SPECIFICATIONS

Licking Metropolitan Housing Authority Terrace Gardens Window Replacement AMP OH043000001 IFB # 10-01



PRE-BID DATE/TIME

February 22, 2010, 10:00 AM

LOCATION

Terrace Gardens 85 West Church Street Newark, Ohio 43055

BID OPENING DATE/TIME

March 04, 2010, 2:00 PM

LOCATION

Licking Metropolitan Housing Authority 144 West Main Street Newark, Ohio 43055

Time Table:

February 11, 2010	Date IFB was Issued
February 22, 2010	Pre-Bid Conference
March 01, 2010	Deadline for written questions from vendors
March 02, 2010	Deadline for written responses to vendors
March 04, 2010	Public Bid Opening
March 08, 2010	Board Meeting

INSTRUCTIONS

All bid documents must be delivered in a Sealed Envelope.

All sealed bids must be received by the date and time issued. If mailing a sealed bid, ensure bid will arrive on time.

To check for Addendums, Clarifications and Response to Inquiries please visit: https://nahro.economicengine.com or http://www.lickingmha.org or http://dcplanroom.com/public.php

The following forms MUST be presented to submit a complete Bid:

- 1. Bid Form
- 2. Representations, Certifications, and Other Statements of Bidders HUD Form 5369-A
- 3. Bid Bond
- 4. Section 3 Business Certification Form
- 5. Section 3 Narrative Action Plan
- 6. Five (5) Reference Release Forms
- 7. Certification for a Drug-Free Workplace

The entire Bid Package is available online at: https://nahro.economicengine.com & https://nahro.economicengine.com & https://nahro.economicengine.com &

Please read bid documents carefully. If a company has questions, it is advised that a representative attend the Pre-Bid Conference.

The selected bidder shall provide Performance and Payment Bond upon request.

TABLE OF CONTENTS

Notice of Invitation For Bid	IFB-1
Bid Form	BF-1 thru BF-8
Instructions to Bidders for Contracts - HUD Form 5369	ITB-1 thru ITB-5 ITB-6 ITB-7 thru ITB-11
Representations, Certifications, and	RCO-1 thru RCO-4
General Conditions for Construction Contracts	GC-1 thru GC-19
Bid Bond	BB-1 thru BB-2
Performance and Payment Bond	PB-1 thru PB-2
Supplemental Instruction to Bidder's/Offerors	SIB-1 thru SIB-2
Section 3 Business Certification Form	SBC-1 thru SBC-3
Reference Release Forms	RRF-1 thru RRF-5
Certification for a Drug-Free Workplace	CDF-1 thru CDF-2
Understanding HUD Construction Forms	UHF-1
Detailed Specifications	00 01 10-1

NOTICE OF INVITATION FOR BIDS

LICKING METROPOLITAN HOUSING AUTHORITY

IFB No. 10-01 – An ARRA Stimulus Project

The Licking Metropolitan Housing Authority is soliciting formal competitive sealed bids for the project listed below:

PROJECT NAME: Terrace Gardens Window Replacement

PROJECT LOCATION: Terrace Gardens

85 W. Church Street Newark, Ohio 43055

SCOPE OF WORK: The contractor shall provide the necessary labor, supervision,

equipment and materials to replace windows at eighty-seven (87) existing window openings comprised of two-hundred and sixty (260) window units. The project also includes installation of head and sill flashing, the application of interior and exterior sealant, weep hole cleanout and any required painting and patching.

ESTIMATE OF CONSTRUCTION COST: \$195,000

PROJECT MANAGERS: Art Ouellette & Todd Boiarski

Kabil Associates, Inc. 5900 Sharon Woods Blvd. Columbus, Ohio 43229 (614) 899-6707 Ext. 234

Please direct inquiries in writing to address above

or via email to: tboiarski@kabil.com

INSTRUCTIONS: A bid package will be available after February 11, 2010 at DC

Reprographics at 1072 W. Fifth Ave, Columbus, Ohio, 43212 or order online at http://dcplanroom.com/public.php. A \$50.00 non-refundable deposit is required. The bid package is also available

online at https://nahro.economicengine.com and

http://www.lickingmha.org. Plans and specifications are available for review at the following plan rooms; Builders Exchange of Central Ohio, Central Ohio Minority Business Association and the

Central Ohio Women's Business Center.

PRE-BID CONFERENCE: Monday, February 22, 2010 at10:00 A.M.

Terrace Gardens 85 W. Church Street Newark, Ohio 43055

BID SUBMITTAL RETURN: Licking Metropolitan Housing Authority Administrative Office

144 West Main Street Newark, Ohio 43055

BID SUBMITTAL DEADLINE: Thursday, March 4, 2010 at 2:00 P.M. The bids will be opened

publicly and read aloud beginning at 2:00 P.M.

Section 3 businesses and residence are encouraged to respond.

The Owner reserves the right to reject any or all bids.



BID FORM IBF # 10-01

To: Licking Metropolitan Housing Authority

144 West Main Street Newark, OH 43055

Phone: (740) 349-8069 Fax: (740) 349-7132

Having carefully read and examined the "Scope of Work," "Specifications," "Plans," and any addendum for:

Terrace Gardens Window Replacement Licking Metropolitan Housing Authority Terrace Gardens AMP OH043000001 85 West Church Street Newark, Ohio 43055

As prepared by Kabil Associates, Inc, 5900 Sharon Woods Blvd. Suite B, Columbus, Ohio 43229 (P: 614-899-6707, F: 614-899-7503), and having inspected the premises and all conditions affecting the work, the undersigned proposes to furnish all materials and perform all labor necessary for the above, and further agrees that each separate item of trade or unemployment further agrees that, if any or all of said bids are accepted, he will enter into a Contract according to the form required by the Owner for the faithful performance of the labor and the furnishing of all materials included in such bid or bids accepted.

Submitted by:	
Contracting Firm	
Having read and examined the Contract Documents, prepreferenced Project, and the following Addenda:	pared by the Associate for the above-
Addendum No.	Date of Receipt
Bid Bond or Certified Check is included as part of Contrac	tor's bid submittal: Yes No
	Bidder's Initials

MBE Participation: LMHA has established goals of twenty-five (25%) Minority Business Enterprise Participation.

To achieve this goal, contractors are encouraged to engage in joint ventures with MBE's to include

MBE's	as subcontractors, an	d utilize other initiativ	es that enhance opportunities for MBE's.
affida	vits, indicating MBE's o	date of notification, M	pal, supporting documentation and notarized BE's date of response, nature of response or smitted does not meet MBE requirements.
			Bidder's Initials
1. <u>Ba</u>	ase Bid: Division 1-32	2, Licking Metropolitar	Housing Authority
	Terrace Gardens / Pu	ublic Housing:	
		Figures	Words
	Labor	\$	_\$
	Material	\$	_\$
	Total	\$	\$
2. <u>Al</u>	ternates:		
	Alternate G-1:		
	Substitute aluminum	n windows for vinyl wi	ndows.
		Figures	Words
	Additional Labor	\$	_\$
	Additional Material	\$	\$

Bid Form BF-2

Total Base Bid plus Alternate G-1

3. Project Changes:

Contractor shall indicate the	amount of overhead	d and pro	fit to be adde	ed to changes to the project.
For ADDS to the work:	Overhead	%	Profit	%
For DEDUCTS to the work:	Overhead	%	Profit	%
The Time of Completion for date of Notice to Proceed.	the Contract shall n	ot excee	d One Hundre	ed Twenty (120) days from
Contractor proposes a Time	of Completion for t	he Contra	act	
Work Days to Substantial Completion days from the Notice to Proceed.				
The full name and address or principals are as follows:	f all persons and par	ties inter	ested in the f	oregoing proposals as
Bidder				
Address				
Phone_	F	ax		

If the Contractor is entering into a partnership to perform the work, provide the following information for the partnering firm:

Bidder		
Address		
Phone	Fax	
Addendums Received: (Please list)		
	Bidder's Signature	
	Typed Name	
	Title	

Note: The Bidder will sign his bid on the line indicated above; if it will be a partnership, the firm name will be signed, followed by the signature of the partner signing. If a corporation, name will be signed followed by the signature and the official title of the officer signing name.

Bidder's Certification

The Bidder hereby acknowledges that the following representations in this bid are material and not mere recitals:

- 1. The undersigned, having carefully read and examined the "Notice to Bidders," "Instructions to Bidders," "General Conditions," "General Requirements," "Specifications," "Plans," and any addendum for: Terrace Gardens Window Replacement, Licking Metropolitan Housing Authority (AMP OH043000001) as prepared by Kabil Associates, Inc., 5900 Sharon Woods Blvd. Suite B, Columbus, Ohio 43229 (P: 614-899-6707, F: 614-899-7503), and having inspected the premises and all conditions affecting the work, the undersigned proposes to furnish all materials and perform all labor necessary for the performance and completion of the work indicated below, all in compliance with the documents named above, and further agrees that each separate item or trade or employment entered in this Proposal shall be considered as a separate bid for that kind of work. The undersigned further agrees that, if any or all of said bids are accepted, he will enter in a Contract according to the form required by the Owner for the faithful performance of the labor and the furnishing of all materials included in such bid or bids so accepted.
- 2. In submitting this bid it is understood that the Licking Metropolitan Housing Authority reserves the right to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of one hundred twenty **(120) days** subsequent to the opening of bids without the consent of Licking Metropolitan Housing Authority.

3.	Security in the sum of		dollars	
	(\$) in the form of	is submitted	
	herewith in	accordance with the Specifications.		

- 4. Bidder hereby agrees to comply with all City, State and Federal Statutes relating to Liability Insurance, Working Hour, Safety and Sanitary Regulations. Bidder further agrees that their bid amount includes all fees for permits, taxes, and insurance required or applicable to the work.
- 5. The Bidder will sign his bid on the line indicated below; if it will be a partnership the firm name will be signed, followed by the signature of the partner signing, his own name to be signed on the line beginning with the work "By;" if a corporation, name will be signed followed by the signature and the official title of the officer signing name.
- 6. The Bidder has read and understands the Contract Documents and agrees to comply with all requirements of the Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.

- 7. The Bidder represents that the bid is based upon the Standards specified in the Contract Documents.
- 8. The Bidder has visited the project site, become familiar with the local conditions and has correlated personal observations about the requirements of the Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the Contract Documents.
- 9. The Bidder and each person signed on behalf of the Bidder certifies, and in the case of a joint or combined bid, each party thereto certifies as to such parties organization, under penalty of perjury, that to the best of the undersigned's knowledge and belief: a) The Base Bid in the bid having been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid with any other; b) unless otherwise required by law, the Base Bid in the bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid; c) no attempt has been made or will be made by the Bidder to induce any other individual, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
- 10. The Bidder will enter into and execute the Contract with Licking Metropolitan Housing Authority (LMHA). If a Contract is awarded on the basis of this bid, and if the Bidder does not execute a Contract for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to LMHA as indicated in the Instructions to Bidders and in the General Conditions of the Contract.
- 11. The Bidder certifies that upon the award of a Contract, the Contractor will make a good faith effort to ensure that all of the Contractor's employees, while working on the project site, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.

If the Bidder is a Corporation, partnership or sole proprietorship, an officer, partner or principal of the Bidder, as applicable, shall print or type the legal name of the Bidder on the line provided and **sign the Bid Form.** If the Bidder is a joint venture, an officer, partner or principal, as applicable, each member of the joint venture shall print or type the legal name of the applicable member on the line provided and **sign the Bid Form.** All signatures must be original.

Bidder's Name:
Authorized Signature:
Print Name:
Title:
Company Name:
Mailing Address:
Telephone Number:
Facsimile Number:
Where incorporated:
Federal Identification Number:
Contact Person for Contract processing:(Please print)
Additional Signature for Joint Venture:
Bidder's Name:
Authorized Signature:
Print Name:

Title:
Company Name:
Mailing Address:
Telephone Number:
Where incorporated:
Where incorporated:
Federal Identification Number:
Contact Person for Contract processing:(Please print)

U.S. Department of Housing and Urban Development

Office of Public and Indian Housing

Instructions to Bidders for Contracts Public and Indian Housing Programs

Previous edition is obsolete form **HUD-5369** (10/2002)

Instructions to Bidders for Contracts

Public and Indian Housing Programs

Table of Contents

Cla	use	Page
1.	Bid Preparation and Submission	1
2.	Explanations and Interpretations to Prospective Bidders	1
3.	Amendments to Invitations for Bids	1
4.	Responsibility of Prospective Contractor	1
5.	Late Submissions, Modifications, and Withdrawal of Bid	s 1
6.	Bid Opening	2
7.	Service of Protest	2
8.	Contract Award	2
9.	Bid Guarantee	3
10.	Assurance of Completion	3
11.	Preconstruction Conference	3
12.	Indian Preference Requirements	3

1. Bid Preparation and Submission

- (a) Bidders are expected to examine the specifications, drawings, all instructions, and, if applicable, the construction site (see also the contract clause entitled **Site Investigation and Conditions Affecting the Work** of the *General Conditions of the Contract for Construction*). Failure to do so will be at the bidders' risk.
- (b) All bids must be submitted on the forms provided by the Public Housing Agency/Indian Housing Authority (PHA/IHA). Bidders shall furnish all the information required by the solicitation. Bids must be signed and the bidder's name typed or printed on the bid sheet and each continuation sheet which requires the entry of information by the bidder. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority. (Bidders should retain a copy of their bid for their records.)
- (c) Bidders must submit as part of their bid a completed form HUD-5369-A, "Representations, Certifications, and Other Statements of Bidders."
- (d) All bid documents shall be sealed in an envelope which shall be clearly marked with the words "Bid Documents," the Invitation for Bids (IFB) number, any project or other identifying number, the bidder's name, and the date and time for receipt of bids.
- (e) If this solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "No Bid" in the space provided for any item on which no price is submitted.
- (f) Unless expressly authorized elsewhere in this solicitation, alternate bids will not be considered.
- (g) Unless expressly authorized elsewhere in this solicitation, bids submitted by telegraph or facsimile (fax) machines will not be considered.
- (h) If the proposed contract is for a Mutual Help project (as described in 24 CFR Part 905, Subpart E) that involves Mutual Help contributions of work, material, or equipment, supplemental information regarding the bid advertisement is provided as an attachment to this solicitation.

2. Explanations and Interpretations to Prospective Bidders

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

3. Amendments to Invitations for Bids

- (a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- (b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date on the bid form, or (3) by letter, telegram, or facsimile, if those methods are authorized in the solicitation. The PHA/IHA must receive acknowledgement by the time and at the place specified for receipt of bids. Bids which fail to acknowledge the bidder's receipt of any amendment will result in the rejection of the bid if the amendment(s) contained information which substantively changed the PHA's/IHA's requirements.
- (c) Amendments will be on file in the offices of the PHA/IHA and the Architect at least 7 days before bid opening.

4. Responsibility of Prospective Contractor

- (a) The PHA/IHA will award contracts only to responsible prospective contractors who have the ability to perform successfully under the terms and conditions of the proposed contract. In determining the responsibility of a bidder, the PHA/IHA will consider such matters as the bidder's:
 - (1) Integrity;
 - (2) Compliance with public policy;
 - (3) Record of past performance; and
 - (4) Financial and technical resources (including construction and technical equipment).
- (b) Before a bid is considered for award, the bidder may be requested by the PHA/IHA to submit a statement or other documentation regarding any of the items in paragraph (a) above. Failure by the bidder to provide such additional information shall render the bidder nonresponsible and ineligible for award.

5. Late Submissions, Modifications, and Withdrawal of Bids

- (a) Any bid received at the place designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it:
- (1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);
- (2) Was sent by mail, or if authorized by the solicitation, was sent by telegram or via facsimile, and it is determined by the PHA/IHA that the late receipt was due solely to mishandling by the PHA/IHA after receipt at the PHA/IHA; or
- (3) Was sent by U.S. Postal Service Express Mail Next Day Service Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and observed holidays.
- (b) Any modification or withdrawal of a bid is subject to the same conditions as in paragraph (a) of this provision.
- (c) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the bid, modification, or withdrawal shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, bidders should request the postal clerk to place a hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.
- (d) The only acceptable evidence to establish the time of receipt at the PHA/IHA is the time/date stamp of PHA/IHA on the proposal wrapper or other documentary evidence of receipt maintained by the PHA/IHA.
- (e) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (c) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, bidders should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and Failure by a bidder to acknowledge receipt of the envelope or wrapper.
- (f) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful bid that makes its terms more favorable to the PHA/IHA will be considered at any time it is received and may be accepted.
- (g) Bids may be withdrawn by written notice, or if authorized by this solicitation, by telegram (including mailgram) or facsimile machine transmission received at any time before the exact time set for opening of bids; provided that written confirmation of telegraphic or facsimile withdrawals over the signature of the bidder is mailed and postmarked prior to the specified bid opening time. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

6. Bid Opening

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

7. Service of Protest

(a) Definitions. As used in this provision:

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

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

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

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

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

8. Contract Award

- (a) The PHA/IHA will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the PHA/IHA considering only price and any price-related factors specified in the solicitation.
- (b) If the apparent low bid received in response to this solicitation exceeds the PHA's/IHA's available funding for the proposed contract work, the PHA/IHA may either accept separately priced items (see 8(e) below) or use the following procedure to determine contract award. The PHA/IHA shall apply in turn to each bid (proceeding in order from the apparent low bid to the high bid) each of the separately priced bid deductible items, if any, in their priority order set forth in this solicitation. If upon the application of the first deductible item to all initial bids, a new low bid is within the PHA's/IHA's available funding, then award shall be made to that bidder. If no bid is within the available funding amount, then the PHA/IHA shall apply the second deductible item. The PHA/IHA shall continue this process until an evaluated low bid, if any, is within the PHA's/IHA's available funding. If upon the application of all deductibles, no bid is within the PHA's/IHA's available funding, or if the solicitation does not request separately priced deductibles, the PHA/IHA shall follow its written policy and procedures in making any award under this solicitation.
- (c) In the case of tie low bids, award shall be made in accordance with the PHA's/IHA's written policy and procedures.
- (d) The PHA/IHA may reject any and all bids, accept other than the lowest bid (e.g., the apparent low bid is unreasonably low), and waive informalities or minor irregularities in bids received, in accordance with the PHA's/IHA's written policy and procedures.

- (e) Unless precluded elsewhere in the solicitation, the PHA/IHA may accept any item or combination of items bid.
- (f) The PHA/IHA may reject any bid as nonresponsive if it is materially unbalanced as to the prices for the various items of work to be performed. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.
- (g) A written award shall be furnished to the successful bidder within the period for acceptance specified in the bid and shall result in a binding contract without further action by either party.

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

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

10. Assurance of Completion

- (a) Unless otherwise provided in State law, the successful bidder shall furnish an assurance of completion prior to the execution of any contract under this solicitation. This assurance may be [Contracting Officer check applicable items] —
- [X] (1) a performance and payment bond in a penal sum of 100 percent of the contract price; or, as may be required or permitted by State law;
- [] (2) separate performance and payment bonds, each for 50 percent or more of the contract price;
- [] (3) a 20 percent cash escrow;
- [] (4) a 25 percent irrevocable letter of credit; or,
- [] (5) an irrevocable letter of credit for 10 percent of the total contract price with a monitoring and disbursements agreement with the IHA (applicable only to contracts awarded by an IHA under the Indian Housing Program).
- (b) Bonds must be obtained from guarantee or surety companies acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. Individual sureties will not be considered. U.S. Treasury Circular Number 570, published annually in the Federal Register, lists companies approved to act as sureties on bonds securing Government contracts, the maximum underwriting limits on each contract bonded, and the States in which the company is licensed to do business. Use of companies listed in this circular is mandatory. Copies of the circular may be downloaded on the U.S. Department of Treasury website http://www.fms.treas.gov/c570/index.html, or ordered for a minimum fee by contacting the Government Printing Office at (202) 512-2168.

- (c) Each bond shall clearly state the rate of premium and the total amount of premium charged. The current power of attorney for the person who signs for the surety company must be attached to the bond. The effective date of the power of attorney shall not precede the date of the bond. The effective date of the bond shall be on or after the execution date of the contract.
- (d) Failure by the successful bidder to obtain the required assurance of completion within the time specified, or within such extended period as the PHA/IHA may grant based upon reasons determined adequate by the PHA/IHA, shall render the bidder ineligible for award. The PHA/IHA may then either award the contract to the next lowest responsible bidder or solicit new bids. The PHA/IHA may retain the ineligible bidder's bid guarantee.

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 Indianowned 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 [X] 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.

ADDITIONAL INSTRUCTIONS TO BIDDERS

Amendments to this Invitation for Bid (IFB)

- 1. If this solicitation is amended, all terms and conditions that are not modified remain unchanged.
- 2. 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. LMHA 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 LMHA's requirements.

ADDITIONAL REQUIREMENTS

1. TIME FOR COMPLETION

The work shall be commenced at the time stipulated in the Notice to Proceed to the contractor. The work shall be fully completed within time for completion as stipulated on the bid form and including completion date stipulated in the Notice to Proceed.

2. LIQUIDATING DAMAGES

- A. As actual damages for any delay in completion are impossible for determination, the contractor and his sureties shall pay to the Local Authority the sum of One Hundred Dollars 00/00 (\$100.00) per day as fixed, agreed and liquidated damages for each calendar day of delay (not beyond the control of the contractor) until the work is completed or accepted. Completion shall include the correction of punchlist items and submission of all close-out documents. The sum of daily liquidated damages will be further discussed at the pre-construction meeting.
- B. The Local Authority may accept any part of the work of the entire contract of such part has, in its opinion, been brought to a condition meeting all contract requirements.

3. **COMMUNICATIONS**

- A. All notices, demands, requests, instructions, approvals, proposals, and claims must be in writing.
- B. Any notice to or demand upon the contractor shall be sufficiently given if delivered at the office of the contractor stated on the signature page of the contract (or at such other office as he/she may from time to time designate in writing to the Local Authority), or deposited in the United States mail in a sealed, postage prepaid envelope, or if delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.
- C. All papers required to be delivered to the Local Authority shall, unless otherwise specified in writing to the contractor, be delivered to Licking Metropolitan Housing Authority at 144 West Main Street, Newark, Ohio 43055, and any notice to or demand upon the Local Authority shall be sufficiently given if so delivered, or deposited in the United States mail in a sealed, postage prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Licking Metropolitan Housing Authority as such address, or to such other representatives of the Local Authority at such address, or to such other address as the Local Authority ay subsequently specify in writing to the contractor for such purposes.
- D. Any such notice shall be deemed to have been given as of the time of actual

delivery or (in the case of mailing) when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.

4. LINES OF COMMUNICATION

- A. The contract shall direct all questions regarding the drawings and specifications, in writing, to the architect, and a copy to Licking Metropolitan Housing Authority. The architect/specification writer shall review and distribute responses.
- B. The contractor shall direct all questions regarding the contract, in writing, to the Contracting Officer and a copy to the architect/specifications writer. The Contracting Officer shall review and distribute responses.
- C. The contractor shall not contract directly any of the architect's consultants. The contract's subcontractors or suppliers shall not contact directly the architect or his consultants or the Housing Authority staff. All subcontractor communications should be through the contractor who in turn will contact the architect/specification writer.
- D. The contractor shall forward, to the architect/specification writer, copies of all correspondence related to the project.

5. NOTICE OF COMPLETION

The contractor shall provide the Contracting Officer with written notice thirty (30) days prior o the completion of each phase. The notice shall contain the proposed date the PHA will take possession of the facility and conformance of this date with the approved construction schedule.

6. HOURS OF CONSTRUCTION

The contractor shall coordinate hours of construction operations with LMHA. Contact Lauren Ault, LMHA Public Housing Supervisor at 740-349-8069 Ext. 227.

7. PURCHASE ORDER/CONTRACT PERIOD

- A. Upon issuance of a purchase order/contract from LMHA, the contractor shall supply a work start date within 10 working days. A start date and completion date will be negotiated and a Notice to Proceed will be issued stating those dates. If an extension of time is necessary, a request in writing must be submitted to LMHA stating the reason for the delay. Approval/denial will be given in writing from LMHA. Failure to comply may result in cancellation of the purchase order and disbarment from future bidding. The contractor must notify LMHA in writing, upon determination of any delay in material delivery.
- B. Upon completion of work, the contractor shall contact the Construction Inspector, the Site Manager, and the Construction Coordinator to schedule final inspection prior to submittal of final invoice.

8. REQUIRED LMHA INSPECTIONS

Contact assigned inspector and architect of record (AOR) (information provided) for any of the following:

- A. To clarify and/or answer any questions concerning the specifications.
- B. To provide a start date. (Do this prior to starting the job.)
- C. To clarify and/or answer any questions during installation.
- D. To request final inspection or notify of payment request.

9. POST AWARD CONFERENCE AND NOTICE TO PROCEED

Following the award of a construction contract, a pre-construction conference will be held for discussing all design, construction and contract administration and safety related issues. Then, a Notice to Proceed will be issued by LMHA to the contractor stating the starting and completion dates and typical contract related information. The contractor is require dot submit all materials in the prescribed format to the architect and a detailed schedule, no less than three (3) working days prior to the pre-construction conference.

10. PROGRESS PAYMENTS

Payments to the contractor shall be made as follows:

- A. Where progress payments are necessary, LMHA will require the contractor to prepare a construction progress schedule, or other appropriate forms from various professional organizations. The information shall be realistic and consistent with the information provided by the contractor on LMHA approved schedule of amounts for the contract payments.
- B. LMHA or its architect under contract will review the contractor's construction progress schedule to determine that the schedule dates and amount of work to be completed are reasonable and consistent with the contract.
- C. LMHA will require the contractor to prepare a schedule of amounts for contract payments immediately after execution of the contract. The contractor will use HUD Form 51000, Schedule of Amounts for Contract Payments.
- D. LMHA and/or its Architect will review the schedule to determine that the scheduled work to be completed by the specified dates and the amount of payment for such work are reasonable.
- E. LMHA is responsible for making progress payment to the contractor based on LMHA approved schedule of amounts for contract payment. Generally, progress payments for acceptable work and materials delivered and stored on-site are made at 30-day intervals.
- F. The contractor will submit a request for payment for each project on HUD Form

51001, Periodical Estimate for Partial Payment. In addition, the contractor shall submit the following HUD forms or other appropriate forms, as applicable, with each periodic estimate for partial payment: Form HUD 50012, Schedule of Materials Stored; HUD 51004, Summary of Materials Stored; and updated Construction Progress Schedule.

- G. All approved invoicing shall be directed to the attention of LMHA's Accounts Payable with a copy to the LMHA Construction Coordinator.
- H. LMHA will review each contractor request and will approve the payment if the following conditions have been met; if the contractor requests payment for items which have not been acceptable completed, LMHA will delete those items and adjust the payment accordingly:
 - a. The contractor request is consistent with LMHA approved schedule of amounts for work completed.
 - b. The request does not include the amount to be retained by LMHA under the contract.
 - c. The work covered by the payment has been performed in accordance with the construction documents.
 - d. HUD Form 51001, Periodical Estimate for Partial Payment, has been properly executed and all applicable supporting documentation submitted.
 - e. The contractor has submitted all required reports, schedules, and scheduling updates.

11. <u>SECURITY: CONTRACTOR'S LIABILITY FOR VANDALISM</u>

- A. The contractor shall be responsible, at the contractor's cost and expense, for the security and protection of the site, building(s) and/or unit(s) under contractor's control, and of the work until that portion to the site(s), building(s) and/or unit(s) are accepted as completed by LMHA. The contractor shall take all measures necessary to provide such security.
- B. The contractor shall be liable for and shall promptly repair or otherwise remedy any and all damages to said portion of the site(s), building(s), and/or unit(s) and of the work caused by vandalism.
- C. The contractor shall indemnify and hold LMHA harmless from and against any and all damages, liabilities, costs and expenses, including, without limitation, reasonable attorney fees, which may be imposed upon or incurred by LMHA as a result of the contractor's failure to comply with the requirements of this section.

RESPONSIBILITY OF PROSPECTIVE CONTRACTOR

A contractor working under contractual agreement with Licking Metropolitan Housing Authority, <u>must be in compliance</u> with OSHA STANDARDS 1926 – Regulations for Construction. Any and all Subcontractors doing work on this project <u>must also be in compliance</u> with OSHA standards. Non-compliance shall be a basis for making a bid non-responsive. And, if a contractor or subcontractor is found to be in **violation (non-compliance) at any time,** this could be a basis for termination of the contract.

Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in either plans, specifications or details. Such errors, ambiguities, and discrepancies shall be reported to LMHA immediately for clarification, revision, or correction prior to submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.

The submission of a bid shall be considered the contractor's certification that the bid price is based upon equipment and/or materials that meet or exceed the standards set forth by specification or equipment and/or materials identification. Should a contractor's product be determined not equal to that specified, the contractor shall be required to provide/install a product acceptable as equal by LMHA at no additional cost to LMHA.

A line item of the bid costs shall also be required in order to assure all items, including allowances, equipment, materials, and labor that are stipulated in the specifications, are included in the bid amount.

QUALIFYING CONTRACTORS AND SUBCONTRACTORS

The contractor and/or subcontractor must establish their qualifications with LMHA to do this type of work.

Qualifications will be as follows:

- A. Contractor will have been performing work in the specific trade in which they are bidding for a minimum of five (5) years.
- B. Contractor to provide LMHA with a minimum of five (5) references with names, addresses and phone numbers for similar work.
- C. Contractor to demonstrate financial ability to fund the construction of the project with monthly draws and retained funds.

The contractor will be responsible for all work performed by subcontractors, apprentices, and trainees.

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

Previous edition is obsolete form **HUD-5369-A** (11/92)

Representations, Certifications, and Other Statements of Bidders

Public and Indian Housing Programs

Table of Contents

Clause		
1.	Certificate of Independent Price Determination	1
2.	Contingent Fee Representation and Agreement	1
3.	Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions	1
4.	Organizational Conflicts of Interest Certification	2
5.	Bidder's Certification of Eligibility	2
6.	Minimum Bid Acceptance Period	2
7.	Small, Minority, Women-Owned Business Concern Representation	2
8.	Indian-Owned Economic Enterprise and Indian Organization Representation	2
9.	Certification of Eligibility Under the Davis-Bacon Act	3
10.	Certification of Nonsegregated Facilities	3
11.	Clean Air and Water Certification	3
12.	Previous Participation Certificate	3
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)(I) through (a)(3) above.

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

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

- (iii) As an agent, has not personally participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.
- (c) If the bidder deletes or modifies subparagraph (a)2 above, the bidder must furnish with its bid a signed statement setting forth in detail the circumstances of the disclosure.
- [] [Contracting Officer check if following paragraph is applicable]
- (d) Non-collusive affidavit. (applicable to contracts for construction and equipment exceeding \$50,000)
- (1) Each bidder shall execute, in the form provided by the PHA/ IHA, an affidavit to the effect that he/she has not colluded with any other person, firm or corporation in regard to any bid submitted in response to this solicitation. If the successful bidder did not submit the affidavit with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the affidavit by that date may render the bid nonresponsive. No contract award will be made without a properly executed affidavit.
- (2) A fully executed "Non-collusive Affidavit" $\ [\]$ is, $\ [\]$ is not included with the bid.

2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

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

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

- (b) The bidder represents and certifies as part of its bid that, except for full-time bona fide employees working solely for the bidder, the bidder:
- (1) [] has, [] has not employed or retained any person or company to solicit or obtain this contract; and
- (2) [] has, [] has not paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.
- (c) If the answer to either (a)(1) or (a)(2) above is affirmative, the bidder shall make an immediate and full written disclosure to the PHA/IHA Contracting Officer.
- (d) Any misrepresentation by the bidder shall give the PHA/IHA the right to (1) terminate the contract; (2) at its discretion, deduct from contract payments the amount of any commission, percentage, brokerage, or other contingent fee; or (3) take other remedy pursuant to the contract.
- 3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (applicable to contracts exceeding \$100,000)
- (a) The definitions and prohibitions contained in Section 1352 of title 31, United States Code, are hereby incorporated by reference in paragraph (b) of this certification.

- (b) The bidder, by signing its bid, hereby certifies to the best of his or her knowledge and belief as of December 23, 1989 that:
- (1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of a contract resulting from this solicitation;
- (2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the bidder shall complete and submit, with its bid, OMB standard form LLL, "Disclosure of Lobbying Activities;" and
- (3) He or she will include the language of this certification in all subcontracts at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.
- (c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.
- (d) Indian tribes (except those chartered by States) and Indian organizations as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) are exempt from the requirements of this provision.

4. Organizational Conflicts of Interest Certification

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

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

5. Bidder's Certification of Eligibility

- (a) By the submission of this bid, the bidder certifies that to the best of its knowledge and belief, neither it, nor any person or firm which has an interest in the bidder's firm, nor any of the bidder's subcontractors, is ineligible to:
- (1) Be awarded contracts by any agency of the United States Government, HUD, or the State in which this contract is to be performed; or,
 - (2) Participate in HUD programs pursuant to 24 CFR Part 24.
- (b) The certification in paragraph (a) above is a material representation of fact upon which reliance was placed when making award. If it is later determined that the bidder knowingly rendered an erroneous certification, the contract may be terminated for default, and the bidder may be debarred or suspended from participation in HUD programs and other Federal contract programs.

6. Minimum Bid Acceptance Period

- (a) "Acceptance period," as used in this provision, means the number of calendar days available to the PHA/IHA for awarding a contract from the date specified in this solicitation for receipt of bids.
- (b) This provision supersedes any language pertaining to the acceptance period that may appear elsewhere in this solicitation.
- (c) The PHA/IHA requires a minimum acceptance period of [Contracting Officer insert time period] calendar days.
- (d) In the space provided immediately below, bidders may specify a longer acceptance period than the PHA's/IHA's minimum requirement. The bidder allows the following acceptance period: calendar days.
- (e) A bid allowing less than the PHA's/IHA's minimum acceptance period will be rejected.
- (f) The bidder agrees to execute all that it has undertaken to do, in compliance with its bid, if that bid is accepted in writing within (1) the acceptance period stated in paragraph (c) above or (2) any longer acceptance period stated in paragraph (d) above.

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

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

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

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

(Check the block applicable to you)

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

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

The bidder represents and certifies that it:

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

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

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

- (a) By the submission of this bid, the bidder certifies that neither it nor any person or firm who has an interest in the bidder's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (b) No part of the contract resulting from this solicitation shall be subcontracted to any person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (c) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

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

- (a) The bidder's attention is called to the clause entitled **Equal Employment Opportunity** of the General Conditions of the Contract for Construction.
- (b) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.
- (c) By the submission of this bid, the bidder certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Employment Opportunity clause in the contract.
- (d) The bidder further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) prior to entering into subcontracts which exceed \$10,000 and are not exempt from the requirements of the Equal Employment Opportunity clause, it will:
- (1) Obtain identical certifications from the proposed subcontractors;
 - (2) Retain the certifications in its files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

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

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

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

The bidder certifies that:

- (a) Any facility to be used in the performance of this contract [] is, [] is not listed on the Environmental Protection Agency List of Violating Facilities:
- (b) The bidder will immediately notify the PHA/IHA Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the bidder proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and,
- (c) The bidder will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

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

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

13. Bidder's Signature

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

(Signature and Date)	 	
(Typed or Printed Name)		
(Title)	 	
(Company Name)		
(Company Address)		

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. 3/31/2010)

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.

Table of Contents							
Clause		Page			Page		
1.	Definitions	2		Administrative Requirements			
2.	Contractor's Responsibility for Work	2	25.	Contract Period	9		
3.	Architect's Duties, Responsibilities and Authority	2	26.	Order of Precedence	9		
4.	Other Contracts	3	27.	Payments	9		
	Construction Requirements		28.	Contract Modifications	10		
5.	Preconstruction Conference and Notice to Proceed	3	29.	Changes	10		
6.	Construction Progress Schedule	3	30.	Suspension of Work	11		
7.	Site Investigation and Conditions Affecting the Work	3	31.	Disputes	11		
8.	Differing Site Conditions	4	32.	Default	11		
9.	Specifications and Drawings for Construction	4	33.	Liquidated Damages	12		
10.	As-Built Drawings	5	34.	Termination of Convenience	12		
11.	Material and Workmanship	5	35.	Assignment of Contract	12		
12.	Permits and Codes	5	36.	Insurance	12		
13.	Health, Safety, and Accident Prevention	6	37.	Subcontracts	13		
14.	Temporary Buildings and Transportation Materials	6	38.	Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms	13		
15.	Availability and Use of Utility Services	6	39.	Equal Employment Opportunity	13		
16.	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	6	40.	Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968	14		
17.	Temporary Buildings and Transportation Materials	7	41.	Interest of Members of Congress	15		
18.	Clean Air and Water	7	42.	Interest of Members, Officers, or Employees and Former Members, Officers, or Employees	15		
19.	Energy Efficiency	7	43.	Limitations on Payments Made to Influence	15		
20.	Inspection and Acceptance of Construction	7	44.	Royalties and Patents	15		
21.	Use and Possession Prior to Completion	8	45.	Examination and Retention of Contractor's Records	15		
22.	Warranty of Title	8	46.	Labor Standards-Davis-Bacon and Related Acts	15		
23.	Warranty of Construction	8	47.	Non-Federal Prevailing Wage Rates	19		
24.	Prohibition Against Liens	9	48.	Procurement of Recovered Materials	19		

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

4. Other Contracts

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

Construction Requirements

5. Pre-construction Conference and Notice to Proceed

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

6. Construction Progress Schedule

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

7. Site Investigation and Conditions Affecting the Work

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

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

8. Differing Site Conditions

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

9. Specifications and Drawings for Construction

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

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

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

10. As-Built Drawings

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

14. Temporary Heating

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

15. Availability and Use of Utility Services

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

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

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

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

17. Temporary Buildings and Transportation of Materials

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

18. Clean Air and Water

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

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

24. Prohibition Against Liens

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

Administrative Requirements

25. Contract Period

The Contractor shall complete all work required under this contract within $\underline{150}$ calendar days of the effective date of the contract, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

26. Order of Provisions

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

27. Payments

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

- basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to HUD. If the contract covers more than one project, the Contractor shall furnish a separate breakdown for each. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.
- (d) The Contractor shall submit, on forms provided by the PHA, periodic estimates showing the value of the work performed during each period based upon the approved breakdown of the contract price. Such estimates shall be submitted not later than <u>ten</u> days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
- (e) Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made: I hereby certify, to the best of my knowledge and belief, that:
 - The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
 - (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements; and,
 - (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

Name:	 	 	_
Title:	 	 	
Date:	 	 	

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

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

28. Contract Modifications

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

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

29. Changes

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

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

30. Suspension of Work

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

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

31. Disputes

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

32. Default

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

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

33. Liquidated Damages

- (a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, as specified in the clause entitled Default of this contract, the Contractor shall pay to the PHA as liquidated damages, the sum of \$\frac{100.00}{}\$ Contracting Officer insert amount] for each day of delay. If different completion dates are specified in the contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another clause in this contract, liquidated damages shall not be due the PHA. The Contractor remains liable for damages caused other than by delay.
- (b) If the PHA terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final

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

34. Termination for Convenience

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

35. Assignment of Contract

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

36. Insurance

- (a) Before commencing work, the Contractor and each subcontractor shall furnish the PHA with certificates of insurance showing the following insurance is in force and will insure all operations under the Contract:
 - (1) Workers' Compensation, in accordance with state or Territorial Workers' Compensation laws.
 - (2) Commercial General Liability with a combined single limit for bodily injury and property damage of not less than \$1,000,000 [Contracting Officer insert amount]

- per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a "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.
- (3) Automobile Liability on owned and non -owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$500,000 [Contracting Officer insert amount] per occurrence.
- (b) Before commencing work, the Contractor shall furnish the PHA with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force. The Builder's Risk Insurance shall be for the benefit of the Contractor and the PHA as their interests may appear and each shall be named in the policy or policies as an insured. The Contractor in installing equipment supplied by the PHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by the PHA. The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. It need not be carried on landscape work. Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by the PHA. The Contractor may terminate this insurance on buildings as of the date taken over for occupancy by the PHA. The Contractor is not required to carry Builder's Risk Insurance for modernization work which does not involve structural alterations or additions and where the PHA's existing fire and extended coverage policy can be endorsed to include such work.
- (c) All insurance shall be carried with companies which are financially responsible and admitted to do business in the State in which the project is located. If any such insurance is due to expire during the construction period, the Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or 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.
- 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.
- 40. Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968.

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

41. Interest of Members of Congress

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

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

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

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

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

44. Royalties and Patents

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

45. Examination and Retention of Contractor's Records

- (a) The PHA, HUD, or Comptroller General of the United States, or any of their duly authorized representatives shall, until 3 years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- (b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders not exceeding \$10.000.
- (c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the Disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the PHA, HUD, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

46. Labor Standards - Davis-Bacon and Related Acts

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

(a) Minimum Wages.

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

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

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

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

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

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

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

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

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

47. Non-Federal Prevailing Wage Rates

- (a) Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State or tribal law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:
 - (1) The applicable wage rate determined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) to be prevailing in the locality with respect to such trade;
- (b) An applicable apprentice wage rate based thereon specified in an apprenticeship program registered with the U.S. Department of Labor (DOL) or a 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.

BID BOND

Page 1 of 2

KNOW ALL MEN BY THESE PRESENTS. as PRINCIPAL, and As SURETY, are held and firmly bound unto Licking Metropolitan Housing Authority, hereinafter called the "PHA", in the sum of _____ **OF THE TOTAL AMOUNT OF THE BID** of the Principal above named, submitted by said Principal to the PHA, for the work described below, for the payment of which sum in lawful money of the United Sates, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. IN NO CASE SHALL THE LIABILITY OF THE SURETY HEREUNDER EXCEED THE SUM OF (Fill in only if Surety requires limitation other than the above 5%) THE CONDITION OF THIS OBLIGATION IS SUCH, That whereas the Principal has submitted the above-mentioned bid to the PHA, for IFB# 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 ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the PHA in accordance with the bid as accepted, and give bond with good and sufficient surety of sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdraw of said bid within the specified period, or the failure to enter into such contract and given such bond within the time specified in said bid and amount for which the PHA may procure the required work or supplier 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 force and virtue. Signed this _______, 20______ In presence of: Principal BY Witness Sureties Attorney-in-Fact Witness

Attorney-in-Fact Mailing Address

BID BOND Page 2 of 2

Attach corporate seal of principal if corporation.
Attach corporate seal of surety company signing.
(1) If a corporation, insert "A corporation organized under the laws of the State of
with its principal place of business at
in Ohio."
(2) if a surety company, insert "A corporation organized under the laws of the State of and duly authorized to transact business within the State of Ohio."

If the above bond is executed by private individuals as sureties, the affidavits in justification of sureties must be filled out in detail; or in lieu of said affidavits, a certificate of the County Auditor of the County in which said sureties, or one of them, reside, or have property, may be furnished to the effect that in his judgment such sureties possess the qualifications required by Section 1341.01 of the Ohio Revised Code which reads as follows:

"Sureties must be residents of this State, and worth, in the aggregate, double the sum to be secured, beyond the amount of their debts, and have property liable to execution in this State equal to the sum to be secured."

If signed by a surety company, said bond must be accompanied by:

- (1) a certificate of the superintendent of insurance, that such surety company is authorized to transact business in this State; and
- (2) the power of attorney of the agent of such company showing this authority to execute said bond in its behalf, which power of attorney must be dated not more than ninety days previous to the signing of the contract; and
- (3) a recent financial statement of the surety company.

In the event the bond exceeds 5% of the capital and surplus of the surety company signing the bond, the excess amount must be reinsured in some other surety company licensed to do business in Ohio and a certificate showing such reinsurance must accompany said bond.

Contract #:	

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT, THAT WE,		
, as Principal,		
and, as Principal,		
as Surety , are hereby held and firmly bound unto Licking Metropolitan Housing hereinafter called the "Local Authority", in the penal sum of		
Dollars (\$		
), for payment of which sum we bind ourselves, our heir, administrators, and successors, jointly and severally, firmly by these present.	executors,	
WHEREAS , the principal has entered into a certain Contract with the Local Authority , a copy of which is hereto attached and made a part		
NOW, THEREFORE, the condition of this obligation is such that if the Principal respects fully perform the Contract and all duly authorized modifications thereof, during term and any extensions thereof that may be granted and if the Principal shall fully pay of lawful claims of all subcontractors, mechanics, laborers, or persons contributing supplies or other things of value for the performance or persecutions of any of the work under the and shall fully indemnify the Local Authority for all expenses of every kind and nature without limitation of the generality of the above, attorneys' fees) which the Local Authority by reason of such claims, then this obligation shall be void; otherwise, it shall reforce and effect.	g its original or satisfy all s, materials, ne Contract, (including, thority may	
It is expressly agreed that this undertaking shall be for the direct benefit of the obligation well as for the direct benefit of any Subcontractors, mechanics, laborers, or persons of supplies, materials, or things of value who have any such lawful claims against the Principle.	contributing	
No modification of the Contract or extension of the term thereof, nor any forbearance of the Local Authority, shall in any way release the Principal or the Surety from liability Notice to the Surety of any such modification, extension, or forbearance as hereby wa	thereunder.	
IN WITNESS WHEREOF, the aforesaid Principal and Surety have executed this instaffixed their Seals hereto, theday of, 2		

WITNESS:		(5	SEAI)
		(Individual Principal)	SEAL)
		(Business Address)	
		(2)	SEAL)
		(Individual Principal)	
ATTEST:		(Business Address)	
		(Corporate Principal)	
		(Business Address)	
	Rv:		Affirm Corporate
	-		Seal
ATTEST:	Title:		
		(Corporate Surety)	
		(Business Address)	
	D		Affirm
	By:		<u>Corporate</u> Seal
	Title:		Affirm
The rate of premium on this bond is \$ premium charged is \$		per thousand. The tot	tal amount of

(The above is to be filled in by Surety Company.)

Power of Attorney of person signing for Surety Company must be attached **PB-2**

Licking Metropolitan Housing Authority 144 West Main St. Newark, Ohio 43055 Telephone (740) 349-8069 Fax (740) 349-7132

Supplemental Instruction to Bidder's/Offerors for Section 3 Compliance

LMHA Section 3 Goals

All contractors and subcontractors shall take necessary actions to the greatest extent feasible to meet the following goals.

Section 3 Employment Goals		
Contractors	New Hires and Trainees	30% of workforce
Any Tier Subcontractors	New Hires and Trainees	30% of workforce
Section 3 Contracting Goals		
Contractors	Subcontract Awards	10% of dollar amount of contract
Any Tier Subcontractors	Subcontract Awards	10% of dollar amount of contract

The contractor and subcontractor shall document there efforts towards meeting these goals as outlined below.

Bid/Proposal Phase

Bidder/offeror not claiming a section 3 preference:

Bidder/offeror not claiming a section 3 preference during the bid/proposal phase shall submit the following forms with their bid/offer. Failure to complete, execute and submit all forms will render the bidder/offer non-responsive and their bid/offer will *not* be considered.

- Form sec3-014, Section 3 Strategy Commitment and Compliance Assessment
- 2. Form sec3-017, List of Current (pre-bid) Employees

Bidder/offeror claiming a Section 3 Business Concern preference:

A bidder/offeror claiming a Section 3 Business Concern preference must submit Section 3 required certification documents either prior to bid/offer submission or with the bid/offer. To qualify, the party wishing to claim a Section 3 preference shall complete the following forms and submit them either prior to or with the bid/offeror for which qualification is sought:

- For all individual, sole proprietorship, partnership, corporation or joint venture claiming a Section 3 preference claiming a 51% ownership by a Section 3 qualified individual.
 - Form sec3-014, Section 3 Strategy Commitment and Compliance Assessment
 - Form sec3-017, List of Current (pre-bid) Employees
 - Form sec3-014, Qualifying for a Section 3 Preference
 - Form sec3-001, Section 3 Business Concern Application and all required supporting documentation
- For businesses claiming 30% of their current full-time workforce qualify as section 3 residents, or within three years of the date of first employment with the business concern were section 3 residents
 - Form sec3-014, Section 3 Strategy Commitment and Compliance Assessment
 - Form sec3-017, List of Current (pre-bid) Employees
 - Form sec3-004, Section 3 Contractor or Subcontractor Payroll Report Complete for each F/T employee who has been employed at least one month. (this includes all employees of the company)
 - Form sec3-002, Section 3 Business Employee List and all required supporting documentation
 - Form sec3-003, Section 3 Resident Preference Claim Form and all required supporting documentation (to be completed for each section 3 resident claimed in meeting the 30% threshold)

- Form sec3-004, Section 3 Resident or Employee Household Income Certification (to be completed for each section 3 resident claimed in meeting the 30% threshold)
- For businesses claiming to subcontract in excess of 25 percent of the dollar award of all subcontracts to be awarded to business concerns that meet the qualifications set forth in paragraphs (1) or (2) above
 - Form sec3-014, Section 3 Strategy Commitment and Compliance Assessment
 - Form sec3-017, List of Current (pre-bid) Employees
 - Form sec3-012, List of Subcontractors (this list must demonstrate that 25% of the total dollar award of all subcontracts to be awarded to Section 3 business concerns)
 - Form sec3-001, Section 3 Business Concern Application and all required supporting documentation for each individual, sole proprietorship, partnership, corporation or joint venture claimed on the subcontractor list.
 - Form sec3-003, Section 3 Resident Preference Claim Form and all required supporting documentation (to be completed for each section 3 owner/employee claiming Section 3 resident status as a subcontractor)
 - Form sec3-004, Section 3 Resident or Employee Household Income Certification (to be completed for each section 3 owner/employee claiming Section 3 resident status as a subcontractor)

Completing the Section 3 Strategy Commitment

In completing the Section 3 Strategy Commitment, the bidders/offeror's efforts shall be directed towards identifying methods to achieve success under this program, as opposed to documenting the reasons why success was not achieved. Some examples of good faith efforts include, but are not limited to the following:

Hiring:

- Target recruitment of LMHA residents for training and employment by taking steps such as:
- Prominently place a notice of commitments under Section 3 at the project site or other places where applications for training and employment are taken.
 - Contact local job training centers, employment service agencies, and community organizations.
 - Develop on-the-job training opportunities or participate in job training programs.

- Contact LMHA, LMHA resident councils, LMHA resident management corporations, and LMHA residents.
- Contact LMHA for a list of agencies which may be able to provide assistance regarding opportunities for training which can be utilized on this contract.
- Advertise in the local media.
- Keep a list of Section 3 area residents who apply on their own or by referral for available positions.
- Send to labor organizations or representatives of workers with whom the recipient, contractor, or subcontractor has a collective bargaining agreement or other understanding, a notice about contractual commitments under Section 3.
- Select Section 3 area residents, particularly LMHA residents, for training and employment positions.
- Provide ongoing monitoring of the program by the contractor and its subcontractors to ensure compliance and to identify problems or difficulties in meeting the requirements, and implement strategies to overcome the problems. Where problems or difficulties in meeting the goals are encountered, take aggressive efforts to rectify the matter. Such action shall include, but not be limited to convening a meeting with LMHA to advise it of the problems and proposed solutions. LMHA will offer its assistance whenever possible.

Contracting:

Target recruitment of Section 3 business concerns by taking such steps as:

- Contact Section 3 business concerns in the LMHA's directory.
- Prominently place a notice of commitment relative to Section 3 contracting at the project site and other appropriate places.
- Contact LMHA for a list of certified firms.
- Contact other organizations which might be helpful in identifying Section 3 business concerns.
- Advertise in the local media.
- Dividing total work into smaller sub-tasks (i.e. by floor);
- Using multiple firms for the same type of work (i.e. two drywall subcontractors or several plumbing suppliers);
- Exercise flexibility in utilizing Section 3 business concerns in other or additional areas than initially proposed if necessary to meet the program objectives.
- Provide ongoing monitoring of the program by the contractor and its subcontractors to ensure compliance and to identify problems or difficulties in meeting the requirements, and implement strategies to overcome the problems. Where problems or difficulties in meeting the goals are encountered, take aggressive efforts to rectify the matter. Such action shall include, but not be limited to convening a meeting with LMHA to advise it of the problems and proposed solutions. LMHA will offer its assistance whenever possible.

Pre-Award Phase

Subsequent to the submission of bids/proposals, but prior to contract award, contractors may be requested to provide additional information regarding the submissions required in the Bid/Proposal Phase. Such requests may be made in instances where the contractor does not show sufficient detail in its required Section 3 Strategy Commitment, where the

contractor's required submissions do not reflect achievement of the minimum stated goals, where the contractor has not identified the name of the Section 3 subcontractor(s) in the required submissions, or where it is deemed necessary by LMHA's Contracting Officer.

Contract Award Phase

As a condition of contract award, the contractor shall be required to enter into a Section 3 Memorandum of Understanding delineating the "greatest extent feasible" efforts required of the contractor during the term of the contract. Form sec3-016, Section 3 Memorandum of Understanding

Contract Performance Phase

- The LMHA shall monitor and evaluate the contractor's Section 3 compliance towards achieving the numerical goals relative to Section 3 employment, training, and contracting on a monthly basis throughout the contract period. The contractor shall be responsible for providing the following reports to LMHA, which shall be submitted no later than 4:30 p.m., on the first business day of each month throughout the contract period:
- 1. Form sec3-017, Contractor's Section 3 Employment and Training Compliance Report
- 2. The contractor shall also ensure that for each Section 3 resident hired, form sec3-003, Section 3 Resident Preference Claim and form sec3-004, Section 3 Resident or Employee Household Income Certification are completed and submitted to LMHA. These forms shall be completed by the resident, and submitted to LMHA by the contractor with the monthly reports listed above.
- The contractor shall be responsible for monitoring the compliance of any tier subcontractors. In doing so, the contractor shall require monthly reports, in the formats provided, from its lower tier subcontractors.

Determination of Compliance

Contractors and their subcontractors may demonstrate compliance with Section 3 by meeting the commitments stated on the Form sec3-014, Section 3 Strategy Commitment and Compliance Assessment and by meeting the employment and contracting numerical goals set forth above. Contractors who do not meet their commitment shall have the burden of demonstrating through the submission of supporting documentation, why it was not feasible to meet the numerical goals. It is expected that contractors who put forth a good faith effort will be successful in meeting the goals relative to employment and contracting.

Effects of Non-Compliance

Contractors that do not meet the numerical goals set forth herein have the burden of demonstrating why it was not feasible to meet the goals. LMHA shall consider documentation provided by the contractor evidencing impediments encountered despite actions taken to comply. Such evidence shall be subject to the satisfaction of LMHA. The documentation may be subject to the examination of LMHA's Board of Commissioners prior to the award of any future contract awards. Contractors found not to be in compliance with the provisions of Section 3 may be deemed ineligible for future contract awards with LMHA.

SECTION 3 BUSINESS CERTIFICATION FORM

Section 3 Business Concern Representation (Public & Indian Housing Program Only)

Please use this form to indicate whether or not your firm is a Section 3 Business entity.

The Bidder represents and certifies as part of its bid that it: ☐ Is not a Section 3 business (please provide a listing of intended subcontractors; include name, address and phone number). ☐ Is a Section 3 business as indicated below (check application category and sub-category): **CATEGORY 1 BUSINESS:** 51% or more of the business is owned by public housing residents of a specific public housing community for which the Section 3 covered assistance is expended. **CATEGORY 2 BUSINESS:** 51% or more of the business is owned by residents of a public housing community or communities within the Licking Metropolitan Housing Authority for which the Section 3 covered assistance is *not* being expended. **CATEGORY 3 BUSINESS:** O 51% or more of the business is owned by Section 3 eligible residents and/or O Will subcontract in excess of 25% of the total amount of subcontracts to category 1 or 2 Section 3 businesses as indicated on the following page. **CATEGORY 4 BUSINESS:** O Full time, permanent workforce includes 30% or more Section 3 eligible residents. O An entity selected to carry out a HUD Youth build Program in Montgomery County in which Section 3 covered funding is expected. **CATEGORY 5 BUSINESS:**

Full-time, permanent workforce includes 30% or more Section 3 eligible residents.

Please provide the following information on each intended subcontractor:

(Attach a separate sheet if necessary)

Name	Address	Phone #	Amount of Subcontract	Section 3 Category

APPLICATION CERTIFICATION

Title 18, Section 1001 of the U.S. Code states that any person who knowingly and willingly makes or uses a document or writing containing any false, fictitious, fraudulent statement or entity, in any matter within the jurisdiction of any department or agency of the United States, shall be fined not more than \$10,000 or imprisoned for not more than five years, or both. The undersigned fully understands that false statements or information are punishable under Federal and State Law, and that the business may be removed from the Licking Metropolitan Housing Authority (LMHA) vendor list for false statements of information. The undersigned also realizes that LMHA may verify any information provided by the vendor within this Section 3 Business Certification Form.

The vendor hereby waives and releases any right the vendor may have or assert against the Licking Metropolitan Housing Authority by virtue of its reliance on information provided by outside investigatory or informational agencies. Vendor acknowledges that LMHA will include the business (if applicable) within its database for the applicable Section 3 category. Such information may be submitted to other vendors as a form or reference the vendor may utilize in order to meet its LMHA Section 3 requirements. Nothing contained with this Section 3 Certification Form is to be interpreted as a promise by Licking Metropolitan Housing Authority to contract with the vendor.

(Name of Corporation)	
Signature of Authorized Representative	
	<i>By</i> :
(Please Print Name of Above Signed Representative)	
Tt: .1	

SECTION 3 NARRATIVE ACTION PLAN

- I. Overview
 - Description of the project's work detail
 - Proposed positions for new hires (job description, if available)
- II. Describe how your company will advertise the positions
- III. Implementation Schedule
 - o Provide an overview of the activities involved in executing this plan
- IV. Are there any other *creative* or *innovative* ideas your company would like to implement in order to fulfill your Section 3 compliance obligations? If yes, please describe.
- V. Can your company provide training opportunities for public housing residents as an option for meeting your Section 3 requirements? If yes, provide an overview of your training plan.

REFERENCE RELEASE FORM For

LMHA IFB#	JOB TITLE		
Being Title give LMHA authorization to			, I hereby
Authorization Signature:	1 7 1	•	
RETURN FIVE (5) SI	GNED ORIGINALS OF	THIS FORM TO LM	HA WITH PROPOSAL
Reference:			
Company Name:			
Company Address:			
Contact Person:			
Telephone No	Fax	Email_	
Dear Sir or Madam:			
The vendor mentioned above ha office.	as submitted your compan	y as reference in respons	e to a proposal received by our
To assist LMHA in the evaluati this form in the postage paid en			nformation below and return
1. Nature of service provided			
2. Dollar amount of agreemen	nt \$		
3. Performance: (Circle One)			
Excellent	Good	Average	Poor
4. Would you enter into an ag	reement with this compa	any?	
5. Comments:			
Title (Use Reverse Side if needed)		Signature	

REFERENCE RELEASE FORM For

LMHA IFB#	JOB TITLE		
Being			, I hereby
Authorization Signature:			
	GNED ORIGINALS OF		
Reference:			
Company Name:			
Company Address:			
Contact Person:			
Telephone No	Fax	Email_	
Dear Sir or Madam:			
The vendor mentioned above has office.	as submitted your company	y as reference in respons	e to a proposal received by our
To assist LMHA in the evaluati this form in the postage paid en			nformation below and return
1. Nature of service provided			
2. Dollar amount of agreemen	nt \$		
3. Performance: (Circle One)			
Excellent	Good	Average	Poor
4. Would you enter into an ag	reement with this compa	ny?	
5. Comments:			
Title (Use Reverse Side if needed)		Signature	

REFERENCE RELEASE FORM For

LMHA IFB#	JOB TITLE		
Being	of		, I hereby
give LMHA authorization to			
Authorization Signature:			
	GNED ORIGINALS OF		
Reference:			
Company Name:			
Company Address:			
Contact Person:			
Telephone No	Fax	Email_	
Dear Sir or Madam:			
The vendor mentioned above ha office.	s submitted your compan	y as reference in respons	e to a proposal received by our
To assist LMHA in the evaluation this form in the postage paid environment.			nformation below and return
1. Nature of service provided			
2. Dollar amount of agreemen	t \$		
3. Performance: (Circle One)			
Excellent	Good	Average	Poor
4. Would you enter into an ag	reement with this compa	nny?	
5. Comments:			
Title (Use Reverse Side if needed)		Signature	

REFERENCE RELEASE FORM For

LMHA IFB#	JOB TITLE		
Being	of		, I hereby
give LMHA authorization to			
Authorization Signature:			
	GNED ORIGINALS OF		
Reference:			
Company Name:			
Company Address:			
Contact Person:			
Telephone No	Fax	Email_	
Dear Sir or Madam:			
The vendor mentioned above ha office.	s submitted your compan	y as reference in respons	e to a proposal received by our
To assist LMHA in the evaluation this form in the postage paid environment.			nformation below and return
1. Nature of service provided			
2. Dollar amount of agreemen	t \$		
3. Performance: (Circle One)			
Excellent	Good	Average	Poor
4. Would you enter into an ag	reement with this compa	nny?	
5. Comments:			
Title (Use Reverse Side if needed)		Signature	

REFERENCE RELEASE FORM For

LMHA IFB#	JOB TITLE		
Being Title give LMHA authorization to			, I hereby
Authorization Signature:	1 7 1	•	
RETURN FIVE (5) SI	GNED ORIGINALS OF	THIS FORM TO LMI	HA WITH PROPOSAL
Reference:			
Company Name:			
Company Address:			
Contact Person:			
Telephone No	Fax	Email_	
Dear Sir or Madam:			
The vendor mentioned above ha office.	as submitted your compan	y as reference in respons	e to a proposal received by our
To assist LMHA in the evaluati this form in the postage paid en			nformation below and return
1. Nature of service provided			
2. Dollar amount of agreemen	nt \$		
3. Performance: (Circle One)			
Excellent	Good	Average	Poor
4. Would you enter into an ag	reement with this compa	any?	
5. Comments:			
Title (Use Reverse Side if needed)		Signature	

Certification for a Drug-Free Workplace

U.S. Department of Housing and Urban Development

Applicant Name				
Program/Activity Receiving Federal Grant Funding				
Acting on behalf of the above named Applicant as its Authorized Official, I make the following certifications and agreements to the Department of Housing and Urban Development (HUD) regarding the sites listed below:				
I certify that the above named Applicant will or will continue to provide a drug-free workplace by: a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Applicant's workplace and specifying the actions that will be taken against employees for violation of such prohibition. b. Establishing an on-going drug-free awareness program to inform employees (1) The dangers of drug abuse in the workplace; (2) The Applicant's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace. c. Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph a.; d. Notifying the employee in the statement required by paragraph a. that, as a condition of employment under the grant, the employee will	e. after ploye Empling I whose unless recei numl f. days to an empline emplie	(1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her convictor a violation of a criminal drug statute occurring in the place no later than five calendar days after such conviction; Notifying the agency in writing, within ten calendar days receiving notice under subparagraph d.(2) from an empere or otherwise receiving actual notice of such conviction, loyers of convicted employees must provide notice, includosition title, to every grant officer or other designee on the grant activity the convicted employee was working, as the Federalagency has designated a central point for the pt of such notices. Notice shall include the identification per(s) of each affected grant; Taking one of the following actions, within 30 calendar of receiving notice under subparagraph d.(2), with respect y employee who is so convicted (1) Taking appropriate personnel action against such an oyee, up to and including termination, consistent with the rements of the Rehabilitation Act of 1973, as amended; on (2) Requiring such employee to participate satisfactorin a drug abuse assistance or rehabilitation program appeted for such purposes by a Federal, State, or local health, law rement, or other appropriate agency;		
2. Sites for Work Performance. The Applicant shall list (on separate p HUD funding of the program/activity shown above: Place of Perform Identify each sheet with the Applicant name and address and the program/activity each sheet with the Applicant name and address and the program of the pro	free ages) the mance shogram/ac	nall include the street address, city, county, State, and zip code tivity receiving grant funding.) ets. n provided in the accompaniment herewith, is true and accurate		
Signature		Date		
X				

UNDERSTANDING HUD CONSTRUCTION FORMS

51000-Schedule of Amounts for Contract Payments The form above is your Schedule of Values and must be pre-approved by the Architect & Owner before submitting for a periodic payment. It is self-explanatory. Break down the units for the smallest unit of measure you will want to be paid for. For instance, if your plumber only says rough-in, stack-out, and trim-out-all per unit, then even if he has half-way completed the rough-in in four units he will get nothing because he will only be paid for the **completed** measure of unit. Instead of saying rough-in, he may want to break the rough-in into smaller sections so that if he only partially completes the rough-in he can bill for that smaller parts that are enumerated. Having more detail makes it easier for the Architect and Owner to justify partial payments.

51001-Periodic Estimate for Partial Payment This form is used monthly to show the Work Completed to Date. Each line item will correspond to the same line item on the approved form 51000 (Your Schedule of Values). The Summary page pulls numbers from all of these forms and previous payments.

51002-Schedule of Change Orders This form is used when there are approved Change Orders. Each Change Order is listed line by line and multiple forms may be used if there are too many to list on one. In that case, type CONTINUED in the totals line and carry the balance to the next form. Start each additional page with a balance forward line.

5372- Construction Progress Schedule This form is also submitted for prior approval and then again monthly. It shows the anticipated construction completion schedule as a percentage monthly. The monthly percentages should add up to completion and are accumulated month to month. For instance, a ten month job could show 10% each month by going 10-20-30-40-etc---until 100%. After approval, the form is submitted monthly and the actual data is added to the form so that it shows the previously anticipated progress along with the actual progress. LMHA reserves the right to have inspectors audit the forms.

All of the aforementioned documents may be downloaded at: http://www.hud.gov/offices/adm/hudclips/forms/hud5.cfm

DIVISION 10 TO 33 – NOT USED

SECTION 00 01 10 TABLE OF CONTENTS

00 01 10 00 31 00	Table of Contents Available Project Information	00 01 10-1 thru 00 01 10-5 00 31 00 -1			
DIVISION 01 – GENERAL REQUIREMENTS					
01 00 00	General Requirements	01 00 00-1 thru 01 00 00-18			
DIVISION 02 – EXISTING CONDITIONS					
02 41 19	Selective Demolition	02 41 19-1 thru 02 41 19-2			
DIVISION 03 TO 05 – NOT USED					
DIVISION 06 – WOOD, PLASTICS AND COMPOSITES					
06 10 00 06 20 00	Rough Carpentry Finish Carpentry	06 10 00-1 thru 06 10 00-1 06 20 00-1 thru 06 20 00-2			
DIVISION 07 – THERMAL AND MOISTURE PROTECTION					
07 21 00 07 62 00 07 90 00	Thermal Insulation Sheet Metal Flashing and Trim Joint Protection	07 21 00-1 thru 07 21 00-3 07 62 00-1 thru 07 62 00-3 07 90 00-1 thru 07 90 00-4			
DIVISION 08 – OPENINGS					
08 52 00 08 56 00 08 80 00	Aluminum Windows Vinyl Windows Glass and Glazing	08 52 00-1 thru 08 52 00-6 08 56 00-1 thru 08 56 00-6 08 80 00-1 thru 08 80 00-7			
DIVISION 09 – FINISHES					
09 90 00	Painting and Coating	09 90 00-1 thru 09 90 00-7			

Table of Contents 00 01 10 - 1

DRAWINGS

NAME		DRAWING NUMBER
Title Sheet		T-1
Demolition Plan / Floor Plan	First Floor	A-1
Demolition Plan / Floor Plan	Second Floor	A-2
Demolition Plan / Floor Plan	Third Floor	A-3
Demolition Plan / Floor Plan	Fourth Floor	A-4
Demolition Plan / Floor Plan	Fifth Floor	A-5
Demolition Plan / Floor Plan	Sixth Floor	A-6
Demolition Plan / Floor Plan	Seventh Floor	A-7
North & East Exterior Elevations		A-8
South & West Exterior Elevations		A-9
Vinyl Window Details Window Schedule		A-10
Aluminum Window Details Window Schedule	Alternate G-1	A-11

Table of Contents 00 01 10 - 2

SECTION 00 31 00 AVAILABLE PROJECT INFORMATION

1.1 AS BUILT DRAWINGS

A. Copies of the original construction documents are available for viewing at Licking Metropolitan Housing Authority.

Licking Metropolitan Housing Authority 144 West Main Street Newark, Ohio 43055

END OF SECTION

SECTION 01 00 00 - GENERAL REQUIREMENTS

INDEX

PART 1 - GENERAL

- 1.1 Buy American
- 1.2 Site Visits

PART 2 - SUMMARY

- 2.1 Contract description.
- 2.2 Contractor's use of premises.
- 2.3 Time for completion.
- 2.4 Notice of completion.
- 2.5 Specification conventions.

PART 3 – PRICE AND PAYMENT PROCEEDURES

- 3.1 Schedule of values.
- 3.2 Applications for payment.
- 3.3 Change procedures.
- 3.4 Alternates.

PART 4 - ADMINISTRATIVE REQUIREMENTS

- 4.1 Coordination.
- 4.2 Field engineering.
- 4.3 Computer File Waiver & Fees
- 4.4 Pre construction & pre installation meetings.
- 4.5 Progress meetings.
- 4.6 Cutting and patching.

PART 5 – SUBMITTALS

- 5.1 Submittal procedures.
- 5.2 Construction progress schedules.
- 5.3 Proposed products list.
- 5.4 Product data.
- 5.5 Shop drawings.
- 5.6 Samples.
- 5.7 Manufacturer's instructions.
- 5.8 Manufacturer's certificates.

PART 6 - QUALITY REQUIREMENTS

- 6.1 Quality control.
- 6.2 Tolerances.
- 6.3 References.
- 6.4 Examination.
- 6.5 Preparation.

General Requirements 01 00 00 - 1

PART 7 - TEMPORARY FACILITIES AND CONTROLS

- 7.1 Telephone and facsimile service.
- 7.2 Field offices and storage.
- 7.3 Parking.
- 7.4 Progress cleaning and waste removal.
- 7.5 Fire prevention facilities.
- 7.6 Protection of installed work.
- 7.7 Security.
- 7.8 Pollution and environmental control.

PART 8 - PRODUCT REQUIREMENTS

- 8.1 Products.
- 8.2 Delivery, handling, storage, and protection.
- 8.3 Product options.
- 8.4 Substitutions.

PART 9 - EXECUTION REQUIREMENTS

- 9.1 Closeout procedures.
- 9.2 Final cleaning.
- 9.3 Demonstration and instructions.
- 9.4 Testing, adjusting and balancing.
- 9.5 Protecting installed construction.
- 9.6 Project record documents.
- 9.7 Operation and maintenance data.
- 9.8 Spare parts and maintenance materials.
- 9.9 Warranties.

PART 1 - GENERAL

1.1 BUY AMERICAN

A. Buy American: Section 1605. Use of American Iron, Steel, and Manufactured Goods.

 None of the funds appropriated or otherwise made available by this Act may be used for a project for the construction, alteration, maintenance, or repair of a public building or public work unless all of the iron, steel, and manufactured goods used in the project are produced in the United States.

1.2 SITE VISITS

A. The Contractor shall visit the site to verify conditions and take measurements necessary for bidding purposes. Arrangements to visit the site may be made by contacting Lauren Ault, LMHA Public Housing Supervisor at 740-349-8069 Ext. 227.

General Requirements 01 00 00 - 2

PART 2 - SUMMARY

2.1 CONTRACT DESCRIPTION

A. Project Identification

1. Project: Terrace Gardens Window Replacement

2. Project location: 85 West Church Street Newark. Ohio 43055

3. Owner: Licking Metropolitan Housing Authority

144 West Street Newark, Ohio 43055

Contract Documents have been prepared by:
Kabil Associates Engineers/Architects/Planners
5900 Sharon Woods Boulevard
Columbus, Ohio 43229
614.899.6707 Phone
614.899.7503 Fax
spsavla@kabil.com

B. Work of the Project includes but is not limited to the replacement of windows in a total of eighty-seven (87) existing window openings.

1. Demolition

- Exterior Demolition includes but is not limited to removal of existing window units, interior wood trim, batt insulation, interior and exterior sealants, wood shims and blocking.
- b) Interior Demolition includes but is not limited to removal, cover-up and encapsulating hazardous materials, removal of existing gypsum wall board at perimeter walls, existing wall insulation at perimeter walls, all cabinetry, all doors, frames and hardware, all interior partition walls, all mechanical equipment and duct work, electrical devices and wiring, electrical power distribution panel, and all plumbing fixtures and exposed plumbing piping.

2. New Work

- a) New Work includes but is not limited to the installation of new window units, head and sill flashing, wood blocking, interior wood trim, batt insulation, interior and exterior sealants.
- C. Window units will be replaced in residential apartments that will be occupied.
- D. Perform Work of Contract under a fixed cost contract with Owner in accordance with Conditions of Contract.

2.2 CONTRACTOR'S USE OF PREMISES

- A. Limit use of premises to allow:
 - Access to units.
- B. Confine construction operations to within property lines of building.
 - Keep driveways and entrances serving premises clear and available to Owner, Owner's employees and emergency vehicles at all times. Do not use these areas for parking or storage of materials,
 - 2. Schedule deliveries to minimize use of driveways and entrances.
 - 3. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

2.3 TIME FOR COMPLETION

A. All Work is to be completed within three hundred sixty five (150) calendar days of the Notice to proceed.

Work Days to Substantial Completion 120 days

Includes Punchout, Back Punch and Acceptance for Occupancy along with all Warranties, Manuals and Operating Instructions submittals and acceptance.

Administration / Closeout 35 days

2.4 NOTICE OF COMPLETION

A. The contractor shall notify LMHA in writing 30 days prior to substantial completion of the project. The notice shall contain the proposed date the PHA will take possession of the facility and conformance of this date with the approved construction.

2.5 SPECIFICATION CONVENTIONS

A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 3 - PRICE AND PAYMENT PROCEEDURES

3.1 SCHEDULE OF VALUES

- A. Submit schedule on HUD form 51000.
- B. Submit Schedule of Values 10 days prior to the Pre-construction meeting for approval.
- C. Approved Schedule of Values will be signed at the Pre-Construction meeting.

3.2 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on HUD form 51000.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.

General Requirements 01 00 00 - 4

- C. Included with each Application for Payment shall be an updated schedule (M.S. Project only) with pertinent revisions and the projected date for Substantial Completion.
- D. Payment Period: Monthly.

3.3 CHANGE PROCEDURES

- A. On Owner's approval of a proposal from Contractor, Owner will issue a Change Directive or a Change Order for all changes to Contract Sum and a Change Order for all changes to the Contract Time.
- B. The Architect may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change. Contractor will prepare and submit estimate within five (5) days.
- C. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- D. Unit Price Change Order: For contract unit prices and quantities, the Change Directive or Change Order must be executed prior to beginning any work. The Order, when applicable, will be based on fixed unit price basis provided in the Bid Form.
- E. Construction Change Directive: LMHA in conjunction with the Architect/Engineer may issue directive, on HUD Forms signed by Owner, instructing Contractor to proceed with change in the Work. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- F. Change Order Forms: LMHA Approved Forms.
- G. Correlation of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Directive or Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.

3.4 ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.
- B. Coordinate related Work and modify surrounding Work as required.
- C. Schedule of Alternates:
 - 1. Alternate G-1: Deduct vinyl window units and exterior trim. Add aluminum window units and trim, see Bid Form.

General Requirements 01 00 00 - 5

PART 4 – ADMINISTRATIVE REQUIREMENTS

4.1 COORDINATION

A. Coordinate scheduling, submittals, and Work of various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.

4.2 FIELD ENGINEERING

 Verify field measurements are as indicated on shop drawings or as instructed by manufacturer.

4.3 AGREEMENT AND WAIVER FOR USE OF COMPUTER AIDED DESIGN FILES

- A. The Architect/Engineer, at his sole discretion and without obligation, makes graphic portions of the contract documents available for use by the contractor in electronic format. These electronic documents are proprietary, and remain the Housing Authority's Instruments and shall be for use solely with respect to this project, as provided in the Standard Form of Agreement between Owner and Architect and Architect and Engineer.
- B. Electronic files shall be released only after bids have been received for the project and contracts have been signed with the contractors.
- C. The contractor shall acknowledge receipt of CAD files in DXF or DWG format for this project. These files are provided as a convenience to the User, for use in preparing shop drawings and/or coordination drawings related to the construction of the above project only. These files and the information contained within are the property of the Housing Authority and may not be reproduced or used in any format except in conjunction with the above project.
- D. The User acknowledges that the information provided in these files is not a substitution or replacement for the Contract Documents and does not become a Contract Document. The User acknowledges that neither the Architect, the Consultants, the Client or the Owner make any warrant or representation that the information contained in these files reflect the Contract Documents in their entirety. The User assumes full responsibility in the use of these files, including the responsibility to see that all manual modifications, addenda, bulletins, clarifications and Change Orders to the drawings executed as a part of the Contract Documents have been incorporated.
- E. The User acknowledges that the furnishing of these files in no way relieves the User from the responsibility for the preparation of shop drawings or other schedules as set forth in the Contract between the Contractor and the Owner.
- F. These electronic documents are available in the .DWG format for AutoCAD Release 2006 for a cost of \$100.00 per discipline. They are available through the Architect or Engineer's office on a C.O.D. basis only. A sample of the format will be provided by the Architect or Engineer upon request by the contractor, for the purpose of testing the compatibility of the format to contractor's systems.
- G. The electronic documents shall be stripped of the Project's name and address, the Architect's and Engineer's and any consultant's name and address, and any professional licenses indicated on the contract documents, (and all dimensions, verbiage, and

statistical information). Use of these electronic documents is solely at the contractor's risk, and shall in no way alter the contractor's Contract for Construction.

Η. The User agrees to indemnify, hold harmless and defend the Architect, the Engineer, the Consultants, the Owner, the Client and any of their agents from any litigation resulting from the use of (by any means of reproduction or electronic media) these files. The Architect/Engineer makes no representation regarding fitness for any particular purpose, or suitability for use with any software or hardware, and shall not be responsible or liable for errors, defects, inexactitudes, or anomalies in the data, information, or documents (including drawings and specifications) caused by the Architect/Engineer's or its consultant's computer software or hardware defects or errors; the Engineer's or its consultant's electronic or disk transmittal of data, information or documents; or the Architect/Engineer's or its consultant's reformatting or automated conversion of data. information or documents electronically or disk transmitted from the Architect/Engineer's consultants to the Engineer. The contractor waives all claims against the Architect/Engineer its employees, officers and consultants for any and all damages, losses, or expenses the contractor incurs from such defects or errors in the electronic documents. Furthermore, the contractor shall indemnify, defend, and hold harmless the Architect/Engineer, and its consultants together with their respective employees and officers, harmless from and against any claims, suits, demands, causes of action, losses, damages or expenses (including all attorney's fees and litigation expenses) attributed to errors or defects in data, information or documents, including drawings and specifications, resulting from the contractor's distribution of electronic documents to other contractors, persons, or entities.

4.4 PRECONSTRUCTION and PREINSTALLATION MEETINGS

- A. Owner will schedule preconstruction meeting after Notice of Award for affected parties.
- B. When required in individual specification section, convene pre-installation meeting at Project site prior to commencing work of section.

4.5 PROGRESS MEETINGS

- A. LMHA will schedule and administer bi-weekly meetings throughout progress of the Work. Progress meeting schedule shall be determined by LMHA.
- B. LMHA will preside at meetings and distribute copies of agenda and minutes at the next regularly scheduled meeting to those affected by decisions made.
- C. Architect will record minutes and forward to LMHA for review and approval prior to distribution.

4.6 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:

- 1. Fit several parts together, to integrate with other Work.
- 2. Uncover Work to install or correct ill-timed Work.
- 3. Remove and replace defective and non-conforming Work.
- 4. Remove samples of installed Work for testing.
- 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- E. Refinish surfaces to match adjacent finishes.

PART 5 - SUBMITTALS

5.1 SUBMITTAL PROCEDURES

- A. Utilize cover sheet provided by the Architect. Submittal form to identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- C. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of completed Work.
- D. Revise and resubmit submittals as required; identify changes made since previous submittal.

5.2 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate within 3 business days of prior to the preconstruction conference.
- B. Submit revised schedules with each Application for Payment, identifying changes since previous version. Indicate estimated percentage of completion for each item of Work at each submission.
- C. Utilize the latest version of Microsoft Project schedule with separate line for each major section of Work or operation, identifying first work day of each week. No exception of the software requirement will be allowed. Schedules not submitted in Microsoft Project format will be rejected by the Owner and Architect.

5.3 PROPOSED PRODUCTS LIST

A. Within 10 days after date of Notice to Proceed, submit list of major Products proposed for use, with name of manufacturer, trade name, and model number of each product.

5.4 PRODUCT DATA

- A. Product Data:
 - 1. Submitted to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract

Documents.

- 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. Submit number of copies which Contractor requires, plus two copies which will be retained by Architect/Engineer. Maximum 6 copies.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this project.

5.5 SHOP DRAWINGS

A. Shop Drawings:

- Submit a minimum 3 hardcopies and 1 electronic file of shop drawings to the Architect/Engineer for review, for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
 - 1. Include signed and sealed calculations to support design.
 - 2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 - 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- C. Submit PDF electronic files along with number of opaque reproductions Contractor requires, plus two (three if PME submittals) copies which will be retained by Architect/Engineer. Maximum 6 copies.

5. 6 SAMPLES

- A. Samples for Review:
 - Submitted to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
 - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. Samples For Selection:
 - 1. Submitted to Architect/Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturer's standard colors, in custom colors selected, textures, and patterns for Architect/Engineer selection.
 - 3. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- C. Submit samples to illustrate functional and aesthetic characteristics of Product.
- D. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns for Architect/Engineer's selection.

E. Contractor shall provide actual examples of work including such items as mock-ups and sample installations for approval by the A/E and LMHA Construction Inspector prior to start of complete installation of the work involved, as indicated in the Quality Assurance paragraph of each division of the specifications.

5. 7 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

5. 8 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

PART 6 – QUALITY REQUIREMENTS

6.1 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturer's instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

6.2 TOLERANCES

- A. Monitor fabrication and installation tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply fully with manufacturer's tolerances.

6.3 REFERENCES

- A. Conform to reference standards by date of issue current as of date for receiving bids.
- B. When specified reference standard conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

6.4 EXAMINATION

A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

6.5 PREPARATION

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

PART 7 - TEMPORARY FACILITIES AND CONTROLS

7.1 TELEPHONE AND FACSIMILE SERVICE

A. Job superintendent must carry a cell phone at all times and be available 24 hours a day, 7 days a week.

7.2 FIELD OFFICES AND STORAGE

- A. LMHA to provide for contractors use:
 - 1. Two (2) existing vacant residential units for use as field office and storage room.
 - 2. Contractor shall be responsible for telephone maintenance and security of office.

7.3 PARKING

Construction personnel may utilize existing parking areas along Public Street.

7.4 PROGRESS CLEANING AND WASTE REMOVAL

- A. Collect and maintain areas free of waste materials, debris, and rubbish on a daily basis. Maintain site in clean and orderly condition.
- B. Do not utilize tenant dumpsters for waste.

7.5 FIRE PREVENTION FACILITIES

- A. Prohibit smoking within buildings under construction and demolition. Designate area on site where smoking is permitted. Provide approved ashtrays in designated smoking areas.
 - Personnel violating smoking ban inside building will not be permitted to return to work.

7.6 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified in individual specification sections.

7.7 SECURITY

A. Provide security and facilities to protect Work and existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

7.8 POLLUTION AND ENVIRONMENTAL CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced

by construction operations.

PART 8 - PRODUCT REQUIREMENTS

8.1 PRODUCTS

A. GENERAL REQUIREMENTS

- The Contractor shall visit the site to verify conditions and take measurements necessary for bidding purposes. Arrangements to visit the site may be made by contacting <u>Lauren Ault, LMHA Public Housing Supervisor at 740-349-8069</u> Ext. 227.
- 2. The Contractor shall be responsible for paying for all permits and inspections necessary to complete all work related to these specifications. All work shall comply with Federal, State and Local codes.
- 3. The **Contractor** shall provide dumpsters or trash containers needed and will not use LMHA dumpsters or trash containers at any time for removal of materials, trash or debris related to the Contractor's work.
- 4. A Contractor, working under a contractual agreement with LMHA, MUST BE IN COMPLIANCE WITH OSHA STANDARDS 1926 REGULATIONS FOR CONSTRUCTION. Any and all sub-contractors, doing work on this project, MUST ALSO BE IN COMPLIANCE WITH OSHA STANDARDS. Noncompliance shall be a basis for making a bid non-responsive. And, if a Contractor or sub-contractor is found to be in VIOLATION (NON-COMPLIANCE) AT ANY TIME, this could be a basis for termination of the contract.
- 5. IMPORTANT: Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.
- 6. The Contractor shall not take advantage of any clerical errors, omissions, contradictions or conflicts that may develop in plans, specifications or details. Such errors, ambiguities and discrepancies shall be reported to LMHA immediately for clarification, revision or correction prior to submission of bids. If no notification is given it shall be assumed that all specifications and conditions will be met.
- 7. The submission of a bid shall be considered the Contractor's Certification that the bid is based upon equipment and /or materials that meet or exceed the standards set forth by specification or equipment and/or materials identification. Should a Contractor's product be determined not equal to that specified, the Contractor shall be required to provide/install a product acceptable as equal by LMHA at no additional cost to LMHA.
- 8. During investigation of the work to be done, should the Contractor believe there is material containing asbestos, they shall immediately notify LMHA Management, otherwise, it shall be the Contractor's responsibility to inspect, test, remove and provide for the proper disposal of any asbestos containing material.
- 9. Special Conditions
 - During Construction, call Kabil Associates, Inc., at 614-899-6707, or the LMHA Planning and Development staff if you have questions. The LMHA contact for this project is <u>Lauren Ault, LMHA Public Housing</u> <u>Supervisor at 740-349-8069 Ext. 227.</u>
 - b) In submitting their bid, it will be assumed that the Contractor has visited the site and is familiar with the conditions as they may exist, and the modifications that may be necessary to provide a complete and professional job;
 - c) LMHA must be notified forty-eight hours prior to starting any work at the construction site.

- d) Contractor will be responsible for any and all damages done to LMHA and /or resident property and at no additional expense to LMHA;
- e) The intent of these specifications is to accomplish a complete installation, ready for operation. Any minor items required for installations shall be considered in the bid amount, whether or not it is mentioned in the specifications.

10. Contract Period

a) Upon issuance of a contract from LMHA, the Contractor shall supply a work start date within 10 (ten) working days. A start date and completion date will be negotiated and a Notice to Proceed will be issued stating those dates. If an extension of time is necessary, a request in writing must be submitted to LMHA. Failure to comply may result in cancellation of the purchase order and disablement from future bidding. The Contractor must notify LMHA, in writing, upon determination of any delay in material delivery.

11. Security: Contractor's Liability for Vandalism

- a) The Contractor shall be responsible, at the Contractor's cost and expense, for the security and protection of that portion of the sites, building and/or units under the Contractor's control, and for the repair and replacement of the work until that portion of the building is accepted as completed by LMHA. The Contractor shall take all measures necessary to provide such security.
- b) The Contractor shall be liable for and shall promptly repair or otherwise remedy any and all damages to said portion of the building or site and of the accepted construction work caused by vandalism up to \$5,000.00 per incident. The Contractor shall indemnify and hold LMHA harmless from and against all damages, liabilities, costs and expenses, including, without limitation, reasonable attorney fees, which may be imposed upon or incurred by LMHA as a result of the Contractor's failure to comply with the requirements of this section.

12. Qualifying Contractors and Sub-contractors

- The Contractor and/or Sub-contractor must establish their qualifications with LMHA to do this type of work. Qualifications may be established by:
 - 1) Pre-Construction work;
 - 2) Providing a recommendation from the supplier of the products;
 - 3) Providing a list of 5 jobs (minimum) of like work with names and addresses that can be used as references:
 - 4) Demonstrating to LMHA the capability to do the work. The Contractor will have a minimum of five years experience in doing similar work.
- b) The Contractor will be responsible for all work performed by the Subcontractors.

13. Required Inspections by LMHA

a) Call <u>Lauren Ault, LMHA Public Housing Supervisor at 740-349-8069</u> <u>Ext. 227.</u>to:

- 1) Inform LMHA when the job is actually going to start and to schedule the first inspection;
- 2) Inspection at random or when problems arise;
- Final Inspection.
- b) Kabil Associates, Inc. will assist LMHA during inspections.

14. Warranties and Guarantees

a) General: The warranty and guarantee provisions of the General Conditions apply to all work of the contract, including but not limited to

the following specific categories related to individual units of work specified in various sections of these specifications:

- 1) Special Project Warranty (Guarantee): A warranty specifically written and signed by the Contractor for a defined portion of the work, and, where required, countersigned by sub-contractor, installer, manufacturer, or other entity engaged by the Contractor.
- Specified Product Warranty: A warranty which is required by the contract documents, to be provided for a manufactured product incorporated in the Work, regardless of whether manufacturer has published a similar warranty without regard for specific incorporation into the work, or has written and executed a special project warranty as a direct result of contract document requirements.
- 3) Coincidental Product Warranty: A warranty which is not specifically required by the Contract Documents (other than as specified in this Section); but which is available on a product incorporated into the work, by virtue of the fact that the manufacturer of the product has published a warranty in connection with purchases and users of the product without regard for specific applications except as otherwise limited by terms of the warranty.
- 15. Buy American: Section 1605. Use of American Iron, Steel, and Manufactured Goods.
 - a) None of the funds appropriated or otherwise made available by this Act may be used for a project for the construction, alteration, maintenance, or repair of a public building or public work unless all of the iron, steel, and manufactured goods used in the project are produced in the United States.

Subsection (a) shall not apply in any case or category of cases in which the head of the Federal department or agency involved finds that:

- 1.2 Applying subsection (a) would be inconsistent with the public interest;
- 1.3 Iron, steel, and the relevant manufactured goods are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- 1.4 Inclusion of iron, steel, and manufactured goods produced in the United States will increase the cost of the overall project by more than 25 percent.

PART 2 If the head of a Federal department or agency determines that it is necessary to waive the application of subsection (a) based on a finding under subsection (b), the head of the department or agency shall publish in the Federal Register a detailed written justification as to why the provision is being waived.

PART 3 This section shall be applied in a manner consistent with United States obligations under international agreements.

- 8.2 DELIVERY, HANDLING, STORAGE, AND PROTECTION
 - A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.

8.3 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for manufacturers not named.

8.4 SUBSTITUTIONS

- A. Requests for Substitutions must be received a minimum of 10 days prior to the Bid Date. Approved substitutions will be identified by Addenda.
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.

PART 9 - EXECUTION REQUIREMENTS

9.1 CLOSEOUT PROCEDURES

- A. Submit written certification Contract Documents have been reviewed, Work has been inspected, and Work is complete in accordance with Contract Documents and ready for Architect/Engineer's inspection.
 - 1. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - a) Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - b) Advise Owner of pending insurance changeover requirements.
 - c) Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - d) Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - e) Prepare and submit Project Record Documents and operation and maintenance manuals.
 - f) Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - g) Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - h) Complete startup testing of systems.
 - i) Submit test/adjust/balance records.
 - j) Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - k) Advise Owner of changeover in heat and other utilities.
 - I) Submit changeover information related to Owner's occupancy, use,

operation, and maintenance.

- m) Complete final cleaning requirements, including touchup painting.
- n) Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- 2. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - a) Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - b) Results of completed inspection will form the basis of requirements for Final Completion.

B. FINAL COMPLETION

- Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - a) Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
 - b) Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - c) Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - d) Submit pest-control final inspection report and warranty.
 - e) Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - a) Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

9.2 FINAL CLEANING

- Clean all interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.
- B. Clean debris from site.
- C. Clean or Replace filters of operating equipment.
- D. Remove waste and surplus materials, rubbish, and construction facilities from site.

9.3 DEMONSTRATION AND INSTRUCTIONS

A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of final review.

9.4 TESTING, ADJUSTING, AND BALANCING

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

9.5 PROTECTING INSTALLED CONSTRUCTION

- A. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- B. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

9.6 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of Contract Documents to be utilized for record documents.
- B. Record actual revisions to the Work. Record information concurrent with construction progress.
- Specifications: Legibly mark and record at each Product section description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Submit documents to Architect/Engineer 15 days prior to request for Final Inspection.

9.7 OPERATION AND MAINTENANCE DATA

- A. Submit one set prior to final inspection, bound in 8-1/2 x 11 inch text pages, slant "D" ring binders with durable plastic covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.
- C. Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles legibly printed under reinforced laminated plastic tabs.
- D. Contents Tabbed as follows:
 - 1. Part 1: Contractor's Warranty
 - 2. Part 2: Signed off permits
 - 3. Part 3: Project documents and certificates arranged by Specification Number.
- E. Upon approval of Manual complete two additional copies. Submit at least 15 days prior to Final Inspection.

9.8 SPARE PARTS AND MAINTENANCE MATERIALS

A. Provide Products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.

B. Deliver to Project site and place in location as directed by Owner; obtain receipt for acceptance prior to final payment.

9.9 WARRANTIES

- A. Provide notarized copies.
- B. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- C. Submit prior to final Application for Payment.

END OF SECTION

SECTION 02 41 19 SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolishing designated building components, equipment and fixtures.
 - 2. Cutting and alterations for completion of the Work.
 - 3. Protecting items designated to remain.
 - 4. Removing demolished materials.

1.2 SUBMITTALS

- A. Demolition Schedule: Indicate overall schedule and interruptions required for utility and building services.
- B. Shop Drawings:
 - 1. Indicate demolition and removal sequence.
 - 2. Indicate location and construction of temporary work.

1.3 CLOSEOUT SUBMITTALS

- A. Section 01 00 00 Execution and Closeout Requirements: Requirements for submittals.
- B. Operation and Maintenance Data: Submit description of system, inspection data, and parts lists.

1.4 QUALITY ASSURANCE

- A. Conform to OBC for demolition work, dust control, products requiring electrical disconnection, and re-connection.
- B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.

1.5 PRE-INSTALLATION MEETINGS

A. Convene minimum one week prior to commencing work of this section.

1.6 SCHEDULING

- A. Contractor to have access to (10) ten window units per day. Existing units must be removed and new units installed within the same working day.
- B. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation and residents activities in adjoining buildings.
- C. Perform all work:

Selective Demolition 02 41 19 - 1

1. Between hours of 8 AM and 6 PM Monday through Friday.

1.7 PROJECT CONDITIONS

- A. Conduct work to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.
- C. If materials suspected of containing hazardous materials are encountered and not identified in the construction documents, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.
- D. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Erect, and maintain temporary barriers and security devices including warning signs and lights, and similar measures, for protection of the public, Owner, and existing
 - improvements indicated to remain.
- B. Erect and maintain weatherproof closures for exterior openings.
- C. Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to Owner.

3.2 DEMOLITION

- A. Conduct demolition to minimize interference with adjacent and occupied buildings.
- B. Maintain protected egress from and access to adjacent existing buildings at all times.
- C. Do not close or obstruct roadways or sidewalks without permits.
- D. Demolish in orderly and careful manner. Protect existing improvements.
- F. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- G. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- H. Remove temporary Work.

END OF SECTION

Selective Demolition 02 41 19 - 2

SECTION 06 10 00 ROUGH CARPENTRY

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. Section includes blocking in window frames.
- 1.2 SUBMITTALS
- 1.3 QUALITY ASSURANCE
 - A. Perform Work in accordance with the following agencies:
 - 1. Lumber Grading Agency: Certified by NIST PS 20.
 - 2. Plywood Grading Agency: Certified by APA/The Engineered Wood Association.
 - B. Perform Work in accordance with Ohio Building Code.

PART 2 - PRODUCTS

- 2.1 LUMBER MATERIALS
 - A. Lumber Grading Rules: SPIB, ASLS.
 - B. Grade: Construction.
 - C. Window Blocking: AWPA C2 Lumber, Stress Group D, spruce, pine, and fir species, and 19 percent maximum moisture content, pressure preservative treated.
- 2.2 ACCESSORIES
 - A. Fasteners: Galvanized steel for exterior, high humidity, and treated wood locations, plain finish elsewhere.
 - B. Die Stamped Connectors: galvanized steel, as applicable

PART 3 - EXECUTION

- 3.1 BLOCKING
 - A. Install wood blocking around all window units. Place members level and plumb.

END OF SECTION

Rough Carpentry 06 10 00 - 1

SECTION 06 20 00 FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes finish carpentry items, other than shop prefabricated casework; hardware and attachment accessories.

1.2 SUBMITTALS

A. Shop Drawings: Indicate materials, component profiles and fastening methods.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with AWI Quality Standards, Custom Grade.
- B. Surface Burning Characteristics: Maximum 25/450 75/450 200/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

PART 2 - PRODUCTS

2.2 INTERIOR COMPONENTS

A. Softwood lumber and moldings for painted finish. Graded Prime Finish, maximum moisture content of 6 percent.

2.3 ACCESSORIES

- A. Fasteners: Size and type to suit application; stainless steel for exterior, high humidity and treated wood locations, plain finish elsewhere.
- B. Contact Adhesives: Water Base type.
- C. Wall Adhesive: Cartridge type, compatible with wall substrate, capable of achieving durable bond.
- D. Primer: Alkyd primer sealer type.

2.4 FABRICATION

- A. Fabricate to AWI Custom standards.
- B. Seal and paint exposed to view surfaces.
- C. Seal internal surfaces and semi-concealed surfaces.
- D. Seal surfaces in contact with cementitious materials.

Finish Carpentry 06 20 00 - 1

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify field conditions are acceptable and are ready to receive work.

3.2 PREPARATION

A. Seal surfaces of items or assemblies in contact with cementitious materials, before installation.

3.3 INSTALLATION

- A. Interior Trim
 - 1. Install work in accordance with AWI Custom quality standard.
 - 2. Set and secure materials and components in place, plumb and level.
 - 3. Install trim by nails, countersink and fill.
 - 4. Site Applied Wood Treatment:
 - a. Brush apply one coat of preservative treatment on wood in contact with cementitious materials. Treat site-sawn cuts.
 - b. Allow preservative to dry prior to erecting members.
 - 5. Preparation For Finish:
 - a. Sand work smooth and set exposed fasteners. Apply wood filler in exposed fastener indentations.
 - b. Caulk edges.
 - c. Site Finishing: Refer to Section 09 90 00.

END OF SECTION

Finish Carpentry 06 20 00 - 2

SECTION 07 21 00 THERMAL INSULATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Batt and Roll Insulation.

1.2 REFERENCES

- A. ASTM C 518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
- B. ASTM C 553 Standard Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications.
- ASTM C 764 Standard. Specification for Mineral Fiber. Loose-Fill Thermal Insulation.
- D. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- E. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials.
- F. ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Materials.
- G. Federal Specification HH-I-521F: Insulation Blankets, Thermal (Mineral Fiber, For Ambient Temperatures).
- H. National Fire Protection Association (NFPA) Life Safety Code
- I. Underwriters Laboratories (UL) UL 2079 Standard test method for fire resistance of Building Joint Systems.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - Installation methods.
- C. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer with a minimum of ten years experience manufacturing products in this section shall provide all products listed.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging bearing the brand

Thermal Insulation 07 21 00 - 1

name and manufacturer's identification until ready for installation.

- B. Storage: Store materials in dry locations with adequate ventilation, free from water, and in such a manner to permit easy access for inspection and handling.
- C. Handling: Handle materials to avoid damage.

1.6 SEQUENCING

- A. Coordinate with the installation of blocking and windows specified in Section 06 10 00 and Section 08 52 00 and Section 08 56 00..
- B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.7 PROJECT CONDITIONS

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

PART 2-PRODUCTS

2.1 MANUFACTURERS

- A. CertainTeed Corp., Insulation Group
- B. Owens-Corning Fiberglass Corporation.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 01 016.

2.2 APPLICATIONS

- A. Exterior Stud Walls: Batt type.
 - Vapor Retarder: Kraft facing.

2.3 BATT AND ROLL INSULATION

- A. Thermal Insulation, Friction Fit: Certainteed SpeedyR Tabless Batts. Fiber glass building insulation for friction fit in walls. Complies with ASTM C 665; preformed glass fiber batt insulation:
 - 1. Facing: ASTM C 665 Type II, Class C, Category 1, faced on one side with Kraft paper providing a vapor barrier of 1.0 or less.
 - a. Thermal Resistance: R of 13 (RSI 2.3).
 - 1) Thickness: 3-12 inches (89 mm).
 - 2) Width: 15-14 inches by 93 inches (387.35 mm by 2362.20 mm).

PART 3-EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

Thermal Insulation 07 21 00 - 2

- B. Verify that all exterior and interior wall, partition, and floor/ceiling assembly construction has been completed to the point where the insulation may correctly be installed.
- C. Verify that mechanical and electrical services in ceilings, walls and floors have been installed and tested and, if appropriate, verify that adjacent materials are dry and ready to receive insulation.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install in exterior spaces without gaps or voids. Do not compress insulation.
- C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.
- D. Install insulation with vapor barrier installed facing the warm side. Seal or tape joints as required.

3.4 PROTECTION

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

END OF SECTION

Thermal Insulation 07 21 00 - 3

SECTION 07 62 00 SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes wall flashings and counter flashings, reglets and accessories.

1.2 REFERENCES

- A. American Architectural Manufacturers Association:
 - AAMA 2603 Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
 - AAMA 2604 Voluntary specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels
 - 3. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- B. American Society for Testing and Materials:
 - ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- C. Sheet Metal Flashings: Conform to the criteria of SMACNA "Architectural Sheet Metal Manual".

1.3 SUBMITTALS

A. Product Data: Submit data on manufactured components metal types, finishes, and characteristics.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- B. Prevent contact with materials causing discoloration or staining.

PART 2 - PRODUCTS

2.1 SHEET METAL FLASHING AND TRIM

- A. Manufacturers:
 - 1. Alcoa
 - 2. Certainteed
 - 3. Cheney Flashing Co.
 - 4 Hickman Flashing Co.

- B. Pre-Finished Aluminum Sheet: 3105 aluminum, manufacturer's standard alloy and temper for specified finish; 0.024 inch thick; plain finish shop pre-coated with PVC coating; color as selected from manufacturer's standard colors.
- C. Aluminum Trim Coil: 24 gauge aluminum with 3.5 mills PVC coating
- D. Pre-finished galvanized steel sheet: ASTM A924/A924M, Grade A, or ASTM A653/A653M, G60 zinc coating; 24 gage core steel, shop pre-coated with polyvinylidene fluoride coating, color as selected to match mounting surface.

2.2 ACCESSORIES

- A. Fasteners: Same material and finish as flashing metal.
- B. Underlayment: ASTM D226, organic roofing felt, Type I, No. 15.
- C. Slip Sheet: Rosin sized building paper.
- D. Primer: Zinc molybdate type.
- E. Protective Backing Paint: Zinc molybdate alkyd.
- F. Sealant: Type E butyl.
- G. Sealant: Polyurethane.
 - 1. Color match sealant to adjacent surfaces.
- H. Plastic Cement: ASTM D4586, Type I.

2.3 FABRICATION

- A. Form sections shape indicated on Drawings, accurate in size, square, and free from distortion or defects.
- Fabricate cleats of same material as sheet metal, interlocking with sheet.
- C. Form pieces in longest possible lengths.
- D. Hem exposed edges on underside 1/2 inch; miter and seam corners.
- E. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- F. Seal metal joints.

2.4 FACTORY FINISHING

- A. Acrylic coating: Two coat process with primer and 3.25 baked PVC coating.
- B. Washcoat: Finish concealed side of metal sheets with washcoat compatible with finish system, as recommended by finish system manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Paint concealed metal surfaces with protective backing paint to minimum dry film thickness of 15 mil.

3.2 INSTALLATION

A. Flashings at applicable exterior joints. Install to suit application.

END OF SECTION

SECTION 07 90 00 JOINT PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes sealants and joint backing.

1.2 SUBMITTALS

A. Product Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

1.3 ENVIRONMENTAL REQUIREMENTS

A. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Exterior Applicator: <u>Caulking Contracting Company</u> specializing in performing Work of this section with minimum five years documented experience, and approved by manufacturer and the architect.
- C. Interior Applicator: Company specializing in performing Work of this section with minimum three years documented experience.

1.5 WARRANTY

- A. When warranties are required, verify with Owner's counsel that special warranties stated in this Article are not less than remedies available to Owner under prevailing local laws. Coordinate with Division 01 Section "Product Requirements."
- B. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- C. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: 50 years from date of Substantial Completion.

- D. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:
 - Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
 - 2 Disintegration of joint substrates from natural causes exceeding design specifications.
 - Mechanical damage caused by individuals, tools, or other outside agents.
 - 4 Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 JOINT SEALERS

- A. Manufacturers:
 - 1. Tremco
 - Pecora
 - Approved equal.
- B. Product Description:
 - 1. Polyurethane Sealant: ASTM C834, Grade NS, Class 25, Single component , paintable sealant.
 - a. Applications: Joints between opening frames and other materials, other joints for which no other sealant is indicated.
 - b. Trowelable application around floor registers and plumbing pipes, etc.
 - c. Color: Standard colors matching finished surfaces
 - d. Manufacturer to provide 50 year performance warranties of material.
 - 1. Tremco: Dymonic General Purpose Polyurethane Sealant
 - 2. Pecora: Dyna Troll I-XL General Purpose Polyurethane Sealant
 - 2. Two part closed cell polyurethane expandable insulation
 - a. Applications: Sealing open floor slab at bathroom drains
 - b. CLR Handifoam or equal.
 - 3. Multi Polymer Sealant: ASTM C920, Grade NS, Class 25, Single component, Type S, NS, NT, paintable sealant
 - a. Applications: Joints in Fiber Cement Siding, Trim, and Fascias.
 - b. Color: Painted to match adjacent finishes.
 - c. Manufacturer to provide 50 year performance warranties of material.
 - 4. General Purpose Interior Sealant: Elastomeric latex; ASTM C920, Type S, Grade NS, Class 25. Use NT, G, A and M, Single Component, Paintable
 - a. Applications: Use for interior wall and ceiling control joints, joints between door and window frames and wall surfaces, and other interior joints for which no other type of sealant is indicated.
 - b. Color: Standard colors matching finished surfaces.
 - c. Manufacturer to provide 50 year performance warranties of material.

- 5. Butyl Sealant: ASTM C920, Grade NS, Class 12-1/2, Use NT; single component, solvent release, non-skinning, non-sagging.
 - a. Color: Black.
 - b. Movement Capability: Plus and minus 12-1/2 percent.
 - c. Service Temperature Range: -13 to 180 degrees F.
 - d. Shore A Hardness Range: 10 to 30.
 - Primer Sealer: Formulated to consolidate surface fibers and dust.
 - 2 Bathtub/Tile Sealant: silicone; ASTM C920, Uses M and A; single component, mildew resistant.
 - a. Applications: Use for joints between plumbing fixtures and floor and wall surfaces, and joints between kitchen and bathroom counter tops and wall surfaces.

2.2 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify substrate surfaces and joint openings are ready to receive work.
- B. Verify joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter impairing adhesion of sealant.
- B. Clean and prime joints.
- C. Perform preparation in accordance with ASTM C1193.

3.3 INSTALLATION

- A. Perform installation in accordance with ASTM C1193.
- B. Mockups: Build mockups incorporating sealant joints to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Mockup to be reviewed by Architect and Owner's representative.

- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- D. Install bond breaker where joint backing is not used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- G. Tool joints concave.

3.4 SCHEDULE

- A. Exterior Joints for which No Other Sealant Type is Indicated: Type Polyurethane.
- B. Interior Joints for which No Other Sealant Type is Indicated: Interior Elastomeric Sealant.
- C. Door thresholds and roofing applications: Butyl.

END OF SECTION

SECTION 08 52 00 ALUMINUM WINDOWS

PART 1-GENERAL

1.1 SECTION INCLUDES

A. Aluminum double hung windows.

1.2 RELATED SECTIONS

- A. Section 07 62 00 Sheet Metal Flashing and Trim.
- B. Section 07 90 00 Joint Protection.
- C. Section 08 80 00 Glass and Glazing.

1.3 REFERENCES

- A. AAMA/NWWDA 101/I.S.2 Voluntary Specifications for Aluminum, Vinyl (PVC), and Wood Windows and Glass Doors.
- B. AAMA 2603 Voluntary Specification for Pigmented Organic coatings on Aluminum Extrusions and Panels.
- C. AAMA 2605 Voluntary Specification for Superior Performance Organic coatings on Architectural Aluminum Extrusions and Panels.
- D. AAMA 1503.1 Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors, and Glazed Wall Sections.
- E. ASTM E90 Standard Test Methods for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
- F. ASTM E 283 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
- G. ASTM E 330 Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- H. ASTM E 547 Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
- ASTM F 588 Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact.
- J. ASTM E1332 Standard Classification for Determination of Outdoor-Indoor Transmission Class.

1.4 SYSTEM DESCRIPTION

- A. Design Requirements:
 - 1. Double hung units; thermally broken aluminum dual sash units conforming to, or exceeding, H-DW-HC50 per AAMA/NWWDA 101/I.S.2.

- B. Performance Requirements (Operable Units):
 - Air Infiltration: Test window in accordance with ASTM E 283, primary sash closed and locked, secondary sash full open position; meet the following performance requirements:
 - a. Windows with Less than 18 Feet (5.486 m) of Operable Crack Perimeter: Not more than 2.8 cubic feet per minute (1.32 L/second) total when tested in a static pressure drop of 1.57 pounds per square foot (7.66 kg/square m), equivalent to 25 miles per hour (40.2 km/hour) wind velocity, or 6.3 cubic feet per minute (2.97 L/second) total when tested at 6.24 pounds per square foot (30.47 kg/square m), equivalent to 50 miles per hour (80.5 km/hour) wind velocity.
 - b. Windows with 18 Feet (5.486 m) or More of Operable Crack Perimeter: Not more than 0.10 cubic feet per minute (0.47 L/second) per square foot of window area at a static pressure drop of 1.57 pounds per square foot (7.66 kg/square m), or 0.20 cubic feet per minute (0.09 L/second) total when tested at 6.24 pounds per square foot (30.47 kg/square m).
 - Water Resistance: Test window in accordance with ASTM E 547, in the winter and summer mode with screen removed, as follows:
 - Primary sash closed and locked, secondary sash full open position; subject window to pressure drop of 8.00 pounds per square foot (39.1 kg/square m).
 - b. Both sets of sash closed and latched; subject window to minimum pressure drop of 12.00 pounds per square foot (58.6 kg/square m).
 - 3. Uniform Load Structure Test: Test window in accordance with ASTM E 330, primary sash closed, secondary sash full open position.
 - a. Double Hung Units: Static air pressure difference of 75.0 pounds per square foot (366.2 kg/square m), high pressure applied first on one side of unit and then on the other side.
 - Static air pressure difference of 1.5 times design wind class used in AAMA/NWWDA 101/I.S.2.
 - c. At Conclusion of Test: No glass breakage; no permanent damage to fasteners, hardware parts, support arms, or actuating mechanisms; no other damage which would cause window to be inoperable; permanent deformation of any frame, sash, or ventilator member not exceeding 0.04 percent of its span.
 - 4. Thermal Performance ("U" Value): Test window of exactly 4 by 6 foot (1.219 by 1.829 m) size in accordance with AAMA 1503.1.
 - a. Double Hung Units: Thermal transmittance due to conductance not exceeding 0.56.
 - 5. Condensation Resistance Factor (CRF): Test window of exactly 4 by 6 foot (1.219 by 1.829 m) size in accordance with AAMA 1503.1.
 - a. Double Hung Units: CRF not less than 61.
 - 6. Forced Entry Resistance: ASTM F 588.
 - Double Hung Windows: Type A, Grade 40.
 - 7. Sound Attenuation: Test window in accordance with ASTM E90 and ASTM 1332. STC shall not be less than 44; OITC shall not be less than 30.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 05 01.
- B. Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.

- 2. Storage and handling requirements and recommendations.
- Installation methods.
- C. Shop Drawings: Show dimensions of aluminum windows, elevations, details of all window sections, anchorage and installation details, hardware, and interface with other products.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum ten (10) years experience producing aluminum windows.
- B. Installer Qualifications: Use installers that are experienced and skilled in the installation of aluminum windows of the type specified.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Install in areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.

1.7 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 products in manufacturer's unopened packaging until ready for installation.

1.8 WARRANTY

- A. Provide written 10-year warranty signed by manufacturer that products are free of material or manufacturing defects. Defects are defined to include uncontrolled leakage of water, corner or joint failure, and abnormal aging or deterioration.
- B. Include repair or replacement of defective units for 10 years from date of completion.

PART 2-PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: St. Cloud Window, Inc.
- B. Substitutions: Marvin Windows
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 08 04.

2.2 WINDOWS

- A. Provide SCW 900 Series aluminum windows in the configurations indicated on the Drawings and as follows:
 - 1. Operating Sash:
 - a. Double Hung Windows.
 - Fixed Frames:
 - a. Rectangle.

2.3 MATERIALS

- A. Frame, Sash, and Screen Members: Extruded aluminum alloy 6063-T6; 0.062 inch (1.57 mm) minimum wall thickness.
- B. Thermal Barrier: Complete metal to metal separation between inner and outer frame members; not less than 1/4 inch (6.3 mm) wide. Poured and debridged polyurethane thermal barrier is not acceptable.
- C. Weatherstripping: 100 percent woven pile with Mylar center fins.
- D. Screens: Tubular aluminum frames; screen cloth securely held in place by means of reusable vinyl splines.
 - 1. Screen Cloth: 18 by 16 fiberglass.
- E. Hardware: Spring-loaded metal plunger type or spring-loaded pinch type. Lock to engage automatically as window is closed; locate as follows:
 - 1. Double Hung Windows: Interior sill rails.
- F. Double Hung Window Balances: Block and Tackle zinc die cast metal with nylon rollers, capable of providing positive lifting force through full range of sash travel and holding sash stationary at any open position without the use of auxiliary frictional devices or holding clips; overhead balances, exposed balance cables, or fasteners are not acceptable. Use a minimum of 2 balances per sash.
- G. Sash Rollers: Delrin lubricated with "Moly B" dry lubricant, operating on stainless steel axles.

2.4 GLAZING SCHEDULE

- A. Operable Windows:
 - 1. Interior Sash: 1/8 inch (6.3 mm) clear glass with "hard coat" Low-E coating.
 - 2. Exterior Sash: 1/8 inch (6.3 mm) clear glass.
 - 3. Glazing: 3/4 inch total thickness.

2.5 FABRICATION

A. General:

- Fabricate windows as two separate frames permanently interlocked by a rigid thermal barrier.
- 2. Operable Frame and Sash Joints: Butt type secured by means of threadcutting type screws anchored into screw ports, ports integral parts of frame members.
- 3. Fixed Frame Joints: Miter or butt type secured by means of thread-cutting type screws anchored into screw ports, ports integral parts of frame members.

- 4. Corners: Joined neatly in a manner to provide watertight connections. All frame corners to be fitted with a neoprene gasket.
- 5. Deburr and make smooth all sharp milled edges and corners.
- 6. Internally seal sash corners.
- 7. Fabricate meeting rails of tubular construction, double weatherstripped and interlocked when in closed position.
- 8. Fabricate window units in a manner to facilitate replacement of worn or damaged parts, hardware, or weatherstripping.
- B. Sill Frames: Tubular sections, formed from single extrusions (2-pieces joined to form a tube are not acceptable), 5-degree minimum slope with a closed-weep system (including aluminum weep flaps) to prevent accumulation of water in sill and intrusion of insects.
- C. Thermal Barrier: Interlock both halves of frame, securing them together without inhibiting expansion and contraction of either part; apply bead of sealant to complete perimeter of window to seal joints between frame and thermal barrier.
- D. Weatherstripping: Double weatherstripped all sash at perimeter of master frame. All weatherstrip to be contained in profiles extruded into the sash pockets of the master frame to prevent movement and excessive wear. Except at meeting stiles, weatherstrip contained in sash rails shall not be accepted. Secure weatherstripping to prevent movement.
- E. Double Hung Windows:
 - 1. Fully balance each sash with a minimum of two balances.
 - 2. Locate balances inside jamb sash; make removable with the use of take out clips for ease of replacement without the use of special tools.

2.6 FINISH

- A. Finish exposed surfaces of aluminum windows as follows:
 - Finish exterior exposed surfaces of aluminum windows, panning, and trim as follows:
 - Organic Paint Coating: Baked Polyester Enamel or Acrylic coating in a color selected by the architect; meet or exceed AAMA 2603 specifications for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
 - 2. Finish interior exposed surfaces of aluminum windows, panning, and trim as follows:
 - Organic Paint Coating: Baked Polyester Enamel or Acrylic coating in a color selected by the architect; meet or exceed AAMA 2603 specifications for Pigmented Organic Coatings on Aluminum Extrusions and Panels.

PART 3-EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until openings have been properly prepared.
- B. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the project conditions.

3.3 INSTALLATION

- A. Install windows and related components in accordance with approved shop drawings and manufacturer's requirements.
- B. Erect materials plumb, level, and true relative to the building structure, maximum variation from plumb and level not exceeding 1/8 inch in 10 feet (3 mm in 3 m).
- C. Install approved insulation materials in the frame cavity on the interior portion of the window frame, area adjacent to exterior of window frame remaining uninsulated.
 - 1. Exercise caution to avoid overlapping insulation materials across thermal barrier connectors.
 - 2. Exercise caution to avoid bridging of the two separated frame members.
- D. Apply calking at all points between masonry and aluminum outer frame; apply in a manner to ensure airtight and watertight continuous perimeter seal so as to prohibit seepage of cold air into the insulated cavity.

3.4 FIELD QUALITY CONTROL

- A. The Architect retains the option to pay for a certified testing laboratory to conduct on-site tests for air infiltration and water infiltration as specified in "Performance Requirements" above.
- B. The Architect will select two or more windows to be tested.
- C. Window manufacturer shall repair or replace window units not meeting specified performance requirements and the cost of re-testing an equal quantity of windows shall be borne by Window Manufacturer.

3.5 CLEANING

- A. After installation, remove all sealants, calking, and other misplaced materials from all surfaces, including adjacent work.
- B. Thoroughly clean window frames, casings, and glass using materials and methods recommended by the window and glass manufacturer that do not cause defacement of work.

3.6 PROTECTION

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

END OF SECTION

SECTION 08 56 00 VINYL WINDOWS

PART 1-GENERAL

1.1 SECTION INCLUDES

- A. Vinyl Double-Hung Windows with Hardware.
- B. Accessories.
- C. Vinyl Double-Hung Windows shall be in compliance with UFAS requirements.

1.2 REFERENCES

- A. ASTM C 1036 Standard Specification for Flat Glass.
- B. ASTM C 1048 Standard Specification for Heat-Treated Flat Glass Kind HS, Kind FT Coated and Uncoated Glass.
- C. ASTM E 283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.
- D. ASTM E 330 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- E. ASTM E 547 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Cyclic Static Air Pressure Difference.
- F. ASTM E773 Test Method for Seal Durability of Sealed Insulating Glass Units.
- G. ASTM E774 Specification for Seal Durability of Sealed Insulating Glass Units.
- H. ASTM E1887 Standard Test Method for Fog Determination.
- I. ASTM F 588 Standard Test Method for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact.
- J. ANSI/AAMA/NWWDA 101/I.S. 2-97 Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.
- K. NFRC 100-97 Procedure for Determining Fenestration Product Thermal Properties.
- L. Insulating Glass Certification Council (IGCC).
- M. Safety glass tested in accordance with ANSI Z97.1.
- N. ANSI-SMA-1004 Aluminum Tubular Framing Screens for Windows.
- O. FS L-S-125B Screen, Insect Non-Metallic.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 05 01.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - Installation methods.
- C. Shop Drawings: Indicate opening dimensions, framed opening tolerances, affected related work; and installation requirements.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing residential and commercial wood windows with minimum ten years documented experience.
- B. Installer Qualifications: Company specializing in performing residential and commercial installation of wood windows with minimum five years documented experience.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store units in a dry location, off the ground, under cover, protected from weather and construction activities.

1.6 PROJECT CONDITIONS

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

1.7 MANUFACTURERS

- A. Acceptable Manufacturer:
 - Pella: Vinyl Double Hung
 - 2. Jeldwen: Premium Vinyl Series Double Hung
 - 3. Requests for substitutions will be considered in accordance with provisions of Section 01 08 04.

1.8 VINYL WINDOWS

A. Vinyl Double-Hung Windows

1. Performance:

- a. ANSI/AAMA/NWWDA 101/I.S. 2-97:
 - 1) Rating: H-R20; maximum jamb size 47-1/2 inches by 83-1/2 inches (1207 mm by 2121 mm) jamb to jamb twin.
 - 2) Rating: H-R50; 35-1/2 inches by 59-1/2 inches (902 mm by 1511 mm) with upgrades twin.
- b. Air infiltration shall not exceed 0.15 cfm/ft2 at 1.57 psf (75 Pa) when tested according to ASTM E 283.
- c. No water penetration when tested at the following pressure according to ASTM E 547:
 - 1) H-R20 3.75 psf (180 Pa).
 - 2) H-R50 7.52 psf (360 Pa).
- d. Wind load without damage when tested according to ASTM E 330:
 - 1) H-R20 30.0 psf (1436 Pa).
 - 2) H-R50 82.5 psf (3950 Pa).
- e. Pass a forced entry resistance test of at least Level 10 to meet requirements set forth in ASTM F 588.

2. Frame:

- a. Frame members .065-inch (1.65 mm) extruded unplasticized polyvinylchloride (uPVC).
- b. Frame corners shall be fusion welded and cleaned.
- c. Frame thickness: 3-1/4 inch (83 mm) overall.
- d. Frame shall have standard jamb depth of 2 inch (51 mm) with integral nailing fin, brickmould and j-channel.
- e. Aluminum Mull Reinforcement: Provide with mull reinforcement for adjacent windows.

3. Sash:

- Sash members .060-inch (1.5 mm) extruded unplasticized polyvinylchloride (uPVC).
- b. Sash corners shall be fusion welded and cleaned.
- c. thickness: 1-3/8 inch (35 mm) overall.
- d. Continuous vinyl finger pull at top rail of top sash and check rail of lower sash. Finish to match interior sash.
- e. Bottom sash must tilt in from the inside for cleaning purposes without removal of screens.
- f. Aluminum Bottom Sash Reinforcement: Provide with bottom sash reinforcement.

4. Hardware:

- a. Balance System: Self-contained, calibrated block and tackle balance system. Zinc die-cast sash pins disengage sash for easy removal.
- b. Locks: Zinc die-cast hook latch locks with two flush-mounted, nylon tilt latches.
 - 1) Finish:
 - a) Tan.
- 5. Weather Stripping:
 - a. Woven pile weather stripping with Mylar fin applied around full perimeter of sash.
- 6. Screens: Half screen.
 - a. Screen consists of .019 inch (0.5 mm) thick formed aluminum frames with baked-on acrylic coating, injection molded vinyl corner keys.
 - 1) Mesh type/color: 18 x 16 mesh charcoal fiberglass.
 - 2) Mesh type/color: 18 x 16 mesh black aluminum non-glare.
 - 3) Mesh type/color: 20 x 20 mesh vinyl coated, high-visiblity

charcoal fiberglass.

- b. (uPVC).
- c. Sash corners shall be fusion welded and cleaned.
- d. thickness: 2-3/16 inch (56 mm) overall.
- e. Aluminum Bottom Sash Reinforcement: Provide with bottom sash reinforcement.
- f. Provide two (2) additional screens per living unit.

7. Hardware:

- a. Operator shall be hardened steel drive worm, hinged gear arms, factory applied, and located on the jamb of the window:
 - 1) High pressure zinc die-cast case/handles:
 - a) Round handle.
 - b) T-handle.
 - c) Folding crank handle (standard).
 - 2) Corrosive resistant for salt spray environments:
 - a) White.
 - b) Tan.
 - c) Cameo.
- b. Locks: Manual lever. Multipoint sequential lock pulls the sash into a locked position.
 - 1) Finish:
 - a) White.
 - b) Tan.
 - c) Cameo.
- Steel Hinges: Two concealed hinges with stainless steel track, steel support arms, stainless steel reinforcing insert in low-friction sliding shoe.
 - 1) Steel hinges with protective powder coat.
 - 2) Stainless steel hinges.
- 8. Weather Stripping:
 - a. Woven pile weather stripping with Mylar fin applied around full perimeter of sash.
 - b. Compression foam filled vinyl on frames.

9. Screens:

- a. Screen consists of .020 inch (0.5 mm) thick formed aluminum frames with baked-on acrylic coating, injection molded vinyl corner keys.
 - 1) Mesh type/color: 18 x 16 mesh charcoal fiberglass.
 - 2) Mesh type/color: 18 x 16 mesh black aluminum non-glare.
 - 3) Mesh type/color: 20 x 20 mesh vinyl coated, high-visiblity charcoal fiberglass.

1.9 WINDOW MATERIALS

- A. Vinyl Frame Materials:
 - 1. Frame members shall be manufactured from extruded unplasticized polyvinylchloride (uPVC).
 - 2. Frame corners shall be fusion welded and cleaned.
 - 3. Frame extrusion shall be designed to include no less than five individual chambers.
- B. Vinvl Sash Materials:
 - 1. Sash members shall be manufactured from .067-inch extruded unplasticized polyvinylchloride (uPVC).

- 2. Sash corners shall be fusion welded and cleaned.
- Sash extrusion shall be designed to include no less than four individual chambers.
- C. Vinyl Frame and Sash Finish:
 - Color:
 - a. Tan.
- D. Glazing: Select quality complying with ASTM C 1036. Insulating glass IGCC certified to performance level CBA when tested in accordance with ASTM E 2190.
 - 1. Glazing Method:
 - a. Insulated glass consisting of two lites of clear annealed glass.
 - 2. Glass type:
 - a. Low E2 coating: applied to number two surface (available on insulated units only).
 - b. Insulated glass airspace as follows:
 - 1) Argon gas.
 - 3. Glass shall be siliconed at sash exterior to allow reglazing from the interior.
 - 4. Units sealed with a cross-linking hot-melt dual seal system.
- E. Accessories and Trim
 - Drywall Return if required:
 - a. 1/2 inch to 5/8 inch (12.5 mm to 16 mm).
 - b. 3/4 inch to 7/8 inch (19 mm to 22 mm).
 - c. Color to match interior frame.
 - d. Provide shipped loose.
 - 2. Vinyl Jamb Extension:
 - a. Size as required.
 - b. Color to match interior frame.
 - c. Provide shipped loose.
 - d. Vinyl Brick Mould: Color to match interior frame.
 - e. Exterior J-Channel. Color to match interior frame.
 - 3. Retro-Z casing:
 - a. Mitered corners welded into picture frame and applied to unit.
 - b. Color to match exterior frame.
 - 4. Sill extender: Color to match exterior frame.
- F. Windows shall be manufactured in compliance with UFAS requirements.

PART 2 - EXECUTION

2.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

2.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

Vinyl Windows 08 56 00 - 5

2.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install window unit plumb, level and square with no distortion of frame members.
- C. Fill perimeter frame to wall opening cavity with batt insulation. Do not use expansive foam insulation.
- D. Apply approved sealant in accordance with Section 07 09 00 Joint Protection
- E. Do not puncture prefinished exterior surfaces. Refer to installation instructions for complete installation recommendations.

2.4 ADJUSTING AND CLEANING

- A. Adjust operating sash and hardware to provide tight fit at contact points and at the weather stripping for smooth operation.
- B. After installation adjust door units for proper operation, without binding, sticking, or racking.
- C. Remove excess sealant materials and visible labels from glass. Clean glass surfaces promptly after installation.
- D. Initiate and maintain all protection and other precautions required to ensure windows are in acceptable condition at time of substantial completion.

2.5 PROTECTION

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

2.6 SCHEDULES

1. Refer to Window Schedules in the drawings.

END OF SECTION

Vinyl Windows 08 56 00 - 6

SECTION 08 80 00 GLASS AND GLAZING

PART 1 – GENERAL

1.1 WORK INCLUDES

- A. Base Bid:
 - Contractor provide:
 - Glazing exterior windows on which glazing is not included under other sections.
 - All other related accessory items such as fasteners, clips, setting blocks, glazing beads and other items of installation to complete glazing work for the Project.

1.2 RELATED WORK

- A. Specified elsewhere:
 - 1. Division 1 General Requirements.
 - 2. 06 10 00 Rough Carpentry.
 - 3. 06 20 00 Finish Carpentry.
 - 4. 07 90 00 Joint Protection.
 - 5. 08 52 00 Aluminum Windows.

1.3 QUALITY ASSURANCE

- A. Comply with published recommendations of glass product manufacturers and organizations as follows:
 - 1 FGMA Publications: "FGMA Glazing Manual".
 - 2 SIGMA Publications: TM-3000, "Vertical Glazing Guidelines".
- B. Insulating Glass Certification: Provide insulating glass units permanently marked either in spacers or at least on component lite of units with appropriate certification label of one of the following inspecting and testing agencies:
 - 1 Insulating Glass Certification Council (IGCC).
 - 2 Associated Laboratories (ALI).
 - 3 National Certified Testing Laboratories (NCTL).
- C. Single Source Responsibility: Obtain glass from one source for each product indicated:
 - 1 Primary glass of each type and class indicated per ASTM C 1036.
 - 2 Heat-treated glass of each condition indicated per ASTM C 1048.
 - 3 Insulating glass of each construction indicated.
- D. Obtain glazing accessories from one source for each product and installation method indicated.

1.4 SYSTEM PERFORMANCE REQUIREMENTS

- A. General:
 - 1. Provide glazing systems that are produced, fabricated and installed to withstand normal thermal movement, wind loading and impact loading without failure.

- 2. Included in these requirement are loss or glass breakage attributable to the following:
 - a. Defective manufacturer fabrication.
 - b. Installation defects.
 - c. Failure of sealants or gaskets to remain watertight and airtight.
 - d. Deterioration of glazing materials and other defects in glazing installation.

B. Glass Design:

- 1 Glass thicknesses are indicated or, where not indicated, shall be the minimum thickness required for installation.
- 2 Confirm glass thicknesses by analyzing Project loads and in-service conditions.
- C. Provide glass lites for the various size opening in the thicknesses and strengths (annealed or heat-treated) to meet or exceed the following:
 - 1. Minimum nominal glass thickness of lites in exterior opening shall be 1/8 inch.
 - 2. Minimum nominal glass thickness of lites, whether compose of annealed or heat-treated glass, are selected so the worst case probability of failure does not exceed:
 - a. 8 lites per 1000 for lites set vertically or not over 15 degrees off vertical and under wind loading.
 - Determine minimum thickness of monolithic annealed glass according to ASTM E 1300.
 - c. For other than monolithic annealed glass, determine thickness per glass per glass manufacturer's standard method of analysis including applying adjustment factors to ASTM E 1300 base on types of glass.

D. Thermal Movement:

- 1. Design glazing based on normal thermal movement results in ambient and surface temperatures acting of glass, framing members and glazing components for temperature change range as follows:
 - a. 120 degrees F., ambient.
 - b. 180 degrees F., material surfaces.
- 2. Base engineering calculations on actual material surface temperature due to both solar heat gain and nighttime sky heat loss.

1.5 SUBMITTALS

- A. Manufacturer's Data, Glass:
 - 1. Submit 6 copies of manufacturer's specifications and installation instructions for each type of glass required.
 - 2. Include test data substantiating that glass complies with specified requirements.
- B. Manufacturer's Data, Glazing Materials:
 - Submit 6 copies of manufacturer's specifications, and installation instructions for each type of glazing sealant and compound, gasket and associated miscellaneous material.
 - 2 Include manufacturer's published data, or letter of certification, or certified test laboratory report indicating that each material complies with the project specifications and is suitable for the applications shown.

C. Samples, Glass:

- 1 Submit 4-inch minimum square samples of each type of glass specified.
- 2 Insulating glass need not be hermetically sealed but edge construction shall be included.

D. Samples, Glazing Materials:

- Submit 4-inch minimum long samples of each color specified (except black) for each type of glazing sealant or gasket exposed to view.
- 2 Install sample between two strips of material similar to or representative of channel surfaces where sealant or gasket will be used, held apart to represent typical joint widths.

1.6 JOB CONDITIONS

- A. Temperature Conditions: Do not proceed with installation of liquid sealants when temperatures are below or above manufacturer's recommended limitations for installation.
- B. Maintain security of buildings prior to installation of glazing products.

1.7 WARRANTY

- A. Warranties shall be in addition to, and not a limitation of, other rights the owner may have under the Contact Documents.
- B. Provide manufacturer's ten (10) year warranty against seal separation for all insulated glass products used on project.

PART 2 - PRODUCTS

2.1 PRIMARY GLASS PRODUCTS

- A. Primary Glass Standard: Provide primary glass that complies with ASTM C 1036 requirements, including those indicated by reference to type, class, quality, form, finish and pattern, where applicable.
- B. Clear Float Glass:
 - 1 Type I: Transparent glass, flat.
 - 2 Class 1: Clear.
 - 3 Quality: q³ glazing select.

C. Acceptable Manufacturers:

- 1 Guardian Industries Corp.
- 2 LOF Glass
- 3 PPG Industries

2.2 INSULATING GLASS

A. Construct 3/4-inch units of two panes of 1/8-inch laminated glass, unit depth nominal 3/4-inch.

- B. Performance classification per ASTM E774, Class A.
 - 1 Thickness of each panel: 1/8-inch.
 - 2 Thickness of air space: 1/2-inch.
 - 3 Sealing System: Dual seal, primary and secondary sealant of manufacturer's standard materials.
 - 4 Spacer Material: Manufacturer's standard metal.
- C. Minimum performance characteristics:
 - 1 U-factor (summer daytime): 0.58.
 - 2 U-factor (winter nighttime): 0.48.
 - 3 Solar Heat Gain Coefficient (SHGC): 0.51.
 - 4 Visible light transmittance (Vtc): 40 percent.
 - 5 Outdoor reflectance: 8 percent.
- D. Acceptable products:
 - 1 ASG Industries, Inc. Tru-Therm.
 - 2 Libby-Owens-Ford Co. Thermopane.
 - 3 PPG Industries, Inc. Twindow.
 - 4 Globe Amerada Glass Co. GAGC Insulating Glass.
 - 5 Curtain wall and automatic door manufacturer's standard glazing suppliers will be considered acceptable manufacturers after providing written certification of compliance with requirements set forth herein.

2.3 GLAZING SEALANTS/COMPOUNDS

- A. Provide color selected by Architect or designated representative from manufacturer's standard colors.
- B. Provide only compounds that are proven to be fully compatible with surfaces contacted.
- C. Silicone Base Sealant:
 - Silicone base, single component, chemical curing; capable of withstanding movement of up to 50 percent of joint width and satisfactorily applied throughout a temperature range of 40_ to 80_ F. Shore A hardness of maximum 50; nonstaining color; color will be selected by Architect/Engineer from manufacturer's standard colors.
 - 2. Acceptable manufacturers and products:
 - a. General Electric "Silpruf".
 - b. General Electric "Silglaze 2400".
 - c. Woodmont Products "Chem-Caul 1000".
 - d. Dow Corning "790".
 - e. Pecora "863".
 - 3. Refer also to Type S-3 Sealants specified in Section 07920 for silicone sealant products used for field glazing.
- D. Preformed Butyl Rubber Glazing Sealant:
 - Tape or ribbon (coiled on release paper) of polymerized butyl, of mixture of butyl and polyisobutylene, compounded with inert fillers and pigments, solvent based with minimum of 95% solids, with thread of fabric reinforcement, tack-free within 24 hours, paintable, non-staining.

2 Provide combination tape and encased continuos rubber shim, of approximately 50 durometer hardness.

2.6 GLAZING GASKETS

- A. Provide glazing gaskets recommended by manufacturer.
- B. Molded Neoprene Glazing Gaskets:
 - Molded or extruded neoprene gaskets of profile and hardness shown for watertight construction; comply with ASTM D 2000 designation 2BC 415 to 3BC 620, black.
- C. Polyvinyl Chloride Glazing Gaskets:
 - 1. Extruded, flexible PVC gaskets of the profile and hardness shown for watertight construction; comply with ASTM D 2287.
- D. Vinyl Foam Glazing Tape:
 - Closed cell, flexible, self adhesive, non-extruding, polyvinyl chloride foam tape; recommended by manufacturer for exterior, exposed, watertight, installation of glass, with only nominal pressure in the glazing channel, comply with ASTM D 1667.

2.7 MISCELLANEOUS GLAZING MATERIALS

- A. Setting Blocks: Neoprene, 79-90 durometer hardness, with proven compatibility with sealants used.
- B. Spacers: Neoprene 40-50 durometer hardness, with proven compatibility with sealants used.
- C. Compressible Filler Rod: Closed cell or waterproof, jacketed rod stock of synthetic rubber or plastic foam, proven to be compatible with sealants used, flexible and resilient, with 510 psi compression strength for 25% deflection.
- D. Cleaners, Primers and Sealers: Type recommended by sealant or gasket manufacturer.

PART 3 - EXECUTION

3.1 INSPECTION.

- A. Examine the framing and glazing channel surfaces, backing, removal stop design, and the conditions under which the glazing will be performed.
- B. Notify the Architect in writing of all conditions detrimental to the proper and timely completion of the work.
- C. Do not proceed with the glazing until unsatisfactory conditions have been corrected in a manner acceptable to the Architect.

3.2 JOB REQUIREMENTS

- A. Provide secure and airtight installation of each piece of glass.
- B. Each installation shall withstand normal temperature changes, loading, impact loading (for operation doors) without failure of any kind including loss or breakage of glass, failure of sealants or gaskets to remain secure and airtight, deterioration of glazing materials and other defects in the work.
- C. Protect glass from edge damage at all time during handling, installation and operation of the building.
- D. Glazing channel dimensions indicated provide for a minimum bite on the glass, minimum edge clearance and adequate sealant thicknesses, with reasonable tolerances. Be responsible for correct glass size for each opening, within the tolerances and dimensions established.
- E. Comply with combined recommendation of glass manufacturer and manufacture of sealants and other materials used in glazing, except where manufacturer's technical representative direct otherwise.
- F. Comply with "Glazing Manual" by Flat Glass Marketing Association except as shown and specified otherwise, and except as specifically recommended otherwise by the manufacturer of the glass and glazing materials.
- G. Inspect each piece of glass immediately before installation, and eliminate all that have observable edge damage or face imperfections.
- H. Unify appearance of each series of lights by setting each piece to match others as nearly as possible. Inspect each piece and set with pattern, draw and bow oriented in the same direction as other pieces.

3.3 PREPARATION FOR GLAZING

- A. Clean the glazing channel, or other framing members to receive glass, immediately before glazing.
 - 1 Remove coatings which are not firmly bonded to the substrate.
 - 2 Remove lacquer from metal surfaces wherever elastomeric sealants are used.
- B. Apply primer or sealer to joint surfaces wherever recommended by sealant manufacturer.

3.4 GLAZING

- A. Comply with ANSI Standard Z97.1-(Current Edition) Safety Glazing Code.
- B. Install setting blocks of proper size at quarter points of sill rabbet. Set blocks in thin course of the heel bead compound.
- C. Glazing shall be set with equal bearing for entire width.
- D. Provide spacers inside and out, and of proper size and spacing, for all glass sizes larger than 50 united inches, except where gaskets are used for glazing.

- E. Provide 1/8 in. minimum bite of spacers on glass and use thickness equal to sealant width, except with sealant tape use thickness slightly less than final compressed thickness of tape.
- F. Voids and Filler Rods: Prevent exudation of sealant or compounded by forming voids or installing filler rods in the channel at the heel of jambs and heads (do not leave voids in the sill channels) except as otherwise indicated, depending on light size, thickness and type of glass, and complying with manufacturer's recommendations.
- G. Do not attempt to cut, seam, nip or abrade glass that is chemically strengthened, tempered, or heat strengthened.
- H. Force sealants into channel to eliminate voids and to ensure complete "wetting" or bond of sealant to glass and channel surfaces.
 - 1 Tool exposed surfaces of glazing liquids and compounds to provide a substantial "wash" away from the glass.
 - 2 Install pressurized tapes and gaskets to protrude slightly out of the channel to eliminate dirt and moisture pockets.
 - 3 Clean and trim excess glazing materials from the glass and stops or frames promptly after installation, and eliminate stains and discolorations.
- I. Wedge shaped gaskets:
 - 1 Where driven into one side of the channel to pressurize the sealant or gasket on the opposite side, provide adequate anchorage to ensure that gasket will not "walk" out when subjected to dynamic movement.
 - 2 Anchor gasket to stop with matching ribs, or by proven adhesive, including embedment of gasket tail in cured heel bead.

3.5 CURE, PROTECTION AND CLEANING

- A. Cure glazing sealants and compounds in compliance with manufacturer's instruction and recommendations, to obtain high early bond strength, internal cohesive strength and surface durability.
- B. Protect glass from breakage immediately upon installation, by attachment of crossed streamers to framing held away from glass and do not apply markers of any type to surfaces of glass.
- C. Remove and replace glass which is broken, chipped, cracked, abraded or damaged in other ways during the construction period, including natural causes, accidents and vandalism.
- D. Maintain glass in a reasonably clean condition during construction, so that it will not be damaged by corrosive action and will not contribute (by washoff) to the deterioration of glazing materials and other work.
- E. Wash and polish on both faces not more than four days prior to Owner's acceptance of the work in each area.
 - 1 Comply with glass manufacturer's recommendations.
 - 2 Washing shall be performed by a professional firm.

END SECTION

SECTION 09 90 00 PAINTING AND COATING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and field application of paints and other coatings.
- B. Paint all exposed surfaces, new and existing, unless otherwise indicated.
 - 1. Exterior work
 - a. Exterior steel angle lintels
 - 2. Interior Work
 - Walls and ceilings at areas requiring painting.
- C. Do not paint exterior masonry.
- D. Do not paint prefinished items, finished metal surfaces, operating parts, labels, and materials obviously intended to be left exposed such as brick and tile.
- E. Unless otherwise indicated do not paint concealed surfaces except steel angle lintels.
- F. Obtain primers and undercoat materials for each coating system from the same manufacturer as the finish coats. Primer and finish coat shall be factory applied, finish coat shall be field applied.
- G. **Extra Materials**: Deliver to Owner **two (2) 1-gallon** Containers, properly labeled, factory sealed, of each color and type of finish coat paint used on project for each building in contract. Materials shall be signed for by LMHA Construction Inspector.
- H. Minimum surface temperature of 50 degrees required for all coating systems.
- I. Store all materials in tightly closed containers when not in use, away from heat, electrical equipment, sparks and open flames. Use approved bonding and grounding procedures. Keep out of the reach of children and residents.
- J. Transfer materials to approved containers with complete and appropriate labeling.
- K. Contractor shall police the site on a daily basis and remove all debris and empty cans etc. on a daily basis.

1.2 APPLICATORS QUALIFICATIONS

- A. Engage an experienced applicator with a minimum of <u>five</u> years experience and who has completed painting systems application similar in materials and extent to those indicated for the Project and that have resulted in a construction record of successful in-service performance.
- 1.3 SUBMITTALS
- A. Product Data and Color Samples.
 - 1. Contractor shall provide four copies of Manufacturers product data and paper

samples for initial color selections. After initial color selections, contractor shall supply min. of 2-6" x 6" samples on actual substrate to be painted of each color selected. Architect will select a minimum of three color schemes of three colors each.

2. Mockups: Full-coat finish sample (benchmark sample) of each type of coating, substrate, color, and finish required in area of not less than 100 sq. ft. Comply with PDCA P5. Contractor shall not begin work until final approval is given on color and finish.

1.4 REFERENCES AND REGULATIONS:

- A. Standards: Comply with applicable provisions and recommendations of the following, except when otherwise shown or specified:
 - OSHA Safety Standards for the Construction Industry, Title 29 Labor, Subtitle B

 Regulations Relating to Labor, Occupational Safety and Health Administration
 (OSHA) 1926, 07/01/93 editions.
 - OSHA Worker Safety and Health Act Regulation 29 CFR No. Parts 1900 through 1910.1400, 07/01/93 and later editions.
 - 2 SSPC Volume 1, Good Painting Practice, 1989 edition.
 - 3 SSPC Volume 2, Systems and Specifications, 1991 edition, Surface Preparation Guide and Paint Application Specifications of the Steel Structures Painting Council.
 - 4 NACE Standards, Volume I and II, 1992 editions of the National Association of Corrosion Engineers.
 - 5 SSPC and NACE Painter Safety Guidelines, latest editions.
- B. Requirements of Regulatory Agencies, conform with the following:
 - 1. Clean Air Act (CAA) hazardous Air Emissions by U.S. EPA or State Agency under Regulation 40 CFR 61 or state equivalent.
 - 2. Clean Water Act (CWA) hazardous Water Releases by U.S. EPA or State Agency under Regulation 40 CFR 116 through 117 or state equivalent.
 - 3. Toxic Substances Control Act (TSCA) Toxic substance by U.S. EPA under Regulation 40 CFR 761.
 - 4. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "SuperFund") Uncontrolled Hazardous Waste Sites and Hazardous Substance Release by U.S. EPA under Regulation 40 CFR 302.
 - 5. Resource Conservation and Recovery Act (RCRA) Generation, Transportation, Treatment, Storage and Disposal of hazardous waste by U.S. EPA or State Agency under Regulation 40 CFR 260 through 267 or state equivalent.
 - 6. Hazardous and Solid Waste Amendments (HSWA) Further regulation of hazardous waste by U.S. EPA or State Agency under Regulation 40 CFR through 267 or state equivalent.
 - 7. Hazardous Material Transportation Act (HMTA) Transportation of Hazardous Material by DOT or State Agency under Regulation 49 CFR 171 through 179 or state equivalent.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: Submit maintenance and cleaning instructions.

1.6 QUALITY ASSURANCE

- A. Surface Burning Characteristics:
 - 1. Fire Retardant Finishes: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- B. Mock-Up: Provide for approval one room completely painted and finished to indicate quality of workmanship for the project. Mock-up shall be included in work upon approval by A/E or DMHA representative.

1.7 ENVIRONMENTAL REQUIREMENTS

 Store and apply materials in environmental conditions required by manufacturer's instructions.

1.8 SUSTITUTIONS

- A. No substitutions shall be considered that decreases or reduces the coating thickness specified; the number of coats required; changes the surface preparation specified or alters the generic type of coating specified.
- B. Substitute coating and lining manufacturers, if approved, must furnish the same colors as are available from the named manufacturers.
- C. Substitutions must fully meet or exceed performance requirements of the coating materials specified.

PART 2 - PRODUCTS

2.1 COLORS AND FINISHES

- A. Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.
 - 1. Lead: Measurable lead content in either the pigment or binder will not be permitted.
 - 2. The finish coats shall match colors selected.
 - 3. WHERE MULTIPLE COAT EXTERIOR COATING SYSTEMS ARE SPECIFIED, SUCH AS THOSE WITH INTERMEDIATE AND FINISH COATS. THE INITIAL COAT(S) SHALL BE TINTED APPROXIMATELY 25% LIGHTER IN COLOR THAN THE NEXT COAT IN ORDER TO MAINTAIN A CONSISTENT QUALITY CONTROL REFERENCE FOR THE APPLICATOR AND TO PROVIDE VERIFICATION OF COVERAGE.
 - 4. WHERE MULTIPLE COAT INTERIOR SYSTEMS ARE SPECIFIED, THERE SHALL BE A COLOR CHANGE BETWEEN COATS. THIS COLOR CHANGE SHALL BE WITH PRODUCTS THAT FULLY COMPLY WITH NSF AND UL GUIDELINES.

B. Finish Quality:

1. Finishes shall exhibit a high quality, commercial grade appearance of uniform

thickness.

- 2. Finishes shall be free of runs, sags, drips, waves, orange peel, festoons, dry spray, cloudiness, spotting, ropiness, brush marks, roller marks, fish eyes or other surface imperfections, voids, discontinuities, pinholes, holidays and overspray.
- 3. Final coat shall be uniform in texture, color and gloss, and shall provide an acceptable match with the approved drawdown sample sheet.

2.2 COATINGS

- A. Manufacturer
 - PPG Porter
 - 2. Sherwin-Williams
 - 3. Benjamin Moore
 - 4. Glidden: Dulux- ICI
- B. Colors: As selected from a full range of manufacturer's offerings, including premium colors.
- C. Application Equipment
 - 1. Brush: Nylon/Polyester or Natural Bristle.
 - a. Brush stripe edges, welds & corners.
 - b. Field touch as required & directed.
 - 2. Roller: 3/8" woven with phenolic core or as recommended by manufacturer's representative for substrate.
 - a. Field recoat & touch-up as required.
 - 3. Spray Application: Shop application per coating manufactures application data.
 - a. Surface preparation & application in a controlled protective application facility.

2.3 Interior Coatings

- A. Interior Latex: PPG Porter PRO-MASTER 2000 EGGSHELL Interior Latex Wall and Trim Paint 6129, or equal.
 - 1. Interior Latex Eggshell Enamel
 - 2. VOC: maximum 0.89 lb/gal
 - 3. Volume Solids: 35 +/- 2%
- B. Interior Latex: PPG Porter PRO-MASTER SEMI-GLOSS Interior Latex Wall and Trim Paint 6139, or equal.
 - 1. Interior Latex Semi-Gloss Enamel
 - 2. VOC: maximum 0.90 lb/gal
 - 3. Volume Solids: 37 +/- 2%
- C. Interior Latex PPG Porter PORTER GUARD WB Spray Dryfall 9620, or equal.
 - 1. Interior Alkyd Dryfall formulation
 - 2. VOC: maximum 0.55 lb/gal
 - 3. Volume Solids: 42 +/- 2%
- D. Interior Alkyd Dryfall formulation PPG Porter PORTER GUARDS WB Spray Dryfall 9650, or equal.

- 1. Interior Alkyd Dryfall formulation
- 2. VOC: maximum 0.60 lb/gal
- 3. Volume Solids: 39 +/- 2%
- E. Interior Latex Primer: PRO-MASTER 2000 Interior Latex Primer/Sealer 867, or equal.
 - 1. Interior Latex Primer
 - 2. VOC: maximum 1.12 lb/gal
 - 3. Volume Solids: 28 +/- 2%
- F. Alkyd Based Oil Stain: Sherwin Williams Wood Classics Interior Oil Stain
 - Alkyd Based Stain
 - 2. VOC: 524 g/l; 4.37 lb/gal.;
 - 3. Volume Solids: 34% +/- 2%
- G. Alkyd Based Sealer: Sherwin Williams Wood Classics Sanding Sealer
 - 1. Alkyd Based Sealer;
 - 2. VOC: maximum 522 g/l; 4.36 lb/gal.;
 - 3. Volume Solids: 31% +/- 2%.
- H. Alkyd Based Satin Varnish: Sherwin Williams Wood Classics Oil Base Varnish
 - a. Alkyd Based Varnish;
 - b. VOC: maximum 500 g/l; 4.17 lb/gal.
 - c. Volume Solids: 33% +/- 2%

2.4 PRE-CLEANING AND SURFACE PREPARATION PRODUCTS

- A. Pre-cleaning Agents
 - 1. Great Lakes Laboratories, Product 899, Extra Muscle Prepaint Cleaner
 - 2. Great Lakes Laboratories, Product 899, No Rinse Cleaner
 - 3. Metalprep 79 pre-cleaner by Henkel or approved equal
 - 4. Galvaprep 5 Prepaint coating by Henkel or approved equal.
 - 5. Simple Green Concentrate Solution
 - 6. Krud Kutter
 - 7. Sherwin Williams Prep Wash
 - 8. Or approved equal
 - 9. Potable water
- B. Power Tool Surface Preparation Media:
 - 1. Scotch Brite No. 07451 by 3 M Corporation, Surface Conditioning disc.
 - a. Properties
 - b. Texture: A Medium
 - c. Maximum Speed: 18,000 RPM
 - 2. Clean 'N" Strip Disco No CSD2 by 3 M Corporation
 - a. Texture: Course
 - b. Maximum Speed: 8,000 RPM
 - c. Or approved equal.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

A. Comply with paint manufacturer's written instructions for surface preparation, environmental and substrate conditions, product mixing, and application. Coating manufacturer's authorized

representative shall verify adequacy of surface preparation and application.

- A. Perform all surface preparation in accordance with SSPC specifications, guidelines and good painting practices.
- B. Metal Surface Precleaning and surface preparation.
- 1. General: The Contractor shall provide all labor, material and equipment to thoroughly preclean the exterior substrates as scheduled. The precleaning is to include galvanized trash enclosures to be coated. Perform all precleaning and surface preparation procedures in strict accordance with the coating manufacturer's instructions and these specifications for each particular substrate and environmental condition. Power washing shall be conducted in a manner to prevent damage of the galvanized coating. Clean all surfaces, of all oil, grease, dirt, and other foreign matter in accordance with SSPC-SP1.

3.2 APPLICATION

- A. Examination and Verification of Condition: Contractor shall verify the areas and conditions under which the work is to be performed and notify the Owner in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until satisfactory conditions have been corrected. Do not coat over surface contaminants, coatings that have exceeded the manufacturers re-coat guidelines, or conditions otherwise detrimental to the formation of a durable high quality coating system.
- B. Comply with manufacturer's instructions and SSPC Good Paint Practices Volumes 1 and 2.
- C. Comply with OSHA regulations, State of Ohio and Federal laws, ordinances, and guidelines.
- C. Coating systems require a minimum surface temperature of 70 degrees F at 50% RH for proper drying and curing with a minimum temperature of 60 degrees and a maximum relative humidity of 85% for all shop work. Follow label directions for each type of coating. Substrate temperatures to be coated shall be a minimum of 5 degrees F above dew point and rising. Ambient surface to be painted and coating materials shall be a minimum maintained temperature of 60 degrees F for 24 hours.
- E. Refer to MSDS sheets before using any product.
- F. Mixing: Mix coating components with Jiffy mixer, or equal, with a ¾" drill driver at maximum 300 RPM.
- G. All surfaces must be thoroughly dry before coating applications.
- H. Apply stripe coats using brush or roller only followed by shop spray application.
- I. Labor and materials shall be guaranteed for five years against disbondment, fading that results in non-uniform finish color and chalking.
- J. Contractor shall verify that their company and journeymen assigned to this project have five years experience in commercial coating operations.
- K. Protect surfaces not to be coated including adjacent property and vehicles and tenant's personal property.

3.3 INTERIOR PAINT APPLICATION SCHEDULE

- A. Gypsum Board: As follows:
 - 1. Gypsum board ceilings:
 - a. Interior Latex Primer: PRO-MASTER 2000 Interior Latex Primer/Sealer 867 at 1.6 MILS DFT per coat, one coat.
 - b. Interior Latex: PPG Porter PRO-MASTER 2000 FLAT Interior Latex Wall and Trim Paint 6109 at 1.5 MILS DFT per coat, two coats.
 - 2. Gypsum board walls and ceilings in bathrooms, kitchens, and mech. rooms:
 - a. Interior Latex Primer: PRO-MASTER 2000 Interior Latex Primer/Sealer 867 at 1.6 MILS DFT per coat, one coat.
 - b. Interior Latex: PPG Porter PRO-MASTER 2000 EGGSHELL Interior

Latex Wall and Trim Paint 6129 with M-1 mildew inhibitor at 1.6 MILS DFT, two coats.

- 3. Gypsum board walls in all other areas:
 - Interior Latex Primer: PRO-MASTER 2000 Interior Latex Primer/Sealer 867 at 1.6 MILS DFT per coat, one coat.
 - b. Interior Latex: PPG Porter PRO-MASTER 2000 EGGSHELL Interior Latex Wall and Trim Paint 6129 at 1.6 MILS DFT, two coats.
- B. Painted Woodwork and Interior face of Exterior Doors and enclosed door treatment frame: As follows:
 - 1. Interior Latex Primer: PRO-MASTER 2000 Interior Latex Primer/Sealer 867 at 1.6 MILS DFT per coat, one coat.
 - 2. Interior Latex: PPG Porter PRO-MASTER 2000 SEMI-GLOSS Interior Latex Wall and Trim Paint 6139 at 1.6 MILS DFT, two coats.
- C. Stained Interior Doors, trim and woodwork
 - Alkyd Based Oil Stain: Sherwin Williams Wood Classics Interior Oil Stain, One Coat
 - Alkyd Based Sealer: Sherwin Williams Wood Classics Sanding Sealer, One coat.
 - Alkyd Based Satin Varnish: Sherwin Williams Wood Classics Oil Base Varnish,
 1.3 MILS DFT per coat, two coats

3.4 EXTERIOR PAINT APPLICATION SCHEDULE

A. Miscellaneous metals as follows:

Flat Acrylic Primer: PPG Porter PORTER GUARD DTM Acrylic Primer/Finish 212/215 at 2.5 MILS DFT per coat, one coat.

Semi-Gloss, Acrylic Coating: PPG Porter PORTER GUARD DTM Acrylic Satin Enamel 2809 at 1.5 to 4 MILS DFT per coat, two coats.

- 3.5 CLEAN UP of FIELD COATING & TOUCH
 - A. Remove all paint from adjacent surfaces. Clean spills and splatters immediately.
 - B. Clean tools immediately after use.
 - C. Follow manufacturer's safety recommendations when using mineral spirits.
 - D. Clean site and remove debris and empty cans daily.
 - E. Clean site and remove debris and empty cans daily.
- 3.6 CLOSEOUT SUBMITTALS
 - A. Operation and Maintenance Data: Submit maintenance and cleaning instructions.
- 3.7 ENVIRONMENTAL REQUIREMENTS
 - A. Store and apply materials in environmental conditions required by manufacturer's instructions.

END OF SECTION