



# Housing Authority Of St. James Parish

## Oscar Brooks & Baytree Site Renovations



03/13/2026	25-120, 25-121

Didier Architecture: Derryl Didier, Architect & Associates, LLC

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## **DIVISION 0 - BID REQUIREMENTS**

### **SECTION 00 03 00 – INVITATION FOR BIDS**

#### **PART 1 - GENERAL**

- 1.01 Bids will be received by the Housing Authority of St. James Parish via DemandStar until 2:00 PM local time on April 16, 2026 for the following project:

**Housing Authority of St. James Parish  
Oscar Brooks & Baytree Site Renovations**

- 1.02 A Pre-Bid Conference will be held in person on site March 31, 2026 at 10:00am local time for the above referenced project.
- 1.03 Bids will be downloaded and read aloud at the above stated time virtually through Google Meet – a link will be distributed through the DemandStar portal for the above referenced project.
- 1.04 Digital copies of complete bid documents will be issued to all bidders at no charge via DemandStar.
- 1.05 Hard copies of complete bid documents may be obtained from:

Didier Architecture, LLC  
17531 Old Jefferson Hwy., Suite C  
Prairieville, Louisiana  
225-744-0008

by General Contractors upon deposit of \$200.00 for each set of documents. Deposit on the first two sets are fully refundable to bona fide Prime Bidders (i.e., those who have submitted a qualified bid) upon return of documents, complete and in good condition, no later than 10 days after bid date. Fifty percent of the deposit on all other sets of documents will be refunded upon return of documents as stated above.

- 1.06 All bids over \$100,000 must be accompanied by bid security equal to 5% of the sum of the base bid and all alternates, and must be in the form of a certified check, cashier's check, or Bid Bond Form written by a company licensed to do business in Louisiana, countersigned by a person who is under Contract with the surety company or bond issuer as a licensed agent in this state and who is residing in this state. Surety represents that it is listed on the current U.S. Department of the Treasury Financial Management Service list of approved bonding companies and that it is listed thereon as approved for an amount equal to or greater than the amount for which it obligates itself in this instrument. No Bid Bond indicating an obligation of less than 5% by any method is acceptable. Checks or bonds are to be payable to the Housing Authority of St. James Parish.
- 1.07 The successful Bidder shall be required to furnish a Performance Bond and a Payment Bond written by a company licensed to do business in Louisiana, each in an amount equal to 100% of the Contract sum, and who is currently on the U.S. Department of the Treasury Financial Management Service List and complies with R.S. 38:2219. The bond shall not be accepted if written for an amount exceeding the amount listed in the Treasury Financial Management Service List. The bond shall be countersigned by a person who is under contract with the surety company or bond issuer as an agent of the company or issuer, and who is licensed as an insurance agent in this State, and who is residing in this State. The agents name, address and telephone number must be listed on the face of the bonds.

- 1.08 Bids shall be accepted only from Contractors who are licensed under La. R.S. 37:2150-2163 for the classification of **"Building Construction"**. No bid may be withdrawn for a period of 45 days after receipt of bids without the consent of the Housing Authority of St. James Parish.
- 1.09 Attention is called to the provisions for equal employment opportunity as set forth in the specifications.
- 1.10 The Housing Authority of St. James Parish reserves the right to reject any or all bids or to waive any informalities in the bidding.

Owner Point of Contact: Housing Authority of St. James Parish – Dana Groover – 225-869-3278

**END OF SECTION 00 03 00**

# INVITATION FOR BIDS (IFB) No. 25-120, 25-121 Oscar Brooks & Baytree Site Renovations

## INTRODUCTION

The Housing Authority of the Parish of St. James (hereinafter, “SJPH or Agency”) is a public entity that was formed in 1965 to provide federally subsidized housing and housing assistance to low-income families, within the Parish of St. James, Louisiana. The SJPHA is headed by an Executive Director (ED) and is governed by a five-person board of commissioners and is subject to the requirements of Title 24 of the Code of Federal Regulations (hereinafter, “CFR”) and the SJPHA’s procurement policy. Though brought into existence by a Resolution of the Police Juror, it is a separate entity from the St. James Parish Government.

Currently, the SJPHA owns and/or manages: (a) 6 multi-family apartment complexes totaling 316 units; that include 2 Project Based Rental Assistance complexes, totaling 64 units; with 4 designated as Public Housing (low rent)(The SJPHA currently has approximately 15 employees.

In keeping with its mandate to provide efficient and effective services, the SJPHA is now soliciting proposals from qualified, licensed, and insured entities to provide the noted services to the SJPHA as included in the scope of work in this document. All bids/quotes submitted in response to this solicitation must conform to all of the requirements and specifications outlined within this document and any designated attachments in its entirety.

## IFB INFORMATION AT A GLANCE

[Table 2]

<b>DIDIER ARCHITECTURE CONTACT</b>	Derryl Didier Email: derryl@didierarch.com	Matthew Landry Email: matthew@didierarch.com
<b>ST. JAMES HOUSING AUTHORITY CONTACT</b>	Dana S. Groover, Executive Director Email: dgroover@stjameshousing.com	
<b>HOW TO OBTAIN THE IFB DOCUMENTS</b>	See previous IFB for details.	
<b>PRE-SUBMISSION CONFERENCE</b>	See previous IFB for details.	
<b>QUESTION SUBMITTAL DEADLINE</b>	See previous IFB for details.	
<b>BID SUBMITTAL RETURN &amp; DEADLINE</b>	See previous IFB for details.	

## INVITATION FOR BIDS (IFB) No. 25-120, 25-121 Oscar Brooks & Baytree Site Renovations

- 1.0 **THE SJPHA'S RESERVATION OF RIGHTS.** The SJPHA reserves the right to:
- 1.1 **Right to Reject, Waive, or Terminate the IFB.** Reject any or all bids, to waive any informality in the IFB process, or to terminate the IFB process at any time, if deemed by the SJPHA to be in its best interests.
  - 1.2 **Right to Not Award.** Not to award a contract pursuant to this IFB. Right, to award by individual service, group of services, or as a total, whichever is deemed most advantageous to SJPHA.
  - 1.3 **Right to Terminate.** Terminate a contract awarded pursuant to this IFB, at any time for its convenience upon 10 days' written notice to the Contractors.
  - 1.4 **Right to Determine Time and Location.** Determine the days, hours, and locations that the successful proposer(s) shall provide the services called for in this IFB.
  - 1.5 **Right to Retain Bids.** Retain all Bids submitted and not permit withdrawal for a period of 60 days subsequent to the deadline for receiving bids without the written consent of the SJPHA's Executive Director (ED), who serves as the Contracting Officer (CO).
  - 1.6 **Right to Negotiate.** Negotiate the fees proposed by the bidder entity.
  - 1.7 **Right to Reject Any Bid.** Reject and not consider any bid that does not meet the requirements of this IFB, including but not necessarily limited to incomplete bids and/or bids offering alternate or non-requested services.
  - 1.8 **No Obligation to Compensate.** The agency have no obligation to compensate any bidder for any costs incurred in responding to this IFB.
  - 1.9 **Right to Prohibit.** At any time during the IFB or contract process to prohibit any further participation by a bidder or reject any bid submitted that does not conform to any of the requirements detailed herein. By downloading this document, each prospective bidder is thereby agreeing to abide by all terms and conditions listed within this document and further agrees that he/she will inform the CO in writing within 5 days of the discovery of any item listed herein or of any item that is issued thereafter by the SJPHA that he/she feels needs to be addressed. Failure to abide by this period shall relieve the SJPHA, but not the prospective proposer, of any responsibility pertaining to such issue.
  - 1.10 **Right to Reject - Obtaining Competitive Solicitation Documents.** By submitting a response to this IFB the respondent thereby affirms that he/she obtained all information on any noted software. Any other group such as an association or a bid depository that informs potential respondents of the availability of such competitive solicitations are hereby instructed to not distribute these documents to any such potential respondents, but to instruct the potential respondents to visit the noted Internet-based software to obtain the documents. The SJPHA will reject without consideration any response submitted from a firm that has not obtained the documents from the noted Internet-based software.

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

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

# Instructions to Bidders for Contracts

## Public and Indian Housing Programs

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### 1. Bid Preparation and Submission

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

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

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

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

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

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

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

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

### 2. Explanations and Interpretations to Prospective Bidders

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

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

### 3. Amendments to Invitations for Bids

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

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

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

### 4. Responsibility of Prospective Contractor

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

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

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

## 5. Late Submissions, Modifications, and Withdrawal of Bids

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

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

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

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

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

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

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

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

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

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

## 6. Bid Opening

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

## 7. Service of Protest

(a) Definitions. As used in this provision:

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

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

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

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

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

## 8. Contract Award

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

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

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

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

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

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

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

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

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

**10. Assurance of Completion**

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

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

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

[ ] (3) a 20 percent cash escrow;

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

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

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

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

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

**11. Preconstruction Conference (applicable to construction contracts)**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

INSTRUCTIONS TO BIDDERS (continued)13. INSPECTION OF SITE

Before submitting his proposal, bidder must inspect the existing conditions at the site of the proposed construction and become fully informed as to the facilities, difficulties and restrictions pertaining to the execution of the work. No additional compensation will be granted for work on items omitted from his proposal due to failure to inform himself of the conditions affecting the performance of the work included in the contract that are necessary to carry out and satisfactorily complete the work included herein.

14. ADDENDA

Addenda will be e-mailed or delivered to all who are known by the Architect to have received a complete set of Bidding Documents.

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

Addenda shall not be issued within a period of seventy-two (72) hours prior to the advertised time for the opening of bids, excluding Saturdays, Sundays, and any other legal holidays. If it is necessary to issue an addendum within the seventy-two (72) hour period prior to receipt of bids, the opening of such bids shall be extended exactly one week, without the requirement of readvertising.

Each Bidder shall ascertain from the Architect prior to submitting his bid that he has received all Addenda issued, and he shall acknowledge their receipt on the Proposal Form.

15. SUBSTITUTIONS

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

No substitution will be considered unless written request for approval has been submitted by the proposer and has been received by the Architect ([derryl@didierarch.com](mailto:derryl@didierarch.com), [matthew@didierarch.com](mailto:matthew@didierarch.com)) at least ten (10) days prior to the day for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included.

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

If the Architect approves any proposed substitution, such approval will be set forth in an Addendum. Bidder shall not rely upon approvals made in any other manner.

16. LEAD BASED PAINT

No paint product containing lead shall be used on this project. No building material pre-finished using lead based paint shall be incorporated into the work of this project.

17. ASBESTOS

No asbestos containing building material shall be incorporated into the work of this project. Existing site and improvements have already been abated to remove asbestos.

18. U.S. TREASURY LIST FOR SURETY

Surety must be licensed to do business in Louisiana and must be listed in U.S. Treasury Circular No. 570 as a government approved surety.

19. GENERAL CONTRACTOR

Wherever the term General Contractor is used herein, the reference for this project is to the prime contractor. For this project, the prime contractor is "**Building Construction**". This Contractor must be licensed to perform work in the State of Louisiana as stated in the Advertisement for Bids.

20. BID DOCUMENTS

The bid documents include the following:

- a) Specifications; Bidding Requirements through Division 32, dated March 13, 2026.
- b) Drawings: dated March 13, 2026 as enumerated on Sheet G100 of the set of Documents.
- c) Addenda issued during the bid period and acknowledged in the Bid Form.

21. PERFORMANCE AND PAYMENT BOND

The Contractor shall furnish and pay for a performance and a payment bond written by a company licensed to do business in Louisiana, each in an amount equal to 100% of the Contract Sum.

The Bidder shall deliver the required bonds to the Owner simultaneous with the execution of the Contract.

The Bidder shall require the Attorney-in-Fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his Power of Attorney.

Form of Bond shall be as defined hereinafter in these specifications.

The name, address and telephone number of the Attorney-in-Fact and a copy of the license to do business in Louisiana shall be included with all bonds on this project.

**END OF INSTRUCTIONS TO BIDDERS**



St. James Parish Housing Authority has partnered with DemandStar an online marketplace connecting local governments with an extensive network of suppliers across the nation. DemandStar is open and accessible to all businesses. DemandStar gives you instant access to RFPs, bids, quotes, and other opportunities with St. James Parish Housing Authority.

By registering for a complimentary account with DemandStar, you get Instant Access to bids for St. James Parish Housing Authority. Your free DemandStar account provides:

- **Instant** access to all bid and quotes for St. James Parish Housing Authority
- **Automatic** notifications from St. James Parish Housing Authority - right to your inbox
- The ability to **quickly view** the contractual terms and scope of work
- All the **forms and documents** you need in one place.

**It's EASY!** Get started with 3 easy steps!

## REGISTER

Go to  
[demandstar.com/registration](https://demandstar.com/registration)

## Get started for free!

**Email Address**

This will be your username for logging in to DemandStar

**Company Name**

**Create your DemandStar account**

By creating an account, you agree to DemandStar's Terms of Use and Privacy Policy.



Step 1

## CHOOSE YOUR FREE AGENCY

Type "Housing Authority of St. James Parish" in the Search Box and check the bubble next to the name, then hit Next

### 1 of 3: Choose your free agency

A great way to find out about new opportunities on DemandStar is to subscribe to a government agency. To get started, please choose your first (free) agency. You'll have a chance to sign up for more in just a moment.

Selected free agency: **Park District of Highland Park**

Search by Agency Name

State

County

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- Park District of Highland Park
- Park District of Forest Park
- Park District of Oak Park
- Park District of Franklin Park

Showing 1-4 of 4

[Skip Agency Selection](#)

**Next**

Step 2

## CHOOSE MORE NOTIFICATIONS

Click "Next" to proceed with a free account to receive notifications solely for St. James Parish Housing Authority. Or, if you'd like to get notifications when other governments near you post a relevant solicitation, you can select any combination of our county, state or national plans on this page.

### 2 of 3: Choose Subscriptions

Now that you've chosen [Park District of Highland Park](#) as your free agency, add more counties to grow your network of potential clients.

County subscriptions start at \$25 per year.

Please select a state to begin

State

Choose your counties in Illinois

There are currently 27 Illinois counties with agencies publishing bids on DemandStar. Please choose which counties you'd like to subscribed to. You may also subscribe to all counties in Illinois and save!

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Search for Counties

- |   |                                  |           |
|---|----------------------------------|-----------|
| <input type="checkbox"/> Coles County     | <a href="#">View 1 Agency</a>    | \$25/year |
| <input type="checkbox"/> Cook County      | <a href="#">View 26 Agencies</a> | \$40/year |
| <input type="checkbox"/> DeKalb County    | <a href="#">View 2 Agencies</a>  | \$25/year |
| <input type="checkbox"/> Douglas County   | <a href="#">View 1 Agency</a>    | \$25/year |
| <input type="checkbox"/> DuPage County    | <a href="#">View 17 Agencies</a> | \$40/year |
| <input type="checkbox"/> Effingham County | <a href="#">View 1 Agency</a>    | \$25/year |
| <input type="checkbox"/> Jackson County   | <a href="#">View 1 Agency</a>    | \$25/year |
| <input type="checkbox"/> Kane County      | <a href="#">View 10 Agencies</a> | \$25/year |
| <input type="checkbox"/> Kankakee County  | <a href="#">View 1 Agency</a>    | \$25/year |
| <input type="checkbox"/> Kendall County   | <a href="#">View 3 Agencies</a>  | \$25/year |

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## COMPLETE YOUR PROFILE –

Enter your contact and company information and you're done!

### 3 of 3: Complete your profile

Your order is complete! Now that you've set up your subscriptions on DemandStar, tell us a little bit more about yourself.

#### Your contact information

First Name \*

Last Name \*

Phone Number \*

#### Your company information

Company Phone Number \*

Website

Address \*

Suite, Floor, etc.

ZIP Code \*

City \*

State \*

County

Country



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**INVITATION FOR BIDS (IFB) No. 25-120,25-121 Oscar Brooks & Baytree Site Renovations**

**FORM OF BID - Cover Sheet & Disclosure Form**

(This Form must be fully completed and submitted along with your Bid.)

(1) **Instructions.** Unless otherwise specifically required, the items listed below must be completed and included within the bid submittal. Please complete this form by marking an “X,” where provided, to verify that the referenced completed form or information has been included within the “hard copy” bid submittal submitted by the bidder. Also, complete the following Statement’s herein:

[Table No. 1]

(1) “X” = Item Included	(2) Tab No.	(3) Bid Submittal Item (One original signature copy of each document)
	1	Form of Bid (Cover Sheet)
	2	form HUD-5369-A
	3	Bid Bond or Cashier’s Check
	4	Louisiana Uniform Public Work Bid Form

(2) **Debarred Statement.** Has this firm, or any principal(s) ever been debarred from providing any services by the Federal Government, any state government, the State of Ohio, or any local government agency within or without the State of Ohio? Yes  No  If "Yes," please attach a full detailed explanation, including dates, circumstances, and current status.

(3) **Disclosure Statement.** Does this firm or any principals thereof have any current, past personal or professional relationship with any Commissioner or Officer of the Agency? Yes  No  If "Yes," please attach a full detailed explanation, including dates, circumstances, and current status.

(4) **Felony Disclosure.** Has any principal(s) or any person(s) proposed to perform the work ever been convicted of a felony? Yes  No  If "Yes," please attach a full detailed explanation, including dates, circumstances, and current status. PLEASE NOTE: The Agency reserves the right to not complete award to any bidder that has staff who has been convicted of a felony if the Agency feels that doing such is in its best interests.

(5) **In compliance with La.R.S 37:2150-2163 Code of Louisiana,** the undersigned hereby attests that the owner of the firm Is  Is Not  a resident of the State of Louisiana, and his/her current State of Louisiana License Number is: \_\_\_\_\_.

*Failure to complete this Section shall, pursuant to the aforementioned law listed within this Section, cause the Agency to deem that firm non-responsive and to not be considered for award.*

(6) **Build America, Buy America (BABA) Act Requirements.** As detailed within Section 2.2.3 of the IFB 1.0 Document issued, by executing this form the bidder thereby agrees that by receipt of a contract award, it shall be the responsibility of the successful bidder to agree, certify, and eventually show proof that the work and products provided and installed by the contractor are in full compliance with the requirements of the noted Act. More information can be obtained at the following link: <https://www.hud.gov/baba>.

(7) **Non-Collusive Affidavit.** The undersigned party submitting this bid hereby certifies that such bid is genuine and not collusive and that said bidder entity has not colluded, conspired, connived or agreed,

INVITATION FOR BIDS (IFB) No. 25-120,25-121 Oscar Brooks & Baytree Site Renovations

**FORM OF BID - Cover Sheet & Disclosure Form**

(This Form must be fully completed and submitted along with your Bid.)

directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, to fix overhead, profit or cost element of said bid price, or that of any other bidder or to secure any advantage against the Agency or any person interested in the proposed contract; and that all statements in said bid are true.

**(8) Bidder's Statement.** The undersigned bidder hereby states that by completing and submitting this Form and all other documents within this bid submittal, he/she is verifying that all information provided herein is, to the best of his/her knowledge, true and accurate, and that if the Agency discovers that any information entered herein to be false, such shall entitle the Agency to not consider or make award or to cancel any award with the undersigned party. Further, by completing and submitting the bid submittal, and by entering and submitting the costs, where provided on the Louisiana Uniform Public Work Bid Form, the undersigned bidder thereby agrees to abide by all terms and conditions pertaining to this IFB as issued by the Agency, either in hard copy or on Demand Star, including an agreement to execute the attached Sample Contract form. Pursuant to all IFB Documents, this Form of Bid, and all attachments, and pursuant to all completed Documents submitted, including these forms and all attachments, the undersigned agrees to supply the Agency with the services described herein for the fee(s) entered on the Louisiana Uniform Public Work Bid Form pertaining to this IFB.

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name**

**Name of Company**\_\_\_\_\_

## **BID REQUIREMENT DOCUMENTS**

The following list of documents are required:

Documents to be turned in with the Bid (To be submitted to specified location as noted in Bid Documents):

- Bid Form
- Unit Price Form
- HUD 5369-A Representations, Certifications, and Other Statements of Bidders
- Bid Bond or Cashier's Check

Documents required 10 Days after Bid (To be submitted to Architect):

- Section 3 Certification Form
- Profile of Firm Form
- Previous Participation Certificate
- Certificates of Insurance for General Liability, Auto, and Workman's Compensation.
- Performance Bond
- Payment Bond

# LOUISIANA UNIFORM PUBLIC WORK BID FORM

**TO:** Housing Authority of St. James Parish  
2627 N. King Ave.  
Lutcher, Louisiana 70071

*(Owner to provide name and address of owner)*

**BID FOR:** Housing Authority of St. James Parish  
Oscar Brooks & Baytree Site Renovations  
St. James Parish, Louisiana

*(Owner to provide name of project and other identifying information)*

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Didier Architecture, LLC, 17531 Old Jefferson, Suite C, Prairieville, Louisiana 70769 and dated: March 13, 2026.

*(Owner to provide name of entity preparing bidding documents.)*

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) \_\_\_\_\_ .

**TOTAL BASE BID:** For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" \* but not alternates) the sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**ALTERNATES:** For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

**Alternate No. 1** (Replace Soffit and Fascia at Baytree, all buildings) for the lump sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate No. 2** (Supply and install LVT in lieu of VCT) for the lump sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate No. 3** (*Owner to provide description of alternate and state whether add or deduct*) for the lump sum of:

N/A Dollars (\$ \_\_\_\_\_)

**NAME OF BIDDER:** \_\_\_\_\_

**ADDRESS OF BIDDER:** \_\_\_\_\_

**LOUISIANA CONTRACTOR'S LICENSE NUMBER:** \_\_\_\_\_

**NAME OF AUTHORIZED SIGNATORY OF BIDDER:** \_\_\_\_\_

**TITLE OF AUTHORIZED SIGNATORY OF BIDDER:** \_\_\_\_\_

**SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER \*\*:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

\* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

\*\* If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212(A)(1)(c) or RS 38:2212(O) .

**BID SECURITY** in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid, for bids over \$100,000.

# LOUISIANA UNIFORM PUBLIC WORK BID FORM

## UNIT PRICE FORM

**TO:** Housing Authority of St. James Parish  
2627 N. King Ave.  
Lutcher, LA 70071  
*(Owner to provide name and address of owner)*

**BID FOR:** Housing Authority of St. James Parish  
Oscar Brooks & Baytree Site Renovations  
St. James Parish, Louisiana  
*(Owner to provide name of project and other identifying information)*

**UNIT PRICES:** This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# 2x6 Lumber and Rafters (As required for replacement of unforeseen deteriorated conditions)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
1	100	LF		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# 2x4 Framing – Pressure Treated Lumber (As required for replacement of unforeseen deteriorated conditions)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
2	100	LF		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# N/A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
N/A	N/A	N/A	N/A	N/A

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# N/A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
N/A	N/A	N/A	N/A	N/A

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# N/A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
N/A	N/A	N/A	N/A	N/A

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# N/A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
N/A	N/A	N/A	N/A	N/A

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# N/A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
N/A	N/A	N/A	N/A	N/A

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# N/A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
N/A	N/A	N/A	N/A	N/A

**Wording for “DESCRIPTION” is to be provided by the Owner.**

**All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.**

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

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

# Representations, Certifications, and Other Statements of Bidders

## Public and Indian Housing Programs

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### 1. Certificate of Independent Price Determination

(a) The bidder certifies that--

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### 2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### 4. Organizational Conflicts of Interest Certification

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

- (a) Result in an unfair competitive advantage to the bidder; or,
- (b) Impair the bidder's objectivity in performing the contract work.

[ ] In the absence of any actual or apparent conflict, I hereby certify that to the best of my knowledge and belief, no actual or apparent conflict of interest exists with regard to my possible performance of this procurement.

#### 5. Bidder's Certification of Eligibility

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

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

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

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

#### 6. Minimum Bid Acceptance Period

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

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

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

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

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

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

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

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

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

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

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

(Check the block applicable to you)

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

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

The bidder represents and certifies that it:

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

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

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

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

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

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

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

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

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

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

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

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

- (1) Obtain identical certifications from the proposed subcontractors;
- (2) Retain the certifications in its files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

**Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities**

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

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

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

The bidder certifies that:

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

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

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

**12. 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)

## St. James Parish Housing Authority --Section 3 Business Preference Explanation

Be aware that the Agency previously conducted IFB's that required bidders and contractors to comply with the requirements of 24 CFR §135, *Economic Opportunities for Low- and Very Low-Income Persons* (a.k.a., Section 3).

However, in 2020, the U.S. Department of Housing and Urban Development (HUD) discontinued these former requirements and implemented the requirements of 24 CFR §5, 14, 75, 91, 92, 93, 135, 266, 570, 574, 576, 578, 905, 964, 983, and 1000, entitled *Enhancing and Streamlining the implementation of Section 3 Requirements for Creating Economic Opportunities for Low- and Very Low-Income Persons and Eligible Businesses*.

Accordingly, these new Section 3 regulations do not provide for a firm proposing to provide services to a housing agency to immediately submit any information pertaining to Section 3, including the new regulations do not provide for the granting of any preferences to Section 3 firms submitting bids. The Agency will advise all firms if these requirements change.

NOTE: Please see attached to this IFB, Section 3 Contract Information, which the successful bidder will be required to execute and abide by.

This is a Section 3 Covered Project per HUD's guidelines in 24 CFR 75. This requirement and all applicable clauses is included in the proposed contract and Forms HUD-5370, HUD-5370C, and HUF-5370-EZ. Monthly reporting is now a REQUIREMENT for all General Contractors and is a condition that failure to comply is considered a material breach of the contract terms.

Training and guidance will be provided by the St. James Parish Housing Authority in order to assist in the Prime Contractor with the required data collection and documentation to support success of this requirement.



The Housing Authority of the Parish of St. James (SJPHA) P.O. Box Blox 280 – 2627 N. King Avenue  
Lutcher, Louisiana - O: (225) 869-3278

### SECTION 3 POLICY, PROCEDURES AND COMPLIANCE FORMS WITH INSTRUCTIONS

This packet is designed to comply with the New HUD Section 3 Final Rule issued September 29, 2020, and became effective November 30, 2020. Therefore, these documents and instructions are related to the “Hours Worked Benchmarks” as called for in the 24 CFR Part 75 regulation. Every contractor and sub-contractor (with the exception of professional services) are required to work toward meeting the prescribed benchmarks as indicated on the bottom of page 6 of this packet. There are no specific hiring or contracting goals under this new rule.

Most importantly, the rule does not require the hiring or contracting of any person or business that is not fully qualified to perform the work as would be charged. However, the rule makes clear that HUD is intent on ensuring Section 3 persons employed under the new rule receive measurable and sustainable employment. Therefore, Section 3 employees can be counted for up to five full years from the date of certification or hire, respectively. HUD is expected to issue continued guidance on the new rule in the future so these documents may change in accordance with the rule.

If you should have any questions on this packet, please contact:

Dana Groover, Executive Director

## Governing Parts of the Section 3 Final Rule to this Recipient

### Subpart A—General Provisions

- § 75.1 Purpose
- § 75.3 Applicability
- § 75.5 Definitions

### Subpart B—Additional Provisions for Public Housing Financial Assistance

75.9 Requirements.

75.11 Targeted Section 3 worker for public housing financial assistance. 75.13 Section 3 safe harbor.

75.15 Reporting.

75.17 Contract provisions.

### Subpart D—Provisions for Multiple Funding Sources, Recordkeeping and Compliance

75.29 Multiple funding sources. 75.31 Recordkeeping

75.33 Compliance

## **SECTION 3 REQUIREMENTS**

*Applicable to all contracts and agreements regardless of the dollar amount or contract duration*

Background - Section 3 of the Housing and Urban Development Act of 1968 (Public Law 90-448, approved August 1, 1968) (Section 3) was enacted to bring economic opportunities generated by certain HUD financial assistance expenditures, to the greatest extent feasible, to low- and very low-income persons residing in communities where the financial assistance is expended. Section 3 recognizes that HUD funds are often one of the largest sources of Federal funds expended in low- and very low-income communities and, where such funds are spent on activities such as construction and rehabilitation of housing and other public facilities, the expenditure results in economic opportunities. By directing HUD-funded economic opportunities to residents and businesses in the community where the funds are expended, the expenditure can have the dual benefit of creating new or rehabilitated housing and other facilities while providing opportunities for employment and training for the residents of these communities.

The Section 3 statute establishes priorities for employment and contracting for public housing programs and for other programs that provide housing and community development assistance. For example, the prioritization as it relates to public housing assistance places an emphasis on public housing residents, in contrast to the prioritization as it relates to housing and community development assistance, which places more emphasis on residents of the neighborhood or service area in which the investment is being made.

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Any Louisiana law whose language may cause or create a conflict with the requirements of Section 3 to certify that a person hired is actually Section 3, what category of Section 3 they are, or are not Section 3 at all. The Benchmarks be very difficult, if not impossible, to attain if the prior salary information is not available in all cases. Certainly, a more unreasonable burden will be placed upon this HUD funds recipient as a direct result of this state law. So, to the extent where it is deemed unlawful for the St. James Housing Authority or its contractors to qualify a person for employment, training, or contracting because their prior employment salary history cannot be learned or considered for certification, the overall agency compliance will be less than prescribed by the HUD benchmarks. Only if the new employees' new annualized income meets the 80% low-income threshold for being considered Section 3, will any compliance be requested of new hires, trainees, or contractors.

ENROLLED, An Act, Relating to wages; to prohibit an employer from paying any of its employees at wage rates less than those paid to employees of another sex or race for equal work unless a wage differential is based upon one or more specified factors.

(b) An employer shall not refuse to interview, hire, promote, or employ an applicant for employment, or retaliate against an applicant for employment because the applicant does not provide wage history. Wage history means the wages paid to an applicant for employment by the applicant's current or former employer.

For all advertised contracts let by the authority, the responsible staff will include the Section 3 Business Self Certification form and the Section 3 Individual Low-Income Self Certification form (with no income limit area) with the bid package (virtually and paper) allowing each respondent to identify themselves and their business accordingly. The completion of the forms will remain voluntary and at the respondents' discretion.

Once all responses have been received and reviewed, the most desirous and qualified business will be progressed through the contracting process. The Section 3 status of the respondent will be considered only after the "Most Qualified and Advantageous" respondent has been determined. This act shall be known as the Clarke-Figures Equal Pay Act, there will be an area for contractors to confirm they meet any HUD income limit for Section 3 business owners for persons working for Section 3 business owners. So again, meeting the Section 3 Business Concern definition will be difficult to impossible, though we still encourage contractors to recruit, train, and hire as many DHAL residents and voucher holders as possible. At a minimum, contractors should provide notice to the Section 3 coordinator so some outreach can be executed for any created or available employment opportunities.

If there are multiple and equally qualified businesses, the Section 3 status and category of the business will be considered. The business with the highest Section 3 priority, based on the 24CFR Part 75.9 (b)(2) will be awarded the contract. All other applicable procurement laws will be adhered to relative to contracting amounts. All advertisements for contracts with the authority will carry this wording: "This opportunity is covered under Section 3 of the HUD Act of 1968"

For all resident training offered by the authority and its contractors, the staff will include the Section 3 Individual Low-Income Person Self Certification form with the training notice or, upon the first day of training (virtually and paper), allowing each prospective trainee to identify themselves accordingly as public housing or Section 8. The completion of the form will NOT be voluntary as the prospective trainees will be allowed to attend based on their prioritization in the 24CFR Part 75.9(a)(2).

If the training is being paid for with HUD Public Housing financial assistance, the training will be limited to authority residents and potentially voucher holders only.

All advertisements for training with the authority will carry this wording: "This opportunity is covered under Section 3 of the HUD Act of 1968."

#### § 75.1 Purpose

This part establishes the requirements to be followed to ensure the objectives of Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) (Section 3) are met. The purpose of Section 3 is to ensure that economic opportunities, most importantly employment, generated by certain HUD financial assistance shall be directed to low- and very low-income persons, particularly those who are recipients of government assistance for housing or residents of the community in which the Federal assistance is spent.

#### § 75.3 Applicability.

(a) General applicability. Section 3 applies to public housing financial assistance and Section 3 projects, as follows:

(1) Public housing financial assistance. Public housing financial assistance means:

(i) Development assistance provided pursuant to section 5 of the United States Housing Act of 1937 (the 1937 Act);

(ii) Operations and management assistance provided pursuant to section 9(e) of the 1937 Act;

(iv) The entirety of a mixed-finance development project as described in 24 CFR 905.604, regardless of whether the project is fully or partially assisted with public housing financial assistance as defined in paragraphs (a)(1)(i) through (iii) of this section.

(iii) The requirements in this part apply to an entire Section 3 project, regardless of whether the project is fully or partially assisted under HUD programs that provide housing and community development financial assistance.

(b) Contracts for materials. Section 3 requirements do not apply to material supply contracts.

(d) Other HUD assistance and other Federal assistance. Recipients that are not subject to Section 3 are encouraged to consider ways to support the purpose of Section 3.

§ 75.5 Definitions.

The terms HUD, Public housing, Public Housing Agency (PHA), and are defined in 24 CFR part 5. The also apply to this part: 1937 Act means the United States Housing Act of 1937, 42 U.S.C. 1437 et seq. Contractor means any entity entering into a contract with:

- (1) A recipient to perform work in connection with the expenditure of public housing financial assistance or for work in connection with a Section 3 project; or
- (2) A subrecipient for work in connection with a Section 3 project.

Labor hours means the number of paid hours worked by persons on a Section 3 project or by persons employed with funds that include public housing financial assistance.

Low-income person means a person as defined in Section 3(b)(2) of the 1937 Act.

Material supply contracts means contracts for the purchase of products and materials, including, but not limited to, lumber, drywall, wiring, concrete, pipes, toilets, sinks, carpets, and office supplies.

Professional services means non-construction services that require an advanced degree or professional licensing, including, but not limited to, contracts for legal services, financial consulting, accounting services, environmental assessment, architectural services, and civil engineering services.

Public housing financial assistance means assistance as defined in § 75.3(a)(1).

Public housing project is defined in 24 CFR 905.108.

Recipient means any entity that receives directly from HUD public housing financial assistance or housing and community development assistance that funds Section 3 projects, including, but not limited to, any State, local government, instrumentality, PHA, or other public agency, public or private nonprofit organization.

Section 3 means Section 3 of the Housing and Urban Development Act of 1968, as amended (12 U.S.C. 1701u).

Section 3 business concern means:

- (1) A business concern meeting at least one of the following criteria, documented within the last six-month period:
  - (i) It is at least 51 percent owned and controlled by low- or very low-income persons;
  - (ii) Over 75 percent of the labor hours performed for the business over the prior three- month period are performed by Section 3 workers; or
  - (iii) It is a business at least 51 percent owned and controlled by current public housing residents or residents who currently live in Section 8-assisted housing.
- (2) The status of a Section 3 business concern shall not be negatively affected by a prior arrest or conviction of its owner(s) or employees.
- (3) Nothing in this part shall be construed to require the contracting or subcontracting of a Section 3 business concern. Section 3 business concerns are not exempt from meeting the specifications of the contract.

Public housing project

Section 3 project means a project defined in § 75.3(a)(2).

- (i) The worker's income for the previous or annualized calendar year is below the income limit established by HUD.
- (ii) The worker is employed by a Section 3 business concern.
- (iii) The worker is a Youth Build participant.

Section 3 worker means:

Any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:

- (i) The worker's income for the previous or annualized calendar year is below the income limit established by HUD.
- (ii) The worker is employed by a Section 3 business concern.
- (iii) The worker is a Youth Build participant.

(2) The status of a Section 3 worker shall not be negatively affected by a prior arrest or conviction.

(3) Nothing in this part shall be construed to require the employment of someone who meets this definition of a Section 3 worker. Section 3 workers are not exempt from meeting the qualifications of the position to be filled.

Section 8-assisted housing refers to housing receiving project-based rental assistance or tenant-based assistance under Section 8 of the 1937 Act.

Service Area or the Neighborhood of the project This definition

Small PHA means a public housing authority that manages or operates fewer than 250 public housing units.

Subcontractor means any entity that has a contract with a contractor to undertake a portion of the contractor's obligation to perform work in connection with the expenditure of public housing financial assistance or for a Section 3 project.

Sub-recipient has the meaning provided in the applicable program regulations or in 2 CFR 200.93.

Targeted Section 3 worker has the meanings provided in § 75.11, 75.21, or 75.29, and does not exclude an individual that has a prior arrest or conviction.

Very low-income person means the definition for this term set forth in section 3(b)(2) of the 1937 Act.

Youth Build programs refers to Youth Build programs receiving assistance under the Workforce Innovation and Opportunity Act (29 U.S.C. 3226).

[Continues Next Page](#)

§ 75.9 Requirements - (a) Employment and Training.

(1) Consistent with existing Federal, state, and local laws and regulations, PHAs or other recipients receiving public housing financial assistance, and their contractors and subcontractors, must make their best efforts to provide employment and training opportunities generated by the public housing financial assistance to Section 3 workers.

(2) PHAs or other recipients, and their contractors and subcontractors, must make their best efforts described in paragraph (a)(1) of this section in the following order of priority:

- (i) To residents of the public housing projects for which the public housing financial assistance is expended;
- (ii) To residents of other public housing projects managed by the PHA that is providing the assistance or for residents of Section 8-assisted housing managed by the PHA;
- (iii) To participants in Youth Build programs; and
- (iv) To low- and very low-income persons residing within the metropolitan area (or nonmetropolitan county) in which the assistance is expended.

(b) Contracting. (1) Consistent with existing Federal, state, and local laws and regulations, PHAs and other recipients of public housing financial assistance, and their contractors and subcontractors, must make their best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers.

(2) PHAs and other recipients, and their contractors and subcontractors, must make their best efforts described in paragraph (b)(1) of this section in the following order of priority:

- (i) To Section 3 business concerns that provide economic opportunities for residents of the public housing projects for which the assistance is provided;
- (ii) To Section 3 business concerns that provide economic opportunities for residents of other public housing projects or Section-8 assisted housing managed by the PHA that is providing the assistance;
- (iii) To Youth Build programs; and
- (iv) To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (or nonmetropolitan county) in which the assistance is provided.

§ 75.11 Targeted Section 3 worker for Public Housing Financial Assistance.

(a) Targeted Section 3 worker. A Targeted Section 3 worker for public housing financial assistance means a Section 3 worker who is:

(1) A worker employed by a Section 3 business concern; or

(2) A worker who currently fits or when hired fit at least one of the following categories, as documented within the past five years:

(i) A resident of public housing or Section 8-assisted housing;

(ii) A resident of other public housing projects or Section 8-assisted housing managed by the PHA that is providing the assistance; or

(iii) A Youth Build participant.

§ 75.13 Section 3 Safe Harbor. *(See Benchmarks at the bottom of page 10)*

(a) General. Recipients will be considered to have complied with requirements in this part, in the absence of evidence to the contrary if they:

(1) Certify that they have followed the prioritization of effort in § 75.9; and

(2) Meet or exceed the applicable Section 3 benchmark as described in paragraph (b) of this section.

§ 75.15 Reporting. *(See Benchmarks at the bottom of page 10)*

(a) Reporting of labor hours. (1) For public housing financial assistance, PHAs and other recipients must report in a manner prescribed by HUD:

- (i) The total number of labor hours worked;
- (ii) The total number of labor hours worked by Section 3 workers; and
- (iii) The total number of labor hours worked by Targeted Section 3 workers.

(2) Section 3 workers' and Targeted Section 3 workers' labor hours may be counted for five years from when their status as a Section 3 worker or Targeted Section 3 worker is established pursuant to § 75.31.

(3) The labor hours reported under paragraph (a)(1) of this section must include the total number of labor hours worked with public housing financial assistance in the fiscal year of the PHA or other recipient, including labor hours worked by any contractors and subcontractors that the PHA or other recipient is required, or elects pursuant to paragraph (a)(4) of this section, to report.

(4) PHAs and other recipients reporting under this section, as well as contractors and subcontractors who report to PHAs and recipients, may report labor hours by Section 3 workers, under paragraph (a)(1)(ii) of this section, and labor hours by Targeted Section 3 workers, under paragraph (a)(1)(iii) of this section, from professional services without including labor hours from professional services in the total number of labor hours worked under paragraph (a)(1)(i) of this section. If a contract covers both professional services and other work and the PHA, other recipient, contractor, or subcontractor chooses not to report labor hours from professional services, the labor hours under the contract that are not from professional services must still be reported.

(5) PHAs and other recipients may report on the labor hours of the PHA, the recipient, a contractor, or a subcontractor based on the employer's good faith assessment of the labor hours of a full-time or part-time employee informed by the employer's existing salary or time and attendance based payroll systems, unless the project or activity is otherwise subject to requirements specifying time and attendance reporting.

(b) Additional reporting if Section 3 benchmarks are not met.

If the PHA's or other recipient's reporting under paragraph (a) of this section indicates that the PHA or other recipient has not met the Section 3 benchmarks described in § 75.13, the PHA or other recipient must report in a form prescribed by HUD on the qualitative nature of its Section 3 compliance activities and those of its contractors and subcontractors. Such qualitative efforts may, for example, include but are not limited to the following:

- (1) Engaged in outreach efforts to generate job applicants who are Targeted Section 3 workers.
- (2) Provided training or apprenticeship opportunities.
- (3) Provided technical assistance to help Section 3 workers compete for jobs (e.g., resume assistance, coaching).
- (4) Provided or connected Section 3 workers with assistance in seeking employment including: drafting resumes, preparing for interviews, and finding job opportunities connecting residents to job placement services.
- (5) Held one or more job fairs.
- (6) Provided or referred Section 3 workers to services supporting work readiness and retention (e.g., work readiness activities, interview clothing, test fees, transportation, childcare).
- (7) Provided assistance to apply for/or attend community college, a four-year educational institution, or vocational/technical training.
- (8) Assisted Section 3 workers to obtain financial literacy training and/or coaching.
- (9) Engaged in outreach efforts to identify and secure bids from Section 3 business concerns.
- (10) Provided technical assistance to help Section 3 business concerns understand and bid on contracts.
- (11) Divided contracts into smaller jobs to facilitate participation by Section 3 business concerns.
- (12) Provided bonding assistance, guaranties, or other efforts to support viable bids from Section 3 business concerns.
- (13) Promoted use of business registries designed to create opportunities for disadvantaged and small businesses.

§ 75.15 Continued - (b) Additional reporting if Section 3 benchmarks are not met.

(14) Outreach, engagement, or referrals with the state one-stop system as defined in Section 121(e)(2) of the Workforce Innovation and Opportunity Act.

(c) Reporting frequency. Unless otherwise provided, PHAs or other recipients must report annually to HUD under paragraph (a) of this section, and, where required, under paragraph (b) of this section, in a manner consistent with reporting requirements for the applicable HUD program.

(d) Reporting by Small PHAs. Small PHAs may elect not to report under paragraph (a) of this section. Small PHAs that make such election are required to report on their qualitative efforts, as described in paragraph (b) of this section, in a manner consistent with reporting requirements for the applicable HUD program.

§ 75.17 Contract provisions.

(a) PHAs or other recipients must include language in any agreement or contract to apply Section 3 to contractors.

(b) PHAs or other recipients must require contractors to include language in any contract or agreement to apply Section 3 to subcontractors.

(c) PHAs or other recipients must require all contractors and subcontractors to meet the requirements of § 75.9, regardless of whether Section 3 language is included in contracts.

§ 75.29 Multiple Funding Sources.

(a) If a housing rehabilitation, housing construction or other public construction project is subject to Section 3 pursuant to § 75.3(a)(1) and (2), the recipient must follow subpart B of this part for the public housing financial assistance and may follow either subpart B or C of this part for the housing and community development financial assistance. For such a project, the following applies:

(2) The recipients of both sources of funding shall report on the housing rehabilitation, housing construction, or other public construction project as a whole and shall identify the multiple associated recipients. PHAs and other recipients must report the following information:

(i) The total number of labor hours worked on the project;

(ii) The total number of labor hours worked by Section 3 workers on the project; and

(iii) The total number of labor hours worked by Targeted Section 3 workers on the project.

[Continues Next Page](#)

§ 75.31 Recordkeeping.

(b) Recipients must maintain documentation, or ensure that a subrecipient, contractor, or subcontractor that employs the worker maintains documentation, to ensure that workers meet the definition of a Section 3 worker or Targeted Section 3 worker, at the time of hire or the first reporting period, as follows:

(1) For a worker to qualify as a Section 3 worker, one of the following must be maintained:

- (i) A worker's self-certification that their income is below the income limit from the prior calendar year;
- (ii) A worker's self-certification of participation in a means-tested program such as public housing or Section 8-assisted housing;
- (iii) Certification from a PHA, or the owner or property manager of project-based Section 8-assisted housing, or the administrator of tenant-based Section 8-assisted housing that the worker is a participant in one of their programs;
- (iv) An employer's certification that the worker's income from that employer is below the income limit when based on an employer's calculation of what the worker's wage rate would translate to if annualized on a full-time basis; or
- (v) An employer's certification that the worker is employed by a Section 3 business concern.

(2) For a worker to qualify as a Targeted Section 3 worker, one of the following must be maintained:

(i) For a worker to qualify as a Targeted Section 3 worker under subpart B of this part:

- (A) A worker's self-certification of participation in public housing or Section 8-assisted housing programs;
- (B) Certification from a PHA, or the owner or property manager of project-based Section 8-assisted housing, or the administrator of tenant-based Section 8-assisted housing that the worker is a participant in one of their programs;
- (C) An employer's certification that the worker is employed by a Section 3 business concern; or
- (D) A worker's certification that the worker is a Youth Build participant.

Benchmarks - For Section 3 projects, the proposed benchmark notification set the same benchmarks but with regards to the project itself rather than the recipient's fiscal year. The proposed benchmark notification provided that recipients would meet the safe harbor in the new § 75.13 by certifying to the prioritization of effort in the new § 75.9 and meeting or exceeding Section 3 benchmarks for total number of labor hours worked by Section 3 workers and by Targeted Section 3 workers. The benchmark for Section 3 workers was set at 25 percent or more of the total number of labor hours worked by all workers on a Section 3 project. The benchmark for Targeted Section 3 workers was set at 5 percent or more of the total number of labor hours worked by all workers on a Section 3 project. **Simply stated, the contract needs to meet these two benchmarks in order to be in compliance.**

$$\frac{\text{Section 3 Workers Labor Hours}}{\text{Total Labor Hours for the Project}} = 25\%$$

$$\frac{\text{Section 3 Targeted Workers Labor Hours}}{\text{Total Labor Hours for the Project}} = 5\%$$

## SECTION 3 BUSINESS SELF-CERTIFICATION FORM

*(In compliance with Section 3 of the HUD Act of 1968 Updated 24 CFR Part 75 11/30/2020)*

The purpose of this form is to comply with Section 3 of the HUD Act of 1968 Business Certification requirements. To count as a Section 3 Business your company/firm must meet one of the listed categories below. Each category will require additional documentation to support the election. You must provide that supporting documentation with this form to be properly and completely confirmed as a Section 3 business. If this form is submitted without the required supplemental data, your certification will not be processed.

Section 3 Business Category	Additional Required Data	Mark an "X" on Your Election
It is at least 51 percent owned by low- or very low-income persons;	Proof of ownership showing all owners and their percentages and a completed Section 3 Individual Self-Certification form for all low- and very low-income owners	
Over 75 percent of the labor hours performed for the business are performed by low- or very low-income persons; or	Provide the last 90 days full payrolls for the entire company, make a list of the names from the payrolls of the Section 3 workers, and provide a completed Section 3 Individual Self-Certification for all low- and very low-income workers you list	
It is a business at least 51 percent owned by current public housing residents or residents who currently live in Section 8-assisted housing.	Proof of ownership showing all owners and their percentages and a Section 3 Individual Self-Certification form for all public housing and/or Section 8 owners	

I hereby certify to the US Department of Housing and Urban Development (HUD) that all of the information on this form is true and correct. I attest under penalty of perjury that my business meets the elected definition and understand proof of this information may be requested. If found to be inaccurate, I understand that I may be disqualified as a certified Section 3 business

Signature:		Date Signed:
Print Name:	Title:	
Company Name:	Signers Email:	
Address		
Telephone Number		
Type of Business: (Check One): <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Other		

# SECTION 3 INDIVIDUAL LOW-INCOME PERSON SELF-CERTIFICATION FORM

(In compliance with Section 3 of the HUD Act of 1968 Updated 24 CFR Part 75 11/30/2020)

The purpose of this form is to comply with Section 3 of the HUD Act of 1968 self-certification income requirements. To count as a Section 3 individual, any legal resident of the United States annual income must not exceed the HUD income limits for the year before they were hired, or, the individuals current year income annualized for the year you are being confirmed as low-income.

Printed Name: \_\_\_\_\_

Street Address (Not a PO Box)                      Apt#                      City                      State                      Zip

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

To qualify as a Section 3 Person, you must meet one of the standards on the left side box and your income does not exceed the number in the right side box below.

Check only one line below that describes your housing situation:

I am a Public Housing Resident or Section 8 Assists me with my rent, or I am a current Youth Build participant

I receive No HUD support, but I am low-income and live in the City of Lutchter, \_\_\_\_\_ County including a 10 mile overlap into \_\_\_\_\_ County

I hereby certify to the US Department of Housing and Urban Development (HUD) that all of the information on this form is true and correct. I attest under penalty of perjury that my total income is as shown above, and that proof of this information may be requested. If found to be inaccurate, I understand that I may be disqualified as an applicant and/or a certified Section 3 individual. Finally, I authorize including my name on a list of Section 3 Residents seeking employment and to include my contact information so that contractors may contact me directly for any employment opportunities.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

ST. JAMES HOUSING AUTHORITY SECTION 3 HOURS WORKED REPORTING FORM

(In compliance with Section 3 of the HUD Act of 1968 Updated 24 CFR Part 75 11/30/2020)

The purpose of this form is to comply with Section 3 of the HUD Act of 1968 tracking of hours worked by all person's employed by your company on the \_\_\_\_\_ contract including those meeting the Section 3 income requirements as low- or very low-income. To count as a Section 3 individual, any legal resident of the United States annual income must not exceed the HUD income limits for the year before they were hired, or, the individuals current year income annualized for the year you are confirming they are low-income. If your company employs any person, you believe is low income now or was when they were hired within the past five years, please have them complete the "SECTION 3 INDIVIDUAL LOW-INCOME PERSON SELF-CERTIFICATION FORM" and return it to the GC immediately. Please keep in mind the objective and the HUD benchmark requirements for this project are:

- 25% of the total labor hours worked by everyone employed under the project must be worked by Section 3 Workers (Defined as the low and very low-income people in your project service area)
- And
- 5% of the total labor hours worked by everyone employed under the project must be worked by Targeted Section 3 Workers (Defined as Public Housing and Section 8 Assisted persons in your project service area)

Therefore, we are interested in identifying as many people Section 3 workers as possible that will allow us to count their hours toward the benchmarks. However, all hours worked by everyone on the project must be reported monthly to:

Dana Groover, Executive Director

Official Hours Worked for the Period of \_\_\_\_\_ 2025 - \_\_\_\_\_ 2026

Total Hours Worked by all Non-Section 3 staff \_\_\_\_\_

Total Hours Worked by All Section 3 staff Targeted and Non-Targeted \_\_\_\_\_

Please list the names and hours worked by each Section 3 Worker individually below or on a separate sheet.

First Name	Last Name	Total Hours This Period Only
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Section 3 Utilization Tracker: Business Labor Hours**

U.S. Department of Housing and Urban Development  
Office of Field Policy and Management

OMB 2501-0040  
Expiration 04-30-2025 HUD  
Form 4737

Public reporting for this collection of information is estimated to average 5 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.

Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1992 (Section 3), and 12 U.S.C. § 1701u ensure that employment and other economic opportunities generated by Federal financial assistance for housing and community development programs are, to the greatest extent feasible, directed toward low- and very low-income persons, particularly those who receive government assistance for housing. The regulations are found at 24 CFR Part 75. This collection of information is required to ensure that Section 3 workers and Section 3 Business concerns participating in Housing and Community Development Projects and Public Housing Assistance Projects with HUD funding are documenting Section 3 labor hours to meet the requirements of Section 3 found in 24 CFR part 75. The information will be used by the Department to monitor program recipient's compliance with Section 3, to assess the results of the Department's efforts to meet the statutory objectives of Section 3, to prepare reports to Congress, and by recipients as a self-monitoring tool.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to Anna P. Guido, Reports Management Officer, QDAM, Department of Housing and Urban Development, 451 7th Street, SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2501-0040. 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. No assurances of confidentiality are provided for this information collection.

**FORM A: Business Labor Hours Tracking**

Tracking of labor hours occurs throughout the project and is reported no later than the conclusion of the work for the identified business. This form is completed in conjunction with Form B for Section 3 Workers and Section 3 Targeted Workers labor hours. An alternative to this use of this form can be from a business or employer's good faith assessment of the labor hours of a full-time or part-time employee informed by the employer's existing salary or time and attendance based payroll systems, unless the project or activity is otherwise subject to requirements specifying time and attendance reporting.

EXAMPLE	Business Name	Non-Section 3 Business	Section 3 Business (must be verified by recipient/subrecipient before contract is executed)	Total number of Section 3 worker or Section 3 business labor hours worked	Total targeted Section 3 worker labor hours. (Of the total Section 3 worker labor hours reported list total labor hours from Targeted Section 3 workers)	Total number of labor hours worked from non-Section 3 and Section 3 workers/Section 3 businesses	Section 3 Benchmark non-Section 3 businesses calculate column E divided by column G
<b>A. Construction (HCD programs) or Capital Expenses (PHAs)</b> <i>(Enter labor hours for all construction contracts or subcontracts in the project. Note Section 3 requirements do not apply to material supply contracts.)</i>						All Section 3 businesses report total in column E	All Section 3 business shall record 100% of total labor hours
	Optimus General Contractor	x		50	25	500	10.0%
	123 Excavation	x		19		40	47.5%
	XYZ Concrete		x	120	20	120	100.0%
	76 Framers		x	80		80	100.0%
<b>B. Construction subtotal</b> (Add all amounts in column E to display a subtotal for column E; Add all amounts in column G to display subtotal of all labor hours in column G)				269		740	36.4%
<b>C. Professional Services/Recipients</b> Professional Service/recipients Section 3 worker labor hours are only added to the total in column E <i>(Optional reporting, but is encouraged if it is Section 3 Business or Section 3 worker)</i>							
	Vision Land Surveying		x	10			100.0%
	1+2 Engineering	x					
	Accrued Accountants	x		20			100.0%
	City of Entitlement CDBG		x				
	Helpful NGO Subrecipients LLC	x		10			100.0%
<b>D. Professional Services/Recipient Subtotal</b> (Add all professional service/recipient hours reported in column E to display a subtotal for column E. This subtotal amount is added to the cumulative hours total in column E)				40			
<b>E. Cumulative Project Labor Hours</b>				309		740	41.8%
<b>F. Benchmark met.</b>							

**Section 3  
Utilization  
Tracker: Section 3  
Labor Hours**

U.S. Department of Housing and  
Urban Development  
Office of Field Policy and  
Management

Expiration 04-30-2025

OMB 2501-0040  
HUD  
Form 4737A

Public reporting for this collection of information is estimated to average 5 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.

Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1992 (Section 3), and 12 U.S.C. § 1701u ensure that employment and other economic opportunities generated by Federal financial assistance for housing and community development programs are, to the greatest extent feasible, directed toward low- and very low-income persons, particularly those who receive government assistance for housing. The regulations are found at 24 CFR Part 75. This collection of information is required to ensure that Section 3 workers and Section 3 Business concerns participating in Housing and Community Development Projects and Public Housing Assistance Projects with HUD funding are documenting Section 3 labor hours to meet the requirements of Section 3 found in 24 CFR part 75. The information will be used by the Department to monitor program recipient's compliance with Section 3, to assess the results of the Department's efforts to meet the statutory objectives of Section 3, to prepare reports to Congress, and by recipients as a self-monitoring tool.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to Anna P. Guido, Reports Management Officer, QDAM, Department of Housing and Urban Development, 451 7th Street, SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2501-0040. 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. No assurances of confidentiality are provided for this information collection.

**FORM B: Section 3 Labor Hours Tracking**

(Reporting for each Section 3 worker can occur throughout the project and as directed by the HUD recipient for the identified business(es). An alternative to this use of this form can be from a business or employer's good faith assessment of the labor hours of a full-time or part-time employee informed by the employer's existing salary or time and attendance based payroll systems, unless the project or activity is otherwise subject to requirements specifying time and attendance reporting.

Name of Business contracted on (Name of Project)	Identification of Section 3 Worker	Identification of Targeted Section 3 Worker	Date of hire or first reporting period	Total labor hours worked on a project per Section 3 Worker (Tracking of hours can be completed in a separate wage reporting system)
EXAMPLE				
	List or identify all Section 3 Workers for each contracted business. Documentation of a Section 3 Worker is completed outside of this form.	Indicate, by marking with an "X" if the worker has been identified as a Targeted Section 3 Worker. Documentation of a Targeted Section 3 Worker is completed outside of this form.	Enter either the date of hire or the date of the first reporting period after hire for each worker.	Enter number of hours worked by the individual employee over the duration of project.
Business Name	Section 3 Worker Name			
Optimus General Contractor	Employee name 1	x	5/16/2021	10
	Employee name 2			
	Employee name 3			
123 Excavation	Employee name 4			
XYZ Concrete	Employee name 5	x		
76 Framers	Employee name 6			
	Employee name 7	x		
AB Drywall				
<b>Cumulative Project Labor Hours</b>				

## PROFILE OF FIRM FORM

(This Form must be fully completed and submitted to the Agency when notified to do so by the Agency after the submittal deadline.)

(1) PRIME CONTRACTOR \_\_\_\_\_ SUB-CONTRACTOR \_\_\_\_\_ (This form must be completed by and for each).

(2) Name of Firm: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Mobile: (if applicable) \_\_\_\_\_ Email: \_\_\_\_\_

Email: \_\_\_\_\_

(3) Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

(4) Please attach a brief biography/resume of the company, including the following information:  
 (a) Year Firm Established; (b) Year Firm Established in Alabama; (c) Former Name and Year Established (if applicable); (d) Name of Parent Company and Date Acquired (if applicable).

(5) Identify Principals/Partners in Firm:

NAME	TITLE	% OF OWNERSHIP

(6) Identify the individual(s) that will act as project manager and any other supervisory personnel that will work on projects:

NAME	TITLE

# PROFILE OF FIRM FORM

(This Form must be fully completed and submitted to the Agency when notified to do so by the Agency after the submittal deadline.)

(7) Proposer Diversity Statement: You must check all the following that apply to the ownership of this firm and enter where provided the correct percentage (%) of ownership of each:

- Caucasian American (Male) \_\_\_\_\_%     Public-Held Corporation \_\_\_\_\_%     Government Agency \_\_\_\_\_%     Non-Profit Organization \_\_\_\_\_%

Resident - (RBE), Minority- (MBE), or Woman-Owned (WBE) Business Enterprise (Qualifies by virtue of 51% or more ownership and active management by one of more of the following:

- Resident-Owned \_\_\_\_\_%     African American \_\_\_\_\_%     Native American \_\_\_\_\_%     Hispanic American \_\_\_\_\_%     Asian/Pacific American \_\_\_\_\_%     Asian/Indian American \_\_\_\_\_%
- Woman-Owned (MBE) \_\_\_\_\_%     Woman-Owned (Caucasian) \_\_\_\_\_%     Disabled Veteran \_\_\_\_\_%     Other (Specify) \_\_\_\_\_%

WMBE Certification Number (if applicable) \_\_\_\_\_

Certified by: \_\_\_\_\_  
(NOTE: A CERTIFICATION / NUMBER NOT REQUIRED TO PROPOSE - ENTER IF AVAILABLE)

(8) Federal Tax ID No. \_\_\_\_\_

(9) DUNNS No. \_\_\_\_\_

(10) Louisiana Business License Information:

- General Contractor's License No. (if applicable) \_\_\_\_\_
- City of Lusher Business License No. \_\_\_\_\_

(11) State of \_\_\_\_\_ License Type and No.: \_\_\_\_\_

- City of \_\_\_\_\_ License Type and No.: \_\_\_\_\_

(12) General Liability Insurance Carrier: \_\_\_\_\_

Policy No. \_\_\_\_\_ Expiration Date \_\_\_\_\_

(13) Worker's Compensation Insurance Carrier: \_\_\_\_\_

Policy No. \_\_\_\_\_ Expiration Date \_\_\_\_\_

(14) Professional Liability Insurance Carrier: \_\_\_\_\_

Policy No. \_\_\_\_\_ Expiration Date \_\_\_\_\_

Print Name \_\_\_\_\_ Signature: \_\_\_\_\_

Company \_\_\_\_\_ Date \_\_\_\_\_

Contract Form between the Housing Authority of the Parish of St. James  
and General Contractor

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INTRODUCTION

This contract by and between the **Housing Authority of the Parish of St. James** (hereinafter "the Agency"), and \_\_\_\_\_, (hereinafter "the Contractor") is hereby entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2026.

Services pursuant to this contract shall begin on the \_\_\_\_\_ day of \_\_\_\_\_, 2026, and shall end on the \_\_\_\_\_ day of \_\_\_\_\_, 2027, unless otherwise extended, modified, terminated, or renewed by the parties as provided for within this contract. Unless otherwise detailed herein, all references to "days" shall be calendar days (in the case that the last day referenced falls on a Saturday, Sunday, or legal holiday, then the period of time shall be automatically extended to include the next workday). Also, whenever the term "herein" is referred to, such refers to this contract form, the appendices, and all listed attachments.

1.0 Definitions.

- 1.1 **Executive Director (ED).** The Agency ED.
- 1.2 **Contracting Officer (CO).** The Agency Contracting Officer, typically the Agency Executive Director, but may be another person delegated such authority by the ED.
- 1.3 **Housing Authority.** Any reference herein or within any Appendix to the "Housing Authority" or the "HA" shall be interpreted to mean the same as the Agency.
- 1.4 **Invitation for Bid (IFB).** A competitive solicitation process conducted by the Agency wherein the award was completed to the responsive and responsible bidder(s) that submitted the lowest cost.

2.0 Services and Payment

- 2.1 **Scope of Services.** The services provided pursuant to this contract generally consist of those services for the Agency as described herein and within the IFB, IFB attachments, DIDIER Architecture project manual, construction documents, and drawings. Said services shall be provided on the dates and times determined by the Agency at the designated Agency community and facilities. In addition, the Agency shall retain the right to implement and/or enforce any item issued as a part of IFB No. 24-113(8).
- 2.2 **Provisions of any and all Work.** The Contractor shall not begin any additional work (other than that already detailed herein) without the receipt of a completed Contract Change Order from the authorized Agency representative. Change Orders must be approved in writing and will be documented using the standard AIA Document G701 - 2017 and forwarded to the Architect for review, signature and recommendation to Owner. Additional work will not be approved without written documentation under any circumstances during the scope of this contract period of performance.
- 2.3 **Cost/Value of Services.**
  - 2.3.1 **Contract Value.** The current total Not-To-Exceed (NTE) value of this contract is: \$ \_\_\_\_\_
    - 2.3.1.1 The Contractor exceeds the NTE amount at his/her own risk. The Contractor is under no obligation to provide additional services that would cause the Contractor's fees to exceed the NTE amount without prior revision of this amount by written change order. Further, the Agency reserves the right to amend this amount (increase/decrease) at any time during the ensuing contract period(s) when the Agency determines doing so is in its best interests.
- 2.4 **Renewal Options.** This contract shall terminate when the work described in the IFB is completed, accepted, and paid for by the Agency. There will be no option to renew.

Contract Form between the Housing Authority of the Parish of St. James and General Contractor

2.5 **Time Performance.** The Period of performance for this contract is 304 days from the issuance date of the executed Notice to Proceed (NTP).

2.6 **Billing Method.**

**2.6.1** To receive payment for services rendered pursuant to this contract the Contractor shall submit a fully completed AIA Application and Certificate for Payment signed and notarized with all required supporting documentation to the Architect's Office for review and certification. Once certified the Architect will forward to the Agency for processing and payment. for work previously performed to:

St. James Parish Housing Authority  
Attention: Dana Groover, Executive  
Director 2627 N. King Avenue  
Lutcher, LA 70071

**2.6.2** The Agency will endeavor to pay properly completed pay application received on a Net/30 basis. Any pay application received not properly completed will not be paid unless and/or until the Contractor complies with the applicable provisions of this contract.

**2.6.3** Pay application processing will be delayed and documented via email to the Contractor when required weekly certified payroll reports and not up to date and/or required Section 3 quarterly reports are delinquent. Once documents are received and cured, payment will be released and placed in line for payment during Agency's next payables check run.

**3.0 Agency's Obligations.** Pursuant to this contract, the Agency agrees to provide the specific services detailed herein and shall be responsible for ensuring compliance with all provisions as set forth in the IFB, agency policy, state requirements and regulations as well as FEMA's guidance and funding requirements.

**4.0 Contractor's Obligations.** Pursuant to this contract, the Contractor agrees to provide the specific services detailed herein and shall be responsible for the work as outlined in the **plans and specifications to include verified addendums and written explanations or clarification documents as well as requirements issued by local code enforcement agency/officials:**

**4.1 Supervision and Oversight.** The Contractor shall be solely responsible for providing supervision and oversight to all the Contractor's personnel that are assigned to the Agency properties pursuant to this contract.

**4.2 Qualified Personnel.** The Contractor warrants and represents that it will assign only qualified personnel to perform the services outlined herein and within the appendices. For the purposes of this contract, the term "qualified personnel" shall mean those personnel that have been investigated, tested, and trained in the manner described within this contract and, as proposed by the Contractor within its proposal or as provided by the Contractor during the Contractor's normal conduct of business.

**4.3 Compliance with Federal and State Laws.** All work performed by the Contractor, pursuant to this contract, shall be done in accordance with all applicable Federal, State, and local laws, regulations, codes, and ordinances.

**4.4** Sub-contractors to be used on this contract must be listed and provided prior to issuance of the NTP and are subject to the Contractor's requirements as issued to include compliance with Davis Bacon posting(s) weekly certified payroll requirements, Section 3 reporting, and HUD's No Smoking policy while on PHA property.

Contract Form between the Housing Authority of the Parish of St. James and General Contractor

Insurance Requirements.

**4.4.1** Indemnity. The complete indemnity requirements are detailed within Section 11.19 herein **Insurances.** In this regard, the Contractor shall maintain the following insurance coverage during the effective term(s) of this contract:

- 4.4.2.1 General Liability Insurance.** An original certificate evidencing General Liability coverage, naming the Agency as an additional insured, together with the appropriate endorsement to said policy reflecting the addition of the Agency as an additional insured under said policy (minimum of \$1,000,000 each occurrence, general aggregate minimum limit of \$1,000,000, together with damage to premises and fire damage of \$50,000 and medical expenses any one person of \$5,000), with a maximum deductible amount of \$5,000; and,
- 4.4.2.3 Automobile Liability Insurance.** Automobile Liability coverage in a combined single limit of \$1,000,000. For every vehicle utilized during the term of this contract, when not owned by the entity, each vehicle must have evidence of automobile insurance coverage with limits of no less than \$100,000/\$300,000 and medical pay of \$5,000, with a deductible not greater than \$5,000.
- 4.4.2.4 Worker's Compensation Insurance.** Worker's compensation coverage evidencing carrier and coverage amount.
- 4.4.2.5 Certificates/Endorsements.** The Contractor shall provide to the Agency with current certificate(s)/endorsement(s) evidencing the insurance coverage referenced above. Failure to maintain the above-reference insurance coverage, including naming the Agency as an additional insured (where appropriate) during the term(s) of this contract shall constitute a material breach thereof. Insurance certificate(s)/endorsement(s) shall be delivered to the following person representing the Agency:

**St. James Parish Housing Authority**  
**Attention: Dana Groover, Executive Director**  
**2627 N. King Avenue**  
**P.O. Box 280**  
**Lutcher, LA 70071**

**4.5 Licensing.** The Contractor shall also provide to the Agency a copy of any required licenses. Failure to maintain these licenses in a current status during the term(s) of this contract shall constitute a material breach thereof.

**4.6 Financial Viability and Regulatory Compliance.**

**4.6.1** The Contractor warrants and represents that its corporate entity is in good standing with all applicable federal, state, and local licensing authorities and that it possesses all requisite licenses to perform the services required by this contract. The Contractor further warrants and represents that it owes no outstanding delinquent federal, state, or local taxes or business assessments.

**4.6.2** The Contractor agrees to promptly disclose to the Agency any IRS liens or insurance or licensure suspension or revocation that may adversely affect its capacity to perform the services outlined within this contract. The failure by the Contractor to disclose such an issue to the Agency in writing within 5 days of such notification received will constitute a material breach of this contract.

**4.6.3** The Contractor further agrees to promptly disclose to the Agency any change of more than 50% of its ownership and/or any declaration of bankruptcy that the Contractor may undergo during the term(s) of this contract. The failure of the Contractor to disclose any change of

more than 50% of its ownership and/or its declaration of bankruptcy within 5 days of said actions shall constitute a material breach of this contract.

**4.6.4** All disclosures made pursuant to this section of the contract shall be made in writing and submitted to the Agency within the time periods required herein.

**4.7 Confidentiality.** The Contractor, in connection with performing his/her services hereunder, will have access to or may be provided certain confidential information concerning the Agency and agrees that any information concerning the finances, accounting practices, business, client, client lists, property information, client data, records of the Agency or any other information which a reasonable person could conclude that should remain confidential (collectively Confidential Information), will not be disclosed to any party and without limitation, any employee of the Agency or any client or potential client of the Agency at any time, except for the Contractor's legal counsel, accounts, or financial advisors, who will also hold such Confidential Information in confidence. The Contractor acknowledges that the information is being provided with the sole understanding that all Confidential Information will remain confidential and will be held in the strictest confidence. The Contractor further acknowledges that any disclosure of the Confidential Information, whether intentional or inadvertent, may harm the Agency. The Agency will have the right to enforce this Contract by specific performance, as well as hold the Contractor liable for any damages caused by any disclosure of any Confidential Information, whether intentional or inadvertent. The Contractor agrees that he has received valuable consideration for the entering into this Contract and agrees to be bound by all of its terms and conditions. This Contract will be binding on the Contractor and any attorney, accountant, financial advisor who also may be provided Confidential Information.

**4.8 No Smoking on Agency Property.** The Agency has implemented a No Smoking policy on all its properties. Accordingly, the Contractor shall ensure that its employees or other persons brought or allowed onsite by the Contractor shall not utilize any smoking materials on Agency property at any time.

**5.0 Modification.** This contract shall not be modified, revised, amended, or extended except by issuance of a written addendum, preferably executed by both parties, but the Agency shall retain the right to issue a unilateral addendum (pursuant to HUD regulation, the Contractor shall not have the same right). The Agency acknowledges that such "unilateral addendum" must not be otherwise in conflict with the current requirements already stated within this contract, or any appendix attached thereto, or in conflict with any relevant regulation or law; in either case, if a unilateral addendum is issued in conflict with the current requirements of the contract, and the amended conditions are deemed necessary by the Agency, and if the amended conditions cause the Contractor to be required to provide additional services, the Agency will negotiate suitable additional compensation to the Contractor to compensate the Contractor for the additional work caused by the unilateral addendum issued.

**6.0 Severability.** The invalidity of any provision of this contract, as determined by a court of competent jurisdiction and/or HUD, shall in no way affect the validity of any other provision herein.

## **7.0 Applicable Laws.**

**7.1 Compliance with Federal and State Laws.** All work performed by the Contractor, pursuant to this contract, shall be done in accordance with applicable all Federal, State, and local laws, regulations, codes, and ordinances.

**7.2 Jurisdiction of Law.** The laws of the State of Louisiana shall govern the validity, construction, and effect of this contract, unless said laws are superseded by, or in conflict with applicable federal laws and/or federal regulations. This contract will be binding upon the parties, their heirs, beneficiaries, and devisees of the parties hereto. The parties agree that St. James County, Louisiana, is the appropriate forum for any action relating to this contract. Should any party hereto retain counsel for the purpose of initiating litigation or arbitration to enforce, prevent the breach of any provision hereof, or for any other judicial remedy, then the prevailing party shall be entitled to be reimbursed by the losing party for all costs and expenses incurred thereby, including, but not limited to, reasonable attorney's fees and costs incurred by such prevailing party. This contract may be signed by its counterparts.

**8.0 Notices and Reports.**

**8.1** All notices and/or reports submitted to the Agency by the Contractor pursuant to this contract shall be in writing and delivered to the attention of the following person representing the Agency:

**St. James Parish Housing Authority  
Attention: Dana Groover, Executive Director  
2627 N. King Avenue  
P.O. Box 280  
Lutcher, LA 70071**

or, if appropriate, e-mailed to [dgroover@stjameshousing.com](mailto:dgroover@stjameshousing.com)

**8.2** All notices submitted to the Contractor pursuant to this contract shall be in writing and mailed to the attention of:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

or, if appropriate, shall be e-mailed to: \_\_\_\_\_

**9.0 Disputed Billings (Charges).**

**9.1 Procedures:** In addition to the procedures detailed within Clause No. 31 of Appendix No. 1, *General Conditions for Construction Contracts - Public Housing Programs*, in the event that the Agency disputes any portion of its billing(s), the Agency shall pay the undisputed portion of such billing and initiate the dispute-resolving procedures, as follows:

**9.1.1** The Agency's representative shall, within 10 days after the Agency's receipt of such billing, formally notify the Contractor's representative of all particulars pertaining to the dispute, and request that he/she investigate and respond to this issue.

**9.1.2** If such dispute cannot be resolved by the Contractor's response, within 10 days after such notification is given, the CO and the Contractor's representative shall meet to discuss the matter and attempt to arrive at a resolution.

**9.1.3** If the CO and the Contractor's representative are unable to resolve the dispute through such discussion within 10 days, the Agency shall, within 10 days thereafter, either (herein, "appropriate," as determined at the sole discretion of the Agency):

**9.1.3.1** Pay the disputed charges and reserve the right to submit the matter to the appropriate District Court in the State of Louisiana; or,

**9.1.3.2** Not pay the disputed charge and submit the matter to the appropriate district court in the State of Louisiana; or,

**9.1.3.3** Not pay the disputed charge and allow the Contractor to submit the matter either to the appropriate District Court in the State of Louisiana.

**10.0 2 CFR §200.327, Appendix II, Contract Provisions For Non-Federal Entity Contracts Under Federal Awards.** Pursuant to this CFR, as issued by the Office of the U.S. Secretary of HUD, the Agency, and the Contractor each agree to comply with the following provisions and agree that any contract that ensues as a result of this IFB will include the following clauses, whether actually inserted or by reference:

- 10.1 Remedies for Contractor Breach.** Pertaining to contract-related issues, it is the responsibility of both the Agency and the Contractor to communicate with each in as clear, and complete, a manner as possible. If at any time during the term of this contract the Agency or the Contractor is not satisfied with any issue, it is the responsibility of that party to deliver to the other party communication, in writing, fully detailing the issue and corrective action (please note that the Agency has the right to issue unilateral addendums to this contract, but the Contractor does not have the same right). The other party shall, within 10 days, respond in writing to the other party (however, the Agency shall retain the right to, if conditions warrant, require the Contractor to respond in a shorter period of time). Further, the Agency shall, at a minimum, employ the following steps in dealing with the Contractor as to any performance issues:
- 10.1.1** If the Contractor is in material breach of the contract, the Agency may promptly invoke the termination clause detailed within Section No. 32 of Contract Appendix No. 1, form HUD-5370 (01/2014), *General Conditions for Construction Contracts-Public Housing Programs*, which is attached hereto, and terminate the contract for cause. Such termination must be delivered to the Contractor in writing and shall fully detail all pertinent issues pertaining to the cause of and justification for the termination.
- 10.1.2** Prior to termination, the Agency may choose to warn the Contractor, verbally or in writing, of any issue of non-compliant or unsatisfactory performance. Such a written warning may include placing the Contractor on probation, thereby **giving** the Contractor a certain period of time to correct the deficiencies or potentially suffer termination. The Agency shall maintain in the contract file a written record of any such warning detailing all pertinent information. If the Contractor does not agree with such action, the Contractor shall have ten 10 days to dispute or protest, in writing, such action; if he/she does not do so within the 10-day period, he/she shall have no recourse but to accept and agree with the Agency's position on the issue. The written protest must detail all pertinent information pertaining to the dispute, including justification detailing the Agency's alleged incorrect action(s).
- 10.1.3** After termination, if the Contractor does not agree with the Agency's justification for the termination, the Contractor shall have 10 days to dispute, in writing, such action; if he/she does not do so within the 10-day period, he/she shall have no recourse but to accept and agree with the Agency's position on the issue. The written protest must detail all pertinent information pertaining to the dispute, including justification detailing the Agency's alleged incorrect action(s).
- 10.1.4** The response to any protest received shall be conducted in accordance with Section No. 4.0 of the *Supplemental Instructions to Bidders and Contractors* document.
- 10.2** Termination for Cause and Convenience. For all contracts in excess of \$10,000, as detailed within Clause No. 34 of Contract Appendix No. 1, form HUD-5370 (1/2014), *General Conditions for Construction Contracts - Public Housing Programs*, attached hereto. In addition to the immediate foregoing, if the Agency terminates the Contractor for convenience, the Agency is obligated to, as detailed within Section 11.6.C.2 of HUD Procurement Handbook 7460.8 REV 2, negotiate with and pay to the Contractor a "reasonable allowance for profit" for the remainder of the contracted period.
- 10.3 Equal Employment Opportunity.** Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
- 10.4 Davis-Bacon Act, as amended (40 U.S.C.3141-3148).** When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C.3141-3144, and 3146-3148) as supplemented by

Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors [are] required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors [are] required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the **Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States")**. The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

- 10.5 Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708).** Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or *contracts for transportation or transmission of intelligence*.
- 10.6 Rights to Inventions Made Under a Contract or Agreement.** If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.
- 10.7 Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended-Contracts** and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C.1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
- 10.8 Debarment and Suspension (Executive Orders 12549 and 12689)-A** contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), "Debarment and Suspension." The Excluded Parties List System in SAM contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.
- 10.9 Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)-Contractors** that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any

other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

**10.10 §200.323 Procurement of recovered materials.** A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only 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, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

**10.11 §200.216 Prohibition on certain telecommunications and video surveillance services or equipment.**

**10.11.1** Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

**10.11.1.1** Procure or obtain;

**10.11.1.2** Extend or renew a contract to procure or obtain; or

**10.11.1.3** Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

**10.11.1.3.1** For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

**10.11.1.3.2** Telecommunications or video surveillance services provided by such entities or using such equipment.

**10.11.1.3.3** Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

**10.11.2** In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

10.11.3 See Public Law 115-232, section 889 for additional information.

10.11.4 See also § 200.471.

#### 10.12 §200.322 Domestic preferences for Procurements.

10.12.1 As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

10.12.2 For purposes of this section:

10.12.2.1 "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

10.12.2.2 "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

### 11.0 Additional Considerations.

#### 11.1 Right of Joinder.

11.1.1 Any political subdivision within the State of Louisiana (or any other jurisdiction within the United States) may be granted the privilege of joining the awarded contract, only at the option of the Contractor. If the Contractor so grants such a privilege, the terms, and conditions, of the IFB documents, including the ensuing contract, may be passed on to the joining political subdivision by the Contractor.

11.1.2 The Contractor shall retain the unilateral right to allow or disallow any political subdivision the privilege of joining the awarded contract. In the event the Contractor allows another political subdivision to join the Agency contract, it is expressly understood that the Agency shall in no way be liable for the joining political subdivision obligations to the Contractor in any manner whatsoever.

11.2 **Non-Escalation.** Unless otherwise specified within the IFB documents, the unit prices reflected in the contract shall remain firm with no provision for price increases during the term of the contract.

11.3 **Funding Restrictions and Order Quantities.** The Agency reserves the right to reduce or increase estimated or actual quantities in whatever amount necessary without prejudice or liability to the Agency, if:

11.3.1 Funding is not available; or,

11.3.2 Legal restrictions are placed upon the expenditure of monies for this category of service or supplies; or,

11.3.3 The Agency's requirements change in good faith after award of the contract.

11.4 **Local, State, and/or Federal Permits.** Unless otherwise stated in the IFB documents, all local, State or Federal permits which may be required to provide the services ensuing from award of this IFB, whether or not they are known to either the Agency or the bidders at the time of the bid submittal deadline or the

award, shall be the sole responsibility of the Contractor and any costs that were submitted by the Contractor in response to the IFB shall reflect all costs required by the Contractor to procure and provide such necessary permits.

- 11.5 Taxes.** All persons doing business with the Agency are hereby made aware that the Agency is exempt from paying Louisiana State Sales and Use Taxes and Federal Excise Taxes. A letter of Tax Exemption will be provided upon request to any contractor awarded.
- 11.6 Government Standards.** It is the responsibility of the bidder to ensure that all items and services proposed conform to all local, State, and Federal law concerning safety (OSHA) and environmental control (EPA and County Pollution Regulations) and any other enacted ordinance, code, law, or regulation. The Contractor shall be responsible for all costs incurred for compliance with any such possible ordinance, code, law, or regulation. No time extensions shall be granted, or financial consideration given to the Contractor for time or monies lost due to violations of any such ordinance, code, law, or regulations that may occur.
- 11.7 Freight on Blii and Delivery.** All costs submitted by the bidder shall reflect the cost of delivering the proposed items and/or services to the locations(s) specified within the IFB documents or within the contract.
- 11.7.1** The Contractor agrees to deliver to the designated location(s) on or before the date specified in the finalized contract. Failure to deliver on or before the specified date constitutes an event of default by the Contractor. Upon default, the Contractor agrees that the Agency may, at its option, rescind the finalized contract under the default clause herein and seek compensatory damages as provided by law.
- 11.8 Backorders.**
- 11.8.1** The CO must be notified in writing by the Contractor within 10 days of any and all backordered materials and/or any incomplete services and the estimated delivery date.
- 11.8.2** Unless otherwise stipulated in the contract, any order that will take more than 10 days after the originally agreed upon delivery date may at the option of the Agency, be canceled and ordered from another source, if, in the opinion of the CO, it is in the best interests of the Agency to do so.
- 11.9 Work on Agency Property.** If the Contractor's work under the contract involves operations by the Contractor on Agency premises, the Contractor shall take all necessary precautions to prevent the occurrence of any injury to persons or property during the progress of such work and, except to the extent that any such injury is caused solely and directly by the Agency's negligence, shall indemnify the Agency, and their officers, agents, servants and employees against all loss which may result in any way from any act or omission of the Contractor, its agents, employees, or subcontractors.
- 11.10 Official, Agent and Employees of the Agency Not Personally Liable.** It is agreed by and between the parties hereto that in no event shall any official, officer, employee, or agent of the Agency in any way be personally liable or responsible for any covenant or agreement herein contained, whether either expressed or implied, nor for any statement, representation or warranty made herein or in any connection with this agreement.
- 11.11 Subcontractors.** Unless otherwise stated within the IFB documents, the Contractor may not use any subcontractors to accomplish any portion of the services described within the IFB documents or the contract without the prior written permission of the CO.
- 11.12 Salaries and Expenses Relating to the Contractors Employees.** Unless otherwise stated within the IFB documents, the Contractor shall pay all salaries and expenses of, and all Federal, Social Security taxes, Federal and State Unemployment taxes, and any similar taxes relating to its employees used in the performance of the contract. The Contractor further agrees to comply with all Federal, State, and local

wage and hour laws and all licensing laws applicable to its employees or other personnel furnished under this agreement.

- 11.13 Attorney's Fees.** In the event that litigation commences by one party hereto against the other in connection with the enforcement of any provision of this agreement, the prevailing party shall be paid by the losing party all court costs and other expenses of such litigation, including reasonable attorneys' fees. The amount allowed as attorneys' fees shall be taxed to the losing party as costs of the suit, unless prohibited by law.
- 11.14 Independent Contractor.** Unless otherwise stated within the IFB documents or the contract, the Contractor is an independent Contractor. Nothing herein shall create any association, Agency, partnership, or joint venture between the parties hereto and neither party shall have any authority to bind the other in any way.
- 11.15 Waiver of Breach.** A waiver of either party of any terms or condition of this agreement in any instance shall not be deemed or construed as a waiver of such term or condition for the future, or of any subsequent breach thereof. All remedies, rights, undertakings, obligations, and agreements contained in this agreement shall be cumulative and none of them shall be in limitation of any other remedy, right, obligation or agreement of either party.
- 11.16 Time of the Essence.** Time is of the essence under this agreement as to each provision in which time of performance is a factor.
- 11.17 Limitation of Liability.** In no event shall the Agency be liable to the Contractor for any indirect, incidental, consequential, or exemplary damages.

**11.18 Indemnification.**

**11.18.1** The Contractor shall indemnify, defend, and hold the Agency (and its officers, employees, and agents) harmless from and against any and all claims, damages, losses, suits, actions, decrees, judgments, attorney's fees, court costs and other expenses of any kind or character, which are caused by, arise out of, or occur due to any failure of the Contractor to (1) abide by any of the applicable professional standards within its industry, or (2) comply with the terms, conditions, or covenants that are contained in this contract, (3) comply with the Louisiana "Industrial Insurance Act," or any other similar law, ordinance, or decree; or (4) ensure that the any subcontractors abide by the terms of this provision and this contract; provided, however, that Contractor will not be required to indemnify the Agency against any loss or damage which was specifically caused by the Agency providing inaccurate information to the Contractor, failing to provide necessary and requested information to the Contractor, or refusal to abide by any recommendation of the Contractor.

**11.18.2** In this connection, it is expressly agreed that the Contractor shall, at its own expense, defend the Agency, its officers, employees, and agents, against any and all claims, suits or actions which may be brought against them, or any of them, as a result of, or by reason of, or arising out of, or on account of, or in consequence of any act or failure to act the consequences of which the Contractor has indemnified the Agency. If the Contractor shall fail to do so, the Agency shall have the right, but not the obligation, to defend the same and to charge all direct and incidental costs of such defense to the Contractor including attorney's fees and court costs.

**11.18.3** Any money due to the Contractor under and by virtue of this contract, which the Agency believes must be withheld from the Contractor to protect the Agency, may be retained by the Agency so long as it is reasonably necessary to ensure the Agency's protection; or in case no money is due, its surety may be held until all applicable claims have been settled and suitable evidence to that effect furnished to the Agency provided, however, neither the Corporation's payments shall not be withheld, and its surety shall be released, if the

Contractor is able to demonstrate that it has adequate liability and property damage insurance to protect the Agency from any potential claims.

**11.18.4** The Contractor shall provide that any contractual arrangement with a subcontractor shall be in conformance with the terms of this Contract including the terms of this indemnity provision. The Contractor guarantees that it will promptly handle and rectify any and all claims for materials, supplies and labor, or any other claims that may be made against it or any of its subcontractors in connection with the contract.

**11.19 Lobbying Certification.** By execution of this contract with the Agency the Contractor thereby certifies, to the best of his or her knowledge and belief, that:

**11.19.1** No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an Agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal loan, the entering into of any cooperative agreement, or modification of any Federal contract, grant, loan, or cooperative agreement.

**11.19.2** If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an Agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form- LLL, Disclosure Form to Report Lobbying, in an accordance with its instructions.

**11.19.3** The Contractor shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

**11.20 Additional Federally Required Orders/Directives.** Both parties agree that they will comply with the following laws and directives, where applicable:

**11.20.1 Executive Order 11061**, as amended, which directs the Secretary of HUD to take all action which is necessary and appropriate to prevent discrimination by agencies that utilize federal funds.

**11.20.2 Public Law 88-352, Title VI of the Civil Rights Act of 1964**, which provides that no person in the United States shall, on the basis of race, color, national origin, or sex, be excluded from participation in, denied the benefits of, or subjected to discrimination under any program or activity which receives federal financial assistance. The Agency hereby extends this requirement to the Contractor and its private contractors. Specific prohibited discriminatory actions and corrective action are described in Chapter 2, Subtitle C, Title V of the Anti-Drug Abuse Act of 1988 (42 U.S.C. 19901 et. seq.).

**11.20.3 Public Law 90-284, Title VIII of the Civil Rights Act of 1968.**, popularly known as the Fair Housing Act, which provides for fair housing throughout the United States and prohibits any person from discriminating in the sale or rental of housing, the financing of housing or the provision of brokerage services, including in any way making unavailable or denying a dwelling to any person because of race, color, religion, sex, or national origin. Pursuant to this statute, the Agency requires that the Contractor administer all programs and activities, which are related to housing and community development in such a manner as affirmatively to further fair housing.

**11.20.4** The Age Discrimination Act of 1975, which prohibits discrimination on the basis of age.

**11.20.5** Anti-Drug Abuse Act of **1988** (42 U.S.C. 11901 et. seq.).

**11.20.6** HUD Information Bulletin 909-23 which is the following:

**11.20.6.1** Notice of Assistance Regarding Patent and Copyright Infringement; and,  
**11.20.6.2** Clean Air and Water Certification (where applicable); and,  
**11.20.6.3** Energy Policy and Conversation Act (where applicable).

**11.20.7** That the funds that are provided by the Agency and HUD hereunder shall not be used, directly or indirectly, to employ, award a contract to, or otherwise engage the services of any debarred, suspended, or ineligible Contractor.

**11.20.8** That none of the personnel who are employed in the administration of the work required by this contract shall, in any way or to any extent, be engaged in the conduct of political activities in violation of Title V, Chapter 15, of the United States Code.

**11.20.9** The mention herein of any statute or Executive Order is not intended as an indication that such a statute or Executive Order is necessarily applicable not is the failure to mention any statute or Executive Order intended as an indication that such a statute or Executive Order is not applicable. In this connection, therefore each provision of law and each clause, which is required by law to be inserted in this agreement, shall be deemed to have been inserted herein, and this agreement shall be read and enforced as though such provision or clause had been physically inserted herein. If, through mistake or otherwise, any such provision is not inserted or is inserted incorrectly, this agreement shall forthwith be physically amended to make such an insertion or correction upon the application of either part.

**11.21 Build America, Buy America (BABA) Act Requirements.** If pertinent (i.e. pertaining to non-PHA awards), by receipt of this contract award, it shall be the responsibility of the successful bidder to agree, certify, and eventually show proof that the work and products provided and installed by the contractor are in full compliance with the requirements of the noted Act. More information can be obtained at the following link: <https://www.hud.gov/baba>.

### **12.0 Section 3 Clause:**

**A. Authority,** 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) and 24 CFR Part 75. 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. Contracting, Contract Certification and Compliance.** The parties to this contract agree to comply with HUD's regulations in 24 CFR part 75, which implement section 3. As evidenced by their execution of this contract, the parties

to this contract certify that they are under no contractual or other impediment that would prevent them from

complying with the part 75 regulations. Specifically, contracts must be:

- (1) Consistent with existing Federal, state, and local laws and regulations, PHAs and other recipients of public housing financial assistance, and their contractors and subcontractors, must make their best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers.
- (2) PHAs and other recipients, and their contractors and subcontractors, must make their best efforts in the following order of priority:
  - a. To Section 3 business concerns that provide economic opportunities for residents of the public housing projects for which the assistance is provided;
  - b. To Section 3 business concerns that provide economic opportunities for residents of other public housing projects or Section-8 assisted housing managed by the PHA that is providing the assistance;
  - c. To YouthBuild programs; and
  - d. To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (or nonmetropolitan county) in which the assistance is provided.

**C. Notice.** 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. Subcontracts.** The contractor agrees to include this **Section 3 Clause** in every subcontract subject to compliance with regulations in 24 CFR Part 75 and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this **Section 3 Clause** upon finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 75.

**E. Employment and Training Opportunities.** The contractor will certify that any vacant employment positions, including training positions, that are filled: after the contractor is selected but before the contract is executed, and with persons other than those to whom the regulations of 24 CFR Part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 75.

Specifically, the contract shall be consistent with existing Federal, State, and local laws and regulations. PHAs or other recipients receiving public housing financial assistance, as well as their contractors and subcontractors, must make their best efforts to provide employment and training opportunities generated by the public housing financial assistance to Section 3 workers. These best efforts must apply to the Section 3 workers in the following order of priority:

- (1) To residents of the public housing projects for which the public housing financial assistance is expended;
- (2) To residents of other public housing projects managed by the PHA that is providing the assistance or for residents of Section 8-assisted housing managed by the PHA;
- (3) To participants in YouthBuild programs; and
- (4) To low- and very low-income persons residing within the metropolitan area (or nonmetropolitan county) in which the assistance is expended.

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

### **12.1 Contracting With Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms.**

- a) Any party to this Contract, when expending any Federal funds received under this Agreement, must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. These steps are required for the hiring of any subcontractors under this Contract.
- b) Affirmative steps must include:
  - 1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
  - 2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
  - 3)

- 4) 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;
- 5) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- 6) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development agency of the Department of Commerce.

**No.**  
**13.1 Description**

- form HUD-5370 (1/2014), *General Conditions for Construction Contracts-Public Housing Programs*
- | Supplemental conditions pertaining to form HUD-5370 (1/2014), *General Conditions for construction Contracts, for Public Housing Programs*
- 13.2** HUD-92554M *Supplementary Conditions of the Contract for Construction*
- 13.3** form HUD-255'4, *Supplementary Conditions of the Contract for Construction*
- 13.4** Form HUD-401
- 13.5** *armf\_t.J\_D-'l\_2010 (311006) Equal Employment Opportunity Certification*
- 13.6** form HUD-51000 (1/2014). *Schedule of Amounts for Contract Payments*
- 13.7** form HUD-5'1001 (1/2014), *Periodic Estimate for Partial P1*
- 13.8** form HUD-51002 (1/2014). *Schedule of Change Orders*
- 13.9** form HUD 5J1003 (1/2014), *Schedule of Materials Stored*
- 13.10** form HUD-51004 (1/2014). *Summary of Materials Stored*
- 13.11** form HWD-5372 (1/20U), *Const/ruction Progress Schedule*
- 13.12** *form WH-347*  
form HUD-11 (8/2004), *Record of Employee Interview*
- 13.13** form HUD 50071 (01 /14), *Certification of Payments to Influence Federal Transactions* (NOTE: This form will only be completed and included as a part of the ensuing contract if the Agency anticipates that total awards pursuant to the ensuing contract may or will exceed \$100,000.)
- 13.14** | Standard Form I.LL (Rev. 01/14), *Disclosure of Lobbying Activities* (NOTE: this form will only be completed and included as a part of the ensuing contract if the Contractor designates an affirmative answer to Item No. (2)  the the immediate identified form 50071.)
- 13.15** | Davis-Bacon Wage Decision no.
- 13.16** | Section 3 Policy-Procedures-Compliance Form
- 13.17** | E-Verify Form
- 13.18** | *Notice to Proceed (to be issued separately*
- 13.19** | Scope of Work & related plans. specifications
- 13.19.1** | if applicable, Addendum #1 dated \_\_\_\_\_ by signed acknowledgement w/form of Bid
- 13.19.2** Other:
- 13.20** | Inclusion **by Reference**. Included by Reference is any document or clause issued as a part of JIFB No.25-120,25-121 or within the Contractor's bid submittal, that. The Agency may choose to include at any time during the performance of this contract or any options exercised thereto by the Agency (NOTE! This inclusion shall be the unilateral right of the Agency and not the Contractor). Further, any document that may be referenced herein that has not been listed above is hereby incorporated herein by reference, and a copy of each such document is available from the Agency upon written request from the Contractor.
- 13.21** | Order of Precedence. Please note that, in the case of any discrepancy between this contract and any of the above noted attachments, the requirement(s) detailed within the body of this contract shall take first precedence, then the requirement(s) detailed within each attachment shall take precedence in the order that they are listed above (meaning, the requirement(s) detailed within the lower listed item may not overrule any requirements detailed within a higher listed item).

**14.0 CERTIFICATIONS.** The undersigned representative of each party hereby acknowledges by signature below that they have reviewed the foregoing and understand and agree to abide by their respective obligations as defined herein:

**General Contractor**

By: \_\_\_\_\_

Date: \_\_\_\_\_

The Housing Authority of the Parish of St. James:

;

DRAFT

By: \_\_\_\_\_

DRAFT

Date:

DRAFT

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

**US Department of Agriculture**  
Farmers Home Administration

<b>Part I to be completed by Controlling Participant(s) of Covered Projects</b> <i>(See instructions)</i>		<b>For HUD HQ/FmHA use only</b>	
Reason for submission:			
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:
    - a. No mortgage on a project listed has ever been in default, assigned to the Government or foreclosed, nor has it received mortgage relief from the mortgagee;
    - b. The controlling participants have no defaults or noncompliance under any Conventional Contract or Turnkey Contract of Sale in connection with a public housing project;
    - c. There are no known unresolved findings as a result of HUD audits, management reviews or other Governmental investigations concerning the controlling participants or their projects;
    - d. There has not been a suspension or termination of payments under any HUD assistance contract due to the controlling participant's fault or negligence;
    - e. The controlling participants have not been convicted of a felony and are not presently the subject of a complaint or indictment charging a felony. (A felony is defined as any offense punishable by imprisonment for a term exceeding one year, but does not include any offense classified as a misdemeanor under the laws of a State and punishable by imprisonment of two years or less);
    - f. The controlling participants have not been suspended, debarred or otherwise restricted by any Department or Agency of the Federal Government or of a State Government from doing business with such Department or Agency;
    - g. The controlling participants have not defaulted on an obligation covered by a surety or performance bond and have not been the subject of a claim under an employee fidelity bond;
  3. All the names of the controlling participants who propose to participate in this project are listed above.
  4. None of the controlling participants is a HUD/FmHA employee or a member of a HUD/FmHA employee's immediate household as defined in Standards of Ethical Conduct for Employees of the Executive Branch in 5 C.F.R. Part 2635 (57 FR 35006) and HUD's Standard of Conduct in 24 C.F.R. Part 0 and USDA's Standard of Conduct in 7 C.F.R. Part 0 Subpart B.
  5. None of the controlling participants is a participant in an assisted or insured project as of this date on which construction has stopped for a period in excess of 20 days or which has been substantially completed for more than 90 days and documents for closing, including final cost certification, have not been filed with HUD or FmHA.
  6. None of the controlling participants have been found by HUD or FmHA to be in noncompliance with any applicable fair housing and civil rights requirements in 24 CFR 5.105(a). (If any controlling participants have been found to be in noncompliance with any requirements, attach a signed statement explaining the relevant facts, circumstances, and resolution, if any).
  7. None of the controlling participants is a Member of Congress or a Resident Commissioner nor otherwise prohibited or limited by law from contracting with the Government of the United States of America.
  8. Statements above (if any) to which the controlling participant(s) cannot certify have been deleted by striking through the words with a pen, and the controlling participant(s) have 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.
<b>This form prepared by (print name)</b>			<b>Area Code and Tel. No.</b>

**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 <b>Yes No If yes, explain</b>		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)

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## 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](http://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](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.

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**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.

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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.

# General Conditions for Construction Contracts - Public Housing Programs

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

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

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

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## 1. Definitions

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

## 2. Contractor's Responsibility for Work

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

## 3. Architect's Duties, Responsibilities, and Authority

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

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

#### 4. Other Contracts

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

### Construction Requirements

#### 5. Pre-construction Conference and Notice to Proceed

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

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

#### 6. Construction Progress

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

#### 7. Site Investigation and Conditions Affecting the Work

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

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

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

## 8. Differing Site Conditions

- (a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site(s), of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.
- (b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. Work shall not proceed at the affected site, except at the Contractor's risk, until the Contracting Officer has provided written instructions to the Contractor. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, the Contractor shall file a claim in writing to the PHA within ten days after receipt of such instructions and, in any event, before proceeding with the work. An equitable adjustment in the contract price, the delivery schedule, or both shall be made under this clause and the contract modified in writing accordingly.
- (c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.
- (d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

## 9. Specifications and Drawings for Construction

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

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

- (b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.
- (c) Where "as shown" "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place" that is "furnished and installed".
- (d) "Shop drawings" means drawings, submitted to the PHA by the Contractor, subcontractor, or any lower tier subcontractor, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e., form, fit, and attachment details) of materials of equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract. The PHA may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with other contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the PHA's reasons therefore. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.
- (f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Architect approves any such variation and the Contracting Officer concurs, the Contracting Officer shall issue an appropriate modification to the contract, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- (g) It shall be the responsibility of the Contractor to make timely requests of the PHA for such large scale and full size drawings, color schemes, and other additional information, not already in his possession, which shall be

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

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

#### 10. As-Built Drawings

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

#### 11. Material and Workmanship

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

machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

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

#### 12. Permits and Codes

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

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

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

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

### 13. Health, Safety, and Accident Prevention

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

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

(b) For these purposes, the Contractor shall:

- (1) Comply with regulations and standards issued by the Secretary of Labor at 29 CFR Part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96), 40 U.S.C. 3701 et seq.; and
- (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

(c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 CFR Part 1904.

(d) The Contracting Officer shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

(e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as the PHA, the Secretary of Housing and Urban Development, or the Secretary of Labor shall direct as a means of enforcing such provisions.

### 14. Temporary Heating

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

### 15. Availability and Use of Utility Services

(a) The PHA shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the PHA or, where the utility is produced by the PHA, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the PHA, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

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

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed under this contract, and which do not unreasonably interfere with the work required under this contract.

(b) The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during performance of this contract, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(c) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. Prior to disturbing the ground at the construction site, the Contractor shall ensure that all underground utility lines are clearly marked.

(d) The Contractor shall shore up, brace, underpin, secure, and protect as necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected by the excavations or other operations connected with the construction of the project.

(e) Any equipment temporarily removed as a result of work under this contract shall be protected, cleaned, and replaced in the same condition as at the time of award of this contract.

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

## 17. Temporary Buildings and Transportation of Materials

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

## 18. Clean Air and Water

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

## 19. Energy Efficiency

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

## 20. Inspection and Acceptance of

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

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

## 21. Use and Possession Prior to Completion

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

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

## 22. Warranty of Title

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

## 23. Warranty of

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

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

**24. Prohibition Against Liens**

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

**Administrative Requirements**

**25. Contract Period**

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

**26. Order of Provisions**

accordance with the terms and conditions of the

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

**27. Payments**

retain ten (10) percent of the amount of progress

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

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

- (d) The Contractor shall submit, on forms provided by the PHA, periodic estimates showing the value of the work performed during each period based upon the approved submitted not later than \_\_\_\_\_ days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
- (e) Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made: I hereby certify, to the best of my knowledge and belief, that:

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

**Name:**

Title:

Date:

- (f) Except as otherwise provided in State law, the PHA shall payments until completion and acceptance of all work under the contract; except, that if upon completion of 50 percent of the work, the Contracting Officer, after consulting with the Architect, determines that the Contractor's performance and progress are satisfactory, the PHA may make the remaining payments in full for the work subsequently completed. If the Contracting Officer subsequently determines that the Contractor's performance and progress are unsatisfactory, the PHA shall reinstate the ten (10) percent (or other percentage as provided in State law) retainage until such time as the Contracting Officer determines that performance and progress are satisfactory.
- (g) The Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration when computing progress payments.

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

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

## 28. Contract Modifications

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

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

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

## 29. Changes

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

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

### 30. Suspension of Work

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

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

### 31. Disputes

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

### 32. Default

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

proceed with the work (or separable part of the work) that has been delayed. In this event, the PHA may take over the work and complete it, by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the PHA resulting from the **Convenience** Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the PHA in completing the work.

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

### 33. Liquidated Damages

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

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

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

### 34. Termination for

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

### 35. Assignment of Contract

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

### 36. Insurance

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

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

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

[Contracting Officer insert amount] per occurrence.

- (b) Before commencing work, the Contractor shall furnish the PHA with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force. The Builder's Risk Insurance shall be for the benefit of the Contractor and the PHA as their interests may appear and each shall be named in the policy or policies as an insured. The Contractor in installing equipment supplied by the PHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by the PHA. The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. It need not be carried on landscape work. Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by the PHA. The Contractor may terminate this insurance on buildings as of the date taken over for occupancy by the PHA. The Contractor is not required to carry Builder's Risk Insurance for modernization work which does not involve structural alterations or additions and where the PHA's existing fire and extended coverage policy can be endorsed to include such work.
- (c) All insurance shall be carried with companies which are financially responsible and admitted to do business in the State in which the project is located. If any such insurance is due to expire during the construction period, the Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or non-renewed by the insurance company until at least 30 days prior written notice has been given to the Contracting Officer.

### 37. Subcontracts

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

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

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

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

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

### 39. Equal Employment Opportunity

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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#### 41. Interest of Members of Congress

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

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

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

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

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

#### 44. Royalties and Patents

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

#### 45. Examination and Retention of Contractor's Records

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

#### 46. Labor Standards - Davis-Bacon and Related

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

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

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

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

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

- (ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employee Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- (iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (a)(2)(ii) or (iii) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in classification.
- (3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (4) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the

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

- (b) Withholding of funds. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working in the construction or development of the project, all or part of the wages required by the contract, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.
- (c) Payrolls and basic records.
- (1) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working in the construction or development of the project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

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

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

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

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

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

- (d) (1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under

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

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

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

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47. Non-Federal Prevailing Wage Rates

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

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

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

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

48. Procurement of Recovered Materials.

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

( ) Paragraph (a) of this clause shall apply to items purchased under this contract where: (1) the Contractor purchases in excess of \$10,000 of the item under this contract; or (2) during the preceding Federal fiscal year, the Contractor: (i) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (ii) purchased a total of in excess of \$10,000 of the item both under and outside that contract.

## SUPPLEMENTARY CONDITIONS TO THE CONSTRUCTION CONTRACT

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

OMB Approval No. 2502-0598  
(Exp. 12/31/2027)

The public reporting burden for this collection of information is estimated to average 0.2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to U.S. Department of Housing and Urban Development, Office of the Chief Data Officer, 451 7th St SW, Room 8210, Washington, DC 20410-5000. Do not send completed forms to this address. This agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid OMB control number. HUD collects this information to obtain supportive documentation that must be submitted to HUD for approval. HUD uses this information to ensure that viable projects are developed and maintained. This information is required to obtain benefits derived from the National Housing Act Multifamily Mortgage Insurance Programs. This information collected is authorized under Title II of the National Housing Act (12 USC 1701 et seq.) and the regulations at 24 CFR 200 et seq., and no confidentiality is assured.

**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. The terms of this Supplementary Conditions to the Construction Contract (HUD-92554M) takes precedence over all provisions of the "General Conditions of the Contract for Construction" (AIA Document A201) inconsistent with said Supplementary Conditions.

**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)(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.

(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.

(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.

(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.

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the U.S. 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.

(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 may be submitted in any form desired, whether paper (Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347.pdf> or its successor site), or electronically pursuant to Program Obligations. 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 U.S. 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.

(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 U.S. 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 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 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 U.S. 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 24.

(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, Section 1010, Title 18, U.S.C., "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 therefore 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, which shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of such subparagraph, at a rate determined and published by the U.S. Department of Labor 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. The U.S. Department of Labor posts current civil money penalty rates at: <https://www.dol.gov/whd/govcontracts/cwhssa.htm#cmp>.

**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 U.S. 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, age, 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, age, 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, age, disability, or national origin.

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 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 of September 24, 1965, 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 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, 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 of September 24, 1965, 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 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 residents of the unit of local government or the metropolitan area (or non-metropolitan 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 which are located in, or owned in substantial part by persons residing in the same metropolitan area (or non-metropolitan county) as the Project.

#### **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 USC 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.

## **SECTION 00 80 00 – SUPPLEMENTARY CONDITIONS**

### **PART 1 - GENERAL**

- 1.01** The Supplementary Conditions modify, change, delete from or add to the General Conditions for Construction Contracts, HUD Form 5370, dated 01/2014. Where any part of the General Conditions is unaltered by these supplements, the unaltered provisions shall remain in effect.
- 1.02** Articles, paragraphs, sub-paragraphs or clauses modified or deleted have the same numerical designation as those occurring in the General Conditions.

### **ARTICLE 28 - CONTRACT MODIFICATION**

(Add the following subsection 28.d, 28.e, 28.f, 28.g, 28.h):

- 28.d** **CONCEALED CONDITIONS:** Should concealed conditions encountered in the performance of the Work below the surface of the ground or should concealed or unknown conditions in the existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either party made within twenty days after the first observance of the conditions.
- 28.e** Any notices, demand requests, instructions, approvals, proposals, claims must be in writing.
- 28.f** Any notices to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Contract (or at such other office as he may from time to time designate in writing to the Housing Authority of St. James or deposited in the United States mail in a sealed, postage-prepaid envelope, or if delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.
- 28.g** All papers required to be delivered to the Housing Authority of St. James Parish or Architect shall, unless otherwise specified in writing to the Contractor, be delivered to the Housing Authority of St. James Parish, 2627 N. King Ave., Litcher, Louisiana 70071 and any notice to or demand upon the Housing Authority of St. James Parish or Architect shall be sufficiently given if so delivered, or deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Housing Authority of St. James Parish at such address, or to such other representative of Housing Authority of St. James Parish or to such other address as Housing Authority of St. James Parish may subsequently specify in writing to the Contractor for such purpose.
- All normal correspondence from the General Contractor to the Architect, including request for payment, shall be directed to the Architect's office, Didier Architecture, LLC, 17531 Old Jefferson Hwy., Suite C, Prairieville, LA 70769.
- 28.h** Any such notice shall be deemed to have been given as of the time of actual delivery; or, in the case of mailing, when the same should have been received in due course of post; or, in the case of telegrams, at the time of actual receipt, as the case may be.

### **ARTICLE 32 - DEFAULT**

(Add the following subsections 32.d and 32.e):

**32.d** TIME FOR COMPLETION: The work shall commence at the time stipulated in the NOTICE TO PROCEED to the Contractor.

Work shall be fully completed within the stated consecutive calendar days (**300**) in the General Contractor's Bid Form calculated from the NOTICE TO PROCEED date.

Any request for extension of contract time shall be in accordance with Division 1, Section 01 26 49 Modification Procedures.

**32.e** CLAIMS FOR ADDITIONAL TIME: If adverse weather conditions at the project site, including unsuitable ground conditions, are the basis for a claim for additional time, the Contractor shall document that weather conditions had an adverse effect on the scheduled construction. An increase in the contract time due to weather shall not be cause for an increase in the contract sum.

The following are considered reasonably anticipated days of adverse weather on a monthly basis:

January	<u>11</u> days	May	<u>5</u> days	September	<u>4</u> days
February	<u>10</u> days	June	<u>6</u> days	October	<u>3</u> days
March	<u>8</u> days	July	<u>6</u> days	November	<u>5</u> days
April	<u>7</u> days	August	<u>5</u> days	December	<u>8</u> days

*Note: Contract is on a calendar day basis.*

The Contractor shall ask for total adverse weather days, the Contractor's request shall be considered only for days over the allowable number of days stated above.

**ARTICLE 34 - TERMINATION FOR CONVENIENCE**

(Add the following subsection 34.e):

**34.e** LIQUIDATED DAMAGES: As actual damages for any delay in completion are impossible of determination, the Contractor and his Sureties shall be liable for and shall pay to the Housing Authority of St. James Parish the sum hereinafter stipulated as fixed, agreed liquidated damages for each calendar day of delay until the work is completed or accepted.

(1) \$ 1,250.00 per calendar day.

**ARTICLE 36 - INSURANCE**

(Add the following to subsection 36.d):

**36.d** The cost of all deductible amounts shall be borne by the Contractor.

Proof of insurance must be delivered to the Developer for review and approval prior to issuance of the Notice-To-Proceed.

Proof of insurance must list the following as insureds or additional insureds under the policy:  
Housing Authority of St. James Parish

Companies providing insurance coverage shall provide 30 day written notice prior to non-renewal, cancellation or any other material change in coverage to the Housing Authority of St. James Parish.

**END OF SECTION 00 80 00 - SUPPLEMENTARY CONDITIONS**

**A. APPLICABILITY**

The Project or Program to which the construction work covered by this Contract pertains is being assisted by the United States of America, and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

**1. Minimum wages and fringe benefits**

- i. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in 29 CFR 5.5(d) and (e), the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(v) of these contract clauses; 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) 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 classifications and wage rates conformed under 29 CFR 5.5(a)(1)(iii)) and the Davis-Bacon poster (WH-1321) must 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. Frequently recurring classifications**

- A.** In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR 5.5(a)(1)(iii), provided that:
1. The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
  2. The classification is used in the area by the construction industry; and
  3. The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- B.** The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3). Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

**iii. Conformance**

- A.** The contracting officer must require that 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 be

classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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. The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- C. If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- D. In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- E. The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under 29 CFR 5.5 (a)(1)(iii)(C) and (D). The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to 29 CFR 5.5 (a)(1)(iii)(C) or (D) must 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.

**iv. Fringe benefits not expressed as an hourly rate**

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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

**v. Unfunded plans**

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, in accordance with the criteria set forth in 29 CFR 5.28, 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.

- vi. Interest** In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding

### i. Withholding requirements

The U. S. Department of Housing and Urban Development may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in 29 CFR 5.5(a) for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv), HUD may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, 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.

### ii. Priority to withheld funds

The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

- A. A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- B. A contracting agency for its procurement costs;
- C. A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- D. A contractor's assignee(s);
- E. A contractor's successor(s); or
- F. A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

## 3. Records and certified payrolls

### i. Basic record requirements

- A. **Length of record retention.** All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- B. **Information required** Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- C. **Additional records relating to fringe benefits.** Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must 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.

**D. Additional records relating to apprenticeship** Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

**ii. Certified payroll requirements**

**A. Frequency and method of submission** The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to HUD if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to HUD. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system

**B. Information required** The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.*, the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).

**C. Statement of Compliance** Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

1. That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information and basic records are being maintained under 29 CFR 5.5 (a)(3)(i), and such information and records are correct and complete;
2. That each laborer or mechanic (including each helper and apprentice) working 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

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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
  - D. **Use of Optional Form WH-347** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the “Statement of Compliance” required by 29 CFR 5.5(a)(3)(ii)(C).
  - E. **Signature** The signature by the contractor, subcontractor, or the contractor’s or subcontractor’s agent must be an original handwritten signature or a legally valid electronic signature.
  - F. **Falsification** The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
  - G. **Length of certified payroll retention** The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- iii. **Contracts, subcontracts, and related documents** The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
  - iv **Required disclosures and access**
    - A. **Required record disclosures and access to workers** The contractor or subcontractor must make the records required under 29 CFR 5.5(a)(3)(i)–(iii), and any other documents that HUD or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by 29 CFR 5.1, available for inspection, copying, or transcription by authorized representatives of HUD or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
    - B. **Sanctions for non-compliance with records and worker access requirements** If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CFR 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
    - C. **Required information disclosures** Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to HUD if the agency is a party to

the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to HUD, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### 4. **Apprentices and equal employment opportunity**

##### i. **Apprentices**

- A. Rate of pay** Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- B. Fringe benefits** Apprentices must 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, fringe benefits must be paid in accordance with that determination.
- C. Apprenticeship ratio** The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D). Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CFR 5.5(a)(4)(i)(A), must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- D. Reciprocity of ratios and wage rates** Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

- ii Equal employment opportunity** The use of apprentices and journeyworkers under this part must 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 must insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (11), along with the applicable wage determination(s) and such other clauses or contract modifications as the U.S. Department of Housing and Urban Development may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.

**7 Contract termination: 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 and 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 the contracting agency, 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 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 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

ii. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

iii. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

**11 Anti-retaliation** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

i. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, or 29 CFR parts 1, 3, or 5;

ii. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5;

iii. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5; or

iv. Informing any other person about their rights under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5.

**B. Contract Work Hours and Safety Standards Act (CWHSSA)**

The Agency Head must cause or require the contracting officer to insert the following clauses set forth in 29 CFR 5.5(b)(1), (2), (3), (4), and (5) in full, or (for contracts covered by the Federal Acquisition Regulation) by reference, in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses must

be inserted in addition to the clauses required by 29 CFR 5.5(a) or 4.6. As used in this paragraph, the terms “laborers and mechanics” include watchpersons 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 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 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 hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of \$31 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

**3. Withholding for unpaid wages and liquidated damages**

**i. Withholding process** The U.S Department of Housing and Urban Development or the recipient of Federal assistance may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in 29 CFR 5.5(b) on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

**ii Priority to withheld funds** The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

**A.** A contractor’s surety(ies), including without limitation performance bond sureties and payment bond sureties;

**B.** A contracting agency for its procurement costs;

**C.** A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor’s bankruptcy estate;

**D.** A contractor’s assignee(s);

**E.** A contractor’s successor(s); or

**F.** A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss,

due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- 5 Anti-retaliation** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- i. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in 29 CFR part 5;
  - ii. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or 29 CFR part 5;
  - iii. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or 29 CFR part 5; or
  - iv. Informing any other person about their rights under CWHSSA or 29 CFR part 5.
- C. CWHSSA required records clause** In addition to the clauses contained in 29 CFR 5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Agency Head must cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor must maintain regular payrolls and other basic records during the course of the work and must preserve them for a period of 3 years after all the work on the prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid; daily and weekly number of hours actually worked; deductions made and actual wages paid. Further, the Agency Head must cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview workers during working hours on the job.
- D. Incorporation of contract clauses and wage determinations by reference** Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.
- E. Incorporation by operation of law** The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

## **F. HEALTH AND SAFETY**

The provisions of this paragraph (F) are applicable where the amount of the prime contract exceeds **\$100,000**.

1. 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.
2. 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, (Public Law 91-54, 83 Stat 96), 40 U.S.C. § 3701 et seq.
3. The contractor shall include the provisions of this paragraph in every subcontract, so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

"General Decision Number: LA20260001 01/30/2026

Superseded General Decision Number: LA20250001

State: Louisiana

Construction Type: Residential

Counties: Acadia, Ascension, Bossier, Caddo, Calcasieu, East Baton Rouge, Jefferson, Lafayette, Lafourche, Livingston, Orleans, Ouachita, Plaquemines, Rapides, St Bernard, St Charles, St James, St John the Baptist, St Landry, St Martin, St Tammany, Terrebonne, Webster and West Baton Rouge Counties in Louisiana.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories)

Modification Number	Publication Date
0	01/02/2026
1	01/30/2026

\* ELEC0130-003 12/01/2025

JEFFERSON, LAFOURCHE, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JAMES, ST. JOHN THE BAPTIST, ST. MARTIN (Southern Portion), and TERREBONNE PARISHES

	Rates	Fringes
ELECTRICIAN (including low voltage wiring and installation of fire alarms and security systems).....	\$ 36.00	16.66
-----		
ELEC0194-002 09/02/2025		

BOSSIER, CADDO, and WEBSTER PARISHES

	Rates	Fringes
ELECTRICIAN (including low voltage wiring and installation of fire alarms and security systems).....	\$ 35.85	15.58
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ELEC0446-002 03/01/2025		

OUACHITA PARISH

	Rates	Fringes
ELECTRICIAN (including low voltage wiring and		

installation of fire alarms  
 and security systems).....\$ 29.55            2%+13.77

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 ELEC0576-003 09/01/2025

RAPIDES PARISH

Rates                      Fringes

ELECTRICIAN (including low  
 voltage wiring and  
 installation of fire alarms  
 and security systems).....\$ 30.00            4.25%+10.75

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 ELEC0861-002 09/01/2024

ACADIA, CALCASIEU, LAFAYETTE, AND ST. MARTIN (Northern Portion)  
 PARISHES

Rates                      Fringes

ELECTRICIAN (including low  
 voltage wiring and  
 installation of fire alarms  
 and security systems).....\$ 31.98            4.34%+13.75

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 ELEC0995-003 01/01/2025

ASCENSION, EAST BATON ROUGE, LIVINGSTON, ST. LANDRY, AND WEST  
 BATON ROUGE PARISHES

Rates                      Fringes

ELECTRICIAN (including low  
 voltage wiring and  
 installation of fire alarms  
 and security systems).....\$ 29.47            13.50

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 ELEC1077-006 05/26/2025

ST. TAMMANY PARISH

Rates                      Fringes

ELECTRICIAN (including low  
 voltage wiring and  
 installation of fire alarms  
 and security systems).....\$ 30.35            3%+11.55

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 PLUM0060-005 06/05/2023

JEFFERSON, LAFOURCHE, ORLEANS, PLAQUEMINES, ST. BERNARD, ST.  
 CHARLES, ST. JAMES (Southeastern Portion), ST. JOHN THE  
 BAPTIST, ST. TAMMANY, AND TERREBONNE PARISHES

	Rates	Fringes
PLUMBER (including HVAC pipe)....	\$ 31.70	13.85
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PLUM0141-003 08/01/2023		

BOSSIER, CADDO, and WEBSTER PARISHES

	Rates	Fringes
PLUMBER (including HVAC pipe)....	\$ 28.48	14.47
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PLUM0141-008 08/01/2024		

OUACHITA PARISH

	Rates	Fringes
PLUMBER (including HVAC pipe)....	\$ 28.75	11.86
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PLUM0198-002 12/08/2022		

ASCENSION, EAST BATON ROUGE, LIVINGSTON , ST. JAMES  
(Northwestern Portion), ST. MARTIN (Eastern Portion), AND WEST  
BATON ROUGE PARISHES

	Rates	Fringes
PLUMBER (including HVAC pipe)....	\$ 32.42	16.50
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PLUM0198-009 06/01/2014		

ACADIA, CALCASIEU, LAFAYETTE, ST. LANDRY, and ST. MARTIN  
(Western Portion) PARISHES

	Rates	Fringes
PLUMBER (including HVAC pipe)....	\$ 25.90	13.65
-----		
PLUM0247-004 05/01/2020		

RAPIDES PARISH

	Rates	Fringes
PLUMBER (including HVAC pipe)....	\$ 26.50	13.39
-----		
SHEE0214-003 07/01/2009		

Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St.  
Charles, St. James, St. John the Baptist, St. Tammany, and  
Terrebonne Parishes

	Rates	Fringes
SHEET METAL WORKER (includes HVAC Duct).....	\$ 24.54	9.65
-----		
SHEE0214-005 02/01/2009		

Acadia, Ascension, Calcasieu, East Baton Rouge, Lafayette, Livingston, St. Landry, St. Martin, and West Baton Rouge Parishes

	Rates	Fringes
SHEET METAL WORKER (includes HVAC Duct).....	\$ 24.37	9.205
-----		
SHEE0361-004 07/01/2012		

BOSSIER, CADDO, OUACHITA, RAPIDES, AND WEBSTER PARISHES

	Rates	Fringes
Sheet Metal Worker (including HVAC duct).....	\$ 26.09	10.22+3%
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SULA2004-012 06/15/2004		

	Rates	Fringes
CARPENTER (including drywall hanging, metal stud installation, and formbuilding/formsetting).....	\$ 11.78	0.00
Laborer, common.....	\$ 8.01	0.00
PAINTER		
Brush, Roller, and Spray....	\$ 11.38	.83
Drywall Finishing.....	\$ 12.71	.78
Power Equipment Operator		
Crane.....	\$ 13.00	0.00
ROOFER.....	\$ 10.11	2.01
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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide

employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

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)).

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

#### Union Rate Identifiers

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

number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

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

#### Union Average Rate Identifiers

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

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

#### Survey Rate Identifiers

The "SU" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

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

#### State Adopted Rate Identifiers

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

internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to [dba.reconsideration@dol.gov](mailto:dba.reconsideration@dol.gov) or by mail to:

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

The request should be accompanied by a full statement of the interested party's position and any information (wage payment

data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

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

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

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END OF GENERAL DECISION"

# Davis-Bacon and Related Acts Weekly Certified Payroll Form

(For Contractor's Optional Use; See Instructions at [www.dol.gov/whd/forms/wh347instr.htm](http://www.dol.gov/whd/forms/wh347instr.htm))



Unless otherwise noted, the information requested is specific to the named project below.  
Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

Rev. January 2025  
OMB No.: 1235-0008  
Expires: 01/31/2028

SUBMISSION OF FINAL DBRA CERTIFIED PAYROLL FORM

PRIME CONTRACTOR

SUBCONTRACTOR

PROJECT NAME				PROJECT NO. or CONTRACT NO.			CERTIFIED PAYROLL NO.		PRIME CONTRACTOR'S/SUBCONTRACTOR'S BUSINESS NAME														
PROJECT LOCATION				WAGE DETERMINATION NO.			WEEK ENDING DATE		PRIME CONTRACTOR'S/SUBCONTRACTOR'S BUSINESS ADDRESS														
(1A)	(1B)	(1C)	(1D)	(1E)	(2)	(3)	(4)					(5)	(6A)	(6B)	(6C)	(7A)	(7B)	(8)			(9)		
WORKER ENTRY NO.	WORKER LAST NAME	WORKER FIRST NAME	WORKER MIDDLE INITIAL	WORKER IDENTIFYING NO.	(J) JOURNEYWORKER (RA) REGISTERED APPRENTICE	LABOR CLASSIFICATION	ST = STRAIGHT TIME OT = OVERTIME	(TOP) DAYS OF WORK WEEK (BOTTOM) DATES					TOTAL HOURS WORKED FOR WEEK	HOURLY WAGE RATE PAID FOR ST AND OT	TOTAL FRINGE BENEFIT CREDIT	PAYMENT IN LIEU OF FRINGE BENEFITS	GROSS AMT EARNED	GROSS AMT EARNED FOR ALL WORK	DEDUCTIONS FOR ALL WORK			NET PAY TO WORKER FOR ALL WORK	
																			TAX WITH-HOLDINGS	FICA	OTHER (MUST SPECIFY, SEE INSTRUCTIONS)		TOTAL DEDUCTIONS
								HOURS WORKED EACH DAY															
							ST																
							OT																
							ST																
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While use of Form WH-347 itself is optional, covered contractors and subcontractors performing work on Federal or federally assisted construction contracts are required by the DBRA regulations and the contract clauses to submit payroll information on a weekly basis. The Copeland Act (40 U.S.C. § 3145) requires contractors and subcontractors performing work on Federal or federally financed construction contracts to, on a weekly basis, "furnish a statement on the wages paid each employee during the prior week." U.S. Department of Labor (DOL) Regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors and subcontractors to submit weekly certified payrolls to the appropriate Federal agency if the agency is a party to the contract (or, if the agency is not such a party, to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to the Federal agency). Each certified payroll must be accompanied by a signed "Statement of Compliance" (e.g., page 2 of the WH-347 or another document with identical wording) indicating that the certified payrolls are accurate and complete, and that each laborer or mechanic has been paid not less than the required Davis-Bacon prevailing wage rate(s) (including any fringe benefits) for the work performed. DOL and contracting agencies receiving this information review the information to determine whether workers have received legally required wages and fringe benefits.

**Public Burden Statement**

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210 (over)

PROJECT NAME	PROJECT NO. or CONTRACT NO.	PAYROLL NO.	PRIME CONTRACTOR'S/SUBCONTRACTOR'S BUSINESS NAME
PROJECT LOCATION	WEEK ENDING DATE	CERTIFYING OFFICIAL'S NAME AND TITLE	

I paid or supervised the payment of the laborers or mechanics working on the above project during the stated time period. I certify the following:

- The payroll information submitted with this statement is correct and complete for the above project during the above period, and the wage and fringe benefit rates paid to the workers, including credit taken for the reasonably anticipated costs of a bona fide fringe benefit plan, fund or program, are not less than the applicable wage and fringe benefits rates for the classification(s) of work actually performed, as specified in the wage determination(s) incorporated into the contract.
- All regular payrolls and all other basic records that the contractor is required to maintain for this payroll period are complete and accurate and will be made available upon request from the agency or the Department of Labor.
- The classifications reported for each laborer or mechanic are the classification(s) of work that each worker actually performed.
- Any workers paid as apprentices during the above period are duly registered in a bona fide apprenticeship program registered with the Office of Apprenticeship, Employment and Training Administration, United States Department of Labor ("OA"), or a State Apprenticeship Agency ("SAA") recognized by Department of Labor. I have verified the registered apprenticeship program information provided below as accurate and applicable to any apprentices identified on page 1 of this form.

APPRENTICESHIP PROGRAM NAME	REGISTERED	NAME OF LABOR CLASSIFICATION
	<input type="checkbox"/> OA <input type="checkbox"/> SAA	
	<input type="checkbox"/> OA <input type="checkbox"/> SAA	
	<input type="checkbox"/> OA <input type="checkbox"/> SAA	

- Fringe benefits have been paid in cash and/or to bona fide fringe benefit plans, funds, or programs. Where the contractor is claiming an hourly credit for their contributions to or reasonably anticipated costs of a bona fide fringe benefit plan, fund, or program, provide plan information and the hourly credit claimed for each worker listed on the previous page of this form.

**HOURLY CREDIT FOR FRINGE BENEFITS**

*If an amount is listed in (6B) on the first page of this certified payroll form, enter the hourly credit claimed under each plan name, type and number for each worker and check whether the plan is funded or unfunded.*

NAME OF WORKER	FB NAME		TOTAL HOURLY CREDIT										
	FB TYPE		FB TYPE		FB TYPE		FB TYPE		FB TYPE		FB TYPE		
	PLAN NO.		PLAN NO.		PLAN NO.		PLAN NO.		PLAN NO.		PLAN NO.		
	<input type="checkbox"/> Funded <input type="checkbox"/> Unfunded		<input type="checkbox"/> Funded <input type="checkbox"/> Unfunded		<input type="checkbox"/> Funded <input type="checkbox"/> Unfunded		<input type="checkbox"/> Funded <input type="checkbox"/> Unfunded		<input type="checkbox"/> Funded <input type="checkbox"/> Unfunded		<input type="checkbox"/> Funded <input type="checkbox"/> Unfunded		
	Hourly Credit	\$	\$										
	Hourly Credit	\$	\$										
	Hourly Credit	\$	\$										
	Hourly Credit	\$	\$										
	Hourly Credit	\$	\$										
	Hourly Credit	\$	\$										
	Hourly Credit	\$	\$										

- All workers on the project have been paid the full weekly wages earned, and no rebates or deductions have been or will be made either directly or indirectly, other than permissible deductions as defined in 29 CFR part 3.

ADDITIONAL REMARKS

SIGNATURE OF CERTIFYING OFFICIAL	DATE	TELEPHONE NUMBER	EMAIL ADDRESS
		(____) ____ - ____	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION (SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF TITLE 31 OF THE UNITED STATES CODE), AS WELL AS DEBARMENT FROM FUTURE FEDERAL AND FEDERALLY-ASSISTED CONTRACTS. INFORMATION REPORTED IN CERTIFIED PAYROLLS MAY BE SUBJECT TO DISCLOSURE IN RESPONSE TO A FREEDOM OF INFORMATION ACT REQUEST.



**Designation of Construction Contractor  
as Agent of a Governmental Entity  
Sales Tax Exemption Certificate**

\_\_\_\_\_, an agency of the United States government, or an agency, board, commission, or instrumentality of the State of Louisiana or its political subdivisions, including parishes, municipalities and school boards, does hereby designate the following contractor as its agent for the purpose of making sales tax exempt purchases on behalf of the governmental body:

Name of Contractor		
Address		
City	State	ZIP

This designation of agency shall be effective for purchases of component construction materials, taxable services and leases and rentals of tangible personal property for the following named construction project:

Construction Project	Contract Number
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This designation and acceptance of agency is effective for the period

Beginning Date (mm/dd/yyyy)	End Date (mm/dd/yyyy)
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Purchases for the named project during this period by the designated contractor shall be considered as the legal equivalent of purchases directly by the governmental body. Any materials purchased by this agent shall immediately, upon the vendor's delivery to the agent, become the property of this government entity. This government entity, as principal, assumes direct liability to the vendor for the payment of any property, services, leases, or rentals made by this designated agent. This agreement does not void or supersede the obligations of any party created under any construction contract related to this project, including specifically any contractual obligation of the construction contractor to submit payment to the vendors of materials or services for the project.

This contractor-agent is not authorized to delegate this purchasing agency to others; separate designations of agency by this governmental entity are required for each contractor or sub-contractor who is to purchase on behalf of this governmental entity. The undersigned hereby certify that this designation is the entirety of the agency designation agreement between them. In order for a purchase for an eligible governmental entity through a designated agent to be eligible for sales tax exemption, the designation of agency must be made, accepted, and disclosed to the vendor before or at the time of the purchase transaction.

Designation of Agency		
Signature of Authorized Designator	Date (mm/dd/yyyy)	
Name of Authorized Designator		
Name of Governmental Entity		
Address		
City	State	ZIP

Acceptance of Agency		
Signature of Contractor or Subcontractor Authorized Acceptor	Date (mm/dd/yyyy)	
Name of Contractor's or Subcontractor's Acceptor		
Name of Contractor		
Address		
City	State	ZIP

This designation of agency form, when properly executed by both the contractor and the governmental entity, shall serve as evidence of the sales tax exempt status that has been conferred onto the contractor. No other exemption certificate form is necessary to claim exemption from sales taxes. The agency agreement evidenced by this sales tax exemption certificate must be implemented at the time of contract execution with the governmental entity. The contract between the governmental entity and his agent must contain provisions to authenticate the conferment of agency.



**CONTRACTOR AFFIDAVIT**

By executing this affidavit, the undersigned contractor verifies its compliance with E-Verify, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the **Housing Authority of the Parish of St. James (SJPHA)** has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established with E-Verify. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by E-Verify. Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

**Federal Work Authorization User Identification Number:** \_\_\_\_\_

**Date of Authorization:** \_\_\_\_\_

**Name of Contractor:** \_\_\_\_\_

**I hereby declare under penalty of perjury that the foregoing is true and correct.**

Executed on \_\_\_\_\_, 20\_\_ in \_\_\_\_\_ (city),  
\_\_\_\_\_ (state).

\_\_\_\_\_  
**Signature of Authorized Officer or Agent**

\_\_\_\_\_  
**Printed Name and Title of Authorized Officer or Agent**

**SUBSCRIBED AND SWORN BEFORE ME**  
**ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.**

\_\_\_\_\_  
**NOTARY PUBLIC**

**My Commission Expires:**

**Equal Employment  
Opportunity Certification**  
Excerpt From 41 CFR §60-1.4(b)

U.S. Department of Housing  
and Urban Development  
Office of Housing  
Federal Housing Commissioner

Department of Veterans Affairs  
OMB Control No. 2502-0029  
(exp. 4/30/2020)

The applicant hereby agrees that it will incorporate or cause to be incorporated into 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, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin, such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; 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.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which 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 under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction 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.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) 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 subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: **Provided, however,** That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work:

**Provided,** That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and Federally-assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed

Firm Name and Address

By

Title

upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

#### **Excerpt from HUD Regulations**

200.410 Definition of term "applicant".

- (a) In multifamily housing transactions where controls over the mortgagor are exercised by the Commissioner either through the ownership of corporate stock or under the provisions of a regulatory agreement, the term "applicant" as used in this subpart shall mean the mortgagor.
- (b) In transactions other than those specified in paragraph(a) of this section, the term "applicant" as used in this subpart shall mean the builder, dealer or contractor performing the construction, repair or rehabilitation work for the mortgagor or other borrower.

200.420 Equal Opportunity Clause to be included in contracts and subcontracts.

- (a) The following equal opportunity clause shall be included in each contract and subcontract which is not exempt:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, 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 the nondiscrimination clause.

(2) The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard race, creed, color, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided, advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notices in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 10925 of March 6 1961, as amended, and of the regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

(5) The contractor will furnish all information and reports required by Executive Order 10925 of March 6, 1961, as amended, and by the regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by HUD and the Committee for purposes of investigation to ascertain compliance with such regulations, and orders.

(6) In the event of the contractor's non-compliance with the nondiscrimination clause of this contract or with any of the said regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or Federally-assisted construction contracts in accordance with procedures authorized in Executive Order 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoked provided in the said Executive Order or by regulations, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.

(7) The contractor will include the provisions of Paragraphs(1) through (7) in every subcontract or purchase order unless exempted by regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to Section 303 of Executive Order 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase orders as HUD 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, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

- (b) Except in subcontracts for the performance of construction work at the site of construction, the clause is not required to be inserted in subcontracts below the second tier. Subcontracts may incorporate by reference to the equal opportunity clause.

200.425 Modification in and exemptions from the regulations in this subpart.

- (a) The following transactions and contracts are exempt from the regulations in this subpart:

(1) Loans, mortgages, contracts and subcontracts not exceeding \$10,000.

(2) Contract and subcontracts not exceeding \$100,000 for standard commercial supplies or raw material;

(3) Contracts and subcontracts under which work is to be or has been performed outside the United States and where no recruitment of workers within the United States is involved. To the extent that work pursuant to such contracts is done within the United States, the equal opportunity clause shall be applicable;

(4) Contracts for the sale of Government property where no appreciable amount of work is involved; and

(5) Contracts and subcontracts for an indefinite quantity which are not to extend for more than one year if the purchaser determines that the amounts to be ordered under any such contract or subcontract are not reasonably expected to exceed \$100,000 in the case of contracts or subcontracts for standard commercial supplies and raw materials, or \$10,000 in the case of all other contracts and subcontracts.

# Schedule of Amounts for Contract Payments

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

OMB Approval No. 2577-0157  
(Exp. 1/31/2027)

No progress payments shall be made to the contractor unless a schedule of amounts for contract payments in accordance with the construction contract is received.

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. HUD may not conduct or sponsor, and an applicant is not required to respond to a collection of information unless it displays a currently valid OMB control number. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. Construction practices and HUD administrative requirements establish the need that HAs maintain certain records or submit certain documents in conjunction with the oversight of the award of construction contracts for the construction of new low-income housing developments or modernization of existing developments. These forms are used by HAs to provide information on the construction progress schedule and schedule of amounts for contract payments. Responses to the collection of information are required to obtain a benefit or to retain a benefit. The information requested does not lend itself to confidentiality.

Project Name and Location	Project Number
---------------------------	----------------

Name, Address, and Zip Code of Contractor
---

Nature of Contract	Contract Number
--------------------	-----------------

Approved for Contractor by	Title	Date (mm/dd/yyyy)
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Approved for Architect by	Title	Date (mm/dd/yyyy)
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Approved for Owner by	Title	Date (mm/dd/yyyy)
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Item No. (1)	Description of Item (2)	Quantity (3)	Unit of Measure (4)	Unit Price in Place (5)	Amount of Sub-Item (6)	Amount of Principal Item (7)

<b>Total Amount of Contract or Carried Forward</b>	\$
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To the best of my knowledge, all the information stated herein, as well as any information provided in the accompaniment herewith, is true and accurate. **Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Signature of authorized representative	Date signed (mm/dd/yyyy)
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## Instructions for Preparation of form HUD-51000

1. A separate breakdown is required for each project and prime contract instructions for preparation are given below.
  - a. **Heading.** Enter all identifying information required for both forms.
  - b. **Columns 1 and 2.** In column 1, enter the item numbers starting with No. 1, and in column 2 enter each principal division of work incorporated in the contract work.
    - (1) **Master List.** The Master list contains the basic items into which any construction contract may be subdivided for the purpose of preparing the Construction Progress Schedule and the Periodical Estimates for Partial Payments. Only those items shall be selected which apply to the particular contract. To ensure uniformity, no change shall be made in the item numbers. Generally, about 25 to 40 major items appear in a contract.
    - (2) **Items Subdivided.** In the Contractor's breakdown, against which all periodical estimates will be checked prior to payment, each major item must be subdivided into sub-items pertinent to the project involved and in agreement with the Contractor's intended basis for requesting monthly payments.
  - c. **Column 3.** Enter the total quantity for each sub-item of each principal division of work listed in the breakdown.
  - d. **Column 4.** Enter the appropriate unit of measure for each sub-item of work opposite the quantities described in column 3, such as "sq. ft.," "cu. yd.," "tons," "lb.," "lumber per M/BM," "brickwork per M," etc., applicable to the particular sub-item. Items shown on "lump sum" or equivalent basis will be paid for only on completion of the whole item and not on a percentage of completion basis.
  - e. **Column 5.** Enter the unit price, in place, of each sub-item of work.
  - f. **Column 6.** Enter the amount of each sub-item obtained by multiplying the quantities in column 3 by the corresponding unit prices in column 5.
  - g. **Column 7.** Enter the amount of principal item only, obtained by adding the amounts of all sub-items of each principal division of work listed in column 6. Continue with the breakdown on form HUD-51000.
  - h. The "Schedule of Amounts for Contract Payments" shall be signed and dated in the space provided at the bottom of each sheet of the form by the individual who prepared the breakdown for the Contractor.
2. The minimum number of copies required for each submission for approval is an original and two copies. When approved, one fully approved copy will be returned to the Contractor.

### Master List of Items

Item No.	Division of Work	Item No.	Division of Work	Item No.	Division of Work
1	Bond	20	Rough Carpentry		
2	General Conditions	21	Metal Bucks	44	<b>Site Improvements</b> Retaining Walls
3	Demolition & Clearing	22	Caulking	45	Storm Sewers
	<b>Structures</b>	23	Weatherstripping	46	Sanitary Sewers
4	General Excavation	24	Lath & Plastering-Drywall	47	Water Distribution System
5	Footing Excavation	25	Stucco	48	Gas Distribution System
6	Backfill	26	Finish Carpentry	49	Electrical Distribution System
7	Foundation Piles & Caissons	27	Finish Hardware	50	Street & Yard Lighting
8	Concrete Foundations	28	Glass & Glazing	51	Fire & Police Alarm System
9	Concrete Superstructures	29	Metal Doors	52	Fire Protection System
10	Reinforcing Steel	30	Metal Base & Trim	53	Street Work
11	Waterproofing & Dampproofing	31	Toilet Partitions	54	Yard Work
12	Spandrel Waterproofing	32	Floors	55	(Other)
13	Structural Steel	33	Painting & Decorating	56	(Other)
14	Masonry	34	Screens		
15	Stonework	35	Plumbing		<b>Equipment</b>
16	Miscellaneous & Ornamental Metal	36	Heating	57	Shades & Drapery Rods
17	Metal Windows	37	Ventilating System	58	Ranges
18	Roofing	38	Electrical	59	Refrigerators
19	Sheet Metal	39	Elevators	60	Kitchen Cabinets & Work Tables
		40	Elevator Enclosures—Metal	61	Laundry Equipment
		41	Incinerators—Masonry & Parts	62	(Other)
		42	(Other)		
		43	(Other)	63	<b>Punch List</b> <sup>1</sup> / <sub>2</sub>
				64	Lawns & Planting

1 General Conditions should be 3% to 5% of contract amount.

2 Punch List should be approximately 1/2 of 1% or \$30 per dwelling unit, whichever is greater.

# Periodic Estimate for Partial Payment

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

OMB Approval No. 2577-015  
7 (exp. 1/31/2027)

Submit original and one copy to the Public Housing Agency.  
Complete instructions are on the back of this form.

Public reporting burden for this collection of information is estimated to average 3.5 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. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. This information is collected under the authority of Section 6(c) of the U.S Housing Act of 1937 and HUD regulations. HAs are responsible for contract administration to ensure that the work for project development is done in accordance with State laws and HUD requirements. The contractor/subcontractor reports provide details and summaries on payments, change orders, and schedule of materials stored for the project. The information will be used to ensure that the total development costs, identified in the ACC, are kept as low as possible and consistent with HUD construction requirements. Responses to the collection are necessary to obtain a benefit. The information requested does not lend itself to confidentiality.

Name of Public Housing Agency	Periodic Estimate Number	Period From (mm/dd/yyyy) To (mm/dd/yyyy)
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Location of Project	Project Number
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Name of Contractor	Contract Number
--------------------	-----------------

Item Number (1)	Description of Item (2)	Completed to Date (3)
		\$

<b>Value of Contract Work Completed to Date (Transfer this total to line 5 on back of this sheet)</b>	<b>\$</b>
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**Instructions**

**Headings.** Enter all identifying data required. Periodic estimates must be numbered in sequence beginning with the number 1.

**Columns 1 and 2.** The "Item Number" and "Description of Item" must correspond to the number and descriptive title assigned to each principal division of work in the "Schedule of Amounts for Contract Payments", form HUD-51000.

**Column 3.** Enter the accumulated value of each principal division of work completed as of the closing date of the periodic estimate. Enter the total in the space provided.

**Certifications.** The certification of the contractor includes the analysis of amounts used to determine the net balance due. In the first paragraph, enter the name of the Public Housing Agency, the contractor, and the date of the contract. Enter the calculations used in arriving at the "Balance Due This Payment" on lines 1 through 16.

Enter the contractor's name and signature in the certification following line 16.

The latter portion of this certification relating to payment of legal rates of wages, is required by the contract before any payment may be made. However, if the contractor does not choose to certify on behalf of his/her subcontractors to wage payments made by them, he/she may modify the language to cover only himself /herself and attach a list of all subcontractors who employed labor on the site during the period covered by the Periodic Estimate, together with the individual certifications of each.

**Certification of the Contractor or Duly Authorized Representative**

According to the best of my knowledge and belief, I certify that all items and amounts shown on the other side of this form are correct; that all work has been performed and material supplied in full accordance with the items and conditions of the contract between the (name of owner)

\_\_\_\_\_ and (contractor) \_\_\_\_\_

dated (mm/dd/yyyy) \_\_\_\_\_, and duly authorized deviations, substitutions, alterations, and additions; that the following is a true and correct statement of the Contract Account up to and including the last day of the period covered by this estimate, and that no part of the "Balance Due This Payment" has been received.

1. Original Contract Amount \$ \_\_\_\_\_

**Approved Change Orders:**

2. Additions (Total from Col. 3, form HUD-51002) \$ \_\_\_\_\_  
3. Deductions (Total from Col. 5, form HUD-51002) \$ \_\_\_\_\_ (net) \$ \_\_\_\_\_  
4. Current Adjusted Contract Amount (line 1 plus or minus net) \$ \_\_\_\_\_

**Computation of Balance Due this Payment**

5. Value of Original Contract work completed to date (from other side of this form) \$ \_\_\_\_\_

**Completed Under Approved Change Orders**

6. Additions (from Col. 4, form HUD-51002) \$ \_\_\_\_\_  
7. Deductions (from Col. 5, form HUD-51002) \$ \_\_\_\_\_ (net) \$ \_\_\_\_\_  
8. Total Value of Work in Place (line 5 plus or minus net line 7) \$ \_\_\_\_\_  
9. **Less:** Retainage, \_\_\_\_\_ % \$ \_\_\_\_\_  
10. Net amount earned to date (line 8 less line 9) \$ \_\_\_\_\_  
11. **Less:** Previously earned (line 10, last Periodic Estimate) \$ \_\_\_\_\_  
12. Net amount due, work in place (line 10 less line 11) \$ \_\_\_\_\_

**Value of Materials Properly Stored**

13. At close of this period (from form HUD-51004) \$ \_\_\_\_\_  
14. **Less:** Allowed last period \$ \_\_\_\_\_  
15. Increase (decrease) from amount allowed last period \$ \_\_\_\_\_  
16. **Balance Due This Payment** \$ \_\_\_\_\_

I further certify that all just and lawful bills against the undersigned and his/her subcontractors for labor, material, and equipment employed in the performance of this contract have been paid in full in accordance with the terms and conditions of this contract, and that the undersigned and his/her subcontractors have complied with, or that there is an honest dispute with respect to, the labor provisions of this contract.

Name of Contractor \_\_\_\_\_ Signature of Authorized Representative \_\_\_\_\_ Title \_\_\_\_\_ Date (mm/dd/yyyy) \_\_\_\_\_

**Certificate of Authorized Project Representative and of Contracting Officer**

Each of us certifies that he/she has checked and verified this Periodic Estimate No. \_\_\_\_\_; that to the best of his/her knowledge and belief it is a true statement of the value of work performed and material supplied by the contractor; that all work and material included in this estimate has been inspected by him/her or by his/her authorized assistants; and that such work has been performed or supplied in full accordance with the drawings and specifications, all applicable accessibility requirements (including Section 504 and Title II of the Americans with Disabilities Act; and the Fair Housing Act and Title III of the Americans with Disabilities Act, if applicable), the terms and conditions of the contract, and duly authorized deviations, substitutions, alterations, and additions, all of which have been duly approved.

We, therefore, approve as the "Balance Due this Payment" the amount of \$ \_\_\_\_\_

Authorized Project Representative \_\_\_\_\_ Date (mm/dd/yyyy) \_\_\_\_\_ Contracting Officer \_\_\_\_\_ Date (mm/dd/yyyy) \_\_\_\_\_

I certify the information on this form and in any accompanying documentation is true and accurate. I acknowledge making, presenting, or submitting a false, fictitious, or fraudulent statement, representation, or certification may result in criminal, civil, and/or administrative sanctions, including fines, penalties, and confinement for up to 5 years, (18 U.S.C. §§ 287, 1001 and 31 U.S.C. §3729)

# Schedule of Change Orders

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

OMB Approval No. 2577-0157  
(exp. 1/31/2027)

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. HUD may not conduct or sponsor, and an applicant is not required to respond to a collection of information unless it displays a currently valid OMB control number. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. This information is collected under the authority of Section 6(c) of the U.S Housing Act of 1937 and HUD regulations. HAs are responsible for contract administration to ensure that the work for project development is done in accordance with State laws and HUD requirements. The contractor/subcontractor reports provide details and summaries on payments, change orders, and schedule of materials stored for the project. The information will be used to ensure that the total development costs, identified in the ACC, are kept as low as possible and consistent with HUD construction requirements. Responses to the collection are necessary to obtain a benefit. The information requested does not lend itself to confidentiality.

**Instructions:** Contractors use this form for reporting the details of approved Change Orders. Attach an original (or a copy) to each copy of the Periodic Estimate for Partial Payment (form HUD-51001) submission, and send to the Public Housing Agency. Complete all entries. Only Change Orders which bear the signatures required by the contract are to be recorded.

Name of Public Housing Agency	Supporting Periodic Estimate for Partial Payment Number	Period From (mm/dd/yyyy) to (mm/dd/yyyy)
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Location of Project	Project Number
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Name of Contractor	Contract Number
--------------------	-----------------

Approved Change Orders		Additions		Deductions
Change Order Number (1)	Dated (mm/dd/yyyy) (2)	Total Amount of Change Order (3)	Value of Work Completed to Date (4)	Total Amount of Change Order (5)
		\$	\$	\$
<b>Totals</b>		\$	\$	\$

Authorized Project Representative	Date (mm/dd/yyyy)
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I certify that the information provided on this form and in any accompanying documentation is true and accurate. I acknowledge that making, presenting, or submitting a false, fictitious, or fraudulent statement, representation, or certification may result in criminal, civil, and/or administrative sanctions, including fines, civil penalties, and confinement for up to 5 years. (18 U.S.C. §§ 287, 1001 and 31 U.S.C. §3729)

# Schedule of Materials Stored

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

OMB Approval No. 2577-0157  
(exp. 1/301/2027)

Public reporting burden for this collection of information is estimated to average 1.5 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. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. This information is collected under the authority of Section 6(c) of the U.S. Housing Act of 1937 and HUD regulations. HAs are responsible for contract administration to ensure that the work for project development is done in accordance with State laws and HUD requirements. The contractor/subcontractor reports provide details and summaries on payments, change orders, and schedule of materials stored for the project. The information will be used to ensure that the total development costs, identified in the ACC, are kept as low as possible and consistent with HUD construction requirements. Responses to the collection are necessary to obtain a benefit. The information requested does not lend itself to confidentiality.

**Instructions:** This form is to be used to support the Periodic Estimate for Partial Payment (form HUD-51001). The contractor must prepare a separate schedule for his/her materials and for those of his/her subcontractors. Attach an original (or a copy ) to each copy of the Summary of Materials Stored (form HUD-51004). Enter all identifying data and list materials stored. The listing of materials stored must correspond to the arrangement established on the Schedule of Contract Payments (form HUD-51000) and each item will be keyed by corresponding item number. This form must be signed as noted.

Name of Public Housing Agency	Supporting Periodic Estimate for Partial Payment Number	Period From (mm/dd/yyyy) To (mm/dd/yyyy)
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Name and Location of Project	Project Number
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Name of General Contractor	Contract Number
----------------------------	-----------------

Name of Subcontractor	Subcontract Number
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Item Number*	Description and Quality	Quantity	Unit of Measure	Unit Price at Site	Total Price
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**Amount Carried Forward** \$

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**Total Amount or Amount Carried Forward** \$

Prepared by (Contractor's Representative)	Date (mm/dd/yyyy)	Checked by (Owner's Representative)	Date (mm/dd/yyyy)
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I certify that the information provided on this form and in any accompanying documentation is true and accurate. I acknowledge that making, presenting, or submitting a false, fictitious, or fraudulent statement, representation, or certification may result in criminal, civil, and/or administrative sanctions, including fines, penalties, and imprisonment.

As identified in Schedule of Amounts for Contract Payments, form HUD-51000.

**Previous Editions are Obsolete**

form **HUD-51003** (1/2014)

# Summary of Materials Stored

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

OMB Approval No. 2577-0157  
(exp. 1/31/2027)

Public reporting burden for this collection of information is estimated to average 2.5 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. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. This information is collected under the authority of Section 6(c) of the U.S Housing Act of 1937 and HUD regulations. HAs are responsible for contract administration to ensure that the work for project development is done in accordance with State laws and HUD requirements. The contractor/subcontractor reports provide details and summaries on payments, change orders, and schedule of materials stored for the project. The information will be used to ensure that the total development costs, identified in the ACC, are kept as low as possible and consistent with HUD construction requirements. Responses to the collection are necessary to obtain a benefit. The information requested does not lend itself to confidentiality.

**Instructions:** This form is for the Contractor to summarize the value of materials stored at the site (as shown on the schedule, form HUD-51003). Use a separate line for the contractor and each of his/her subcontractors. Prepare an original and one copy, attach form HUD-51003, and send to the Public Housing Agency with the Periodic Estimate for Partial Payment, form HUD-51001. **Payment Value.** No more than 90 percent of the estimated value of the stored materials will be allowed, and only the net amount will be carried to line 13 on the back of the Periodic Estimate for Partial Payment, form HUD-51001. **Signatures.** This form must be signed by those employees of the contractor and of the Public Housing Agency who prepare and check the Schedule of Materials Stored, form HUD-51003.

Name of Public Housing Agency	Supporting Periodic Estimate for Partial Payment Number	Period From (mm/dd/yyyy)	To (mm/dd/yyyy)
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Location of Project	Project Number
---------------------	----------------

Name of General Contractor	Contract Number
----------------------------	-----------------

Name of General Contractor or Subcontractor	Amounts
General Contractor	\$

Subcontractors	\$
----------------	----

	<b>Total</b>	\$
	<b>Less 10%</b>	\$
	<b>Net</b>	\$

Prepared by	Date (mm/dd/yyyy)	Checked by	Date (mm/dd/yyyy)
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I certify that I or my authorized representatives have examined and checked in detail the invoices representing the cost of materials set forth in appended "Schedule of Materials Stored", form HUD-51003, dated (mm/dd/yyyy) \_\_\_\_\_ submitted by \_\_\_\_\_ consisting of \_\_\_\_\_ sheets with an indicated cost of \$ \_\_\_\_\_, and find that the net unit prices set forth in the schedule are the same or less than the invoices examined, and that such materials were suitably stored at the site of the development as of (date)(mm/dd/yyyy) \_\_\_\_\_.

Name of Owner	By (Authorized Representative)	Title	Date (mm/dd/yyyy)
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**Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

form HUD-51004 (01/2011)

# Construction Progress Schedule

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

OMB Approval No. 2577-0157 (Exp. 1/31/2027)

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. HUD may not conduct or sponsor, and an applicant is not required to respond to a collection of information unless it displays a currently valid OMB control number. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. Construction practices and HUD administrative requirements establish the need that HAs maintain certain records or submit certain documents in conjunction with the oversight of the award of construction contracts for the construction of new low-income housing developments or modernization of existing developments. These forms are used by HAs to provide information on the construction progress schedule and schedule of amounts for contract payments. Responses to the collection of information are required to obtain a benefit or to retain a benefit. The information requested does not lend itself to confidentiality.

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

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

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

**Instructions for Preparation of Construction Progress Schedule  
Form HUD-5372**

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

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

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

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

**Computation of Anticipated Monthly Value of Work in Place**

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

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

**Accumulated Scheduled Progress – %**

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

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

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

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

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

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

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

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

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

## Instructions

### General:

This form is to be used by HUD and local agency staff for recording information gathered during on-site interviews with laborers and mechanics employed on projects subject to Federal prevailing wage requirements. Typically, the staff that will conduct on-site interviews and use this form are HUD staff and fee construction inspectors, HUD Labor Standards staff, and local agency labor standards contract monitors.

Information recorded on the form HUD-11 is evaluated for general compliance and compared to certified payroll reports submitted by the respective employer. The comparison tests the veracity of the payroll reports and may be critical to the successful conclusion of enforcement actions in the event of labor standards violations. The thoroughness and accuracy of the information gathered during interviews is crucial.

Note that the interview itself and the information collected on the form HUD-11 are considered confidential. Interviews should be conducted individually and privately. All laborers and mechanics employed on the job site must be made available for interview at the interviewer's request. The employee's participation, however, is voluntary. Interviews shall be conducted in a manner and place that are conducive to the purposes of the interview and that cause the least inconvenience to the employer(s) and the employee(s).

### Completing the form HUD-11

Items 1a - 1c: Self-explanatory

Items 2a – 2d: Enter the employee's full name, a telephone number where the employee can be reached, email address and the employee's home address. Many construction workers use a temporary address in the locality of the project and have a more permanent address elsewhere from which mail may be forwarded to them. Obtain a more permanent address, if available. Ask the employee for a form of identification (e.g., driver's license) to verify their name.

Items 3a – 4c: Enter the employee's responses. Ask the employee about the frequency of pay (weekly, biweekly, semi-monthly or other).

Items 5 – 7: Be certain that the employee's responses are specific. For example, job classification (#5) must identify the trade involved (e.g., Carpenter, Electrician, Plumber) – responses such as "journeyman" or "mechanic" are not helpful for our purposes.

Items 8 – 12b: Self-explanatory

Items 13 – 15c: These items represent some of the most important information that can be gathered while conducting on-site interviews. Please be specific about the duties you observed the employee performing. It may be easiest to make these observations before initiating the interview. Please record any comments or remarks that may be helpful. For example, if the employee interviewed was working with a crew, how many workers were in the crew? Was the employee evasive?

The level of specificity that is warranted is directly related to the extent to which interview(s) or other observations indicate that there may be violations present. If interviews indicate that there may be underpayments involving a particular trade(s), the interviewer is encouraged to interview as many workers in that trade(s) that are available.

Items 16 – 17b: The information on the form HUD-11 may be reviewed for general compliance, initially. For example, are the job classification and wage rate stated by the employee compatible with the classifications and wage rates on the applicable wage decision? Are the duties observed by the interviewer consistent with the job classification?

Item 18: Please place here any additional information you may want to document or continuing information from other lines that do not fit in their block space.

Once the corresponding certified payroll reports are received, the information on the HUD-11 shall be compared to the payroll reports. Any discrepancies noted between the HUD-11 information and that on the payroll report shall be noted in Item 16, Remarks. If discrepancies are noted, follow-up actions to resolve the discrepancies must be taken.

# Record of Employee Interview

U.S. Department of Housing and Urban Development  
Office of Davis-Bacon and Labor Standards

OMB Approval No. 2501-0009  
(exp. 03/31/2028)

Public reporting burden for this collection of information is estimated to average 15 minutes 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. 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. The information is collected to ensure compliance with the Federal labor standards by recording interviews with construction workers. The information collected will assist HUD in the conduct of compliance monitoring; the information will be used to test the veracity of certified payroll reports submitted by the employer. **Sensitive Information.** The information collected on this form is considered sensitive and is protected by the Privacy Act. The Privacy Act requires that these records be maintained with appropriate administrative, technical, and physical safeguards to ensure their security and confidentiality. In addition, these records should be protected against any anticipated threats or hazards to their security or integrity that could result in substantial harm, embarrassment, inconvenience, or unfairness to any individual on whom the information is maintained. **The information collected herein is voluntary, and any information provided shall be kept confidential.**

**Note: Please ensure responses are legible and easy to read.**

1a. Project Name			2a. Employee's Full Name		
1b. Project Number			2b. Employee's Phone Number (including area code) and Email Address		
1c. Contractor or Subcontractor (Employer—not individual's name or supervisor's name)			2c. Employee's Home Address & Zip Code		
			2d. Verification of identification? Yes <input type="checkbox"/> No <input type="checkbox"/>		
3a. How long on this job and average weekly hours worked?	3b. Last date on this job before today?	3c. Number of hours last day on this job?	4a. Hourly Rate of Pay	4b. Fringe benefits? Medical Yes <input type="checkbox"/> No <input type="checkbox"/> Pension Yes <input type="checkbox"/> No <input type="checkbox"/>	4c. Frequency of Pay: Weekly <input type="checkbox"/> Biweekly <input type="checkbox"/> Semi-monthly <input type="checkbox"/> Other <input type="checkbox"/>

5. Your Job Classification(s) (list all and continue on a separate sheet if necessary):

6. Your Duties:

7. Tools or Equipment Used:

8. Are you an apprentice or trainee?	Y <input type="checkbox"/> N <input type="checkbox"/>	10. Are you paid at least time and ½ (1.5x regular hourly rate) for all hours worked in excess of 40 in a week?	Y <input type="checkbox"/> N <input type="checkbox"/>
8a. Have you provided a copy of your apprenticeship certificate?	<input type="checkbox"/> <input type="checkbox"/>		
9. Are you paid for all hours worked?	<input type="checkbox"/> <input type="checkbox"/>	11. Have you ever been threatened or coerced into giving up any part of your pay?	<input type="checkbox"/> <input type="checkbox"/>

12a. Employee Signature	12b. Date
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13. Duties Observed by the Interviewer (Please be specific):

14. Remarks

15a. Interviewer Name (please print)	15b. Signature of Interviewer	15c. Date of Interview
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## Payroll Examination

16. Remarks

17a. Signature of Payroll Examiner	17b. Date
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**Record of  
Employee Interview**

**U.S. Department of Housing and Urban Development  
Office of Davis-Bacon and Labor Standards**

OMB Approval No. 2501-0009  
(exp. 03/31/2028)

18. Additional Remarks

Empty rectangular box for additional remarks.

# Certification of Payments to Influence Federal Transactions

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

Public reporting burden for this information collection is estimated to average 30 minutes, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The information requested is required to obtain a benefit. This form is used to ensure federal funds are not used to influence members of Congress. 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. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157.

Applicant Name

Program/Activity Receiving Federal Grant Funding

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with 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.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

I hereby certify that all the information stated herein, as well as any information provided in the accompaniment herewith, is true and accurate.

**Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Name of Authorized Official

Title

Signature

Date (mm/dd/yyyy)

# DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013  
Expiration Date: 06/30/2028

<b>1. * Type of Federal Action:</b> <input type="checkbox"/> a. contract <input checked="" type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<b>2. * Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input checked="" type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<b>3. * Report Type:</b> <input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change
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**4. Name and Address of Reporting Entity:**  
 Prime     SubAwardee

\* Name

\* Street 1  Street 2

\* City  State  Zip

Congressional District, if known:

**5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:**

<b>6. * Federal Department/Agency:</b> <input type="text"/>	<b>7. * Federal Program Name/Description:</b> <input type="text"/> Assistance Listing Number, if applicable: <input type="text"/>
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<b>8. Federal Action Number, if known:</b> <input type="text"/>	<b>9. Award Amount, if known:</b> \$ <input type="text"/>
--	--

**10. a. Name and Address of Lobbying Registrant:**

Prefix  \* First Name  Middle Name

\* Last Name  Suffix

\* Street 1  Street 2

\* City  State  Zip

**b. Individual Performing Services** (including address if different from No. 10a)

Prefix  \* First Name  Middle Name

\* Last Name  Suffix

\* Street 1  Street 2

\* City  State  Zip

**11.** Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

\* Signature:

\* Name: Prefix  \* First Name  Middle Name   
\* Last Name  Suffix

Title:  Telephone No.:  Date:

**SECTION 01 11 00**  
**SUMMARY OF WORK**

**PART 1 GENERAL**

**1.01 PROJECT**

- A. Project Name: St. James Parish Housing Authority Oscar Brooks & Baytree Site Renovations
- B. Architect's Name: Didier Architecture: Derryl Didier, Architect & Associates, LLC
- C. Architect's Project Number: 25-120 and 25-121
- D. Project Description:
  - 1. Project consists of the reconstruction of the renovation of 36 units in Oscar Brooks Apartment Complex for Saint James Parish Housing Authority after considerable damage from Hurricane Ida. Typical Renovations consist of replacement of flooring, wall & ceiling gypsum board, kitchen and bathroom millwork, plumbing fixtures, HVAC system replacement, and electrical panel replacement.
  - 2. Project consists of the reconstruction of the renovation of 16 units in Baytree Apartment Complex for Saint James Parish Housing Authority after considerable damage from Hurricane Ida. Typical Renovations consist of replacement of flooring, wall & ceiling gypsum board, kitchen and bathroom millwork, plumbing fixtures, HVAC system renovations, and electrical panel replacement.

**1.02 WORK COVERED BY CONTRACT DOCUMENTS**

- A. The Work of this Contract (in general) is comprised of the following:
  - 1. Base bid:
    - A. Oscar Brooks:
      - a. Demolition of existing flooring, where applicable.
      - b. Removal and replacement of damaged wood studs, where applicable.
      - c. Removal and replacement of plywood floor deck, where applicable
      - d. Removal and Installation of all mechanical, electrical, and plumbing systems, devices, fixtures, lights, etc., as required.
      - e. Installation of wall and ceiling gypsum board.
      - f. Installation of interior doors and hardware.
      - g. Paint all interior surfaces indicated on drawings and specs, as required to complete the work.
    - B. Baytree:
      - a. Demolition of existing flooring, where applicable.
      - b. Removal and replacement of damaged wood studs, where applicable.
      - c. Cleaning and servicing existing HVAC systems. Removal and replacement of existing flex duct.
      - d. Removal and Installation of all electrical and plumbing systems, devices, fixtures, lights, etc., as required.
      - e. Installation of wall and ceiling gypsum board.
      - f. Installing of new flooring.
      - g. Installation of interior doors and hardware.
      - h. Paint all interior surfaces indicated on drawings and specs, as required to complete the work.
  - 2. Alternate Bid 1:
    - A. Replace Soffit, Fascia and Trim at the Baytree site, all buildings
  - 3. Alternate Bid 2:
    - A. Supply and Install LVT in lieu of VCT, both sites

4. General Contractor will punch out job and when project is 100% complete and in full compliance with the Contract Documents and all specified/required close out documents are transmitted to the Architect, request in writing that the Architect perform a final inspection for acceptance. Inspection will not be performed by the Architect prior to completion of the above.

B. Related Requirements:

1. General Conditions.
2. Supplementary Conditions.

**END OF SECTION**

**SECTION 01 12 13**  
**SUMMARY OF CONTRACTS**

**PART 1 GENERAL**

**1.01 CONTRACTS**

- A. Work will be constructed under a single lump sum contract.
- B. The work of each separate prime contract is identified in this section and on the Drawings.

**PART 2 NOT USED**

**PART 3 EXECUTION**

**3.01 RECORDATION**

- A. The Contractor will file the original copies of the Contract and Bond with the Clerk of Court, Parish in which the work is to be performed, State of Louisiana. Cost of filing and Notice of Recordation will be paid for by the Owner. Notice of Recordation will be forwarded to the Architect for transmittal to the Contractor.
- B. At completion of the work, the Contractor shall file the Owner's "Notice of Acceptance of Work" at the same office and after expiration of the 45 day Lien Period, shall obtain the Clear Lien certificate and forward same to the Architect. Contractor shall bear any cost involved in the acceptance.

**END OF SECTION**

**SECTION 01 12 16  
WORK SEQUENCE**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Coordinate construction schedule and operations with Architect.
- B. The General Contractor shall schedule and coordinate his construction operations in an orderly and timely manner. A planned schedule of work shall be prepared by the General Contractor and shall be filed with the Architect. It shall be updated monthly and revised copies submitted with the payment requisitions.
- C. Units will not be occupied.

**END OF SECTION**

**SECTION 01 14 16**  
**COORDINATION WITH OCCUPANTS**

**PART 1 GENERAL**

**1.01 OWNER OCCUPANCY**

- A. The Owner will continue to have normal operations on site for the entire site duration of the construction contract.
- B. The Owner shall have the right to use, at any time, any and all portions of the project that have reached such a stage of completion as to permit such occupancy that does not hinder the Contractor's efficient completion of the contract.
- C. Such occupancy will not violate any part of the contract nor be construed as constituting an acceptance of any part of the work. Contractor obligates himself to permit such use and to use every effort to accommodate the Owner by providing such available spaces for the Owner's use.
- D. Existing site, buildings, and parking areas will remain in use at all times during this construction project. Access to all building entrances must be provided at all times. Area where interior work is to be performed will be **unoccupied**, contractor will have full access to units. Protect adjacent areas from dust, debris and noise. Phase work as required to accomplish this requirement without additional cost to the Owner.
- E. Contractor shall protect existing site features and utilities during construction.

**END OF SECTION**

**SECTION 01 14 19**  
**JOB SITE ADMINISTRATION**

**PART 1 GENERAL**

**1.01 CONTRACTOR'S RESPONSIBILITY**

- A. The Contractor shall be responsible for the protection of the work in place as construction progresses.
- B. The Contractor shall schedule and perform all work so that the normal functioning of the project will be interrupted as little as possible.
- C. The Contractor shall be responsible for erecting protective walkways, corridors and other temporary enclosures, barricades, exterior fences and warning lights required to protect the Owner and the Public.
- D. The Contractor shall be responsible for protection of the site and his material storage from vandalism or theft. Type of enclosure, gates, etc. are at the Contractor's option as long as the Owner and the Public are protected from construction operations and the enclosure is not unsightly.
- E. The Contractor shall be responsible for keeping all construction areas used by his personnel clean and trash and debris shall be kept to an absolute minimum.
- F. The Contractor shall be responsible for keeping the site area well drained and shall allow no standing water to pond or to saturate the surface or sub-surface. Excavations shall be kept dry.
- G. The Contractor shall prevent erosion and shall provide silt fences at all drain off areas into area waterways or streets.
- H. The Contractor shall protect existing utilities and services, adjoining work and other improvements in the area.

**1.02 CONTRACTOR USE OF SITE AND PREMISES**

- A. Provide access to and from site as required by law:
  - 1. Do not obstruct roadways, sidewalks, or other public ways without permit and prior consent from the Owner.
- B. The Contractor shall require that his representatives (including, but not necessarily limited to, Suppliers, Subcontractors, Employees and Field Engineers who will enter upon the Owner's property) certify their awareness of and familiarity with the requirements of this Section.
- C. Truck and equipment access: Limit access of trucks and equipment to the site to avoid overloading of streets, driveways, pedestrian access, parking facilities, etc.
- D. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site. Concrete curbs and pavement areas which are damaged during construction events shall be repaired and replaced to a condition that is equal to that prior to beginning construction.
- E. Require Contractor's vehicles, employee's vehicles and all other vehicles entering upon the Owner's property, in performance of the work of the Contractor, to use only the area designated by the Owner. Require proper insurance on all vehicles which enter upon the Owner's property.
- F. Keep existing drives and parking areas open at all times. Keep all low access lanes open at all times. Site will be continuously occupied during construction.
- G. Existing building spaces and parking areas shall not be used for storage. A staging area will be identified at a pre-construction meeting.

**1.03 CORRELATION AND INTENT OF DOCUMENTS**

- A. The Contract Documents, Drawings and Specifications are complementary and what is called for by one shall be as binding as if called for by all. The intention of the Documents is to include all labor and materials, equipment and transportation necessary for the proper execution and completion of the work.

- B. Contractor will be held responsible for errors if old drawings are used after revised drawings are issued to him.
- C. Contractor shall verify all dimensions shown on the drawings with work to be placed and he shall report any errors or inconsistencies to the Architect before commencing work. In all cases of discrepancy between scale and dimensions, figured dimensions shall have precedence over scaled measurements, larger scale over smaller scale, but all discrepancies shall be referred to the Architect for final adjustments. Conflicts between two or more dimensions applying to a common point shall be referred to the Architect for adjustment. Contractor will be held responsible for following figured dimensions which do not among themselves justify. He will likewise be held responsible when such procedure results in failure to coordinate component parts or to fit them properly into place.

**1.04 CONTRACTOR'S SUPERINTENDENT**

- A. The General Contractor shall employ and keep at the site at all times while work is in progress, competent Superintendents, one for each project site, satisfactory to the Architect. These superintendents shall remain for the duration of all work required by this Contract and shall not be changed without the approval of the Architect.

**END OF SECTION**

**SECTION 01 23 00  
ALTERNATES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Description of Alternates
- B. Procedures for pricing Alternates.

**1.02 RELATED REQUIREMENTS**

- A. Bid Form
- B. Instruction to Bidders

**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**

- A. Bid Alternate #1 Replace Soffit, Fascia and Trim at Baytree, all buildings
- B. Bid Alternate #2 Supply and Install LVT in lieu of VCT

**END OF SECTION**

**SECTION 01 26 49**  
**MODIFICATION PROCEDURES**

**PART 1 GENERAL**

**1.01 CHANGE ORDERS/DIRECTIVES**

- A. Refer to Articles 28 and 29 of General Conditions (HUD-5370) and Supplementary Conditions.
- B. Submit complete data required including an itemized breakdown of cost, and time if applicable, within time period stated in General Conditions.
- C. If approved, Architect will prepare Change Order on form G701 for General Contractor's signature.
- D. In an emergency situation, a Construction Change Directive may be issued in order to allow work to proceed.

**1.02 REQUEST FOR EXTENSION OF TIME**

- A. Request for time extension shall be presented to the Architect who will evaluate the request, confer with the Owner prior to the processing of a written change order for time extension and notify the Contractor of the mutual decision. No request for extensions of time will be approved other than for major reasons beyond the control of the Contractor such as major transportation interruptions or delays, problems arising from governmental controls, labor disputes or other major reasons.
- B. Normal rainfall for the area, according to Weather Bureau records, shall not be a cause for an extension of Contract Time.
- C. Request for extension of time shall be presented to the Architect for presentation to the Owner with the monthly application for payment and the Owner shall act upon each application each month.

**END OF SECTION**

**SECTION 01 29 73**  
**SCHEDULE OF VALUES**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Submit a Schedule of Values at the Preconstruction Conference. Provide 2 copies.
- B. Upon request of the Architect, support the values with data which will substantiate their correctness.
- C. The Schedule of Values, unless objected to by the Architect, shall be used only as the basis for the Contractor's Applications for Payment.
- D. Related Requirements in Other Parts of the Project Manual:
  - 1. Conditions of the Contract.
- E. Related Requirements Specified in Other Sections:
  - 1. Application for Payment: Section 01 29 76.

**1.02 FORM AND CONTENT OF SCHEDULE OF VALUES**

- A. Form to be used: G-702 with form G-703 continuation sheets and break down into the 49 Divisions. Complete all applicable portions of form. Provide all line item balances.
- B. Schedule shall list the installed value of the component parts of the Work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. For various portions of the Work:
  - 1. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
  - 2. For items on which progress payments will be requested for stored materials, break down the value into:
    - a. The cost of the materials, delivered and unloaded, with taxes paid.
    - b. The total installed value.
- D. The sum of all values listed in the schedule shall equal the total Contract Sum.
- E. Forms filled out by hand will not be accepted.
- F. Revise schedule to list approved Change Orders, with each Application For Payment.

**END OF SECTION**

## SECTION 01 29 76

### APPLICATION FOR PAYMENT AND MATERIAL INVOICES

#### PART 1 GENERAL

##### 1.01 DESCRIPTION

- A. Work included: Comply with procedures described in this Section when applying for progress payment and final payment under the Contract.
- B. Related work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 01 of these Specifications.
  - 2. The Contract Sum and the schedule for payments are described in the Form of Agreement.
  - 3. Payments upon Substantial Completion and Completion of the Work as described in the General Conditions.
  - 4. The Architect's approval of applications for progress payment and final payment may be contingent upon the Architect's approval of status of Project Record documents as described in Section 01 77 00 of these Specifications.

##### 1.02 QUALITY ASSURANCE

- A. Prior to start of construction, secure the Architect's approval of the schedule of values required to be submitted under Article 27 of the General Conditions (HUD-5370), and further described in Section 01 29 73-Schedule of Values.
- B. During progress of the Work, modify the schedule of values as approved by the Architect to reflect changes in the Contract Sum due to Change Orders or other modifications of the Contract.
- C. Base requests for payment on the approved schedule of values.

##### 1.03 SUBMITTALS

- A. Informal submittal: Unless otherwise directed by the Architect:
  - 1. Make an informal submittal of request for payment by filling in, with erasable pencil, pertinent portions of HUD Form 51001, "Application and Certificate for Payment", plus continuation sheet or sheets. Verify items included under General Conditions heading.
  - 2. For items on which progress payments will be made for stored on site materials, break down the value into:
    - a. The cost of the materials, delivered and unloaded, taxes paid.
    - b. The total installed value.
  - 3. Make this preliminary submittal to the Architect at the last regular job meeting of each month.
  - 4. Revise the informal submittal of request for payment as agreed at the job meeting, initialing all copies.
  - 5. Include copy of updated progress schedule.
- B. Formal submittal: Unless otherwise directed by the Architect:
  - 1. Make formal submittal of request for payment by filling in the agreed data, by typewriter or neat lettering in ink, on HUD Form 51001 "Application and Certificate for Payment", plus continuation sheet or sheets.
  - 2. Include invoice and proof of insurance for stored on site materials.
  - 3. Sign and notarize the Application and Certificate for Payment.
  - 4. Submit the original of the Application and Certificate for Payment, plus 3 identical copies including the continuation sheet or sheets, to the Architect.
  - 5. Include 3 copies of updated progress schedule.
  - 6. The Architect will compare the formal submittal with the approved informal submittal and, when approved, will sign the Application and Certificate for Payment, and will distribute:
    - a. The Original and 2 copies to the Owner.

- b. One copy to the General Contractor.
  - c. One copy to the Architect's file.
- C. The Owner will review and execute a completed copy and return same to the Architect.

**END OF SECTION**

**SECTION 01 31 13**  
**COORDINATION**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- 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.
- B. Notify affected utility companies and comply with their requirements.
- C. 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.
- D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of work of separate sections.
- F. After acceptance of work, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

**1.02 SUBCONTRACTORS**

- A. Various portions of this work may be subcontracted by the General Contractor. The letting of subcontracts shall in no way relieve the Contractor from complete responsibility of all work included under this contract with the Owner. It shall be the Contractor's responsibility to coordinate his subcontracts, not the Architect's responsibility.

**END OF SECTION**

**SECTION 01 31 19**  
**PROJECT MEETINGS**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. General Contractor shall schedule and administer preconstruction meeting, periodic progress meetings and specially called meetings throughout the progress of the work. General Contractor is required to take minutes of all scheduled meetings and to issue copies of same (within 7 calendar days of the meeting) to Owner, Architect and others as he deems necessary. Minutes shall identify the project name, date, time, location and attendance list.
- B. Representatives of Architects, Contractors, Subcontractors and Suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. Submit to the General Contractor, not less than 24 hours prior to any conference or meeting, any item you wish to be place on the agenda.

**1.02 PRECONSTRUCTION CONFERENCE**

- A. Schedule within 5 days after date of Notice to Proceed but prior to any on-site work.
- B. Location: The project site, unless otherwise designated by the Architect.
- C. Attendance:
  - 1. Owner's Representative(s).
  - 2. Architect and his Professional Consultants.
  - 3. Contractor's Superintendent and Recording Secretary.
  - 4. Major Subcontractors.
  - 5. Major Suppliers.
  - 6. Others as appropriate.
- D. Suggested Agenda:
  - 1. Organizational arrangement.
    - a. Channels and procedures for communication.
  - 2. Distribution and discussion of: (General Contractor shall provide Architect with 2 copies of each)
    - a. The Schedule of Values.
    - b. List of major Subcontractors and Suppliers.
    - c. Projected Construction Schedules.
  - 3. Critical work sequencing.
  - 4. Major equipment deliveries and priorities.
  - 5. Project Coordination.
    - a. Designation of responsible personnel.
  - 6. Procedures and processing of:
    - a. Field decisions.
    - b. Proposal requests.
    - c. Submittals.
    - d. Change Orders.
    - e. Applications for Payment.
    - f. Correspondence - Project number.
    - g. Shop Drawings and other data submitted to Architect for review.
  - 7. Adequacy of distribution of Contract Documents.
  - 8. Procedures for maintaining Record Documents.
  - 9. Use of premises:
    - a. Office, work and storage areas.
    - b. Owner's requirements.
  - 10. Construction facilities, controls and construction aids.
  - 11. Temporary utilities.

12. Safety and first-aid procedures.
13. Security procedures.
14. Housekeeping procedures.
15. Asbestos.
16. Other items as the General Contractor deems necessary.

### **1.03 PROGRESS MEETINGS**

- A. Schedule regular periodic meetings, as required. For this project, monthly.
- B. Hold called meetings as required by progress of the Work.
- C. Location of the meetings: As established at the Pre-Construction Conference.
- D. Attendance:
  1. General Contractor's representative, Superintendent and Recording Secretary.
  2. Architect and his Professional Consultants, as needed.
  3. Subcontractors as appropriate to the agenda.
  4. Suppliers as appropriate to the agenda.
  5. Owner's representative(s).

**END OF SECTION**

**SECTION 01 32 16**  
**CONSTRUCTION PROGRESS SCHEDULE**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Preliminary schedule.
- B. Construction progress schedule, bar chart type.

**1.02 REQUIREMENTS**

- A. Within 5 days after the awarding of the Contract, but not later than the Preconstruction Conference, the General Contractor shall prepare a progress schedule with anticipated dates of delivery of various materials and schedule completion dates for the various portions of the work. A copy shall be submitted to the Architect for approval.
- B. Bar graph or CPM showing work progress by Specifications Division in weekly time periods.
- C. Two copies of the "approved" schedule must be provided to the Architect at the Preconstruction Conference.
- D. Must be revised and submitted monthly with each request for payment.
- E. Progress schedule must have a clear way to indicate the anticipated work scheduled and the actual work completed. Comparison shall indicate early or late start and end dates for each item of work, as well as percent of work completed for each item at the end of each pay period.
- F. Progress schedule must have at a minimum:
  - 1. Milestones
  - 2. Progress bars
  - 3. Critical Path
  - 4. Early start, late start
  - 5. Early finish, late finish
  - 6. Total float
- F. Breakdown of work items shall be by EACH of the Specifications Divisions.
- G. Schedule shall indicate original Contract Date, original Calendar Days and original Completion Date.
- H. Revised Schedules shall indicate any increase in contract time which is approved by signed Change Order.
- I. Show name of project and name of General Contractor.

**END OF SECTION**

**SECTION 01 33 23**  
**SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Submit Shop Drawings, Product Data and Samples required by the Contract Documents.
- B. Related Requirements Specified in Other Sections:
  - 1. Progress Schedule: Section 01 32 16.
  - 2. Record Documents: Section 01 77 19.
- C. Designate in the construction schedule, or in a separate coordinated schedule, the dates for submission and the dates that reviewed Shop Drawings, Product Data and Samples will be needed.

**1.02 SHOP DRAWINGS**

- A. Drawings shall be presented in a clear and thorough manner.
  - 1. Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Contract Drawings.
  - 2. Details shall be in scale.
    - a. Elevations 1/4" = 1'-0" minimum.
    - b. Sections 3/4" = 1'-0" minimum.
    - c. Detail cuts 1-1/2" = 1'-0" minimum.
- B. Minimum sheet size 18" x 24"; maximum sheet size 24" x 36".
- C. Provide a minimum white space of 8" x 8" on the face of each drawing for G.C. and Architect approval stamps.

**1.03 PRODUCT DATA**

- A. Preparation:
  - 1. Clearly mark each copy to identify pertinent products or models.
  - 2. Show performance characteristics and capacities.
  - 3. Show dimensions and clearances required.
  - 4. Show wiring or piping diagrams and controls.
- B. Manufacturer's standard schematic drawings and diagrams:
  - 1. Modify drawings and diagrams to delete information which is not applicable to the Work.
  - 2. Supplement standard information to provide information specifically applicable to the Work.

**1.04 SAMPLES**

- A. Office samples shall be of sufficient size and quantity to clearly illustrate:
  - 1. Functional characteristics of the product, with integrally related parts and attachment devices.
  - 2. Full range of color, texture and pattern.
- B. Field samples and mock-ups:
  - 1. Contractor shall erect, at the Project site, at a location acceptable to the Architect.
  - 2. Size and area: that specified in the respective specification section.
  - 3. Fabricate each sample and mock-up complete and finished.
  - 4. Remove mock-ups at conclusion of Work or when acceptable to the Architect.

**1.05 CONTRACTOR RESPONSIBILITIES**

- A. Review Shop Drawings, Product Data and Samples prior to submission. Place G. C. review stamp, date, and signature on document. Documents not so marked will be rejected without review.
- B. Determine and verify:
  - 1. Field measurements.

2. Field construction criteria.
  3. Catalog numbers and similar data.
  4. Conformance with specifications.
- C. Coordinate each submittal with requirements of the Work and of the Contract Documents.
  - D. Notify the Architect in writing, at time of submission, of any deviations in the submittals from requirements of the Contract Documents.
  - E. Do not begin fabrications without an accepted Submittal from the Architect.
  - F. Cost of all reproduction of Shop Drawings and Project Data shall be borne by the Contractor and/or his Subcontractors.

#### **1.06 COORDINATED COLOR SELECTION OF MATERIALS**

- A. Submit all samples requiring selection of colors within 15 days of approval of Subcontractors and Material Suppliers.
- B. Selection of colors or materials will not be made on an individual material basis.

#### **1.07 SUBMISSION REQUIREMENTS**

- A. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other Contractor. Number each submittal consecutively in lower right hand corner of first page.
- B. Number of submittals required:
  1. Shop Drawings: Submit the number of copies which the Contractor requires returned, plus two which will be retained by the Architect.
  2. Product Data: Submit the number of copies which the Contractor requires returned, plus two which will be retained by the Architect.
  3. Samples: Submit the number stated in each specification section. If not stated, a minimum of 3 of each material requiring selection.
  4. Note: General Contractor to retain 1 approved set of Shop Drawings & Product Data to be bound into a booklet for the Owner at project closeout.
- C. Submittals shall contain:
  1. The date of submission and the dates of any previous submissions.
  2. The project title and number.
  3. Contract identification.
  4. The names of:
    - a. Contractor.
    - b. Supplier.
    - c. Manufacturer.
  5. Identification of the project, with the specification section number.
  6. Field dimensions, clearly identified as such.
  7. Relation to adjacent or critical features of the Work material.
  8. Applicable standards, such as ASTM or Federal Specification numbers.
  9. Identification of deviations from Contract Documents.
  10. Identification of revisions on re submittals.
  11. A 8 in. x 4 in. blank space each for Contractor and Architect stamps.
  12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents.

#### **1.08 RESUBMISSION REQUIREMENTS**

- A. Make any corrections or changes in the submittals required by the Architect and resubmit until satisfactory.
- B. Shop Drawings and Product Data:
  1. Revise initial drawings or data, and resubmit as specified for the initial submittal.

2. Indicate any changes which have been made other than those requested by the Architect.
- C. Samples: Submit new samples as required for initial submittal.

**1.09 DISTRIBUTION**

- A. Distribute reproductions of Shop Drawings and copies of Product Data which carry the Architect's stamp of review to:
  1. Architect (2 copies).
  2. Engineers (via Architect).
  3. Job site file.
  4. Record Documents file.
  5. Other affected Contractors.
  6. Subcontractors.
  7. Supplier or Fabricator.
- B. Distribute samples which carry the Architect's stamp of review as directed by the Architect.
- C. DO NOT DISTRIBUTE SHOP DRAWINGS WHICH DO NOT CARRY THE ARCHITECT'S STAMP OF REVIEW TO ANYONE.

**1.10 ARCHITECT DUTIES**

- A. Review submittals.
- B. Affix stamp and initials or signature, and indicate requirements for re submittal or correction of submittal.
- C. Return submittals to Contractor for distribution or for resubmission.

**END OF SECTION**

**SECTION 01 41 00  
REGULATORY REQUIREMENTS**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. PERMITS AND LICENSES
  - 1. The Contractors and his Subcontractors shall procure all necessary permits and licenses and shall observe and abide by all applicable laws, ordinances and regulations of the Local, State and Federal Governments.
- B. CONTRACTOR'S AND SUBCONTRACTOR'S LICENSE
  - 1. All contractors and and/or Subcontractors bidding portions of this work amounting to \$50,000.00 or more shall be licensed in accordance with Act #233 of the 1956 Louisiana Legislature and amended under Title 37, Sections 2150-2163, et. seq., of the Louisiana Legislature.
- C. O.S.H.A. COMPLIANCE
  - 1. The attention of all Contractors and Subcontractors is called to the US. Department of Labor "Occupational Safety and Health Standards; National Consensus Standards and established Federal Standards" as published in Vol. 36, No. 105 of the Federal Register dated May 29, 1971 or subsequent. These standards are in effect for this project.
- D. HUD COMPLIANCE
  - 1. The Contractors and his Subcontractors shall comply with all applicable HUD requirements. Refer to the Bid Requirements and Supplementary Conditions of this project manual.
- E. SECTION 3 PROGRAM CERTIFICATION COMPLIANCE
  - 1. The Contractors and his Subcontractors shall comply with all applicable requirements of the Section 3 Program per The Public Housing Agency. Refer to the Bid Requirements and Supplementary Conditions of this project manual.
- F. FEMA and GOHSEP COMPLIANCE
  - 1. The Contractors and his Subcontractors shall comply with all applicable FEMA and GOHSEP Guidelines and Requirements. Refer to the Bid Requirements and Supplementary Conditions of this project manual.

**END OF SECTION**

**SECTION 01 45 23**  
**TESTING AND INSPECTION SERVICES**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

**A. SELECTION AND PAYMENT**

1. The Owner shall engage and pay for the services of an independent testing laboratory to perform inspections and tests of materials and construction as defined in the General and Supplementary Conditions. In the event of a test failure the General Contractor shall delay and/or replace work as required until retesting produces a passing test. Fail test will be paid for by the General Contractor.

**B. COOPERATION OF CONTRACTOR**

1. The Contractor shall cooperate with the laboratory and:
  - a. Make available, without cost, samples of all materials to be tested in accordance with applicable standard specifications.
  - b. Furnish such nominal labor and sheltered working space as is necessary to obtain samples at the project.
  - c. Advise the laboratory of the identity of material sources and instruct the suppliers to allow tests or inspections by the laboratory.
  - d. Notify the laboratory sufficiently in advance of operations to allow for completion of initial tests and assignment of inspection personnel.
  - e. Notify the laboratory sufficiently in advance of cancellation of required testing operations. The Contractor shall be responsible to the laboratory for charges due to failure to notify if requirements for testing are canceled.

**C. TEST METHODS**

1. Tests and inspections shall be conducted in accordance with the latest standards of ASTM or other recognized authorities.

**D. TEST REPORTS**

1. The laboratory shall promptly submit written reports of each test and inspection made to the Architect, Contractor and to such other parties the Architect may specify.

**E. EXTENT OF LABORATORY TESTS AND INSPECTIONS**

1. The Architect will recommend the type and number of tests to be performed on the project. The Contractor shall be advised of the number and type of tests to be performed by the Testing Laboratory.
2. All invoices for testing shall be submitted to the Architect who will review and forward to the Owner for payment.

**END OF SECTION**

**SECTION 01 50 00**  
**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Field Office.
- B. Temporary Utilities.
- C. Temporary Telecommunications services.
- D. Temporary Sanitary facilities.
- E. Temporary Controls: Barriers, enclosures, and fencing.
- F. Security requirements.
- G. Vehicular access and parking.
- H. Waste Removal.
- I. Removal of Utilities, Facilities, and Controls.
- J. Project identification.

**1.02 FIELD OFFICE**

- A. The Contractor shall set up at one location within the contract limits a temporary office approx. 8' x 10' in size to be used as the Contractor's Office (Contractor's Option). A blueprint table approx. 60" x 36" shall be provided in this office. **Contractor's option.**
- B. A complete set of Contract Documents including all addenda, shop drawings, etc. shall be maintained at this location and all modifications to the contract shall be noted on these Documents in red ink.
- C. Location of field office on site will be determined at the Pre-Construction Meeting, if applicable.

**1.03 TEMPORARY UTILITIES**

- A. The Contractor shall provide temporary water, electricity and other utilities for the construction operations.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

**1.04 TELECOMMUNICATIONS SERVICES**

- A. The Contractor shall make arrangements for, provide and pay for a telephone for the use of construction personnel.
- B. Superintendent, when outside the office, on this site, shall carry an email capable portable cellphone.

**1.05 TEMPORARY SANITARY FACILITIES**

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. The Contractor shall provide for the use of his workmen, adequate sanitary toilet facilities.
- C. The accommodations shall be kept in a clean and sanitary condition daily.
- D. The use of portable chemically treated toilets is acceptable; however, all requirements of local Health Authority must be complied with.

**1.06 BARRIERS, ENCLOSURES, FENCES, ETC.**

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. The Contractor shall furnish the following (but not limited to) as required for the protection of the Owner and the public from any damage due to the construction operations:
  - 1. Temporary exterior fences.

2. Warning Lights.
  3. Warning Signs.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.
  - D. Contractor shall comply with all regulations governing construction activities, including safety regulations, sanitary regulations, etc. applying in the area.

#### **1.07 SECURITY**

- A. Contractor shall be responsible for security in the area of work. Provide barriers, warnings, services, fences, etc. to protect work in place, stored materials, supplies, tools, etc. as required. Owner will assume no responsibility for the area of work during this contract period.

#### **1.08 VEHICULAR ACCESS AND PARKING**

- A. A Construction Staging area will be available and will be coordinated at the Pre-Construction Conference.
- B. Provide and maintain access to fire hydrants, free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.

#### **1.09 WASTE REMOVAL**

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.

#### **1.10 PROJECT IDENTIFICATION**

- A. Provide project identification sign of design and construction indicated on Drawings.
- B. Erect on site at location indicated by Architect and Owner.
- C. Without prior approval from the Architect, no Contractor, Subcontractor or Material Dealer shall post any signs or advertisements on any part of the premises.

#### **1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.

**END OF SECTION**

**SECTION 01 62 00**  
**PRODUCT OPTIONS AND SUBSTITUTIONS**

**PART 1 GENERAL**

**1.01 REQUIREMENTS**

- A. Whenever manufacturer's or trade names appear on the plans or in the specifications, the following words "OR EQUAL" or "OR APPROVED EQUAL" or similar words shall be assumed to follow such manufacturer's or trade names, whether they actually do appear or not.
- B. It is the intention of this specification that, wherever a product is identified by name, equal products which are properly submitted and which meet the Architect's approval may be used. Refer to General Conditions, Article 3, 3.4 Labor and Materials, 3.4.2.
- C. General Contractor shall certify that any product he selects, which is specified by description or performance specification, contains no asbestos.

**END OF SECTION**

**SECTION 01 66 00**  
**PRODUCT HANDLING**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Work included: Protect products scheduled for use in the Work by means including, but not necessarily limited to, those described in this Section.
- B. Related work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1 of these Specifications.
  - 2. Additional procedures also may be prescribed in other Sections of these Specifications.

**1.02 QUALITY ASSURANCE**

- A. Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

**1.03 MANUFACTURER'S RECOMMENDATIONS**

- A. Except as otherwise approved by the Architect, determine and comply with manufacturers' recommendations on product handling, storage and protection.

**1.04 PACKAGING**

- A. Deliver products to the job site in their manufacturer's original container, with labels intact and legible.
  - 1. Maintain packaged materials with seals unbroken and labels intact until time of use.
  - 2. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
- B. The Architect may reject as non-complying such material and products that do not bear identification satisfactory to the Architect as to manufacturer, grade, quality and other pertinent information.

**1.05 PROTECTION**

- A. Protect finished surfaces, including jambs and soffits of openings used as passageways, through which equipment and materials are handled.
- B. Provide protection for finished floor surfaces in traffic areas prior to allowing equipment or materials to be moved over such surfaces.

**1.06 REPAIRS AND REPLACEMENT**

- A. In event of damage, promptly make replacements and repairs to the approval of the Architect and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the Architect to justify an extension in the Contract Time of Completion.

**END OF SECTION**

**SECTION 01 71 23**  
**FIELD ENGINEERING**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Work included:
  - 1. Provide such field engineering services as are required for proper completion of the Work including, but Not necessarily limited to:
    - 1) Establishing and maintaining lines and levels.
    - 2) Structural design of shores, forms and similar items provided by the Contractor as part of his means and methods of construction.
    - 3) Temporary wind bracing.
- B. Related Work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1 of these Specifications.
  - 2. Additional requirements for field engineering also may be described in other sections of these Specifications.

**1.02 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

**1.03 SUBMITTALS**

- A. Comply with pertinent provisions of Section 01 33 23 "SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES".
- B. Upon request of the Architect, submit:
  - 1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
  - 2. Documentation verifying accuracy of field engineering work.
  - 3. Certification signed by the Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance or nonconformance with requirements of the Contract Documents.

**1.04 PROCEDURES**

- A. In addition to procedures directed by the Contractor for proper performance of the Contractor's responsibilities:
  - 1. Locate and protect control points before starting work on the site.
  - 2. Preserve permanent reference points during progress of the Work.
  - 3. Do not change or relocate reference points or items of the Work without specific approval from the Architect.
  - 4. Promptly advise the Architect when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
    - a. Upon direction of the Architect, require the field engineer to replace reference stakes or markers.
    - b. Locate such replacements according to the original survey control.

**END OF SECTION**

**SECTION 01 73 29  
CUTTING AND PATCHING**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Each Contractor and/or Subcontractor shall do all necessary cutting at his own expense. Also, any cost incurred by defective or ill-timed work shall be borne by the party responsible for cutting and patching.
- C. The Contractor and/or Subcontractor shall not endanger any work by cutting and shall not cut or alter the work of any Subcontractor without the consent of the Architect and other persons involved.
- D. Patching shall be performed by tradesmen experienced in the required trade.
- E. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Repair areas adjacent to cuts to required condition.
  - 4. Repair new work damaged by subsequent work.
  - 5. Remove samples of installed work for testing when requested.
  - 6. Remove and replace defective and non-conforming work.
- F. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. 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.

**END OF SECTION**

**SECTION 01 74 13**  
**CLEANING UP**

**PART 1 GENERAL**

**1.01 DESCRIPTION**

- A. Progress Cleaning.
- B. Final Cleaning.

**1.02 PROGRESS CLEANING**

- A. Entire construction area shall be kept neat, clean and safe at all times. Pick up construction debris on a daily basis.
- B. Remove lunch debris from site daily. No food debris shall be left within the project site overnight.
- C. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

**1.03 FINAL CLEANING**

- A. Execute final cleaning prior to final project assessment.
- B. Use cleaning materials that are nonhazardous.
- C. Clean site; sweep paved areas, rake clean landscaped surfaces.
- D. Clean or replace filters of operating equipment.
- E. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.
- F. At the completion of the project, in addition to the removal of rubbish and leaving the areas broom clean, Contractor shall clean the following (not limited to):
  - 1. Remove stains, spots, marks and dirt from decorated work.
  - 2. Clean hardware.
  - 3. Remove paint spots and smears from all surfaces.
- G. The Contractor shall also clean up, fill holes, grade and resod all property areas damaged by construction operations, areas used for material storage or other construction purposes.

**END OF SECTION**

**SECTION 01 77 19**  
**CONTRACT CLOSEOUT**

**PART 1 GENERAL**

**1.01 CLOSEOUT PROCEDURES**

- A. Comply with procedures stated in the General Conditions of the Contract for issuance of Certificate of Substantial Completion.
- B. When the Contractor considers the Work has reached Final Completion, submit written certification that the Contract Documents have been reviewed, the Work has been inspected, and that the Work is complete in accordance with the Contract Documents and ready for the Architect's inspection.
- C. In addition to submittals required by the Conditions of the Contract, provide submittals required by governing authorities, and submit a final statement of accounting giving total adjusted Contract Sum, previous payments and the sum remaining due.
- D. The Architect will issue a final Change Order reflecting approved adjustments to the Contract not previously adjusted by Change Order, if and when applicable.

**1.02 PROJECT RECORD DOCUMENTS**

- A. Store documents separate from those used for construction. Documents to include one set of Contract Documents, all shop drawings, data sheets, addenda, job sketches, etc. issued or reviewed during the Contract period.
- B. Keep documents current. Make all entries in red ink. Do not permanently conceal any work until information has been recorded.
- C. At Contract Closeout, submit documents with transmittal letter containing date, Project title, the Contractor's name and address, list of documents, and the signature of the Contractor. Submit to Architect who will prepare final As-Built Drawings.

**1.03 WARRANTIES AND BONDS**

- A. Provide duplicate notarized copies. Execute the Contractor's submittals and assemble documents executed by Subcontractors, Suppliers and Manufacturers. Provide table of contents and assemble in a binder with durable plastic cover.
- B. Submit material prior to final Application for Payment. For items of work delayed materially beyond the date of Substantial Completion, provide updated submittal within 10 days after acceptance of the item, listing the date of acceptance of the item as the start of the warranty period.
- C. **GUARANTEE WARRANTY**
  - 1. The Contractor shall and does hereby warrant and/or guarantee the following:
    - a. For a period of 1 year from the date of completion as evidenced by the date of final acceptance of the work, the Contractor does warrant all work performed by him under the contract and for which guarantees are required in sections of these specifications.
    - b. Nothing in the above intends or implies that this warranty shall apply to work which has been abused or neglected by the Owner.
    - c. Where guarantees or warranties are written in any section of these specifications or in the manufacturers' literature for longer terms, such longer terms shall apply.

**END OF SECTION**

**SECTION 02 41 00  
DEMOLITION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Selective Demolition as shown on drawings.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 Rough Carpentry

**1.03 SUBMITTALS**

- A. Photographs of existing conditions of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. File with Owner's Representative prior to start of work.

**1.04 JOB CONDITIONS**

- A. Protections: Provide temporary barricades and other forms of protection to protect personnel and general public from injury due to demolition work.
- B. Damages: Promptly repair damages caused to adjacent facilities by demolition work.
- C. Traffic: Conduct demolition operations and debris removal to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- D. Utility Services: Maintain existing utilities and protect them against damage during demolition operations. General Contractor will be responsible for repair to any and all existing utility services. Utilities include but are not limited to: Sewer, Gas, Water, Electricity, Telephone and Cable.
- E. Environmental Controls: Use water sprinkling, temporary enclosures, and other methods to limit dust and dirt migration. Comply with governing regulations pertaining to environmental protection.

**PART 2 PRODUCTS -- NOT USED**

**PART 3 EXECUTION**

**3.01 SCOPE**

- A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with governing regulations.
- B. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Owner's Representative in written, accurate detail. Pending receipt of directive from Owner's Representative, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.
- C. Remove other items as indicated on the drawings.
- D. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one year after completion.

**3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS**

- A. 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. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
  - 3. Do not close or obstruct roadways or sidewalks without prior authorization and/or required permit.

4. 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.

- B. Protect existing structures and other elements that are not to be removed.

### **3.03 EXISTING UTILITIES**

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- E. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- F. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
- G. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

### **3.04 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 indicated.
  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. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- C. Remove existing work as indicated and as required to accomplish new work.
  1. Remove items indicated on drawings.
- D. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
  1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
  2. Verify that abandoned services serve only abandoned facilities before removal.
  3. 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.
- E. 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.

### **3.05 DEBRIS AND WASTE REMOVAL**

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Remove and dispose of demolition debris in accordance with all regulatory requirements.

**3.06 SALVAGE**

A. No site or building elements are expected to be salvaged.

**END OF SECTION**

**SECTION 05 50 10**  
**MISCELLANEOUS METAL ITEMS**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. This section includes the following items:
  - 1. Expansion anchors.
  - 2. Nailing Plates.
  - 3. Toggle Bolts.
  - 4. Lag Screws Expansion shield.
  - 5. Self Tapping masonry screws.
  - 6. Steel Angles.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 - Rough Carpentry.

**1.03 SUBMITTALS**

- A. Submit per Division 1, Section 01 33 23 - Shop Drawings, Product Data and Samples.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

- A. Simpson Strong tie
- B. Hilti
- C. USP Structural Connectors
- D. Hull Metal and Supply Company
- E. Equal

**2.02 PLYWOOD CLIPS**

- A. Hull Metal and Supply Company or Equal.
- B. Aluminum or Galvanized.
- C. Refer to Division 6 for installation.

**PART 3 - EXECUTION**

**3.01 GENERAL**

- A. General: Coordinate sizes of all connectors with sizes of each different framing members indicated on drawings.
- B. Plywood Clips:
  - 1. Install as directed by Architect or manufacturer to properly separate all plywood edges.
  - 2. Follow details and/or manufacturer's requirements for proper installation.
- C. Hurricane Clips, Joist, and Rafter Hanger, Nailing plates:
  - 1. Length of anchors must penetrate at a minimum 3/4 of the length of the concrete area in which is installed unless otherwise noted.
  - 2. Length and Diameter: As indicated on drawings.

**END OF SECTION**

**SECTION 06 10 00**  
**ROUGH CARPENTRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Structural dimension lumber framing.
- B. Non-structural dimension lumber framing.
- C. Sheathing.
- D. Preservative treated wood materials.
- E. Miscellaneous wood nailers, blocking, and grounds.

**1.02 RELATED REQUIREMENTS**

- A. Section 05 50 00 - Metal Fabrications: Miscellaneous steel connectors and support angles for wood framing.

**1.03 SUBMITTALS**

- A. Comply with Division 1, Section 01 33 23- SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Product data required for the following products:
  - 1. Insulating sheathing.
  - 2. Metal framing anchors.
  - 3. Construction adhesives.

**1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Comply with Division 1, Section 01 66 00- PRODUCT HANDLING.
- B. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

**PART 2 PRODUCTS**

**2.01 GENERAL REQUIREMENTS**

- A. Dimension Lumber: Comply with PS 20 "American Softwood Lumber Standard" and with requirements of specified grading agencies.
  - 1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
  - 2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee ([www.alsc.org](http://www.alsc.org)) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
- B. Lumber fabricated from old growth timber is not permitted.
- C. Inspection Agencies: Inspection agencies and the abbreviations used to reference them with lumber grades and species include the following:
  - 1. RIS - Redwood Inspection Service.
  - 2. SPIB - Southern Pine Inspection Bureau.
  - 3. WWPA - Western Wood Products Association.
  - 4. AITC - American Institute of Timber Construction.

**2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS**

- A. For light framing (2 to 4 inches thick, 2 to 6 inches wide) provide the following grade and species:
  - 1. Sizes: Nominal sizes as indicated on drawings, S4S.
  - 2. Moisture Content: S-dry or MC19.
  - 3. Grade: Utility.

- B. For structural light framing (2 to 4 inches thick, 2 to 4 inches wide ) provide the following grade and species:
  - 1. Species: Same species as indicated for structural framing below.
  - 2. Grade: No. 2.
- C. For structural framing (2 to 4 inches thick, 5 inches and wider ) provide the following grade and species:
  - 1. Species: Southern Pine. Graded under SPIB rules.
  - 2. Grade: No. 2.
- D. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
  - 1. Lumber: S4S, No. 2 or Standard Grade.
  - 2. Boards: Standard or No. 3.

### **2.03 EXPOSED DIMENSION LUMBER**

- A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.
- B. For exposed framing lumber provide material complying with the following requirements:
- C. Sizes: Nominal sizes as indicated on drawings.
- D. Surfacing: S4S.
- E. Sizes: Nominal sizes as indicated on drawings, S4S.
- F. Moisture Content: S-dry or MC19.
- G. Grading: Material hand selected at factory from lumber of species and grade indicated below that complies with "Appearance" grade requirements of ALSC National Grading Rule; issue inspection certificate of inspection agency for selected material.:
  - 1. Species: Southern Pine.
    - a. Grade: Select Structural.
  - 2. Species: Douglas Fir.
    - a. Grade: Select Structural.

### **2.04 EXPOSED BOARDS**

- A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.
- B. Where boards will be exposed in the finished work, provide the following:
  - 1. Moisture Content: Kiln-dry (15 percent maximum).
  - 2. Surfacing: S4S.
  - 3. Species: Redwood.
  - 4. Grade: Select Heart.
- C. Where painted finish is indicated, provide:
  - 1. Moisture Content: Kiln-dry (15 percent maximum).
  - 2. Surfacing: S4S.
  - 3. Species: Redwood.
  - 4. Grade: No. 1, 1 Common, or Select.
- D. Where boards will be concealed by other work, provide:
  - 1. Moisture Content: S-dry (19 percent maximum).
  - 2. Species: Southern Pine.
  - 3. Grade: No. 2, 2 Common, or Construction.

### **2.05 MISCELLANEOUS LUMBER**

- A. General: Provide lumber for support or attachment of other construction including cant strips, bucks, nailers, blocking, furring, grounds, stripping, and similar members.
- B. Fabricate miscellaneous lumber from dimension lumber of sizes indicated and into shapes shown.

- C. Moisture Content: S-dry (19 percent maximum) for lumber items not specified to receive wood preservative treatment.
- D. Grade: "No. 2 Boards" per SPIB rules..

## **2.06 CONCEALED PERFORMANCE-RATED CONSTRUCTION PANELS**

- A. General: Where construction panels are indicated for the following concealed types of applications, provide APA Performance Rated Panels complying with requirements designated under each application for grade designation, span rating, exposure durability classification, edge detail (where applicable), and thickness.
- B. Wall Sheathing, APA RATED SHEATHING: Structural I Rated Sheathing, Exterior Exposure Class, and as follows:
  - 1. Span Rating: Wall 16 o.c..
  - 2. Thickness: 5/8 inch. OSB or CDX.

## **2.08 FASTENERS**

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
- B. Fasteners and Anchors:
  - 1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide Hot-dipped galvanized steel per ASTM A 153/A 153M.
  - 2. Nails, Wire, Brads, and Staples: FS FF-N-105.
  - 3. Power Driven Fasteners: National Evaluation Report NER-272.
  - 4. Wood Screws: ANSI B18.6.1.
  - 5. Lag Bolts: ANSI B18.2.1.
  - 6. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and where indicated, flat washers.

## **2.09 METAL FRAMING ANCHORS**

- A. General: Provide metal framing anchors of type, size, metal, and finish indicated that comply with requirements specified including the following:
  - 1. Current Evaluation/Research Reports: Provide products for which model code evaluation/research reports exist that are acceptable to authorities having jurisdiction and that evidence compliance of metal framing anchors for application indicated with the building code in effect for this Project.
  - 2. Allowable Design Loads: Provide products for which manufacturer publishes allowable design loads that are determined from empirical data or by rational engineering analysis and that are demonstrated by comprehensive testing performed by a qualified independent testing laboratory.
- B. Galvanized Steel Sheet: Steel sheet zinc-coated by hot-dip process on continuous lines prior to fabrication to comply with ASTM A 525 for Coating Designation G60 and with ASTM A 446, Grade A (structural quality); ASTM A 526 (commercial quality); or ASTM A 527 (lock-forming quality); as standard with manufacturer for type of anchor indicated.
- C. Use galvanized steel framing anchors for rough carpentry exposed to weather, in ground contact, or in area of high relative humidity, and where indicated.

## **2.10 MISCELLANEOUS MATERIALS**

- A. Adhesives for Field Gluing Panels to Framing: Formulation complying with APA AFG-01 that is approved for use with type of construction panel indicated by both adhesive and panel manufacturer.
- B. Water Repellent Preservative: NWWDA-tested and -accepted formulation containing 3-iodo-2-propynyl butyl carbonate (IPBC) as its active ingredient.

## **2.11 FACTORY WOOD TREATMENT**

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
  - 1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.
- B. Preservative Treatment:
  - 1. Preservative Pressure Treatment of Lumber Above Grade: AWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
    - a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
    - b. Treat lumber exposed to weather.
    - c. Treat lumber in contact with roofing, flashing, or waterproofing.
    - d. Treat lumber in contact with masonry or concrete.
  - 2. Preservative Pressure Treatment of Plywood Above Grade: AWPA U1, Use Category UC2 and UC3B, Commodity Specification F using waterborne preservative.
    - a. Kiln dry plywood after treatment to maximum moisture content of 15 percent.
    - b. Treat plywood in contact with roofing, flashing, or waterproofing.
  - 3. Treat indicated items and the following:
    - a. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
    - b. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
    - c. Wood framing members less than 18 inches above grade.
    - d. Wood floor plates installed over concrete slabs directly in contact with earth.
    - e. Wood framing directly behind fascia board.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION - GENERAL**

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.
- D. Discard units of material with defects that impair quality of rough carpentry construction and that are too small to use in fabricating rough carpentry with minimum joints or optimum joint arrangement.
- E. Set rough carpentry to required levels and lines, with members plumb and true to line and cut and fitted.
- F. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow attachment of other construction.
- G. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated.
- H. Countersink nail heads on exposed carpentry work and fill holes.
- I. Use common wire nails, unless otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; predrill as required.

### **3.02 WOOD FRAMING - GENERAL**

- A. Framing Standard: Comply with N.F.P.A. "Manual for House Framing," unless otherwise indicated.

- B. Framing with Engineered Wood Products: Install framing composed of engineered wood products to comply with manufacturer's directions.
- C. Install framing members of size and spacing indicated.
- D. Anchor and nail as shown, and to comply with the following:
  1. National Evaluation Report No. NER-272 for pneumatic or mechanical driven staples, P-Nails, and allied fasteners.
  2. Published requirements of manufacturer of metal framing anchors.
  3. "Recommended Nailing Schedule" of referenced framing standard and with N.F.P.A. "National Design Specifications for Wood Construction."
  4. "Table No. II - Recommended Nailing Schedule" of the Uniform Building Code.
  5. "Appendix C - Recommended Nailing Schedule" of the BOCA National Building Code.
  6. "Table 1705.1 - Fastening Schedule," of the Standard Building Code.
- E. Do not splice structural members between supports.
- F. Firestop concealed spaces of wood framed walls and partitions at each floor level, 4'-0" above floor and at the ceiling line of the top story. Where firestops are not automatically provided by the framing system used, use closely fitted wood blocks of nominal 2-inch-thick lumber of the same width as framing members.

### 3.03 STUD FRAMING

- A. General: Arrange studs so that wide face of stud is perpendicular to direction of wall or partition and narrow face is parallel. Install single bottom plate and double or triple top plates, as indicated on drawings, using 2-inch-thick members whose widths equal that of studs; except single top plate may be used for non-load-bearing partitions. Nail or anchor plates to supporting construction.
- B. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength or result in unacceptable appearance of exposed members.
- C. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.
- D. Install structural members full length without splices unless otherwise specifically detailed.
- E. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes, AWC (WFCM) Wood Frame Construction Manual.
- F. Construct corners and intersections with not less than 3 studs. Install miscellaneous blocking and framing as shown and as required for support of facing materials, fixtures, specialty items, and trim.
  1. Install continuous horizontal blocking row at mid-height of single-story partitions over 8 feet high and at midpoint of multi-story partitions, using 2-inch thick members of same width as wall or partitions.
- G. Frame wall openings with two or more studs at each jamb. Install nailed header members of thickness equal to width of studs. Set headers on edge and support on jamb studs.
  1. For nonbearing partitions, install double-jamb studs and headers not less than 4 inches deep for openings 3 feet and less in width, and not less than 6 inches deep for wider openings.
  2. For load-bearing partitions, install double-jamb studs for openings 6 feet and less in width, and triple-jamb studs for wider openings. Install headers of depth shown, or if not shown, as recommended by N.F.P.A. "Manual for House Framing."
- H. Install diagonal bracing in stud framing of exterior walls, except as otherwise indicated. Brace both walls at each external corner, full story height, at a 45 degree angle, using metal diagonal bracing.
  1. Install additional metal diagonal bracing as indicated on plans and elevations.

### 3.04 JOIST FRAMING

- A. Install joist with crown edge up and support ends of each member with not less than 1-1/2 inches of bearing on wood or metal at each end. Attach floor joists as follows:
  - 1. To wood bearing members by toe nailing or metal framing anchors.
  - 2. To wood supporting members with wood ledgers as shown, or if not shown, with metal joist hangers.
- B. Frame openings with headers and trimmers supported by metal joist hangers; double headers and trimmers where span of header exceeds 4 feet.
- C. Do not notch joists. Do not bore holes larger than 1/3 depth of joist or locate closer than 2 inches from top or bottom. Install solid blocking (2 inches thick by depth of joist) at ends of joists unless nailed to header or bearing member.
- D. Lap members framing from opposite sides of beams, girders or partitions not less than 4 inches or securely tie opposing members together. Install solid blocking (2 inches thick by depth of joist) over supports.
- E. Provide bridging of type indicated below between joists where nominal depth-to-thickness ratio exceeds 6, at intervals of 8 feet. Fit solid blocking at ends of members.
  - 1. Diagonal wood bridging formed from bevel cut nominal 1-inch by 4-inch lumber, double-crossed and nailed both ends to joists or
  - 2. Solid wood bridging 2 inches thick by depth of joist, end nailed to joist or
  - 3. Steel bridging installed to comply with bridging manufacturer's directions.
- F. Under non-load-bearing partitions, install double joists separated by solid blocking equal to depth of studs above.
  - 1. Install triple-joists separated as above, under partitions receiving ceramic tile and similar heavy finishes or fixtures.

### 3.05 WOOD GROUNDS, BLOCKING, NAILERS, AND SUPPORTS

- A. Install wood grounds where shown and where required for screeding or attachment of other work.
- B. Form to shapes as shown and cut as required for true line and level of work to be attached.
- C. Coordinate location with other work involved.
- D. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise indicated.
- E. Build into masonry during installation of masonry work. Where possible, anchor to formwork before concrete placement.
- F. Install permanent grounds of dressed, preservative treated, key beveled lumber, shall be no less than 1 1/2 inches wide and of thickness required to bring face of ground to exact thickness of finish material involved. Remove temporary grounds when no longer required.
- G. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- H. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.
- I. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
- J. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
- K. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

### **3.06 WOOD FURRING**

- A. Install plumb and level with closure strips at edges and openings. Shim with wood as required for tolerance of finished work.
  - 1. Firestop furred spaces on walls at each floor level and at ceiling line of top story, with wood blocking or noncombustible materials, accurately fitted to close furred spaces.
- B. Furring to Receive Gypsum Drywall: Install 1-inch by 2-inch furring at 16 inches o.c., vertically.
- C. Suspended Furring: Install suspended furring members of size and spacing indicated, including hangers and attachment devices. Level to a tolerance of 1/8 inch in 10 feet.

### **3.07 CLEANING**

- A. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.
- B. Prevent sawdust and wood shavings from entering the storm drainage system.

**END OF SECTION**

**SECTION 06 20 00  
FINISH CARPENTRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Finish carpentry items.
- B. Hardware and attachment accessories.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- B. Section 06 41 00 - Architectural Wood Casework:
- C. Section 08 11 13 - Steel Door and Frames.
- D. Section 08 53 13 - Windows:

**1.03 SUBMITTALS**

- A. Comply with Section 01 33 23 - Shop Drawings, Product data and Samples.

**1.04 QUALITY ASSURANCE**

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
- B. Installer Qualifications: Arrange for installation of finish carpentry by a firm that can demonstrate successful experience in installing finish carpentry items similar in type and quality to those required for this Project.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Protect work from moisture damage.
- B. Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels. Provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.
- C. Do not deliver interior finish carpentry until environmental conditions meet requirements specified for installation areas. If finish carpentry must be stored in other than installation areas, store only in areas where environmental conditions meet requirements specified for installation areas.
- D. Comply with Division 1, Section 01 66 00 - Product Handling.

**1.06 PROJECT CONDITIONS**

- A. Environmental Conditions: Obtain and comply with finish carpentry manufacturer's and installer's coordinated advice for optimum temperature and humidity conditions for finish carpentry during its storage and installation.
- B. Weather Conditions: Proceed with finish carpentry only when existing and forecasted weather conditions will permit exterior finish carpentry to be installed in compliance with manufacturer's recommendations and when substrate is completely dry.

**PART 2 PRODUCTS**

**2.01 FINISH CARPENTRY ITEMS**

- A. Lumber Standards: Comply with PS 20 "American Softwood Lumber Standard" for lumber and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee Board of Review.
- B. Plywood Standards: Comply with PS 1 "U.S. Product Standard for Construction and Industrial Plywood" for plywood and, for products not manufactured under PS 1, with APA PRP-108.  
NOTE: NO PARTICLE BOARD OR FLAKEBOARD MAY BE INSTALLED ON THIS PROJECT IN ANY LOCATION unless specifically allowed within these specifications.

- C. Inspection Agencies: Inspection agencies and the abbreviations used to reference them with lumber grades and species include the following:
  - 1. RIS - Redwood Inspection Service.
  - 2. SPIB - Southern Pine Inspection Bureau.
  - 3. WWPA - Western Wood Products Association.
- D. Grade Stamps: Provide lumber with each piece factory-marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
  - 1. For exposed lumber furnish pieces with grade stamps applied to ends or back of each piece, or omit grade stamps entirely and provide certificates of grade compliance issued by inspection agency.
- E. Formaldehyde Emission Levels: Comply with formaldehyde emission requirements of each voluntary standard referenced below:
  - 1. Medium-Density Fiberboard: NPA 9.
  - 2. Hardwood Plywood: HPMA FE.
- F. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by authority having jurisdiction.

## **2.02 HARDWARE**

- A. Hardware: Comply with BHMA A156.9.

## **2.03 FABRICATION**

- A. Shop assemble work for delivery to site, permitting passage through building openings.
- B. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.
- C. Wood Moisture Content: Comply with requirements of specified inspection agencies and manufacturer's recommendations for moisture content of finish carpentry in relation to relative humidity conditions existing during time of fabrication and in installation areas. Provide finish carpentry with moisture content that is compatible with Project requirements.
- D. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.
- C. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting installation and performance of finish carpentry. Do not proceed with installation until unsatisfactory conditions have been corrected.

### **3.02 PREPARATION**

- A. Clean substrates of projections and substances detrimental to application.
- B. Condition finish carpentry to average prevailing humidity conditions in installation areas before installation for a minimum of 24 hours unless longer conditioning recommended by manufacturer.
- C. Lumber for painted finish exposed on the exterior. Comply with requirements for surface preparation and application in Section "Painting."

### **3.03 INSTALLATION**

- A. Set and secure materials and components in place, plumb and level.

- B. Do not use finish carpentry materials that are unsound, warped, bowed, twisted, improperly treated or finished, not adequately seasoned, or too small to fabricate with proper jointing arrangements.
  - 1. Do not use manufactured units with defective surfaces, sizes, or patterns.
- C. Install finish carpentry plumb, level, true, and aligned with adjacent materials. Use concealed shims where required for alignment.
  - 1. Scribe and cut finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
  - 2. Install to tolerance of 1/8 inch in 8 feet for plumb and level. Install adjoining finish carpentry with 1/16 inch maximum offset for flush installation and 1/8 inch maximum offset for reveal installation.
  - 3. Coordinate finish carpentry with materials and systems that may be in or adjacent to standing and running trim and rails. Provide cutouts for mechanical and electrical items that penetrate exposed surfaces of trim and rails.
  - 4. Finish in accordance with specified requirements.

#### **3.04 TOLERANCES**

- A. Fabricate finish carpentry to dimensions, profiles and details indicated. Ease edges to radius indicated for the following:
  - 1. Lumber less than 1 inch in nominal thickness: 1/16 inch.
  - 2. Lumber 1 inch or more in nominal thickness: 1/8 inch.

**END OF SECTION**

**SECTION 06 41 00**  
**ARCHITECTURAL WOOD CASEWORK**

**PART 1 – GENERAL**

**1.01 SECTION INCLUDES**

- A. Modular wood casework, including base, wall cabinets, and associated trims.
- B. Cabinet hardware and accessories.
- C. Decorative plastic laminate and solid surface countertops.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 – Rough Carpentry: Support framing and blocking for casework.
- B. Section 06 20 00 – Finish Carpentry: Finish trim and molding related to casework.
- C. Section 08 53 00 – Windows:

**1.03 REFERENCES**

- A. HUD Housing Quality Standards (HQS) for casework and cabinetry.
- B. AWI (Architectural Woodwork Institute) Quality Standards.

**1.04 SUBMITTALS**

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Indicate cabinet construction, dimensions, joinery, hardware, finishes, and installation details.
- C. Samples: Submit samples of proposed laminates and solid surface materials for approval.
- D. Certifications: AWI QCP certification, if project requires compliance with Architectural Woodwork Standards (AWS).

**1.05 QUALITY ASSURANCE**

- A. Fabricator Qualifications: Minimum 5 years of experience producing similar wood casework; AWI certification preferred.
- B. Installer Qualifications: Company with experience installing casework of similar scope and complexity.
- C. Standards Compliance: Fabricate in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, latest edition.
- D. Mockups: Provide sample cabinet unit if required by Architect for approval.

**1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Protect casework from physical damage, soiling, and moisture.
- B. Do not deliver until wet trades are complete and installation areas are clean, dry, and properly conditioned.

**PART 2 – PRODUCTS**

**2.01 MATERIALS**

- A. Wood: Select hardwood or veneer species as indicated on drawings; kiln-dried, defect-free.
- B. Casework must comply with HUD HQS durability requirements for multi-family residential housing.
- C. All materials shall be heavy-duty grade suitable for long-term use and residential occupancy.

## **2.02 HARDWARE**

- A. Drawer Slides: Full extension, heavy-duty metal slides rated for residential use.
- B. Pull Hardware: Manufacturer's standard heavy-duty pulls, finish as selected by Architect/Owner.
- C. Hinges: Heavy-duty, soft close, concealed or semi-concealed hinges, with minimum 5-year warranty.

## **2.03 FABRICATION**

- A. Construct casework per AWI Premium Grade standards unless otherwise noted.
- B. Provide beveled edges on all casework doors, consistent and smooth finish.
- C. Assemble components in the shop where possible for quality control.
- D. Provide cutouts and reinforcement for hardware and accessories.

## **2.04 FINISHES**

- A. Provide finish as specified or approved by Architect; smooth, durable, and resistant to household wear.
- B. Edge Treatment: Doors to have beveled edges with smooth sanding and sealed finish.

## **PART 3 – EXECUTION**

### **3.01 EXAMINATION**

- A. Verify supporting framing and blocking are in place and adequate.
- B. Inspect adjoining surfaces and confirm conditions are ready for installation.

### **3.02 INSTALLATION**

- A. Install casework plumb, level, and securely anchored.
- B. Install full extension slides and pull hardware securely.
- C. Adjust doors and drawers for proper operation, alignment, and flush fit with 1/16" maximum offset tolerance.
- D. Protect installed casework until project completion.

### **3.03 ADJUSTING AND CLEANING**

- A. Lubricate hardware and slides as recommended by manufacturer.
- B. Clean casework surfaces and touch up finishes as required.

**END OF SECTION**

**SECTION 07 21 00**  
**THERMAL INSULATION**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. All labor, materials and equipment necessary to complete work specified to provide batt, blanket and spray foam type insulations.
- B. Batt insulation for filling perimeter window and door shim spaces and crevices in exterior wall and roof.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 - Rough Carpentry: Supporting construction for batt insulation.
- B. Section 09 21 16 - Gypsum Board Assemblies: Acoustic insulation inside walls and partitions.

**1.03 QUALITY ASSURANCE**

- A. Requirements of Regulatory Agency:
  - 1. Louisiana State Fire Marshal and City Parish Permit Office.
  - 2. 2021 International Energy Conservation Code (IECC).
- B. Design Conditions per IECC 2021, Climate Zone 2:
  - 1. Ceilings - Thermal Resistance: R-38.
  - 2. Wood Frame Exterior Walls - Thermal Resistance: Minimum R-13.
  - 3. Fenestration U-Factor: Maximum 0.40.
  - 4. Fenestration SHGC (Solar Heat Gain Coefficient): Maximum 0.25.
  - 5. Ducts  $\geq 3$ " diameter: R-8; Ducts  $< 3$ " : R-6.
  - 6. Blower Door Test (required after July 1, 2024):  $\leq 7$  ACH50.
- C. Testing:
  - 1. R-Value ASTM C518.
    - a. Surface Burning Characteristics ASTM E84, twenty-five (25) less flame spread.
    - b. Perm Rating ASTM E96.

**1.04 SUBMITTALS**

- A. Comply with Section 01 33 23 - Shop Drawings, Product Data and Samples.
- B. Product Data: Provide data on product characteristics, performance criteria, and product limitations.
- C. Manufacturer's Installation Instructions: Include information on special environmental conditions required for installation and installation techniques.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

**1.05 FIELD CONDITIONS**

- A. Do not install insulation adhesives when temperature or weather conditions are detrimental to successful installation.
- B. Protection:
  - 1. Protect adjoining work during installation.
  - 2. Protect installed products until contract acceptance.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

- A. Thermal Insulation:
  - 1. U.S. Gypsum.
  - 2. Celotex.
  - 3. International Cellulose Corp.

4. UCSC.
5. Henry Company.
6. Equal as submitted by General Contractor and approved by Architect.

## **2.02 APPLICATIONS**

- A. Insulation in Wood Framed Walls: Batt insulation with separate vapor retarder.
- B. Insulation in Wood Framed Ceiling Structure: Batt insulation with separate vapor retarder.

## **2.03 BATT INSULATION MATERIALS**

- A. Glass Fiber Batt Insulation - Walls: Flexible preformed batt or blanket, complying with ASTM C 665; friction fit.
  1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E84.
  2. Smoke Developed Index: 50 or less, when tested in accordance with ASTM E84.
  3. Combustibility: Non-combustible, when tested in accordance with ASTM E136, except for facing, if any.
  4. Type II, Class C.
  5. Thermal Resistance: R-value of 13.
  6. Facing: Aluminum foil, one side for walls.
- B. Glass Fiber Batt Insulation - Ceiling: Flexible preformed batt or blanket, complying with ASTM C 665; friction fit. Blown option will be acceptable to comply with all requirements described
  1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E 84.
  2. Smoke Developed Index: 50 or less, when tested in accordance with ASTM E 84.
  3. Combustibility: Non-combustible, when tested in accordance with ASTM E 136.
  4. Type II, Class C.
  5. Thermal Resistance: R of 38.
  6. Facing: Unfaced.
- C. Batt Insulation: ASTM C665, preformed glass fiber batts, friction fit, conforming to the following:
  1. Unfaced (sound attenuating) at interior demising walls, as indicated on drawings.
  2. Thicknesses; verify, as indicated on drawings.
  3. Manufacturers:
    - a. John Manville
    - b. Owens Corning
    - c. Approved Equal
- D. Closed Cell, Polyurethane Spray Foam, 3" min.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that substrate, adjacent materials, and insulation materials are dry and that substrates are ready to receive insulation.
- B. Verify substrate surfaces are flat, free of irregularities or materials or substances that may impede adhesive bond.

### **3.02 BATT INSTALLATION**

- A. Install insulation and vapor retarder in accordance with manufacturer's instructions.
- B. Install in exterior wall and roof spaces without gaps or voids. Do not compress insulation.
- C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.
- D. Fit insulation tightly in cavities and tightly to exterior side of mechanical and electrical services within the plane of the insulation.
- E. Cut and fit snugly around pipes, conduits and outlet boxes maintaining a continuous barrier over surface to be insulated.
- F. Patch and seal punctures, tears or voids in integral vapor barrier.
- G. Replace any area damaged by installation of mechanical and electrical work.

- H. Remove excess materials, litter and debris, leaving areas in a clean condition.
- I. At wood framing, place vapor retarder on warm side of insulation by stapling at 6 inches on center. Lap and seal sheet retarder joints over member face.
- J. Tape seal tears or cuts in vapor retarder.
- K. Extend vapor retarder tightly to full perimeter of adjacent window and door frames and other items interrupting the plane of the membrane. Tape seal in place.

### **3.03 PROTECTION**

- A. Do not permit installed insulation to be damaged prior to its concealment.

**END OF SECTION**

**SECTION 07 46 2**  
**SOFFIT, FASCIA, AND TRIM – Baytree, Alternate #1**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Fiber cement perforated soffit panels, trim, fascia, and accessories.

**1.2 RELATED SECTIONS**

- A. Section 06100 - Rough Carpentry: Wood framing and bracing.
- B. Section 06100 - Rough Carpentry: Sheathing.

**1.3 REFERENCES**

- A. ASTM D3359 - Standard Test Method for Measuring Adhesion by Tape Test, Tool, and Tape.
- B. ASTM E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 degrees C.

**1.4 SUBMITTALS**

- A. Submit under provisions of Section 01300.
- 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: Provide detailed drawings of atypical non-standard applications of cementitious siding materials which are outside the scope of the standard details and specifications provided by the manufacturer.
- D. Selection Samples: Factory primed, paint to be selected by Owner / Architect.

**1.5 QUALITY ASSURANCE**

- A. Installer Qualifications: Minimum of 2 years' experience with installation of similar products.
- B. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
  - 3. Remodel mock-up area as required to produce acceptable work.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store siding on edge or lay flat on a smooth level surface. Protect edges and corners from chipping. Store sheets under cover and keep dry prior to installing.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

**1.7 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 the manufacturer's absolute limits.

## 1.8 WARRANTY

- A. Product Warranty: Limited, non-pro-rated product warranty.
  - 1. Fascia #210 board for 30 years.
  - 2. Soffit HZ10 panels for 30 years.
  - 3. Trim HZ10 boards for 15 years.
- B. Finish Warranty: Limited product warranty against manufacturing finish defects.
  - 1. When used for its intended purpose, properly installed and maintained according to manufacturer's published installation instructions.
- C. Workmanship Warranty: Application limited warranty for 2 years.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: James Hardie Building Products, Inc., which is located at: 303 E. Wacker Dr.; Chicago, IL 60601 ; Toll Free Tel: 877-236-7526; Email: [requestinfo \(info@jameshardie.com\)](mailto:requestinfo@jameshardie.com); Web: <https://www.jameshardiepros.com> | <https://www.jameshardie.com>
- B. Acceptable Manufacturer: Plycem USA, LLC, a.k.a. Allura®, located at: 396 W. Greens Rd, Ste 300, Houston, TX 77067; Tel: 1-844-4-ALLURA Web: [www.alluraUSA.com](http://www.alluraUSA.com)
- C. Substitutions: Approved equal.
- D. Requests for approval of equal substitutions will be considered in accordance with the provisions of Section 01600.

### 2.2 SIDING, FASCIA, AND TRIM

- A. Hardie Plank HZ10 lap siding, Hardie Panel HZ10 vertical siding, Hardie Soffit HZ10 panels and Hardie Shingle HZ10 siding requirement for materials:
  - 1. Fiber-cement siding - complies with ASTM C 1186 Type A Grade II.
  - 2. Fiber-cement siding - complies with ASTM E 136 as a noncombustible material.
  - 3. Fiber-cement siding - complies with ASTM E 84 Flame Spread Index = 0, Smoke Developed Index = 5.
  - 4. CAL-FIRE, Fire Engineering Division Building Materials Listing - Wildland Urban Interface (WUI) Listed Product.
  - 5. ICC-ES evaluation reports ESR-2290, ESR-1844, and ESR-2273 (IBC, IRC, CBC, CRC).
- B. Fascia: Hardie Board HZ10 as manufactured by James Hardie Building Products, Inc.
  - 1. Type: Select Cedarmill 6-1/4 inches (159 mm) with 5 inches (127 mm) exposure.
- C. Vented Soffit Panels: Hardie Soffit HZ10 VentedPlus Panels. as manufactured by James Hardie Building Products, Inc.
  - 1. Net Free Ventilation: 12.6 sq inches of net free ventilation per linear foot (26670 sq mm per linear meter).
  - 2. Factory primed on 5 sides.
  - 3. Thickness: 1/4 inch (6 mm).
  - 4. Type: Textured Cedarmill, 12 inches (305 mm) by 12 feet (3658 mm).
- D. Trim:
  - 1. Hardie Trim HZ10 boards as manufactured by James Hardie Building

Products, Inc.

- a. Product: Batten Boards, 2-1/2 inch (63 mm) width.
  - b. Texture: Smooth.
  - c. Length: 12 feet (3658 mm).
  - d. Thickness: 1 inch (24 mm).
2. Hardie Trim HZ10 Fascia boards as manufactured by James Hardie Building Products, Inc.
  3. Artisan HZ10 Accent trim as manufactured by James Hardie Building Products, Inc.
  4. Fiber-cement trim - complies with ASTM C 1186 Type A Grade II.
  5. Fiber-cement trim - complies with ASTM E 136 as a noncombustible material.
  6. Fiber-cement trim - complies with ASTM E 84 Flame Spread Index = 0, Smoke Developed Index = 5.
  7. Intertek Product Listing.

## **2.3 FINISHES**

- A. Factory Primer: Provide factory applied universal primer.
  1. Primer: Factory primed by manufacturer.
  2. Topcoat: Painted, color to be selected by Owner / Architect.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Do not begin installation until the substrates have been properly prepared.
- B. If framing preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Nominal 2 inch by 4 inch (51 mm by 102 mm) wood framing selected for minimal shrinkage and complying with local building codes, including the use of water-resistive barriers or vapor barriers where required. Minimum 1-1/2 inches (38 mm) face and straight, true, of uniform dimensions and properly aligned.
  1. Install water-resistive barriers and claddings to dry surfaces.
  2. Repair any punctures or tears in the water-resistive barrier prior to the installation of the siding.
  3. Protect siding from other trades.

### **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 - HARDIE SOFFIT HZ10 AND VENTED PANELS**

- A. Install materials in strict accordance with manufacturer's installation instructions.
  1. Panels may be installed as soffit or ceiling over wood or steel framing; Complying with local building code. Install soffits to nominal 2 x 4 framing members spaced a maximum of 24 inches (610 mm) on center with the long dimension perpendicular to the rafter or joist framing.
  2. Support edges by framing.
  3. Ensure gutters have end caps. Maintain a minimum 1 inch (25 mm) gap between end caps and siding and trim.
  4. Position vent holes toward outside of eave for optimal airflow.

5. Fastener Positioning: Position fasteners 3/8 inches (9.5 mm) from panel edges and no closer than 2 inches (51 mm) away from corners when using soffit greater than 12 inch (305 mm) wide and no closer than 1 inch (25 mm) away from corners when using soffit that is less than or equal to 12 inch (305 mm) wide.
6. Jointing Methods: Install panels in moderate contact at ends, provide battens.
7. Drive fasteners perpendicular to siding and framing.
8. Fastener heads should fit snug against siding; no air space.

### **3.4 INSTALLATION - HARDIE TRIM HZ10 BOARDS**

- A. Install materials in strict accordance with manufacturer's installation instructions. Install flashing around all wall openings.
- B. Fasten through trim into structural framing or code complying sheathing. Fasteners must penetrate a minimum of 3/4 inch (19 mm) or full thickness of sheathing. Additional fasteners may be required to ensure adequate security.
- C. Place fasteners no closer than 3/4 inch (19 mm) and no further than 2 inches (51 mm) from side edge of trim board and no closer than 1 inch (25 mm) from end. Fasten maximum 16 inches (406 mm) on center.
- D. Maintain clearance between trim and adjacent finished grade.
- E. Trim inside corner with a single board trim both side of corner.
- F. Outside Corner Board Attach Trim on both sides of corner with 16 gage corrosion resistant finish nail 1/2 inch (13 mm) from edge spaced 16 inches (406 mm) apart, weather cut each end spaced minimum 12 inches (305 mm) apart.
- G. Allow 1/8 inch gap between trim and siding.
- H. Seal gap with high quality, paint-able caulk.
- I. Shim frieze board as required to align with corner trim.
- J. Fasten through overlapping boards. Do not nail between lap joints.
- K. Overlay siding with single board of outside corner board then align second corner board to outside edge of first corner board. Do not fasten HardieTrim boards to HardieTrim boards.
- L. Shim frieze board as required to align with corner trim.
- M. Install HardieTrim Fascia boards to rafter tails or to sub fascia.

### **3.5 FINISHING**

- A. Finish factory primed siding with a minimum of one coat of high quality 100 percent acrylic or latex or oil based exterior grade paint within 180 days of installation. Follow paint manufacturer's written product recommendation and written application instructions.

### **3.6 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 62 00**  
**FLASHING AND SHEET METAL**

**PART 1 GENERAL**

**1.01 WORK INCLUDED**

- A. This Section includes the following:
  - 1. Miscellaneous sheet metal accessories.
- B. Integral masonry flashings are specified as masonry work in sections of Division 4.
- C. Roofing accessories installed integral with roofing membrane are specified in roofing system sections as roofing work.

**1.02 SUBMITTALS**

- A. Comply with Division 1, Section 01 33 23.

**1.03 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Comply with Division 1, Section 01 66 00.

**1.04 PROJECT CONDITIONS**

- A. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes.

**PART 2 PRODUCTS**

**2.01 SHEET METAL FLASHING AND TRIM MATERIALS**

- A. Stainless Steel: AISI Type 302/304, complying with ASTM A 167, 2D annealed finish, soft, except where harder temper required for forming or performance; 0.0188-inch thick (26 gage) except as otherwise indicated.
- B. Lead: ASTM B 749, Type L51121, copper-bearing sheet lead, minimum 4 lb/sq ft (0.0625-inch thick) except not less than 6 lb/sq ft (0.0937-inch thick) for burning (welding) unless otherwise indicated.
- C. Zinc-Coated Steel: Commercial quality with 0.20 percent copper, ASTM A 526 except ASTM A 527 for lock-forming, G90 hot-dip galvanized, Kynar finish; 0.0179-inch thick (26 gage) except as otherwise indicated.

**2.02 MISCELLANEOUS MATERIALS AND ACCESORIES**

- A. Solder: For use with steel or copper, provide 50 - 50 tin/lead solder (ASTM B 32), with rosin flux.
- B. Solder: For use with stainless steel, provide 60 - 40 tin/lead solder (ASTM B 32), with acid-chloride type flux, except use rosin flux over tinned surfaces.
- C. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.
- D. Bituminous Coating: SSPC - Paint 12, solvent-type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.
- E. Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, non-drying, nonmigrating sealant.
- F. Elastomeric Sealant: Generic type recommended by manufacturer of metal and fabricator of components being sealed and complying with requirements for joint sealants as specified in Division 7 Section "Joint Sealers."
- G. Epoxy Seam Sealer: 2-part noncorrosive metal seam cementing compound, recommended by metal manufacturer for exterior/interior nonmoving joints including riveted joints.
- H. Adhesives: Type recommended by flashing sheet manufacturer for waterproof/weather-resistant seaming and adhesive application of flashing sheet.

- I. Paper Slip Sheet: 5-lb. rosin-sized building paper.
- J. Polyethylene Underlayment: Minimum 6-mil carbonated polyethylene film resistant to decay when tested in accordance with ASTM E 154.
- K. Reglets: Metal or plastic units of type and profile indicated, compatible with flashing indicated, noncorrosive.
- L. Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gage required for performance.
- M. Elastic Flashing Filler: Closed-cell polyethylene or other soft closed-cell material recommended by elastic flashing manufacturer as filler under flashing loops to ensure movement with minimum stress on flashing sheet.
- N. Roofing Cement: ASTM D 2822, asphaltic.
- O. Spray paint: flat enamel, exterior, color to match roof shingles.

### **2.03 FABRICATED UNITS**

- A. General Metal Fabrication: Shop-fabricate work to greatest extent possible. Comply with details shown and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage, or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.
- B. Seams: Fabricate nonmoving seams in sheet metal with flat-lock seams. For metal other than aluminum, tin edges to be seamed, form seams, and solder. Form aluminum seams with epoxy seam sealer; rivet joints for additional strength where required.
- C. Expansion Provisions: Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- D. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant, in compliance with SMACNA standards.
- E. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION REQUIREMENTS**

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations and with SMACNA "Architectural Sheet Metal Manual." Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.
- B. Underlayment: Where stainless steel or aluminum is to be installed directly on cementitious or wood substrates, install a slip sheet of red rosin paper and a course of polyethylene underlayment.
- C. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance.
- D. Install reglets to receive counterflashing in manner and by methods indicated. Where shown in concrete, furnish reglets to trades of concrete work for installation as work of Division 3 sections. Where shown in masonry, furnish reglets to trades of masonry work, for installation as work of Division 4 sections.

- E. Install counterflashing in reglets, either by snap-in seal arrangement or by welding in place for anchorage and filling reglet with mastic or elastomeric sealant, as indicated and depending on degree of sealant exposure.
- F. Install elastic flashing in accordance with manufacturer's recommendations. Where required, provide for movement at joints by forming loops or bellows in width of flashing. Locate cover or filler strips at joints to facilitate complete drainage of water from flashing. Seam adjacent flashing sheets with adhesive, seal and anchor edges in accordance with manufacturer's recommendations.
- G. Install rain guards of length shown on drawings at locations shown on exterior elevations. Deflect water to protect entry doorways and walkways.
- H. Spray paint all lead flashings, lead roof jacks, stainless steel and other penetrations exposed on roof with flat, enamel at completion of work. Color as selected by Architect to match roof shingles color.

### **3.02 CLEANING AND PROTECTION**

- A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes.
- B. Protection: Contractor is required to observe and protect flashings and sheet metal work during construction to ensure that work will be without damage or deterioration other than natural weathering at time of Substantial Completion.

**END OF SECTION**

**SECTION 07 92 00**  
**SEALANTS AND CAULKING**

**PART 1 GENERAL**

**1.01 WORK INCLUDED**

- A. Completion of all sealant and caulking. All joints between dissimilar materials, adjoining materials, intersecting materials shall be sealed to prevent moisture or insect travel between the crack created by the two materials at the joint.

**1.02 RELATED WORK**

- A. Hollow metal doors and frames.
- B. Windows.
- C. Carpentry.

**1.03 QUALITY ASSURANCE**

- A. Obtain elastomeric materials from only manufacturers who will, if required, send a qualified technical representative to project site, for the purpose of advising the Installer of proper procedures and precautions for the use of the materials.
- B. Prepare a mock-up installation of major type and use of sealant. Install sealant between materials matching those used on the project.

**1.04 SUBMITTALS**

- A. Comply with Division 1, Section 01 33 00.
- B. Manufacturer's Data: For information only, submit 2 copies of manufacturer's specifications (primer, filler, etc.), recommendations and installation instructions for each type of sealant and associated miscellaneous material required. Include manufacturer's published data, or letter of certification, or certified test laboratory report indicating that each material complies with the requirements and is intended generally for the applications shown. Show by transmittal that one copy of each recommendation and instruction has been distributed to the Installer.
- C. Guarantee, Sealants: Submit two (2) copies of written guarantee agreeing to repair or replace sealants which fail to form air-tight and water-tight joints; or fail in joint adhesion, cohesion, abrasion resistance, weather resistance, extrusion resistance, migration resistance, stain resistance, or general durability; or appear to deteriorate in any other manner not clearly specified by submitted manufacturer's data, as an inherent quality of the material for the exposure indicated. Provide guarantee signed by the Installer and Contractor.
  - 1. Guarantee period is three years.
  - 2. Product delivery, storage and handling
- D. Comply with Division 1, Section 01 66 00.
- E. Deliver products in original sealed and labeled containers when applicable.
- F. Store products in a clean environment with temperature range within the recommendations of the manufacturer.
- G. Protect products from damage. Damaged products shall not be used.

**1.05 JOB CONDITIONS**

- A. Pre-Installation Meeting: Review the procedures and time schedule proposed for installation of sealants in coordination with other work. Review each major sealant application required on the project.
- B. Condition of Other Work: The Installer must examine the joint surfaces, backing and anchorage of units forming sealant rabbet, and the conditions under which the sealant work is to be performed, and notify the Contractor in writing of conditions detrimental to the proper and timely completion of the work and performance of the sealants. Do not proceed with the sealant work until satisfactory conditions have been corrected in a manner acceptable to the Installer.

- C. Weather Conditions: Do not proceed with installation of sealants under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitations for installation. Proceed with the work only when forecasted weather conditions are favorable for proper cure and development of high early bond strength.

## **PART 2 PRODUCTS**

### **2.01 ACCEPTABLE MANUFACTURERS**

- A. Sonneborn.
- B. Pecora Corp.
- C. Products Research & Chemical Corporation.
- D. Tremco Mfg. Company.
- E. Toch Brothers, Inc.
- F. Sika.
- G. Vulkem.
- H. Approved Equal.

### **2.02 MATERIALS**

- A. Sealant (Exterior): Polysulfide-based, 2-part elastomeric sealant, complying with FS TT-S-00227E, Class A, Type 2 (non-sag) unless Type I (self-leveling) recommended by manufacturer for the application shown (including firestopping sealants at rated partitions).
  - 1. Sonneborn - Sonolastic NP 2.
  - 2. Pecora Corp. - Synthacaulk GC-5.
  - 3. Products Research and Chemical Corp. - Rubber Caulk 250 and 150.
  - 4. Tremco Mfg. Co. - Lasto Meric or Dymeric.
  - 5. Toch Brothers, Inc. - Thiotor Sealant.
  - 6. Approved equal.
- B. Joint Filler (Exterior) for bituminous top sealant of all paving expansion and keyway joints.
  - 1. Sikaflex - 12SL.
  - 2. Vulkem 45.
- C. Caulking Compound (Interior): One component acrylic glazing sealant - acrylic terpolmer, solvent based, one-part thermoplastic sealant compound; solids not less than 95% acrylic; complying with ASTM C834, recommended by manufacturer for specific job uses (including fire rated construction).
  - 1. Sonneborn - Sonolac.
  - 2. Pecora - Unicrylic.
  - 3. Tremco - Mono.
  - 4. Approved equal.
- D. Joint cleaner: Provide the type of joint cleaning compound recommended by the sealant or caulking compound manufacturer for the joint to be cleaned.
- E. Primers: As recommended by caulking and sealants manufacturer. Use primers on all metal surfaces.
- F. Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer, to be applied to sealant-contact surfaces where bond to the substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape wherever applicable.
- G. Sealant Backer Rod: Compressible rod stock polyethylene foam, polyethylene jacketed polyurethane foam, or other flexible, permanent, durable non-absorptive material as recommended, for compatibility with sealant by the sealant manufacturer. Provide size and shape of rod which will control the joint depth for sealant placement, break bond of sealant at bottom of joint, form optimum shape of sealant bead on back side, and provide a highly compressible backer to minimize the possibility of sealant extrusion when joint is compressed.

- H. Compatibility: Provide only materials (manufacturer's recommended variation of the specified materials) which are known to be fully compatible with the actual installation conditions, as shown by manufacturer's published data or certification.
- I. Colors: Wherever compound is not exposed to view, provide manufacturer's standard color which has the best overall performance characteristics for the application shown.
  - 1. Provide custom colors, if required to match samples or to match the adjoining surfaces in a manner to be determined by the Architect.

### **2.03 FABRICATION AND MANUFACTURER**

- A. The products of a single manufacturer shall be used on exterior. The products of a single manufacturer shall be used on the interior. Systems recommendations on specific products will be considered by Architect.

## **PART 3 EXECUTION**

### **3.01 JOINT SURFACE PREPARATION**

- A. Clean joint surfaces immediately before installation of sealant or sealant or caulking compound. Remove dirt, insecure coatings, moisture and other substances which would interfere with bond of sealant or caulking compound.
- B. For elastomeric sealants, do not proceed with installation of sealant over joint surfaces which have been painted, lacquered, waterproofed or treated with water repellent or other treatment or coating.
- C. Etch concrete and masonry joint surfaces to remove excess alkalinity, unless sealant manufacturer's printed instructions indicate that alkalinity does not interfere with sealant bond and performance. Etch with 5% solution of muriatic acid; neutralize with dilute ammonia solution, rinse thoroughly with water and allow to dry before sealant installation. Protect adjacent surfaces.
- D. Remove cap strip from all paving metal keyway joints and prepare joint for application of specified paving sealant.

### **3.02 APPLICATION**

- A. Comply with sealant manufacturer's printed instructions except where more stringent requirements are shown or specified.
- B. Prime or seal the joint surfaces wherever shown or recommended by the sealant manufacturer. Do not allow primer/sealer to spill or migrate onto adjoining surfaces.
- C. Install sealant backer rod for liquid elastomeric sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for the application shown.
- D. Install bond breaker tape wherever shown and wherever required by manufacturer's recommendations to ensure that elastomeric sealants will perform properly.
- E. Use two parts polysulfide or Dymeric type sealant for all exterior joints, unless otherwise herein specified.
- F. Employ only proven installation techniques, which will ensure that sealants will be deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of the joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces where horizontal joints are between a horizontal surface and a vertical surfaced, fill joint to form a slight cove, so that joint will not trap moisture and dirt.
- G. Install sealants to depths as shown, or if not shown, as recommended by the sealant manufacturer but within the following general limitations, measured at the center (thin) section of the bead.
  - 1. For normal moving joints sealed with elastomeric or Dymeric sealant, but not subject to traffic, fill joints to a depth equal to 50% of joint width, but neither more than 1/2" deep nor less than 1/4" deep.

2. For joints sealed with non-elastomeric sealants and caulking compound (if any), fill joints to a depth in the range of 75% to 125% of joint width.
- H. No face beads of sealant or caulking will be allowed.
  - I. Do not allow sealants or compounds to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces including rough textures such as exposed aggregate panels.

### **3.03 CURING AND PROTECTION**

- A. Cure sealants and caulking compounds in compliance with manufacturer's instructions.
- B. The Installer shall advise the Contractor of procedures required for the curing and protection of sealants and caulking compounds during the construction period.

### **3.04 CLEAN UP**

- A. Remove excess and spillage of compounds promptly as the work progresses. Clean the adjoining surfaces.
- B. Repair and correct defective work.

**END OF SECTION**

**SECTION 08 11 13  
HOLLOW METAL DOORS AND FRAMES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Non-fire-rated steel doors and frames.
- B. Thermally insulated steel doors.

**1.02 RELATED REQUIREMENTS**

- A. Finish Carpentry
- B. Section 08 71 00 Door Hardware
- C. Section 08 80 00 Glazing
- D. Caulking and Sealants

**1.03 REFERENCE STANDARDS**

- A. ANSI A250.3 - Test Procedure and Acceptance Criteria for Factory-Surfaces for Steel Doors and Frames; 2007 (R2011).
- B. ANSI A250.8 - SDI-100 Recommended Specifications for Standard 2003.
- C. ANSI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 1998 (R2011).
- D. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2011.
- E. NAAMM HMMA 840 - Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames; The National Association of Architectural Metal Manufacturers; 2007.
- F. NAAMM HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and Frames; The National Association of Architectural Metal Manufacturers; 2006.
- G. UL 10B - Standard for Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

**1.04 SUBMITTALS**

- A. See Section 01 33 23 - Shop Drawings, Product Data and Samples.
- B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced grade standard.
- C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and identifying location of different finishes, if any.

**1.05 QUALITY ASSURANCE**

- A. Provide all products of this section from a single manufacturer
- B. Steel frames and doors shall be shop fabricated, all welded construction without exceptions.
- C. Knockdown or field welded type frames will not be considered or approved equal.

**1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Store in accordance with NAAMM HMMA 840.
- B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion.
- C. Store products in clean area.
- D. Damaged products shall not be used.
- E. Frames shall not be stored outside or outside under plastic cover.

**1.07 JOB CONDITIONS**

- A. Protection:
  - 1. Protect adjoining work during installation.
  - 2. Protect installed products until contract acceptance.

## **PART 2 PRODUCTS**

### **2.01 ACCEPTABLE MANUFACTURERS**

- A. Steel Doors and Frames:
  - 1. Assa Abloy Ceco or Curries: [www.assaabloydss.com](http://www.assaabloydss.com)
  - 2. Steelcraft, an Ingersoll Rand brand; Product: [www.steelcraft.com](http://www.steelcraft.com).
  - 3. Fenestra.
  - 4. Pioneer.
  - 5. Premier Products.
  - 6. Republic.
  - 7. Approved Equal.
  - 8. Substitutions: See Section 01 62 00 - Product Options and Substitutions

### **2.02 DOORS AND FRAMES**

- A. Requirements for All Doors and Frames:
  - 1. Door Top Closures: Flush with top of faces and edges.
  - 2. Door Edge Profile: Beveled on both edges.
  - 3. Door Texture: Embossed wood-grain faces.
  - 4. Galvanizing for Units in Wet Areas: All components hot-dipped zinc-iron alloy-coated (galvannealed), manufacturer's standard coating thickness.
  - 5. Finish: Completely factory finished, including factory primer and factory-applied topcoat. Paint color shall be selected by Owner/Architect.
  - 6. Frames installed in wood-framed walls shall be filled with non-shrink grout. Grout shall be pumpable, non-metallic, non-shrink type formulated for use with hollow metal frames. Place grout to completely fill interior of frame without causing distortion or bowing. Brace frames as required during placement. Coordinate with wall construction to avoid moisture intrusion or damage to adjacent materials
- B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with all the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, coordinate with the Architect.

### **2.03 STEEL DOORS**

- A. Exterior Doors: Raised panel to match existing, painted with peep sight.
  - 1. Grade: ANSI A250.8 Level 2, physical performance Level B, Model 2, seamless.
  - 2. Core: Polystyrene foam.
  - 3. Galvanizing: All components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness.
  - 4. Weatherstripping: Separate, see Section 08 71 00.

### **2.04 STEEL FRAMES, N/A**

- A. General
  - 1. Comply with the requirements of grade specified for corresponding door.
  - 2. Finish: Same as for door.
- B. Exterior Door Frames: Face welded, seamless with joints filled.
  - 1. Galvanizing: All components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness.

### **2.05 ACCESSORY MATERIALS**

- A. Silencers: Resilient rubber, stick-on type; 3 on strike side of single door, 3 on center mullion of pairs, and 2 on head of pairs without center mullions.
- B. Temporary Frame Spreaders: Provide for all factory-or shop-assembled frames.

## **2.06 FINISH MATERIALS**

- A. Primer: Rust-inhibiting, complying with ANSI A250.10, door manufacturer's standard.
- B. Site Finished. Color as Selected by Architect. Coordinate with "PAINTING" Section.
- C. Provide factory-installed wide-angle peepholes in unit entry doors, centered at 60 inches above finished floor unless otherwise indicated. Peepholes shall be UL-listed, vandal-resistant, with a minimum 160-degree viewing angle. Finish to match door hardware unless otherwise noted.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.

### **3.02 INSTALLATION**

- A. Install in accordance with the requirements of the specified door grade standard and NAAMM HMMA 840.
- B. Coordinate frame anchor placement with wall construction.
- C. Coordinate installation of hardware.
- D. Coordinate installation of glazing.
- E. Touch up damaged factory finishes.

### **3.03 TOLERANCES**

- A. Maximum Diagonal Distortion: 1/16 in measured with straight edge, corner to corner.

### **3.04 ADJUSTING**

- B. Adjust for smooth and balanced door movement.

### **3.05 SCHEDULE - See Drawings**

**END OF SECTION**

**SECTION 08 14 16**  
**FLUSH WOOD DOORS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Flush wood doors; flush and flush glazed configuration; fire rated, non-rated, and acoustical.
- B. Extent and location of each type of flush wood door is indicated on drawings and in schedules.
- C. Flush wood doors are to be natural finished under Division 9 of these specifications.
- D. Factory-prefitting to frames and factory-premachining for hardware for wood doors is included in this section

**1.02 RELATED REQUIREMENTS**

- A. Section 06 20 00 - Finish Carpentry: Wood door frames.
- B. Section 08 11 13 - Hollow Metal Doors and Frames.
- C. Section 08 71 00 - Door Hardware.
- D. Section 09 91 00 - Painting.

**1.03 SUBMITTALS**

- A. Comply with Division 1, Section 01 33 23 - Shop Drawings, Product data and Samples.
- B. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.
- C. Door manufacturer's technical data for each type of door, including details of core and edge construction, trim for openings and louvers, and factory finishing specifications.
- E. Manufacturer's Installation Instructions: Indicate special installation instructions.

**1.04 QUALITY ASSURANCE**

- A. Quality Standards: Comply with the following standards:
  - 1. AWI Quality Standard: "Architectural Woodwork Quality Standards"; including Section 1300 "Architectural Flush Doors", of Architectural Woodwork Institute (AWI) for grade of door, core construction, finish and other requirements.
- B. Manufacturer: Obtain doors from a single manufacturer.
- C. Maintain one copy of the specified door quality standard on site for review during installation and finishing.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Comply with Section 01 66 00 - Product Handling.
- B. Package, deliver and store doors in accordance with specified quality standard.
- C. Accept doors on site in manufacturer's packaging. Inspect for damage.
- D. Protect doors with resilient packaging . Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges if stored more than one week. Break seal on site to permit ventilation.
- E. Identify each door with individual opening numbers which correlate with designation system used on shop drawings for door, frames, and hardware, using temporary, removable or concealed markings.
- F. Damaged products shall not be used.
- G. Protect adjoining work during installation. Protect installed products including finish hardware until contract acceptance.

**1.06 PROJECT CONDITIONS**

- A. Conditioning: Do not deliver or install doors until conditions for temperature and relative humidity have been stabilized and will be maintained in storage and installation areas during

remainder of construction period to comply with the following requirements applicable to project's geographical location:

1. Referenced AWI quality standard including Section 100-S-11 " Relative Humidity and Moisture Content".

### **1.07 WARRANTY**

- A. General: Warranties shall be in addition to, and not a limitation of, other rights the Owner may have under the Contract Documents.
- B. Door Manufacturer's Warranty: Submit written agreement in door manufacturer's standard form signed by Manufacturer, Installer and Contractor, agreeing to repair or replace defective doors that have warped (bow, cup or twist) or that show telegraphing of core construction in face veneers, or do not conform to tolerance limitations of referenced quality standards.
  1. Warranty shall also include reinstallation which may be required due to repair or replacement of defective doors where defect was not apparent prior to hanging.
  2. Warranty shall be in effect for 5 years following period of time after date of Substantial Completion.
- C. Contractor's Responsibilities: Replace or refinish doors where Contractor's work contributed to rejection or to voiding of manufacturer's warranty.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering doors which may be incorporated in the work include, but are not limited to, the following:
  1. Solid Core Doors – Painted:
    - a. Algoma Hardwoods, Inc.
    - b. Benton Doors, Incorporated
    - c. Eggers Industries, Architectural Door Division.
    - d. Franks Door, Inc.
    - e. Ipik Door Co., Inc.
    - f. Mid South Door Company.
    - g. V.T. Industries.
    - h. Weyerhaeuser Company.
    - i. Approved equal.

### **2.02 INTERIOR FLUSH WOOD DOORS**

- A. Doors: Refer to drawings for locations and additional requirements.
  1. Faces: Select red oak, grade A, rotary sliced, book matched. (Must match cabinets & trim).
    - a. Select Red Oak.
    - b. Grade A.
    - c. Rotary sliced.
    - d. Book Matched.
    - e. Finish to be selected by Architect.
  2. Quality Level: Premium Grade, in accordance with AWI/AWMAC Architectural Woodwork Quality Standards Illustrated, Section 1300.
  3. AWI Door Symbol: SLC-5.
  4. Construction: Solid bonded, lumber cores, no particle board allowable.
  5. Adhesive: Type I Exterior, Type II Interior.
  6. Edge Construction: Provide manufacturer's standard laminated edge construction for improved screw-holding capability and split resistance as compared to edges composed of a single layer of treated lumber. Edge band to match face veneer.

### **2.03 DOOR CONSTRUCTION**

- A. Fabricate doors in accordance with door quality standard specified.
- B. Fabricate flush wood doors to produce doors complying with following requirements:

1. Moisture Content: 12% max. at time of fabrication.
2. Factory-prefit and premachine doors to fit frame opening sizes indicated with the following uniform clearances and bevels:
  - a. Comply with tolerance requirements of AWI for prefitting. Comply with final hardware schedules and door frame shop drawings and with hardware templates.
  - b. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before proceeding with factory premachining.
3. Face veneer thickness, 1/50 inch minimum for outer exposed face layer (1/12" 2 ply minimum face).
4. Furnish doors free of warpage. Maximum allowable warp or twist shall be 1/4" as defined and qualified by National Woodwork Manufacturer's Standard Door Guarantee.
5. Furnish astragals for double doors.
6. Sealing: Seal top and bottom edges of door with 2 coats of spar varnish prior to shipment.
7. Fire Rated Doors: Equal to Weyerhaeuser "Roddis Fire Door", Eggers "Eggers Fire Door", Vauter "Vauter Fire Door", rated as shown on door schedule, comply with UL and FM requirements and AWI FS-1-1/2 or FS-3/4. Comply with ASTM E 152. Provide labels on all rated doors.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.
- C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.
- D. Examine installed door frames prior to hanging door:
  1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with plumb jambs and level heads.
  2. Do not install doors in frames which would hinder the operation of the doors.
  3. Reject doors with defects.
- E. Do not proceed with installation until unsatisfactory conditions have been corrected.

#### **3.02 INSTALLATION**

- A. Install doors in accordance with manufacturer's instructions and specified quality standard.
- B. Do not install doors in rooms where humidity will damage doors.
- C. Factory-Finished Doors: Do not field cut or trim; if fit or clearance is not correct, replace door.
- D. Field-Finished Doors: Trimming to fit is acceptable.
  1. Adjust width of non-rated doors by cutting equally on both jamb edges.
  2. Trim maximum of 3/4 inch off bottom edges.
- E. Use machine tools to cut or drill for hardware.
- F. Coordinate installation of doors with installation of frames and hardware.
- G. Coordinate installation of glazing.
- H. Job-Fit Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and machining.
  1. Fit doors for width by planing for height by sawing. Maximum allowable diagonal distortion is 1/16".
  2. Fitting Clearances for Non-Rated Doors: Provide 1/8" at jambs and heads; 1/16" per leaf at meeting stiles for pairs of doors; and 1/2" from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4" clearance from bottom of door to top of threshold unless otherwise required by hardware supplied door sweep strip. Re: Division 8, Hardware.
  3. Bevel non-rated doors 1/8" in 2" at lock and hinge edges.

- I. Prefit Doors: Fit to frames for uniform clearance at each edge.
- J. Sealing: Seal all jobsite cut surfaces with 2 coats of sealer before final installation of doors.

### **3.03 ADJUSTING**

- A. Adjust doors for smooth and balanced door movement.
- B. Adjust closers for full closure.
- C. Operation: Rehang or replace doors which do not swing or operate freely.
- D. Protect doors as recommended by door manufacturer to ensure that wood doors will be without damage or deterioration at time of Substantial Completion. Replace doors which were damaged during construction.
- E. Replace doors which are warped beyond allowable limits.
- F. At completion of project, clean and adjust all hardware, replace all damaged or broken parts. Remove all temporary protection.

**END OF SECTION**

**SECTION 08 21 60  
EMBOSSSED HARDBOARD PANEL DOORS**

**PART 1 - GENERAL**

**1.01 WORK INCLUDED**

- A. Extent and location of each type of embossed hardboard panel (EHP) door is indicated on drawings and in schedules.
- B. Types of doors required include the following:
  - 1. 4 panel or 6 panel, as scheduled.
- C. Embossed hardboard panel doors are to be factory primed but shall be field finish painted under Division 9 of these specifications.
- D. Factory-prefitting to frames and factory-premachining for hardware for EHP doors is included in this section.
- E. Wood door frames and other woodwork in juxtaposition to EHP doors are specified in Division-6 section "Architectural Woodwork".

**1.02 SUBMITTALS**

- A. Comply with Division 1, Section 01340.
- B. Product Data: Door manufacturer's technical data for each type of door, including details of core and edge construction, trim for openings and louvers.

**1.03 QUALITY ASSURANCE**

- A. Quality Standards: Comply with the following standards:
  - 1. Basic Hardboard Product Standard ANSI/AHA 135.4 - 1982
  - 2. NWWDAI.S.1.1 - 86, sec. 3.7.3 (B)
- B. Manufacturer: Obtain doors from a single manufacturer.

**1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING**

- A. Comply with Division 1, Section 01610.
- B. Protect doors during transit, storage and handling to prevent damage, soiling and deterioration.

**1.05 PROJECT CONDITIONS**

- A. Conditioning: Do not deliver or install doors until conditions for temperature and relative humidity have been stabilized and will be maintained in storage and installation areas during remainder of construction period to comply with the following requirements applicable to project's geographical location:
  - 1. Temperature: 50°F to 85°F
  - 2. Relative humidity: 43% to 70%

**1.06 WARRANTY**

- A. General: Warranties shall be in addition to, and not a limitation of, other rights the Owner may have under the Contract Documents.
- B. Door Manufacturer's Warranty: Submit written agreement in door manufacturer's standard form signed by Manufacturer, Installer and Contractor, agreeing to repair or replace defective doors that have warped (bow, cup or twist) or that show telegraphing of core construction in face veneers, or do not conform to tolerance limitations of referenced quality standards.
  - 1. Warranty shall also include reinstallation which may be required due to repair or replacement of defective doors where defect was not apparent prior to hanging.

2. Warranty shall be in effect for 5 years following period of time after date of Substantial Completion.
- C. Contractor's Responsibilities: Replace or refinish doors where Contractor's work contributed to rejection or to voiding of manufacturer's warranty.

## **PART 2 - PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering doors which may be incorporated in the work include, but are not limited to, the following:
1. Masonite Corporation
  2. Mohawk Doors, Inc.
  3. Approved equal

### **2.02 INTERIOR PANEL DOORS**

- A. Hardboard Panel Doors for Painted Finish: Comply with the following requirements:
1. Faces: 4 or 6 panel embossed hardboard as scheduled on drawings.
  2. Name brand panel.
  3. Waterproof adhesive.
  4. Factory primed.
  5. Edge Construction: Provide manufacturer's standard edge construction for improved screw-holding capability and split resistance.

### **2.03 FABRICATION**

- A. Fabricate EHP doors to produce doors complying with following requirements:
1. In sizes indicated on schedules.
  2. Factory-prefit and premachine doors to fit frame opening sizes indicated with the following uniform clearances and bevels:
    - a. Comply with tolerance requirements of AWI for prefitting. Comply with final hardware schedules and door frame shop drawings and with hardware templates.
    - b. Furnish units drilled for specified hardware sets.
  3. Pre-hung, pre-framed units. Refer to SECTION 08260 DOOR OPENING ASSEMBLIES.
  4. Furnish doors free of warpage. Maximum allowable warp or twist shall be 1/4" as defined and qualified by National Woodwork Manufacturer's Standard Door Guarantee.
  5. Furnish astragals for double doors.
  6. Sealing: Seal top and bottom edges of door with 2 coats of spar varnish prior to shipment.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Examine EHP door prior to installing in frames.
1. Verify that doors comply with indicated requirements for type, size, location, and have no defects.
  2. Reject doors with defects.
- B. Do not proceed with installation until unsatisfactory conditions have been corrected.

### **3.02 INSTALLATION**

- A. Do not install doors in rooms where humidity will damage doors.
- B. Hardware: For installation see Division-8 "Finish Hardware" section of these specifications.
- C. Manufacturer's Instructions: Install EHP door units to comply with manufacturer's instructions and of referenced AWI standard and as indicated.
- D. Prefit Doors: Fit to frames for uniform clearance at each edge.

- E. Sealing: Seal all jobsite cut surfaces with 2 coats of sealer before final installation of doors.
- F. Door Units: Set, plumb, level and secure to rough buck. Wedge at specified hinge and lock locations and at top and bottom of lock side of frame. Adjust wedges to plumb door unit. Nail through frame at wedge locations to secure wedges and unit. Trim off wedges if required to clear casing. Apply casing trim to opposite side. Set nails to receive filler by others.
- G. Field-Finished Doors: Refer to the following for finishing requirements:
  - 1. Division-9 section "Painting".

### **3.03 ADJUSTING AND PROTECTION**

- A. Operation: Rehang or replace doors which do not swing or operate freely.
- B. Protect doors as recommended by door manufacturer to ensure that wood doors will be without damage or deterioration at time of Substantial Completion.
- C. Replace doors which are warped beyond allowable limits.
- D. At completion of project, clean and adjust all hardware, replace all damaged or broken parts. Remove all temporary protection.

**END OF SECTION**

**SECTION 08 51 13**  
**ALUMINUM WINDOWS**

**PART 1 - GENERAL**

**1.01 WORK INCLUDED**

- A. This Section includes commercial-grade aluminum window units of the performance class indicated. Window types required include:
  - 1. Single-hung windows with factory installed 5/16" Low E, insulating glass and between the glass muntins.
  - 2. Replacement window factory finished surround.
- B. Related Sections: The following sections contain requirements that relate to this Section:
  - 1. Division 6, Rough Carpentry and Finished Carpentry.
  - 2. Division 7, Insulation, Flashing, Sealants.
  - 3. Division 8, Section 08 56 53 - Window Security Screens.

**1.02 DEFINITIONS**

- A. Performance class number included as part of the window designation system is the actual design pressure in pounds per sq. ft. used to determine the structural test pressure and water test pressure.
  - 1. Structural test pressure, wind load test, is equivalent to 150 percent of the design pressure.
  - 2. Water leakage resistance test pressure is equivalent to 15 percent of the design pressure with 2.86 psf as a minimum.

**1.03 SYSTEM PERFORMANCE REQUIREMENTS**

- A. General: Provide aluminum window units that comply with performance requirements specified, as demonstrated by testing manufacturer's corresponding stock systems according to test methods indicated.
- B. Design Requirements: Comply with structural performance, air infiltration, and water penetration requirements indicated in AAMA 101 for type, grade, and performance class of window units required.
  - 1. Optional Performance Class Requirements: Where the required design pressure exceeds the minimum for the specified window grade, comply with requirements of AAMA 101, Section 3, "Optional Performance Classes" for higher than minimum performance class.
  - 2. Heights of window units above grade at the window centerline are indicated or can be determined from the drawings. Consult with the Architect for clarification needed to confirm required loading and test pressures.
  - 3. Design wind velocity at the project site is 115 mph.
- C. Testing: Test each type and size of required window unit through a recognized independent testing laboratory or agency, in accordance with ASTM E 330 for structural performance, with ASTM E 283 for air infiltration, and with both ASTM E 331 and ASTM E 547 for water penetration. Provide certified test results.
  - 1. Structural Performance: Provide window units with no failure or permanent deflection in excess of 0.4 percent of any member's span after removal of the imposed load, for a positive (inward) and negative (outward) test pressure of 30 lbs./sq. ft.
  - 2. Air Infiltration: Provide units with air infiltration rate of not more than 0.37 cfm/ft. of operable sash joint for an inward test pressure of 6.24 lbs./sq. ft.
  - 3. Water Penetration: Provide units with no water penetration as defined in the test method at an inward test pressure of 15 percent of the design pressure.
  - 4. Forced-Entry Resistance: Provide window units that comply with requirements for Performance Level 10 when tested in accordance with ASTM F 588.

**1.04 SUBMITTALS**

- A. Comply with Division 1, Section 01340.

1. Product data for each type of window required, including:
  - a. Construction details and fabrication methods.
  - b. Profiles and dimensions of individual components.
  - c. Data on hardware, accessories, and finishes.
  - d. Recommendations for maintenance and cleaning of exterior surfaces.
2. Shop drawings for each type of window required. Include information not fully detailed in manufacturer's standard product data and the following:
  - a. Layout and installation details, including anchors.
  - b. Elevations of continuous work at 1/4-inch scale and typical window unit elevations at 3/4-inch scale.
  - c. Full-size section details of typical composite members, including reinforcement.
  - d. Hardware including operators.
  - e. Glazing details.
  - f. Accessories.
3. Samples for Initial Color Selection: Submit samples of each specified finish on 12-inch-long sections of window members. Where finishes involve normal color variations, include sample sets showing the full range of variations expected.

### **1.05 QUALITY ASSURANCE**

- A. Installer Qualifications: Engage an experienced Installer who has completed installation of aluminum windows similar in design and extent to those required for the project and whose work has resulted in construction with a record of successful in-service performance.
- B. Standards: Requirements for aluminum windows, terminology and standards of performance, and fabrication workmanship are those specified and recommended in AAMA 101 and applicable general recommendations published by AAMA.
- C. Single-Source Responsibility: Provide aluminum window units from one source and produced by a single manufacturer.
- D. Design Concept: The drawings indicate the size, profiles, and dimensional requirements of the aluminum window types required and are based on the specific type and model indicated. Aluminum windows by other manufacturers may be considered provided deviations in dimensions and profiles are minor and do not change the design concept as judged by the Architect. The burden of proof of equality is on the proposer.

### **1.06 PROJECT CONDITIONS**

- A. Field Measurements: Do not proceed with fabrication without field measurements, and coordinate fabrication tolerances with framing of rough openings to ensure proper fit of window units.

### **1.07 WARRANTY**

- A. Aluminum Window Warranty: Submit a written warranty, executed by the window manufacturer, agreeing to repair or replace window units that fail in materials or workmanship within the specified warranty period. Failures include but are not necessarily limited to:
  1. Structural failures including excessive deflection, excessive leakage, or air infiltration.
  2. Faulty operation of sash and hardware.
  3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
- B. Warranty Period: 3 years after the date of Substantial Completion.
- C. The warranty shall not deprive the Owner of other rights or remedies that the Owner may have under other provisions of the Contract Documents and is in addition to and runs concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

## **PART 2 - PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include, but are not limited to, the following:

1. Single-Hung Windows:
  - a. General Aluminum, [www.gactx.com](http://www.gactx.com)
  - b. Alenco, [www.alenco.com](http://www.alenco.com)
  - c. Capitol Aluminum & Glass Corp, [www.capitol-windows.com](http://www.capitol-windows.com)
  - d. EFCO Corporation, [www.efcocorp.com](http://www.efcocorp.com)
  - e. General Window & Supply.
  - f. Graham Architectural Products Corporation, [www.grahamwindows.com](http://www.grahamwindows.com)
  - g. Peerless Products, Inc, [www.peerlessproducts.com](http://www.peerlessproducts.com)
  - h. Seal Craft Manufacturing, [www.seal-craft.com](http://www.seal-craft.com)
  - i. Traco.
  - j. Or prior approved equal

## 2.02 MATERIALS

- A. Aluminum Extrusions: 6063-T5 alloy not less than 22,000-psi ultimate tensile strength and not less than 0.078 inch thick at any location for main frame and sash members.
- B. Fasteners: Provide aluminum, nonmagnetic stainless steel, epoxy adhesive, or other materials warranted by the manufacturer to be noncorrosive and compatible with aluminum window members, trim, hardware, anchors, and other components of window units.
  1. Reinforcement: Where fasteners screw-anchor into aluminum less than 0.125 inch thick, reinforce the interior with aluminum or nonmagnetic stainless steel to receive screw threads or provide standard noncorrosive pressed-in splined grommet nuts.
  2. Exposed Fasteners: Except where unavoidable for application of hardware, do not use exposed fasteners. For application of hardware, use fasteners that match the finish of the member or hardware being fastened, as appropriate.
- C. Anchors, Clips, and Window Accessories: Fabricate anchors, clips, and window accessories of aluminum, nonmagnetic stainless steel, or hot-dip zinc-coated steel or iron complying with the requirements of ASTM B 633; provide sufficient strength to withstand design pressure indicated.
- D. Compression-Type Glazing Strips and Weather-stripping: Unless otherwise indicated, and at the manufacturer's option, provide compressible stripping for glazing and weather-stripping such as molded EPDM or neoprene gaskets complying with AAMA SG-1 or with ASTM D 2000 Designation 2BC415 to 3BC620, or molded PVC gaskets complying with ASTM D 2287, or molded expanded EPDM or neoprene gaskets complying with ASTM C 509, Grade 4.
- E. Sliding-Type Weather-stripping: Provide woven pile weather-stripping of wool, polypropylene, or nylon pile and resin-impregnated backing fabric. Comply with AAMA 701.2.
  1. Provide stripping with integral center-line barrier fin of semirigid plastic sheet of polypropylene.
- F. Sealant: For sealants required within fabricated window units, provide type recommended by the manufacturer for joint size and movement. Sealant shall remain permanently elastic, nonshrinking, and nonmigrating. Comply with Division 7 Section "Joint Sealants" of these specifications for selection and installation of sealants.
- G. 5/16" thick insulating glass with between glass muntin arrangement shown on the elevations.

## 2.03 HARDWARE

- A. General: Provide the manufacturer's standard hardware fabricated from aluminum, stainless steel, or other corrosion-resistant material compatible with aluminum and of sufficient strength to perform the function for which it is intended.
- B. Counterbalancing Mechanism: Comply with AAMA 902.2.
  1. Sash Balance Type: Concealed block and tackle type of size and capacity to hold sash stationary at any open position.
- C. Locks: Die-cast cam type at center of meeting rail or dual spring type at each side of meeting rail or at sill.
- D. Lifts: Continuous across bottom rail of lower sash.

## **2.04 ACCESSORIES**

- A. General: Provide the manufacturer's standard accessories that comply with indicated standards.
- B. Weatherstripping: Provide sliding-type weather-stripping where sash rails slide horizontally or vertically along the unit frame. Provide compression-type weather-stripping at the perimeter of each operating sash where sliding type is not appropriate.
  - 1. Provide weather-stripping locked in to extruded grooves in the sash.

## **2.05 SINGLE-HUNG WINDOWS**

- A. Window Grade and Class: Provide window units that comply with requirements of AAMA Grade and Performance Class DH-C30 insulated, including operating force and deglazing test requirements specified in AAMA 101.
- B. Hardware: Provide the following equipment and operating hardware:
  - 1. Sash Balances: Manufacturer's standard type (2 per sash).
  - 2. Lock: Cam action sweep lock and keeper on the meeting rail or
  - 3. Lock: Spring-loaded snap-type lock on bottom rail of lower sash (2 per sash) or
  - 4. Lock: Spring-loaded plunger lock on meeting rail of lower sash (2 per sash).
  - 5. Lift Handle: Continuous integral sash lift bar on bottom rail of lower sash.

## **2.06 FABRICATION**

- A. General: Fabricate aluminum window units to comply with indicated standards. Include a complete system for assembly of components and anchorage of window units.
  - 1. Provide units that are reglazable without dismantling sash or ventilator framing.
  - 2. Specified units are to be factory glazed.
  - 3. Weepholes: Provide weepholes and internal passages to conduct infiltrating water to the exterior.

## **2.07 FINISHES**

- A. General: Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.
- B. Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.
- C. Baked Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: chemical conversion coating, acid chromate-fluoride-phosphate pretreatment; Organic Coating: as specified below). Apply baked enamel in compliance with paint manufacturer's specifications for cleaning, conversion coating, and painting.
  - 1. Organic Coating: Thermosetting modified acrylic enamel primer/topcoat system complying with AAMA 603.8 except with minimum dry film thickness of 1.5 mils, medium gloss.
  - 2. Color: Dark Bronze.

## **PART 3 - EXECUTION**

### **3.01 INSPECTION**

- A. Inspect openings before beginning installation. Verify that rough opening is correct and the sill plate is level.
  - 1. Wood frame walls shall be dry, clean, sound, and well-nailed, free of voids and without offsets at joints. Ensure that nail heads are driven flush with surfaces in the opening and within 3 inches of the opening.

### **3.02 INSTALLATION**

- A. Comply with manufacturer's specifications and recommendations for installation of window units, hardware, operators, and other components of the work.

- B. Set window units plumb, level, and true to line, without warp or rack of frames or sash. Provide proper support and anchor securely in place. Install window surround for all replacement windows.
  - 1. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials by complying with the requirements specified under paragraph "Dissimilar Materials" in the Appendix to AAMA 101.
- C. Set sill members and other members in a bed of compound or with joint fillers or gaskets, as shown, to provide weathertight construction. Refer to the "Joint Sealer" sections of Division 7 for compounds, fillers, and gaskets to be installed concurrently with window units. Coordinate installation with wall flashings and other components of the work.
  - 1. Provide expandable type insulation along perimeter of installed window.

### **3.03 ADJUSTING**

- A. Adjust operating sash and hardware to provide a tight fit at contact points and at weather-stripping for smooth operation and a weathertight closure.

### **3.04 CLEANING**

- A. Clean aluminum surfaces promptly after installation of windows. Exercise care to avoid damage to protective coatings and finishes. Remove excess glazing and sealant compounds, dirt, and other substances. Lubricate hardware and other moving parts.
- B. Clean glass of pre-glazed units promptly after installation of windows. Comply with Manufacturer's requirements for cleaning and maintenance.

### **3.05 PROTECTION**

- A. Initiate and maintain protection and other precautions required through the remainder of the construction period, to ensure that, except for normal weathering, window units will be free of damage or deterioration at the time of Substantial Completion.

**END OF SECTION**

**SECTION 08 56 53**  
**SECURITY WINDOW SCREENS**

**PART 1 GENERAL**

**1.01 WORK INCLUDED**

- A. Material, labor, equipment and services to fabricate and install new operable stainless steel and aluminum security screens complete with all hardware on new windows furnished and installed in this project.

**1.02 SUBMITTALS**

- A. Comply with Section 01 33 23.
- B. Verify sizes at jobsite and with new window shop drawings. ALL SCREENS SIZES MUST BE FIELD VERIFIED PRIOR TO ORDERING.

**1.03 WARRANTY**

- A. One year from date of project acceptance.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS/MODELS**

- A. Olney Door and Screen Company, Model OLNLY LT.
- B. NrG Products Manufacturing Corporation, Model Heavy Duty Tough Screen.
- C. Kane, Van-Guard II.
- D. Mohawk Security Products, Inc.
- E. Prior approved equal.

**2.02 MATERIALS**

- A. Master Frame: 6063T extruded aluminum, approximately 1.385 inches by .966 inches by .090 inches. Conceal welded in all corners. Raised metal ridges .04 by 60 degrees to receive cover plate and interlock with screen.
- B. Mesh: Stainless steel, 12 by 12 by .028.
- C. Cover Plate: 6063T extruded aluminum, approximately 1.00 inches by .375 inches by .085 inches. Raised metal ridges .04 by 60 degrees to interlock the mesh.
- D. Screws: No. 8 by 1/2 inch cadium.
- E. Screw Spacing: 4 inches on center.
- F. Hinge: Continuous 40 gauge aluminum piano hinge. MUST HAVE AN OPERABLE SCREEN PER BEDROOM FOR CODE COMPLIANCE.
- G. Latches: Two per operable section; Paneloc # 716-S-A-72-90 slide bolts, zinc plated per ASTM-8-633
- H. Finish: Dark Bronze TO MATCH WINDOW FRAME.
- I. Hinge Locations: Horizontal at top of window operable sash.

**PART 3 EXECUTION**

**3.01 INSTALLATION**

- A. Verify that window openings are satisfactory and ready to accept security screens.
- B. Set screens level and plumb without distortion of screen frame.
- C. Anchor in place with #8 by 1/2" minimum cadium plated vandal resistant screws. Verify required length on jobsite with new windows. Space screws 18 inches o.c. maximum unless otherwise directed by manufacturer. Install not less than seven screws per screen, 3 on each side and one in center at top.
- D. Remove installation debris and adjust screens and latches for proper operation.

**END OF SECTION**

## SECTION 08 71 00

### DOOR HARDWARE

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

- A. **Door locksets, dead bolts, & maintenance sets for exterior, mechanical (HVAC & Water Heater Closet), and maintenance doors are to be provided by the Owner and Contractor installed. Interior door hardware shall be provided and installed by Contractor.**
- B. Any door shown on the drawings and not specifically referenced in the hardware sets shall be provided with identical hardware as specified on other similar openings and shall be included in the finish hardware suppliers bid.
- C. Hardware supplier shall notify the Architect in writing of any discrepancies no less than five (5) working days prior to the bid date that could result in hardware being supplied that is non-functional, that will not meet local codes, or any door that is not covered in this specification.

##### 1.02 RELATED DOCUMENTS

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

##### 1.03 SUMMARY

- A. This Section includes the following:
  - 1. Commercial door hardware for the following:
    - a. Swinging doors.
    - b. Other doors to the extent indicated.
  - 2. Owner-Provided, Contractor-Installed Door Hardware:
    - a. Cylindrical Lever Door Locksets
    - b. Cylindrical Knob Door Locksets
    - c. Door Deadbolts

##### 1.04 SUBMITTALS

- A. Product Data: Include installation details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening.
    - a. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
    - b. Content: Include the following information:
      - 1) Type, style, function, size, label, hand, and finish of each door hardware item.
      - 2) Manufacturer of each item.
      - 3) Fastenings and other pertinent information.
      - 4) Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
      - 5) Explanation of abbreviations, symbols, and codes contained in schedule.
      - 6) Mounting locations for door hardware.
      - 7) Door and frame sizes and materials.
    - c. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include

Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

- C. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.

#### **1.05 QUALITY ASSURANCE**

- A. Installer Qualifications: An experienced Installer who has completed both standard and electrified builders hardware and integrated access control installations similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Source Limitations: Obtain each type and variety of aluminum, steel and wood door hardware from the same single source manufacturer and supplier, unless otherwise indicated.
- C. Regulatory Requirements: Comply with provisions of the following:
  - 1. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1 as follows:
    - a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
    - b. Door Closers: Comply with the following maximum opening-force requirements indicated:
      - 1) Interior Hinged Doors: 5 lbf applied perpendicular to door.
      - 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
        - (a) Thresholds: Not more than 1/2 inch high. Bevel raised thresholds with a slope of not more than 1:2.
    - c. NFPA 101: Comply with the following for means of egress doors:
      - 1) Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
      - 2) Thresholds: Not more than 1/2 inch high.
    - d. International Building Code (2006).
- D. Keying Conference: Conduct conference to comply with requirements in Division 1 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
  - 1. Function of building, purpose of each area and degree of security required.
  - 2. Plans for existing and future key system expansion.
  - 3. Requirements for key control system.
  - 4. Installation of permanent keys and cylinder cores.
  - 5. Address and requirements for delivery of keys.
- E. Prior to Substantial Completion, the hardware supplier and general contractor shall perform an on site survey of the hardware installation. All hardware found to be loose, out of proper alignment, or installed incorrectly (including incorrect fasteners) shall be adjusted or reinstalled by the general contractor for proper function and operation. The hardware supplier and general contractor shall submit a written report certifying that all hardware is properly installed and operation correctly.

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. One complete shipment of door hardware as detailed in approved Door Hardware Schedule Shop Drawings to be inventoried on site and, upon receipt of material, be secure in lock-up room provided with shelving for door hardware.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

- C. Contractor shall coordinate and verify all owner-provided items and ensure all required accessories and templates for proper installation are available prior to installation. Notify Architect immediately of any compatibility issues or deficiencies.

### **1.07 COORDINATION**

- A. Templates: Door Hardware Supplier to provide and distribute to the parties involved for templating for doors, frames, and other work specified to be factory prepared for installing standard, electrified and access control door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Contractor shall coordinate installation of Owner-Provided cylindrical locksets and deadbolts, ensuring correct handing, backset, and prep.

### **1.08 WARRANTY**

- A. Warranty Period: All finish hardware shall be supplied with a One (1) year warranty by the manufacturer against defects in materials and workmanship from date of Substantial Completion, unless otherwise indicated below.
- B. Special Warranty Periods:
  - 1. Five (5) years for cylindrical locksets.
  - 2. Five (5) years for exit devices.
  - 3. Ten (10) years for manual door closers.
- C. Owner-provided cylindrical locks and deadbolts shall be covered by manufacturer's warranty. Contractor warranty shall apply to proper installation only.

## **PART 2 PRODUCTS**

### **2.01 SCHEDULED DOOR HARDWARE**

- A. General:
  - 1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated for named products listed in Hardware Sets.
  - 2. Sequence of Operation: Provide electrified and access control hardware function, sequence of operation, and interface with other building control systems indicated.
- B. Designations:
  - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing quality standards of utility and performance.
  - 2. Architect and Owner reserve the right to approve all substitutions proposed for this specification.
  - 3. The following items will be provided by the Owner and installed by the Contractor:
    - i. Dormakaba QCL200 Series Cylindrical Locks
    - ii. Arrow Assa Abloy RK Series Cylindrical Locksets
    - iii. Tell Doors & Hardware DB2400 Series Deadbolts
  - 4. Note: Contractor to install Owner-provided locks and deadbolts at locations indicated in the hardware sets and/or door schedule. Coordinate all cutouts and mounting hardware in advance. All installations must meet applicable codes and manufacturer instructions.

### **2.02 HINGES**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Continuous Geared Hinges (Aluminum):
    - a. Hager (HA).
    - b. Select (SE).
    - c. McKinney Products (MC).
    - d. Pemko Manufacturing (PE).
- B. Standards: BHMA Certified products complying with the following:

1. Continuous Geared Hinges: BHMA A156.26.
- C. Continuous-Geared Hinges (Aluminum): Minimum 0.120-inch thick, hinge leaves with minimum overall width of 4 inches; fabricated to full height of door and frame. Fabricate hinges non-handed and to template screw locations. Continuous hinges guaranteed for the life of the opening.

### **2.03 DOOR BOLTS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  1. Flush Bolts:
    - a. Hager (HA).
    - b. McKinney Products (MC).
    - c. Rockwood Manufacturing (RO).
    - d. Trimco Manufacturing (TR).
- B. Standards: Comply with the following:
  1. Manual Flush Bolts: BHMA A156.16.
- C. Flush Bolts: BHMA Certified Grade 1.
- D. Provide bolts with top rod of sufficient length to allow bolt location approximately six feet from the floor regardless if detailed as such in hardware sets. Furnish dust proof strikes for bottom bolts.
- E. Bolt Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:
  1. Mortise Flush Bolts: Minimum 3/4-inch throw.

### **2.04 LOCKS AND LATCHES**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  1. Mechanical Mortise Locks and Latches:
    - a. Yale (YA) - 8800 Series with CRE Trim.
    - b. Corbin Russwin (CR) - ML2000 Series with LSM Trim.
    - c. Sargent (SA) - 8200 Series with LS1J Trim.
- B. Standards: Comply with the following:
  1. Mortise Locks and Latches: BHMA A156.13.
- C. Mortise Locks: BHMA Certified Grade 1, Series 1000.
- D. Mortise Lock trim shall be Certified to meet ANSI /BHMA A156.13 Grade 1 Operational and Security.
- E. Lock Functions: Function numbers and descriptions indicated in the Door Hardware Schedule comply with the following:
  1. Mortise Locks: BHMA A156.13.
- F. Provide mortise locks with Stainless Steel latchbolts and deadbolts only. Brass bolts will not be accepted.
- G. All locks to be easily field reversible without the need to open the lock case.
- H. Lock Throw: Comply with testing requirements for length of bolts to comply with labeled fire door requirements, and as follows:
  1. Mortise Locks: Minimum 3/4-inch latchbolt throw.
  2. Deadbolts: Minimum 1-inch bolt throw.
- I. Backset: 2-3/4 inches unless otherwise indicated.
- J. Cylindrical Locks and Deadbolts (Owner-Provided/Contractor-Installed):
  1. Dormakaba QCL200 Series – Cylindrical lever locks
  2. Arrow Assa Abloy RK Series – Cylindrical knob locks
  3. Tell DB2400 Series – Deadbolts

- a. All locks must be ANSI/BHMA Grade 1 or 2.
- b. Backset: 2-3/4 inches.
- c. Contractor shall confirm compatibility with door preparations and ensure proper function and secure installation.

## **2.05 CYLINDERS AND KEYING**

- A. All Locks requiring cylinders shall be factory keyed to the existing YALE PG 6 PIN RESTRICTED key system as directed by the owner. (No Substitutions.)
- B. Standards: Comply with the following:
  - 1. Cylinders: BHMA A156.5.
- C. Cylinder Grade: BHMA Certified Grade 1.
- D. Construction Keying: Comply with the following:
  - 1. Construction Master keying: Provide temporary construction master keyed cylinders to maintain adequate security for the building during the construction period.
  - 2. Temporary construction master keys only will be issued to the General Contractor during the construction period.
- E. Keying System: Unless otherwise indicated, provide for a keying system complying with the following requirements:
  - 1. Master Key System: Cylinders shall be key operated by a change key, master key, and a grand master key. Conduct keying meeting with End User to define and document keying system instructions and requirements.
- F. Keys: Provide nickel-silver keys complying with the following:
  - 1. Stamping: Permanently inscribe each key with a visual key control number and as directed by Owner.
  - 2. Quantity: Provide the following:
    - a. Cylinder Change Keys (Per Key Set): Two.
    - b. Master Keys (Per Tenant): Two.
    - c. Grand Master Keys: Two.
    - d. Construction keys: Four.
- G. The General Contractor shall turn over all keys to the Owner at least ten (10) days prior to final inspection, to recipient designated at the keying conference. Four type-written lists showing heading numbers, Architect's mark, Owner's room number, key change number and number of keys, along with tagged keys shall be turned over to the Owner. After checking the keys against the itemized list, one copy will be signed by the Owners' agent and shall serve as a receipt.
  - 1. All keys shall be delivered directly to the Owner by Hardware Supplier. Owner will sign out keys to Contractor.
  - 2. Permanent cores shall be installed by the Hardware Supplier.
  - 3. Hardware supplier shall have the manufacturer of the cores on this building furnish the Owner a duplicate list of all the key change numbers used in the project, including master keys.

## **2.06 EXIT DEVICES**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Exit Devices:
    - a. Yale 7000 Series with Squarebolt.
    - b. Corbin Russwin ED5000 Series with Securebolt.
    - c. Von Duprin 99XP Series.
    - d. All exit devices shall have Stainless Steel chassis, pushpads, and cover plates.
- B. Standard: BHMA A156.3.
- C. Exit Devices: BHMA Certified Grade 1.
- D. Latchbolt: High-grade, heat-treated, corrosion-resistant nickel steel alloy. Slide-action deadbolt with positive deadlocking by auxiliary bolt.

- E. Panic Exit Devices: Listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305.
- F. Fire Exit Devices: Complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252.
- G. Outside Trim: Match design for locksets and latchsets, unless otherwise indicated.
- H. Through Bolt Installation: For exit devices and trim as required for fire rated wood doors.

## **2.07 CLOSERS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one the following:
  - 1. Surface-Mounted Closers (Heavy Duty): BHMA Certified Grade 1.
    - a. Corbin Russwin Hardware (CR) - DC8000 Series.
    - b. LCN (LC) - 4040 Series.
    - c. Norton Door Controls (NO) - 7500 Series.
    - d. Sargent Manufacturing (SA) - 351 Series.
    - e. Yale Security Group (YA) - 4400 Series.
- B. Standards: Comply with the following:
  - 1. Closers: BHMA A156.4.
- C. Size of Units: Unless otherwise indicated, comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide non-handed, factory-sized closers adjustable to meet field conditions and requirements for opening force.
- D. Closer Options: As indicated in hardware sets, provide door closer options including: delayed action, hold open arms, extra duty parallel arms, positive stop/hold open arms, compression stop/hold open arms, special mounting brackets, spacers and drop plates. Through bolt type mounting is required as indicated in the door hardware sets.

## **2.08 OPERATING AND PROTECTIVE TRIM UNITS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Metal Protective Trim Units:
    - a. Hager (HA).
    - b. McKinney Products (MC).
    - c. Rockwood Manufacturing (RO).
    - d. Trimco Manufacturing (TR).
- B. Standard: Comply with BHMA A156.6.
- C. Materials: Fabricate protection plates from the following:
  - 1. Brass/Bronze and Stainless Steel: .050 inches thick, beveled four sides (B4E) with countersunk screw holes.
- D. Fasteners: Provide manufacturer's designated fastener type as indicated in door hardware sets.
- E. Furnish protection plates sized 2 inches less than door width (LDW) on push side and 1 inch less door width on pull side by height specified in door hardware sets.

## **2.09 STOPS AND HOLDERS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Stops and Holders:
    - a. Hager (HA).
    - b. McKinney Products (MC).
    - c. Rockwood Manufacturing (RO).
    - d. Trimco Manufacturing (TR).
- B. Standards: Comply with the following:

1. Stops and Bumpers: BHMA A156.16.
  2. Electromagnetic Door Holders: BHMA A156.15.
  3. Combination Overhead Holders and Stops: BHMA A156.8.
  4. Door Silencers: BHMA A156.16.
- C. Stops and Bumpers: BHMA Certified Grade 1.
- D. Combination Overhead Stops and Holders: Certified BHMA Grade 1.
1. Glynn-Johnson (GJ)
  2. Rixson Hardware (RX)
  3. Sargent Hardware (SA)
- E. Silencers for Metal Door Frames: BHMA Grade 1; neoprene or rubber, minimum diameter 1/2 inch fabricated for drilled-in application to frame. Provide (3) per single door and (2) per paired door frame if applied gasketing is not specified in Hardware Sets.

## **2.10 DOOR THRESHOLDS, WEATHERSTRIPPING AND GASKETING**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Door Thresholds, Weatherstripping and Gasket Seals:
    - a. Hager (HA).
    - b. Pemko Manufacturing (PE).
    - c. National Guard (NG).
    - d. McKinney (MC).
- B. Standard: Comply with BHMA A156.22.
- C. General: Provide continuous weatherstrip seal on exterior doors and smoke, light, or sound gasketing on interior doors where specified. Provide non-corrosive fasteners for exterior applications.
1. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame. Install header seal before mounting door closer arms.
  2. Meeting Stile Astragals: Fasten to meeting stiles, forming seal when doors are closed.
  3. Door Sweep: Apply to bottom of door, forming seal with threshold when door is closed.

## **2.11 FABRICATION**

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

## **2.12 FINISHES**

- A. Standard: Comply with BHMA A156.18.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- D. BHMA Designations: Comply with base material and finish requirements indicated by the following:
1. BHMA 600: Primed for painting, over steel base metal.
  2. BHMA 613: Dark-oxidized satin bronze, oil rubbed, over bronze base metal.
  3. BHMA 690: Dark bronze painted, over any base metal.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Examine roughing-in for electrical source power to verify actual locations of wiring connections before electrified door hardware installation.

- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- D. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

### **3.02 PREPARATION**

- A. Steel Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

### **3.03 INSTALLATION**

- A. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
  - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
  - 2. Custom Steel Doors and Frames: DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."
  - 3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- C. Provide and coordinate concealed wood blocking for wall mount stops as detailed in Door Hardware Schedule.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

### **3.04 FIELD QUALITY CONTROL**

- A. The Contractor shall comply with AIA A201 1997 section 3.3.1 which reads as follows: "The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the contract Documents give other specific instructions concerning these matters."

### **3.05 ADJUSTING**

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
  - 1. Door Closers: Adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.

### **3.06 CLEANING AND PROTECTION**

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper finish. and provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

**END OF SECTION**

**SECTION 09 21 16**  
**GYPSUM BOARD ASSEMBLIES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Acoustic insulation.
- B. Gypsum wallboard.
- C. Joint treatment and accessories.
- D. Textured finish system.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 07 84 00 – Firestopping.
- C. Section 07 92 00 - Sealants and Caulking
- D. Section 09 91 00 - Painting

**1.03 REFERENCE STANDARDS**

- A. ANSI A108.11 - American National Standard for Interior Installation of Cementitious Backer Units; 2010 (Revised).
- B. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 1999 (Reaffirmed 2010).
- C. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2015.
- D. ASTM C557 - Standard Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing; 2003 (Reapproved 2009).
- E. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2013.
- F. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2015.
- G. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2014.
- H. ASTM C1325 - Specification for Non-Asbestos Fiber-Mat Reinforced Cementitious Backer Units; 2014.
- I. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2014.
- J. GA-216 - Application and Finishing of Gypsum Board; 2013.
- K. UL Design Nos. L570, U305, U407 – Fire-Resistance-Rated Assemblies.

**1.04 FIELD CONDITIONS**

- A. Temperature: Maintain temperature uniformly within the range of 55 degrees to 70 degrees F for 24 hours before, during and after wall application and joint finishing.
- B. Ventilation: Provide adequate ventilation to eliminate moisture build-up.

**1.05 PRODUCT DELIVERY STORAGE AND HANDLING**

- A. Comply with Division 1, Section 01 66 00 - Product handling.
- B. Storage:
  - 1. Store materials inside under cover and stacked flat on clean, dry floor.
  - 2. Avoid overloading floor system.
  - 3. Distribute material storage areas to provide working area for other trades.
  - 4. Store adhesives at approximately 70 degrees F for 24 hours before using.

## **PART 2 PRODUCTS**

### **2.01 BOARD MATERIALS**

- A. Manufacturers - Gypsum-Based Board:
  - 1. American Gypsum Company.
  - 2. CertainTeed Corporation.
  - 3. Georgia-Pacific Gypsum.
  - 4. National Gypsum Company.
  - 5. PABCO Gypsum.
  - 6. USG Corporation.
  - 7. Approved Equal.
- B. Gypsum Wallboard and Ceilings: Paper-faced gypsum panels as defined in ASTM C1396/ C1396M; sizes to minimize joints in place; ends square cut.
  - 1. Regular Gypsum Wallboard:
    - a. 5/8 inch for walls and ceilings in non-rated partitions.
  - 2. Type X Gypsum Board:
    - a. 5/8 inch thick.
    - b. Required at fire-rated assemblies (UL L570, U305, U407)
  - 3. Mold/Moisture-Resistant Board:
    - a. Approved Products:
      - 1) M-Bloc (American Gypsum)
      - 2) ToughRock Mold-Guard (Georgia-Pacific)

### **2.02 ACCESSORIES**

- A. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.
- B. Fasteners:
  - 1. Type W, drywall screws (wood studs, joists or blocking).
  - 2. Length as required to provide 3/4" minimum penetration into framing.
    - a. Single layer and base layer: 1-1/4".
    - b. Face layer of double layer: 2".
- C. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
  - 1. Ready-mixed vinyl-based joint compound.
  - 2. Joint Tape: Perforated.
  - 3. Joint Compound: Ready mix.
  - 4. Metal Corner Beads: Galvanized or Zinc.
  - 5. Plastic Corner Beads: PVC

### **2.03 FINISH**

- A. Ceilings and Walls: Orange peel fine texture.
- B. Note: Smooth finish required at areas receiving wall coverings and ceramic tile.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that project conditions are appropriate for work of this section to commence.

### **3.02 FRAMING INSTALLATION**

- A. Studs: Space studs at 16 inches on center.
  - 1. Extend partition framing to structure where indicated and to ceiling in other locations.
  - 2. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.

- B. Install per framing drawings and fire-rated UL assemblies where applicable:
  - 1. UL L570: Suspended ceiling with resilient channels and insulation.
  - 2. UL U305: Wood stud wall, 5/8" Type X both sides, insulation in cavity.
  - 3. UL U407: Wood stud wall, 5/8" Type X both sides, insulation in cavity.

### **3.03 ACOUSTIC ACCESSORIES INSTALLATION**

- A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.
- B. Acoustic Sealant: Install in accordance with manufacturer's instructions.

### **3.04 BOARD INSTALLATION**

- A. Install sound blanket between studs where indicated on drawings.
- B. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- C. Single-Layer Non-Rated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
- D. Erect single layer fire rated gypsum board vertically, with edges and ends occurring over firm bearing.
- E. Screw attach gypsum board to framing.
  - 1. Use type W screws x length required to penetrate framing a min. of 3/4" (wood studs or blocking).
- F. Install moisture resistant gypsum board in all walls and ceilings in all restrooms and areas with any plumbing fixtures. Treat cut edges and holes in moisture resistant gypsum board with sealant.
- G. Place control joints to be consistent with lines of building spaces and in consistent pattern and as directed by Architect.
- H. Place corner beads at external corners. Use longest practical lengths. Place edge trim where gypsum board abuts dissimilar materials. Leave 3/8" minimum caulk joint opening.
- I. Tape, fill and sand exposed joints, edges, corners, openings and fixings, to produce surface ready to receive surface finishes. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.
- J. Remove defective work.
- K. Cementitious Backing Board: Install over steel framing members, wood framing members, and plywood substrate where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.

### **3.05 TEXTURE FINISH**

- A. Texture Required: Orange peel ceilings and walls, ready to receive painting.
- B. Finish to be smooth finish on walls scheduled to receive wall coverings or ceramic tile.

### **3.06 TOLERANCES**

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

### **3.07 CLEANING**

- A. Restore to original condition, or replace, work or materials of other trades damaged or permanently stained during erection of drywall systems.

**END OF SECTION**

**SECTION 09 30 00**  
**TILING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Tile for floor applications.
- B. Tile for wall applications.
- C. Cementitious backer board as tile substrate.
- D. Ceramic accessories.
- E. Ceramic trim.
- F. Tile and Grout Sealant.

**1.02 SUBMITTALS**

- A. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- B. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, ceramic accessories, and setting details.
- C. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 62 00 - Product Options and Substitutions, for additional provisions.
  - 2. Extra Tile: 10 square feet of each size, color, and surface finish combination.

**1.03 QUALITY ASSURANCE**

- A. Installer Qualifications: Company specializing in performing tile installation, with minimum of five years of documented experience.

**1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

**1.05 FIELD CONDITIONS**

- A. Do not install solvent-based products in an unventilated environment.
- B. Maintain ambient and substrate temperature of 50 degrees F during installation of mortar materials.

**PART 2 PRODUCTS**

**2.01 TILE**

- A. Manufacturers: All products by the same manufacturer.
  - 1. American Olean Corporation: [www.americanolean.com](http://www.americanolean.com).
  - 2. Dal-Tile Corporation: [www.daltile.com](http://www.daltile.com).
  - 3. ICTC International.
  - 4. Orian.
  - 5. Substitutions: See Section 01 62 00 - Products Options and Substitutions.
  - 6. Size:
    - a. Floor: 12" x 12" floor.
    - b. Wall: 4" X 4" glazed wall tile with bullnose and cove base.
  - 7. Selected from Manufacturer's Standard and/or Premium range of ceramic tile.

**2.02 GROUTS**

- A. Epoxy Grout by approved manufacturer: color to be selected by Architect and Owner

**2.03 ACCESSORY MATERIALS**

- A. Concrete Floor Slab Crack Isolation Membrane: Material complying with ANSI A118.12; not intended as waterproofing.
  - 1. Type: Fluid-applied.

2. Thickness: 20 mils, maximum.
3. Crack Resistance: No failure at 1/16 inch gap, minimum.
4. Products:
  - a. LATICRETE International, Inc; LATICRETE Blue 92 Anti-Fracture Membrane: [www.laticrete.com/#sle](http://www.laticrete.com/#sle).
  - b. Merkrete, by Parex USA, Inc; Merkrete Fracture Guard: [www.merkrete.com/sle](http://www.merkrete.com/sle).
  - c. Approved Equal.
- B. Backer Board: Cementitious type complying with ANSI A118.9; high density, glass fiber reinforced, 1/4 inch thick; 2 inch wide coated glass fiber tape for joints and corners.
- C. Tile and Grout Sealant:
  1. As recommended by Manufacturer of selected product.
  2. Color: To be selected by Architect.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
- C. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.
- D. Verify that required floor-mounted utilities are in correct location.

#### **3.02 PREPARATION**

- A. Protect surrounding work from damage.
- B. Vacuum clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- D. Install backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of setting material to a feather edge.
- E. Install cementitious backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of dry-set mortar to a feather edge.

#### **3.03 INSTALLATION - GENERAL**

- A. Install tile, thresholds, and stair treads and grout in accordance with applicable requirements of ANSI A108.1a through ANSI A108.13, manufacturer's instructions, and TCNA (HB) recommendations.
- B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings.
- C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints, wall joints and trim joints.
- D. Slope floor to drains and install neatly around drains.
- E. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.
- F. Form internal angles square and external angles bullnosed.
- G. Sound tile after setting. Replace hollow sounding units.
- H. Keep control and expansion joints free of mortar, grout, and adhesive.
- I. Prior to grouting, allow installation to completely cure; minimum of 48 hours.
- J. Grout tile joints unless otherwise indicated. Use standard grout unless otherwise indicated.
- K. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.

L. Apply Tile and joint sealer.

**3.04 INSTALLATION - FLOORS - THIN-SET METHODS**

A. Over interior concrete substrates, install in accordance with TCA Handbook Method F113, dry-set or latex-portland cement bond coat, with standard grout, unless otherwise indicated.

**3.05 INSTALLATION - WALL TILE**

A. Over cementitious backer units on studs, install in accordance with TCNA (HB) Method W244, using membrane at toilet rooms.

**3.06 CLEANING**

A. Clean tile and grout surfaces.

**3.07 PROTECTION**

A. Do not permit traffic over finished floor surface for 4 days after installation.

**END OF SECTION**

**SECTION 09 65 00 RESILIENT  
FLOORING AND BASE**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. VCT (Base Bid) or Luxury vinyl tile (LVT) plank flooring (**Alternate bid #2**)
- B. Wood base at walls, toe spaces, and exposed ends at base cabinets.
- C. Work shall include floating as required for complete installation of work indicated in plans and as noted in site; bidders shall allow for additional amount of floating that may be necessary.

**1.02 REFERENCES**

- A. ASTM F1700 – Standard Specification for Solid Vinyl Floor Tile.

**1.03 SUBMITTALS**

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns and colors available.
- B. Samples: Submit two samples of luxury vinyl tile, 6" x 48", illustrating color and pattern for approval.
- C. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention, and five-year warranty.

**1.04 REGULATORY REQUIREMENTS**

- A. Conform to applicable code for flame/smoke rating requirements in accordance with ASTM E84.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver, store, protect and handle products to site under provisions of Section 01 60 00.

**1.06 ENVIRONMENTAL REQUIREMENTS**

- A. Store materials for three days prior to installation in area of installation to achieve temperature stability.
- B. Maintain ambient temperature required by adhesive manufacturer three days prior to, during, and 24 hours after installation of materials.

**1.07 MAINTENANCE DATA**

- A. Submit under provisions of Section 01 77 19.
- B. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

**PART 2 PRODUCTS**

**2.01 MATERIALS – LUXURY VINYL TILE FLOORING**

- A. Vinyl Composition Tile, Re: Schedules and Finish Plan on Drawings. **Base Bid**
  - i. Size: 12" x 12"
  - ii. Thickness: 1/8"
  - iii. Manufacturers:
    - a. Manington
    - b. Armstrong
    - c. Approved Equal
- B. Luxury Vinyl Tile Plank Flooring: **Alternate Bid**
  - i. Product: Armstrong Flooring – *Biome*, Color: *Lynx*
  - ii. Size: 6" x 48"
  - iii. Thickness: 7 mil (minimum wear layer)
  - iv. Construction: Solid vinyl plank flooring meeting ASTM F1700
  - v. Installation: Glue-down
  - vi. Approved Equal: Subject to Architect's approval

**2.02 MATERIALS**

- A. Wood Base:
  - i. Material: Paint-grade wood

- ii. Size: 3/4" thick x 4" high
- iii. Finish: Factory primed and field painted.
- iv. Paint: Two coats of acrylic-latex paint over primer, semi-gloss sheen.
- v. Color: As selected by Architect from manufacturer's full range.

### **2.03 ACCESSORIES**

- A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
- B. Primers and Adhesives: Waterproof; types recommended by flooring and base manufacturer. Adhesives shall comply with (SCAQMD) Rule # 1168.
- C. Edge Strips: Flooring material manufactured by floor manufacturer.
- D. Sealer: Color-matched flexible sealant for perimeter and joints as required.

### **2.04 EXTRA STOCK**

- A. Deliver to the Owner:
  - 1. Four (4) present or one (1) unopened carton of each color and pattern of tile selected, whichever is greater.
  - 2. Four (4) percent or one (1) unopened carton of each color, type, and size base, and rubber stair treads and landings selected, whichever is greater.
  - 3. One (1) gallon container of each type adhesive used for flooring, base

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify concrete floors are dry to a maximum moisture content required by flooring manufacturer, and exhibit negative alkalinity, carbonization, or dusting.
- B. Verify floor and lower wall surfaces are free of substances that may impair adhesion of new adhesive.
- C. Test concrete floor as required for moisture content. Verify compliance with adhesive manufacturer's installation instructions.

### **3.02 PREPARATION**

- A. Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface.
- B. Prohibit traffic until filler is cured; vacuum clean substrate.
- C. Prime surfaces recommended by manufacturer appropriate for subfloor of subject installation.

### **3.03 INSTALLATION**

- A. Install in accordance with manufacturer's instructions.
- B. Mix tile from container to ensure shade variations are consistent when tile is placed.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Set flooring in place, press with heavy roller to attain full adhesion.
- E. Lay flooring with joints and seams parallel to building lines to produce symmetrical tile pattern.
- F. Install tile to basket weave pattern. Allow minimum 1/2 full size tile width at room or area perimeter.
- G. Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
- H. Install edge and transition strips at unprotected or exposed edges, and where flooring terminates.
- I. Scribe flooring to walls, cabinets, floor outlets, and other appurtenances to produce tight joints; at crevasse exists between floor tile and material, provide and install appropriate (sealant with matching color to flooring) at crevasse.
- J. Install flooring in or on floor access covers, cleanouts, etc. Maintain floor pattern.
- K. Install rubber base at toe kicks and exposed sides of laminate clad casework.

- L. Use only pre-molded pieces at external and internal corners.

#### **3.04 CLEANING**

Clean work under provisions of 01 70 00 and in accordance with manufacturer's instructions.

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean, seal, and wax floor and base surfaces in accordance with manufacturer's instructions; provide minimum (3) coats.

#### **3.05 PROTECTION OF FINISHED WORK**

- A. Protect finished Work.
- B. Prohibit traffic on floor finish for 48 hours after installation.

**END OF SECTION**



**SECTION 09 91 00**  
**PAINTING**

**PART 1- GENERAL**

**1.01 WORK INCLUDED**

- A. Prepare all surfaces (metal, masonry, concrete, glazing compound, sealant, caulk, etc.) to receive specified paint finish. Scrape, sand, wire brush, mechanically abrade as required to remove all loose paint, rust, scale, or other foreign material from surfaces to be painted.

**1.02 RELATED WORK**

- A. Section 07 92 00 Sealants and Caulking.
- B. Priming or painting and finishing of certain surfaces may be specified to be factory-performed or installer-performed under pertinent other sections.

**1.03 WORK NOT INCLUDED**

- A. Unless otherwise indicated, painting is not required on surfaces in concealed areas and inaccessible areas such as:
  - 1. Furred spaces.
  - 2. Foundation spaces.
- B. Metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze and similar finished materials will not require painting under Section 09 91 00 except as may be so specified.
- C. Do not paint moving parts of operating units, mechanical or electrical parts such as valve operators, linkages, sensing devices and motor shafts.
- D. Do not paint over required labels or equipment identification, performance rating, name or nomenclature plates.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Pre-Installation Conference:
  - 1. In addition to agenda items specified under Division 1, review the following:
    - a. Review Manufacturer's installation requirements and specific owner proprietary colors to be used under the scope of this project.

**1.05 DEFINITIONS**

- A. "Paint", as used herein, means coating systems materials including primers, emulsions, epoxy, enamels, sealers, fillers and other applied materials whether used as prime, intermediate or finish coats.

**1.06 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Paint coordination:
  - 1. Provide finish coats which are compatible with the prime coats actually used.
  - 2. Review other Sections of these Specifications as required, verifying the prime coats to be used and assuring compatibility of the total coating system for the various substrate.
  - 3. Upon request, furnish information on the characteristics of the specific finish materials to assure that compatible prime coats are used.
  - 4. Provide barrier coats over noncompatible primers, or remove the primer and reprime as required.
  - 5. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime coatings supplied under other Sections.

**1.07 SUBMITTALS**

- A. Comply with pertinent provisions of Section 01 33 23.

- B. Product data: Within 7 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
  - 1. Materials list of items proposed to be provided under this section.
  - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
- C. Samples
  - 1. Following the selection of colors and glosses by the Architect, submit samples for the Architect's review.
    - a. Provide three samples of each color and each gloss for each material on which the finish is specified to be applied.
    - b. Except as otherwise directed by the Architect, make samples approximately 8" x 10" in size.
    - c. If so directed by the Architect, submit samples during progress of the work in the form of actual application of the approved materials on actual surfaces to be painted.
    - d. Architect shall secure approval of all finishes and colors from User Agency and provide such approval to contractor prior to any ordering of materials by the contractor. GC shall accommodate for User Agency review time of finishes and colors as to not delay construction schedule.
  - 2. Revise and resubmit each sample as requested until the required gloss, color and texture is achieved. Such samples, when approved, will become standards of color and finish for accepting or rejecting the work of this Section.
  - 3. Do not commence finish painting until approved samples are on file at the job site.

#### **1.08 PRODUCT HANDLING**

- A. Comply with pertinent provisions of Section 01 66 00.

#### **1.09 JOB CONDITIONS**

- A. Do not apply solvent-thinned paints when the temperature of surfaces to be painted and the surrounding air temperature are below 50 degrees F, unless otherwise permitted by the manufacturer's printed instructions as approved by the Architect.
- B. Weather conditions:
  - 1. Do not apply paint in snow, rain, fog or mist, when the relative humidity exceeds 85% or to damp or wet surfaces, unless otherwise permitted by the manufacturer's printed instructions as approved by the Architect.
  - 2. Applications may be continued during inclement weather only within the temperature limits specified by the paint manufacturer as being suitable for use during application and drying periods.
- C. Do not paint in areas which are dirty or subject to dirt or dust being blown into the freshly applied material. Refuse to perform work and call Architect if satisfactory painting conditions are not provided by the General Contractor.
- D. Do not paint pre finished metals.

### **PART 2- PRODUCTS**

#### **2.01 PAINT MATERIALS**

- A. Acceptable materials:
  - 1. The Painting Schedule in Part 3 of this Section is based, in general, on products of Coronado, Farrell-Calhoun, ICI/Devroe, Martin Senour/P&L and Sherwin Williams.
  - 2. Equal products of Tnemec, Benjamin Moore or other manufacturers approved in advance by the Architect may be substituted in accordance with provisions of the Contract.
  - 3. Where products are proposed other than those specified by name and number in the Painting Schedule, provide under the product data submittal required by Article 1.06 of this Section a new painting schedule compiled in the same format used for the Painting Schedule included in this Section. This must be submitted prior to bid and approved by addendum.

4. No paint product used may contain lead in any form.
- B. Undercoats and thinners:
1. Provide undercoat paint produced by the same manufacturer as the finish coat.
  2. Use only the thinners recommended by the paint manufacturer, and use only to the recommended limits.
  3. Insofar as practicable, use undercoat, finish coat and thinner material as parts of a unified system of paint finish.

## **2.02 APPLICATION EQUIPMENT**

- A. For application of the approved paint, use only such equipment as is recommended for application of the particular paint by the manufacturer of the particular paint and as approved by the Architect.
- B. Prior to use of application equipment, verify that the proposed equipment is actually compatible with the material to be applied, and that integrity of the finish will not be jeopardized by use of the proposed equipment.

## **2.03 OTHER MATERIALS**

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

## **PART 3- EXECUTION**

### **3.01 SURFACE CONDITIONS**

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

### **3.02 MATERIALS PREPARATION**

- A. General:
1. Mix and prepare paint materials in strict accordance with the manufacturer's recommendations as approved by the Architect.
  2. When materials are not in use, store in tightly covered containers.
  3. Maintain containers used in storage, mixing and application of paint in a clean condition, free from foreign materials and residue.
- B. Stirring:
1. Stir materials before application, producing a mixture of uniform density.
  2. Do not stir into the materials any film which may form on the surface, but remove the film and, if necessary, strain the material before using.

### **3.03 SURFACE PREPARATION**

- A. General:
1. Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's recommendations as approved by the Architect.
  2. Remove removable items which are in place and are not scheduled to receive paint finish; or provide surface applied protection prior to surface preparation and painting operations.
  3. Following completion of painting in each space or area, reinstall the removed items by using workmen who are skilled in the necessary trades.
  4. Clean each surface to be painted prior to applying paint or surface treatment.
  5. Remove oil and grease with clean cloths and cleaning solvent of low toxicity and flash point in excess of 200 degrees F, prior to start of mechanical cleaning.
  6. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall onto wet newly painted surfaces.
- B. Preparation of metal surfaces:
1. Thoroughly clean surfaces until free from dirt, oil and grease.
  2. Wire brush, scrape, blast, mechanically abrade or otherwise remove all rust, scale and loose paint.

- a. Smooth finished surfaces exposed to view, using the proper sandpaper. Where so required, use varying degrees of coarseness in sandpaper to produce a uniformly smooth and unmarred surface.
  - b. On galvanized surfaces, use solvent for the initial cleaning, and then treat the surface thoroughly with phosphoric acid etch. Remove etching solution completely before proceeding.
  - c. Allow to dry thoroughly before application of rust inhibitor primer.
- C. Preparation of wood surfaces:
- 1. Clean surfaces until free from dirt, oil and other foreign substance.
  - 2. Smooth finished surfaces exposed to view, using the proper sandpaper. Where so required, use varying degrees of coarseness in sandpaper to produce a uniformly smooth and unmarred surface.
  - 3. Unless specifically approved by the Architect, do not proceed with painting of wood surfaces until the moisture meter is approved by the Architect.
- D. Preparation of drywall surfaces: Coordinate with Section 09 24 00.
- 1. Fill joints with joint filler.
  - 2. Apply tape with second coat of joint filler, crowning to allow for shrinkage and extend filler 10" beyond tape on each side to a feathered edge.
  - 3. After filler is dry, sand to a smooth finish and apply a third coat of filler extending coverage 2" beyond second coat. Feather edges. Finished work to be a plane surface free of blemishes.
  - 4. Spray apply uniform orange peel finish and leave work ready to receive paint. Eliminate this step in areas scheduled to receive wall covering or where smooth surface is scheduled.

### **3.04 PAINT APPLICATION**

- A. General:
- 1. Touch up shop-applied prime coats which have been damaged, and touch up bare areas prior to start of finish coats application.
  - 2. Slightly vary the color of succeeding coats.
    - a. Do not apply additional coats until the completed coat has been inspected and approved.
    - b. Only the inspected and approved coats of paint will be considered in determining the number of coats applied.
  - 3. Sand and dust between coats to remove defects visible to the unaided eye from a distance of five feet.
  - 4. On removable panels and hinged panels, paint the back sides and the exposed sides.
  - 5. Do not paint over labels on rated doors and frames.
- B. Drying:
- 1. Allow sufficient drying time between coats, modifying the period as recommended by the material manufacturer to suit adverse weather conditions.
  - 2. Consider oil-base and oleo-resinous solvent-type paint as dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb and when the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- C. Brush applications:
- 1. Brush out and work the brush coats onto the surface in an even film.
  - 2. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness and other surface imperfection will not be acceptable.
- D. Spray application:
- 1. Except as specifically otherwise approved by the Architect, confine spray application to metal framework and similar surfaces where hand brush work would be inferior.

2. Where spray application is used, apply each coat to provide the hiding equivalent of brush coats.
  3. Do not double back with spray equipment to build up film thickness to two coats in one pass.
  4. Coordinate exposed structure painting with acoustical spray contractor.
- E. For completed work, match the approved samples as to texture, color and coverage. Remove, refinish or repaint work not in compliance with the specified requirements.
- F. Miscellaneous surfaces and procedures:
1. Exposed mechanical and electrical items:
    - a. Finish electric panels, transformers, access doors, conduits, pipes, duct, grilles, registers, vents and items of similar nature to match the adjacent wall and ceiling surfaces, or as directed.
    - b. Paint visible duct surfaces behind vents, registers and grilles flat black.
    - c. Wash metal with solvent, prime and apply two coats of alkyd enamel.
  2. Exposed pipe and duct insulation:
    - a. Apply one coat of latex paint on insulation which has been sized or primed under other Section; apply two coats on such surfaces when unprepared.
    - b. Match color of adjacent surfaces.
    - c. Remove band before painting and replace after painting.
  3. Hardware:
    - a. Paint prime coated hardware to match adjacent surfaces.
  4. All Areas Interior and Exterior:
    - a. Add an approved fungicide to paints.
    - b. For oil base paints, use 1% phenylmercuric or 4% tetrachlorophenol.
    - c. For water emulsion and glue size surfaces, use 4% sodium tetrachlorophenate.
    - d. For epoxy paints, use manufacturer recommended product.
    - e. M-1 additive is an excellent additive to the finish coat of all Alkyd paint.
  5. Interior:
    - a. Use "stipple" finish where enamel is specified.
  6. Exposed vents:
    - a. Apply two coats of heat-resistant paint approved by the Architect.

### 3.05 PAINTING SCHEDULE

- A. All systems shall cure per manufacturer specification prior to recoat.
- B. Provide the following paint finish systems:
- | PRIMER | 1ST COAT | 2ND COAT |
|--------|----------|----------|
|--------|----------|----------|
- C. On Ferrous Metal, use: (Omit first coat on factory primed surfaces. Any bare or rusty metal must be cleaned, prepared and spot primed.)
1. MARTIN SENOUR/P & L:
 

Tough Coat	Rust Tough Coat	Tough Coat
Control Universal	Alkyd Gloss Enamel	Alkyd Gloss Enamel
Alkyd Metal Primer	4.0 Mils Wet	4.0 Mils Wet
8.0 Mils Wet	1.7 Mils Dry	1.7 Mils Dry
3.0 Mils Dry		
  2. CORONADO:
 

35-XXX Alkyd	31-XX	31-XX
Metal Primer	Rust-Scat	Rust-Scat
3.7 Mils Wet	Polyurethane Enamel	Polyurethane Enamel
2.0 Mils Dry	3.7 Mils Wet	3.7 Mils Wet
1.65 Mils Dry	1.65 Mils Dry	
  3. SHERWIN WILLIAMS:
 

B50 Series	B54 Series	B54 Series
Kem Kromik	Industrial Enamel	Industrial Enamel

	Universal Metal Primer 8.0 Mils Wet 3.0 Mils Dry	Alkyd Gloss Enamel 4.0 Mils Wet 2.0 Mils Dry	Alkyd Gloss Enamel 4.0 Mils Wet 2.0 Mils Dry
4.	FARRELL-CALHOUN: Tuff Boy 1022 Metal Primer 4 Mils Wet 2 Mils Dry	Tuff Boy 800 Industrial Alkyd Enamel 4 Mils Wet 2 Mils Dry	Tuff Boy 800 Industrial Alkyd Enamel 4 Mils Wet 2 Mils Dry
D.	On Galvanized Metal, use:		
1.	MARTIN SENOUR/P & L: Tough Coat Univ. Alkyd Metal Primer 8.0 Mils Wet 3.0 Mils Dry	Tough Coat Alkyd Gloss Enamel 4.0 Mils Wet 1.7 Mils Dry	Tough Coat Alkyd Gloss Enamel 4.0 Mils Wet 1.7 Mils Dry
2.	ICI/DEVOE: Devguard 4160 Tank & Structural Primer 4.5 Mils Wet 2.25 Mils Dry	Devflex 4308 Alkyd Industrial Gloss Enamel 5.0 Mils Wet 2.25 Mils Dry	Devflex 4308 Alkyd Industrial Gloss Enamel 5.0 Mils Wet 2.25 Mils Dry
3.	CORONADO: 180-11 DTM Acrylic Primer Wet & Dry Mil per Manuf. Specs 1.65 Mils Dry	31-XX Rust-Scat Polyurethane Enamel 3.7 Mils Wet 1.65 Mils Dry	31-XX Rust-Scat Polyurethane Enamel 3.7 Mils Wet 1.65 Mils Dry
4.	SHERWIN WILLIAMS: Galvite HS B50WZ 30 Primer Alkyd Gloss Enamel 6.0 Mils Wet 2.0 Mils Dry	B54 Series Industrial Enamel Alkyd Gloss Enamel 4.0 Mils Wet 2.0 Mils Dry	B54 Series Industrial Enamel 4.0 Mils Wet
5.	FARRELL-CALHOUN: 235 100% Acrylic Primer 5 Mils Wet 2.2 Mils Dry	Tuff Boy 800 Industrial 4 Mils Wet 2 Mils Dry	Tuff Boy 800 Industrial 4 Mils Wet 2 Mils Dry
E.	On Interior gypsum walls and ceilings, Paint Finish, use:		
	Walls: Eggshell Ceiling: Flat		
1.	MARTIN SENOUR/P & L: Pro-Hide Silver PVA Latex Primer	Pro-Hide Gold Interior Semi- Gloss	Pro-Hide Gold Interior Semi-Gloss Latex
2.	CORONADO: 40-11 Super Kote Latex Primer Latex	32-XX Interior Semi-Gloss Latex	32-XX Interior Semi-Gloss
3.	SHERWIN WILLIAMS: Prep-Rite 200 Latex Primer	Pro-Mar 200 Interior Semi-Gloss Latex	Pro-Mar 200 Interior Semi-Gloss Latex

4.	FARRELL-CALHOUN: 380 Perfik Seal Primer/Sealer	500 Interior Semi-Gloss	500 Interior Semi-Gloss
F.	On Interior Wood, Paint Finish, use:		
1.	MARTIN SENOUR/P & L: Interior Trim Primer Enamel	Pro-Hide Alkyd Semi-Gloss Enamel	Pro-Hide Alkyd Semi-Gloss
2.	CORONADO: 37-11 SuperKote Alkyd Enamel Undercoat	23XX Premium Gold Alkyd Semi-Gloss	23XX Premium Gold Alkyd Semi-Gloss
3.	SHERWIN WILLIAMS: Prep-Rite Alkyd Primer B49W2	Pro-Mar 200 Alkyd Semi-Gloss	Pro-Mar 200 Alkyd Semi-Gloss
4.	FARRELL-CALHOUN: 599 Enamel Undercoat 5 Mils Wet 2 Mils Dry	500 Alkyd Semi-Gloss 4 Mils Wet 2 Mils Dry	500 Alkyd Semi-Gloss 4 Mils Wet 2 Mils Dry
G.	On Interior Wood, Stain Finish, use: (Wood doors, trim)		
1.	MARTIN SENOUR/P & L: Stain as selected Polyurethane/Spar	Gloss Finish Polyurethane/Spar	Gloss Finish
2.	CORONADO: Stain as selected Polyurethane/Spar	67-10 Gloss Polyurethane/Spar	67-10 Gloss
3.	SHERWIN WILLIAMS: Stain as selected Polyurethane/Spar	Gloss Finish Polyurethane/Spar	Gloss Finish
4.	FARRELL-CALHOUN: Stain as selected Polyurethane/Spar	Gloss Finish Polyurethane/Spar	Gloss Finish
H.	On Exterior Wood, Siding, Trim Paint Finish, use:		
1.	SHERWIN WILLIAMS: Exterior Latex Water based Wood Primer 4.0 Mils Wet 1.3 Mils Dry	Super Paint Exterior Latex 4.0 Mils Wet 1.4 Mils Dry	Super Paint Exterior Latex 4.0 Mils Wet 1.4 Mils Dry

2. Approved Equal

**\*\* NO PRODUCT MAY CONTAIN LEAD.**

**END OF SECTION**

**SECTION 10 81 10**  
**RESIDENTIAL TOILET ACCESSORIES**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Toilet paper dispensers, soap dishes, tooth brush holders, towel bars, medicine cabinets, grab bars, shower rods, etc.
- B. Accessories to be furnished in Polished Stainless Steel Finish.
- C. Equal products by other manufacturers will be considered.

**1.02 PRODUCTS INSTALLED BUT NOT SUPPLIED BY THIS SECTION**

- A. Wood backing plates are to be installed under Division 6, Rough Carpentry.

**1.03 RELATED WORK**

- A. Installation by Carpenters under Division 6.

**1.04 SUBMITTALS AND HANDLING**

- A. Comply with Division 1, Section 01 33 23.
- B. Comply with Division 1, Section 01 62 00.
- C. Comply with ANSI and ADA requirements.

**1.05 SCHEDULE**

- A. Toilet Paper Dispensers - 1 at each toilet.
- B. 12" Grab Bar - 1 at end of handicap tub in Handicap Dwelling Units.
- C. 24" Grab Bar - 1 at end of handicap tub in Handicap Dwelling Units.
- D. 36" Grab Bar - 1 at rear of each toilet in Handicap Dwelling Units.
- E. 42" Grab Bar - 1 at side of each toilet in Handicap Dwelling Units.
- F. 60" Grab Bar - 2 at each handicap tub in Handicap Dwelling Units.
- G. Soap Dish - 1 at each lavatory/Dwellings.
- H. Tooth Brush Holder - 1 at each lavatory/Dwellings.
- I. Towel Bars - 1-24" in each Bath Room.
- J. Medicine Cabinets - 1 in each Bath Room above lavatory.

**PART 2 - PRODUCTS**

**2.01 ACCEPTABLE MANUFACTURERS**

- A. Toilet Paper Dispensers:
  - 1. HD Supply, Chrome exposed mount
  - 2. American Specialities
  - 3. Bobrick
  - 4. Or approved equal.
- B. Grab Bars:
  - 1. HD Supply
  - 2. American Specialities
  - 3. Bobrick
  - 4. Or approved equal.
- C. Soap Dishes
  - 1. HD Supply.
  - 2. American Specialities
  - 3. Bobrick
  - 4. Or approved equal.

- D. Toothbrush/Cup Holders:
  - 1. HD Supply
  - 2. American Specialities
  - 3. Bobrick
  - 4. Or approved equal.
  
- DI. Towel Bars
  - 1. HS Supply. 24"
  - 2. American Specialities
  - 3. Bobrick
  - 4. Or approved equal.
  
- DII. Medicine Cabinets
  - 1. HD Supply. 16wx 20"h. Recessed Beveled Edge Mirrored Medicine Cabinet w. polystyrene body
  - 2. American Pride
  - 3. Or approved equal.
  
- DIII. Shower Rod
  - 1. HD Supply 60" Aluminum Shower Rod and Accessories
  - 2. Or approved equal

### **PART 3 - EXECUTION**

#### **3.01 INSTALLATION**

- A. Installation shall be in accordance with the manufacturer's specifications.
- B. Toilet accessories shall be located as shown on the drawings specified herein or as directed by the Architect.
- C. Assure that specified recessed accessories will fit existing rough-in opening prior to placement of order or plan to modify recess opening to accommodate new required dimensions.
- D. Assure that proper backing is installed during early stage of project. Furnish necessary backing plates where required for installation by General Contractor. All grab bars to have backing kits furnished with bar. Backing to be installed prior to wall being closed. All other accessories to have wood backing and shall be attached using proper anchors.
- E. Remove all debris from installation from area and dispose of in G.C. dumpster or in legal manner off-site.

**END OF SECTION**

**SECTION 10 90 00  
WARDROBE AND CLOSET SPECIALITIES**

**PART 1 – GENERAL**

**1.01 SECTION INCLUDES**

- A. Closet rods for Bedroom Closets.

**1.02 SUBMITTALS**

- A. Comply with Sections 013400 and 016100.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

- A. Adjustable closet bar, steel-bright finish, telescoping, structurally rolled shape with escutcheon for fast, simple installation. Metal shall be .025 gauge. Provide center support for closets 48" to 95" in width and two intermediate supports for closets 96" to 144" in width. Furnish sample for Architect's approval prior to installation.
- B. Option 1-1/4" O.D. galvanized pipe rod may be furnished and installed by General Contractor.

**PART 3 - EXECUTION**

**3.01 INSTALLATION**

- A. Install adjustable closet bar or pipe rod in closets. Provide wood shelf and rod supports at ends.
- B. Provide 1 inch by 6 inch shelf support at each end with a 1-3/8 inch diameter hole. Install at time of rod to prevent removal of rod without removal of support.
- C. Painting by Section 09900.

**END OF SECTION**

**SECTION 11 31 10**  
**RESIDENTIAL APPLIANCES**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Furnish and install new appliances as indicated on the drawings and as specified herein.
- B. GC to provide connection transition from new hood to existing vent. GC to extend all mechanical and/or electrical to new vent hood as required.
- C. It will be the GC's responsibility to assure proper space requirements and connections are provided for appliances.

**1.02 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, DELIVERY, HANDLING**

- A. Comply with Division 1, Sections 01 33 23, 01 62 00.

**1.03 QUALITY ASSURANCE**

- A. Energy consumption requirements.
  - 1. Furnish appliances which qualify for the EPA/DOE ENERGY STAR product labeling program.

**1.04 WARRANTY**

- A. Manufacturer must provide warranty for repair/replacement of appliances which fail due to materials or workmanship during the warranty period.
- B. Warranty excludes vandalism.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

- A. Model numbers listed are based on General Electric Appliances. Equal products of any other national manufacturer are approved.

**2.02 30" RANGE VENT HOODS (ADA, SAME EXCEPT REMOTE SWITCHES)**

- A. GE - JV338HWW, 2 speed, externally vented, light, 7" round duct. ADA units to be wired to switch

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION**

- A. Deliver, uncrate, install, connect to power, lamp and operate to assure function.
- B. Vent hoods through roof with weatherproof roof jack and cap.
- C. Clean inside and outside of all appliances.
- D. Remove all warranty and owner papers and include same with close-out package to Architect for Owner.

### **3.02 WARRANTY**

- A. One year from date of final acceptance unless otherwise stated in 1.04 above.

**END OF SECTION**

**SECTION 114580 - DISAPPEARING STAIRWAY****PART 1 - GENERAL****1.01 SUMMARY**

- A. Metal Folding Disappearing Stairway including stairway, frame and door.
- B. Products Required, But Not Supplied Under This Section.
  - 1. Required fasteners.

**1.02 SYSTEM DESCRIPTION**

- A. The system requires a ceiling opening of 2'-6" X 5'-4" (30" X 64") For floor to ceiling dimensions of from approx. 8'- 0" to 9'- 0" or as required by manufacturer and a ceiling to upper floor dimension of more than 1'. The rough opening at the level above shall be coordinated with manufacturer.

**1.03 DELIVERY, STORAGE AND HANDLING**

- A. Examine stairway when it arrives on site. Notify the carrier and manufacturer of any damage.
- B. Store stairway until installation under roof, if possible; or, if stored outside, under a tarp or suitable cover.

**1.04 WARRANTY**

- A. The unit carries a limited warranty of 1 year against defective material and workmanship, covering parts only, no labor or freight. Defective parts, if deemed so by the manufacturer, will be replaced no charge, freight excluded, upon inspection at manufacturer's plant which warrants same.

**PART 2 - PRODUCTS****2.01 MANUFACTURER**

- A. Precision Ladders, LLC
- B. Bessler – Model 26 or Model 26 truss

**2.02 MATERIALS**

- A. Door
  - 1. 1/8" aluminum door panel (standard) or 1 3/4" wood veneer core door.
  - 2. Steel piano hinge.
  - 3. Door overlaps bottom flange of frame (standard). Fire rated steel door is flush with bottom of frame.
  - 4. Eye bolt accommodates pole for opening and closing.
- B. Stairway
  - 1. Stringers
    - a. 6005-T5 Extruded aluminum channel 5" X 1" X 1/8"
    - b. Tri-fold design
    - c. Steel blade type hinges
    - d. Adjustable foot with plastic Mar-guard.
    - e. Pitch 63ø (standard). Other pitches optional.
  - 2. Treads
    - a. 6005-T5 Extruded aluminum channel 5 3/16" X 1 1/4" X 1/8".
    - b. Depth 5 3/16".
    - c. Width 21 1/4" (standard). Widths to 30" available.
    - d. Deeply serrated top surface.
    - e. 9 1/2" riser height (standard). Other riser heights available.
    - f. 500 lbs load rating.
- C. Frame

1. Custom fabricated from 1/8" steel with factory-installed tread(s) to cover the distance from finished ceiling to finished floor above. Frame shall be on a 63 degree angle on the hinge end in order to continue the climb from ceiling and beyond on the same incline as the folding portion of the unit. The frame shall have pre-drilled and mounted brackets to allow for hanging from and fastening to the floor above.
- D. Hardware
1. Steel blade type hinge connecting stringer sections, zinc-plated and chromate-sealed, bolted to stringers.
  2. Steel operating arms, both sides, zinc-plated & chromate-sealed.
  3. Double acting steel springs and V-hooks, both sides.
  4. Rivets rating at 1100# shear.
- E. Safety
1. Steel bar handrail riveted to stringers, upper section, right side standard. Other locations optional.
  2. Steel section alignment clips at stringer section joints.
  3. Molded rubber guards at corners of aluminum door panel.
- F. Manufactured Units
1. The disappearing stairway is a Model SS/AL= ceiling height in inches - maximum is 144.
- G. Accessories
1. Steel pole to aid opening, closing and unfolding stairways. The pole is equipped with a hook on one end and (on taller units) a "T" on the other. Supplied.
- H. Fabrication
1. The stairway is completely fabricated ready for installation before shipment to the site.
- I. Finishes
1. Mill finish on aluminum stairway components.
  2. Prime coat on frame.
  3. Primed and painted handrail.
- J. Source Quality Control
1. All products tested in factory test jig for proper operation before shipment.

### **PART 3 – EXECUTION**

#### **3.01 EXAMINATION**

- A. Examine rough opening in ceiling for opening size and squareness.

#### **3.02 INSTALLATION**

- A. Install per the manufacturer's installation instructions.

#### **3.03 FIELD QUALITY CONTROL**

- A. The manufacturer has representatives in all areas of the United States and Canada. For the name of the closest representative, call (800)225-7814.

### **END OF SECTION 11458**

## **SECTION 22 10 00 PLUMBING PIPING**

### **PART 1 – GENERAL**

#### 1.01 WORK INCLUDED

- A. Pipe and Pipe Fittings
- B. Valves
- C. Sanitary Sewer Piping System
- D. Domestic Water Piping system
- E. Service Connections
- F. Natural Gas Piping System

#### 1.02 RELATED WORK

- A. Section 230000 - General Provisions
- B. Section 230516 - Expansion Compensation
- C. Section 230523 - Supports and Anchors
- D. Section 230700 - Piping Insulation
- E. Section 221010 - Plumbing Specialties
- F. Section 224000 - Plumbing Fixtures and Trim

#### 1.03 REFERENCES:

- A. ANSI/ASME B16.3 - Malleable Iron Threaded Fittings Class 150 NS 300.
- B. ANSI/ASME B16.23 - Cast Copper Alloy Solder Joint Drainage Fittings - DWV.
- C. ANSI/ASME B16.29 - Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV.
- D. ANSI/ASME Sec. 9 - Welding and Brazing Qualifications.
- E. ANSI/ASTM B32 - Solder Metal.
- F. ANSI/ASTM C443 - Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.
- G. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc Coated, Welded and Seamless.
- H. ASTM A74 - Cast Iron Soil Pipe and Fittings.
- I. ASTM A234 - Pipe Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and Elevated Temperatures.

- J. ASTM B88 - Seamless Copper Water Tube.
- K. ASTM B306 - Copper Drainage Tube (DWV).
- L. ASTM C564 - Rubber Gaskets for Cast Iron Soil Pipe and Fittings.
- M. AWS A5.8 - Brazing Filler Metal.
- N. AWWA C601 - Standard Methods for the Examination of Water and Waste Water.
- O. CISPI 301 - Cast Iron Soil Pipe and Fittings for Hubless Cast Iron Sanitary System.
- P. CISPI 310 – Standard for cast iron couplings
- Q. LSPC – The latest addition of the Louisiana State Plumbing Code.

1.04 QUALITY ASSURANCE:

- A. Valves: Manufacturer's name and pressure rating marked on valve body.
- B. Welding Materials and Procedures: Conform to ASME Code and applicable state labor regulations.
- C. Welders Certification: In accordance with ANSI/ASME Sec. 9. ANSI/AWS D 1.1.
- D. Cast iron pipe and fittings shall be marked with CISPI's collective trademark.

1.05 SUBMITTALS:

- A. Submit shop drawings and product data under provisions of Section 013000.
- B. Include data on pipe material, pipe fittings, valves and accessories.

1.06 WATER PIPE AND FITTING MATERIALS STANDARD

- A. Plastic Water Pipe and Fittings
  - 1. ABS and PVC Plastic Tubular Fittings: ASTM F 409, ANSI/NSF 24, ANSI/NSF 14
  - 2. Joints for IPS PVC pipe using solvent cement: ASTM D 2672
  - 3. Chlorinated poly (vinyl chloride) (CPVC) plastic pipe, Schedule 80, 2" and under: ASTM F 441, listed
  - 4. Chlorinated poly (vinyl chloride) (CPVC) plastic pipe (SDR-PR): ASTM F 442
  - 5. CPVC Pipe and fittings: ASTM D 2846, Listed
  - 6. Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) pressure pipe and fittings: ASTM F 1281
  - 7. Cross-linked Polyethylene (PEX) plastic hot and cold water distribution system: ASTM F 877, Listed
  - 8. Cross-linked Polyethylene (PEX) tubing: ASTM F 876
  - 9. Cross-linked Polyethylene (PEX) tubing systems for pressure: CAN/CSA-B137.5M89, listed
  - 10. Flexible Elastomeric pressure joints: ASTM D 3139, See 308.8
  - 11. Metal insert fittings for PB tubing: ASTM F 1380
  - 12. Polyethylene/Aluminum/Polyethylene (PE-AL-PE) pressure pipe and fittings: ASTM F 1282
  - 13. Polyethylene pipe and tubing (PE) Number 2305, 2306, 3306, 3406, 3408: ASTM D

- 2104, ASTM D 2239, ASTM D 2737, Listed, See 303.8.2
14. Poly (vinyl chloride) (PVC) plastic pipe fittings, Schedule 40: ASTM D 2466
  15. Pressure rated ABS-fittings: ASTM D 2468, Listed
  16. Pressure rated ABS-pipe Number 1210, 2112, 1316: ASTM D 1527, ASTM D 2282, Listed, See 303.8.2
  17. PVC injection molded gasketed fittings for pressure applications: CAN/CSA-B137.2-M89, Listed
  18. PVC Pipe, Number 1120, 1220: ASTM D 1785, ASTM D 2241, listed, See 303.8.2
  19. PVC socket-type fittings, Schedule 80: ASTM D 2467, listed
  20. Socket-type chlorinated poly (vinyl chloride) (CPVC) plastic pipe fittings, Schedule 80, 2" and under: ASTM F 439, listed
  21. Threaded chlorinated poly (vinyl chloride) (CPVC) plastic pipe fittings, Schedule 80, 2" and under: ASTM F 437, listed
- B. Ferrous Water Pipe and Fittings
1. Cast Iron fittings (threaded): ASTM A 126
  2. Cast iron pipe (threaded): ANSI A40.5
  3. Cast iron water pipe: ASTM A377
  4. Ductile-iron water pipe: ANSI/AWWA C 151/A 21.51
  5. Ductile-iron water fittings: ANSI/AWWA C 110/A 21.10
  6. Malleable iron fittings (threaded): ASTM A 197
  7. Nipples pipe (threaded): FS WW-N-351a
  8. Stainless steel water pipe Grade H: ASTM A 268, See 303.8.4
  9. Steel couplings, threaded, black and galvanized: ASTM A 865
  10. Steel pipe black and galvanized: ASTM A 53
  11. Welded and seamless steel pipe: ASTM A 53
- C. NonFerrous Pipe and Fittings
1. Cast bronze fittings for flared copper tube: ANSI B16.26
  2. Cast bronze threaded fittings: ASME B16.15
  3. Cast bronze solder-joint pressure fittings: ANSI B16.18
  4. Cast copper alloy fittings for flared copper tubes: ASME B 16.26
  5. Pipe flanges and flanged fittings: ANSI B16.5
  6. Seamless brass tube: ASTM B 135
  7. Seamless copper pipe: ASTM B 42
  8. Seamless copper tube: ASTM B 75
  9. Seamless copper water tube types K, L, & M: ASTM B 88
  10. Seamless red brass pipe: ASTM B 43
  11. Seamless and welded copper distribution tube (type D): ASTM B 641
  12. Threadless copper pipe (TP): ASTM B 302
  13. Welded brass tube: ASTM B 587
  14. Welded copper tube: ASTM B 447
  15. Welded copper alloy UNS # C21000 water tube: ASTM B 642
  16. Wrought copper and copper-alloy solder-joint pressure fittings: ASME B 16.22 for copper water tube
  17. Wrought seamless copper and rectangular copper-alloy pipe and tube: ASTM B 251, square and tubing not applicable
  18. Valves-flanged threaded, and welding end: ANSI B 16.34
- D. Backflow Prevention Devices Materials Standard
1. Air gap standards: ASME A112.1.2
  2. Backflow preventers, double check valve assembly: ASSE 1015, ANSI/AWWA C510
  3. Backflow preventers with intermediate atmospheric vent: ANSI/ASSE 1012
  4. Backflow preventers, double check detector assembly: ANSI/ASSE 1048
  5. Backflow preventers, hose connection: ANSI/ASSE 1052

6. Backflow preventers, reduced pressure detector assembly: ANSI/ASSE 1047
  7. Backflow preventers, reduced pressure principle assembly: ANSI/AWWA C511, ASSE 1013
  8. Dual check valve type backflow preventer: ASSE 1032, for carbonated beverage dispensers-post mix type
  9. Field test procedures for backflow preventer assemblies: ASSE 5010
  10. Manual for the selection, installation, maintenance, and field testing of backflow prevention devices: CAN/CSA B64.10
  11. Vacuum breakers, Anti-Siphon, pressure type assembly (outdoor use): ASSE 1020
  12. Vacuum breakers-atmospheric pipe applied: ANSI/ASSE 1001
  13. Vacuum breakers, back siphonage, pressure type assembly (spill resistant): ANSI/ASSE 1056
  14. Vacuum breakers, hose connections: ANSI/ASSE 1011
  15. Vacuum breakers, laboratory faucet: ANSI/ASSE 1035
  16. Vacuum breaker wall hydrants, fronts resistant automatic draining: ASSE 1019
  17. Water closet flush tank fill valves (ballcocks): ASSE 1002
- E. Valves Material Standards
1. Valves, bronze gate: MSS SP-80
  2. Valves, cast iron gate: ASTM A 126
  3. Valves, ball: MSS SP-72, MSS SP-110
  4. Valves, resilient-seated gate: ANSI/AWWA C509
- F. Temperature Control Device Standards
1. Individual shower control valves, anti-scald: ASSE 1016
  2. Temperature actuated mixing valves for primary domestic use: ASSE 1017
  3. Water supply valves, mixing valves and single control mixing valves: ASSE 1029
- G. Potable Water Piping
1. All potable water pipes, pipe related products, and materials that join of seal pipes conform to ANSI/NSF 61.

## 1.07 DRAINAGE SYSTEM MATERIALS STANDARDS

- A. NonMetallic Piping
1. Concrete drain tile: ASTM C 412
  2. Concrete perforated: ASTM C 444
  3. Concrete reinforced culverts: ASTM C 76, for storm drains only
  4. Concrete reinforced sewer pipe: ASTM C 361, for storm drains only
  5. Concrete sewer pipe: ASTM C 14, for storm drains only
  6. Sewer manholes: ASTM C 478
  7. Concrete (steel cylinder type): FS SS-P-381
- B. Plastic Pipe and Fittings
1. Coextruded composite pipe: ASTM F 1488, See 303.8.3, 303.8.5, 704.1, 1101.5, 1103.2, 1103.4
  2. Coextruded composite drain, waste, and vent pipe (DWV): ASTM F 1499, See 303.8.3, 303.8.5, 704.1, 1101.5, 1103.2, 1103.4
  3. Coextruded PVC plastic pipe: ASTM F 891, See 303.8.3, 303.8.5, 704.1, 1101.5, 1103.2, 1103.4
  4. Flexible elastomeric non-pressure joints: ASTM D 3212, See 303.8
  5. Large diameter ribbed PVC sewer pipe and fittings: CAN/CSA-B182.4
  6. Polyolefin laboratory drainage systems: CAN/CSA-B181.3
  7. PVC-DWV pipe and fittings: ASTM D 2665, listed, See 303.8.3
  8. Type PS 46 and type PS 115 sewer pipe (for outside building sewers, storm drains):

- 9. ASTM F 789, See 704.1, 1101.4, 1103.2, 1103.4, ASTM D 2321, installation  
Type PSM PVC sewer pipe and fittings (for outside building sewers, storm drains, and storm sewers): ASTM 3034, See 704.1, 1101.5, 1103.2, 1103.4, ASTM D 2321, installation
  - 10. Type PSP PVC sewer pipe and fittings (for outside building sewers, storm drains, and storm sewers): ASTM D 2321, Installation
  - 11. All plastic piping pipes, plastic plumbing piping components and related materials shall be listed as conforming with ANSI/NSF Standard 14.
- C. Ferrous Pipe and Fittings
- 1. Cast iron soil pipe and fittings: ASTM A 74, CISPI HS
  - 2. CI NO-HUB pipe and fittings: ASTM A 888, CISPI Std. 301
  - 3. Ductile-iron gravity sewer pipe: ASTM A 746
  - 4. Hubless cast iron sanitary system: CISPI Std. 310
  - 5. Manhole top frames and covers: ASTM A 48
- D. NonFerrous Pipe and Fittings
- 1. Cast copper alloy solder-joint drainage fittings: ASME B 16.23, for plumbing drainage waste and vents
  - 2. Cast copper alloy solder-joint fittings for solvent drainage systems: ANSI B 16.32
  - 3. Copper drainage tube DWV: ASTM B 306
  - 4. Welded copper and copper alloy heat exchanger tube: ASTM B 543
  - 5. Wrought copper and wrought copper alloy solder-joint drainage fittings for plumbing drainage waste and vents: ASME B 16.29
  - 6. Wrought copper and wrought copper alloy solder-joint fittings for solvent drainage systems: ANSI B 16.43
- E. Glass pipe
- 1. Borosilicate glass pipe and fittings for DWV applications: ASTM C 1053

## **PART 2 - PRODUCTS**

- 2.01 SANITARY SEWER PIPING - BURIED BEYOND 5 FEET OF BUILDING:
- A. Schedule 40 PVC/DWV  
Fittings: Same as piping  
Joints: Solvent welded
- 2.02 SANITARY SEWER PIPING - BURIED WITHIN 5 FEET OF BUILDING:
- A. Schedule 40 PVC/DWV  
Fittings: Same as piping  
Joints: Solvent welded
- 2.03 SANITARY SEWER PIPING, ABOVE GRADE:
- A. Schedule 40 PVC/DWV  
Fittings: Same as piping  
Joints: Solvent welded
- 2.04 WATER PIPING, ABOVE GRADE: Exterior water piping buried beyond 5' of building to be same as above grade.
- A. Copper Tubing: ASTM B88, Type L, hard drawn.

Fittings: ANSI/ASME B16.18, cast bronze solder-joint pressure fittings, or ANSI/ASME B16.22, wrought copper.

- B. All potable water pipes, pipe related products and materials that join or seal pipes and pipe related products shall be evaluated and listed as conforming with a national consensus product or material standard and ANSI/NSF Standard 61.

2.06 WATER PIPING, TRAP PRIMERS: Piping for trap primer piping below slab only.

- A. Soft Copper Tube: ASTM B 88, Types K and L, water tube, annealed temper.

2.07 NATURAL GAS PIPING, BURIED BEYOND 5 FEET OF BUILDING:

- A. Polyethylene Pipe: ASTM D2513, SDR 11.5.  
Fittings: ASTM D2683 to ASTM D2513, socket type.  
Joints: Fusion welded.

2.08 NATURAL GAS PIPING, ABOVE GRADE:

- A. Steel Pipe: ASTM A53 or A120, Schedule 40, black.  
Fittings: ANSI/ASME B16.3, malleable iron, or ASTM A234, forged steel welding type.  
Joints: Screwed for pipe two (2) inches and under; ANSI/AWS D1.1 welded, for pipe over two (2) inches. All gas piping run in a concealed space shall be welded.

2.09 FLANGES, UNION, AND COUPLINGS:

- A. Pipe Size two (2) Inches and Under: 150 psig malleable iron unions for threaded ferrous piping; bronze unions for copper pipe, solder joints.
- B. Pipe Size Over two (2) Inches: 150 psig forged steel slip-on flanges for ferrous piping; bronze flanges for copper piping; neoprene gaskets for gas service.
- C. Dielectric Connections: Unions with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

2.10 GATE VALVES

- A. Up to two (2) Inches: Bronze body, non-rising or rising stem and handwheel, inside screw, single double wedge or disc, solder or threaded ends. Nibco Model 113 Series, Crane Model 438 Series, Powell Model 2700, Hammond 2B 617 or approved equal.
- B. Over two (2) Inches: Iron body, bronze trim, non-rising or rising stem and handwheel, OS&Y, single wedge, flanged ends. Red and White 415/421, NIBCO F619/F617, Crane 461/465 1/2 or approved equal.

2.11 GLOBE VALVES:

- A. Up to 2 Inches: Bronze body, rising stem and handwheel inside screw, renewable composition disc, solder screwed ends, with backseating capacity. Nibco Model 211 Series, Crane Model 1 Series, Powell Model 150, Hammond 1.413, Red White 211/212 or approved equal.
- B. Over 2 Inches: Iron body, bronze trim, rising stem and handwheel, OS&Y, plug-type disc, flanged ends. Red and White Fig 400 or NIBCO F718-B, Crane 351 or approved equal.

2.12 BALL VALVES:

- A. Up to 2 Inches: Bronze or stainless steel body, stainless steel ball, teflon seats and stuffing box ring, lever handle and balancing stops, solder threaded ends with union. Nibco Model 580 Series, Crane Model 2330 Series, Red White 5092/5095 or approved equal.
- B. Over 2 inches: Cast steel body, chrome plated steel ball teflon seat and stuffing box seals, lever handle or gear drive handwheel for sizes 10 inches and over, flanged.

2.13 BUTTERFLY VALVES:

- A. Iron body, bronze disc, resilient replaceable seat for service to 180-degrees F, or lug end butterfly, 10 position over handle or infinite position lever handle with memory stop.

2.14 SWING CHECK VALVES:

- A. Up to 2 inches: Bronze 45 degree swing disc, solder or screwed ends. Nibco Model 413 Series, Crane Model 37 Series, Red White 236/237 or approved equal.
- B. Over 2 inches: Iron body, bronze trim, 45 degrees swing disc, renewable disc and seat, flanged ends. Red White 435, Nibco F918, Crane 373 or approved equal.

2.15 SPRING LOADED CHECK VALVES:

- A. Iron body, bronze trim, spring loaded, bronze disc, wafer.
- B. Red White 442, Nibco W920W, Stockham W6-970 or approved equal.

**PART 3 - EXECUTION**

3.01 PREPARATION:

- A. Ream pipe and tube ends. Remove burrs. Bevel end Ferrous pipe.
- B. Remove scale and dirt, on inside and outside, before assembly.
- C. Prepare piping connections to equipment with flanges or unions.

3.02 INSTALLATIONS:

- A. Provide non-conducting dielectric connections wherever jointing dissimilar metals.
- B. Route piping in orderly manner and maintain gradient.
- C. Install piping to conserve building space and not interfere with use of space.
- D. Group piping whenever practical at common elevations.
- E. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
- F. Provide clearance for installation of insulation and access to valves and fittings.
- G. Provide access where valves and fittings are not exposed.

- H. Slope water piping and arrange to drain at low points.
- I. Establish elevations of buried piping outside the building to insure not less than 3 feet of cover.
- J. Where pipe support members are welded to structural building framing, scrape, brush clean, and apply one coat of zinc rich primer to welding.
- K. Prepare pipe, fittings, supports, and accessories not prefinished, ready for finish painting.
- L. Establish invert elevations, slope all drainage piping 4 inches and larger to 1/8 inch per foot minimum. All drainage piping 3 inches and smaller shall be sloped to 1/4 inch per foot minimum.
- M. Install bell and spigot pipe with bell end upstream.
- N. Install valves with stems upright or horizontal, not inverted.
- O. Provide one plug cock wrench for every ten plug cocks sized 2 inches and smaller, minimum of one. Provide one plug cock wrench for each plug cock sized 2-1/2 inches and larger.
- P. In pipe 3 – inch nominal diameter or less, cleanouts shall be located at not more than 50ft.intervals
- Q. In pipe 4 – inches nominal diameter through 6 inches nominal diameter, cleanouts shall be located at not more than 80ft. intervals
- R. Each building drain shall be provided with a cleanout within 6ft. of the junction of the building drain and building sewer.

### 3.03 APPLICATION:

- A. Grooved mechanical couplings and fasteners not allowed.
- B. Install unions downstream of valves and at equipment or apparatus connections.
- C. Install brass male adapters each side of valves in copper piped system. Sweat solder adapters to pipe. All joints in potable lines to be lead free.
- D. Install gate, ball, butterfly valves for shut-off and to isolate equipment, part of systems, or vertical risers.
- E. Install globe, ball, butterfly valves for throttling, bypass, or manual flow control services.
- F. Provide spring loaded check valves on discharge of water pumps.

### 3.04 TEST

- A. Upon completion of the domestic water piping system, it shall be tested and proved tight under a water pressure not less than 200 psi. The water used for testing shall be obtained from a potable source of supply. This pressure test shall be performed before the disinfection of the domestic water piping system is started. This test shall conform to the Louisiana State Plumbing Code
- B. Upon completion of the sanitary sewer piping system the contractor shall perform a water test to prove that the system is tight and with out leaks. No section of the piping system shall be tested with less than 10 ft head of water. The pressure shall be kept on the system for a time no less

that 1 hour. This test shall conform to the Louisiana State Plumbing Code.

- C. Upon completion of the sanitary vent piping system the contractor shall perform a pressure test to prove that the system is tight and is with out leaks. This test shall conform to the Louisiana State Plumbing Code.
- D. All Gas piping shall be tested in accordance to NFPA 54.
- E. Prior to any test, the contractor shall notify the Architect in writing a minimum of 5 business days, the date and time the test will take place. No exceptions. After the completion of the test but before the building is substantially complete the contractor shall submit a written report with the following information for each test performed.
  - 1. Project Name
  - 2. Project Location
  - 3. Plumbing Contractor Name, Address and Contact Information
  - 4. Identification of test performed.
  - 5. Time and Date test was started
  - 6. Time and Date test was completed.

### 3.05 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM:

- A. Prior to starting work, verify system is complete, flushed and clean.
- B. New or repaired potable water systems shall be purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction or, in the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in this section. This requirement shall apply to "onsite or in-plant" fabrication of a system or to a modular portion of a system.
  - 1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
  - 2. The system or part thereof shall be filled with a water/chlorine solution containing not less than 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine solution containing not less than 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.
  - 3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
  - 4. The procedure shall be repeated where shown by a bacteriological examination that contamination remains present in the system.
- C. Prior to the disinfection of the domestic water piping system the contractor shall inform the architect in writing the date and time the disinfection will take place. After the completion of the disinfection of the domestic water piping system but before the building is substantially completed the contractor shall submit a written report with the following information.
  - 1. Project Name
  - 2. Project Location
  - 3. Plumbing Contractors Name, Address, and contact information
  - 4. Chemicals used in the disinfection process.
  - 5. Time and Date disinfection process was started
  - 6. Time and Date disinfection process was completed

### 3.06 SERVICE CONNECTIONS:

- A. Provide new sanitary and storm sewer services and tie into existing as shown on plans. Before

commencing work check invert elevations required for sewer connections, confirm inverts and insure that these can be properly connected with slope for drainage and cover to avoid freezing. Contractor to tie in existing services as shown on drawings.

- B. Tie domestic water into existing services as shown on drawings. Provide sleeve in wall for service main and support at wall with reinforced concrete bridge. Caulk enlarged sleeve and make watertight with pliable material. Provide 18-gauge galvanized sheet metal sleeve around service main to 6 inches above floor and 6 feet minimum below grade. Size for minimum of 2 inches of loose batt insulation stuffing. Contractor shall utilize and tie in existing water lines as indicated on the drawings.
- C. Tie new gas service into existing onsite. Coordinate connection with gas service provider.

**END OF SECTION 22 10 00**

## **SECTION 22 10 10 PLUMBING SPECIALTIES**

### **PART 1 - GENERAL**

#### 1.01 WORK INCLUDED

- A. Floor drains
- B. Trap Primers
- C. Cleanouts
- D. Backflow preventors
- E. Water hammer arrestors
- F. Hose bibbs hydrants

#### 1.02 RELATED WORK

- A. Section 230529 - Supports and Anchors
- B. Section 221000 - Plumbing Piping
- C. Section 224000 - Plumbing Fixtures

#### 1.03 REFERENCES

- A. ANSI/ASSE 1012 - Backflow Preventers with immediate Atmospheric Cent.
- B. ANSI/ASSE 1011 - Hose Connection Vacuum Breakers.
- C. ANSI/ASSE 1013 - Backflow Preventers, Reduced Pressure Principle.
- D. ANSI/ASSE 1019 - Wall Hydrants, Frost Proof Automatic Draining Anti-Backflow Types.
- E. ANSI A112.21.1 - Roof Drains
- F. ANSI A112.26.1 - Water Hammer Arrestors
- G. PDI WH-201 Water Hammer Arrestors

#### 1.04 QUALITY ASSURANCE

- A. Manufacturer: For each product specified, provide components by same manufacturer throughout.

#### 1.05 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 013000.
- B. Include component sizes, rough-in requirements, service sizes, and finishes.

## **PART 2 - PRODUCTS**

### 2.01 FLOOR DRAINS

- A. Floor Drain (FD): ANSI A112.21.1; lacquered cast iron two piece body with double drainage flange, weep holes, reversible clamping collar, square adjustable nickel- bronze strainer, and trap primer connection; Wade model 1100G, Zurn model Z415s or Smith model 2005.
- B. All floor drains installed shall have trap primers.

### 2.02 TRAP PRIMERS

- A. Trap primers shall be PPP, Inc. Prime-Rite 500 with AG-500 air gap fitting. Distribution unit may be used for multiple floor drains. Trap primers shall be installed as per manufacturer recommendations and in strict accordance with the Louisiana Plumbing Code. Elastomeric flexible type trap guards will not be allowed on this project.

### 2.03 FLOOR SINK

- A. Floor sink (FS): 12"x12" floor sink with square nickel bronze top, 8" deep, aluminum dome strainer. Zurn Z1901, Wade 9144, or Smith 300.

### 2.04 CLEANOUTS

- A. Exterior Surfaced Areas: As detailed on Plans.
- B. Interior Finished Floor Areas: Lacquered cast iron, two piece body with double drainage flange, weep holes, reversible clamping collar, and adjustable nickel- bronze strainer, square with scoriated cover in service areas and square with depressed cover to accept floor finish in finished floor areas; Model W-6000 manufactured by Wade or Model ZN-1400 manufactured by Zurn or 4000 Series manufactured by Smith.
- C. Interior Finished Wall Areas: Line type with lacquered cast iron body and round epoxy coated gasketed cover, and round stainless steel access cover secured with machine screw; Model W-8460-R manufactured by Wade or Model ZN-1445-1 manufactured by Zurn or Model 4532 manufactured by Smith.
- D. Interior Unfinished Accessible Areas: Caulked or threaded type, provide bolted stack cleanouts on vertical rainwater leaders.
- E. Acceptable Manufacturers
  1. Wade 6000
  2. Zurn 1400
  3. Substitutions: Under provisions of Instructions To Bidders.

### 2.05 BACKFLOW PREVENTERS

- A. Pressure Backflow Preventers: ANSI/ASSE 1013; bronze body with bronze and plastic internal parts and Stainless steel springs; two independently operating, spring loaded check valves; diaphragm type differential pressure relief valve located between check valves; third check valve which opens under back pressure in case of diaphragm failure; non-threaded vent outlet; assembled with two gate valves, strainer, and four test cocks.

- B. Acceptable Manufacturers
  - 1. Watts Model 909
  - 2. Wilkins Model 375
  - 3. Substitutions: Under provisions of Instructions To Bidders.

#### 2.06 WATER HAMMER ARRESTORS

- A. ANSI A112.26.1; sized in accordance with PDI WH-201, precharged suitable for operation in temperature range - 100 to 300 degrees F ( -73 to 49 Degrees C) and maximum 250 psig (1700 kpa) working pressure.
- B. Acceptable Manufactures
  - 1. Wade Model W-5, W-10, W-20
  - 2. Zurn Model Z-1700-100, 200, 300
  - 3. Smith Model 5000
  - 4. Substitutions: Under provisions of Instructions To Bidders.

### **PART 3 - EXECUTION**

#### 3.01 PREPARATION

- A. Coordinate cutting forming of roof floor construction to receive drains to required invert elevations.

#### 3.02 INSTALLATION AND APPLICATION

- A. Install specialties in accordance with manufacturer's instructions to permit intended performance.
- B. Extend cleanouts to finished floor or wall surface. Lubricate threaded cleanout plugs with mixture of graphite and linseed oil. Insure clearance at cleanout for rodding of drainage system.
- C. Encase exterior cleanouts in concrete flush with grade.
- D. Install water hammer arrestors complete with accessible isolation valve.
- G. In pipe 3 – inch nominal diameter or less, cleanouts shall be located at not more than 50ft.intervals
- H. In pipe 4 – inches nominal diameter through 6 inches nominal diameter, cleanouts shall be located at not more than 80ft. intervals
- I. Each building drain shall be provided with a cleanout within 6ft. of the junction of the building drain and building sewer.

**END OF SECTION 22 10 10**

**SECTION 22 40 00  
PLUMBING FIXTURES AND TRIM**

**PART 1 – GENERAL**

1.01 SECTION INCLUDES

- A. Plumbing Fixtures and Trim

1.02 RELATED WORK

- A. Section 230000 - General Mechanical
- B. Section 221000 - Plumbing Piping
- C. Section 221010 - Plumbing Specialties

1.03 SUBMITTALS

- A. Furnish and install plumbing fixtures as shown on the accompanying drawing and in accordance with the approved rough-in drawings. This will include service sinks, lavatories, water closets, urinals, etc., with all brass in connection with supply tubing, traps, escutcheons, stop and basin cocks, etc. All fixtures shall be new and must be delivered to the building properly crated and in perfect condition.
- B. All brass must be best quality. All brass pipe to be seamless brass tubing and all fixture traps shall be heavy with C.O. plugs. Nipples shall be extra heavy. Lightweight goods will not be accepted. All exposed metal on fixtures shall be C.P. or Chromard. All "P" traps shall be complete with cleanout plug.
- C. Contractor shall submit in his fixture brochure for approval, a rough-in sheet of each fixture and indicate any variation required for the fixtures. Fixtures are to be roughed-in in accordance with these approved rough-in sheets and anchored so that piping cannot be moved.

1.04 JOB CONDITIONS

- A. Check millwork shop drawings. Conform location and size of fixtures and openings before rough-in and installation.

**PART 2 – PRODUCTS – see plans**

**PART 3 – EXECUTION**

3.01 INSTALLATION

- A. Install furnish and install all plumbing fixtures and accessories according to manufacturer's instruction and according to national, state and local codes governing the various systems. Carefully review the Architectural floor plans and millwork details to determine exact number of all fixtures, outlets, and accessories required. Coordinate all fixtures, outlets, drains, accessories, etc., prior to submitting shop drawings.
- B. Install each fixture in accordance with rough-in drawings as per manufacturers' recommendations. At completion thoroughly clean plumbing fixtures and equipment.

Anchor fixtures rigidly; anchor piping in walls so that piping cannot be moved.

- C. Provide chrome plated rigid or flexible supplies to fixtures with stops, reducers and escutcheons.
- D. Solidly attach floor water closets to floor with lag screws and finishing caps.
- E. Install each fixture with trap, easily removable for servicing and cleaning.
- F. All fixtures supplied with domestic water, hot or cold, shall be installed with integral stops on all supply lines.
- G. Mount fixtures to the following heights above finished floor:
  - 1. Water Closets:
    - a. Standard 15" to top of bowl rim
    - b. Handicapped 18" to top of seat
  - 2. Urinal:
    - a. Standard 22" to top of bowl rim
  - 3. Lavatories:
    - a. Handicapped 34" to top of basin rim
  - 4. Water Closet Flush Valves:
    - a. Standard 11" min. above bowl rim'
- H. Contractor shall caulk all joints at walls and floors with plumbing fixtures.
- I. Contractor shall provide approved ADA drain and water line insulation covers on all exposed services for lavatories and sinks. Truebro Lav Guard or approved equal.

3.02 FIXTURE ROUGH-IN SCHEDULE:

- A. Rough-in fixture piping and size connections shall be in accordance with the following table of minimum sizes for particular fixtures unless noted different on the drawing:

PLUMBING FIXTURE ROUGH-IN SCHEDULE

<u>DESCRIPTION</u>	<u>C.W.</u>	<u>H.W.</u>	<u>WASTE</u>	<u>VENT</u>
WATER CLOSET (TANK)	1/2"	–	4"	3"
WATER CLOSET (FLUSH VALVE)	1"	--	4"	3"
URINAL (FLUSH VALVE)	3/4"	--	2"	1-1/2"
LAVATORY	1/2"	--	2"	1-1/2"
SERVICE SINK	1/2"	1/2"	3"	2"
ELECTRIC WATER COOLER	1/2"	--	2"	1-1/2"
SINK	1/2"	1/2"	2"	1-1/2"
HOSE BIBB	3/4"	--	--	--
2" FLOOR DRAIN	--	--	2"	1-1/2"
3" FLOOR DRAIN	--	--	3"	2"
3" HUB DRAIN	--	--	3"	2"

WATER PIPE SIZING TABLE

UNLESS SHOWN OTHERWISE, DOMESTIC WATER LINES SHALL RUN CONCEALED OVERHEAD AS DESIGNATED IN PLUMBING FIXTURE SCHEDULE AND BE SIZED ACCORDING TO TABLE BELOW.

PLANS AND RISER DIAGRAMS DO NOT NECESSARILY SHOW ALL PIPING RUNS. INSTALL A FACTORY SHOCK ABSORBER AT TOP OF EACH FIXTURE GROUP AND ALSO AT WATER HEATERS.

<u>NUMBER OF FIXTURES*</u>	<u>PIPE SIZE (IPS)</u>
2 OR LESS	1/2"
3 TO 5	3/4"
6 TO 10	1"
11 TO 15	1-1/4"
16 TO 28	1-1/2"

\*FLUSH VALVE WATER CLOSET IS EQUIVALENT TO SIX (6) FIXTURES SIZES INDICATED ABOVE ARE MINIMUM SIZES TO BE USED UNLESS OTHERWISE STATED

**END OF SECTION 22 40 00**

## **SECTION 23 00 00 GENERAL MECHANICAL**

### **PART 1 - GENERAL CONDITIONS**

#### 1.01 WORK INCLUDED

- A. The general conditions of the general specifications are made a part of these specifications and apply the same as if attached hereto. The contractor should, before bidding, read and thoroughly understand all general conditions, priority and scheduling.

#### 1.02 SCOPE OF WORK

- A. This section calls for the furnishing of labor, materials, equipment, and all the services, and of performing all operations required for the complete mechanical systems as hereinafter specified and/or shown on the accompanying drawings.

#### 1.03 GENERAL REQUIREMENTS

- A. Contractor shall install his work to meet the existing conditions as found at buildings and property, and to accommodate work of other trades. This contractor shall be responsible for timely placing of sleeves in forms before concrete is poured. Cooperate with the general contractor and place pipes and ducts in floors, walls, furred spaces, etc., so there will be no delay. Sheet metal or iron pipe sleeves shall be provided for pipes passing through floors, wall or partitions.
- B. Contractor shall furnish and properly install materials, devices, equipment, insulation, controls, appurtenances, etc., mentioned in these specifications and/or shown on plans or required to make a complete and satisfactory installation in working order whether fully shown or not.
- C. Contractor should visit the site and acquaint himself thoroughly with conditions governing installation of his work.
- D. All other plans shall be checked in relation to these plans so that all conditions will be furnished and installed in this contract to provide complete and satisfactory systems.

#### 1.04 LAWS, RULES, REGULATIONS, FEES, ETC.

- A. The entire mechanical work shall comply with rules and regulations of the local and state authorities having jurisdiction including the State Fire Marshal and the State Board of Health. All modifications required by the said authorities at any time shall be made by the mechanical contractor without additional charge. In cases where alterations to or deviations from this specification and accompanying plans are required by the authorities, contractor shall report same to the Architect and obtain his approval before work is started.

#### 1.05 DRAWINGS

- A. Plans and detail sketches are submitted to limit, explain, and define structural conditions, specified requirements, pipe sizes, and manner of erecting work. Structural or other conditions may require certain deviations from manner of installation shown, and such deviations shall be made as required, but specified sizes and requirements necessary for satisfactory operation shall remain unchanged.
- B. It may be necessary to shift or to change routing of ducts and or piping and this shall be done,

but such changes must be referred to Architect for approval before proceeding. Extra charges will not be allowed for these changes.

- C. Typical details are shown on plans, and in any cases where Contractor is not certain about the method of installation of this work, he shall ask for details, lack of details will not be an excuse for improper installation.
- D. Contractor bidding on this portion of the work must be fully experienced in installations of equal size, complexity and quality. In bidding, he acknowledges that he fully understands the scope of the work and design and has the ability, for the contract price to assemble and install the equipment, piping, and ductwork shown or specified, so as to mold same into a satisfactory workable system and arrangement, without responsibility for capacities and sizes set by these documents.
- E. Contractor shall recognize that the amount of information and detail that could be provided in Contract Documents is limitless and could extend into every minute detail, step, sequence, and operation to a point where only workmen would be required, without drawing on ability experience, and ingenuity of the Contractor.

#### 1.06 MATERIALS

- A. Where directed by the Architect, Contractor shall submit sample for approval before proceeding.

#### 1.07 STANDARDS

- A. In general, standards for products and workmanship shall be as described in each individual section.
- B. The standards referred to, except as modified in these specifications shall have full force and effect as though printed in these specifications. These standards are not furnished to bidders for the reason that the manufacturers and trades involved are assumed to be familiar with their requirements. The Architect will furnish, upon request, information as to how copies of the standards referred to may be obtained.
- C. Notwithstanding any reference in this section of the specifications to any article, device, product, material, fixture, form or type of construction by name, make or catalogue number, such references shall be interpreted as establishing a standard of quality and shall not be construed limiting competition and the Contractor in such cases, may at his option, use any article, device, product, material, fixture, form or type of construction which in the judgment of the Architect, expressed in writing, is equal to that specified.

#### 1.08 MATERIALS SPECIFIED OR SUBSTITUTED (Prior Approvals)

- A. Refer to Instructions to Bidders.

#### 1.09 SHOP DRAWINGS

- A. Before proceeding with the work, contractor shall make complete shop and working drawings of such apparatus or connections as directed by the Architect and/or hereinafter specified. These drawings shall show construction details and dimensions of each piece of equipment so drawn.
- B. Architects approval of shop drawings shall not relieve the Contractor from responsibility of incorrectly figured dimensions or any other errors in these drawings or specified even though approved by the Architect, shall not relieve this Contractor from furnishing and erecting same.

- C. Ten (10) sets of prints of shop drawings shall be submitted to Architect for approval. These prints shall be supplied as part of this contract. Submit all shop drawings at the same time or as soon as practical after award of the contract. No separate items will be accepted.
- D. Where laws or local regulations provide that certain accessories such as gauges, thermometers, relief valves and parts be installed on equipment, it shall be understood that such accessories shall be furnished if no specific reference to them is made in the specifications.

#### 1.10 CUTTING AND PATCHING

- A. All cutting necessary for this work will be done by this Contractor at his own expense, but all patching shall be done by the General Contractor. No beams or joists shall be cut without prior approval of Architect. After initial resurfacing has been done any further cutting, patching or painting shall be done at the expense of this Contractor.

#### 1.11 INTERFERENCES

- A. The drawings are generally diagrammatic and this Contractor shall harmonize his work with that of the different trades so that interferences of the different equipment, piping, etc., shall be installed so as to function properly. In the case where interference develops, the Architect is to state which equipment, piping, etc., is to be relocated regardless of which item was first installed.

#### 1.12 EXCAVATION AND BACKFILL

- A. This Contractor shall do all excavating required to lay the specified services and after same have been laid, he shall do all backfilling to the satisfaction of all parties concerned and shall cart away from the premises all unnecessary dirt, rubbish, etc., as directed. Backfill shall be well tamped. All backfill shall be done according to the "Compaction And Backfill" section of these specifications.

#### 1.13 SPACE REQUIREMENTS

- A. Contractor shall check all plans pertaining to this job so as to be fully aware of the space limitations for all various items of equipment. Equipment is not to be bid on, submitted for preliminary approval nor placed on the job if it is so bulky and large that adequate access for proper maintenance and servicing cannot be achieved in the space provided.

#### 1.14 FOUNDATIONS AND SUPPORTS

- A. This contractor shall furnish and install foundations and supports of concrete or steel shapes for equipment requiring same, unless specifically indicated otherwise or specified.
- B. All floor mounted mechanical equipment shall be mounted on 4" high concrete housekeeping pad unless specifically shown otherwise on plans. Refer to plans for special requirements for foundations and supports.

#### 1.15 HANGERS, ESCUTCHEONS, ETC.

- A. See Section 230529 – Supports and Anchors.
- B. Mechanical Contractor shall furnish and install all thimbles, inserts and other requirements necessary for the support of his equipment and piping. Assist and cooperate with other trades in locating and placing these items.

1.16 CEILING AND WALL ACCESS PANEL

- A. Factory made access doors and frames, prime coat finish, screw driver latch(s) of suitable size as required.
- B. Access panels in rated ceiling to have same rating as ceiling.
- C. Where valves, dampers, controls, fire dampers, smoke dampers, and detectors, reheat coils, etc. are concealed in walls or non-accessible ceilings, install factory made access doors and frames.

1.17 DUCTWORK ACCESS PANNELS

- A. Access panels in ductwork to be double wall type with insulation sandwiched in between, same insulation value as adjacent ductwork.

1.18 SIPHON PREVENTERS

- A. Furnish and install approved type siphon preventors on all equipment and fixtures in such a manner as to prevent water being siphoned back into the water supply in the event the water supply is shut off.

1.19 FLAME SPREAD PROPERTIES OF MATERIALS

- A. All materials and adhesives used for acoustical linings, jackets and insulation shall comply with requirements of NFPA 90A and 90B and UL guide # 40V.8.15. Products exceeding a flame spread rating of 25, or a smoke developed rating of 50, as determined by ASTM Test Method E-84 are prohibited. Adhesives and sealers shall be fire retardant and fire resistant when dry. Flame proofing treatments which are subject to decomposition, deterioration, or the effects of moisture are prohibited.

1.20 DOMESTIC AND FIRE WATER TIE-IN

- A. Contractor shall provide any necessary meters and tap fees for domestic or fire water tie-ins to utility companies. All domestic and fire water taps shall have aboveground reduced pressure back flow preventors near the tie-in point. Coordinate with Engineer exact location.
- B. All backflow preventors shall be heat traced and insulated with 1-1/2" fiberglass insulation with water tight aluminum jacket.

1.21 PROTECTION OF EQUIPMENT

- A. See individual sections for protection of equipment.
- B. This Contractor shall at all times take such precautions as may be necessary to properly protect his equipment from damage. Failure on the part of the Contractor to comply with the above to the entire satisfaction of the Architect will be sufficient cause for the rejection of the particular piece of equipment in question.

1.22 TESTING

- A. All pressure lines, unless elsewhere specified, shall be tested under 150# hydrostatic pressure unless rated pressure is less for a minimum of 5 hours. Contractor shall provide valve at farthest point in line to bleed off air and for inspection.

- B. Notice shall be given the Architect before tests are made, the test is not to be drawn off pipes and pipes are not to be covered or insulated until filled pipes have been examined and testing approved by the Architect.
- C. In case of defects, they shall be made good to the satisfaction of the Architect and work retested. All such work shall be done by the Contractor with no additional expense to the Owner.
- D. Contractor shall make any other such tests as may be called for by the Architect, and all other tests so called for elsewhere in these specifications.

#### 1.23 CLEANING AND ADJUSTING

- A. Before receiving final approval from the Architect, the Contractor shall clean out all lines; adjust all valves, control equipment and other equipment. Clean all pipe and equipment and leave the entire installation in good working order. All heaters, fans, grilles, controls, etc., shall be adjusted to perform in correct and satisfactory manner, with sequences, etc., as called for in the specifications hereinafter specified and on plans.

#### 1.24 PAINTING

- A. Refer to Section 099000 – Painting and Coating and 230553 – Mechanical Identification for painting requirements.

#### 1.25 MOTORS, MOTOR STARTERS AND ELECTRICAL WORK

- A. Refer to Section 230513 - Motors.
- B. Motors shall be suitable for voltage indicated on the plans, plus or minus 10% and be designed for constant operation at 40 degrees C ambient, 65 degrees C rise for class A, 90 degrees C rise for Class B, etc. Electrical equipment furnished under this contract shall meet standards as set forth by NEMA and NEC requirements. All electrical equipment shall be UL labeled.

#### 1.26 PARTS LIST AND INSTRUCTION MANUAL

- A. See individual sections for specific instructions.
- B. This Contractor shall deliver to the Architect three (3) copies of printed instructions relating to operating, proper maintenance and repair parts list indicating the various parts by name, number and diagram for each piece of equipment installed. Test and balance report shall also be included in parts list and instruction manual.
- C. The shop drawings, parts list, and maintenance and repair instructions shall be neatly bound in a canvas-covered notebook and turned over to the Architect before acceptance of the work.

#### 1.27 GUARANTEE

- A. Contractor shall guarantee materials, equipment and workmanship installed and performed under this contract for a period of one (1) year from date of the final completion and official acceptance of the contract.
- B. He shall furnish free of charge to the Owner all materials and labor necessary to comply with the above guarantee, which shall be based on defective materials and/or workmanship, and on such basis shall be responsible if a deficiency is found, for any adjustment, replacement, or correction which may be necessary to replace the project to first class condition. This guarantee shall

include refrigerant charges, but shall not include the changing of filters.

1.28 RECORD DRAWINGS

- A. The Contractor shall maintain a set of record drawings on-site throughout the construction. The record drawings shall reflect accurate dimensional record of all underground, buried, above ceiling, or otherwise concealed work.
- B. The Contractor shall maintain these record documents and keep them up-to-date daily.

**END OF SECTION 23 00 00**

**SECTION 23 05 00**  
**BASIC MECHANICAL MATERIALS AND METHODS**

**PART 1 - GENERAL**

1.01 SUMMARY

- A. This Section includes the following:
  - 1. Piping materials and installation instructions common to most piping systems.
  - 2. Dielectric fittings.
  - 3. Mechanical sleeve seals.
  - 4. Sleeves.
  - 5. Escutcheons.
  - 6. Grout.
  - 7. Mechanical demolition.
  - 8. Equipment installation requirements common to equipment sections.
  - 9. Concrete bases.
  - 10. Supports and anchorages.

1.02 DEFINITIONS

- A. Finished Spaces: Spaces other than mechanical and electrical equipment rooms, furred spaces, pipe and duct shafts, unheated spaces immediately below roof, spaces above ceilings, unexcavated spaces, crawlspaces, and tunnels.
- B. Exposed, Interior Installations: Exposed to view indoors. Examples include finished occupied spaces and mechanical equipment rooms.
- C. Exposed, Exterior Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions. Examples include rooftop locations.
- D. Concealed, Interior Installations: Concealed from view and protected from physical contact by building occupants. Examples include above ceilings and in duct shafts.
- E. Concealed, Exterior Installations: Concealed from view and protected from weather conditions and physical contact by building occupants but subject to outdoor ambient temperatures. Examples include installations within unheated shelters.

1.03 SUBMITTALS

- A. Welding certificates.

1.04 QUALITY ASSURANCE

- A. Steel Support Welding: Qualify processes and operators according to AWS D1.1, "Structural Welding Code--Steel."
- B. Steel Pipe Welding: Qualify processes and operators according to ASME Boiler and Pressure Vessel Code: Section IX, "Welding and Brazing Qualifications."
  - 1. Comply with provisions in ASME B31 Series, "Code for Pressure Piping."
  - 2. Certify that each welder has passed AWS qualification tests for welding processes involved and that certification is current.
- C. Electrical Characteristics for Mechanical Equipment: Equipment of higher electrical charac-

teristics may be furnished provided such proposed equipment is approved in writing and connecting electrical services, circuit breakers, and conduit sizes are appropriately modified. If minimum energy ratings or efficiencies are specified, equipment shall comply with requirements.

## **PART 2 - PRODUCTS**

### 2.01 PIPE, TUBE, AND FITTINGS

- A. Refer to individual Division 23 piping Sections for pipe, tube, and fitting materials and joining methods.
- B. Pipe Threads: ASME B1.20.1 for factory-threaded pipe and pipe fittings.

### 2.02 JOINING MATERIALS

- A. Refer to individual Division 23 piping Sections for special joining materials not listed below.
- B. Pipe-Flange Gasket Materials: ASME B16.21, nonmetallic, flat, asbestos-free, 1/8-inch (3.2-mm) maximum thickness unless thickness or specific material is indicated.
- C. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer, unless otherwise indicated.
- D. Solder Filler Metals: ASTM B 32, lead-free alloys. Include water-flushable flux according to ASTM B 813.
- E. Brazing Filler Metals: AWS A5.8, BCuP Series or BAg1, unless otherwise indicated.
- F. Welding Filler Metals: Comply with AWS D10.12.
- G. Solvent Cements for Joining Plastic Piping:
  - 1. ABS Piping: ASTM D 2235.
  - 2. CPVC Piping: ASTM F 493.
  - 3. PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.
  - 4. PVC to ABS Piping Transition: ASTM D 3138.

### 2.03 DIELECTRIC FITTINGS

- A. Description: Combination fitting of copper alloy and ferrous materials with threaded, solder-joint, plain, or weld-neck end connections that match piping system materials.
- B. Insulating Material: Suitable for system fluid, pressure, and temperature.
- C. Dielectric Unions: Factory-fabricated, union assembly, for 250-psig (1725-kPa) minimum working pressure at 180 deg F (82 deg C).
- D. Dielectric Flanges: Factory-fabricated, companion-flange assembly, for 150- or 300-psig (1035- or 2070-kPa) minimum working pressure as required to suit system pressures.
- E. Dielectric Couplings: Galvanized-steel coupling with inert and noncorrosive, thermoplastic lining; threaded ends; and 300-psig (2070-kPa) minimum working pressure at 225 deg F (107 deg C).

- F. Dielectric Nipples: Electroplated steel nipple with inert and noncorrosive, thermoplastic lining; plain, threaded, or grooved ends; and 300-psig (2070-kPa) minimum working pressure at 225 deg F (107 deg C).

#### 2.04 MECHANICAL SLEEVE SEALS

- A. Description: Modular sealing element unit, designed for field assembly, to fill annular space between pipe and sleeve.
- B. Sealing Elements: NBR interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
- C. Pressure Plates: Carbon steel. Include two for each sealing element.
- D. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements. Include one for each sealing element.

#### 2.05 SLEEVES

- A. Galvanized-Steel Sheet: 0.0239-inch (0.6-mm) minimum thickness; round tube closed with welded longitudinal joint.
- B. Steel Pipe: ASTM A 53, Type E, Grade B, Schedule 40, galvanized, plain ends.
- C. Cast Iron: Cast or fabricated "wall pipe" equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.
- D. Stack Sleeve Fittings: Manufactured, cast-iron sleeve with integral clamping flange. Include clamping ring and bolts and nuts for membrane flashing.
  - 1. Underdeck Clamp: Clamping ring with set screws.
- E. Molded PVC: Permanent, with nailing flange for attaching to wooden forms.
- F. PVC Pipe: ASTM D 1785, Schedule 40.
- G. Molded PE: Reusable, PE, tapered-cup shaped, and smooth-outer surface with nailing flange for attaching to wooden forms.

#### 2.06 ESCUTCHEONS

- A. Description: Manufactured wall and ceiling escutcheons and floor plates, with an ID to closely fit around pipe, tube, and insulation of insulated piping and an OD that completely covers opening.
- B. One-Piece, Deep-Pattern Type: Deep-drawn, box-shaped brass with polished chrome-plated finish.
- C. One-Piece, Cast-Brass Type: With set screw.
  - 1. Finish: Polished chrome-plated and rough brass.
- D. Split-Casting, Cast-Brass Type: With concealed hinge and set screw.
  - 1. Finish: Polished chrome-plated and rough brass.

#### 2.07 GROUT

- A. Description: ASTM C 1107, Grade B, non-shrink and nonmetallic, dry hydraulic-cement grout.
1. Characteristics: Post-hardening, volume-adjusting, non-staining, noncorrosive, nongaseous, and recommended for interior and exterior applications.
  2. Design Mix: 5000-psi (34.5-MPa), 28-day compressive strength.
  3. Packaging: Premixed and factory packaged.

### **PART 3 - EXECUTION**

#### **3.01 MECHANICAL DEMOLITION**

- A. Refer to Division 1 Sections "Cutting and Patching" and "Selective Demolition" for general demolition requirements and procedures.
- B. Disconnect, demolish, and remove mechanical systems, equipment, and components indicated to be removed.
1. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
  2. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
  3. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
  4. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material.
  5. Equipment to Be Removed: Disconnect and cap services and remove equipment.
  6. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
  7. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
- C. If pipe, insulation, or equipment to remain is damaged in appearance or is unserviceable, remove damaged or unserviceable portions and replace with new products of equal capacity and quality.

#### **3.02 PIPING SYSTEMS - COMMON REQUIREMENTS**

- A. Install piping according to the following requirements and Division 23 Sections specifying piping systems.
- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on Coordination Drawings.
- C. Install piping in concealed locations, unless otherwise indicated and except in equipment rooms and service areas.
- D. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.
- E. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.

- F. Install piping to permit valve servicing.
- G. Install piping at indicated slopes.
- H. Install piping free of sags and bends.
- I. Install fittings for changes in direction and branch connections.
- J. Install piping to allow application of insulation.
- K. Select system components with pressure rating equal to or greater than system operating pressure.
- L. Install escutcheons for penetrations of walls, ceilings, and floors.
- M. Install sleeves for pipes passing through concrete and masonry walls, gypsum-board partitions, and concrete floor and roof slabs.
- N. Aboveground, Exterior-Wall Pipe Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.
  - 1. Install steel pipe for sleeves smaller than 6 inches (150 mm) in diameter.
  - 2. Install cast-iron "wall pipes" for sleeves 6 inches (150 mm) and larger in diameter.
  - 3. Mechanical Sleeve Seal Installation: Select type and number of sealing elements required for pipe material and size. Position pipe in center of sleeve. Assemble mechanical sleeve seals and install in annular space between pipe and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.
- O. Underground, Exterior-Wall Pipe Penetrations: Install cast-iron "wall pipes" for sleeves. Seal pipe penetrations using mechanical sleeve seals. Select sleeve size to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.
  - 1. Mechanical Sleeve Seal Installation: Select type and number of sealing elements required for pipe material and size. Position pipe in center of sleeve. Assemble mechanical sleeve seals and install in annular space between pipe and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.
- P. Fire-Barrier Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at pipe penetrations. Seal pipe penetrations with firestop materials. Refer to Division 7 Section "Through-Penetration Firestop Systems" for materials.
- Q. Verify final equipment locations for roughing-in.
- R. Refer to equipment specifications in other Sections of these Specifications for roughing-in requirements.

### 3.03 PIPING JOINT CONSTRUCTION

- A. Join pipe and fittings according to the following requirements and Division 15 Sections specifying piping systems.
- B. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.

- C. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- D. Soldered Joints: Apply ASTM B 813, water-flushable flux, unless otherwise indicated, to tube end. Construct joints according to ASTM B 828 or CDA's "Copper Tube Handbook," using lead-free solder alloy complying with ASTM B 32.
- E. Brazed Joints: Construct joints according to AWS's "Brazing Handbook," "Pipe and Tube" Chapter, using copper-phosphorus brazing filler metal complying with AWS A5.8.
- F. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
  - 1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
  - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- G. Welded Joints: Construct joints according to AWS D10.12, using qualified processes and welding operators according to Part 1 "Quality Assurance" Article.
- H. Flanged Joints: Select appropriate gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
- I. Plastic Piping Solvent-Cement Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
  - 1. Comply with ASTM F 402, for safe-handling practice of cleaners, primers, and solvent cements.
  - 2. ABS Piping: Join according to ASTM D 2235 and ASTM D 2661 Appendixes.
  - 3. CPVC Piping: Join according to ASTM D 2846/D 2846M Appendix.
  - 4. PVC Pressure Piping: Join schedule number ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
  - 5. PVC Non-pressure Piping: Join according to ASTM D 2855.
  - 6. PVC to ABS Non-pressure Transition Fittings: Join according to ASTM D 3138 Appendix.
- J. Plastic Pressure Piping Gasketed Joints: Join according to ASTM D 3139.
- K. Plastic Non-pressure Piping Gasketed Joints: Join according to ASTM D 3212.
- L. PE Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.
  - 1. Plain-End Pipe and Fittings: Use butt fusion.
  - 2. Plain-End Pipe and Socket Fittings: Use socket fusion.
- M. Fiberglass Bonded Joints: Prepare pipe ends and fittings, apply adhesive, and join according to pipe manufacturer's written instructions.

### 3.04 PIPING CONNECTIONS

- A. Make connections according to the following, unless otherwise indicated:
  - 1. Install unions, in piping NPS 2 (DN 50) and smaller, adjacent to each valve and at final connection to each piece of equipment.

2. Install flanges, in piping NPS 2-1/2 (DN 65) and larger, adjacent to flanged valves and at final connection to each piece of equipment.
3. Dry Piping Systems: Install dielectric unions and flanges to connect piping materials of dissimilar metals.
4. Wet Piping Systems: Install dielectric coupling and nipple fittings to connect piping materials of dissimilar metals.

### 3.05 EQUIPMENT INSTALLATION - COMMON REQUIREMENTS

- A. Install equipment to allow maximum possible headroom unless specific mounting heights are not indicated.
- B. Install equipment level and plumb, parallel and perpendicular to other building systems and components in exposed interior spaces, unless otherwise indicated.
- C. Install mechanical equipment to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference to other installations. Extend grease fittings to accessible locations.
- D. Install equipment to allow right of way for piping installed at required slope.

### 3.06 CONCRETE BASES

- A. Concrete Bases: Anchor equipment to concrete base according to equipment manufacturer's written instructions and according to seismic codes at Project.
  1. Construct concrete bases of dimensions indicated, but not less than 4 inches (100 mm) larger in both directions than supported unit.
  2. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch (450-mm) centers around the full perimeter of the base.
  3. Install epoxy-coated anchor bolts for supported equipment that extend through concrete base, and anchor into structural concrete floor.
  4. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  5. Install anchor bolts to elevations required for proper attachment to supported equipment.
  6. Install anchor bolts according to anchor-bolt manufacturer's written instructions.
  7. Use 3000-psi (20.7-MPa), 28-day compressive-strength concrete and reinforcement.

### 3.07 ERECTION OF METAL SUPPORTS AND ANCHORAGES

- A. Refer to Division 5 Section "Metal Fabrications" for structural steel.
- B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor mechanical materials and equipment.
- C. Field Welding: Comply with AWS D1.1.

### 3.08 ERECTION OF WOOD SUPPORTS AND ANCHORAGES

- A. Cut, fit, and place wood grounds, nailers, blocking, and anchorages to support, and anchor mechanical materials and equipment.

- B. Select fastener sizes that will not penetrate members if opposite side will be exposed to view or will receive finish materials. Tighten connections between members. Install fasteners without splitting wood members.
- C. Attach to substrates as required to support applied loads.

### 3.09 GROUTING

- A. Mix and install grout for mechanical equipment base bearing surfaces, pump and other equipment base plates, and anchors.
- B. Clean surfaces that will come into contact with grout.
- C. Provide forms as required for placement of grout.
- D. Avoid air entrapment during placement of grout.
- E. Place grout, completely filling equipment bases.
- F. Place grout on concrete bases and provide smooth bearing surface for equipment.
- G. Place grout around anchors.
- H. Cure placed grout.

**END OF SECTION 23 05 00**

**SECTION 230553  
MECHANICAL IDENTIFICATION**

**PART 1 - GENERAL**

1.01 WORK INCLUDED

A. Identification of all mechanical products installed under this Division.

1.02 RELATED WORK

A. Section 099000 - Painting: Identification painting.

1.03 REFERENCES

A. ANSI/ASME A13.1 - Scheme for the Identification of Piping Systems.

1.04 SUBMITTALS

A. Submit product data under provisions of Section 013000 – Administrative Requirements.

B. Mechanical and plumbing contractors shall coordinate color codes and marking procedures.

1.05 APPROVAL OF PRODUCT PRIOR TO BIDDING

A. Refer to Instructions to Bidders, Page IB-3, Paragraph 4.3 Substitution.

**PART 2 - PRODUCTS**

2.01 MATERIALS

A. Color: Unless specified otherwise, conform with ANSI/ASME A13.1.

B. Plastic Nameplates: Laminated three-layer plastic with engraved black letters on light contrasting background color.

C. Metal Tags: Brass with stamped letters, tag size minimum 1-1/2 inch (38 mm) diameter with smooth edges.

D. Stencils: With clean cut symbols and letters of following size:

OUTSIDE DIAMETER OF INSULATION OF PIPE	LENGTH OF COLOR FIELD	SIZE OF LETTERS
3/4" - 1-1/4"	8"	1/2"S
1-1/2" - 2"	8"	3/4"
2-1/2" - 6"	12"	1-1/4"
8" - 10"	24"	2 - 1/2"
Over 10"	32"	3 - 1/2"
Ductwork & Equipment	-----	2 - 1/2"

E. Plastic Tape Pipe Markers: Flexible, vinyl film tape with pressure sensitive adhesive backing

printed markings.

- F. Underground Plastic Pipe Markers: Bright colored continuously printed plastic ribbon tape of not less than 6" wide by 4 mil thick manufactured for direct burial service.

**PART 3 – EXECUTION**

3.01 PREPARATION AND INSTALLATION:

- A. Degrease and clean surfaces to receive adhesive for identification material.

3.02 INSTALLATION

- A. Plastic Nameplates: Install with corrosive-resistant mechanical fasteners, or adhesive.
- B. Plastic Pipe Markers: Install in accordance with manufacturer's instructions.
- C. Plastic type Pipe Markers: Install complete around pipe in accordance with manufacturer's instructions.
- D. Underground Plastic Pipe Markers: Install 6 to 8 inches (150 to 200 mm) below finished grade, directly above buried pipe.
- E. Equipment: Identify air handling units, pumps, heat transfer equipment, tanks and water treatment devices, and motor starters with plastic nameplates. Small devices, such as in-line pumps, may identified with plastic tags.
- F. Controls: Identify control panels and major control components outside panels with plastic nameplates.
- G. Valves: Identify valves in main and branch piping with tags.
- H. Piping: Identify piping, concealed or exposed, with plastic pipe markers. Tags may be used on small diameter piping. Identify service and flow direction. Install in clear view and align with axis of piping. Locate identification not to exceed 20 feet on straight runs including risers and drops, adjacent to each valve and "T", at each side penetration of structure or enclosure, and at each obstruction.

3.03 PAINTING

- A. All surfaces requiring painting shall be left clean by the Mechanical Subcontractor. All painting shall be done by the General Contractor's painting Subcontractor. All exposed piping or insulation, convectors, grilles, or fans, in building or on roof will be painted. Paint pipe, equipment, hangers and accessories in Equipment Rooms including covering and foundations with two (2) coats of approved paint after thoroughly cleaning. Equipment having factory finish shall be touched up and given one (1) additional coat of machinery enamel color as selected. The above shall be done by the General Contractor. See Section 099000.
- B. All piping in all equipment rooms shall be identified with pipe markers with directional arrows. The following color code shall be followed.

LEGEND	PIPING	DIRECTIONAL MARKER	BAND COLOR BACKGROUND
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Domestic Water

Green

Green

White

NOTE: On any asphalt finished surfaces, prime with one (1) coat of aluminum paint before final color.

**END OF SECTION 23 05 53**

**SECTION 23 05 93  
TESTING, ADJUSTING, AND BALANCING**

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

- A. All division 23 specification sections, drawings, and general provisions of the contract apply to work of this section, as do other documents referred to in this section.

1.02 SCOPE OF WORK

- A. The Contractor shall obtain the services of an independent Test and Balance (TAB) Company which specializes in the testing and balancing of heating, ventilating and air conditioning (HVAC) systems to test, adjust and balance all HVAC systems in the building(s).
- B. The work included in this section consists of furnishing labor, instruments, and tools required in testing, adjusting and balancing the HVAC systems as described in these specifications or shown on accompanying drawings. Services shall include checking equipment performance, taking the specified measurements, and recording and reporting the results. The testing, adjusting and balancing agency shall act as a reporting agency; that is, list and report each piece of equipment as to identification number, manufacturer, model number, serial number, proper location, specified performance, and report actual performance of all equipment as found during testing. The report is intended to be used during the life of the building as a ready reference indicating original conditions, equipment components, etc.
- C. Representatives of the Test and Balance Company shall visit the job site during installation of the HVAC equipment, piping and ductwork as required.
- D. Upon completion of the HVAC system installation, the Test and Balance Company shall perform all required testing and balancing with the full cooperation of the Contractor and his Sub-contractors. The Contractor shall make changes and/or adjustments to the HVAC system components that are required by the Test and Balance Company to accomplish proper balancing. The TAB agency shall not supply or install any materials or balancing devices such as pulleys, drives, belts, etc. All of this work is by the Contractor and shall be performed at no additional cost to the Owner.
- E. The test and balance report complete with a summary page listing all deficiencies shall be submitted to the Architect for review by his Mechanical Engineer. If the Mechanical Engineer agrees with the report, he shall sign it and return it to the Architect. The test and balance report must be complete and must be accepted by the Mechanical Engineer prior to acceptance of the project. Any outstanding test and balance items shall be placed on the punch list and a monetary value shall be assigned to them.
- F. After all deficiencies have been corrected the Mechanical Engineer shall sign the testing and balancing report, and the Test and Balance Company shall supply four (4) copies of the final and complete report to the Architect for inclusion in the Operation and Maintenance Manuals.
- G. The items requiring testing, adjusting, and balancing include (but are not restricted to) the following:

**AIR SYSTEMS**

Supply Fans  
Zone, Branch, & Main Ducts

Diffusers, registers, & grilles  
Coils

### 1.03 DEFINITIONS, REFERENCES, STANDARDS

- A. All work shall be in accordance with the latest edition of the Associated Air Balance Council (AABC) National Standards or the latest standards of the National Environmental Balancing Bureau (NEBB). If these contract documents set forth more stringent requirements than the AABC National Standards or the NEBB Standards, these contract documents shall prevail.

### 1.04 QUALIFICATIONS

- A. Agency Qualifications: The TAB Agency shall be a current member of the AABC or the NEBB and must be in good standing with FP&C. A list of these firms shall be obtained from FP&C. Falsification of a TAB report shall be grounds for removal from the FP&C list and the firm's actions shall be reported to the appropriate certification agency. The contractor may use any FP&C approved TAB firm on a state project.

### 1.05 SUBMITTALS

- A. Procedures and Agenda: The TAB agency shall submit the TAB procedures and agenda proposed to be used.
- B. Sample Forms: The TAB agency shall submit sample forms, which shall include the minimum data required by the AABC National Standards or the NEBB Standards.

### 1.06 TAB PREPARATION AND COORDINATION

- A. Shop drawings, submittal data, up-to-date revisions, change orders, fan curves, pump curves and other data required for planning, preparation, and execution of the TAB work shall be provided when available and no later than 30 days after the Designer has returned the final approved submittal data to the Contractor.
- B. System installation and equipment startup shall be complete prior to the TAB agency's being notified to begin.
- C. The building control system (BCS) contractor shall provide and install the control system, including all temperature, pressure and humidity sensors. These shall be calibrated for accurate control. If applicable, the BCS contractor shall install all necessary computers and computer programs, and make these operational. Assistance shall be provided as required for reprogramming, coordination, and problem resolution.
- D. All test points, balancing devices, identification tags, etc., shall be accessible and clear of insulation and other obstructions that would impede TAB procedures.
- E. Qualified installation or startup personnel shall be readily available for the operation and adjustment of the systems. Assistance shall be provided as required for coordination and problem resolution.

### 1.07 REPORTS

- A. Final TAB Report - The TAB agency shall submit the final TAB report for review by the Architect. On plans provided, all outlets, devices, HVAC equipment, etc., shall be identified (including manufacturer, model number, serial number, motor manufacturer, HP, drive type, fan and motor sheaves and belt number), along with a numbering system corresponding to report unit

identification. The TAB agency shall submit an AABC "National Project Performance Guaranty" (or similar NEBB Guaranty) assuring that the project systems were tested, adjusted and balanced in accordance with the project specifications and AABC National Standards (or similar NEBB Standards). The Designer shall certify his approval on the Performance Guaranty.

- B. Submit 4 copies of the Final TAB Report to the Architect for inclusion in the Operation and Maintenance Manuals.

## **PART 2 - INSTRUMENTATION**

- A. All instruments used for measurements shall be accurate and calibrated. Calibration and maintenance of all instruments shall be in accordance with the requirements of AABC National Standards (or similar NEBB Standards).

## **PART 3 - EXECUTION**

### 3.01 GENERAL

- A. The specified systems shall be reviewed and inspected for conformance to design documents. Testing, adjusting and balancing on each identified system shall be performed. The accuracy of measurements shall be in accordance with AABC National Standards (or similar NEBB Standards). Adjustment tolerances shall be + or - 10% unless otherwise stated.
- B. Equipment settings, including manual damper quadrant positions, valve indicators, fan speed control levers, and similar controls and devices shall be marked to show final settings.
- C. All information necessary to complete a proper TAB project and report shall be per AABC or NEBB standards unless otherwise noted. The descriptions of work required, as listed in this section, are a guide to the minimum information needed.
- D. TAB contractor shall cut insulation, ductwork and piping for installation of test probes to the minimum extent necessary to allow adequate performance of procedures. Upon completion, patch insulation, ductwork and housings using materials identical to those removed. Seal insulation to reestablish integrity of the vapor barrier.
- E. TAB work shall include additional inspection and adjustment of components during the season following the initial balance to include re-balance of any items influenced by seasonal changes or as directed by the Owner.

### 3.02 AIR SYSTEMS

- A. The TAB agency shall verify that all ductwork, splitters, extractors, dampers, grilles, registers, and diffusers have been installed per design, are functional and set full open. Any leakage in the ductwork shall be repaired prior to the test. The TAB agency shall perform the following TAB procedures in accordance with the AABC National Standards or NEBB Standards:

For supply fans:

1. Fan speeds - Test and adjust fan RPM to achieve design CFM requirements.
2. Current and Voltage - Test and record motor voltage and amperage, and compare data with the nameplate limits to ensure fan motor is not in or above the service factor.
3. Pitot-Tube Traverse - Perform a Pitot-tube traverse of main supply and return ducts, as applicable to obtain total CFM. If a Pitot-tube traverse is not practical, an explanation of why a traverse was not made must appear on the appropriate data sheet.

4. Outside Air - Test and adjust the outside air on applicable equipment using a Pitot-tube traverse. If a traverse is not practical, an explanation of why a traverse was not made must appear on the appropriate data sheet. If a traverse is not practical use the mixed-air temperature method if the inside and outside temperature difference is at least 20 degrees Fahrenheit or use the difference between Pitot-tube traverses of the supply and return air ducts.
5. Static Pressure - Test and record system static pressure, including the static pressure profile of each supply fan.

For exhaust fans:

1. Fan speeds - test and adjust fan RPM to achieve design CFM requirements.
2. Current and Voltage - Test and record motor voltage and amperage, and compare data with the nameplate limits to ensure motor is not in or above the service factor.
3. Pitot-Tube Traverse - Perform a Pitot-tube traverse of main exhaust ducts to obtain total CFM. If a Pitot-tube traverse is not practical, an explanation of why a traverse was not made must appear on the appropriate data sheet.
4. Static Pressure - Test and record system static pressure, including the static pressure profile of each exhaust fan.

For zone, branch and main ducts:

1. Adjust ducts to within design CFM requirements. As applicable, at least one zone balancing damper shall be completely open. Multi-diffuser branch ducts shall have at least one outlet or inlet volume damper completely open.

For diffusers, registers and grilles:

1. Tolerances - Test, adjust, and balance each diffuser, grille, and register to within 10% of design requirements. Minimize drafts. Include required CFM, initial test CFM and final CFM.
2. Identification - Identify the type, location, and size of each grille, diffuser, and register. This information shall be recorded on air outlet data sheets.

For coils:

1. Air Temperature - Once air flows are set to acceptable limits, take wet bulb and dry bulb air temperatures on the entering and leaving side of each cooling coil. Dry-bulb temperature shall be taken on the entering and leaving side of each heating coil.

### 3.03 ADDITIONAL TAB SERVICES

- A. Job Site Inspections: During construction, the TAB agency shall inspect the installation of pipe systems, sheet metal work, temperature controls, and other component parts of the HVAC systems as required.
- B. Verification of HVAC Controls: The TAB agency shall be assisted by the building control systems Contractor in verifying the operation and calibration of all HVAC and temperature control systems. The following tests shall be conducted:
  1. Verify that all control components are installed in accordance with project requirements and are functional, including all electrical interlocks, damper sequences, air and water resets, fire and freeze stats, and other safety devices.
  2. Verify that all controlling instruments are calibrated and set for design operating conditions.
- C. Temperature Testing: To verify system control and operation, a series of three temperature tests shall be taken at approximately two hour intervals in each separately controlled zone. The resulting temperatures shall not vary more than two degrees Fahrenheit from the thermostat or control set point during the tests. Outside temperature and humidity shall also be recorded during the testing periods.

- D. TAB Report Verification: At the time of final inspection, the TAB agency may be required to recheck, in the presence of the owner's representative, specific and random selections of data, air quantities, and air motion recorded in the certified report. Points and areas for recheck shall be selected by the owner's representative. Measurements and test procedures shall be the same as approved for the initial work for the certified report. Selections for recheck, specific plus random, will not exceed 10% of the total number tabulated in the report.

**END OF SECTION 23 05 93**

## **SECTION 23 07 00 PIPING AND EQUIPMENT INSULATION**

### **PART 1 - GENERAL**

- 1.01 WORK INCLUDED
  - A. Piping Insulation
  - B. Jackets and Accessories
  - C. Equipment Insulation
  - D. Duct Insulation
- 1.02 RELATED WORK
  - A. Section 233100 - Ductwork
- 1.03 REFERENCES
  - A. ANSI/ASTM C547 - Mineral Fiber Preformed Pipe Insulation
  - B. ANSI/ASTM C552 - Cellular Glass Block and Pipe Thermal Insulation.
  - C. ASTM B209 - Aluminum and Aluminum Alloy Sheet and Plate
  - D. ASTM E845 - Surface Burning Characteristics of Building Materials.
  - E. NFPA 255 - Surface Burning Characteristics of Building Materials.
  - F. UL 723 - Surface Burning Characteristics of Building Materials.
- 1.04 QUALITY ASSURANCE
  - A. Applicator: Company specializing in application of piping insulation.
  - B. Materials: Flame spread/fuel contributed/smoke developed rating of 25/50/50 in accordance with ASTM E84, NFPA 255.0, UL 723.
- 1.05 SUBMITTALS
  - A. Submit product data for each application as per Section 01 30 00– Administrative Requirements.
  - B. Submit manufacturer's installation instructions.

### **PART 2 - PRODUCTS**

- 2.01 INSULATION
  - A. After all work has been tested and found to be leak free and tight, and accepted by the Architect, insulate as follows:
    - 1. All domestic hot and cold piping above ground shall be covered with 1" thick fiberglass, molded type sectional pipe covering complete with FRJ jacket. Sections of

pipe covering shall be joined together, the mastic to be buttered on only one of the two adjoining surfaces at both the Longitudinal and circumferential joints so that a complete seal at the joints is obtained. The piping insulation will be secured in place with copper wire spaced not more than 12 on center. All domestic water piping insulation shall be continuous. Contractor shall not cut insulation to fit around structural items. No exceptions.

2. Insulate the square to round connections on each air handling unit with 3" thick 3/4 lb. density insulation board using stick pins randomly spaced 18" apart. Insulation board shall have aluminum vapor barrier.
3. Fittings, flanges, valves, etc., shall be covered with molded or fabricate covers of same material as pipe covering and shall be finished with two (2) coats of white vapor barrier mastic reinforced with 20-20 mesh glass fabric.
4. Insulate all rectangular supply, return, exhaust, and fresh air ducts with 3" thick 3/4 lb. density fiberglass insulation with reinforced aluminum vapor barrier. Seal all joints with duct tape.
5. All round and flat oval supply air ducts shall be wrapped with 3" thick, 3/4 lb. density fiberglass insulation with reinforced aluminum vapor barrier. Seal all joints with 2" duct tape.
6. Insulate cooling coil condensate drain lines from air handling units with 1/2" thick aerotube type insulation tied on and sealed over with tape.
7. Insulate back of all ceiling diffusers with 3" thick fiberglass with reinforced aluminum vapor barrier.
8. Insulate all horizontal roof drains with 2" thick 3/4 lb. density fiberglass insulation with reinforced aluminum vapor barrier. Seal all joints with duct tape.
9. All outdoor mechanical piping shall be covered with aluminum jacket, water tight.

### **PART 3 - EXECUTION**

#### **3.01 PREPARATION**

- A. Install materials in accordance with manufacturer's instructions.

#### **3.02 INSTALLATION**

- A. Install materials in accordance with manufacturer's instructions.
- B. Continue insulation with vapor barrier through penetrations.
- C. On insulated piping with vapor barrier, insulate fittings, valves, unions, flanges, strainers, flexible connections, and expansion joints.
- D. Neatly finish insulation at supports, protrusions, and interruptions.

**END OF SECTION 23 07 00**

## **SECTION 23 31 00 DUCTWORK**

### **PART 1 - GENERAL**

#### 1.01 WORK INCLUDED

- A. Low pressure duct.
- B. Medium and high pressure duct.
- C. Fire and Smoke Dampers

#### 1.02 RELATED WORK

- A. Section 230523 - Supports and Anchors
- B. Section 230700 - Piping and Equipment Insulation
- C. Section 233600 - Air Terminal Units
- D. Section 233700 - Air Inlets and Outlets
- E. Section 230593 - Testing and Balance

#### 1.03 REFERENCES

- A. ASHRAE, 2009 Fundamentals, Chapter 21.
- B. ASHRAE, 2008 Equipment, Chapter 18.
- C. NFPA 90A, 90B.
- D. H.V.A.C. Duct Construction Standards - SMACNA 1995.

#### 1.04 DEFINITIONS

- A. Duct sizes: Inside clear dimensions for wrapped ducts, maintain sizes inside lining. Metal to metal sizes for internally lined ductwork.
- B. Low Pressure: Three pressure classifications: 1/2" WG positive or negative static pressure and velocities less than 2,000 fpm, 1" WG positive or negative static pressure and velocities less than 2,500 fpm and 2" WG positive or
- C. Medium Pressure: Three pressure classifications: 3 inch WG positive or negative static pressure and velocities less than 4,000 fpm, 4" WG positive static pressure and velocities greater than 2,000 fpm. 6" WG positive static pressure and velocities greater than 2,000 fpm.

#### 1.05 REGULATORY REQUIREMENTS

- A. Construct ductwork to NFPA 90A and NFPA 90B Standards.
- B. Store and protect products under provisions of Section 01 60 00.

- C. Construct ductwork to International Mechanical Code Standards

## **PART 2 - PRODUCTS**

### 2.01 LOW PRESSURE DUCTWORK

- A. Furnish and install all ducts for the air conditioning, heating and ventilating systems. Ductwork shall be complete with grilles, vanes splitters, flashings, hangers, flexible connections, manual dampers, fresh air inlet louvers, reinforcing angles, transitions to equipment, etc.
- B. All low pressure ductwork (mean velocity less than 2,000 FPM and static pressure in duct 2" of water or less) shall be constructed as per SMACNA Standards, 1995 Edition, Chapter 1, and shall be of the gauge metal and reinforced as per SMACNA Standards, 1995 Edition.
- C. Flashing shall be of the same material as specified under the roofing and flashing section of these specifications, or of 16-ounce sheet copper and shall be furnished and installed around all outside openings used for ducts or fans where required. Roof flashing shall extend at least 8" above roof. Cooperate with roofing contractor when installing flashing.
- D. All duct connections to equipment shall be made with fire and mildew resistant flexible connections of canvas or other acceptable materials. Connections shall have suitable metal collar frames at each end and shall not be less than 4" long with at least 1" of slack in the connection. Flexible connections shall be heat resistant to 500 degrees F continuously.
- E. Duct dimensions shown are metal sizes. All edges shall be straight and true.
- F. All flexible connections, duct liner and adhesives shall be U.L. listed as having a maximum flame spread of 50, fuel contribution of 25 and smoke contribution of 25.
- G. This Contractor shall furnish and install in ductwork all dampers, vanes splitters, etc.. as shown on the drawings or necessary to make the system complete. Where dampers or splitters can not be accessed through lay in ceiling, Contractor shall provide lockable 24" x 24" access door. Contractor shall coordinate location with Architect.
- H. Shafts shall be marked to show position of dampers, vanes, splitters, etc.
- I. Ductwork shall be supported in accordance with SMACNA Plate No. 17 and No. 18, up to and including band iron hangers attached to duct by means of screws or rivets per hanger.
- J. Access doors shall be provided in ductwork for all automatic dampers and each manual damper 3 square feet in area or larger, and shall be so located that damper can be completely serviced through the access door. Access door shall be provided with felt gaskets and suitable hinges and locks. Where access doors occur in insulated duct, double skin insulated doors shall be used.
- K. Where square ducts are shown, provide single vane elbows as per Plate 22, Figure A, SMACNA Standards, 1995 Edition. For all ductwork over 18" provide double vane square elbow as shown in Figure C of the Plate.
- L. All low pressure ductwork joints shall be sealed with hard cast "iron grip".
- M. Flexible air duct for connections between low pressure rectangular duct and ceiling diffusers shall be pre- insulated and listed by Underwriters Laboratories under U.L Standard 181 as a Class 1 flexible air duct and complying with NFPA Standards 90A and 90B.

N. All flex duct 45 degree and 90 degree turns shall be metal hard duct.

2.02 INSULATED ACOUSTICAL LOW PRESSURE FLEXIBLE DUCT

- A. The duct shall be constructed of a CPE fabric supported by helical wound galvanized steel.
- B. Provide where indicated on drawings Flexmaster Type 8M UL181 Class I Air Duct.
- C. Fabric shall be mechanically locked to the steel helix without the use of adhesives or chemicals.
- D. The internal working pressure rating shall be at least 6" w.g. positive and 4" w.g. negative with a bursting pressure of at least 2½ time the working pressure.
- E. The duct shall be rated for a velocity of at least 4000 feet per minute.
- F. The duct must be suitable for continuous operation at a temperature range of -20° F to +250°
- G. Acoustical performance, when tested by an independent laboratory in accordance with the Air Diffusion Council's Flexible Air Duct Test Code FD 72-R1, Section 3.0, Sound Properties, shall be as follows:

The insertion loss (dB) of a 10 foot length of straight duct when tested in accordance with ASTM 477, at a velocity of 2500 feet per minute, shall be at least:

Octave Band	2	3	4	5	6	7
Hz.	125	250	500	1000	2000	4000
6" diameter	7	31	40	38	40	27
8" diameter	13	29	36	35	38	22
12" diameter	21	28	29	33	26	12

The radiated noise reduction (dB) of a 10 foot length of straight duct when tested in accordance with ASTM E477, at a velocity of 2500 feet per minute, shall be at least:

Octave Band	2	3	4	5	6	7
Hz.	125	250	500	1000	2000	4000
6" diameter	5	8	7	8	11	15
8" diameter	10	7	7	8	10	13
12" diameter	9	6	6	5	9	13

The self generated sound power levels (LW) dB re 10<sup>-12</sup> Watt of a 10 foot length of straight duct for an empty sheet metal duct when tested in accordance with ASTM E477, at a velocity of 1000 feet per minute, shall not exceed:

Octave Band	2	3	4	5	6	7
Hz.	125	250	500	1000	2000	4000
6" diameter	42	31	23	18	17	21

8" diameter	41	34	27	19	18	21
12" diameter	54	45	38	31	27	23

Factory insulate the flexible duct with fiberglass insulation. The R value shall be at least 5.0 at a mean temperature of 75° F. (R-4.2 is not acceptable)

- H. Cover the insulation with a fire retardant metalized vapor barrier jacket reinforced with crosshatched scrim having a permeance of not greater than 0.05 perms when tested in accordance with ASTM E96, Procedure A.
- I. Maximum length to be 3'-0  
ALL FLEX CONNECTIONS TO CEILING DIFFUSERS MUST BE FACTORY DESIGNED TO HAVE NO DIMENSIONAL CONTORTION WHEN CONNECTED TO THE DIFFUSER.

### 2.03 FIRE AND SMOKE DAMPERS

- A. Round and oval fire dampers shall be designed for high pressure duct systems.
- B. Rectangular fire dampers shall be designed for low pressure duct systems.
- C. All fire dampers must be NFPA 90A and UL approved.
- D. Furnish and install access doors in ductwork, walls, and ceilings where required to service all fire dampers, smoke dampers and detectors. All fire and smoke dampers shall be installed by the sheet metal contractor. All smoke detectors shall be furnished by the electrical Sub-contractor. Control of smoke dampers shall be coordinated with fire alarm system and building automation system.
- E. Rectangular Smoke Dampers - Louvers Dampers Inc. Model SD-400-UD or Ruskin FSD-35 tight seal parallel blade smoke dampers with low leakage and felted blades.
- F. Round and Oval Smoke Dampers - Shall be same as above but complete with welded round or oval collars. Units shall be capable of handling pressures up to 6" W.G.
- G. Smoke dampers shall be Class I rated as per UL 555.
- H. Sheet metal contractor shall provide and install all smoke dampers and actuators. Dampers shall be provided with end switches
- I. Approved Manufacturers: Pottorff, Ruskin, Price, Nailor Industries, Greenheck, or prior approved equal.

### 2.04 SPIN TAPS

- A. All round low pressure connections to rectangular ducts shall be made with a factory fabricated spin collar fitting with damper and constructed of minimum 26 ga galvanized steel. The damper shall have a 2" raised handle with a high quality locking quadrant. A 3/8" continuous rod with "U" bolts connects the damper to the rod. Nylon end bearings are required where the rod penetrates the spin collar barrel.
- B. Provide Flexmaster #FLD-B03, Dace #26 ga MSDS – CO3, or prior approved equal.

### 2.05 LOW LOSS TAP

- A. All round low pressure connections to rectangular ducts shall be made with a factory fabricated 45 degree low loss entry "shoe" tap with damper constructed of minimum 26 gage galvanized steel. The damper shall have a 2" raised handle with a high quality locking quadrant. A 3/8" continuous rod with "U" bolts connects the damper to the rod. Nylon end bearings are required where the rod penetrates the spin collar barrel.
- B. Provide Flexmaster #STOD-BO3, Dace # 26 ga STOD-C03, or prior approved equal.
- C. For medium pressure systems where used upstream of VAV terminals, the damper can be eliminated (use Flexmaster #STO or Dace 24 ga STO). Gauge shall be 24 gauge on medium pressure systems.

2.06 DUCT AIR LEAKAGE TESTING

- A. Ductwork that is designed to operate at static pressures exceeding 3 inches water column and all ductwork located outdoors shall be leak-tested in accordance with SMACNA HVAC Air Duct Leakage Test Manual. Positive pressure testing is acceptable for negative pressure ductwork. The maximum permitted duct leakage shall be in accordance with Equation 6-7.

**PART 3 - EXECUTION**

3.01 INSTALLATION

- A. See details of ductwork symbols and connections on drawing.

**END OF SECTION 23 31 00**

## **SECTION 23 37 00 AIR OUTLETS AND INLETS**

### **PART 1 - GENERAL**

- 1.01 WORK INCLUDED
  - A. Diffuser boots.
  - B. Registers/grilles.
  - C. Louvers.
- 1.02 RELATED WORK
  - A. See Mechanical Plans for wall louvers.
- 1.03 REFERENCES
  - A. ADC 1062 - Certification, Rating and Test Manual.
  - B. AMCA 500 - Test Method for Louvers, Dampers, and Shutters.
  - C. ANSI/NFPA 90A - Installation of Air Conditioning and Ventilating Systems.
  - D. ARI 650 - Air Outlets and Inlets.
  - E. ASHRAE 70 - Method of Testing for Rating the Air Flow Performance of Outlets and Inlets.
  - F. SMACNA - Low Pressure Duct Construction Standard.
- 1.04 QUALITY ASSURANCE
  - A. Test and rate performance of air outlets and inlets in accordance with ADC Equipment Test Code 1062 and ASHRAE 70.
  - B. Test and rate performance of louvers in accordance with AMCA 500.
- 1.05 REGULATORY REQUIREMENTS
  - A. Conform to ANSI/NFPA 90A.
- 1.06 SUBMITTALS
  - A. Submit shop drawings and product data under provisions of Section 013000 – Administrative Requirements.
  - B. Provide product data for items required for this project.
  - C. Submit schedule of outlets and inlets indicating type, size, application, and noise level.
  - D. Review requirements of outlets and inlets as to size, finish, and type of mounting prior to submitting product data and schedules of outlets and inlets.

- E. Submit diffuser, grille and register color data to Architect for approval.

## **PART 2 - PRODUCTS**

### 2.01 GENERAL

- A. See mechanical schedules and drawings for diffuser types, sizes and configuration. See architectural plans - room finish schedules for type of ceiling and wall construction.
- B. Substitutions: Under provisions of Instructions To Bidders, Page IB-3, Paragraph 4.3.

### 2.02 ACCEPTABLE MANUFACTURERS - Ceiling Diffusers

- A. Titus TMSA Series, Krueger Series 1400 Adjustable
- B. All diffusers shall have opposed blade volume dampers and adjustable horizontal to vertical four way throw operable from face of grille. All diffusers must be aluminum.

### 2.03 ACCEPTABLE MANUFACTURERS - Ceiling Exhaust Grilles

- A. Titus - Model 50F Code C 1/2" x 1/2" x 1" Cube Core, Krueger EGC-10, Nailor Industries Model 51EC
- B. All exhaust registers shall have opposed blade dampers.
- C. Grilles shall have baked enamel white finish.
- D. All dampers shall be operable from grille face.

### 2.04 ACCEPTABLE MANUFACTURERS - Ceiling Return Air Grilles

- A. Titus - 50F Code C, Krueger EGC-10, Nailor Industries
- B. All return air shall have opposed blade dampers. See plans for filter backed grille requirements.

### 2.05 ACCEPTABLE MANUFACTURERS - Wall Supply Registers.

- A. Titus 1700 Series, Krueger ULTRA-FLO
- B. All registers shall have adjustable blade dampers on all registers.
- C. Furnish and install opposed blade damper on all registers.
- D. Finish to be approved by Architect.

### 2.06 ACCEPTABLE MANUFACTURERS - DOOR RETURN GRILLES

- A. Titus Model CT-700, Krueger Series 5600, Nailor Industries
- B. Substitutions: Under provisions of Instructions To Bidders, Page IB-3, Paragraph 4.3.
- C. All aluminum construction & design.
- D. Finish to be approved by Architect.

### **PART 3 - EXECUTION**

#### 3.01 INSTALLATION

- A. Install items in accordance with manufacturer's instructions.
- B. Check location of outlets and inlets and make necessary adjustments in position to conform with architectural features, symmetry, and lighting arrangement. Refer to Section 099000.
- C. Install diffusers to ductwork with air tight connection.
- D. Provide balancing dampers on duct take-off to diffusers, and grilles and register, regardless of whether dampers are specified as part of the diffuser, or grille and register assembly.
- E. Furnish and install necessary frames, bucks, sponge rubber gasketed, etc. to make a neat setting job.
- F. Diffusers shall be placed to insure that air does not blast against columns and lights.
- G. All diffusers, registers, etc. shall have external volume controls and deflecting grids.
- H. Ceilings in areas where plaster or gypsum board ceiling are used, shall be surface mounted.

**END OF SECTION 23 37 00**

**SECTION 23 54 10  
FORCED AIR FURNACE - ELECTRIC HEAT - DX**

**PART 1 - GENERAL**

- 1.01 WORK INCLUDED
  - A. Forced Air Furnace
  - B. Refrigeration Cooling Coil
  - C. Controls
  - D. Electric Heater
- 1.02 RELATED WORK
  - A. General Mechanical
  - B. Supports and Anchors
  - C. Piping Insulation
  - D. Air Cooled Condensing Unit
  - E. Ductwork
- 1.03 QUALITY ASSURANCE
  - A. Conform to requirements of UL and applicable codes.
  - B. Cooling system tested and rated to ARI Standard 210.
- 1.04 SUBMITTALS
  - A. Submit manufacturer's installation instructions.
  - B. Submit manufacturer's descriptive literature, operating instruction, and maintenance and repair data.

**PART 2 - PRODUCTS**

- 2.01 TYPE
  - A. Provide horizontal type with electric heating elements.
  - B. Provide self contained packaged, factory assembled, pre-wired units, consisting of cabinets, supply fan, controls, air filter, refrigerant cooling coil.
- 2.02 PERFORMANCE
  - A. Refer to Schedule of Drawings for performance and capacities.

- 2.03 CONSTRUCTION
- A. Cabinet: Galvanized steel with baked enamel finish, easily removed and secured access doors, glass fiber insulation.
  - B. Fan: Direct or belt drive (as scheduled), rubber isolated mounted 1750 rpm motor.
  - C. Air Filters: One (1) inch thick glass fiber, disposable type arranged for easy replacement.
- 2.04 ELECTRIC HEATER
- A. Finned tube metal sheath heating elements or open coil type (black heat) arranged in incremental stages as scheduled, accessible, with protection against no or low air flows, shorts or grounds, and failure of protection devices.
- 2.05 ELECTRIC HEATER CONTROLS
- A. Unit to be complete with low voltage transformer, terminal box with built-in factory wired magnetic contactors and high temperature thermal cutout protection with magnetic contactors rated for 100,000 cycle service: electric heating coils to be protected as per Article 424 of National Electric Code, UL approved and so labeled.
- 2.06 EVAPORATOR COIL
- A. Mount in furnace supply plenum, copper tube with mechanically bonded aluminum fins in a coil assembly, with galvanized drain pan, drain connection, and refrigerant piping connections.
  - B. Provide factory installed thermostatic expansion valve.
- 2.07 CONTROLS
- A. Temperature control sequence of air conditioning equipment: "Automatic controls are placed into operation when system is energized. Provide room type thermostat to cycle condensing unit on the cooling cycle and the electric heater strip on the heating cycle as required to maintain space conditions. Air handling unit fan shall be wired for constant fan operation and shall be electrically interlocked such that the condensing unit may not run nor the electric heater strip be energized unless the evaporator fan is running. An air switch shall be installed which shall prevent electric heater operation until air flow is proven. If return air temperature rises above firestat setpoint then the firestat (located in the return air plenum) shall de-energize the air handling unit fan(s). If supply air contains smoke, a smoke detector (located in the supply air plenum) shall de-energize the air handling unit fan(s). If auxiliary drain pan fills with water, a float switch shall de-energize the condensing unit."
  - B. Contractor shall provide clear locking cover for all thermostats.
- 2.08 ACCEPTABLE MANUFACTURERS
- A. TRANE COMPANY

B. YORK INTERNATIONAL

C. LENNOX INDUSTRIES

**PART 3 - EXECUTION**

3.01 INSTALLATION

A. Install in strict accordance with manufacturer's recommendations.

B. Pipe condensate drain as shown on the drawings or to the nearest available plumbing vent.

**END OF SECTION 23 54 10**

**SECTION 23 63 13**  
**AIR COOLED CONDENSING UNIT**

**PART 1 - GENERAL**

1.01 WORK INCLUDED

- A. Condensing Unit Package
- B. Internal Piping and Accessories
- C. Controls

1.02 RELATED WORK

- A. General Mechanical
- B. Supports and Anchors
- C. Air Handling Unit

1.03 QUALITY ASSURANCE

- A. Conform to requirements of UL and applicable codes.
- B. Test and rate cooling system to ARI Standard 210.

1.04 SUBMITTALS

- A. Submit shop drawings and product data.
- B. Submit with shop drawings, schematic layouts showing condensing units, cooling coils, refrigerant piping, size, and accessories required for complete system.
- C. Submit manufacturer's installation instructions.

**PART 2 - PRODUCTS**

2.01 TYPE AND PERFORMANCE

- A. Provide self-contained, package, factory assembled and pre-wired units suitable for outdoor use consisting of cabinet, compressor(s), condensing coil(s) and fan(s), integral sub-cooling coil, controls, liquid receiver, and screen(s).
- B. All Condensing Unit's to be supplied with coil guards.
- C. Refer to Schedule on Drawings for air cooled condensing unit(s) requirements.
- D. Acceptable Manufacturer: TRANE COMPANY, YORK INTERNATIONAL, LENNOX INDUSTRIES

2.02 MATERIALS

- A. Use corrosion resistant materials for parts in contact with refrigerant. Provide timer circuits to prevent rapid loading and unloading of compressor.

- 2.03 CABINET
- A. Galvanized steel with baked enamel finish, and removable access doors or panels with quick fasteners.
- 2.04 COMPRESSOR(S)
- A. Provide hermetically sealed, 1750 rpm resiliently mounted compressor with positive lubrication, crankcase heater, cylinder unloaders for capacity modulation (as scheduled), motor overload protection, service valves, filter driers (suction and liquid), and site glass.
- 2.05 CONDENSER
- A. Coil: Seamless copper tube with mechanically bonded aluminum fins.
- B. Fans: Vertical discharge, direct or belt drive axial fan(s), resiliently mounted with guard and motor.
- C. Motors: Permanently lubricated ball bearing motors with built-in current and overload protection.
- 2.06 CONTROLS
- A. Provide high and low pressure cutouts for compressor, oil pressure control, and reset relay.
- B. Provide controls to permit operation down to 50-degrees F. ambient temperature at minimum compressor load.
- 2.07 REFRIGERANT PIPING
- A. Refrigerant piping shall be run in Type "L" hard drawn copper tubing attached with wrought copper fittings, utilizing 1000-degree silver solder and a non-corrosive flux. Refrigerant piping shall be sized and installed in strict accordance with the air conditioning unit manufacturer's recommendations and directions and shall be submitted to the Engineer for prior approval before installation. Pressure drops shall not exceed the equivalent of 2-psi. Refrigerant piping system shall be evacuated, charged with refrigerant holding charge. The refrigerant lines to be tested with nitrogen to a test pressure of not less than 450 psi and proved before final charge of refrigerant. Compressor shall not be subject to the 450 psi pressure test.
- B. All refrigerant piping shall comply with the applicable requirements of the safety Code of Mechanical Refrigeration (ASA-89.1-1956) and the Code of Refrigerant Piping (ASA-831.5-1962), and all state ordinances, codes, and regulations.
- C. Refrigerant suction line shall be insulated with a cellular foam type insulation; "K" value of 0.28 at 75-degrees F. Manufacturers: Armstrong "Armaflex" or Rubatex R-180-FS.
- D. General - Refrigerant piping installations shall comply with the requirements of this section. The design of refrigerant piping shall be in accordance with ASME B31.5.
1. Piping Location
    - a. Minimum Height
    - b. Exposed refrigerant piping installed in open spaces that afford passage shall be not less than 7 feet 3 inches (2210 mm) above

- the finished floor.
2. Refrigerant Pipe Enclosure
    - a. Refrigerant piping shall be protected by locating it within the building elements or within protective enclosures.
  3. Exception: Piping protection within the building elements or protective enclosure shall not be required in any of the following locations
  4. Where installed without ready access or located more than 7 feet 3 inches (2210 mm) above the finished floor.
  5. Where located within 6 feet (1829 mm) of the refrigerant unit or appliance
  6. Where located in a machinery room
  7. Outside the building:
    - a. Where protected from damage from the weather, including but not limited to hail, ice and snow loads.
    - b. Where protected from damage within the expected foot or traffic path.
    - c. Where installed underground not less than 8 inches (200 mm) below finished grade and protected against corrosion.
  8. Prohibited Locations
    - a. Refrigerant piping shall not be installed in any of the following locations:
    - b. Exposed within a fire-resistance-rated exit access corridor.
    - c. Exposed within an interior exit stairway.
    - d. Within an interior exit ramp.
    - e. Within an exit passageway.
    - f. Within an elevator, dumbwaiter or other shaft containing a moving object.
  9. Protection against physical damage
    - a. Aluminum, copper and steel tube used for Group A2, A3, B2 and B3 refrigerants and located in concealed locations where tubing is installed in studs, joists, rafters or similar member spaces, and located less than 1 1/4 inches (32 mm) from the nearest edge of the member, shall be continuously protected by shield plates. Protective steel shield plates shall cover the area of the tube plus the area extending not less than 2 inches (51 mm) beyond both sides of the tube. Shield plates shall be of steel material having a thickness of not less than 0.0575 inch (1.46 mm) (No. 16 gage).

### **PART 3 - EXECUTION**

#### 3.01 INSTALLATION

- A. Complete structural, mechanical and electrical connections in accordance with manufacturer's installation instructions.
- B. Mount unit on 4" concrete pad with minimum 6" clearance all around or as indicated on the drawings.
- C. Furnish charge of refrigerant and oil.

#### 3.02 START-UP AND TESTING

- A. Dehydrate, charge system with refrigerant and test entire system for leaks after completion of installation. Repair leaks, put system into operation, and test equipment performance.

#### 3.03 GUARANTEE

A. Reciprocating refrigerant compressor shall have full five (5) year warranty.

END OF SECTION

**SECTION 260100  
BASIC ELECTRICAL REQUIREMENTS**

**PART 1 - GENERAL**

1.01 SCOPE

- A. The scope of work is as indicated on electrical drawings and includes but is not limited to the following:
- B. Demo:
  - 1. Disconnect and remove all existing receptacles and lighting. Protect existing wiring where in good condition and re-use where practicable.
  - 2. Disconnect and remove existing AHU and CU circuitry entirely. Including disconnect switches.
  - 3. Remove existing breakers serving lighting and replace with new AFCI circuit breakers. In the event that AFCI breakers are not available for use with the existing load center contractor shall provide evidence of such and provide a quote for a new load center.
- D. Power:
  - 1. Provide safety disconnect switches and associated feeder(s).
  - 2. Provide receptacles, special outlets, junction boxes, and their associated branch circuits.
  - 3. Provide receptacles in accordance with National Electrical Code for dwelling units.
  - 4. All receptacles in dwelling units shall be tamper resistant.
  - 5. All 120V 15A or 20A circuits shall be AFCI protected. Provide AFCI receptacles for receptacle circuits. Provide (2) 15A/1P AFCI breaker for each dwelling unit lighting circuitry.
  - 6. Provide branch circuits associated with all mechanical and plumbing system equipment, including all accessories such as motorized dampers, valves, fan interlocks, ionization, etc.
  - 7. Furnish and install surge suppression devices for each dwelling unit in accordance with NEC.
- E. Lighting:
  - 1. Provide interior light fixtures, wall switches, wall dimmers, and occupancy sensors and associated branch circuits.
- F. Telecommunications:
  - 1. Provide junction boxes and conduit for phone and data outlets.
  - 2. In the dwelling units provide (1) CAT 6 cable and (1) COAX cable from Structured Media Panel (SMP) to each data outlet shown unless otherwise indicated.

1.02 GENERAL CONDITIONS

- A. The General Conditions and Supplementary General Conditions are a part of this section of these Specifications. The Contractor is cautioned to read and be thoroughly familiar with all provisions of the General Conditions. These conditions shall be complied with in every aspect. The word "shall" where used, is to be understood, as mandatory and the word "should" as advisory. "May" is used in the permissive sense.

1.03 GENERAL REQUIREMENTS

- A. The Contractor is referred to all of the Drawings for building construction as well as the electrical Drawings.
- B. The Contractor shall examine the site and shall verify to his own satisfaction the location of all utilities, and shall adequately inform himself as to their relation to his work before entering into a Contract and he shall base his bid on any conditions, which may be encountered during the progress of the work.
- C. The Contractor shall furnish and install properly all materials, devices, equipment, supports, controls, appurtenances, etc., mentioned or required to make complete or satisfactory installations in working order whether shown or not. All electrical equipment shall be connected in accordance with manufacturer's instructions. All work shall be executed in a workmanlike manner and shall present a neat and mechanical appearance when completed.

#### 1.04 MINIMUM STANDARDS

- A. Applicable rules of the National Electrical Code apply as a minimum standard for this contract, but do not replace or reduce any specific requirement herein.

#### 1.05 DRAWINGS

- A. Plans and detail sketches are submitted to limit, explain, and define structural conditions, specified requirements, conduit sizes, and manner of erecting work. The Contractor is cautioned to field check and verify all existing conditions before bidding, as no extra compensation will be allowed for conditions found different than represented in the construction drawings and/or specifications. Written approval of the Architect shall be obtained prior to any alterations or additions to specified work.
- B. Structural or other conditions may require certain modifications from the manner of installation shown, and such deviations are permissible and shall be made as required, but specified sizes and requirements necessary for satisfactory operations shall remain unchanged.
- C. The drawings and these specifications are complementary to each other and what is called for by one shall be binding as if called for by both.
- D. General arrangement of work is indicated on plans. Due to the small scale of the drawings, offsets, fittings, and boxes required are not all indicated; provide fittings, boxes, etc., as needed in accordance with codes and accepted practices.

#### 1.06 SUPERVISION

- A. The Contractor shall personally or through an authorized and competent representative, constantly supervise the work from beginning to completion and final acceptance. So far as possible, he shall keep the same foreman and workmen throughout the project duration.
- B. During its progress, the work shall be subject to inspection by representatives of the Architect, at which times the Contractor shall furnish required information.
- C. It is not the Architect's or Engineer's duty to direct or guarantee the work of the Contractor, but to assist the Owner in obtaining a complete building in accordance with plans, specifications and addenda and to furnish engineering services in accordance with recognized practices.

#### 1.07 PRIOR APPROVALS

- A. The Contractor shall base his proposal on materials as specified herein. Any references to a specific manufacturer or trade name is made to establish a standard of quality and to define a type of product and in no way is intended to indicate a preference for a particular manufacturer. It is the intent of these specifications to allow all manufacturers of equipment, products, etc., judged equal to the specified product to bid on a competitive basis.

#### 1.08 MEASUREMENTS

- A. The Contractor shall verify all measurements and shall be responsible for the correctness of same, before ordering any materials or doing any work. No extra charge or compensation will be allowed for any differences between the actual measurements and those indicated on the drawings.

#### 1.09 LAWS, PERMITS AND FEES

- A. The entire electrical work shall comply with the rules and regulations of the City, Parish, and State, including the State Fire Marshal and State Board of Health, whether so shown on plans or not. The Contractor shall pay fees for permits, inspections, etc., and shall arrange with the inspecting authorities all required inspections.

#### 1.10 SITE INSPECTION

- A. The Contractor shall visit the site and familiarize himself with difficulties attendant to the successful execution of the work before bidding. Failure to visit the site shall not relieve the Contractor of the extent or conditions of the work required of him.

### **PART 2 - PRODUCTS**

#### 2.01 MATERIAL AND EQUIPMENT

- A. All materials, equipment, and accessories installed under this Contract, whether approved or not, shall be new and shall conform to all rules, codes, etc., as recommended or adopted by the National Association(s) governing the manufacture, rating and testing of such materials, equipment, and accessories.

#### 2.02 SHOP DRAWINGS

- A. The Contractor shall submit to the Architect complete descriptive and dimensional data on the following items for review and approval:
  1. Panelboards
  2. Service Entrance Disconnect Switch
  3. Disconnect Switches
  4. Lighting Fixtures
  5. Occupancy Sensors
  6. Enclosed Circuit Breakers
  7. Data Wiring

### **PART 3 - METHODS OF INSTALLATIONS**

#### 3.01 CONTRACTOR COORDINATION

- A. The Drawings are diagrammatic in nature. Cooperate with other trades so the interferences

of facilities and equipment will be avoided.

### 3.02 OPENINGS, CUTTING AND PATCHING

- A. Cut all openings as required for the electrical work. Patching will be done by the various crafts whose work is involved. Furnish and install all necessary sleeves, thimbles, hangers, inserts, etc., at such times and in such a manner as not to delay or interfere with the work of other Contractors. Caulk, flash or otherwise make weatherproof all penetrations through the roof and exterior walls.
- B. Where conduit, cable or other items that are provided for under this contract penetrate fire rated walls or floors, the Contractor is to seal around the item to maintain the integrity of the rated system.

### 3.03 PAINTING

- A. Painting shall be performed as described in the painting specifications. No painting will be required by the Contractor except for touch-up of factory finishes on equipment furnished under this contract.

### 3.04 APPLICABLE GENERAL CODES AND REGULATIONS

- A. All electrical work and equipment, in whole or in part, shall conform to the applicable portions of the following specifications, codes and regulations in effect on that date of invitation for bids, and shall form a part of this specification.
  - 1. National Electrical Code, 2014 Edition
  - 2. National Electrical Manufacturers Association Standards
  - 3. National Fire Protection Association Recommended Practices
  - 4. Local, City and State Codes and Ordinances
  - 5. National Board of Fire Underwriter's Recommended Practices
  - 6. Life Safety Code, 2012 Edition
  - 7. International Building Codes
- B. Equipment that has been inspected and approved by the Underwriter's Laboratory shall bear its label or appear on its list of approved apparatus.

### 3.05 TESTS AND INSPECTIONS

- A. The Contractor shall assist in making periodic inspections or tests required by the Architect or Engineer. When requested, the Contractor shall provide the assistance of foremen and qualified craftsmen for reasonable duration of each test, etc.

### 3.06 SAFETY PRECAUTIONS DURING CONSTRUCTION

- A. It shall be the Contractor's responsibility to furnish and install proper guards and instruction signs for prevention of accidents and to provide and maintain for the duration of construction any installations needed for safety of life and property.

### 3.07 HEATING AND AIR CONDITIONING SYSTEM

- A. This Contractor shall be responsible for providing electrical service to all devices of the heating and air conditioning system, and is referred to the mechanical plan for the exact location of the various devices.

3.08 EQUIPMENT NAMEPLATE

- A. Each item of electrical equipment installed by the Contractor shall be provided with an engraved nameplate noting the equipment's function or designation. Nameplates shall be engraved laminated plastic with black letters on a white background. Letters shall be 1/4" high, all caps.

3.09 PANELBOARD SCHEDULES

- A. The Contractor shall provide and affix typed panelboard schedules for each panelboard. Schedule will accurately list equipment served by each branch circuit, and not simply indicate "LIGHTING" or "RECEPTACLES", etc. Schedules shall indicate rooms served and device or devices connected to the circuit.

3.10 COMPLETION

- A. The Contractor shall leave all electrical equipment with proper connections, and in proper working order. He shall test the entire electrical system to show that it is properly installed. Contractor shall leave all panels and switches completely fused or complete with circuit breakers.

3.11 RECORD DRAWINGS

- A. The Contractor shall furnish one (1) complete set of drawings on which any changes in the work shall be shown. These drawings must be turned over to the Architect prior to final acceptance of the work.

3.12 GUARANTEE

- A. The Contractor shall guarantee to keep the entire electrical system as installed by him or his subcontractors in repair and in perfect working order for one (1) year from the date of the final Certification of Final Acceptance, and shall furnish free of cost to the Owner, all material and labor necessary to comply with the above guarantee; said guarantee shall be based upon defective material and workmanship. In any case where equipment has a factory warranty exceeding this one-year limit, the full extent of the warranty shall apply.

3.13 CLEANING

- A. When all work has been finally tested, the Contractor shall clean all fixtures, equipment, conduits, ducts, and all exposed work. All cover plates and other finished products shall be thoroughly cleaned.

3.14 INSTRUCTION MANUALS

- A. The Contractor shall provide three (3) operating and maintenance instruction manuals on all systems and equipment installed in the electrical work.

3.15 CONTRACTOR SPECIAL NOTE

- A. The Contractor is again cautioned to refer to all parts of these Specifications and all Drawings, not just electrical sections, and the individual cross references made to other standard specifications or details describing any electrical work, which may be required under these other sections. The Contractor is cautioned to note carefully any other sections which may reference electrical work in order for this Contractor to fully understand the wiring

requirements and electrical work that is required. Any conflicts found between the electrical sections of these Specifications or Drawings shall be immediately directed to the General Contractor for clarification.

- B. These Specifications and the electrical Drawings size equipment, wire, conduit, etc. based on the horsepower of motors and/or wattages of equipment as shown on the plans or specified herein. The Contractor shall install electrical raceways, conductors, fuses, safety switches, breakers, contactors, starters or any other electrical equipment with the capacities to suit the horsepower and/or wattages of the equipment actually furnished and installed. The Contractor shall not furnish or install any electrical raceways, conductors, safety switches, contactors or motor starters of sizes smaller than those shown on the Drawings or specified herein. The Contractor shall coordinate with the various sections of the Specifications and/or Drawings and with the various Sub-Contractors to provide the properly sized equipment without additional cost to the Owner.

**END OF SECTION 26 01 00**

**SECTION 260500  
BASIC ELECTRICAL MATERIALS AND METHODS**

**PART 1 - GENERAL**

1.01 GENERAL REQUIREMENTS

- A. All material furnished shall be new and shall conform to all rules and codes as recommended or adopted by the National Association governing the manufacture, rating and testing of the material. All electrical equipment shall be UL listed for the intended use.

**PART 2 - PRODUCTS**

2.01 Dwelling Units:

- A. Refer to specification section 260518 for box and cable requirements.

2.03 RACEWAYS AND FITTINGS

- A. Raceways permitted on this project shall be hot dipped galvanized rigid steel conduit; electrical metallic tubing (EMT); nonmetallic sheathed cabling (NM) for branch circuits in apartment units only, medical grade MC cable for branch circuits in the wellness center, flexible metallic tubing; liquid-tight flexible metal conduit; and rigid polyvinyl chloride (PVC) conduit. All conduits shall be new and shall bear the inspection label of the Underwriter's Laboratories, Inc.
- B. Metallic conduit shall be metalized, or hot-dipped galvanized. Non-metallic conduit shall be schedule 40 PVC.
- C. Fittings for conduit shall be an approved type specially designed and manufactured for their purpose. EMT fittings shall be water tight, compression type. Rigid metal conduit fittings, bushings, and other components shall be galvanized. All fittings for rigid steel or aluminum conduit shall be threaded and coupled unless specifically approved otherwise by the Engineer.
- D. MC Cable shall be permissible for use in the Clubhouse where permitted by National Electrical Code. MC Cable shall be Steel or Aluminum.

2.04 EXPOSED CONDUIT

- A. Exposed conduit shall be firmly supported on galvanized hangers; on brackets, hangers, or pipe straps; or by beam clamps. Conduit installed exposed shall be neatly aligned and run at right angles to the building walls or walls of the rooms in which installed. All exposed conduit shall be located to avoid all conflicts with architectural or mechanical components.

2.05 FLEXIBLE CONDUIT

- A. Liquid-tight flexible metal conduit shall have a spiral wound, flexible, galvanized steel core and a tough extruded synthetic moisture-tight outer covering. All flexible conduits shall be UL listed.

2.06 GALVANIZED CONDUIT

- A. Galvanized conduit furnished in accordance with these specifications shall be of mild steel

pipng, galvanized inside and outside, and shall conform in all respects to the American Standard Association rigid Steel Conduit Specification C80.1-1959 and Underwriter's Laboratories Specifications.

- B. The galvanized coat of zinc shall be of uniform thickness applied by the hot-dipped process to not only the inside surfaces of the conduit, but also to the threads of the conduit. It shall be further dipped in a chromic acid bath so as to chemically form a corrosive resistant protective coating of zinc chromate over hot-dipped galvanized surface. Each piece of conduit shall be straight, free from blisters and other debris, cut square and taper reamed, and furnished with coupling in 10 foot length threaded each end. The interior threaded surface of each coupling shall be galvanized to insure 100% galvanic protection on all surfaces. The hot galvanized zinc chromate on the inside and outside surfaces shall be sufficiently elastic to prevent cracking or flaking when sample of finished conduit is bent 90o at a minimum temperature of 60oF, the inner edge of the bend having a radius of six (6) times the inside diameter of the conduit.

## 2.07 RACEWAYS

- A. Lay-in duct, JIC Wireway and troughs shall be NEMA 1 for indoor application and NEMA 3R for out door or applications exposed to weather or water. Raceways shall be sized as noted on Drawings, and shall have hinged or screw covers with captive screws. Finish shall be gray enamel. All components shall be UL listed for steel enclosed wireway or auxiliary gutter.

## 2.08 OUTLET AND SWITCH BOXES

- A. Outlet boxes in concealed conduit systems shall be flush mounted. Boxes shall be galvanized steel of sufficient size to accommodate devices shown and shall have raised covers where required to meet requirements of NEC Article 314.
- B. All boxes shall be stamped, one piece, galvanized steel, of proper size and shape for conduits entering them, and shall be UL listed and NEC approved for the intended use. Boxes shall be installed so that device and/or coverplates shall be tight and plumb with wall finish, have all unused openings closed with knock-out plugs, and be weatherproof for exterior locations.
- C. Boxes for lighting fixtures shall be 4 inches octagon, not less than 1-1/2 inches deep, with fixtures stud fastened through from back box. Where boxes are installed in a concrete slab, boxes designed for this application shall be used.
- D. Outlet boxes for switches in concealed work shall be standard switch boxes of required number of gangs. Outlet boxes for receptacles, telephone, and communication use in concealed work shall be 4 inch square, not less than 1-1/2 inches deep. Outlet boxes for switches and receptacles installed in exposed conduit system shall be cast type FS or FD, number of gang as required. Outlet boxes for telephone and communication use in exposed systems to be cast, 4 inches square, not less than 1-1/2 inches deep.
- E. Boxes shall not to be installed back to back in walls. Offset with connecting conduit as specified. Do not use long, extended boxes that would effectively couple light and sound between adjoining spaces.

## 2.09 WIRE (600 VOLT AND BELOW)

- A. All conductors used in the work shall be of soft drawn annealed copper having a conductivity of not less than 98% of that of pure copper. Conductors shall be standard code gauge in

size, insulated and shall have insulation rated for use at 600 volts.

- B. Unless noted otherwise or specified, insulation shall be type THW, THWN, or THHN for sizes up to and including No. 2 AWG. Insulation for wire sizes larger than No. 2 AWG shall be type THW, XHHW, or THHN. Lighting fixture wire shall be heat resistant type TF (150oC) with 300-volt insulation minimum. Wires shall be of the single conductor type. Sizes No.14 AWG and larger shall be stranded. No wire shall be single strand solid copper.
- C. Throughout the system, all conductors shall be identified as to the phase and voltage of the system by color-coding in accordance with NEC 210.5. Color-coding shall be continuous the full length of the wire with surface printing at regular intervals on all conductors and for neutral conductors.
- D. Color coding shall be as follows:
  - 3phase, 208V System
  - Phase 1-Black
  - Phase 2-Red
  - Phase 3-Blue
  - Neutral-White
  - Ground-Green
- E. Feeders with ampacity of 100A or greater may be aluminum. Aluminum feeders shall meet UL 83, Federal Specification A-A-59544, and ASTM B-800 & B-801. Conductors shall be Alumaflex aluminum ally (AA-8176). Insulation shall be THWN or THHN as applicable.

## 2.10 WEATHERPROOF RECEPTACLES

- A. Weatherproof receptacles shall be GFCI duplex receptacles as specified under WIRING DEVICES, mounted in a cast iron type FD conduit box and fitted with gasketed metal cover with spring. Weatherproof receptacles shall be flush mounted in exterior walls.

## 2.11 WIRING DEVICES

- A. Wiring devices shall be as listed. The color of device shall match color of outlet cover plate. It shall be the responsibility of the Contractor to provide plugs, receptacles and fittings required for any equipment furnished or installed or connected under the contract. Color as selected by the Architect.
  - 1. Receptacles: Duplex 125 V, 20 A:
    - a. Hubbell - HBL 5362.
    - b. Leviton Mfg. Company Inc.-5362.
    - c. Pass & Seymour-CRB5362.
    - d. Pass & Seymour -PT5362A (Plug Tail Device).
  - 2. GFI Receptacles: Weather Resistant 125 V, 20 A:
    - a. Hubbell Incorporated- BR20WR
    - b. Leviton Mfg. Company Inc.-WBR20
    - c. Pass & Seymour- WR5362.
  - 3. GFI Receptacles: Weather Resistant and Tamper Resistant 125 V, 20 A:
    - a. Hubbell - BR2WRTR.
    - b. Leviton Mfg. Company Inc.-TWR20
    - c. Pass & Seymour- WR20TR.
  - 4. AFCI Receptacles: Tamper-Resistant 125 V, 20 A
    - a. Hubbell – AFR20TRW
    - b. Leviton – AFTR2-W

- c. Pass & Seymour (Legrand) – AF203TRW
- 5. Dual-Function AFCI/GFCI Receptacles: Tamper-Resistant 125 V, 20 A
  - a. Hubbell – AFGF20TRW
  - b. Leviton – AGTR2-W
  - c. Pass & Seymour (Legrand) – AFGF202TRW
- 6. Receptacles: Tamper Resistant 125 V, 20 A:
  - a. Hubbell - BR20TR.
  - b. Leviton Mfg. Company Inc.-TWR20
  - c. Pass & Seymour- TR5362
- 7. Switches-Single Pole:
  - a. Hubbell- HBL 1221.
  - b. Pass & Seymour - PS20AC1.
  - c. Leviton Mfg. Company, Inc.- 1221-1
- 8. Switches-Three Pole:
  - a. Hubbell- HBL1223
  - b. Leviton Mfg. Company, Inc.-1223-2.
  - c. Pass & Seymour-PS20AC3.

#### 2.12 OUTLET COVER PLATES

- A. Unless otherwise specified, all outlets shall be fitted with cover plates. Cover plates shall be standard size, uniform in design and finish for switches, receptacles and other outlets requiring cover plates. Plates shall be one piece of the required number of gangs. All cover plates shall be lexan unbreakable type. Architect shall select coverplate color.

#### 2.13 SPECIAL PURPOSE RECEPTACLE

- A. Provide receptacles for special purpose devices as indicated on the plans. Refer to equipment specification for proper receptacle to be supplied. Provide stainless steel cover plate.

#### 2.14 FIRESTOPPING PRODUCTS

- A. The Contractor shall provide and install at all fire-rated wall through-penetrations, a non-hardening, conformable firestop system. The system shall consist of a water insoluble putty and suitable damming materials (where required). The non-hardening putty shall be a two-staged intumescent and capable of expanding up to 8 times its original volume. This putty shall contain no asbestos, no fiberglass, no solvents nor corrosive mineral salts of any kind. It shall remain soft during its installed life and shall be capable of being removed and reinstalled to facilitate the addition of cables or pipes. The putty shall exhibit aggressive adhesion to all common building materials and penetrants and shall allow reasonable movement of penetrants without being displaced. The firestop system shall be tested to the time/temperature requirements of ASTM E119 and shall be tested to UL 1479 (ASTM E814) and Classified for up to 3 hours.

### **PART 3 - EXECUTION**

#### 3.01 WIRING - GENERAL

- A. Unless otherwise specified, all wiring shall be installed in conduit. No wire shall be smaller than No. 12 unless noted otherwise. Wiring for low voltage control may be #14 AWG. Wire for each branch circuit shall be of single size and type from the branch circuit protective device the last outlet of the circuit. BX wiring shall not be allowed.

- B. Feeders, motor circuit conductors and main service entrance conductors shall run their entire length without joints or splices. Wiring for branch circuits shall run the entire length without splices, with splices and joints made only at outlets or in accessible junction boxes only when absolutely necessary and approved by the Engineer. Joints and splices in branch circuit wiring shall be made with compression type solderless connectors.
- C. Connectors of the non-metallic screw on type are not acceptable. Terminations or splices for conductors No. 6 AWG and larger shall utilize bolted connecting lugs. All splices and terminations shall be insulated in an approved manner by an integral or separate cover or by taping to provide insulating value equal to that of the conductors being joined.
- D. Type THW or THWN conductors may be connected directly to recessed fixtures only when the fixtures are equipped with outlet boxes listed by Underwriter's Laboratories, Inc. for use with wire having insulation rated for maximum operating temperatures of 75oC (167oF); otherwise, for fixtures not rated for 75oC directly connection, use 125oC insulated conductors from the fixture to an outlet box placed at least one (1) foot, but not more than four (4) feet from the fixture.
- E. Branch circuit home run numbers shown on the drawings shall be used as a guide for connection of circuit wiring to similarly number protective devices in branch circuit panelboards. Requests for changes in the plans shall be directed to the Architect. No changes shall be made without approval from the Architect.
- F. Each circuit shall be furnished with its own neutral conductor. There shall be no sharing of neutral conductors.

### 3.02 ELECTRICAL SERVICE GROUNDING

- A. Main electrical service equipment, conduit work, motors, panelboards and all other electrical equipment shall be effectively and permanently grounded. Grounding connections and conductor sizes shall be in accordance with requirements of the National Electrical Code, Article 250 and local or State ordinances.
- B. All conduit entering panelboards shall be grounded to the panelboard by means of a grounding type locknut installed on the inside of the panelboard. Where the continuity of the metallic conduit system is interrupted by a run of non-metallic conduit, a separate grounding conductor, sized in accordance with NEC Table 250.122 shall be run in the conduit with the insulated conductors. A separate grounding conductor, as described above or as called for on the plans, shall be run in the conduit with the circuit conductors for all circuits serving multi-outlet assemblies.
- C. Conduit runs shall be increased in size where necessary to accommodate the grounding conductor in addition to circuit conductors. The grounding screw on all grounding type receptacles shall be securely grounded to the outlet box using a No. 12 green insulated conductor attached to the outlet box with lug screw.
- D. All switch legs shall include a green ground conductor connected to the circuit ground conductor and terminated in the switch outlet box.

### 3.03 CONDUIT - MATERIALS AND METHODS

- A. Conduit shall be installed as per NEC and NEMA regulations and the manufacturer's recommendations. Conduit shall be as follows:

- B. Rigid Steel Conduit shall be used for all conduits exposed to the weather, and underground conduit except where non-metallic conduit is specified or approved. Underground and under slab runs are to be watertight. All horizontal runs of underground conduit shall utilize rigid steel elbows on vertical risers. Conduits used for receptacles and run under the building slab, shall be hot dipped galvanized rigid steel and shall be 3/4" minimum size.
- C. All conduits routed underground shall not be placed in building slab. Conduits larger than 1" routed under building slab shall be routed below the vapor barrier. Minimum conduit size allowed to be routed underground shall be 3/4". Conduits routed under building slab may be PVC. All conduits rising vertically out of slab or out of ground shall be type RMC to 48" above finished floor.
- D. Electrical Metallic Tubing shall be used for all other feeders, branch circuit and communications and control wiring where rigid steel or non-metallic conduit is not specified.
- E. Non-metallic conduit, minimum schedule 40 PVC, shall be permitted to be installed underground. Non-metallic conduit shall not be used in any environmental air plenum. If PVC conduit is run, a full sized grounding conductor shall be pulled with the circuit conductors. PVC conduit shall not be run exposed. Where PVC conduit is run underground, it shall be encased in concrete or run minimum 24" below grade, or at the depth below grade shown on the drawings.
- F. Flexible metallic tubing and EMT shall only be permitted in spaces above finished ceilings and within enclosed walls within the interior of buildings. Flexible metallic tubing shall only be permitted for the final four (4) feet of conduit runs to fixtures located above finished ceilings. No flexible metallic tubing or EMT will be permitted exposed. Also, EMT may not be installed in or below concrete slabs.
- G. Flexible metal conduit or liquid-tight flexible metal conduit shall be used for the final connection of runs to motors. Flexible conduit shall be at least twelve (12) inches, but not more than 48 inches long. Where used, an external grounding conductor shall be run with conduit unless conductor is made as a part of the conduit.
- H. Conduits installed underground and used for communications system wiring shall be reviewed with the communications contractor prior to installation. Conduits below the vapor barrier may require moisture proof wiring to comply with the structured connectivity solution. Conduits may need to be installed above the vapor barrier to maintain connectivity solution compliance.

### 3.04 CONDUIT - GENERAL

- A. Fittings for rigid steel conduits shall be hot-dipped galvanized steel and shall be of a type especially designed and manufactured for their purpose. Fittings for EMT shall be die cast zinc type. Rigid conduit joints for single conduit runs shall be made with threaded fittings made tight with at least five threads fully engaged. Fittings for rigid non-metallic conduit shall be solvent welded.
- B. Where they enter boxes or cabinets that do not have threaded hubs, conduits shall be secured in place with galvanized locknuts inside and outside the cabinet and shall have bushings inside. Conduits larger than 1-1/4 inch shall have galvanized locknuts and galvanized bushings.
- C. All conduits shall be installed concealed or as indicated or scheduled on the drawings and shall be of sufficient size to accommodate the required number of insulated conductors including equipment grounding conductor where such grounding conductor is required or

specified.

- D. Conduit runs shall be straight; elbows and bends shall be uniform, symmetrical and free from dents or flattening. Exposed conduit shall be firmly supported on galvanized hangers; on brackets, hangers, or pipe straps; or by beam clamps. Conduit installed exposed shall be neatly aligned and run at right angles to the building walls or walls of the rooms in which they are installed. All exposed conduit shall be located to avoid all conflicts with architectural or mechanical components.
- E. Pull boxes shall be installed as required to permit proper installation of conductors and expansion fittings installed where conduit runs cross building expansion joints.
- F. Conduit shall be run no closer than six (6) inches to covering of hot water or steam piping except where crossings are unavoidable. Conduit shall be kept at least one (1) inch from crossing steam and hot water piping.
- G. Conduit shall be held securely in place by hangers and fasteners of appropriate design and dimensions for the particular application. Support shall be such that no strain will be transmitted to outlet box and pull box supports. Wire shall not be used, with or without spring steel fasteners, clips or clamps, for the support of any conduit. Conduit shall not be supported by or attached to duct work unless specifically allowed otherwise.
- H. Hangers and other fasteners shall be supported on solid masonry with inserts or expansion sleeves and bolts, on wood with wood screws, hollow masonry with toggle bolts, on steel with machine screws or welded threaded studs. Fastenings shall be proof tested by the Contractor for secure mounting.
- I. All conduits shall be cut square and reamed at the ends. The conduit system shall be complete and cleaned before any conductors are installed. Open ends of all conduits shall be capped until conductors are installed. A non-metallic fish wire shall be installed in all empty conduits. Empty conduit shall remain capped.
- J. Contractor shall refer to National Electrical Code Appendix C, Conduit and Tubing Fill Tables for Conductors and Fixture Wire of the Same Size. Contractor shall refer to the appropriate table for the conduit and wire condition and shall install wiring in accordance with code requirements.

### 3.05 FLEXIBLE CONDUIT

- A. Flexible metal conduit may be used for short final connections to equipment where permitted by governing codes. Flexible metal conduit shall be sized and supported in accordance with Article 350 of the NEC or more stringent local codes. A separate equipment-grounding conductor sized in accordance with NEC Table 250.122 shall be installed in flexible conduit unless exceptions are allowed by governing codes and if the fittings used are UL listed for the purpose.
- B. Liquid-tight flexible metal conduit shall be used where flexible conduit is permitted and desired and conditions of installation, operation, or maintenance require protection from liquids, vapors, or solids and in other hazardous locations where specifically approved. Flexible conduit for all exterior motor connections shall be liquid-tight. Liquid-tight flexible conduit shall be used with terminal fittings approved for the purpose.

### 3.06 FIRE-RATED WALL AND FLOOR THROUGH-PENETRATIONS

- A. All fire-rated walls or floors penetrated by this Contractor shall be properly sealed with fire stopping materials. All floor through-penetrations shall be fire stopped with a light-weight mortar material. Wall through-penetrations shall be fire stopped with a non-hardening putty material. Contractor shall see that all penetrations are fire stopped and seals are inspected.

### 3.07 SUPPORTS AND FITTINGS

- A. The Contractor shall furnish and install all supports for equipment under this contract. Supports shall be spaced at intervals of eight (8) feet maximum for rigid conduit and five (5) feet maximum for EMT and as necessary to obtain rigid support. Perforated strap supports will not be permitted.
- B. All conduits shall be firmly secured with pipe clamps, conduit straps, or suspension hangers as appropriate. Fasten to steel with screws in tapped holes, to wood with wood screws, and to masonry with expansion anchors. Expansion anchors shall have a minimum pull out load of 1,200 pounds and an ultimate shear load of 1,950 pounds.
- C. All conduit, fixtures, and accessories shall be rigidly supported to form a firm, well-braced installation.
- D. Joints shall be made tight with standard galvanized or sheradized couplings; corners turned with fittings, elbows, or long radius bends.
- E. Low voltage wiring installed above accessible ceilings shall be supported on J-hooks. J-hooks installed for communications system wiring shall not be used for other low voltage system wiring (fire alarm, security, EMS controls, etc.).

### 3.08 WEATHERPROOF EQUIPMENT

- A. All disconnect switches, starters, and other electrical equipment located on the exterior of the building or exposed to the outside shall be enclosed in a rain-tight enclosure.
- B. All lighting fixtures or other devices located on an exterior wall of the building shall be mounted on a flush-mounted, cast outlet box.

### 3.09 MOUNTING HEIGHTS

- A. Unless otherwise noted on the drawings or required by the Architect, the following mounting heights shall apply:
 

Toggle Switches	4'-0"
Receptacles	1'-6"
Panelboards	6'-0" to top
Telephone Outlets	1'-6" (48" for wall phone)
Safety Switches	5'-0" to top
Motor Control Equipment	5'-0" to top
Wiring Devices above counters	0'-6" above counter top
Fire Alarm Manual Stations	4'-0"
Fire Alarm Annunciation Devices	80" or 6" below ceiling (whichever is lower)
- B. Upon permission of the Architect, mounting heights may be adjusted to simplify cutting of masonry units or to facilitate furniture and cabinet arrangements. Dimensions above refer to the centerline of the device unless noted otherwise.

**END OF SECTION 26 05 00**

**SECTION 26 05 18**  
**DWELLING UNIT CABLES AND CONNECTORS AND WALL BOXES**

**PART 1 - GENERAL**

1.01 WORK INCLUDED

- A. Provide electrical boxes, cables, and connector work as shown, required, and specified.
- B. Conductors and connectors required for the dwelling units include the following:
  - 1. 600V copper non-metallic NM and NMC cables.
  - 2. 600V aluminum or copper service entrance rated SE and USE cables.
  - 3. 600V compression connectors.
- C. Outlet and switch boxes required for the project include the following:
  - 1. Non-metallic PVC or thermoplastic
  - 2. Metallic
- D. Application: The applications for boxes, conductors and connectors required on the project are as follows:
  - 1. Power distribution circuitry within residential dwelling units in walls and spaces not shared with common areas or areas not classified as a dwelling unit.
  - 2. Lighting branch circuitry
  - 3. Appliance, receptacle, and equipment branch circuitry
  - 4. Motor branch circuitry
  - 6. Other line voltage circuits
- E. In walls shared with non-dwelling unit spaces, boxes shall be metallic and MC cable shall be used or conductors shall be in metallic conduit or MC as permitted by the NEC. Refer to other specification sections.
- F. Refer to other specification sections for wiring in common for voice, audio, video, data, alarm and instrumentation cables.

1.02 QUALITY ASSURANCE

- A. UL Label: Cables, connectors, boxes, and accessories shall be listed and approved for their intended use.

**PART 2 - PRODUCTS**

2.01 CONDUCTORS AND CONNECTORS

- A. General: Except as indicated, provide conductors and connectors of manufacturer's standard materials, as indicated by published product information, designed and constructed as instructed by the manufacturer, and as required for the installation.
- B. Conductors: Provide factory-fabricated conductors of the size, rating, material, and type as indicated for each use. Conductors shall be soft or annealed copper wires meeting, before stranding, the requirements of ASTM B 3, Standard Specification for Soft or Annealed Copper Wire for Electrical Purposes, latest edition.
  - 1. Conductors sized #14 AWG through #10 AWG shall be solid or stranded.
  - 2. Conductors size AWG #8 and larger shall be stranded. Stranding shall be Class B meeting the requirements of ASTM B 8, Standard Specification for Concentric-Lay-

- Stranded Copper Conductors, Hard, Medium Hard, or Soft.
3. Where authorized in writing by the Owner and Architect and not prohibited by local codes or the Authority Having Jurisdiction (AHJ), aluminum compact stranded AL SE or USE cable may be substituted at Contractor's discretion only for service entrance conductors. Aluminum conductors shall not be used for grounding or for branch circuits or any equipment terminations. Aluminum conductor size shall meet or exceed the equivalent ampacity for the specified copper conductor using dwelling ampacities for both types of conductors.
- C. Insulation for standard building conductors: Insulation shall meet or exceed the requirements of UL 83, Standard for Thermoplastic Insulated Wires.
1. All wiring inside lighting fixtures shall be temperature rated per NEC.
  2. Insulation for copper conductors shall be UL Type THHN/THWN, 90 degrees C.
  3. Insulation for aluminum SE conductors shall be UL Type XHHW-2, 90 degrees C.
- D. Color coding for conductors as required by NEC. Color coding for phase and voltage shall be as required by local codes and local standards.

## 2.02 BOXES AND FITTINGS

- A. Interior Outlet Boxes: Provide PVC or thermoplastic outlet wiring boxes, of the type, shape, and size, including depth of box, to suit respective locations and installation. Provide gang boxes where devices are shown grouped. Single box design; sectional boxes are not acceptable.
1. Type of Various Locations:
    - a. Technology, data, voice, video and multi-media outlet boxes: minimum 4-inch square (2-gang), 3-inch deep.
    - b. Security, access control, and video surveillance outlet boxes: single gang outlet boxes mounted long axis vertically, 3-inch deep.
    - c. All other applications: minimum 4-inch square (2-gang) 3-inch deep boxes.
    - d. Surface: Type FS or FD box with surface cover.
    - e. Special: Where above types are not suitable, boxes as required, taking into account space available, appearance, and code requirements.
  2. Interior Outlet Box Accessories: Outlet box accessories required as for installation, including covers or wall device plates, mounting brackets, wallboard hangers, extension rings, plaster rings for boxes in plaster construction, fixture studs, cable clamps and metal straps or bar hangers for supporting outlet boxes. Accessories shall be compatible with outlet boxes used and meet requirements of individual wiring.
- B. Damp or wet location outlet and switch boxes: Deep type, cast-metal weatherproof outlet wiring boxes, of type, shape, and size required. Include depth of box, threaded conduit ends, and stainless-steel cover plate with spring-hinged waterproof caps suitable for application. Include faceplate gasket.
- C. Junction and Pull Boxes: Galvanized sheet steel junction and pull boxes, with screw-on covers, of type, shape, and size, to suit respective location and installation.
1. Type for Various Locations:
    - a. Minimum Size: 4-inch square, 2-1/8-inches deep.
    - b. 150 Cubic Inches in Volume or Larger: Code gauge steel with sides formed and welded, screw covers unless shown or required to have hinged doors. All boxes mounted above ceiling shall have screw covers. Boxes in all other areas with covers larger than 12-inches shall have hinged with screw covers. Knockouts factory stamped or formed in field with a cutting tool to provide a clean symmetrically cut hole.

- c. Exterior or Wet Areas: 304 stainless steel NEMA 4X construction with gaskets and corrosion-resistant fasteners
- D. Conduit Bodies: Provide galvanized cast-metal conduit bodies, of type, shape, and size, to suit location and installation. Construct with threaded conduit ends, removable cover, and corrosion-resistant screws.
- E. Bushings, Knockout Closures, and Locknuts: Provide corrosion-resistant punched-steel box knockout closures, conduit locknuts, and insulated conduit bushings of type and size to suit use and installation.
- F. Outlet boxes in fire rated walls: Provide 2-hour rated gasket within box and below cover, equal to Rectorseal Metacaulk box guard and cover guard.

### **PART 3 - EXECUTION**

#### **3.01 CABLE AND CONDUCTOR INSTALLATION**

- A. General: Install electrical cable and conductors and connectors as shown, in accordance with the manufacturer's written instructions, the requirements of NEC, the NECA Standard of Installation, and industry practices.
- B. Coordination: Coordinate conductor installation work with electrical raceway and equipment installation work, as necessary for interface.
- C. Cables:
  1. Provide a grounded (neutral) conductor for each branch circuit. Do not share grounded (neutral) conductors.
  2. Run service entrance cables their entire length in continuous section without joints or splices.
  3. No wire smaller than #14 AWG shall be permitted for any 15 Amp circuit. No wire smaller than #12 AWG shall be used for any 20 Amp circuit.
  4. Provide the same size wire from the load center to last outlet on circuit.
  5. Branch circuit voltage drop shall not exceed 3% of rated voltage.
  6. No tap or splice shall be made in any conductor except in outlet boxes, switch boxes, pull boxes, junction boxes, splice boxes. Those boxes shall be in an accessible location. Make taps and splices using an approved connector. Insulate taps and splices equal to the adjoining conductor. Make splices or taps only on conductors that are a component part of a single circuit, protected by approved methods. Taps or splices in feed through branch circuits for connection to light switches or receptacles shall be made by pigtail connection to the device.
  7. Support cables to building structure framing as required by NEC.
  8. Do not permit conductors entering or leaving a junction or pull box to deflect to create pressure on the conductor insulation.
  9. Make joints in branch circuits only where circuits divide. These shall consist of one through circuit to which the branch from the circuit shall be spliced.
  10. Make connections in conductors up to a maximum of one #6 AWG wire with two #8 AWG wires using twist-on pressure connectors of required size.
  11. Make connections in conductors or combinations of conductors larger than specified using cable fittings of type and size required for specific duty.
  12. After a splice is made, insulate entire assembly with UL-approved insulating tape to a value equivalent to the adjacent insulation.
  13. Make splices and connections in control circuit conductors using UL-approved solderless crimp connectors.

14. All cables shall include a grounding conductor.
15. Neatly train and lace wiring inside boxes, equipment, and load centers.
16. Clean conductor surfaces before installing lugs and connectors.
17. Make splices, taps and terminations to carry full ampacity of conductors with no perceptible temperature rise.
18. Provide stranded conductors connected with pressure type connectors / compression fittings and terminal lugs UL listed for the type of conductor used (AL-CU) and correctly sized to the diameter of the bare conductors.
19. Run mains and feeders their entire length in continuous pieces without splices or joints.
20. Color code conductors.
21. Conductors shall be the same color from load side of overcurrent protection device to outlet or utilization equipment.
22. Spare cables or conductors shall not be installed in any conduit, gutter, raceway, panel, load center, or enclosure unless noted otherwise.

**D. Splices AND JOINTS:**

1. In accordance with UL 486A, C, D, E, and NEC.
2. Aboveground Circuits (No. 6 AWG and smaller):
  - a. Connectors: Solderless, screw-on, reusable pressure cable type, rated 600 V, 220° F, with integral insulation, approved for copper and aluminum conductors.
  - b. The integral insulator shall have a skirt to completely cover the stripped wires.
  - c. The number, size, and combination of conductors, as listed on the manufacturers' packaging, shall be strictly followed.

**E. Above ground Circuits No. 4 AWG and larger:**

1. Connectors shall be indent, hex screw, or bolt clamp type of high conductivity and corrosion resistant material, listed for use with copper and aluminum conductors.
2. Provide field-installed compression connectors for cable sizes 250 kcmil and larger with not less than two clamping elements or compression indents per wire.
3. Insulate splices and joints with materials approved for the particular use, location, voltage, and temperature. Splice and joint insulation level shall be not less than the insulation level of the conductors being joined.
4. Plastic electrical insulating tape: Per ASTM D2304, flame-retardant, cold and weather resistant.

**F. Underground Branch Circuits and Feeders:**

1. Submersible connectors in accordance with UL 486D, rated 600 V, 190°F, with integral insulation.

**3.02 BOXES AND FITTINGS INSTALLATION**

- A. Install electrical boxes and fittings as shown and as required, in compliance with NEC requirements, in accordance with the manufacturer's written instructions, in accordance with industry practices. All boxes at finished surfaces shall be recessed to a depth compatible with the finish material without the use of box extenders or field modifications.
- B. Provide minimum 4-inch square (2-gang), 3-inch deep interior outlet boxes for technology, data, audio/video, and multi-media outlet boxes. Provide single gang only, 3-inch deep outlet boxes mounted long axis vertically for security, signaling, access control, and video surveillance, coordinate with communications, security and technology equipment installation. Provide minimum 3-inch deep boxes for all other applications. Where indicated differently on plans or where conflicts arise, notify the Architect / Engineer prior to installation. Box extenders or plaster rings shall not be used to increase size. Provide increased box size as required for the specific

installation.

- C. Determine from the drawings and by field measurement the location of each outlet. Locate electrical boxes to accommodate millwork, fixtures, marker boards, and other room equipment at no additional cost to the Owner. The outlet locations shall be modified from those shown to accommodate changes in door swing or to clear interferences that arise from construction as well as modifying them to center in rooms. The modifications shall be made with no cost to the Owner as part of coordination. Check the conditions throughout the job and notify the Architect of discrepancies. Verify modifications before proceeding with installation. Set wall boxes in advance of wall finish construction, blocked in place and secured. Set all wall boxes flush with the finish. Provide wall box support legs, hangers, or other approved accessories attached to studs to prevent movement of box in wall and to hold plumb and square.
- D. Unless noted or directed otherwise at installation, place outlet boxes as indicated on architectural elevations and as required by local codes.
- E. Outlets above counters, mount long axis vertically. Refer to architectural elevations and coordinate to clear backsplash and millwork.
- F. Provide pull boxes, junction boxes, wiring troughs, and cabinets where necessary for installation of electrical systems.
- G. Provide weatherproof boxes for interior and exterior locations exposed to weather or moisture.
- H. Provide knockout closures to cap unused knockout holes in boxes.
- I. Locate boxes and conduit bodies to ensure access to electrical wiring. Provide minimum 12-inch clearance in front of box or conduit body access.
- J. Secure boxes to the substrate where they are mounted or embed boxes in concrete or masonry.
- K. Boxes shall not be secured to the drywall or wall finishes, HVAC ductwork, or piping system.
- L. Provide junction and pull boxes for feeders and branch circuits where shown and where required by NEC, regardless of whether or not boxes are shown.
- M. Coordinate locations of boxes in fire rated partitions and slabs to not affect the fire rating of the partition or slab. Notify the Architect in writing where modification or construction is required to maintain the partition or slab fire rating.
- N. Align adjacent wall mounted outlet boxes for switches, thermostats, and similar devices.
- O. Use flush mounting outlet box in finished areas unless specifically indicated as being used with exposed conduit.
- P. Locate flush-mounting box in masonry wall to require cutting of masonry unit corner only. Coordinate masonry cutting to achieve neat opening.
- Q. Do not install flush mounting box back-to-back in walls; provide minimum 6 inches with stud separation. Provide minimum 24 inches with separation in acoustic rated walls.
- R. Secure flush mounting box to interior wall and partition studs. Accurately position to allow for surface finish thickness. Provide UL listed materials to support boxes in walls to prevent movement. Ensure box cannot be pushed inside wall.

- S. Use stamped steel bridges to fasten flush mounting outlet box between studs that can not be directly fastened to the stud.
- T. Install flush mounting box without damaging vapor barriers, wall insulation or reducing its effectiveness.
- U. Use adjustable steel channel fasteners for hung ceiling outlet box.
- V. Use gang box where more than one device is mounted together. Do not use sectional boxes.
- W. Install knockout closures in unused metal box openings.
- X. Mount boxes to the building structure with supporting facilities independent of the conduits or raceways.
- Y. Adjust flush-mounting outlets to make front flush with finished wall material.
- Z. Do not mount junction boxes above in inaccessible spaces. Do not mount junction boxes above ceilings accessible only by removing light fixture, mechanical equipment or other devices. At inaccessible spaces use junction box furnished with light fixture or light fixture wiring compartment UL listed for through wiring accessible through the fixture housing.
- A. All boxes shall be protected from building finish painters' over spray and from fire proofing overspray. Remove protective coverings when painting and fire proofing are complete.
- B. Bond equipment grounding conductor to all metallic junction and pull boxes.
- C. Box extenders or plaster rings shall not be used to increase the code mandated cable capacity of a box. Provide proper size box.

#### 3.04 TESTING

- A. Pre-Energization Check: Before energizing, check cable and conductors for circuit continuity and short circuits. Correct malfunctions.

**END OF SECTION 26 05 18**

**SECTION 26 20 00  
SERVICE AND DISTRIBUTION**

**PART 1 - GENERAL**

1.01 SYSTEM VOLTAGE

- A. The building service from the service entrances shall be 120/208V, 3 phase, 4 wire. Dwelling Unit voltages shall be 120/208V 1 phase, 3 wire.

1.02 TERMINATIONS

- A. All wiring shall be sized based on 75°C rated conductors. All connectors shall be rated for 75°C in accordance with N.E.C. Article 110-14 requirements.

**PART 2 - PRODUCTS**

2.01 SAFETY SWITCHES

- A. Furnish and install safety switches as shown on the Drawings. All switches shall be fused NEMA Heavy Duty Type HD and Underwriter's Laboratories listed. All switches shall have blades that are fully visible in the "OFF" position with the door open. Switches shall be dead-front construction with permanently attached arc suppressers. Lugs shall be UL listed for copper and aluminum conductor and front removable. All current carrying parts shall be plated to resist corrosion. Switches shall be quick-make, quick-break type. During operation of the switch, the movable contacts shall not be able to be restrained by the handle once the closing or the opening action of the contacts has been initiated. Switches shall have cover interlocks to prevent opening of the switch door while the switch is in the "ON" position or closing the switch with the door open. Switch shall have padlocking capabilities in the "OFF" position.
- B. Safety switches shall be rated 600 volts for 480 volt service and rated 240 volts for 208 volt service. Switches shall be motor rated when used for motor loads. Switches shall be NEMA 1 enclosed for indoor applications and NEMA 3R for outdoor or wet area locations.
- C. Switches used for service entrance shall be service entrance rated. Safety switches shall be furnished complete with fuses.
- D. Safety switches shall be Square D Heavy Duty Class 3110 type, Cutler-Hammer type DH, or Siemens Heavy Duty Vacu-Break type.

2.02 FUSES

- A. All fuse holders shall be provided with dual-element, time-lag fuses as scheduled on the Drawings or as recommended by the equipment manufacturer. Fuses shall be rated 200,000 AIC. Fuses shall be Buss Fusetron, Economy Econ, or Gould Shawmut Tri-Onic for component protection and Buss Limitron, Economy Econolin, or Gould Shawmut Amp-Trap for circuit protection.

2.03 CIRCUIT BREAKER PANELBOARDS

- A. Panelboards shall be sized as shown on the drawings and schedules, and shall be the bolted breaker panelboard type. Panel buses shall be copper. Loadcenters shall only be permitted in the residential units.

- B. All branch breakers are to be quick-make, quick-break (over center toggle device) with trip indication and common trip on all multiple breakers. Trip indication shall be clearly shown by breaker handle taking a position between "ON" and "OFF" position. Breakers shall be ambient compensated to carry full NEC load in 120 degree F room temperature. Panelboards shall have distributed phase busing throughout. Any two adjacent single pole breakers shall be replaceable by a two pole breaker, and any three adjacent single pole breakers shall be replaceable by a three pole breaker.
- C. Minimum interrupting capacity of breakers shall be as shown on panel schedules. No breakers shall be rated less than 10,000 RMS symmetrical amperes.
- D. Branch breakers shall be numbered 1, 3, 5, etc. from top to bottom beginning at the top of the left hand column so that #1 shall be on phase A, #3 on phase B, and #5 on phase C.
- E. All breakers shall be bolt on type. Panelboards for 120/208 volt or 120/240 volt service shall be GE type NLAB, Square D type NQ, Siemens type CDP-7, Cutler-Hammer POW-R-LINE series, or equal. Panelboards for 480/277 volt service shall be Square D type NEHB, Siemens type Sentron, Cutler-Hammer POW-R-LINE series, or equal.

2.04 Load Centers for Dwelling Units

- A. Refer to specification section 262415.

**PART 3 – EXECUTION**

3.01 COORDINATION

- A. Contractor shall coordinate all service and distribution work with other crafts on the project.

3.02 TEST AND BALANCING

- A. At such times as the Architect directs, the Contractor shall conduct in the Architect's presence operating tests to demonstrate the electrical systems are installed and will operate properly and in accordance with the requirements of the specifications. The Contractor shall furnish instruments and personnel required for such tests. Any work that is found to be defective, or material that are found to vary from the requirements of the drawings or specifications shall be replaced by the Contractor without additional cost of the Owner.

3.03 EQUIPMENT FUSING

- A. All equipment shall be furnished complete with fuses as described herein and/or as shown on the Drawings. Contractor shall furnish one set of spare fuses for each size fuse furnished on the project. Fuses shall be delivered to Owner prior to acceptance of project.
- B. Fusing for protective equipment shall be of the type specifically designed for the intended application. Fuses for service entrance rated equipment shall be Class L. Fuses for branch circuit protection shall be Class RK5 unless specified otherwise. Provide protective fuses as specifically required by the equipment manufacturer.

3.04 INSTALLATION

- A. The Electrical Contractor shall place a sign at the Main Switchboard indicating the type and location of the emergency generator in accordance with National Electrical Code Article 702.8(A) requirements.

- B. Disconnecting means shall be provided for each motor and motor controller, and shall be located within site from the controller and motor locations in accordance with National Electrical Code Article 430.102 requirements.

**END OF SECTION 26 20 00**

## SECTION 26 24 15 LOAD CENTERS FOR DWELLING UNITS

### **PART 1 - GENERAL**

#### 1.01 WORK INCLUDED

- A. Load centers, including cabinet, as shown, scheduled, indicated, and specified.

#### 1.02 QUALITY ASSURANCE

- A. UL Standards: Load centers and enclosures shall confirm to all applicable UL standards and shall be UL labeled.

### **PART 2 - PRODUCTS**

#### 2.01 ACCEPTABLE MANUFACTURERS

- A. Schneider Electric - Square D
- B. ABB-General Electric Co.
- C. Siemens
- D. Eaton

#### 2.02 MATERIALS AND COMPONENTS

- A. General: Panelboards shall be dead-front type equipped with circuit breakers as shown and as required.
- B. The overcurrent protective device short circuit, coordination and arch flash studies performed by the overcurrent protective device manufacturer shall be used by the respective switchgear vendor(s) to select appropriate equipment, switchgear, and overcurrent protective device characteristics such as but not limited to: equipment bracing, AIC rating, circuit breaker frame size and trip settings, and fuse type/class. The appropriate equipment suitable and required by the studies for code compliance shall be included with the submittal data for review and provided at no additional cost to the Owner. The appropriate equipment recommended by the studies for enhanced selective coordination or enhanced arc flash energy reduction beyond code compliance shall be included with the submittal data for review and consideration purposes by the engineer.
- C. Busing Assembly: Panelboard phase, neutral, and equipment ground busing shall be aluminum or copper. Bus structure and mains shall have ratings as shown and scheduled. Furnish a bare uninsulated ground bus inside each panelboard enclosure. Neutral bus termination quantity shall match or exceed the maximum number of single pole circuit breakers the load center will accept.
- D. Main circuit breakers and feeder / branch circuit breakers:
  - 1. Thermal magnetic with factory fixed trip.
  - 2. 125-600 Amps: Thermal magnetic with adjustable instantaneous trip of 5X – 10X with short time tracking.
  - 3. General requirements:
    - a. Two pole breakers shall have internal common trips.

- b. All circuit breakers used as the main or branch mounted back-fed main shall be bolt-on.
  - c. Load centers shall have interrupting capacity as shown or as required, but in no case less 10k AIC for 120/208/240-Volt systems.
  - d. Personnel ground fault interrupter (GFI) circuit breakers, where shown, shall be maximum 5 mA ground fault trip and shall include a TEST button.
  - e. All load center breakers in dwelling unit shall be AFCI
- E. Spaces: Where space for future breakers or switches is shown, panelboard enclosure shall include removable blank panels or knockouts to allow installation of future breakers or switches.
- F. Integrated Equipment Rating: Do not apply series ratings. Each load center, as a complete unit, shall have a short-circuit rating equal or greater than the available short circuit current. Rating shall have been established by tests on similar panelboards with the circuit breakers or fusible switches installed.
- G. Load center enclosures:
- 1. Provide sheet steel enclosures, minimum 16-gauge nominal thickness, with multiple knockouts, unless shown otherwise.
  - 2. Equip with interior circuit directory frame, card, and clear plastic covering for panelboards.
  - 3. Enclosure shall be for recessed or surface mounting as shown or as required.

### **PART 3 - EXECUTION**

#### 3.01 INSTALLATION OF PANELBOARDS AND ENCLOSURES

- A. General: Install load centers only within the confines of the residential dwelling unit it serves, as shown, including electrical connections, in accordance with the manufacturer's written instructions, the requirements of NEC, NECA Standard of Installation, and industry practices.
- B. Coordination: Coordinate installation of panelboards and enclosures with conductor and raceways installation work.
- C. Anchoring: Anchor enclosures to walls and structural surfaces ensuring that they are permanently and mechanically secured.
- D. Directory Card: Provide a typed circuit directory card(s) upon completion of work. Directory card shall be of super heavy-weight index card stock, 110 lb, white. Directory shall include type of load (i.e.: receptacles, lighting, exhaust fan, etc.) and location (i.e.: Dining Room, Bath Room, etc.).
- E. Circuit Arrangement: Branch circuits shall be arranged to provide the best possible phase balance, unless shown otherwise.
- F. Load centers not intended to be used as service entrance (SE) rated or for establishing a separately derived neutral system shall have the factory installed neutral to ground bonding screws and straps removed and disposed of.
- G. Conductors shall be bent neatly opposite circuit breaker to which they are to be attached. Conductors shall be connected in a neat and professional manner. Conductors brought in from the top or bottom of the cabinet shall be bent neatly opposite the circuit breaker to which they are to be attached. Each conductor shall be run along the full height of the panel and

returned to the circuit breaker location to allow relocation of the conductor to any position along the bus. Panelboard shall be cleaned of all construction debris prior to substantial completion review. Neutral and grounding conductors shall be installed similar to the phase conductors.

- H. Circuit breakers and conductors installed for SPD devices shall be located at the top or bottom of the load center in respect to the location of the SPD device. Route all conductors to the SPD device with straight as possible run, using longest sweep bends and the shortest conductor length possible. Twist all SPD conductors and secure with tie straps wherever possible.
- I. Install load centers so that breaker number 1 is the top left breaker.
- J. Label breaker mounting space with stick-on number labels.
- K. Mount the fully aligned panelboard such that the maximum height of the top circuit breaker above the finished floor shall not exceed 78-inches. Mount panelboards as high as practical and such that the bottom of the cabinets will not be less than 6 inches above the finished floor.

### 3.02 TESTING

- A. Before energizing, energization, check for continuity of circuits and short circuits.

**END OF SECTION 26 24 15**

**SECTION 26 43 13**  
**SURGE PROTECTION DEVICES FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS**

**PART 1 - GENERAL**

1.01 SCOPE

- A. This section describes the materials and installation requirements for surge protective devices (SPD) for the protection of all AC electrical circuits.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section. Other sections that may relate to the work in this section include, but are not limited to, the following:
1. Section 16050 – Basic Electrical Materials and Methods

1.03 SUBMITTALS

- A. Submit shop drawings and product information for approval and final documentation in the quantities listed according to the Conditions of the Contract. Customer name, customer location, and customer order number shall identify all transmittals.
- B. Submittals shall include UL 1449 3rd Edition Listing documentation verifiable by visiting [www.UL.com](http://www.UL.com), clicking “Certifications” link, searching using UL Category Code: VZCA.
1. Short Circuit Current Rating (SCCR)
  2. Voltage Protection Ratings (VPRs) for all modes
  3. Maximum Continuous Operating Voltage rating (MCOV)
  4. I-nominal rating (I-n)
  5. SPD shall be Type 1 UL listed and labeled
- C. Upon request, an unencapsulated but complete SPD formally known as TVSS shall be presented for visual inspection.
- D. Minimum of ten (10) year warranty

1.04 RELATED STANDARDS

- A. The following codes and standards shall be referenced:
1. IEEE C62.41.1, IEEE Guide on the Surge Environment in Low-Voltage (1000 V and Less) AC Power Circuits,
  2. IEEE C62.41.2, IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits,
  3. IEEE C62.45, IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000 V and Less) AC Power Circuits.
  4. National Electrical Code: Article 285
  5. UL 1283 - Electromagnetic Interference Filters
  6. UL 1449, Third Edition, effective September 29, 2009 – Surge Protective Devices

1.05 LISTING REQUIREMENTS

- A. SPD shall bear the UL Mark and shall be Listed to most recent editions of UL 1449 and UL 1283. “Manufactured in accordance with” is not equivalent to UL listing and does not meet the intent of this specification.

- B. SPD and performance parameters shall be posted at [www.UL.com](http://www.UL.com) under Category Code: VZCA. Products or parameters without posting at [UL.com](http://www.UL.com) shall not be approved.

#### 1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage a firm with at least ten (10) years' experience in manufacturing transient voltage surge suppressors.
- B. Manufacturer shall be ISO 9001 or 9002 certified.
- C. The manufacturer of this equipment shall have produced similar electrical equipment for a minimum period of five (10) years. When requested by the Engineer, an acceptable list of installations with similar equipment shall be provided demonstrating compliance with this requirement.
- D. The SPD shall be compliant with the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC.

#### 1.07 DELIVERY, STORAGE AND HANDLING

- A. Handle and store equipment in accordance with manufacturer's Installation and Maintenance Manuals. One (1) copy of this document to be provided with the equipment at time of shipment.

### **PART 2 - PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Provide externally mounted transient voltage suppressors as described herein.
- B. Manufacturer and/or manufacturer's model number listed in this Specification are used to establish general style, type, character, and quality of product desired. Similar items manufactured by manufacturers other than those listed will be considered, providing submittals are made according to Pre-Bid Approval requirements of Instructions to Bidders.
- C. Where no manufacturer or model number are given, any product meeting performance or design criteria, or referenced trade association standard may be used and Pre-Bid Approval is not required.
- D. Subject to compliance with the specified requirements, provide products by one of the following manufacturers:
  - 1. Siemens
  - 2. Advanced Protection Technologies

#### 2.02 SURGE PROTECTIVE DEVICE FEATURES

- A. SPD shall be UL 1449 labeled with 200kA Short Circuit Current Rating (SCCR). Fuse ratings shall not be considered in lieu of demonstrated withstand testing of SPD, per NEC 285.6.
- B. SPD shall be UL 1449 labeled as Type 1 intended for use without need for external or supplemental overcurrent controls. Internal overcurrent and thermal overtemperature controls shall protect every suppression component of every mode, including N-G. SPDs relying upon external or supplementary installed safety disconnectors do not meet the intent of this specification.

- C. SPD shall be UL 1449 labeled with 20kA I-nominal (I-n) (verifiable at UL.com) for compliance to UL 96A Lightning Protection Master Label and NFPA 780.
- D. Suppression components shall be heavy duty 'large block' MOVs, each exceeding 30mm diameter.
- E. Standard 7 Mode Protection paths: SPD shall provide surge current paths for all modes of protection: L-N, L-G, L-L, and N-G for Wye systems; L-L, L-G in Delta and impedance grounded Wye systems.
- F. If a dedicated breaker for the SPD is not provided in the switchboard, the service entrance SPD shall include an integral UL Recognized disconnect switch. A dedicated breaker shall serve as a means of disconnect for distribution SPD's.
- G. SPD shall meet or exceed the following criteria:
1. Minimum surge current capability (single pulse rated) per phase shall be:
    - a. Service Entrance applications:
      - 1) Siemens Model TPS3 12 with Maximum 7-Mode surge current capability shall be 300kA per phase.
      - 2) Advanced Protection Technologies Model TE\_XAS30 series with Maximum 7-Mode surge current capability of 300kA per phase.
    - b. Distribution applications:
      - 1) Siemens Model TPS3 12 with Maximum surge current capability of 200kA per phase.
      - 2) Advanced Protection Technologies Model TE\_XAS20 series with Maximum surge current capability of 200kA per phase
    - c. Branch Panel applications:
      - 1) Siemens Model TPS3 12 with Maximum surge current capability of 100kA per phase.
      - 2) Advanced Protection Technologies Model TE\_XDS104 series with Maximum surge current capability of 100kA per phase
  2. UL 1449 Listed Voltage Protection Ratings (VPRs) shall not exceed the following:
 

VOLTAGE	L-N	L-G	N-G
208Y/120V	700V	700V	700V
480Y/277V	1500V	1500V	1500V
- H. UL 1449 Listed Maximum Continuous Operating Voltage (MCOV) (verifiable at UL.com):
- | System Voltage | Allowable System Voltage Fluctuation (%) | MCOV |
|----------------|--|------|
| 208Y/120       | 25%                                      | 150V |
| 480Y/277V      | 20%                                      | 320V |
- I. SPD shall include a serviceable, replaceable module (excluding Distribution).
- J. Service Entrance SPD shall have UL 1283 EMI/RFI filtering with minimum attenuation of -50dB at 100kHz.
- K. SPD shall have a warranty for a period of ten (10) years, incorporating unlimited replacements of suppressor parts if they are destroyed by transients during the warranty period.
- L. Service Entrance SPDs shall be equipped with the following diagnostics:
1. Visual LED diagnostics including a minimum of one green LED indicator per phase, and one red service LED.

2. Audible alarm with on/off silence function and diagnostic test function (excluding branch).
  3. Form C dry contacts
  4. Surge Counter
  5. No other test equipment shall be required for SPD monitoring or testing before or after installation.
- M. Distribution Panels and Branch Panels SPDs shall be equipped with the following diagnostics:
1. Visual LED diagnostics including a minimum of one green LED indicator per phase, and one red service LED.
  2. No other test equipment shall be required for SPD monitoring or testing before or after installation.
- N. Surge protection devices installed for individual equipment items shall meet or exceed the following criteria:
1. Minimum surge current capability (single pulse rated) per phase shall be:
    - a. Siemens Model TPS3\_0305 series with dry contacts and audible alarm and surge current capability shall be 50kA per phase.
    - b. Advanced Protection Technologies Model S50A series with dry contact and surge current capability shall be 50kA per phase.
  2. UL 1449 Listed Voltage Protection Ratings (VPRs) shall not exceed the following:
 

VOLTAGE	L-N	L-G	N-G
208Y/120V	600V	1000V	1000V
480Y/277V	1200V	2000V	1000V
  3. UL 1449 Listed Maximum Continuous Operating Voltage (MCOV) (verifiable at UL.com):
 

System Voltage	Allowable System Voltage Fluctuation (%)	MCOV
208Y/120	25%	150V
480Y/277V	20%	320V
  4. Furnished with NEMA 4X Polycarbonate enclosure.

**PART 3 - EXECUTION**

3.01 INSTALLATION

- A. The installation shall meet the following criteria:
1. Install per manufacturer's recommendations and contract documents.
  2. Install units plumb, level and rigid without distortion
  3. One primary suppressor shall be installed external to the service entrance in accordance with manufacturer instructions.
  4. Service Entrance SPD shall be installed on the line or load side of the main service disconnect.
  5. Service Entrance SPD ground shall be bonded to the service entrance ground.
  6. At Service Entrance or Transfer Switch, a UL approved disconnect switch shall be provided as a means of servicing disconnect if a 60A breaker is not available.
  7. One SPD shall be installed external to each designated distribution panelboard.
  8. At Distribution, MCC and Branch, TVSS shall have an independent means of servicing disconnect such that the protected panel remains energized. A 30A breaker (or larger) may serve this function.
  9. SPD shall be installed per manufacturer's installation instructions with lead lengths as short (less than 24") and straight as possible. Gently twist conductors together.
  10. Installer may reasonably rearrange breaker locations to ensure short & straightest

- possible leads to SPDs.
11. Before energizing, installer shall verify service and separately derived system Neutral to Ground bonding jumpers per NEC.

3.02 ADJUSTMENTS AND CLEANING

- A. Remove debris from SPD and wipe dust and dirt from all components.
- B. Repaint marred and scratched surfaces with touch up paint to match original finish.

3.03 TESTING

- A. Check tightness of all accessible mechanical and electrical connections to assure they are torqued to the minimum acceptable manufacture's recommendations.
- B. Check all installed panels for proper grounding, fastening and alignment.

3.04 WARRANTY

- A. Equipment manufacturer warrants that all goods supplied are free of non-conformities in workmanship and materials for one year from date of initial operation, but not more than eighteen months from date of shipment.

**END OF SECTION 26 43 13**

## **SECTION 26 50 00 LIGHTING**

### **PART 1 - GENERAL**

#### 1.01 LIGHTING SCHEDULE

- A. The Contractor shall install lighting fixtures and accessories as shown on the drawings and/or described herein. The Contractor shall also install lamps for all fixtures.

### **PART 2 - PRODUCTS**

#### 2.01 LED LIGHTING

- A. Lighting fixtures with LED light sources shall meet the following fixture and light source requirements:
1. LED Color Temperature – Cool White (CW), 5800K nom., CRI > 70
  2. Line Voltage – Universal Voltage 120-277 volts
  3. Governmental Standards – LM79 and LM80 Compliant
  4. Expected Lamp Life – LED Life Rating (L70 B10) to be 60,000 hours to 100,000 hours; Defined as time of operation (in hours) to 30% lumen depreciation (i.e. 70% lumen maintenance), derived from Luminaire in-situ temperature measurement testing (i.e. LED chip package temperature (TS) measurement obtained with the LED chip package operating in given luminaire and in a given stabilized ambient environment) under UL1598 environments and directly correlated to LED package manufacturers IESNA LM-80-08 data. Predicted (L70 B10) Limits (@ 25°C luminaire ambient operating environment): Greater than 60,000 hours @ 350mA Drive Current
  5. Driver – Components must be fully encased in potting material for moisture resistance, and must comply with IEC and FCC standards
  6. Surge Protection – Surge protection must be provided including separate surge protection built into electronic driver
  7. Mechanical – Luminaire LED system components to be low copper aluminum, with high performance heat sink(s) designed specifically for LED luminaires. No active cooling features (Fans, etc.). Luminaire configuration must allow for modular upgradability and/or field repair of all electrical components (i.e. LED modules, Driver(s), etc.). Drivers and vertical light bars must be all mounted to a twist-lock tool-less assembly for ease of installation and trouble-shooting.

#### 2.02 OCCUPANCY SENSORS

- A. Sensor shall be a self-contained dual voltage ceiling mounted device capable of directly switching loads upon detection of human activity. Sensor must be circular, and mount to either a single gang enclosure, or surface mount to a round pancake box.
- B. Sensor must be rated for 120 through 277 VAC and be capable of switching zero to 1200 watts of electronic ballast loads. Sensors must be capable of parallel wiring for multi-sensor applications.
- C. Sensor time delay shall be factory set for typical applications, and field adjustable from 30 seconds to 20 minutes. Sensor must provide a green LED motion indicator. Red LED denoting life safety shall not be permitted.
- D. PIR sensing must utilize a high density Fresnel domed lens, providing a circular view pattern

of at least 360 degrees by 56 degrees.

- E. Passive Dual Technology (PDT) sensing must incorporate PIR with Microphonics, which utilizes a passive microphone with automatic gain control (AGC) to sense both occupants moving and sounds. The PIR must be used to initiate an on condition, once on the PIR or Microphonics shall keep the load on. After the time delay expires and the load goes off, the Microphonics shall remain active up to 10 seconds as a back-up grace period.
- F. Wall box mounted occupancy sensors shall mount in a standard utility box. Sensor shall have self-contained relay (no power pack required), utilize PIR and microphonics detection, and include auto sensitivity adjustment. Wall box sensor shall be intrinsically grounded and include ON/OFF switch and adjustable time delay.
- G. Occupancy Sensor:
  - 1. Ceiling mount for offices and restrooms – Lutron #LOS-CUS-1000-WH / PP-DV; Wattstopper UT-305-2/BZ-50; Sensor Switch CM PDT9
  - 2. Wall mount for offices, storage rooms, etc. – Lutron #MS+OPS6M-DV-color; Wattstopper WD-170-FINISH; Sensor Switch WSX
  - 3. Ceiling mount in large rooms – Lutron #LOS-CDT-2000WH, with #PP-DV universal power pack; Wattstopper DT-205 / BZ-50; Sensor Switch CM PDT10 with PP16
  - 4. Wall/ceiling mount at end of corridors – Lutron #LOS-WIR-WH / PP-DV 1600\*ft coverage; Wattstopper CX-105 / BZ-50; Sensor Switch WV16 with PP16
  - 5. Wall/ceiling mount at center of corridors – Watt Stopper #CX-100-3 series, with #BZ-50 universal power pack; Sensor Switch WV16 with PP16
  - 6. Room controllers – Wattstopper #LMRC-101; nLight #nPP 16
- H. Line Voltage Lighting Contactor:
  - 1. Shall be NEMA-3R where located outdoors and NEMA-1 where located indoor
  - 2. Shall be provided with number of poles required per drawings plus an additional 2 poles or 20% whichever is greater.
  - 3. Shall have integral HOA switch to allow for manual operation of lighting as well as automatic control via photocell.
  - 4. Automatic control is by external photocell contractor shall provide compatible photocell and provide all interconnections required between photocell and contactor.

## 2.03 FIXTURES

- A. Fixtures as described in the Fixture Schedule on the drawings shall be furnished by the Contractor and shall be properly installed.

## **PART 3 - EXECUTION**

### 3.01 INSTALLATION

- A. Unless otherwise specified, lighting fixtures shall be permanently installed and connected to the wiring system.
- B. The Contractor shall support each fixture, independently from the building structure. Ceiling framing members shall not be used to support fixtures except in specified areas where ceiling supports for this purpose have been specified elsewhere in these specifications. Each fixture shall have at least two fixture supports.
- C. Flexible conduit used for fixture whips shall be at least twelve (12) inches, but not more than

48 inches long.

3.02 CEILING COMPATIBILITY

- A. Catalog numbers shown on the drawings or descriptions of lighting fixtures contained herein may indicate fixture compatibility with certain types of ceiling construction. Contractor shall determine exact type of ceiling actually to be furnished in each area and shall obtain fixtures to suit, deviation from specified catalogue numbers or descriptions only where necessary and only to the extent necessary to insure fixture/ceiling compatibility.

3.03 LIGHT LEAKS

- A. The Contractor shall, at the end of this project, adjust all recessed lighting fixtures so that there will be no light leaks between the fixture trim and the ceiling. Contractor shall also adjust recessed fluorescent fixtures to eliminate any light leaks between fixture trim and ceiling grid member.

3.04 LAMPS

- A. The Contractor shall install lamps in all fixtures and shall obtain replacement lamps should any not properly operate or become damaged during construction.

3.05 EXIT FIXTURES

- A. Exit fixtures shall be installed according to Life Safety Code requirements, with face(s) plainly visible and directional arrows indicating the proper direction of egress.

**END OF SECTION 26 50 00**