Project Manual

For

Housing Authority of the City of Wilson, Arkansas

Renovation of 6 Apartment Units 10, 11, 17, 18, 57 & 61

Twin Rivers Architecture, P.A.

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Job No. 2020 CFP Date: Feb. 2020

SPECIFICATIONS

HOUSING AUTHORITY OF THE CITY OF WILSON, ARKANSAS 2020 Renovations WILSON, ARKANSAS

GENERAL DOCUMENTS 00050 00100 00200 00310 00400 00402 00500 00600 00700 00881	Construction Notes Invitation for Bids Instructions to Bidders (HUD-5369) (HUD-5369A) Representations, Certifications and other Statements of Bidders Bid Form Bid Bond Non-Collusive Affidavit Contract Arkansas Performance and Payment Bond General Conditions (HUD-5370) Wage Rate Determination
01010 01010 01300 01415 01600 01710 01740	GENERAL REQUIREMENTS Summary of Work Submittals and Substitutions Inspections, Cutting and Patching Materials and Equipment Cleaning Warranties and Bonds
DIVISION TWO 02610	SITE WORK Concrete Curbs, Walks & Paving
DIVISION THREE	CONCRETE Cast in Place Concrete
DIVISION FOUR DIVISION FIVE	MASONRY (N/A) METALS (N/A)
DIVISION SIX 06100 06200 06400 06410	CARPENTRY Rough Carpentry Finish Carpentry Millwork Cabinetwork
DIVISION SEVEN 07200 07601 07900	THERMAL & MOISTURE PROTECTION Building Insulation Flashing and Sheet Metal Sealants and Caulking
DIVISION EIGHT 08110 08561	DOORS & WINDOWS See Construction Notes Also Steel Doors and Frames (exterior Doors) Vinyl Replacement Windows

09250 09300 09665 09900	FINISHES Gypsum Wallboard Porcelain Tile Flooring- Also See Construction notes 00050 Painting
DIVISION TEN DIVISION ELEVEN DIVISION TWELVE DIVISION THIRTEEN DIVISION FOURTEEN	SPECIALTIES (N/A) EQUIPMENT (N/A) FURNISHINGS (N/A) SPECIAL CONSTRUCTION (N/A) CONVEYING SYSTEMS (N/A)
DIVISION FIFTEEN 15060 15440	MECHANICAL Pipe, Tube and Fittings Plumbing Fixtures and Trim
DIVISION SIXTEEN	ELECTRICAL (see construction notes 00050 And drawings)

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General Construction Notes: (Also see construction notes on plans) Renovations of Apartment Units 10, 11, 17, 18, 57 & 61

Notes:

- 1 Remove floor covering down to slab
- 2 Remove sheetrock, paneling and insulation from all walls and ceiling. Remove tile from bath walls and shower.
- Remove HVAC unit and thermostat and install new unit after renovations are complete. Install unit on return air plenum with return air filter grill under closet door. Mech. Closet door shall have air tight seal. Remove all HVAC ductwork and reinstall new with new registers.
- 4 Remove Light fixtures, Electrical Outlets, switches and all electrical wiring from panel to fixtures, outlets and switches. Re install new outlets and switches at existing locations. Install New or relocate main electrical panel if required
- Remove all plumbing fixtures, remove and cap supply and drain lines not being used for new fixtures or appliances
- 6 Remove and replace water heater plumbing line and vent pipe.
- Demo floor slab as required (and replace after plumbing rough in) in order to install new plumbing lines, fixtures for bath, kitchen, Gas water heater, laundry area.
- 8 Demo stud walls as shown and required to reinstall walls and sheathing as shown.
- 9 Remove interior doors, Remove windows and install new vinyl windows with security screens to match existing see plans and specs.
- 10 Remove wall base, window and door trim, window sills.
- Remove and install new Front and rear entry doors paint if needed.
- Remove any AC condensate lines from attic and relocate to run in wall to outside.

Construction Notes

- 1 Construct new walls as shown on floor plan. Install solid blocking for all accessories and grab bars
- Install 3" of closed cell foam insulation in all exterior walls and 3" sound batt insulation in all interior walls, install 6" sound batts in tenant separation wall After completion of all work in the attic blow in fiberglass insulation total attic insulation Shall be R60
- Install new circuit breakers in electrical panel, Install new wiring to all fixtures, outlets and switches, Install new outlets for new appliances and equipment. Upgrade electrical system to meet latest AR electrical code standards.
- As directed by the Architect. Install new light fixtures, outlets and switches. (Install tops of switches at 48" AFF and outlets at 19" AFF to center. See Light Fixtures and related wiring and switches. Install new smoke/CO detectors in each bedroom and one within 15' of any gas burning appliance. Detectors shall be first alert BRK PRC710B
- Install 5/8" sheetrock on all walls and 5/8" on ceiling, tape, mud and paint.
- Install new vinyl plank flooring in all room except bath. Install ceramic tile on bath floor and shower walls see plans for more locations and info.

- Install new front and rear entry door. Contractor shall supply and install 22 ga steel door on storage room.
- 8 Install new interior doors match size on plans. Install 3" wood trim, Doors shall be Solid Core 6 panel pine, stain grade with 3" trim. Install new ADA lever hardware shall be equal to Kwikset 200DL-26D. Install new window trim and wood window sills stain.
- 9 Relocate or add any heat and air duct, exhaust fan duct, range hood duct as required. Install new heat/air vent registers.
- Install new cabinets. Install 22ga stainless steel sheets at ends of base cabinets each side of range and on wall behind range from floor to behind range hood. Install plastic laminate on all walls where Kitchen cabinets are located (on wall between upper and lower cabinet, behind Ref. from floor to under upper cabinet, between cabinets and window trim, on exposed wall under kitchen sink) use metal panel molding at all joints in plastic Lam. on walls
- Install new supply and drain lines to all plumbing fixtures and appliances, all lines shall be plated brass. Install new gas water heater including all plumbing lines, Gas lines, vent piping and required equipment and supplies.
- Kitchen Sink American Standard 22DB.6332283S.075 w/ plated brass basket strainer and American Standard 4005F.002 Faucet, Provide exterior sewer clean out behind kitchen sink in exterior wall, Range hood GE JV635HWW vent to exterior, Install new Gas Range with new gas supply lines from meter to range.
- 13 In laundry room install new dryer venting.
- 14 Install new Vent-Light in bath see plans.
- 15 Install new bath accessories
- Bath: Install new tub/shower and related trim install ceramic tile on walls and floor
- 17 Supply and install 2" cordless vinyl window blinds on all windows.

SECTION 00100 - INVITATION FOR BIDS

Notice is hereby given that the Housing Authority of the City of Wilson, Arkansas, will accept bids on a General Contract for the renovation of 6 apartment units for Modernization Project CFP 2020 in Wilson, Arkansas. The Housing Authority of the City of Wilson, Arkansas will receive sealed bids until:

10:Q0 AM February 16, 2021

at the Osceola Housing Authority, Executive Directors Office, 100 West Wingfield, Osceola, AR 72370. Bids received after that time will not be accepted. All interested parties are invited to attend. At that time and place, all bids will be publicly opened and read aloud.

The Wilson Housing Authority actively participates in and supports HUD's Section 3 Program. The Wilson Housing Authority will give preference to businesses or business owners who meet the criteria of Section 3 businesses. WHA strongly encourages such businesses to respond to this request for bids.

Address questions to:

Robert Burchfield Twin Rivers Architecture, P.A. 511 South Seventh Street Arkadelphia, AR 71923 email robert@trafirm.com phone(870)-246-3500

Bona Fide General Bidders may secure copies of the proposed Contract Documents (at no charge) from the Architect on the following basis:

A. Bid documents (Plans and Specifications) will be sent out electronically. General contractors may request bid documents by email to robert@trafirm.com

All bids must be submitted on forms furnished in the Contract Documents or by the PHA (Public Housing Authority), submitted in a sealed envelope plainly marked to show the name and address of the bidder, contract job number, and date and time of bid opening. Bidders are required to have an Arkansas Contractor's License. This is in accordance with Arkansas State Statute 71-701 et seq. Each bid submitted must contain the following items:

- 1. Bid form, signed by bidder;
- 2. A bid Guarantee in an amount equal to five (5) percent of the bid. The bid Guarantee can be in the form of a certified check or cashier's check made

payable to the PHA; a U.S. Government Bond endorsed to the PHA; or a satisfactory bid bond executed by the bidder;

- 3. Representations, Certifications, and Other Statements of Bidders, HUD-5369-A;
- 4. Non-Collusive Affidavit, signed by bidder;

The successful bidder shall be required to furnish an Arkansas Performance and Payment Bond or Bonds in the amount of 100 percent of the Contract Bid for contracts that exceed \$25,000 in accordance with Arkansas Statute 18-44-503.

The PHA reserves the right to reject any or all bids or to waive any informalities in the bidding.

No bid shall be withdrawn for a period of sixty (60) days subsequent to the opening of bids without the consent of the PHA.

END OF SECTION

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.

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.
- 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 quarantee 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. Free copies of the circular may be obtained by writing directly to: U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, SW, 2nd Floor, West Wing, Washington, D.C. 20226.
- (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 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.

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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13.	Bidder's Signature	3

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)(l) 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)(l) 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.
- 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.

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.

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.

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.

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)		

BID FORM JOB NO. CFP 2020 Renovation of 6 Apartment Units

FROM:	TO: Housing Authority of The
NAME OF BIDDER	City of Wilson, Arkansas NAME OF PHA
ADDRESS	ADDRESS
CITY STATE ZIP	Wilson, Arkansas CITY STATE ZIP
Gentleman: 1. The undersigned, having familiar with the local conditions affecting the with the specifications (including the Instructions to Bidders, this bid, the of Non-Collusive Affidavit, the form the Arkansas Performance and Payment Conditions, Representations, Certifications, the Scope of the Work and Specifications and Wage Rates) and adhereby proposes to furnish all labor, services required to Renovate 6 Apart Wilson, Arkansas all in accordance the	(himself) (themselves) the cost of the work, and the Invitation for bids, the form of Bid Bond, the form of Contract, and the form of Bond or Bonds, the General cations, and Other Statements of the Technical denda, if any thereto, materials, equipment and coment Units located in
(\$) 2. ALTERNATE PROPOSALS: The following deductive alternates wi order starting with No. 1:	ll be applied in numerical
DEDUCTIVE ALTERNATE NO. 1: Deduct All Work, All labor, materials Renovate Apartment unit 57.	s, and equipment necessary to
Delete the sum of	Dollars (\$)
The undersigned acknowledges receipt the Contract Documents the following	and inclusion as a part of addenda:
Addendum No. Date	
3. In submitting this bid, it is undereserved by the PHA to reject any and of the acceptance of this bid is main to the undersigned within sixty (60)	d all bids. If written notice led, telegraphed or delivered

thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver a contract in the prescribed form and furnish the required Performance and Payment Bond within ten (10) days after the contract is presented to him for signature.

4.	Security	in	the	sum	of						
1	lars (\$								form		
is	submitted	he	erewi	th:	in	aco	cord	dance	with	the	Specifications.

- 5. That if awarded the Contract, the Bidder hereby agrees to fully complete the contract in within _(120) consecutive calendar days after the date of the "Notice to Proceed" and should he fail to fully complete the work within the above stated time, he shall pay the PHA as fixed, agreed and liquidated damages and not as a penalty, the sum of _TWO HUNDRED DOLLARS _(\$200.00) for each calendar day of delay until the work is completed and accepted.
- 6. Attached hereto is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this proposal or any other proposal or the submitting of proposals for the contract for which this proposal is submitted.
- 7. The bidder represents that he ()has, ()has not, participated in a previous contract or subcontract subject to the opportunity clause prescribed by Executive orders 10925, 11114, or 11246 or the Secretary of Labor: that he ()has, ()has not, filed all required compliance reports, signed by proposed subcontractors, will be obtained prior to the subcontract awards. (the above representation need not be submitted in connection with contract or subcontractors which are exempt from the clause.)
- 8. Certifications of Nonsegregated Facilities. By signing this bid, the bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and he does not permit his employees to perform services at any locations, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any locations, under his control, where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" 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 fountain, recreation or entertainment areas, transportation, and housing facilities provided for employees which 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. He further agrees that (except where he has obtained identical

certification for proposed subcontractors for specific time periods) he will obtain subcontractors exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause: that he will retain such certifications in his files: and that he will forward a notice to his proposed subcontractors as provided in the Instructions to Bidders.

9. The bidder proposes to subcontract the following portions of the Contract:

TRADES:

NAME TITLE ADDRESS

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

Date	,20	
		(TYPE NAME OF BIDDER)
		(ARKANSAS CONTRACTORS LICENSE NO.)
		BY: (SIGNATURE)
		TITLE:
		OFFICIAL ADDRESS.

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we the undersigned,

(name of principal)
as PRINCIPAL, and(name of surety)
as SURETY, are held and firmly bound unto
(corporate name of local authority) , hereinafter called the "Local Authority," in the penal sum of Dollars, lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by those presents.
THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying bid, dated

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

IN WITNESS WHEREOF, the above-bounden instrument under their several seals thi 20, the name and corporate seal of hereto affixed and these presents duly representative, pursuant to authority of	sday of each corporate part signed by its unde	y being rsigned
In presence of:		98.689.0° 7.859.0° Per- No.
	(Individual Principal)	(SEAL)
	(Business Address)	(SEAL)
		(SEAL)
	(Individual Principal)	(ODAT)
	(Business Address)	(SEAL)
Attest:	(Corporate Principal)	
	(Business Address)	
		(SEAL)
Attest:		
	(Componete Sympty)	
	(Corporate Surety)	
		(SEAL)

(Power-of-Attorney for person signing for surety company must be attached to bond)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I,, ce	rtify that I am the
Secreta	ary of the corporation named as Principal
in the within bond; that	, who signed the same
bond on behalf of the Princ	
and that said bond was duly	now this signature thereto is genuine; signed, sealed, and attested to for and on by authority of its governing body.
	(Corporate Seal)

NON-COLLUSIVE AFFIDAVIT

STATE OF	
COUNTY OF	
	, BEING FIRST DULY
SWORN, DEPOSES AND SAYS:	
That he/she is	of
	, the Bidder that has submitted
conlusive or sham; that said a connived or agreed, directly person, to put in a sham bid on not in any manner, directly or collusion, or communication or the bid price or affiat or o overhead, profit or cost element any other bidder, or to secure	proposal or bid is genuine and not bidder has not colluded, conspired, or indirectly, with any bidder or or to refrain from bidding, and has indirectly, sought by agreement or conference, with any person, to fix f any other bidder, or to fix any ent of said bid price, or of that of any advantage against the or any person interested in the
proposed contract; and that al are true.	l statements in said proposal or bid
	Signature of Bidder
Partner's Signature	
Partner's Signature	
Subscribed and sworn to before 20	e me this,
My Commission Expires	

JOB NO. CFP 2020 Renovations to 6 Apartment Units

CONTRACT

THIS AGREEMENT made thisday of, in the	
year Two Thousand and Twenty by and between,	
hereinafter called the "Contractor", and the Housing Authorit	y or
the <u>City of Wilson</u> , <u>Arkansas</u> , hereinafter called the "Public	
Housing Authority" or PHA.	
WITNESS TO, That the Contractor and the PHA for the considera	ition

WITNESS TO, That the Contractor and the PHA for the consideration stated herein mutually agree as follows:

ARTICLE 1. Statement of Work. The Contractor shall furnish all labor, material, equipment, and services, and perform and complete all work required for the following:

RENOVATE 6 APARTMENTS UNITS LOCATED AT THE WILSON HOUSING AUTHORITY AS DESCRIBED IN THE BID DOCUMENTS PREPARED BY TWIN RIVERS ARCHITECTURE, P.A.

in strict accordance with the attached Specifications and the following Addenda:

Addendum No.

Date

which said Specifications, Addenda, and Drawings are incorporated by reference and made part thereof.

ARTICLE 2. Contract Price. The PHA shall pay the Contractor for the performance of the contract, in current funds, subject to additions and deductions as provided in the Specifications,

The	sum	of		
(\$,	.00).	<u>.</u>	

ARTICLE 3. contract Time. The Contractor hereby agrees to commence work under this contract on or within ten (10) days of the date to be specified in the written "Notice to Proceed" by the PHA and to fully complete the (Replacement of Kitchen Cabinets within 120 consecutive calendar days after the "Notice to Proceed" date. If the Contractor shall fail to complete the work in the time herein specified, he shall pay to the PHA, as liquidated damages, ascertained and agreed, and not in the nature of a penalty, the sum of TWO HUNDRED DOLLARS

(\$ 200.00) for each calendar day of delay until the work is completed and accepted, which shall be deducted from the final amount to be paid under the Contract.

ARTICLE 4. Contract Documents. The Contract shall consist of the following component parts:

- a. This Instrument
- b. General Conditions of the Contract for Construction (HUD-5370)
- c. Technical Specifications and Drawings
- d. Wage Rates
- e. Instructions to bidders HUD 5369 & 5369A

This instrument, together with other documents enumerated in this Article 4, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in the Article 4 shall govern, except as otherwise specifically stated. The various provisions in Addenda shall be construed in the order or preference of the component part of the Contract which each modifies.

IN WITNESS WHEREOF, the parties hereto have caused This Instrument to be executed in three (3) original counterparts as of the day and year first above written,

ATTEST:
BY:
Title:
Address:
ATTEST: Wilson Housing Authority (Public Housing Agency)
ВҮ
Rob Collins, PHM, E.D.
Business Address:100 West Wingfield Osceola, AR 72370

ARKANSAS PERFORMANCE AND PAYMENT BOND

(14-604 Arkansas Statutes)

KNOW ALL PERSONS BY THESE PRESENTS: That we (1) and (2) of of
THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the day of, 20, a copy of which is attached and made a part hereof for the construction of:
NOW, THEREFORE, if the Principals shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreement of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he/she shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, and shall promptly make payment of all persons, firms, subcontractors and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, all amounts due for but not limited to, materials, lubricants, oil, gasoline, coal and coke, repair on machinery, equipment and tools, consumed or used in connection with the construction of said work, fuel oil, camp equipment, food for men, feed for animals, premium for bonds and liability and workmen's compensation insurance, rentals on machinery, equipment and draft animals; also for taxes and payments due the State of Arkansas or any political subdivisions thereof which shall have arisen on account of or in connection with the wages earned by workmen covered by the bond; and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void, otherwise to remain in full force and effect.
The Surety agrees the terms of this bond shall cover the payment by the principal of not less than the prevailing hourly rate of wages as found by the Arkansas Department of Labor or as determined by the court on appeal to all workmen performing work under the contract.
PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder of the specifications accompany the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of contract as to the work or to the specifications.
PROVIDED FURTHER, that no final settlement between the owner and the contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.
IN WITNESS WHEREOF, this instrument is executed in six (6) counterparts, each of which shall be deemed an original, this day of, 20

ARKANSAS PERFORMANCE AND PAYMENT BOND (page 2) ATTEST: (PRINCIPAL) (TITLE) SECRETARY(PRINCIPAL) (SEAL) (ADDRESS) (SURETY) WITNESS AS TO PRINCIPAL **ADDRESS** ATTORNEY-IN-FACT (ADDRESS) Amount of Premium Rate of Premium per \$1,000.00 Amount of Contract ATTEST: SECRETARY (SURETY) (SEAL) WITNESS AS TO ATTORNEY-IN-FACT **ADDRESS**

NOTE: Date of Bond must not be prior to date of Contract.

- (1) Correct name of Contractor.
- (2) A Corporation, a Partnership, or an individual, as case may be.
- (3) Correct name of Surety.
- (4) Correct name of Owner.
- (5) If Contractor is Partnership, all partners should execute bond.
- (6) This bond must be filed with the Circuit Court of the County where the work is being performed prior to the start of construction.

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. 12/31/2011)

Applicability. This form is applicable to any construction/development contract greater than \$100,000.

This form includes those clauses required by OMB's common rule on grantee procurement, implemented at HUD in 24 CFR 85.36, 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 135. 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, HAs would be unable to enforce their contracts.

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. 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 Contract (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.
- (I) "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, 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;
 - (4) Assisting in inspections, signing Certificates of Completion, and making recommendations with respect to acceptance of work completed under the contract.

4. Other Contracts

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

Construction Requirements

5. Pre-construction Conference and Notice to Proceed

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

6. Construction Progress Schedule

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

7. Site Investigation and Conditions Affecting the Work

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

- reasonably ascertainable from an inspection of the site, including all exploratory work done by the PHA, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the PHA.
- (b) The PHA assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the PHA. Nor does the PHA assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

8. Differing Site Conditions

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

9. Specifications and Drawings for Construction

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

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

- required in the planning and production of the work. Such requests may be submitted as the need arises, but each such request shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.
- (h) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the PHA and one set will be returned to the Contractor. As required by the Contracting Officer, the Contractor, upon completing the work under this contract, shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the work is completed and accepted.
- (i) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all shop drawings prepared by subcontractors are submitted to the Contracting Officer.

10. As-Built Drawings

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

14. Temporary Heating

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

15. Availability and Use of Utility Services

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

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

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

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

17. Temporary Buildings and Transportation of Materials

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

18. Clean Air and Water

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

19. Energy Efficiency

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

20. Inspection and Acceptance of Construction

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

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

21. Use and Possession Prior to Completion

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

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

22. Warranty of Title

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

23. Warranty of Construction

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (j) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of _____ (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—
 - 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:
 - Obtain all warranties that would be given in normal commercial practice;
 - Require all warranties to be executed in writing, for the benefit of the PHA; and,
 - (3) Enforce all warranties for the benefit of the PHA.
- (g) In the event the Contractor's warranty under paragraph (a) of this clause has expired, the PHA may bring suit at its own expense to enforce a subcontractor's, manufacturer's or supplier's warranty.

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

24. Prohibition Against Liens

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

Administrative Requirements

25. Contract Period

The Contractor shall complete all work required under this contract within _____ calendar days of the effective date of the contract, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

26. Order of Provisions

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

27. Payments

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

- basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to HUD. If the contract covers more than one project, the Contractor shall furnish a separate breakdown for each. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.
- (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:
 - The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
 - (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements; and,
 - (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

Name:	
Title:	
Date:	

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

- Material delivered to the Contractor at locations other than the site may also be taken into consideration if the Contractor furnishes satisfactory evidence that (1) it has acquired title to such material; (2) the material is properly stored in a bonded warehouse, storage yard, or similar suitable place as may be approved by the Contracting Officer; (3) the material is insured to cover its full value; and (4) the material will be used to perform this contract. Before any progress payment which includes delivered material is made, the Contractor shall furnish such documentation as the Contracting Officer may require to assure the protection of the PHA's interest in such materials. The Contractor shall remain responsible for such stored material notwithstanding the transfer of title to the PHA.
- (h) All material and work covered by progress payments made shall, at the time of payment become the sole property of the PHA, but this shall not be construed as (1) relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or, (2) waiving the right of the PHA to require the fulfillment of all of the terms of the contract. In the event the work of the Contractor has been damaged by other contractors or persons other than employees of the PHA in the course of their employment, the Contractor shall restore such damaged work without cost to the PHA and to seek redress for its damage only from those who directly caused it.
- (i) The PHA shall make the final payment due the Contractor under this contract after (1) completion and final acceptance of all work; and (2) presentation of release of all claims against the PHA arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. Each such exception shall embrace no more than one claim, the basis and scope of which shall be clearly defined. The amounts for such excepted claims shall not be included in the request for final payment. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned.
- (j) Prior to making any payment, the Contracting Officer may require the Contractor to furnish receipts or other evidence of payment from all persons performing work and supplying material to the Contractor, if the Contracting Officer determines such evidence is necessary to substantiate claimed costs.
- (k) The PHA shall not; (1) determine or adjust any claims for payment or disputes arising there under between the Contractor and its subcontractors or material suppliers; or, (2) withhold any moneys for the protection of the subcontractors or material suppliers. The failure or refusal of the PHA to withhold moneys from the Contractor shall in nowise impair the obligations of any surety or sureties under any bonds furnished under this contract.

28. Contract Modifications

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

- responsibilities of the parties (e.g., change in the PHA address). All other contract modifications shall be in the form of supplemental agreements signed by the Contractor and the Contracting Officer.
- (c) When a proposed modification requires the approval of HUD prior to its issuance (e.g., a change order that exceeds the PHA's approved threshold), such modification shall not be effective until the required approval is received by the PHA.

29. Changes

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

- (1) Direct Costs. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost); Transportation and delivery costs associated with materials; Labor breakdowns by hours or unit costs (identified with specific work to be performed); Construction equipment exclusively necessary for the change; Costs of preparation and/ or revision to shop drawings resulting from the change; Worker's Compensation and Public Liability Insurance; Employment taxes under FICA and FUTA; and, Bond Costs when size of change warrants revision.
- (2) Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.
- (3) Profit. The amount of profit shall be negotiated and may vary according to the nature, extent, and complexity of the work required by the change.

The allowability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR 1-31), as implemented by HUD Handbook 2210.18, in effect on the date of this contract. The Contractor shall not be allowed a profit on the profit received by any subcontractor. Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs. On proposals covering both increases and decreases in the amount of the contract, the application of indirect costs for the Contractor or subcontractor performing the work.

- (g) The Contractor shall include in the proposal its request for time extension (if any), and shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the contract in its entirety.
- (h) The Contracting Officer shall act on proposals within 30 days after their receipt, or notify the Contractor of the date when such action will be taken.
- (i) Failure to reach an agreement on any proposal shall be a dispute under the clause entitled Disputes herein. Nothing in this clause, however, shall excuse the Contractor from proceeding with the contract as changed.
- (j) Except in an emergency endangering life or property, no change shall be made by the Contractor without a prior order from the Contracting Officer.

30. Suspension of Work

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

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

31. Disputes

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

32. Default

(a) If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with the diligence that will insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within this time, the Contracting Officer may, by written notice to the Contractor, terminate the right to proceed with the work (or separable part of the work) that has been delayed. In this event, the PHA may take over the work and complete it, by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the PHA resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the PHA in completing the work.

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

33. Liquidated Damages

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

- completion of the work together with any increased costs occasioned the PHA in completing the work.
- (c) If the PHA does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

34. Termination for Convenience

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

35. Assignment of Contract

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

36. Insurance

- (a) Before commencing work, the Contractor and each subcontractor shall furnish the PHA with certificates of insurance showing the following insurance is in force and will insure all operations under the Contract:
 - 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 "claimsmade" 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.
- (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 nonrenewed by the insurance company until at least 30 days prior written notice has been given to the Contracting Officer.

37. Subcontracts

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

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

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

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

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

39. Equal Employment Opportunity

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

- (a) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap.
- (b) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, (1) employment, (2) upgrading, (3) demotion, (4) transfer, (5) recruitment or recruitment advertising, (6) layoff or termination, (7) rates of pay or other forms of compensation, and (8) selection for training, including apprenticeship.

- (c) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.
- (d) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.
- (e) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.
- (f) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
- (g) The Contractor shall furnish all information and reports required by Executive Order 11246, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto. The Contractor shall permit access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (h) In the event of a determination that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, 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 under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.
- (i) The Contractor shall include the terms and conditions of this clause in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor. The Contractor shall take such action with respect to any subcontract or purchase order as the Secretary of Housing and Urban Development or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into the 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.
- Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968.

- (a) The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- (b) The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.
- (c) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- (d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.
- (e) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 135.
- (f) Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- (g) With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b)agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

41. Interest of Members of Congress

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

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

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

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

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

44. Royalties and Patents

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

45. Examination and Retention of Contractor's Records

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

46. Labor Standards - Davis-Bacon and Related Acts

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

(a) Minimum Wages.

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

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

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

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

- (2) (i) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under subparagraph (c)(1) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1214-0149.)
 - (ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (A) That the payroll for the payroll period contains the information required to be maintained under paragraph (c) (1) of this clause and that such information is correct and complete;
 - (B) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3; and
 - (C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirements for submission of the "Statement of Compliance" required by subparagraph (c)(2)(ii) of this clause.
 - (iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.
- (3) The Contractor or subcontractor shall make the records required under subparagraph (c)(1) available for inspection, copying, or transcription by authorized representatives of HUD or its designee, the Contracting Officer, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to

- make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (d) (1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
 - (2) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under

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

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

- (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a United States Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (3) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.
- (j) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
 - (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in subparagraph (i)(1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic (including watchmen and guards) employed in violation of the provisions set forth in subparagraph (j)(1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in subparagraph (j)(1) of this clause.
 - (3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in subparagraph (j)(2) of this clause.
- (k) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts all the provisions contained in this clause, and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all these provisions.

47. Non-Federal Prevailing Wage Rates

- (a) Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State or tribal law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:
 - 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 DOLrecognized State Apprenticeship Agency; or
- (c) An applicable trainee wage rate based thereon specified in a DOL-certified trainee program.

48. Procurement of Recovered Materials.

- (a) In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items: (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.
- (b) Paragraph (a) of this clause shall apply to items purchased under this contract where: (1) the Contractor purchases in excess of \$10,000 of the item under this contract; or (2) during the preceding Federal fiscal year, the Contractor: (i) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (ii) purchased a total of in excess of \$10,000 of the item both under and outside that contract.

SECTION 00881 - WAGE RATE DETERMINATION

"General Decision Number: AR20210091 01/01/2021 Superseded General Decision Number: AR20200091

State: Arkansas

Construction Type: Residential

County: Mississippi County in Arkansas.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories). Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 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 calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional

information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/01/2021

SUAR2008-202 11/28/2008

1	Rates	Fringes
BRICKLAYER\$ CARPENTER, Including Cabinet Installation, Form Work and	13.41	0.00
Drywall Finishing/Taping		
(Excluding Drywall Hanging)\$	15.00	0.00
CEMENT MASON/CONCRETE FINISHER\$	13.00	0.00
DRYWALL HANGER\$	12.00	0.00
ELECTRICIAN\$	15.78	0.00
FENCE ERECTOR\$	10.00	0.00

HVAC MECHANIC (System		
<pre>Installation Only)\$</pre>	10.00	0.00
INSTALLER-SIDING, Including		
Vinyl\$	10.75	0.00
LABORER: Common or General\$	8.85	0.00
LABORER: Mason Tender - Brick\$	8.38	0.00
LABORER: Mason Tender -		
Cement/Concrete\$	8.07	0.00
OPERATOR:		
Backhoe/Excavator/Trackhoe\$	10.50	0.00
PAINTER: Brush and Spray,		
Excluding Drywall		
Finishing/Taping\$	10.75	0.00
PLUMBER\$	14.38	0.00
ROOFER\$	11.72	0.00
SHEETMETAL WORKER\$	10.54	0.00
TILE SETTER\$	8.00	0.00
TRUCK DRIVER: Dump Truck\$	9.15	0.00

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

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 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) (ii)).

the body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical

order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

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

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier. Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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

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

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

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

4.) All decisions by the Administrative Review Board are final. END OF GENERAL DECISION

SECTION 01010 - SUMMARY OF WORK

PART 1.00 GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Title of Work and Type of Contract.
- B. Use of Premises.
- C. Owner Occupancy.
- D. Method of Contracting.
- E. Order and Timing of the Work.
- F. General Completion.
- G. Inspection Procedures.

1.02 RELATED REQUIREMENTS

- A. Document 00200 Instructions to Bidders (HUD-5369) and (HUD-5369A) Representations, Certifications and Other Statements of Bidders. Method of determining assigned subcontractors.
- B. Document 00500 Contract.
- C. Document 00700 General Conditions (HUD-5370): Provisions for use of site and Owner Occupancy. Relations of Contractor / Subcontractor.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work of this contract includes installation of new Improvements in Public Housing Projects
 - 1. Located in Wilson, Ar

1.04 OWNER

A. The Owner shall be the Housing Authority of the City of Wilson, Arkansas
As represented by Mr. Rob Collins, Executive Director.

1.05 CONTRACT METHOD

A. Construct the work under a lump sum bid contract.

1.06 METHOD OF CONTRACT AWARD

- A. The contract will be awarded based on the lowest evaluated bid following application of deductive alternates in the manner specified in the Contractor's Proposal and Bid Form.
- B. The Owner reserves the right to accept any bid, and to reject any and all bids, in accordance with applicable laws.
- C. Each bidder shall be prepared, if so requested by the Owner, to present evidence of his experience, qualifications, and financial ability to carry out the terms of the contract. A bidder may be rejected if he does not have the experience or qualifications or financial ability necessary.
- D. The successful bidder shall be prepared to furnish bonds and insurance certificates, and to execute the Contract within ten (10) days after the Notice of Award and return it to the Architect.

1.07 CONTRACTORS USE OF PREMISES

- A. The Contractor shall be working in/on vacant units.
 - 1. Coordinate use of premises under direct supervision of the designated representative to the Owner and the Architect.
 - 2. The Contractor shall proceed with the improvements in a fashion which allows the residents to maintain the use of the adjacent occupied apartment and site during installation.
 - 3. The Contractor shall maintain and be responsible for temporary utilities.
 - 4. The Contractor shall be responsible for any existing utility lines, existing property and or equipment damaged during construction.
 - 5. The Contractor shall not be allowed to work on the units before 8 a.m and no later than 5 p.m. daily or on weekends or holidays.

1.08 OWNER OCCUPANCY

1. Owner will occupy the premises during entire construction period for conduct of his normal operations. Cooperate with Owner in scheduling operations to minimize conflict and to facilitate Owner usage.

1.09 ORDER AND TIMING OF THE WORK

- 1. Prior to commencement of the work, the contractor will submit his proposed work schedule to the Owner for review and approval. The work schedule shall identify the Contractor's proposed schedule by site and work area as indicated above.
- 2. All items removed to accommodate the work will be replaced by the Contractor in-kind at no additional cost to the Owner.
- 3. The Contractor will execute the work, in phases, in accordance with the schedule prepared by the Contractor and submitted to and approved by the Owner and Architect.

1.10 UNIT INSPECTION PROCEDURE

- A. When a portion of work is ready for final inspection, the Contractor shall notify the Architect by telephone and in writing, one week in advance of each final inspection. The Architect will conduct the final inspection accompanied by a representative of the Contractor's staff and Owner's staff.
- B. Water, Gas, and Electrical service must be in operation during the final inspection and shall remain in operation until all punchlist items are completed and accepted by the Owner.
- C. Upon completion of the final inspection, a copy of the punchlist will be issued by the Owner to the Contractor. This will serve as his release of liability for security of the unit or building and as

the

document that establishes the final completion date for determination regarding liquidated damages. This Certificate will not be issued until the Contractor has completed all punchlist items to the satisfaction of the Architect.

END OF SECTION

SECTION 01300 - SUBMITTALS AND SUBSTITUTIONS

PART 1.00 - GENERAL

1.01 DESCRIPTION

A. Work Included:

- 1. Wherever possible throughout the Contract Documents, the minimum acceptable quality of workmanship and materials has been defined either by manufacturer's name and catalog number or by reference to recognized industry standards.
- 2. To insure that the specified products are furnished and installed in accordance with the design intent, procedures have been established for advance submittal of design data and for its review and approval or rejection by the Architect.

B. Related Work Described Elsewhere:

- Contractual requirement for submittals:
 General Conditions and Supplementary Conditions
- 2. Individual submittals required:
 Pertinent Sections of these Specifications

1.02 PRODUCT HANDLING

Make all submittals of Shop Drawings, Samples, requests for substitution, and other similar items, in strict accordance with the provisions of this Section of these Specifications.

PART 2.00 - PRODUCTS

2.01 SHOP DRAWINGS

A. <u>Scale Required:</u> Unless otherwise specifically directed by the Architect, make all Shop Drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the Work.

- B. Type of Prints Required: Prepared complete, detailed shop fabrication and installation drawings for work specified in other Sections of this Specification. Indicate complete design details, including materials, dimensions, finishes, material thickness and gauges, component parts, locations, where to be installed and complete installation details.
- C. <u>Number of Submittals Required:</u> Submit shop drawings in not less than four (4) copies. For shop drawings requiring approval by Mechanical and Electrical Engineer, submit not less than six (6) copies. One copy of each shop drawing requiring approval by Mechanical and Electrical Engineer will be retained.

2.02 MANUFACTURERS' LITERATURE

- A. <u>General:</u> Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly indicate which portion of the contents is being submitted for the Architect's review.
- B. <u>Number of Copies Required:</u> Submit the number of copies which are required to be returned plus two copies which will be retained by the Architect.

2.03 SAMPLES

- A. <u>Accuracy of Sample:</u> Unless otherwise specifically directed by the Architect, all Samples shall be of the precise article proposed to be furnished.
- B. <u>Number of Samples Required:</u> Submit all Samples in the quantity which is required to be returned plus one which will be retained by the Architect.

2.04 COLORS

- A. <u>General:</u> Unless the precise color and pattern is specifically described in the Contract Documents, whenever a choice of color or pattern is available in a specified product submit accurate color charts and pattern charts to the Architect for his review and selection.
- B. <u>Comparative Analyses:</u> Unless all available colors and patterns have identical costs and identical wearing capabilities, and are identically suited to the installation completely describe the relative costs and capabilities of each.

2.05 SUBSTITUTIONS

A. Architect's Approval Required:

- 1. The Contract is based on the materials, equipment, and methods described in the Contract Documents.
- 2. The Architect will consider proposals for substitution of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Architect to evaluate the proposed substitution.
- 3. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this Work by the Architect.

B. "Or Equal":

- 1. Where the phrase "or equal" or "or equal as approved by the Architect" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Architect unless the item has been specifically approved for this Work by the Architect.
- 2. The decision of the Architect shall be final.

C. Availability of Specified Items:

- 1. Verify prior to bidding that all specified items will be available in time for installation during orderly and timely progress of the Work.
- 2. In the event specified item or items will not be so available, so notify the Architect prior to receipt of bids.
- 3. Complete instructions regarding operation and maintenance of all equipment involved.
- 4. Complete nomenclature of all replaceable parts, their part numbers, current cost, and name and address of nearest vendor of parts.
- 5. Copy of all guarantees and warranties issued.
- 6. Copy of the approved Shop Drawings with all data concerning all changes made during construction.

- B. Extraneous Data: Where contents of Manuals include manufacturers' catalog pages, clearly indicate the precise items included in this installation and delete or otherwise clearly indicate all manufacturers' data with which this installation is not concerned.
- C. <u>Number of Copies Required:</u>

Unless otherwise specifically directed by the Architect or stipulated in the pertinent Section of these Specifications, deliver one copy of the Manual to the Owner and one copy to the Architect.

PART 3.00 - EXECUTION

3.01 <u>IDENTIFICATION</u> OF SUBMITTALS

A. General:

- 1. Consecutively number all submittals.
- 2. Accompany each submittal with a letter of transmittal showing the transmittal number, date of transmittal, Specifications Section or Drawing number to which the submittal pertains, brief description of the material submitted, and the company name of the originator of the submittal.
- B. <u>Internal Identification:</u> On at least the first page of each copy of each submittal, indicate the transmittal number corresponding to the letter of transmittal by which the submittal was accompanied.
- Resubmittals: When material is resubmitted for any reasons, transmit under a new letter of transmittal with a new number; indicate by reference to previous submittal that this is a resubmittal.

D. <u>Submittal Log:</u>

- Maintain an accurate submittal log for the duration of the construction period, showing status of all submittals of all types.
- 2. Make the log available to the Architect for review upon request.

3.02 COORDINATION OF SUBMITTALS

- A. <u>General:</u> Prior to submittal for Architect's review, use all means necessary to fully coordinate all material, including the following procedures:
 - 1. Determine and verify all field dimensions and conditions, catalog numbers, and similar data.
 - 2. Coordinate as required with all trades and with all public agencies involved.
 - 3. Secure all necessary approvals from public agencies and others; signify by stamp or other means that all required approvals have been obtained.
 - 4. Clearly indicate all deviations from the Contract Documents.

B. <u>Grouping of Submittals:</u>

- 1. Unless otherwise specifically permitted by the Architect, make all submittals in groups containing all associated items.
- 2. The Architect may reject partial submittals as not complying with the provisions of the Contract Documents.

3.03 TIMING OF SUBMITTALS

A. General:

- 1. Make all submittals far enough in advance of scheduled dates for installation to provide all required time for reviews, for securing necessary approvals, for possible revision and resubmittals, and for placing orders and securing delivery.
- 2. In scheduling, allow at least eight full working days for the Architect's review following his receipt of the submittal.
- B. <u>Delays:</u> Costs of delays occasioned by tardiness of submittals may be back-charged as necessary and shall not be borne by the Owner.

END OF SECTION

SECTION 01415 - INSPECTIONS, CUTTING AND PATCHING

PART 1.00 - GENERAL

1.01 DESCRIPTION

- A. <u>Work Included:</u> This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:
 - 1. Make the several parts fit properly.
 - 2. Uncover work to provide for installation, inspection, or both, of ill-timed work.
 - 3. Remove and replace Work not conforming to requirements of the Contract Documents.
 - 4. Remove and replace defective Work.

B. Related Work Described Elsewhere

- 1. In addition to other requirements specified, upon the Architect's request, uncover Work to provide for inspection by the Architect of covered Work, and remove samples of installed materials for testing.
- 2. Do not cut or alter work performed under separate contract without the Architect's written permission.

1.02 QUALITY ASSURANCE

Perform all cutting and patching in strict accordance with pertinent requirements of these Specifications and, in the event no such requirements are determined, in conformance with the Architect's written direction.

1.03 SUBMITTALS

A. Request for the Architect's Consent:

- 1. Prior to cutting which affects structural safety, submit written request to the Architect for permission to proceed with cutting.
- 2. Should conditions of the Work or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Architect and secure his written approval prior to the Work.

B. <u>Notices to the Architect:</u>

- 1. Prior to cutting and patching performed pursuant to the Architect's instructions, submit cost estimate to the Architect. Secure the Architect's approval of cost estimates and type of cost reimbursement before proceeding with cutting and patching.
- 2. Submit written notice to the Architect designating time the work will be uncovered, to provide for the Architect's observation.

PART 2.00 - PRODUCTS

2.01 MATERIALS

For replacement of Work removed, use materials which comply with the pertinent Sections of these Specifications.

2.02 PAYMENT FOR COSTS

- A. Cutting, patching, uncovering, and removal performed when in-place work is defective or does not comply with the Contract Documents shall be done at no additional cost to the Owner.
- B. When requested by the Owner, costs of cutting and patching, when the in-place work is correct and complies with the Contract Documents shall be reimbursed by change order.

PART 3.00 - EXECUTION

3.01 CONDITIONS

A. Inspection:

- 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, backfilling and patching.
- 2. After uncovering the Work, inspect conditions affecting installation of new Work.

B. Discrepancies:

- 1. If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed directions.
- 2. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.
- 3.02 PREPARATION PRIOR TO CUTTING

Provide all required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.

3.03 PERFORMANCE

Perform all required excavating and backfilling as required under pertinent Sections of these Specifications. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and will provide proper surfaces to receive installation of repair and new Work. Perform fitting and adjustment of products to provide finished installation complying with the specified tolerances and finishes.

END OF SECTION

SECTION 01600 - MATERIAL AND EQUIPMENT

PART 1.00 - GENERAL

1.01 GENERAL

- A. Material and equipment incorporated into the Work:
 - 1. Conform to applicable specifications and standards.
 - Comply with size, make, type and quality specified, or as specifically approved in writing by the Architect.
 - 3. Manufactured and Fabricated Products:
 - a. Design, fabricate, and assemble in accord with the best engineering and shop practices.
 - b. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service conditions.
 - e. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
 - 4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.
- B. Related Requirements Specified in Other Sections:
 - 1. Summary of Work:

Section 01010.

2. Submittals and Substitutions:

Section 01300.

3. Cleaning:

Section 01710.

1.02 MANUFACTURER'S INSTRUCTIONS

A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two (2) copies to Architect and one (1) set of complete instructions at the job site during installation and until completion.

- B. Handle, install, connect, clean, condition, and adjust products in strict accord with such instructions and in conformity with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Architect for further instructions.
 - 2. Do not proceed with Work without clear instructions.
- C. Perform work in accord with manufacturer's instructions.

 Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.03 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products in accord with construction schedules, coordinate to avoid conflict with work and conditions at the site.
 - 1. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

1.04 STORAGE AND PROTECTION

- A. Store Products in accord with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Store Products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.

B Exterior Storage:

- 1. Store fabricated products above the ground, on blocking or skids, prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.
- Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

- C. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that Products are maintained under specified conditions, and free from damage or deterioration.
- D. Protection After Installation: Provide substantial coverings as necessary to protect installed Products from damage from traffic and subsequent construction operations, remove when no longer needed.

1.05 SUBSTITUTIONS AND PRODUCT OPTIONS

A. Products List: Within 5 days after Contract Date, submit to Architect a complete list of major products proposed to be used, with the name of the manufacturer and the installer.

B. Contractor's Options:

- 1. For Products specified only by reference standard, select any product meeting that standard.
- 2. For Products specified by naming several products or manufacturers named, which complies with the specifications.
- 3. For Products specified by naming one or more products or manufacturers and "or equal", Contractor must submit a request as for any Product or manufacturer not specifically named.
- 4. For Products specified by naming only one Product and manufacturer, there is no option.

C. Substitutions:

- 1. For a period of 5 days after Contract Date, Architect will consider written requests from Contractor for substitutions of Products.
- 2. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalities.
 - f. Availability of maintenance service, and source of replacement materials.
- 3. Architect shall be the judge of the acceptability of the proposed substitution.

- D. Contractor's Representation: A request for a substitution constitutes a representation that Contractor:
 - 1. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
 - 2. Will provide the same warranties or bonds for the substitution as for the Product specified.
 - 3. Will coordinate the installation of an accepted substitution into the Work, and make sure other changes as may be required to make the Work complete in all respects.
 - 4. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.
- E. Architect will review requests for substitutions with reasonable promptness, and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

END OF SECTION

SECTION 01710 - CLEANING

PART 1.00 - DESCRIPTION

1.01 DESCRIPTION

- A. <u>Work Included:</u> Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this Section.
- B. Related Work Described Elsewhere: In addition to standards described in this Section, comply with all requirements for cleaning up as described in various other sections of these Specifications.

1.02 OUALITY ASSURANCE

- A. <u>Inspection:</u> Conduct daily inspection, and more often if necessary, to verify that requirements of cleanliness are being met.
- B. <u>Codes and Standards:</u> In addition to the standards described in this Section, comply with all pertinent requirements of governmental agencies having jurisdiction.

PART 2.00 - PRODUCTS

2.01 CLEANING MATERIALS AND EQUIPMENT

Provide all required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

2.02 COMPATIBILITY

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

3.01 PROGRESS CLEANING

A. General:

- 1. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of materials.
- 2. Do not allow the accumulation of scrap, debris, waste material, and other items not required for construction of the Work.
- 3. Take care to police the construction site of foodwaste materials to prevent the presence of rodents or other animal pest.
- 4. If the incidence of food waste and scraps causes the presence of rodents or other animal pests, take immediate steps to remove the food materials and begin a rodent/pest control program as approved by the Architect and local health authorities. The cost of such corrective controls, if necessary, shall be paid by the Contractor.
- 5. At least twice each month, and more often if necessary, completely remove all scraps, debris, and waste material from the job site.
- 6. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection of the ecology.

B. Site:

- 1. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove all such items to the place designated for their storage.
- 2. Weekly, and more often if necessary, inspect all arrangements of materials stored on the site, restack, tidy or otherwise service all arrangements to meet the requirements of subparagraph 3.01.A.1 above.
- 3. Maintain the site in a neat and orderly condition at all times.

C. Structures:

- 1. Weekly, and more often if necessary, inspect the structures and pick up all scrap, debris, and waste material. Remove all such items to the place designated for their storage.
- 2. Weekly, and more often if necessary, sweep all interior spaces clean. "Clean", for the purpose of this subparagraph, shall be interpreted a meaning free from dust and other materials capable of being removed by use of reasonable effort and handheld broom.
- 3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using all equipment and materials required to achieve the required cleanliness.
- 4. Following the installation of finish floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials have been installed. "Clean", for the purpose of this subparagraph, shall be interpreted as meaning free from all foreign material which, in the opinion of the Architect, may be injurious to the finish floor material.

3.02 FINAL CLEANING

- A. <u>Definition:</u> Except as otherwise specifically provided, "clean" (for the purpose of this Article) shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.
- B. <u>General:</u> Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.01 above.
- C. <u>Site:</u> Unless otherwise specifically directed by the Architect, broom clean all paved areas on the site and public paved areas directly adjacent to the site. Completely remove all resultant debris.

D. Structures:

- 1. Exterior: Visually inspect all exterior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. If necessary to achieve a uniform degree of exterior cleanliness, hose down the exterior of the structure. In the event of stubborn stains not removable with water, the Architect may require light sandblasting or other cleaning at no additional cost to the Owner.
- 2. Interior: Visually inspect all interior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all paint dropping, spots, stains and dirt from finished surfaces. Use only the specified cleaning materials and equipment.
- 3. Glass: Clean all glass inside and outside.
- 4. Polished surfaces: To all surfaces requiring the routing application of buffed polish, apply the polish recommended by the manufacturer of the material being polished.
- 5. Timing: Schedule final cleaning as approved by the Architect to enable the Owner to accept a completely clean project.

3.03 <u>CLEANING DURING OWNER'S OCCUPANCY</u>

Should the Owner occupy the work or any portion thereof prior to its completion by the Contractor and acceptance by the Owner, responsibilities for interim and final cleaning of the occupied spaces shall be as determined by the Architect in accordance with the General Conditions of the Contract.

END OF SECTION

SECTION 01740 - WARRANTIES AND BONDS

PART 1.00 - GENERAL

- 1.01 GENERAL
- A. Compile specified warranties and bonds.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittals when so specified.
- D. Review submittals to verify compliance with Contract Documents.
- E. Submit to Architect for review and transmittal to Owner.
- F. Related Requirements in Other Parts of the Project Manual:
 - 1. Bid or Proposal Bonds: Instructions to Bidders.
 - 2. General Warranty of Construction: Conditions of the Contract.
- G. Related Requirements Specified in Other Sections:
 - 1. Contract Close-out: Section 01700.
 - 2. Warranties and Bond required for Specific Products: Each respective Section of the Specifications.
- 1.02 SUBMITTAL REQUIREMENTS
- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.
- B. Number of original signed copies required: Two Each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item:
 - 1. Product or work item.
 - 2. Firm, with name of principal, address and telephone number.
 - 3. Scope.
 - 4. Date of beginning of warranty, bond or service and maintenance contract.

- 5. Duration of warranty, bond, or service maintenance contract.
- 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure
 - b. Instances which might affect the validity of warranty or bond.
- 7. Contractor, name of responsible principal, address and telephone number.
- D. The General Contractor's bonding company shall furnish a release to the Owner, that it is with their consent that final payment be made to the Contractor. This shall be AIA Document G707.
- 1.03 FORM OF SUBMITTALS
- A. Prepare in duplicate packets.
- 1.04 TIME OF SUBMITTALS
- A. Make submittals within ten (10) days after Date of Substantial Completion, prior to final request for payment. No final payment will be made prior to Architect receiving all required project close out submittals.
- B. For items of work, where acceptance is delayed materially beyond the Date of Substantial Completion, provide updated submittal within ten (10) days after acceptance, listing the date of acceptance as the start of the warranty period.
- 1.05 SUBMITTALS REQUIRED

Submit warranties, bonds, service and maintenance contracts as specified in the respective Sections of the Specifications.

END OF SECTION

SECTION 02610 - CONCRETE CURBS, WALKS & PAVING

PART 1.00 - GENERAL

1.01 GENERAL DOCUMENTS

The GENERAL DOCUMENTS form a part of this Section.

1.02 SCOPE

Furnish material and labor necessary to construct concrete curbs, walks, sidewalks, site paving, curb cuts and driveway aprons, indicated in Drawings and specified.

1.03 CLEAN UP

Clean up debris and leave area in clean condition. Remove any concrete or other materials spilled on pavement, walks or structures.

PART 2.00 - PRODUCTS

- 2.01 CONCRETE PROPORTIONING AND MIXING
- 1. CURBS, WALKS, NON-STRUCTURAL SLABS: Shall have proportioned and mixed concrete to attain 28 day minimum compressive strength of 3000 psi in accordance with requirements under SECTION 03300 CAST IN PLACE CONCRETE
- 2. PAVING, DRIVES: Shall have proportioned and mixed concrete to attain 28 day minimum compressive strength of 4000 psi in accordance with requirements under SECTION 03300 CAST IN PLACE CONCRETE
- 2.02 CONCRETE REINFORCING, JOINTS & ACCESSORIES

Concrete materials shall conform to requirements under SECTION 03200 - REINFORCING, JOINTS, & ACCESSORIES Division 3.

PART 3.00 - EXECUTION

3.01 SUBGRADE PREPARATION

- A. Perform additional grading necessary to bring subgrades, after final inspection, to required grades and sections.
- B. Loosen exceptionally hard spots and recompact. Remove spongy and otherwise unsuitable materials and replace with stable materials. Fill and tamp traces of utility trenches.
- C. Compact subgrade of surface areas of 95% minimum modified proctor.

3.02 PLACING CONCRETE

- A. Place concrete on moist, compacted subgrade. Do not place concrete on muddy or frozen subgrade.
- B. Construct forms free from warp, tight and substantial to maintain shape and position when concrete is placed or vibrated. Stake, brace or tie forms together securely.
- C. Provide 1/4 inch expansion joints with premolded filler at perimeter of building and at intersection with curbs and driveway aprons.
- D. Space joints in walks and site paving not more than 25 feet apart. Place expansion joints at right angles to slab and full depth thereof, with premolded filler extending to within 1/4 inch of walk surfaces.
- D. Remove forms 24 hours after placing concrete. Protect from pedestrian traffic at least 3 days after placing concrete.

3.03 CURING

Curing concrete in accordance with applicable provisions of Division 3.

3.04 WALKS AND PAVING - FINISHING

A. Tamp and screed concrete to true grade, finish with wood float finish. Round edges to 1/4" radius. Where walks terminate at curbs, finish walk 1/4" above curb with neat bevel.

- B. Between expansion joints, form hand-tooled joints to pattern and dimensions indicated in Drawings.
- C. Provide sample area of specified finish and score joints for Architect's approval prior to installation of entire job.

3.05 CURB CUTS

At city streets, where indicated in Drawings, construct new curb cuts to conform to standard city or county requirements. Replace all damaged existing curbs and gutters with standard gutter and curb. Construct concrete aprons 6" thick with $6 \times 6 \cdot 10/10$ welded mesh reinforcing.

3.06 CONCRETE CURBS

- A. Construct vertical concrete curbs in sections 6 to 10 feet long by use of 1/8 inch steel division plates of size and shape conforming to cross section of concrete. Reinforce with #4 deformed bars top and bottom. Size and depth of curbs shall be generally 6" wide x 18" deep, unless noted otherwise on Drawings.
- B. Provide 1/2 inch expansion joints, with premolded filler cut to shape of cross section at ends of all returns and not more than 50 foot intervals.
- C. Tamp and screed concrete as soon as placed. Remove division plates and face forms as soon as practicable; fill any honeycombed places with 1:2 mortar and give exposed surfaces a smooth, wood float finish, without plastering.
- D. Remove no forms, except face forms, for 24 hours after placing concrete. Protect against pedestrian traffic for three (3) days and against vehicular traffic for 14 days. Compact thoroughly and backfill behind curb.

SECTION 03300 - CAST-IN-PLACE CONCRETE

PART 1.00 - GENERAL

1.01 GENERAL CONDITIONS AND REQUIREMENTS

The General Conditions, Supplementary Conditions and the General Requirements of these specifications are an integral part of this Section and of the Contractor for this project. Their contents and provisions shall be carefully noted in performance of the Work.

1.02 REFERENCE SPECIFICATIONS

Reference in this Section to Federal Specifications, ASTM Standards, Association or Industry Specifications and other published standards, shall refer to the latest edition or publication of such standard current at the time of Bid receipt. Unless otherwise indicated, concrete work shall comply with provisions of:

- ACI 117 "Standard Tolerances for Concrete Construction and Materials".
- ACI 301 "Specifications for Structural Concrete for Buildings".
- ACI 318 "Building Code Requirements for Reinforced Concrete".
- ACI 347 "Recommended Practice for Concrete Formwork".

 ASTM C-94 "Standard Specification for Ready-Mixed
- ASTM C-94 "Standard Specification for Ready-Mixed Concrete".

PART 2.00 - PRODUCTS

2.01 MATERIALS

- A. Course Aggregate: Coarse aggregate for normal weight concrete shall be crushed stone, conforming to ASTM C-33 with a maximum size of 1-1/2".
- B. Fine Aggregate: Sand for concrete work shall conform to current ASTM C-33 and shall be composed of clean, uncoated grains of strong materials.
- C. Cement: Shall be Portland cement conforming to ASTM Specification C-150, Type I, Type IA, Type IIIA. Only one brand of cement shall be used for exposed concrete.
- D. Water: Clean, fresh and free form oil, acids, alkali, vegetable, sewage, organic or other deleterious matter.

- E. Admixture: A cement reducing admixture may be used for all concrete at the Contractor's option. Admixtures shall be cement dispersing agent used in conformance with manufacturer's directions. This shall be, or equal to, "No. 3 Pozzolith", as manufactured by Master Builder's Co. Contractor shall notify Architect that he is taking this option. No other admixtures shall be used without written permission of the Architect.
- F. Expansion Joint Fillers: Shall meet ASTM 0994 pre-moulded rigid fiber board impregnated throughout with asphaltic compound; 1/2" as indicated on Drawings or specified in Section 03200.
- G. Non-Shrink Grout: Master Builder "Embeco 153" type as recommended by manufacturer for the particular application, or an approved equal.
- H. Liquid Floor Hardener: Master Builders "Masterseal", or MB429", or approved equal.
- I. Liquid Curing Membrane: Master Builder as manufactured by E.A. Thompson Co., Inc. or approved equal.

2.02 CONCRETE QUANTITY

A. Mix Design: Concrete shall be composed of Portland Cement, fine aggregate, coarse aggregate and water. All concrete shall be designed by an independent testing laboratory approved by the Architect in accordance with the "Recommended Practice for Selecting Proportions for Concrete" ACI 613 (normal weight) to produce the strength for each class of concrete specified, and with slumps and maximum sizes of coarse aggregate in accordance with the requirements outlined below.

The concrete shall be so designed that the concrete materials will not segregate and excessive bleeding will not occur. Submit laboratory trial mix designs and test results for each class of concrete before delivering any concrete. Costs of testing laboratory for designing concrete mixes shall be included in the contract price. Concrete strengths at 28 days shall be as follows:

Interior Slabs		3000 ps	i
Walks, Curbs, Non-structural	Slabs	3000 ps	i
Paving and Drives		4000 ps	i
All Others		3000 ps	i

MAXIMUM SLUMPS FOR VARIOUS TYPES OF CONSTRUCTION

Types of Construction	Hand Placed Maximum	High Frequency Vibrator Used Max.
Slabs	6"	5"
Pavements	4"	3"
Reinforced Footings or Grade Beams	5 "	5 "

The slump shall not exceed the maximum specified above for the type of construction for which it is to be used. The 28-day compressive strength determined in accordance with current ASTM Specifications C-39 and C-31 and with specimens cured in accordance with C-31 shall not be less than that shown above for the specified class of concrete. Maximum water/cement ratio to be 6 gallons per sack. No water shall be added over the amount specified by the mix design.

B. Laboratory Testing

- 1. Testing Laboratory: The Contractor will engage an independent testing laboratory, approved by the Architect, to conduct concrete tests. Contractor will be responsible for sampling concrete for test cylinders, recording, and delivering them to the laboratory, providing all materials required and for making all slump tests in the field as directed by the Architect. All costs in connection with work performed by the laboratory will be paid by the Contractor and shall be included in the Contract price. Concrete testing is not included in the "testing allowance".
- 2. Storage Box: Before any concrete is poured, the Contractor shall construct a storage box in accordance with ASTM C31. Each set of tests shall consist of one slump test and four compression test cylinders. All cylinders shall be kept in the storage box for the first 24 hours. Three cylinders shall be laboratory cured and one shall be field cured and all shall be tested for adequacy of design for strength of the concrete in accordance with ASTM C31. Two cylinders shall be tested at 7 days and two at 28 days. Above to be done at request of Architect.

- 3. Number of Tests: At least one test shall be made of fresh concrete for each fifty (50) cu. yds. of concrete (or fraction thereof) placed on any one day. Testing shall be done in accordance with the following ASTM Specifications:
- C172 Standard Method of Sampling Fresh Concrete
- C-31 Standard Method of Making and Curing Concrete Compression and Flexture Tests Specimens in the Field.
- C-39 Standard Method of Test of Compressive Strength of Molded Concrete Cylinders.
- C143 Standard Method of Slump Test for Consistency of Portland Cement Concrete.
 - a. Concrete slump test shall meet MPS 4910.1-603-3.3b.
- 4. Concrete Acceptability: The concrete shall be considered acceptable if the averages of all sets of three consecutive strength test results equal or exceed the specified strength, provided that no more than one test in ten falls between 90% and 100% of the specified strength. The only cylinders to be used for determination of concrete acceptability will be those laboratory cured and tested at 28 days. When it appears the tests of laboratory-cured cylinders will fail to meet these requirements, the Architect may require changes in the proportions of concrete for the remainder of the work in order to meet the strength requirements. In addition, Architect may also require additional curing, not to exceed a total of 21 days, in portions of the concrete already poured.
- 5. Additional Testing: The Architect may also require tests in accordance with Methods of Securing Preparing and Testing Specimen form Hardened Concrete for Compressive and Flexural Strengths (ASTM Specifications C41) when the concrete cylinder tests fail to meet strength requirements. In the even there is a question as to the quality of the concrete in the structure, the Architect may require load test for that portion where the questionable concrete has been placed. Such load tests to be made according to ACI 318.

6. Removal of Under-strength Concrete: If the above tests indicate that a particular batch of previously placed concrete is under strength, the Architect may direct that the under strength batch be removed and replaced. The removal of the under strength concrete shall also include the removal of concrete that has obtained the required strength if the Architect deems this necessary to obtain structural or visible continuity where the concrete is replaced. removal and replacement of any under strength concrete shall be made at no additional cost to the Owner. This shall include any new formwork required or any reinforcing steel that may be required. The Owner shall not be charged any additional costs for any extra work that is required because of the failure of any concrete to meet the minimum requirements.

C. Procurement:

- 1. The Contractor shall be responsible for providing concrete which complies with the quality and strengths specified herein.
- 2. Concrete shall be procured from an approved, automated concrete batching and mixing plant. Batch, mix and transport concrete to site in accordance with provisions of ASTM C94. Coefficient of variation in production of concrete shall not exceed a maximum of 15%, as per ACI 214.
- 3. The ready-mixed concrete producer shall furnish duplicate delivery tickets with each load of concrete brought to the project.
- 4. These tickets shall be recorded and maintained by the Contractor, and contain the following information:
 - a. Delivery date and time to include batch time and delivery time.
 - b. Name and location of project.
 - c. Name of ready-mix producer.
 - d. Name of Contractor.
 - e. Truck number.
 - f. Size of load (cubic yards).
 - g. Class of concrete.

- h. Cement content (bags per cu. yard of concrete).
- i. Type and brand of cement.
- j. Admixtures, if any.
- k. Maximum size of aggregate.
- 1. Amount of water added at job site, if any.
- 5. This information shall be furnished to the Architect upon request.
- 6. For ready-mix concrete in an agitator truck, the elapsed time from mixer to placement shall not exceed 1-1/2 hours.
- 7. Truck mixers, agitators, and non-agitation units and their manner of operation shall conform to the applicable requirements of ASTM C94.

PART 3.00 - EXECUTION

3.01 PLACING OF CONCRETE

Preparation Before Placing: Remove water from excavation Α. before concrete is deposited. Remove hardened concrete, wood chips, shavings, and other debris from interior of forms and inner surfaces of mixing and conveying equipment. Wood forms shall be oiled, or except in freezing weather, wetted with water in advance of pouring. Before placing concrete, care shall be taken to determine that any embedded metal or wood parts are firmly and securely fastened in place as indicated. They shall be thoroughly clean and free from coating, rust, scale, oil or any foreign matter. Avoid embedding wood in concrete whenever possible, and use metal instead. If used, thoroughly wet wood before placing concrete. Reinforcement and embedded items shall be secured in position, before starting pouring of concrete. Compact subgrade and test all piping before placing slabs on grade or fill.

- B. Conveying: Convey concrete from mixer to forms as rapidly as practicable and by methods which will prevent segregation or loss of ingredients. Deposit as nearly as practicable in final position. Chutes used shall be such that concrete slides in them and does not flow. Chutes, if permitted, shall have a slope of less than 1 on 2. Where a vertical drop greater than five feet (5') is necessary, placement shall be through elephant trunks or similar devices to prevent segregation.
- C. Placing: Place concrete before initial set has occurred and in no event after it has contained its water content for more than 30 minutes. Unless free from running water, or upon properly consolidated fills, but never upon soft mud or dry, porous earth. The concrete shall be compacted and worked in an approved manner into all corners and angles of the forms and around reinforcement and embedded fixtures to prevent segregation of the coarse aggregate. Construct all forms for the lifts of vertical walls so as to make all parts of the walls easily accessible for the placement, spading, and consolidation of the concrete.
- D. Vibration: All concrete shall be placed with the aid of mechanical vibration equipment as approved by the Architect. Vibration shall be transmitted directly to the concrete; in no case shall it be transmitted through forms or reinforcement. The duration of vibration at any location in the forms shall be held to the minimum necessary to produce thorough compaction. Vibrations shall be supplemented by forking or spading by hand, and adjacent to the forms on exposed faces in order to secure smooth, dense and even surfaces, with particular care being taken to prevent coarse aggregate from becoming set too near nay surfaces that are to receive rubbed finish. Vibration shall extend into the previously placed layer of concrete to insure no cold joints develop.
- Expansion and Construction Joints: Construct at locations and of dimensions indicated on drawings or required by Architect. The method and materials used shall be subject to the approval of the Architect. Unless otherwise indicated expansion joints shall be made using an approved premolded expansion joint filler one-half inch (1/2") in thickness and of width required to extend through depth of the joint.

3.02 FINISHING CONCRETE

A. Immediately after removing forms, all concrete surfaces shall be inspected, and any poor joints, voids, or stone pocket surfaces and other defective areas shall be patched and placed in good condition.

- B. Remove formwork not supporting weight of concrete as soon as concrete has hardened sufficiently to resist damage form removal operations, but not longer than 24 hours after concrete is poured. After repairing and patching has set sufficiently to permit removing of formwork, all exposed surfaces shall be thoroughly wetted and rubbed with a medium carborundum stone followed by a second rubbing with a fine carborundum stone to obtain an entire surface of smooth texture and uniformity in color. A cement wash or plaster coat shall not be used.
- C. Interior slabs that are to receive carpet, tile, sheet vinyl or other floor covering shall be finished by tamping the concrete with special tools to force the coarse aggregate below the surface, then screeding and floating with straight-edges to bring the surface to the required finish level. While the concrete is still green but sufficiently hardened to bear a man's weight with deep imprint, it shall be wood floated to a true and even plane and with no coarse aggregate visible. Sufficient pressure shall be used on the wood floats surfaces shall be steel-trowelled to a smooth, even, impervious finish, free from trowel marks. After cement has set enough to ring the trowel, surface of all slabs shall be given a second steel trowelling to a burnished finish.
- D. Interior slabs that do not receive a finish floor covering shall be finished as specified in paragraph C above and further treated with liquid floor hardener. Apply in strict accordance with manufacturer's instructions.
- E. Exposed interior concrete floors and slabs shall be hardened by applying Lapidolith or equal in strict accordance with the manufacturer's specifications and under the manufacturer's supervision. The Manufacturer's written guarantee bond shall be furnished.
- F. Refer to Section 02610 for the finishing of exterior concrete paving, sidewalks and curbs.

3.03 CURING

A. General: Immediately following placing, concrete shall be protected from premature drying, hot and cold temperatures, rain, flowing water and mechanical injury. Maintain above 50 degrees F. and in moist condition for at least seven (7) days after placing for normal concrete and three (3) days for high early strength concrete. Comply with "Recommended Practice for Curing Concrete" ACI 308, unless otherwise indicated. curing compound of satisfactory composition and characteristics may be used except on surfaces to which new concrete is to be bonded and provided such compound does not stain or discolor any

surface which will be exposed. curing compound shall be Darco-Seal, or an approved equal, applied in strict accordance with manufacturer's directions.

- B. Cold Weather Procedures shall conform with "Recommended Practice for Cold Weather Concreting", ACI 306. Adequate equipment shall be provided for heating the concrete materials and protecting the concrete during the freezing of near freezing weather. All concrete materials, reinforcement, forms, fillers and ground or other surfaces which concrete will contact shall be free from frost or ice. Salt or other chemicals shall not be used or depended upon to prevent freezing.
- C. Hot Weather Procedures shall conform with "Recommended Practice for Hot Weather Concreting", ACI 302 and ACI 305. During hot weather adequate provisions shall be make to reduce concrete temperature and water evaporation by proper attention to ingredients, production methods, handling, placing, protection and curing.

3.04 DEFECTIVE WORK

Any concrete which is not formed as shown on the plans or for any reason is out of alignment or level, or shows a defective surface shall be considered as not conforming with the intent of these specifications and shall be removed from job by Contractor at his own expense, unless the Architect grants permission to patch defective area. Permission to patch or correct defective areas shall not be considered a waiver of Architect's rights to require complete removal of such defective work if patching does not satisfactorily restore quality and appearance to meet Architect's approval.

SECTION 06100-ROUGH CARPENTRY

PART 1.00-GENERAL

1.01 GENERAL DOCUMENTS

The GENERAL DOCUMENTS form a part of this Section.

1.02 SCOPE

- A. Furnish materials and labor necessary to complete rough work indicated by Drawings and Specifications.
- B. Install such miscellaneous items pertinent to carpentry work which are furnished by other trades.

PART 2.00-PRODUCTS

2.01 MATERIALS

- A. FRAMING LUMBER: No.2 Medium grade southern yellow Pine surfaced all four sides, dress to mill sizes, kiln dried, with maximum moisture content of 19%. Sizes are as indicated by drawings and specifications.
- B. CONSTRUCTION PANELS: Comply with PS 1 "U.S. Product Standard for construction and Industrial Plywood" for plywood panels and for products not manufactured under PS 1 provisions, with American Plywood Association (APA) "Performance Standard and Policies for Structural-Use Panels", Form No. E445.
 - 1. OSB WALL SHEATHING shall be: 1/2" exterior grade osb or in thickness to match existing on building.
 - 2. Roof decking shall be plywood thickness to match existing on building

C. ROUGH HARDWARE: Nails, screws, bolts, etc., for securing lumber in place shall be galvanized or non-ferrous commercial quality of suitable type and finish for a high moisture location.

PART 3.00 -EXECUTION

3.01 VERIFICATION

A. Verify that all surfaces to receive rough carpentry materials are prepared to exact grades, elevations, and dimensions as indicated on the drawings.

3.02 WORKMANSHIP (GENERAL)

- A. Lay out, cut, fit, and elect bridging, blocking of all items of trim and other carpentry. Do cutting work of carpentry for other trades. Brace, plumb and level all members and secure with sufficient nails, spikes, and bolts to insure rigidity.
- B. Cut out defects or replace members with defects which render piece unsuitable to serve intended purpose, including crooked, warped, bowed or otherwise defective members, even if within specified grade limits.

3.03 WALL AND PARTITION FRAMING

- A. Openings shall be framed to provide a rigid enclosure for installation of doors and windows. Sill shall not cut into jamb stud more than 1/2 inch. Header shall be supported by jamb studs and be designed to support load imposed.
- B. Corners of rooms shall be blocked or framed to receive interior finish.
- C. Stud Partitions: Shall be Southern Yellow Pine constructed with double 2x4 or 2x6 top plate to match existing. Set studs @ 16" o.c. for exterior walls and interior plumbing walls, set staggered 2 x4 stude @ 8" o.c. with bottom plate and 2 x 6 double top plate for tenant separation walls. Set 2 x 4 studs at 16" o.c. at interior walls.
 - 1. Anchorage: Sills shall be anchored to slab with 1/2" x 8" bolts or hardened steel studs. Maximum spacing 4'-0" o.c. with not less than two anchors in each sill piece. Set sill in full bed of continuous silicone Sealant.
- D. Provide wood grounds, strips and blocking as indicated in Drawings or required by conditions, of thickness and shape

required for gypsum board work, wood trim base, to secure roofing and/or sheet metal in place. Fasten wood grounds, furring and other engaging woodwork to wood, concrete and masonry with approved types and sizes of nails, ties or inserts spaces to provide rigid, secure supports.

E. Provide and install all rough hardware for proper installation of carpentry and millwork. Nails, spikes, screws, bolts and similar items shall be of types and sizes sufficient to draw and rigidly secure members in place.

3.34

A. PLACEMENT:

- 1. Place all plywood with face grain perpendicular to supports and continuously over at least two supports, except where otherwise specifically indicated on the drawings.
- 2. Center joints accurately over supports. Use clips between supports. Unless otherwise specifically shown on the drawings, stagger the end joints of plywood panels to achieve a minimum of continuity of joints.
 - 3. Plywood roof deck shall be attached as per table 1705.1 of the Standard Code.
 - 4. PROTECTION OF PLYWOOD:

Protect all plywood from moisture by use of all required waterproof coverings until the plywood has in turn been covered with next succeeding component or finish.

SECTION 06200 - FINISH CARPENTRY

PART 1.00 - GENERAL

1.01 GENERAL DOCUMENTS

The GENERAL DOCUMENTS form a part of this Section.

1.02 SCOPE

- A. Furnish materials and labor required to complete finish carpentry work indicated in Drawings and Specifications, including installation of millwork, wood doors and finish hardware.
- B. Install such miscellaneous items pertinent to carpentry work which are furnished by other trades.

1.03 RELATED WORK SPECIFIED ELSEWHERE

1.	Rough Carpentry:	Section	06100
2.	Finish Hardware:	Section	08710
3.	Gypsum Wallboard:	Section	09250

1.04 STORAGE AND PROTECTION

4. Painting:

- A. Stack lumber to insure proper ventilation and drainage.
- B. Protect millwork against dampness during and after delivery. Store in well ventilated building where not exposed to extreme changes to temperatures and/or humidity.

PART 2.00 - PRODUCTS

2.01 MATERIALS

A. All wood trim shall be "B" Grade, or better, Douglas Fir, Spruce, or Pine suitable for staining.

Section 09900

B. Submit actual material sample and complete color / stain selections to Architect for approval prior to ordering.

PART 3.00 - EXECUTION

3.01 WORKMANSHIP

A. All workmanship shall be accurately and neatly installed without hammer marks or other defacement. All finish nailing shall be set below the surface of the finish, all cuts, miters and connections to adjacent work shall be accurately fitted and scribed into place. Sand woodwork as necessary to remove irregularities and machine marks. Leave work free from defects and blemishes.

3.02 MILLWORK AND TRIM

- A. Install millwork and finish trim with tight joints securely nailed. Set exposed heads of nails for wood filler. Sand interior woodwork as necessary to remove defects and blemishes.
- B. Make joints tight and firm to conceal shrinkage. Make outside joints to exclude water and set in lead paste. Miter corners unless otherwise indicated. Install running and standing trim in longest available lengths, join only where solid fastenings can be made. Distribute end joints in built up members. Miter exterior corners and cope interior angles. Where required, scribe woodwork to adjacent work.

3.03 WOOD DOORS

- A. Trim and fit doors to fit snugly without binding, with approximately 1/8" clearance at side jambs and head. Hang plumb and true, free from warp, with joints undamaged and surfaces prepared for painting.
- B. After hanging and fitting doors, remove and paint tops and bottoms with two coats sealer.
- C. Undercut doors as required to give proper operating clearance over all floor finishes.

3.04 FINISH HARDWARE

- A. Receive, store and be responsible for finish hardware as specified in Section 08710.
- B. Fit hardware accurately, apply securely and adjust carefully to close doors without forcing and to prevent rattle.
- C. Center door knobs 38 inches above floor and center door pulls 45 inches above floor. Leave in working order, free from defects.

SECTION 06400 - MILLWORK

PART 1.00 - GENERAL

- 1.01 GENERAL DOCUMENTS
- A. The GENERAL DOCUMENTS form a part of this Section.
- 1.02 SCOPE
- A. Furnish materials and labor necessary to fabricate items or millwork, including all kitchen cabinets, as indicated on Drawings and specified, NKCA & ANSI A161.1 or better.
- 1.03 SAMPLES
- A. Submit samples of plastic laminate for Architect's approval. Submit samples of stained millwork (finish trim and plywood cabinets) for Architect's approval.

PART 2.00 - PRODUCTS

2.01 QUALITY GRADE AND MATERIALS

A. Casework:

- 1. Casework: Quality grade and species called for herein under Interior Woodwork. "C" grade or better Douglas Fir as defined in AWI Quality Standards, Section 400, or equal.
- 2. Stained Plywood: Equal to AD Douglas Fir and stain grade birch. Thicknesses and locations as indicated on Drawings.
- 3. Plastic Laminate Back-up: Shall be fir plywood.
- 4. Plastic Laminate: Shall be as manufactured by the Formica Corporation, or approved equal by the Architect. Submit samples for approval of color and finish by Architect.

PART 3.00 - EXECUTION

3.01 JOB ASSEMBLED WORK

When installing items not shop assembled, distribute to best overall advantages defects allowed in quality grade specified.

3.02 DELIVERY AND STORAGE

Do not deliver millwork until building and/or storage area is sufficiently dry so woodwork will not be damaged by excessive changes in moisture content.

3.03 WORKMANSHIP

- A. Fabricate items of millwork to conform to material and workmanship requirements as established by Architectural Woodwork Institute in the publication "Quality Standards of the Architectural Woodwork Industry".
- B. Provide all necessary rough wood framing, blocking, bracing, angle clips, rough hardware and fastenings as required to install all items indicated on Drawings.

3.04 PRE-FABRICATED CABINET WORK

- A. The Contractor has the option to bid all built-in kitchen and bathroom cabinet work as factory pre-fabricated, or approved equal by Architect, bearing label to show compliance with ANSI A161.1.
- B. Submit material samples, color/stain selections and complete shop drawings to the Architect for approval prior to fabrication.
- C. Cabinet Construction: Face Frame type construction of 3/4" hardwood material glued at joints and secured with screws Vertical members shall be 3/4" x 1-1/2" solid wood. Horizontal members shall be 3/4" x 1-3/4" solid wood. Mullions shall be 3/4" x 3" solid wood. Stiles shall be 1-1/2" wide. Doors back beveled with spring loaded, self closing hinges. All wall and base cabinets shall have 1/2" plywood shelves. Half depth shelves in base cabinets. 1/4" Hard board back furnished on all base and wall cabinets except sink and lavatory cabinets. End panels constructed of 1/2" cabinet grade plywood. Drawers will be constructed with plywood sides and back, 1/4" hard board bottom and back. Drawer slides shall be 3/4" extension, 75 pound capacity, metal epoxy coated, ball bearing slide, side mounted. Toebases shall be 3-1/2"

- high and recessed 3".
- D. Finish: Cabinet shall be finished inside and outside with sealer, stain and synthetic varnish in any of five standard colors. Toebases shall be finished black and receive typical base.
- E. The center mounted single track is acceptable only when it is the metal tract with metal anchors. The plastic mounts are not acceptable.
- F. Use 3/4" exterior grade plywood under kitchen sink section. No particle board is allowed as shelving in kitchen cabinets.

SECTION 06410 - CABINETWORK

PART 1.00 - GENERAL

- 1.01 GENERAL DOCUMENTS
- A. The GENERAL DOCUMENTS form a part of this Section.
- 1.02 SCOPE
- A. Furnish materials and labor necessary to fabricate all cabinets as indicated on drawings. All cabinets shall meet or exceed ANSI 161.1 and shall bear the label of an independent testing laboratory so certifying, and flamespread rating of finish shall be less than 200. Vinyl faced cabinets will not be accepted. Counter tops shall meet ANSI A161.2.
- 1.03 RELATED WORK SPECIFIED ELSEWHERE
 - 1. Millwork:

Section 06400

- 1.04 SHOP DRAWINGS
- A. Submit shop drawings showing location and size of each type of cabinet and counter top. Accessories, materials, finishes, hardware types and locations, fillers, etc. Include fully dimensioned plans and elevations and indicate details of anchorage to counter top and to walls. Contractor shall verify on shop drawings opening sizes in cabinet work to suit particular kitchen appliances selected prior to submittal to Architect. In addition to drawings, the contractor shall submit one fully finished 15" wide base cabinet with drawer and all hardware installed.
- 1.05 PRODUCT, DELIVERY, STORAGE, AND HANDLING
- A. Protect wood cabinets and counter tops during transit, delivery, storage and handling to prevent damage, soiling and deteriorations. Do not deliver wood cabinets and counter tops until painting, wet work, grinding, and similar operations which could be performed before installation of cabinets and counter tops in installation areas or, if that is impractical, in areas with ambient conditions meeting same requirements.

1.06 JOB CONDITIONS

- A. Manufacturer shall advise Contractor of temperature and humidity requirements for cabinet installation areas. Do not install cabinets and counter tops until required temperature and relative humidity have been stabilized and will be maintained in installation areas.
- B. Maintain temperature and humidity in installation areas as required to maintain moisture content of installed cabinet work within a tolerance range of the optimum moisture content acceptable to cabinet manufacturer, from date of installation through remainder of construction period.

1.07 DEFINITIONS

- A. Exposed portions of cabinets include all surfaces including edges visible when doors and drawers are closed. Also included are visible surfaces in open cabinets or behind glass doors.
- B. Semi-exposed portions of cabinets include surfaces behind opaque doors and drawer fronts including shelves, dividers, interior faces of cabinet ends, backs, tops and bottoms, drawer sides, backs and bottoms, and back face of doors. Also included are underside of bottoms of cabinets over 2'-0" from floor and tops 5'-9" or more above floor.
- C. Concealed portions of cabinets include sleepers, web frames, dust panels & other surfaces not normally visible after installation.

PART 2.00 - PRODUCTS

2.01 QUALITY GRADE AND MATERIALS

- A. CASEWORK
- 1. <u>Plywood Face Veneer:</u> Stain Grade Birch Veneer.
- 2. <u>Hardwood Lumber</u>: Clear, dry, sound, and free of defects selected from First Grade Lumber (NHLA), of species indicated.
- 3. <u>Hardboard</u>: PS 58, Class 1, Tempered.
- B. CABINET CONSTRUCTION
- 1. Solid lumber to be selected for compatible grain and color. Species shall be Birch.

- 2. <u>Plywood Face Veneer</u>: Stain Grade Birch Veneer.
- 3. <u>Semi-Exposed Materials</u>: Dry, sound, selected to eliminate appearance defects, of any species of hardwood or softwood with color and grain characteristics similar to exposed portions.
- 4. <u>Semi-Exposed Plywood</u>: Species to match color and grain of exposed members; with plywood core as standard with manufacturer; unless otherwise indicated. Concealed Members: Solid lumber, plywood, or hardboard, as indicated.
- 5. <u>Face Frames</u>: Not less than 3/4" x 1-5/8" solid lumber rails and stiles fastened with glue and corrugated fasteners.
- 6. Exposed ends: Not less than 1/2" thick, plywood, connected to stile with pressure-glued tongue and plow joint, and supplemented by special fasteners.
- 7. <u>Unexposed ends</u>: Not less than 1/2" thick, 5 ply veneer core plywood attached to front frame in same manner as exposed ends.
- 8. <u>Back, Top and Bottom Rails</u>: Not less than 3/4" x 3" solid lumber machined to interlock with end panels, and grooved to receive top and bottom panels; with back rails secured under pressure with glue and fastening devices.
- 9. <u>Shelving</u>: Not less than 1/2" thick plywood with edge band at exposed edge.
- 10. Door and drawer fronts shall be 3/4" plywood with birch veneer. Drawer fronts must be glued and screwed into the drawer frame. Drawer slides shall be 3/4" extension, 75 pound capacity, metal epoxy coated, ball bearing slide, side mounted.
- C. WALL CABINET CONSTRUCTION
- 1. <u>Tops and Bottoms</u>: Not less than 1/2" thick, 3 ply plywood with tops and bottoms fully supported by, and secured in, gains in end panels and grooves in front frame and back rail.
- 2. <u>Backs</u>: Not less than 1/4" plywood or hardboard glued and fastened to machined rear edge of ends and to top and bottom hanger rails.
- D. BASE CABINET CONSTRUCTION
- 1. Front Frame Drawer Rails: Not less than 3/4" x 1-1/4"

- lumber glued and fastened into face frame with corrugated fasteners.
- 2. <u>Bottoms</u>: Not less than 1/2" thick, 5 ply veneer core plywood fully supported into gains in end panels and grooves in front frame and back bottom rails.
- 3. <u>Back Panels</u>: Not less than 1/4" thick plywood or hardboard glued and fastened to machined rear edge of end panels and to top and bottom rails.
- 4. <u>Toe Boards</u>: Not less than 3/4" plywood core attached between end panels and extended from bottom panel to floor.
- 5. <u>Corner Blocks</u>: Glued and fastened in each of four top corners to maintain cabinet squareness and rigidity.
- 6. General style of cabinet construction to be flush overlay with drawer fronts, doors and fixed panels overlaying and concealing face frames of cabinet body.
- 7. Plastic laminated tops shall be 1/16" laminated plastic on 3/4" plywood. Laminates to be as made by Wilson Art, "Formica" or approved equal. Submit complete set of samples of Owner and/or Architect's selection.
- 8. <u>Counter top Configuration</u>: Provide counter tops with the following front styles (nose), cove and backsplash style, unless otherwise indicated as detailed and shown on drawings.
- 9. <u>Preparation for Finishing</u>: Carefully and smoothly machine sand parallel with grain, exposed and semi-exposed surfaces of cabinets. Hand scrape or sand exposed surfaces to remove machine marks and scratches. Remove sanding residue and other foreign material.

E. CABINET HARDWARE

- A. Provide manufacturer's standard hardware units of type, size and finish indicated, complying with ANSI A156.9. Of type, material, size and finish indicated, or if not indicated, as selected by Architect from manufacturer's standard choices.
- B. Door Hinges: (1 pair per door) Ajax #5939, polished brass Drawer Guides: Drawer slides shall be 3/4" extension, 75 pound capacity, metal epoxy coated, ball bearing slide, side mounted.

PART 3.00 - EXECUTION

3.01 FABRICATION

- A. Construct wood cabinets to dimensions and profiles and details indicated. Assemble units in shop in as large of components as practicable to minimize field cutting and jointing.
- Install plumb, level, true, and straight with no В. distortions. Shim as required using concealed shims. Where wood kitchen cabinets abut other finished work, scribe and cut for accurate fit. Before making cutouts, drill pilot holes at corners. Anchor cabinets securely in place with concealed (when doors and drawers are closed) fasteners, anchored into structural support members of wall construction. Comply with manufacturer's instructions for support of units. Attach counter tops securely to base units. Spline and glue joints in counter tops; provide concealed mechanical clamping of joint. Provide cutouts for fixtures and appliances as indicated; smooth cut edges and coat with waterproof coating or adhesive. Complete hardware installation and adjust doors and drawers for proper operation.

3.02 CLEANING AND PROTECTION

Repair or remove and replace defective work as directed upon completion of installation. Clean exposed and semi-exposed surfaces, touch-up as required and remove and refinish damaged or soiled areas. Installer shall advise Contractor of final protection and maintained conditions necessary to ensure that work will be without damage or deterioration at time of acceptance.

SECTION 07200 - BUILDING INSULATION

PART 1.00 - GENERAL

1.01 CONDITIONS

- A. Requirements of the Conditions of the Contract apply to all work under this section.
- B. Throughout the specifications, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not for the purpose of limiting competition. Unless specifically stated otherwise, the bidder may assume the phrase "or approved equal", except that the burden is upon the Bidder to proved such equality.

1.02 SCOPE

- A. Furnishing and paying for all materials, labor, equipment, licenses, taxes and other items required for execution and completion of all work under this section.
- B. The work described in this section of the specifications includes, but is not limited to, the following:
 - 1. Installing building insulation and related items.

1.03 SAMPLES

A. Submit samples of each type insulation and mastic to architect for approval prior to ordering. Sample shall be of specified materials and thickness.

PART 2.00-PRODUCTS

2.01 MATERIALS

- A. All Exterior Walls Including porch and storage room: Remove existing insulation and install 3 inch closed cell sprayed on foam insulation.
- B. Interior wall insulation: All interior walls shall have 3.5" fiberglass batt sound insulation. Party walls shall have 6" fiberglass batt sound insulation.
- C. ATTIC INSULATION TYPICAL: min. of R-60 loose fill fiberglass insulation.

PART 3.00 -EXECUTION

3.01 <u>INSTALLATION</u>

- A. Locate and install all insulation using same size and types as indicated on drawings.
- B. Install all insulation as directed by manufacturer's printed instructions.

SECTION 07601 - FLASHING AND SHEET METAL (ALUMINUM)

PART 1.00 - GENERAL

1.01 GENERAL DOCUMENTS

- A. The General Documents form part of this Section.
- B. Throughout the specifications, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not for the purpose of limiting competition. Unless specifically stated otherwise, the bidder may assume the phrase "or approved equal", except that the burden is upon the Bidder to prove such equality.

1.02 SCOPE

Furnish materials and labor required to furnish, fabricate and install all items of sheet metal moisture protection indicated in Drawings, specified and necessary to provide complete moisture protection. Furnish flashing and sheet metal to other trades where installation is required by the respective trades.

1.03 SAMPLES

Submit samples of each type flashing to be used, in proper material and thickness.

1.04 MISCELLANEOUS

Provide sheet metal as necessary to produce watertight installation. Lay, rivet, lock or seal joints as conditions warrant. Provide necessary reinforcement and accessories.

1.05 GUARANTEE

Guarantee sheet metal work against defects in workmanship and material for a period of five years from date of final acceptance. Leaks occurring during this period shall be repaired at no cost to the Owner.

PART 2.00 - PRODUCTS

2.01 MATERIALS

- A. ALUMINUM FLASHING shall be made of .032 aluminum alloy and temper shall be 3003-h14 as determined in the "Aluminum Standards & Data" manual of the Aluminum Associates
- B. NAILS for fastening aluminum flashing shall be made of aluminum alloys 6061-T6. Washers of the same composition shall be required for preventing sheet metal tears.

PART 3.00 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. Inspect surfaces to which sheet metal is to be applied to insure that they are even, smooth, sound, thoroughly clean, dry and free from defects that might affect application.
- B. Perform cutting, fitting, drilling and/or other operations in connection with sheet metal required to accommodate work of other trades.
- C. Provide accessories essential to completeness of sheet metal installation.
- D. Nails, screws and bolts shall be of type best suited for purpose. But not less than #10 gauge, needle point, long enough to penetrate wood one inch.
- E. Unless otherwise specified, confine nailing to sheet metal having width of less than 12 inches.
- F. Cleating Provide cleats for sheet metal work where required, spaced approximately 12 inches on centers, unless otherwise specified or noted in Drawings. Cleats shall be not less than two inches wide by three inches long of same material and weight as metal being installed. Secure one end with two nails and fold edge of cleat back over nail heads.
- G. Do not place dissimilar metals in contact nor in position where drainage across them will occur.

3.02 ROOF FLASHING

- A. Install flashing at intersections of roof with vertical surfaces, at projections through roof and other areas as indicated on Drawings.
- B. Counter-flashing: shall be formed in lengths not to exceed 10 feet, turn down over base flashing not less than four inches. Form to provide spring action against base flashing.

3.03 WALL FLASHING

Install wall flashing, as necessary to produce watertight installation

SECTION 07900 - SEALANTS & CAULKING

PART 1.00 - GENERAL

1.01 CONDITIONS

- A. Requirements of the Conditions of the Contract apply to all work under this section.
- B. Throughout the specifications, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not for the purpose of limiting competition. Unless specifically stated otherwise, the bidder may assume the phrase "or approved equal", except that the burden is upon the Bidder to proved such equality.

1.02 SCOPE

Furnish all materials and labor necessary to perform all caulking and sealing work, to secure a weathertight building as indicated in Drawings and specified. Glazing of windows, doors, etc. will be performed under respective sections.

1.03 SAMPLES

- A. Each type sealant: One tube.
- B. Joint Filler: Two pieces 24" long.

PART 2.00-PRODUCTS

2.01 MATERIALS

- A. Sealing Compounds:
 - 1. Exterior sealant shall be G.E. Silicone Sealant as manufactured by Silicone Products Department, General Electric Company, Waterford, N.Y., or approved equal. Type shall be as recommended by manufacturer for specific use.
 - 2. Interior painted Latex caulking shall be DAP Acrylic Latex Caulk as manufactured by the DAP Corporation, or approved equal by the Architect.
- B. Primer: Shall be made by manufacturer or sealant compound, used from original container with a brush.

- C. Color of sealants shall be clear, unless otherwise noted on Drawings.
- D. Joint Filler: Shall be Ethafoam SB brand closed-cell sealant backer rod, extruded polyethylene foam as manufactured by the Dow Chemical Company. Size of rod will be as recommended by manufacturer.

PART 3.00 -EXECUTION

3.01 WORKMANSHIP

- A. One-part acrylic latex caulking shall be used in all interior joints. Do not use as an exterior sealant.
- B. Silicone Sealant shall be used in all exterior joints, under thresholds, door frames, exterior louvers, window sills and other openings through exterior walls, and below wood sill plates continuous around perimeter of concrete floor slabs.
- C. Prepare and seal all joints in strict accordance with manufacturer's written documents.
- D. Perform priming with a brush that will reach all parts of joint to be filled with sealant compound. Apply primer in accordance with manufacturer's written directions.
- E. Polyethylene foam backer rod shall be of sufficient diameter to insure rod will be firmly secured in place. Place at proper depth to form backing to receive sealant and to provide proper sealant depth of approximately 1/4". Compress backer rod 25% to 50% to achieve a secure, proper fit and to achieve the proper deformation shape. Do not twist or braid rod material.
- F. Apply compound with a hand gun having proper sized nozzles to fit joints and with sufficient pressure to completely fill voids and joints full. Mask off adjacent surfaces to prevent uneven application.
- G. Neatly point joints and remove excess materials. Upon completion, sealant shall have smooth even finish with joints watertight.
- H. Spread a bed of silicone sealant over entire seat of thresholds. Set thresholds, wood sill plates and window sill in silicone sealant and remove excess materials.
- I. Clean adjacent materials which have been soiled and leave work in a neat, clean condition.

- J. Seal openings in masonry walls, concrete slabs, etc. through which ductwork, pipes and other items of mechanical, electrical or plumbing equipment pass.
- K. SEALANTS & CAULKING SCHEDULE
 - 1. G.E. Silicone Sealants manufactured by the Silicone Products Department, General Electric Company, Waterford, New York. Use on exterior and interior as follows: (unless recommended otherwise by sealant manufacturer)
 - a. Concrete: GE SILPRUF sealants.
 - b. Wood: GE 1200 Sealants
 - c. Plastics & Plastic Flashing: GE SILPRUF Sealants, unless noted otherwise.
 - d. Sheet Metal: GE SILPRUF sealants.
 - e. Aluminum Flashings: GE SILPRUF sealants.
 - f. Aluminum Frames (Frame to Frame): GE SILGLAZE 2400 Sealants or GE 1200 Sealants.
 - g. Glass: GE SILGLAZE 2400 Sealants.
 - h. Vinyl Tile and Bathroom Surfaces: GE Sanitary Sealant.
 - 2. Interior Painted Latex caulking shall be DAP Acrylic Latex Caulk as manufactured by the DAP Corporation, or approved equal. (For interior use only); use where caulked joints are to be painted to match surrounding materials or a specific color. Do not use as an exterior sealant.

SECTION 08110 - STEEL DOORS AND FRAMES

PART 1 GENERAL

A. SECTION INCLUDES

A. Steel doors and steel frames.

B. RELATED SECTIONS

A. Section 09900 - Painting: Doors and Frames shall be factory primed and painted: contractor shall provide field touch up.

C. REFERENCES

- A. ANSI A250.8 SDI-100 Recommended Specifications for Standard Steel Doors and Frames; 1998.
- B. ANSI A250.3 Test Procedure and Acceptance Criteria for Factory Applied Finish Painted Steel Surfaces for Steel Doors and Frames.
- C. ANSI A250.10 Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 1998.
- D. ANSI A250.11, Recommended Erection Instructions for Steel Frames.
- E. ASTM A 366/A 366M Standard Specification for Commercial Steel (CS) Sheet, Carbon, (0.15 Maximum Percent) Cold-Rolled; 1997.
- F. ASTM A 653/A 653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-coated (Galvannealed) by the Hot-Dip Process; 1998.
- G. ASTM E-90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- H. DHI Al15.1G Installation Guide for Doors and Hardware; 1994.
- I. NFPA 80 Standard for Fire Doors and Windows; 1999.
- J. NFPA 252 Standard Methods of Fire Tests for Door Assemblies; 1995.

- K. UL 10B Standard for Fire Tests of Door Assemblies; 1997.
- L. UL 10C Positive Pressure Fire Tests of Door Assemblies.

D. SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets and specifications.
- C. Shop Drawings: Include schedule identifying each unit, with door marks or numbers referencing drawings. Show layout, profiles, product components and anchorages.
- D. Certificates: Product certificates signed by the manufacturer certifying material compliance with ANSI A250.8, specified performance characteristics and criteria, and physical requirements.
- E. Installation Instructions: Manufacturer's printed installation instructions, if other than as specified in SDI-105.

E. QUALITY ASSURANCE

- A. All products shall conform to the requirements of ANSI A250.8, "SDI 100 Recommended Specifications for Standard Steel Doors and Frames".
- B. Insulated Doors shall have:1. A "U Factor" of 0.10 for a Polyurethane core.

F. DELIVERY, STORAGE, AND HANDLING

- A. Deliver doors and frames palletized and wrapped to provide protection while in transit.
- B. Store all materials under cover. Avoid use of non-vented plastic or canvas shelters to prevent forming of humidity chambers that cause rust.
- C. If cardboard wrapping becomes wet, remove cartons immediately.
- D. Provide 1/4 inch (6 mm) spacing between doors to provide air circulation.

PART 2 PRODUCTS

A. MANUFACTURERS

- A. Acceptable Manufacturer: Republic Doors and Frames, which is located at: 155 Republic Dr.; McKenzie, TN 38201; Toll Free Tel: 800-733-3667; Tel: 731-352-3383; Email: request info (rbplit@republicdoor.com); Web: www.republicdoor.com
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

B. MATERIALS

- A. Uncoated Steel Sheet: Cold rolled commercial steel sheet complying with ASTM A 366/A 366M.
- B. Galvannealed Steel Sheet: ASTM A 653/A 653M, commercial quality, hot-dipped.
 - 1. Coating Thickness: A40 coating.

C. DOORS AND FRAMES

- A. Doors: Full flush (No Vertical Face Seams), complying with ANSI A250.8; face panels laminated to core and complete unit closed with steel perimeter channels projection welded to face sheets.
 - 1. Thickness: 1-3/4 inches (44 mm).
 - a. ANSI Level 2, Model 2; 18 gage (1.0 mm) faces, no visible edge seams.
 - 2. Faces: Embossed in 6-panel design laminated to a polystyrene core
 - 3. Face Material: Galvannealed steel sheet.
 - 4. Insulated Doors: Insulated; U-value of 0.10, polyurethane core.
 - 5. Core: Doors fabricated by laminating panels to a specified core and the complete unit closed with steel perimeter channels, projection welded to the face sheets. Core shall be as follows:

 a. Polyurethane core.
 - 6. Steel Stiffened Doors: Steel reinforced with minimum 22 gage (0.75 mm) hat shaped stiffeners welded to the inside of each face sheet at maximum of 6 inches (150 mm) on center, with mineral wool filling spaces between stiffeners.
 - 7. Finish: Factory prime finish.

B. Door Reinforcements:

1. Top and Bottom Channels: 16 gage steel, projection welded to both face sheets at a maximum of 2-1/2 inched (64 mm) on center.

- 2. Hinge Reinforcement: Hinge reinforcing channel shall be projection welded to both face sheets at a maximum of 5 inches (127 mm) on center.
 - a. 1-3/4 inch (44 mm) thick reinforced with continuous a 16 gage channel with 10 gage reinforcements located at each hinge preparation.
- 3. Lock Reinforcing Channel: Continuous 16 gage channel, with tapped holes extruded to 14 gage. Channel shall be welded to both face sheets at a maximum of 5 inches (127 mm) on center.
- 4. Closer Reinforcement: 12 gage box type reinforcement, 18 inches (457 mm) long.

D. FRAMES CONSTRUCTION

- A. Frames: Formed steel sheet, with 2 inch (50 mm) wide face jambs and heads unless otherwise indicated; complying with ANSI A250.8.
 - 1. Frame Depth: Adjustable within 2 inches (50 mm) of nominal depth.
 - 2. ANSI Level 2 Doors: 16 gage (1.5 mm) frames.
 - 3. Material: Galvannealed steel sheet.
 - 4. Corners: Mitered; face welded and ground smooth.
 - 5. Provide 3 silencers for single doors, 2 silencers on head of frame for pairs of doors.
 - 6. Finish: Factory primed and painted finish.
 - 7. Provide replaceable weather stripping and low-profile thresholds
- B. Reinforcements for 1-3/4 Inch (44 mm) Frames:
 - 1. Hinge Reinforcements: 9 gage (3.8 mm).
 - 2. Strike Reinforcement: 10 gage (3.4 mm) equivalent.
 - 3. Closer Reinforcements: 12 gage (2.6 mm).
- C. Frame Anchors: Minimum of six wall anchors and two base anchors.

E. FACTORY FINISH

- A. All doors, frames, and stick components shall be cleaned and finished in accordance with ANSI A250.10, "Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames".
- B. Preparation: Clean and phosphatize surfaces of steel doors and frames".
- C. Primer: Apply one coat of a gray, alkyd acrylic enamel primer, forced cured.
- D. Finish: Factory Paint with alkyd acrylic enamel using a

two-coat process, with each coat being force cured after each coating.

PART 3 EXECUTION

A. EXAMINATION

- A. Before beginning installation, verify that substrate conditions previously installed under other sections are acceptable for installation of doors and frames in accordance with manufacturer's installation instructions and technical bulletins.
- B. Verify door frame openings are installed plumb, true, and level.
- C. Select fasteners of adequate type, number, and quality to perform intended functions.

B. INSTALLATION

- A. Install frames plumb, level, rigid and in true alignment in accordance with ANSI A250.11, "Recommended Erection Instructions for Steel Frames" and ANSI A115.IG, "Installation Guide for Doors and Hardware".
- B. All frames other than slip-on types shall be fastened to the adjacent structure to retain their position and stability. Drywall slip-on frames shall be installed in prepared wall openings, and shall use pressure type and sill anchors to maintain stability.
- C. Where grouting is required in masonry installations, frames shall be braced or fastened to prevent the pressure of the grout from deforming the frame members. Grout shall be mixed to provide a 4 inch (102 mm) maximum slump and hand troweled into place. Grout mixed to a thin "pumpable" consistency shall not be used.
- D. Install fire-rated doors and frames in accordance with NFPA 80 and local code authority requirements.
- E. Install doors to maintain alignment with frames to achieve maximum operational effectiveness and appearance. Adjust to maintain perimeter clearances as required. Shim as needed to assure the proper clearances are achieved.
- F. Install hardware as specified in Section 08710 in accordance with the hardware manufacturer's recommendations and templates. ANSI A115.IG, "Installation Guide for Doors and Hardware" shall be consulted for other pertinent information.

- G. Clearance between the door and frame head and jambs for both single swing and pairs of doors shall be 1/8 inch (3.2 mm).
- H. Clearance between the meeting edges of pairs of doors shall be 3/16 inch plus or minus 1/16 inch (5 mm plus or minus 1.6 mm). For fire rated applications, the clearance between the meeting edges of pairs of doors shall be 1/8 inch plus or minus 1/16 inch (3.2 mm plus or minus 1.6 mm).
- I. Bottom clearance shall be 3/4 inch (19 mm).
- J. The clearance between the face of the door and door stop shall be 1/16 inch to 1/8 inch (1.6 mm plus or minus 3.2 mm)..
- K. All clearances shall be, unless otherwise specified, subject to a tolerance of plus or minus 1/32 inch (.4 mm).

C. ADJUSTING AND CLEANING

- A. Adjust doors for free swing without binding.
- B. Adjust hinge sets, locksets, and other hardware. Lubricate using a suitable lubricant compatible with door and frame coatings.
- C. Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions before owner's acceptance.
- D. Remove from project site and legally dispose of construction debris associated with this work.

D. PROTECTION

A. Protect installed products and finished surfaces from damage during construction.

SECTION 08561 - Vinyl Replacement Windows

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Factory fabricated vinyl (PVC) windows including glass and glazing, operable hardware, weatherstripping and insect screens.

1.2 RELATED SECTIONS N/A

1.3 REFERENCES

- A. AAMA/NWWDA 101/I.S.2-97 Voluntary Standard for Aluminum and Poly (Vinyl Chloride) (PVC) Prime Windows and Glass Doors.
- B. NFRC 100-97 Thermal Properties; National Fenestration Rating Council.
- C. NFRC 200-97 Solar Heat Gain; National Fenestration Rating Council.
- D. ASTM D 3678 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Interior Profile Extrusions.
- E. ASTM D 4099 Standard Specification for Poly (Vinyl Chloride) (PVC) Prime Windows/Sliding Glass Doors.
- F. ASTM E 774 Standard Specification for Sealed Insulating Glass.
- G. IGCC Classification of Insulating Glass Units; Insulated Glass Certification Council.
- H. U.S. Department of Energy Energy Star Windows Program.

1.4 SUBMITTALS

- A. Submit under the provisions of Section 01300.
- B. Product Data: Manufacturer's standard details and catalog data demonstrating compliance with referenced standards; include manufacturer's standard installation instructions.
- C. Drawings: Manufacturer's product drawings showing details of fabrication, hardware, weatherstripping, fasteners, screens, glazing, accessories and other related items.
- D. Verification Samples: Operating sample of each window type specified illustrating fabrication, hardware, glazing, screen and finish.

E. Test Reports: For each window type specified, furnish test reports from accredited independent testing laboratory certifying that identical or larger window units meet requirements specified for air infiltration, water penetration and structural performance by AAMA 101/I.S.2-97, for thermal performance by NFRC-97, and for seal integrity of insulating glass units by IGCC. Prior test reports to test standards other than those listed will not be accepted.

F. Closeout Submittals: Warranty documents, properly executed.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum five (5) years experience producing vinyl (PVC) windows.

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver windows to project site in undamaged condition; handle windows to prevent damage to components and to finishes.

B. Store windows out of contact with ground, protect windows from weather and construction traffic in well ventilated area.

1.7 WARRANTY

A. Furnish manufacturer's standard warranty against deficiencies in materials or fabrication.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Vinyl Kraft DH vinyl windows VK 9400 DH with Clear Insulated Glass. With perimeter extrusion for the existing security screen PN T-1000 from Vinyl Kraft

2.2 FABRICATION

A. Window/Door Units: Assemble units completely in factory, including operating hardware and glazing.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Openings are in correct location, and of correct size, in accordance with approved shop drawings and manufacturer's installation instructions.
- B. Installer's Examination:
- 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
- 2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
- 3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
- 4. Beginning construction activities of this section indicates installer's acceptance of conditions.

3.2 INSTALLATION

- A. Install products specified in this section square, plumb and level, in accordance with approved shop drawings and manufacturer's installation instructions.
- B. Installation of joint sealers is specified in Section 07900.

3.3 ADJUSTING

A. Adjust operating hardware for correct operation in accordance with manufacturer's installation instructions.

3.4 CLEANING

A. Clean interior and exterior surfaces free of labels, mortar, plaster, paint, joint sealers and other foreign matter to prevent damage to weatherstrip and to prevent interference with operation of hardware.

3.5 PROTECTION

- A. Protect ventilators and operating parts from dirt and damage caused by subsequent construction activities.
- B. Replace units damaged by subsequent construction activities.

SECTION 09250 - GYPSUM WALLBOARD

PART 1.00 - GENERAL

1.01 SCOPE

This section includes drywall materials and related accessories necessary for the complete installation. It does not include the frame walls or furring to support the drywall.

1.02 REQUIREMENTS

- A. Reference Standards: U.S. Gypsum Technical Bulletin "Sheetrock, Gypsum Wallboard and Gypsum Drywall Systems", current edition.
- B. Workmanship shall be of best quality and shall be performed by skilled mechanics. Wallboard work shall not begin until all elements providing alignment are in proper place. Applicator shall examine all surfaces to receive wallboard prior to beginning his work. Start of work shall constitute acceptance of surfaces as satisfactory for receiving wallboard.

PART 2.00 - MATERIALS

2.01 FIRE-RESISTANCE-RATED GYPSUM WALLBOARD: Shall meet ASTM C 36 and as follows:

5/8" Type X tapered edge wallboard for all unit interior walls. 5/8" Type X tapered edge wallboard for all Perimeter, Atrium, Party-walls, Ceilings and other location as indicated on Drawings.

2.02 MOISTURE RESISTANT (MR) GYPSUM BOARD: Shall meet ASTM C 630 and as follows:

Shall be 5/8" (for Interior Walls) and 5/8" (for Perimeter Walls, Party Walls, & Ceilings) Firecode tapered edge for all kitchen, toilet, bath, janitor, mechanical room and other locations subject to high moisture.

2.03 JOINT TAPE AND COMPOUND

Shall be as recommended by the gypsum wallboard manufacturer, installed in accordance with their recommendations.

2.04 DRYWALL ADHESIVE

Shall be "contact type" meeting ASTM C 557. Apply in vertical ribbons only, except as additionally recommended by the drywall manufacturer.

2.05 CORNER BEADS AND CASING BEADS

Shall be galvanized metal as recommended by the wallboard manufacturer and meeting the requirements of ASTM C 840.

2.06 NAILS AND SCREWS

Nails for standard application of single layer gypsum wallboard shall be 1-1/4" GWB-54, or annular ringed nails conforming to ASTM C380. Screws to be one inch Buglehead. Nails for double layer application shall be of length recommended by the wallboard manufacturer.

PART 3.00 - INSTALLATION

3.01 APPLICATION

Application of gypsum wallboard shall conform to ASTM C 840, "Specifications for Application and Finishing Gypsum Board".

3.02 TEMPERATURE

Maintain a uniform room temperature above 50 degrees F during application and until completely dry or occupied. Provide adequate ventilation.

3.03 WALLBOARD

- A. Wallboard shall be applied first to the overhead surfaces and then to side walls.
- B. Use wallboard of maximum practicable length to reduce end joints.
- C. Edges and ends of boards shall be in contact but not forced into place. End joints shall be staggered.
- D. Joints on opposite sides of a partition shall not occur on

the same stud.

E. Provide 1/4 inch space between end of wallboard and floor slab.

3.04 NAILS

Nails shall be spaced not less than 3/8 inch from ends and edges of wallboard. Nails shall be spaced not over 6 inches apart on ceilings or over 8 inches on sidewalls. The wallboard shall be held in firm contact with the nailing member while the nails are being driven. The heads shall be dimpled slightly below the surface of the wallboard with the final hammer blow. Care must be taken not to break the paper face.

3.05 CORNER BEADS

Corner beads shall be applied to all external corners framed by two panels of wallboard. All joints and internal angles shall be finished using the joint treatment system in accordance with the manufacturer's instructions and recommendations.

3.06 CASING BEADS

Casing beads shall be applied to perimeter of openings in gypsum board walls for wall recesses, electrical fixtures and similar conditions where a cover flange or escutcheon is not sufficient to cover edge of gypsum board. In addition, provide at all exposed edges of gypsum board and at edges gutted to a dissimilar material where no cover trim is provided.

3.07 JOINT TREATMENT

All joints in wallboard surfaces intended to receive paint shall be taped and cemented in accordance with the manufacturer's recommendations. All dimpled nail heads and other depressions in wallboard surfaces shall be finished with joint compound.

SECTION 09300 - PORCELAIN TILE

PART 1.00 - GENERAL

1.01 Porcelain tile shall be of standard grade quality as manufactured by American Olean (Ultratech), and shall conform to requirements of ANSI A137.1-1988.

Type: Porcelain tile shall be Cross-Tread (CTS).

Size: Porcelain tile shall be manufactured to specific Size after firing and shall be nominal(6x6) Trim and wall base shall be 4-3/4"x 11-3/4".

Thickness: Porcelain tile shall be manufactured to specific thickness after firing and shall be nominal (8.0 mm or greater).

Color: Porcelain tile shall be furnished in color as selected by Architect from standard available colors.

Trim: According to availability, provide matching trim shapes such as bullnose corners, cove base and borders when specified.

- 1.02 Setting Materials: Use appropriate installation mortars according to ANSI Al18. Series or Al36.1992 Type 1.
- 1.03 Grouting Materials: Select grout per ANSI A118.3, A118.5, A118.6 or A118.8-1992. Provide grout in colors selected by the Architect from standard colors available from the approved manufacturers.
- 1.04 Waterproofing/Anti Fracture Membrane: Select per ANSI A118.10-1993 as required.

PART 2.00 INSTALLATION

2.01 Acceptability of Surfaces

A. Before tiling, verify that all surfaces to be tiled are structurally sound true to plane, and fall within maximum variations shown below:

<u>Walls</u> <u>Floors</u>

1/8" in 8' 1/8' in 10' or or 1/4" in 8" 1/4" in 10' (Depending on Substance) (Depending on Substance)

Report all unacceptable surfaces to the architect in writing, and do not tile such surfaces until they are leveled enough to meet above requirements.

B. Before tiling, all surfaces must be free of curing compounds, oil, grease, wax, dirt dust, form releases or other substances that would interfere with proper bond of setting materials. If tile is installed by the thin-set method, concrete slabs shall be steel trowel or light broom finish.

2.02 Setting Material

Comply with appropriate ANSI A108 specification current and Tile Council of America Handbook for appropriate method of installation for each specification. For adhesive mortar application use following technique: with the flat side of trowel, key mortar into substrate. Using the appropriate size trowel, comb mortar in one direction with notched side of trowel. Set tile with a sliding motion, perpendicular to the mortar ridges. Obtain as near 100% coverage as possible of mortar to tile. Mortar must be sufficiently distributed to give full support under all corners and edges of the tile. Periodically, remove sheets or individual tiles to assure proper bond coverage consistent with industry specifications.

- 2.03 Expansion Joints Install Architecturally designed expansion joints as per TCA Detail EJ171. Prefabricated expansion joint strips can also be used when suitable.
- 2.04 Grouting Methods

Follow exactly grout manufacturer's instructions and comply with appropriate ANSI A108 specifications depending on type of grout selected. Grouting in not complete until all grout haze and residues are removed from the surface of the tile.

- 2.05 Cleaning and Protection
 - A. Leave finished installation free of cracked, chipped, broken, unbounded or otherwise defective tile work.
 - B. Protect all floor tile installations with clean construction paper or other heavy covering during

construction period to prevent staining or damage. No foot or wheel traffic permitted on floor for at lease 3 days after grouting.

SECTION 09665 - RESILIENT VINYL PLANK FLOORING

PART 1.00 - GENERAL

1.01 CONDITIONS

- A. Requirements of the Conditions of the Contract apply to all work under this section.
- B. Throughout the specifications, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not for the purpose of limiting competition. Unless specifically stated otherwise, the bidder may assume the phrase "or approved equal", except that the burden is upon the Bidder to proved such equality.

1.02 SCOPE

A. Furnish labor and materials necessary to complete resilient floors indicated in Drawings and specified.

1.03 SAMPLES

- A. Submit samples to Architect for approval of color and texture prior to delivery of materials to site.
- B. Label samples stating color, gauge, location to be used, and manufacturer's name. Furnish two sets of samples showing full range of color and pattern of tile.

1.04 DELIVERY AND STORAGE

- A. Deliver materials to job in protective wrapping or containers with manufacturer's brand and name clearly marked thereon.
- B. Handle and store materials carefully in accordance with manufacturer's recommendation.
- C. Store materials in original containers at 70 degrees F. 48 hours prior to installation.

PART 2.00 - PRODUCTS

2.02 MATERIALS

A. Resilient Floor Covering: Flooring shall be Armstrong

"Luxe Plank Vinyl" Colors and style shall be selected by the owner from current range manufactured by Armstrong. Color as selected by Architect.

B. Adhesives and fasteners for floor tile: Types recommended by tile manufacturer. Deliver to job in well labeled containers, stating use.

PART 3.00 - EXECUTION

3.01 PREPARATION AND INSPECTION OF SUBFLOORS

A. Remove grease, dirt and other substances from subfloors. Inspect floors for holes, humps, cracks and smoothness. Fill cracks, control joints, hollows with approved patching compound. Do not begin work until all defects have been corrected.

3.02 WORKMANSHIP

- A. Install materials with experienced workmen in strict accordance with manufacturer's specifications.
- B. Do not start work until work of other trades, including painting, has been substantially completed.
- C. Maintain 70 degrees F. minimum temperature for 48 hours before and during time of laying floor covering, and 10 days after application.
- D. Lay floor covering square with room or area axis, with joints tight and in true alignment.
- E. Cut floor covering to fit accurately at joining with other materials.

SECTION 09900 - PAINTING

PART 1.00 - GENERAL

1.01 CONDITIONS

- A. Requirements of the Conditions of the Contract apply to all work under this section.
- B. Throughout the specifications, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not for the purpose of limiting competition. Unless specifically stated otherwise, the bidder may assume the phrase "or approved equal", except that the burden is upon the Bidder to proved such equality.

1.02 DESCRIPTION

- A. Furnishing of and paying for all materials, labor, equipment, licenses, taxes, and other items required for execution and completion of all work under this Section.
- B. The work described in this section of the Specifications includes but is not limited to the following:
 - 1. General and Special Painting of Surfaces.

1.03 RELATED WORK

A. The following items of related work are specified and included in other sections of these Specifications:

1.04 SUBMITTALS

- A. Prepare duplicate 12" x 12" samples for each color selection for each type of paint as per schedules in this section. One approved sample of each color shall be kept at the office.
- B. Submit for approval manufacturer's complete descriptive data on all materials to be used.

1.05 DELIVERY

A. Deliver in manufacturer's original unopened containers, labeled with product description and instructions.

1.06 STORAGE

- A. In addition to requirements of Conditions of the Contract, this section shall store flammable materials in tightly closed containers set in well ventilated spaces.
- 1.07 ENVIRONMENTAL CONDITIONS
- A. Apply exterior paint only when temperature exceeds 50 degrees F. and drying conditions are good and predicted to remain so for at least 24 hours.
- B. Apply interior paint only when inside temperatures exceed 60 degrees F. and will be maintained above that point until paint has dried.
- C. Ventilated interiors during application and drying.
- D. Provide adequate lighting to obtain first class work.
- 1.08 PROTECTION
- A. Protect all finished surfaces by covering or by removing and replacing, in case of small items such as hardware.

PART 2.00 - PRODUCTS

2.01 MATERIALS

A. Paint:

- 1. Materials shall be manufacturer's best grade of respective types. Indicated along side of a few manufacturers are some examples of "Best Grade". Grade level shall be applicable to all types paints specified hereinafter.
- 2. Acceptable manufacturers and Grade of Paint:
 - a. Benjamin Moore "Regal Wall Satin".
 - b. Dovoe "Devoko Wonder Spread".
 - c. Glidden "Spread Satin".
 - d. Pittsburgh "Wallhide".
 - e. Pratt & Lambert "Vapex".
 - f. Sherwin Williams "Pro-Mar".
 - g. United Paint Company "Poly-Glo".

- 3. Acceptable manufacturer for natural oil or finish veneers. No substitutes will be accepted. a. Watco-Dennis.
- 4. Acceptable manufacturer for sealing and finishing concrete floor.
 a. Hillyard Chemical Company.
- B. Spackling shall be Synkaloid, DAP Vinyl, or Sherwin Williams C-850 Spackling Compound.

2.02 MIXING

A. Mixing or tinting shall be done at factory.

PART 3.00 - EXECUTION

3.01 STANDARDS

A. Standards: Paint work shall be according to "Painting Specifications Handbook" published by the Painting and Decorating Contractors of America, Chicago, Illinois, current edition.

3.02 CONDITION OF SURFACES

A. Do not begin work until surfaces to receive paint are dry, firm, sound, clean and free of defects or blemishes which would adversely affect the quality or appearance of the finished work.

3.03 PREPARATION

- A. Clean and sand surfaces to be painted.
- B. Mask, cover or remove surfaces to be protected from paint.
- C. Clean and remove scale, oil or grease from ferrous metal surfaces.
- E. Surfaces to be painted shall be clean, smooth, free from dirt and dust and be dry to receive paint. Nails and screws shall be set; the holes filled with putty and sanded smooth.

F. Before commencing his work, painter shall examine surfaces and report defects or unsatisfactory surfaces to Architect. Work shall not begin until surfaces are acceptable; the beginning of painting shall signify acceptance of surfaces by the painter.

3.04 PAINT SCHEDULE

A. EXTERIOR FERROUS METALS:

1 coat Sherwin Williams Kem Kromik Metal Primer B50N2 2 coats Sherwin Williams Oil Base House Paint A8 Series

B. INTERIOR HARDWOOD:

1 coat Sherwin Williams Oil Stain A-14 Series 2 coats Sherwin Williams Polyurethane Stain Varnish A67 Series

C. INTERIOR SOFTWOOD:

1 seal coat of 1 part Shellac & 7 parts Denatured Alcohol 1 coat Sherwin Williams Oil Stain A-14 2 coats Sherwin Williams Polyurethane Stain Varnish A67

D. SOFTWOOD COMPONENTS:

Where Douglas Fir serves as a component part (shelves, backs, etc.) of hardwood cabinets, use same specifications as for hardwood finish but add sufficient PL "Filter" with tonetic stain 1:1 to make color of Pine or Douglas Fir grains approximately color of finish hardwood. Substitutions of specified product systems manufacturing plant lacquer is not allowed.

E. INTERIOR WALLS & CEILINGS:

1 coat Sherwin Williams Pro Mar 400 Latex Primer B28W400 2 coats Sherwin Williams Pro Mar 200 Latex Semi-Gloss B31W201

F. Steel Doors and Trim : Contractor shall get touch up paint from door and frame provider.

F. PRIMER ONLY

1 coat Sherwin Williams Pro Mar 400 Latex Primer B28W400 on Wall surfaces designated on Drawings to receive wall covering or on ceiling surfaces above suspended acoustical ceiling system or on ceiling surfaces designated on drawings to receive textured spray finish.

3.05 APPLICATION

- A. Apply materials to obtain:
 - 1. Smooth uniform appearance.
 - 2. Complete coverage.
 - 3. Match with approved color sample.
 - 4. Work free of runs, sags, and skips.
 - 5. Sharp, clean edges where finishes or colors change.
 - 6. Surfaces free of defect and damage at time of acceptance.
- B. Fill nail holes and cracks after prime coat.
- C. Sand between coats.
- D. Backprime all new wood surfaces.
- E. Application of all materials shall be in strict accordance with manufacturer's directions.
- F. Brushing shall be the method of application, unless specific approval of another method is granted by the Architect.
- G. Correction of Defective Work: At the completion of painting, damaged or imperfect work shall be corrected.
- 3.06 CLEAN-UP
- A. Install finished items removed by this Section.
- B. Remove masking and protective covering.
- C. Leave factory finish surfaces clean and free of paint.
- D. Remove tools, rubbish, equipment and unused material.
- E. On completion, Contractor shall remove from site all material, tools and equipment involved with painting. Job shall be clean and be in finished condition acceptable to Architect.

SECTION 15060 PIPE, TUBE, AND FITTINGS

PART ONE - GENERAL

- 1.1 SCOPE:
- 1.1.1 Extent of pipe, tube, and fittings required by this section is indicated on drawing and/or specified in other Division-15 Sections.
- 1.1.2 Types of pipes, tube, and pipe fittings specified in this section include the following:
 - (1) Piping Materials: Steel pipe, copper tube, cast-iron pressure pipe, cast-iron soil pipe, clay pipe, plastic pipe and tubing, Acid-Resistant pipe.
 - (2) Miscellaneous piping materials/products.
 - (3) Pipe, tube, and fittings furnished as part of factory-fabricated equipment, are specified as part of the equipment in other Division-15 sections.

1.2 QUALITY ASSURANCE

- 1.2.1 Welding: Comply with ASME Section 9 Procedures and Qualifications for shop and project site welding of piping work.
- 1.2.2 Brazing: Comply with procedures, brazers, and operators in accordance with ASME Section 9 for shop and job-site brazing of piping work. Brazers shall be certified with certificate on job site at all times.
- 1.3 SUBMITTALS
- 1.3.1 Comply with Section 01300. Submit catalog cuts, specifications and installation instructions for each type of pipe, tube, and fitting. Submit piping schedule showing manufacture, pipe or tube weight, fitting type, and joint type for each piping system. Provide one copy of each brazers certificate.
- 1.3.2 Maintenance Data: Submit maintenance data and parts lists for each type of mechanical fitting. Include this data, product data, and

certifications and maintenance manual; in accordance with requirements of Division-1.

- 1.4 DELIVERY, STORAGE, AND HANDLING
- 1.4.1 Except for Hub-and-Spigot, clay, and similar units of pipe, provide factory-applied plastic end-caps on each length of pipe and tube. Maintain end-caps through shipping, storage and handling as required to prevent pipe-end damage and eliminate dirt and moisture from inside of pipe and tube.
- 1.4.2 Where possible, store pipe and tube inside storage and enclosure, or by packaging with durable, waterproof wrapping.

PARTS TWO - PRODUCTS

- 2.1 PIPING AND FITTING MATERIALS
- 2.1.1 General: Provide pipe tube and fittings of type, joint type, grade, size and weight (wall thickness or class) indicated for each service. Where type, grade or class is not indicated, provide proper selection as determined by Installer for installation requirements, and comply with governing regulations and industry standards.

2.1.2 Steel Pipe:

- (1) Black Steel Pipe: ASTM A 53, A 106 or A 120; except comply with ASTM A 53 or A 106 where close coiling or bending is required.
- (2) Galvanized Steel Pipe: ASTM A 53 or A 120; except comply with ASTM A 53 where close coiling or bending is required.
- (3) Seamless Steel Pipe: ASTM A 53, A 106, or A 120; except comply with ASTM A 53 or A 106 where close coiling or bending is required.
- (4) Galvanized Seamless Steel Pipe: ASTM A 53 or A 120; except comply with ASTM A 53 where close coiling or bending is required.
- (5) Electric-Fusion-Welded Steel Pipe: ASTM a671, a 672, or a 691. Where applicable for service pressures and temperatures as specified.

- (6) Steel Water Pipe: AWWA C200 for pipe 6" and larger.
 - (a) Coal Tar Protective Coatings and Linings for Steel Water Pipe: AWWA C203 for enamel and tape, hot applied.
 - (b) Chlorinated Rubber-Alkyd Paint System for Steel.

Water Pipe: AWWA C204.

(c) Cement-Mortar Protective Lining and Coating for Steel Pipe: AWWA C205.

2.1.3 Fittings for Steel Pipe:

- (1) Cast-Iron Flanged Fittings: ANSI B16.1, including bolting.
- (2) Cast-Iron Threaded Fittings: ANSI B16.4.
- (3) Malleable Iron Threaded Fittings: ANSI B16.3, plain or galvanized as indicated.
- (4) Malleable Iron Threaded Unions: ANSI B16.39; selected by Installer for proper piping fabrication and service requirements, including style, end connections, and metal-to-metal seats (iron, bronze or brass); plain or galvanized as indicated.
- (5) Threaded Pipe Plugs: ANSI B16.14.
- (6) Steel Flanges/Fittings: ANSI B16.5, including bolting and gasketing of material group 1.1, buttwelded end connection and raised-face facing, except as otherwise indicated.
- (7) Steel Pipe Flanges for Waterworks Service: AWWA C207.
- (8) Corrosion-Resistant Cast Flanges/Fittings: MSS SP-51, including bolting and gasketing.
- (9) Forged-Steel Socket-Welding and Threaded Fittings: ANSI B16.11, except MSS SP-79 for reducer inserts; rated to match schedule of connected pipe.
- (10) Wrought-Steel Buttwelding Fittings: ANSI B16.9, except ANSI B16.28 for short-radius elbows and returns; rated to match connected pipe.
- (11) Cast-Iron Threaded Drainage Fittings: ANSI B16.12.

- (12) Forged Branch Connection Fittings: Except as otherwise indicated, provide type as determined by Installer to comply with installation requirements.
- (13) Pipe Nipples: Fabricated from same pipe as used for connected pipe; except do not use less than Schedule 80 pipe where length remaining unthreaded is less than 1-1/2", and where pipe size is less than 1-1/2", and do not thread nipples full length (no close nipples).

2.1.4 Copper Tube:

- (1) Copper Tube: ASTM B88; (wall thickness) as indicated for each service; hard-drawn temper, except as otherwise indicated.
- (2) DWV Copper Tube: ASTM B 306.

2.1.5 Fittings for Copper Tube:

- (1) Cast-Copper Solder Joint Fittings: ANSI B16.18.
- (2) Wrought-Copper Solder-Joint Fittings: ANSI B16.22.
- (3) Cast-Copper Solder-Joint Drainage Fittings: ANSI B16.23.
- (4) Wrought-Copper Solder-Joint Drawings Fittings: ANSI B16.29.
- (5) Cast-Copper Solder-Joint Drainage Fittings: For solvent drainage systems, ANSI B16.32.
- (6) Cast-Copper Flared Tube Fittings: ANSI B26.
- (7) Bronze Pipe Flanges/Fittings: ANSI B16.24.
- (8) Non-Ferrous Pipe Flanges: ANSI B16.24.
- (9) Copper-Tube Unions: Provide standard products recommended by manufacturer for use in service indicated.
- 2.1.6 Cast-Iron Pressure Pipe: AWWA C106.
- 2.1.7 Fittings for Cast-Iron Pressure Pipe:
 - Cast-Iron Fittings: AWWA C110.

- (2) Gray Iron Fittings: AWWA C110.
- (3) Ductile Iron Fittings: AWWA C110.
- (4) Rubber-Gasket Joints: AWWA C111.
- 2.1.9 Cast-Iron Soil Pipe:
 - (1) Hubless Cast-Iron Soil Pipe: FSWW-P-401.
 - (2) Cast-Iron Hub-and-Spigot Soil Pipe: ASTM a 74.
- 2.1.10 Fittings for Cast-Iron Soil Pipe:
 - (1) Hubless Cast-Iron Soil Pipe Fittings: Neoprene gasket complying with ASTM C564; and stainless steel clamp holding band.
 - (2) Cast-Iron Hub-and-Spigot Soil Pipe Fittings: Match soil pipe units; complying with same standards (ASTM A 74).
 - (3) Compression Gaskets: ASTM C564.
 - (4) Lead/Oakum Joint Materials: Provide products complying with governing regulations for use in service indicated.
- 2.1.13 Plastic Pipe (Shall not be used above ground or inside building):
 - (1) Polyvinyl Chloride Pipe (PVC): ASTM D 1785.
 - (2) AWWA C900 Pressure pipe for underground fire lines and water mains.
- 2.1.14 Fittings for Plastic Pipe:
 - (1) PVC/CPVC Pipe Fittings: ASTM D 2464 for Schedule 80 threaded fittings: ASTM D 2466 for Schedule 40 socket-type; ASTM D 2467 for Schedule 80 socket-type; ASTM D 2564 for solvent cement; ASTM D 2665 for drain, waste, and vent.
- 2.1.15 Fittings for Plastic Tubing: Provide fittings of type indicated, matching tubing. Where not otherwise indicated, provide fittings produced and recommended, for service indicated, by manufacturer of tubing.
- 2.3 MISCELLANEOUS PIPING MATERIALS/PRODUCTS

- 2.3.1 Welding Materials: Except as otherwise indicated, provide welding materials as determined by Installer to comply with installation requirements. Comply with Section II, Part C, ASME Boiler and Pressure Vessel Code for welding materials.
- 2.3.2 Soldering Materials: Except as otherwise indicated, provide soldering materials as determined by Installer to comply with installation requirements.

Tin-Lead Solder: ASTM B 32, Grade 50A. (Limited to non-drinking water systems.)

Tin-Antimony Solder: ASTM B 32, Grade 95 TA.

Silver Solder: ASTM B 32, Grade 96.5 TS.

Domestic water system soldering materials shall contain no lead, cadmium, or toxic elements.

- 2.3.3 Brazing Materials: Except as otherwise indicated, provide brazing materials as determined by Installer to comply with installation requirements. Company with sfa-5-8, Section II ASME Boiler and Pressure Vessel Code for Brazing filler metal materials.
- 2.3.4 Gaskets for Flanged Joints: ANSI B16.21, full-faced for cast-iron flanges; raised-face for steel flanges, unless otherwise indicated.
- 2.3.5 Piping Connectors for Dissimilar Non-Pressure Pipe: Fernco, Inc., or acceptable equal; elastomeric annular ring insert, or elastomeric flexible coupling secured at each end with stainless steel clamps, sized for exact fit to pipe ends.

PART THREE - EXECUTION

3.1 INSTALLATION

3.1.1 General: Install pipe, tube and fittings in accordance with recognized industry practices which will achieve permanently leakproof piping systems, capable of performing each indicated service without piping failure. Install each run with minimum joints and couplings, but with adequate and accessible unions for disassembly and maintenance/replacement of valves and equipment. Align piping accurately at connections, within 1/16" misalignment tolerance. Comply with ANSI B30 Code for Pressure Piping. Piping installed by non-

certified brazers or welders shall be deemed damaged and be replaced by all new material.

- 3.1.2 Locate piping runs, except as otherwise indicated, vertically and horizontal (pitched to drain) and avoid diagonal runs wherever possible. Orient horizontal runs parallel with walls and column lines. Locate runs as shown or described by diagrams, details and notations, or if not otherwise indicated, run piping in shortest route which does not obstruct usable space or block access for servicing building and its equipment. Hold piping close to walls, overhead construction, columns and other structural and permanent-enclosure elements of building; limit clearance to 1/2" where furring is shown for enclosure or concealment of piping, but allow for insulation thickness, if any. Where possible, locate insulated piping for 1.0" clearance outside insulation. Wherever possible in finishes and occupied spaces, conceal piping from view, by locating in column enclosures, in hollow wall construction or above suspended ceilings; do not encase horizontal runs in solid partitions, except as indicated.
- 3.1.3 Electrical Equipment Rooms: <u>Do not run piping through transformer vaults and other electrical or electronic equipment rooms and enclosures unless unavoidable. Install drip pan under piping that must be run through electrical space.</u>
- 3.1.4 Piping System Joints: Provide joints of type indicated in each piping system.
 - (1) Thread pipe in accordance with ANSI B2.1; cut threads full and clean using sharp dies. Ream threaded ends to remove burrs and restore full inside diameter. Apply pipe joint compound, or pipe tape (Teflon) were recommended by pipe/fitting manufacturer, on male threads at each joint and tighten joint to leave not more than 3 threads exposed.
 - (2) Braze copper tube-and-fitting joints where indicated, in accordance with ANSI B31.5 and ASME Section 9. Cut tube end squarely to full inside diameter, and clean outside of tube ends and inside of fittings. Insert tube full depth into fitting, and braze such that brazing solder will be drawn full depth into fittings and full circle. Provide one Peal Test for every 25 joints.
 - (3) Solder copper tube-and-fitting joints where indicated, in accordance with recognized industry practice. Cut tube end squarely, ream to full inside diameter, and clean outside of tube ends and inside of fittings. Insert tube full depth into fitting, and

solder in manner which will <u>draw solder full depth into fitting</u>, and <u>solder in manner which will draw solder full depth and circumstances of joint</u>. Wipe excess solder from joint before it hardens.

- (4) Mechanically Formed Tee Connections: In lieu of providing tee fittings in copper tubing, Installer may, as option, provide mechanically formed tee connections, providing they are in accordance with the following:
 - (a) Size and wall thickness of both run tube and branch tube are listed by Manufacturer of forming equipment as "Acceptable Application".
 - (b) Height of drawn collar is not less than 3 times wall thickness of run tubing.
 - (c) End of branch tube is notched to conform to inner curve of run tube, and dimpled to set exact penetration depth into collar.
 - (d) Resulting joint is minimum of 3 times as long as thickness of thinner joint member, and brazed using B-CuP series filler metal.
- (5) Mechanically Formed Couplings: In lieu of providing couplings in copper tubing, Installer may, as option provide mechanically formed couplings, provided they are in accordance with the following:
 - (a) Form couplings by first annealing area at end of tube where expansion will occur. Insert tube expander to die size required and expand tube end to accept tubing of same size.
 - (b) Resulting joint is minimum of 3 times as long as thickness of tube, and brazing using B-CuP series filler metal.
- (6) Weld pipe joints in accordance with recognized industry standard and as follows:
 - (a) Weld pipe joints only when ambient temperature is above 0EF where possible. Bevel pipe ends at a 37.5 angle, smooth rough cuts, and clean to remove slag, metal particles and dirt.

- (b) Use pipe clamps or tack-weld joints with 1" long weld; 4 welds for pipe sizes to 10", 8 welds for pipe sizes 12" to 20".
- (c) Build up welds with stringer-bead pass, followed by cover or filler pass. Eliminate valleys at center and edges of each weld. Weld by procedure, which will ensure elimination of unsound or un-fused metal, cracks, oxidation, blow-holes and non-metallic inclusions.
- (d) Do not weld-out piping system imperfections by tackwelding procedures; re-fabricate to comply with requirements.
- (e) At Installer's option, install forged branchconnection fittings wherever branch pipe of size smaller than main pipe is indicated; or install regular "T" fitting.
- (7) Weld pipe joints of steel water pipe in accordance with AWWA C206.
- (8) Flanged Joints: Match flanges within piping system, and at connections with valves and equipment. Clean flanges faces and install gaskets. Tighten bolts to provide uniform compression of gaskets.
- (9) Lead Joint Installation: Tightly pack joint with joint packing material. Do not permit packing to enter bore of finished joint. Clean joint after packing. Fill remaining joint space with one pouring of lead to indicated minimum measured from face of bell. After lead has cooled, caulk joint tightly by use a hammer and caulking iron. Note: Lead joints shall only be allowed where permitted by local, state and county codes.
- (10) Hubless Cast-Iron Joints: Comply with Coupling Manufacturer installation instructions.
- (11) Clay Pipe Joints: Comply with ASTM C 12.
- (12) Plastic Pipe/Tube Joints: Comply with manufacturer's instructions and recommendations, and with applicable industry standards:
 - (a) Heat joining of Thermoplastic Pipe: ASTM D 2657.

- (b) Making Solvent-Cemented joints: ASTM D 2235, and ASTM F 402.
- (13) Glass Pipe Joints: Comply with manufacturer's instructions and recommendations.
- (14) Grooved Pipe Joints: Comply with manufacturer's instructions for making grooves in pipe ends. Remove burrs and ream pipe ends. Assemble joints in accordance with manufacturer's instructions.
- 3.1.5 Install drainage piping (perforated, porous or tile) from lowest end of slope to highest, solidly bedded in filtering or drainage and grooved ends of units up-stream. Lay perforated pipe with perforations down.
- 3.1.6 Install gray and ductile cast-iron water mains and appurtenances in accordance with AWWA C603.
- 3.2 CLEANING, FLUSHING, INSPECTING
- 3.2.1 General: Clean exterior surfaces of installed piping systems of superfluous materials, and prepare for application of specified coatings (if any). Flush out piping systems with clean water before proceeding with required tests. Inspect each run of each system for completion of joints, supports and accessory items. Inspect pressure piping in accordance with procedures of ANSI B30.
- 3.2.2 Disinfect water mains and water service piping in accordance with AWWA C601.
- 3.3 PIPING TESTS
- 3.3.1 Notify Architect/Engineer at least 24 hours before performing leak test. If Architect/Engineer is not notified in writing, test will be deemed null and void and performed over in Architect/Engineer presence at no extra cost to the Owner and the Contractor shall incur all Engineer's or Architect's cost.
- 3.3.2 Provide temporary equipment for testing, including pump and gauges. Test piping system before insulation is installed wherever feasible, and remove control devices before testing. Test each natural section of each piping system independently but do not use piping system valves to isolate sections where test pressure exceeds valve pressure rating. Fill each section with water and pressurization for indicated pressure and time. Required test periods are 2 hours. Test each piping system at 150% of operating pressure indicated, but not less than 25 psi test

pressure. Observe each test escution for leakage at end of test period. Test fails if leakage is observed or if pressure drop exceeds 5% of test pressure.

- 3.3.3 Repair piping systems sections which fail required piping test, by disassembling and re-installed, using new materials to extent required to overcome leakage. Do not use chemicals, stop-leak compounds, mastics, or other temporary repair methods.
- 3.3.4 Drain test water from piping systems after testing and repair work has been completed.
- 3.3.5 Refrigerant piping shall be tested at 300 psi for 24 hours with hydrogen and shall not have less than 5% drop in test pressure. Test shall be deemed null and void if test pressure exceeds 5% fall. Provide independent technician to perform test.

SECTION 15440 PLUMBING FIXTURES AND TRIM

PART	ONE	<u>- GENERAL</u>	
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1.1	SCOPE
1.1.1	Provide plumbing fixtures and trim, complete.
1.2	N/A
1.3	SUBMITTALS
1.3.1	Comply with Section 01300, Submittals.
1.3.2	<u>Product Data</u> : Submit manufacturer's specifications for plumbing fixtures and trim, including catalog cut of each fixture type and trim item furnished, roughing-in dimensioned drawings, templates for cutting substrates, fixture carriers, and installation instructions.
1.3.3	Maintenance Data: Submit maintenance data and parts lists for each fixture type and trim item, including instructions for care of finishes. Include this data in maintenance manual.
1.4	PRODUCT DELIVERY, STORAGE AND HANDLING
1.4.1	Deliver plumbing fixtures individually wrapped in factory-fabricated containers.
1.4.2	Handle plumbing fixtures carefully to prevent breakage, chipping and scoring the fixture finish. Do not install damaged plumbing fixtures; replace and return damaged units to equipment manufacturer, at no cost to owner
PART TW	O - PRODUCTS

- 2.1 PLUMBING FIXTURES
- 2.1.1 <u>Fixtures</u>: (Scheduled on Drawings). Acceptable manufacturers are American Standard.
- 2.2 FITTINGS, TRIM, AND ACCESSORIES

- 2.2.1 <u>Toilet Seats</u>: Elongated, solid white plastic, closed back/ front, less cover, and having stainless steel self-sustaining check hinges and replaceable bumpers. Acceptable manufacturer: Bemis, Church.
- 2.2.2 <u>Traps</u>: Cast brass, 1-1/4" adjustable "P" trap with cleanout and waste to wall. All Exposed P-traps shall be chrome plated with heavy cast J-bend and flat top cleanout plug, flush with inside bottom of bend, cast brass slip nuts and tubular brass wall bend. Acceptable Manufacturer: Engineered Brass Co.
- 2.2.3 TRAP WRAP: Vinyl plastisol cover 1/8" thick with foam insert and nylon fasteners. Angle stop covers shall have "Flip Top" access to allow easy emergency shut-off. Product shall meet ADA 4.19.4 and ANSI A117.1 requirements. Acceptable manufacturer: Brocar Products Inc.
- 2.2.4 <u>Tub Waste and Overflow Fittings</u>: Concealed lever operated pop-up bath waste and overflow, chrome-plated waste spud with universal type outlet connection suitable for 1-1/2" I.P.S., or 1-1/2" O.D. tubing, or 1-1/2" solder-joint outlet connection on waste tee.
- 2.2.5 <u>Escutcheons</u>: Chrome-plated cast brass with set screw.
- 2.2.6 <u>Available Manufacturers</u>: Chicago, Engineered Brass Co., Wade, Powers, Sloan, J R Smith. Zurn.

PART THREE - EXECUTION

- 3.1 EXAMINATION
- 3.1.1 Verify all dimensions by field measurements. Verify that all plumbing fixtures may be installed in accordance with pertinent codes and regulations, the original design, and the referenced standards.
- 3.1.2 Examine rough-in for potable water and waste piping systems to verify actual locations of piping connections prior to installing fixtures.
- 3.1.3 Examine walls, floors, and cabinets for suitable conditions where fixtures are to be installed
- 3.1.4 Do not proceed until unsatisfactory conditions have been corrected.
- 3.2 INSTALLATION
- 3.2.1 Install plumbing fixtures level and plumb, in accordance with fixture

	manufacturer's written instructions, rough-in drawings, and pertinent codes and regulations, the original design, and the referenced standards.
3.2.2	Comply with the installation requirements of ANSI A117.1 and Public Law 90-480 with respect to plumbing fixtures for the physically handicapped.
3.2.3	Fasten plumbing fixtures securely to supports or building structure. Secure supplies behind or within wall construction to provide rigid installation.
3.2.4	Set shower receptor and mop basins in a leveling bed of cement grout.
3.2.5	Install a stop valve in an accessible location in the water connection to each fixture.
3.2.6	Install escutcheons at each wall, floor, and ceiling penetration in exposed finished locations and within cabinets and millwork.
3.2.7	Seal fixtures to walls and floors using silicone sealant as specified in Section 07900. Match sealant color to fixture color.
?3.2.8	Set clinical sinks on concrete pedestals as recommended by manufacturer.
3.3	FIELD QUALITY CONTROL
3.3.1	Test fixtures to demonstrate proper operation upon completion of installation and after units are water pressurized. Replace malfunctioning units, then retest.
3.3.2	Inspect each installed unit for damage. Replace damaged fixtures.
3.4	ADJUSTING
3.4.1	
3.4.2	Replace washers of leaking or dripping faucets and stops.
3.5	CLEANING
3.5.1	Clean fixtures, trim, and strainers using manufacturer's recommended cleaning methods and materials.
3.6	PROTECTION

- 3.6.1 Provide protective covering for installed fixtures, water coolers, and trim.
- Do not allow use of fixtures for temporary facilities unless expressly approved in writing by the Owner.