

PROJECT MANUAL ELEVATOR REPLACEMENT

July 30, 2021

STEVENS TOWERS
930 WILLOW STREET
LEBANON, PA 17042



HOUSING AUTHORITY OF THE COUNTY OF LEBANON

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I
EBANON COUNTY HOUSING AUTHORITY ELEVATOR REPLACEMENT
STEVENS TOWERS, LEBANON, PA

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The following Table of Contents is included for reference only, and is not a part of the Specifications. The Authority does not guarantee the accuracy of the Table of Contents or the inclusion and exclusion of any category of the work. In case of a discrepancy between the Table of Contents and the documents herein, the bound documents shall govern.

Registration Form

Invitation for Bids

Instructions to Bidders

Supplemental Instructions to Bidders

***Representations, Certifications and Other Statements of Bidders (HUD 5369A) Form
(Pages 13, 14, 16, 17 and 18)**

***Form of Bid**

***Bid Bond**

***Form of Non-Collusive Affidavit**

Statement of Bidders Qualifications (only submit if requested by the Authority)

Previous Participation Certification (only submit if requested by the Authority)

Form of Agreement (sample do not submit with bid)

General Conditions (HUD 5370)

Anti-Pollution Legislation

Stipulation Against Liens

Performance Bond

Payment Bond

Wage Rates

Technical Specifications

***NOTE – Documents in bold print must be completed and returned with the bid**

**STOP
EXTREMELY IMPORTANT**

Before proceeding further you **MUST** complete this form and return it via email to the Housing Authority at the email address listed below. ALL vendors who obtain the Elevator Replacement Stevens Towers Solicitation **MUST** register with the Authority.

IF YOU DO NOT COMPLETE THIS FORM AND RETURN IT TO THE AUTHORITY YOUR BID WILL NOT BE CONSIDERED.

Company Name: _____

Company Address: _____

Contact Name: _____

Contact Telephone: _____ Contact Fax: _____

Contact Email: _____

Return this form to Mr. Daniel Lyons by email to: dlyons@lcha.com

Once this form is received by the Authority you will be added to the list of firms who have received the RFP and who are authorized to submit a bid for this solicitation. You will receive a return email from the Authority acknowledging receipt of your registration.

If you have any questions please contact the Authority staff member referenced in the solicitation.

FOR AUTHORITY USE ONLY

The Authority hereby acknowledges receipt of your registration for the above referenced solicitation.

Received by the Authority by: _____

Date Received: _____

INVITATION FOR BIDS

The Housing Authority of the County of Lebanon will receive sealed bids for the complete modernization and maintenance of two elevators located at the Authority's Stevens Towers building, located in the county of Lebanon, PA. Work will include, but is not limited to new gearless machines, controllers, governors, all wiring, fixtures, switches, roller guides, and similar equipment. Work will also include increasing the speed of one of the elevators.

Sealed bids will be accepted at the Authority's administrative offices, 137 West Penn Avenue, Cleona, PA until 2:00 PM prevailing time, on Wednesday, September 22, 2021. All bids will be publicly opened and read immediately thereafter.

The following construction contracts will be received:

Contract No. 2021-01: Elevator Replacement – Stevens Towers

Proposed forms of contract documents, including plans and specifications may be obtained in electronic PDF format on the Authority's website – <http://www.lebanoncountyhousing.com>. Bidders obtaining the file must register their possession by completing and returning the registration form provided in the bid documents.

Bid Security in the amount of ten percent (10%) of the base bid, is required with all bids in the form of a certified check or bank draft, payable to the Housing Authority of the County of Lebanon, U.S. Government Bonds, or a bid bond executed by the bidder and security company in the form as enclosed with the bid documents. The successful bidder will be required to furnish and pay for satisfactory performance and payment bond or bonds.

Attention is called to the provisions for equal employment opportunity and payment of not less than the prevailing salaries and wages as set forth in these specifications.

The Housing Authority of the County of Lebanon reserves the right to reject any or all bids or to waive any informality in the bidding for up to sixty (60) days.

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

Questions referring to this bid shall be directed to Mr. Daniel Lyons, Modernization Coordinator @ 717-274-1401, ext. 133 or by email at dlyons@lcha. Prospective bidders are encouraged to visit the project sites prior to submission of their bid. Site visits may be arranged by contacting Mr. Lyons.

Bryan D. Hoffman Executive Director

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

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

Instructions to Bidders for Contracts

Public and Indian Housing Programs

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1. Bid Preparation and Submission

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

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

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

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

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

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

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

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

2. Explanations and Interpretations to Prospective Bidders

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

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

3. Amendments to Invitations for Bids

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

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

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

4. Responsibility of Prospective Contractor

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

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

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

5. Late Submissions, Modifications, and Withdrawal of Bids

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

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

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

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

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

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

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

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

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

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

6. Bid Opening

All bids received by the date and time of receipt specified in the solicitation

will be publicly opened and read. The time and place of opening will be as specified in the solicitation. Bidders and other interested persons may be present.

7. Service of Protest

(a) Definitions. As used in this provision:

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

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

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

Bryan D. Hoffman, Executive Director
Housing Authority of the County of Lebanon
P.O. Box 2005
Lebanon, PA 17042

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

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

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

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

10. Assurance of Completion

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

[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;

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

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

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

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

11. Preconstruction Conference (applicable to construction contracts)

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

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

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

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

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

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

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

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

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

(d) below.

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

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

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

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

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

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

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

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

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

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

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

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

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

HOUSING AUTHORITY OF THE COUNTY OF LEBANON

Supplemental Instructions to Bidders

Site Inspection: Work under this project shall consist replacement of two elevators at Stevens Towers, an eleven-story apartment building, located at 930 Willow Street, Lebanon, Pennsylvania. Prospective Bidders are encouraged to observe conditions on-site prior to bidding. Arrangements to visit these buildings can be arranged by contacting Modernization Coordinator, Mr. Daniel Lyons, 717-274-1401 x 133 or by email: dlyons@lcha.com

Insurance: The successful bidder shall furnish to HACL proof of Comprehensive General Liability Insurance with bodily injury and property damage coverage in the minimum required amount of \$1,000,000.00 per occurrence, \$3,000,000 aggregate. Contractor shall also provide proof of Worker's Compensation Coverage. Said proofs of insurance coverage must be on file with the Authority before work is begun.

Completion: Successful bidder shall complete the work contracted for within two hundred and forty (240) days of being issued a Notice to Proceed. Failure to complete work on schedule will result in a liquidated damages penalty of \$500.00 per day. NOTE: The 240 day contract period has been established to accommodate a potential extended delivery period for the elevator equipment. It is anticipated that once the required equipment is available, the time required to perform the actual elevator upgrades will be substantially less than the 240 day period.

Bid Bond and Non-Collusion Affidavit: Contractor, as part of his bid submission, shall submit bid bond in the amount of not less than ten percent (10%) of the bid amounts. Contractor shall also submit with his bid submission a completed Non-Collusion Affidavit form. Bid bond and Affidavit forms are included herein.

Payment: Unless other mutually satisfactory arrangements are made in advance, payment will be issued to the contractor upon satisfactory completion of the work and submission of billing invoices from said contractor. Progress payments may be negotiated.

Permits, Local Codes, Inspections: The Contractor shall procure and pay for all necessary building permits and special services of all local authorities and all inspections as required by these Specifications, including fees, taxes, and demolition permits, tap fees and business permits. Contractor is responsible for contacting all necessary agencies and authorities to ascertain these fees.

Responsibility of Area of Construction Work: Each Prime Contractor shall assume responsibility for the general charge of the areas where construction operations are being performed. Each Prime Contractor shall provide and maintain adequate protection to prevent unauthorized persons from entering the construction area.

It shall be the responsibility of each Prime Contractor to coordinate the work of all Sub-Contractors and be in charge of designated portions of the project.

The Prime Contractor and each sub-contractor shall protect and be responsible for any damage to his work or material and shall make good, without costs to the Authority,

any damage or loss that may occur, unless particularly otherwise stipulated in the Contract.

The Prime Contractor and each sub-contractor shall be responsible for the proper care and protection of all of his materials etc., as may be stored on the premises subject to the approval of the Authority.

When any space on the site is used as a shop or storeroom, the one making use of such room will be held responsible for any repairs, patching or cleaning arising from such use.

Damage incurred to any existing surface conditions, facilities, etc. and any underground pipes, wires, utilities, etc. shall be repaired and/or replaced to its' original condition by this Contract at no additional cost to the Authority.

Final Inspection: Will be conducted by the Authority's Representative along with the Contractor. This Contractor shall assist in final inspection, making available any ladders, tools, lights, etc. necessary to conduct the final inspection along with any test data or special testing required by the Authority or Code Requirements.

Warranties: This Contractor shall guarantee and warrant all materials and workmanship for a period of one (1) year unless superseded by a longer warranty and guarantee issued by the particular manufacturer. All warranties and guarantees shall be issued in the name of the Authority and presented to the Authority's Representative at the final inspection.

Punch List: When the Contractor determines that his work is SUBSTANTIALLY COMPLETE, he shall submit to the Authority a written list in duplicate of all items to be completed, repaired or corrected. Upon receipt of this list, the Authority and the Contractor will inspect the work together, as outlined previously, and make out the Punch List. This will be used in determining final completion.

Restrictions: Contractor will assume the building will be fully occupied during the Work. The Contractor shall phase the work and disruptions to services, if required, as to not adversely affect the operation of the facilities. **During the entire period of construction one elevator must remain operational at all times.** Dust and noise shall be kept to a minimum.

Definition: Anywhere in this project manual where "Owner" is referenced shall mean "Housing Authority".

Wage Rates: Davis Bacon wage rates will apply to this project. Minimum wage rates are provided with this bid package.

Further Information: Questions concerning this request for quotes shall be referred to Daniel Lyons @ 717-274-1401 ext 133, dlyons@lcha.com

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

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7. Small, Minority, Women-Owned Business Concern Representation
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9. Certificate of Eligibility Under Davis-Bacon
10. Certification of None segregated Facilities
11. Clean Air and Water Certification
12. Bidder's Signature

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: those prices, the intention to submit a bid, or 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 subparagraph (a) 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) above.

***I, _____
(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]***

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.

(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 (b)(1) or (b)(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 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.

(c) 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.

5. Bidder's Certificate 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 paragraph (a) above is a material representation of the 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:

_____ 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.

_____ 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.

_____ 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 on the following page:

_____ *Black Americans* _____ *Asian Pacific Americans* _____ *Hispanic Americans*

_____ *Asian Indian Americans* _____ *Native Americans* _____ *Hasidic Jewish Americans*

_____ *Any Indian tribe, band, or group.*

8. 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.

9. 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.

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

The bidder certifies that: Any facility to be used in the performance of this contract [] is, [] is not listed on the Environmental Protection Agency List of Violating Facilities:

(a) 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,

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

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

The bidder shall complete and submit with the Form HUD-2530, "Previous Participation Certificate." within three 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.

12. Bidder's Signature

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

(Signature and Date)

(Printed Name)

Title

Company Name

Company Address

**FORM OF BID –ELEVATOR REPLACEMENT STEVENS TOWERS
PAGE 1 OF 2**

To: Lebanon County Housing Authority
137 West Penn Avenue
PO Box 2005
Celona, PA 17042
hereinafter called the "Authority"

Bidder (Firm Name): _____

1. The undersigned, having examined the proposed Contract Documents titled: **Elevator Replacement – Stevens Towers** and having visited the site and examined the conditions affecting the Work, hereby proposed and agrees to furnish all labor, materials, equipment and appliances and to perform operation necessary to complete the Work within Two Hundred Forty (240) calendar days as required by said proposed Contract Documents, including any Addenda (if any thereto), for the stipulated sum listed below.

2. **Total Modernization Price for Two Elevators (includes \$20,000 cab allowance)**

_____ Dollars (\$ _____)

ALTERNATE CONTRACT CONDITIONS/WORK ITEMS (Important note: the contract will be awarded to the contractor with the lowest base bid. Cost of alternate work items will not be considered in award of the contract).

Alternate 1: Extended Work Day (50 hour work week) \$ _____

Alternate 2: Extended Work Day (60 hour work week) \$ _____

Alternate 3: New rails and increase speed of car 2 to a minimum of 250 fpm \$ _____

Additional shut down time required for this work _____ Weeks)

Alternate 4: Increase the speed of car 1 to a Minimum of 250 fpm. \$ _____

Additional shut down time required for this work _____ Weeks)

The following is for informational purposes only and will not be considered as a condition for award of the contract:

Time needed to produce submittals and drawings: _____ weeks

Time needed for engineering & to order equipment: _____ weeks

(After approval of submittals and drawings)

Amount of shutdown time to complete one elevator: _____ weeks
(including cab work as stated below)

Amount of time to complete cab work: _____ weeks

FORM OF BID –ELEVATOR REPLACEMENT STEVENS TOWERS

PAGE 2 OF 3

Bidder (Firm Name): _____

Maintenance Contract Information:

Amount of time, if any, included in the base bid as “free” Preventive Maintenance: _____ months.

Monthly Preventive Maintenance costs, as per specifications for both elevators \$ _____

Product Information:

MANUFACTURERS – Indicate below the names and vendors that have been used to estimate this project

COMPONENT	MANUFACTURER NAME
Machine	
Controller	
Motor Control	
Motor	
Governor	
Door Operator	
Safety	
Cab	
Car and Hoistway Door Equipment	
Fixtures (Car and Hall)	

1. Attached hereto is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this bid or any bid or the submitting of proposals for the Contract for which this bid is submitted.

2. The bidder represents that he ____ HAS ____ HAS NOT (check one) participated in a previous Contract or sub-contract to either the equal opportunity clause therein or the clause originally contained in Section 301 of the Executive Order No. 10925; that he ____ HAS ____ HAS NOT (check one) filed all required compliance reports signed by the proposed sub-contracts or that such reports will be obtained prior to sub-contract awards. The bidder further represents that he will, if required, submit and require proposed sub-contractor to submit a compliance report prior to the award of the Contract or sub- contract.

3. The Bidder represents and further agrees that (except where he has obtained identical certifications from the proposed sub-contractors for specific time periods) he will obtain identical certifications from

proposed sub-contractors prior to the award of sub-contracts exceeding Ten Thousand Dollars (\$10,000) which are not exempt from the provisions of the Equal Opportunity Clause; that he will retain such certifications in his files; and that he will forward a notice of his proposed sub-contractors as provided in the Instructions to Bidders. The penalty for making false statements in offers is prescribed in 18 U.S.C. 100L.

**FORM OF BID –ELEVATOR REPLACEMENT STEVENS TOWERS
PAGE 3 OF 3**

Bidder (Firm Name): _____

4. I hereby acknowledge receipt of Addend Nos: _____

Dated _____ as part of this bid.

BIDDER:

(firm name)

BY:

(printed name of signatory)

SIGNATURE: _____

TITLE: _____

BID DATED THIS _____ DAY OF _____ 2021

BUSINESS ADDRESS: _____

TELEPHONE: _____ FAX: _____

EMAIL: _____

FEDERAL TAX ID # _____

BID BOND

KNOW ALL MEN BY THESE PRESENT, that we the undersigned

_____ as PRINCIPAL

And _____ as SURETY

Are held and firmly bound unto The Housing Authority of the County of Lebanon, Pennsylvania, hereinafter called the "Authority" in the penal sum of:

_____ Dollars (\$ _____)

Lawful money of the United States, for the payment of which sum will and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these present.

THE CONDITONS OF THIS OBIGATION IS SUCH, that whereas the Principal has submitted the accompanying bid, dated _____ 2021, for Elevator Replacement Stevens Towers contract 2021-01.

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

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their several seals this ____ day of _____, 2021. The name and corporate party being hereto affixed and these presents fully signed by its undersigned representatives, pursuant to authority of its governing body.

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute Bond. In the event the penal sum exceeds the Surety's underwriting limitations as set forth in Department of the Treasury Circular 570, Surety shall inform Owner of this fact and shall provide fully executed co-insurance or re-insurance agreements which shall be effective as of the date of the delivery of this Bond.

IN PRESENCE OF:

(Individual Principal)

(Business Address)

ATTEST:

(Corporate Principal)

(Business Address)

BY:

Seal

If Power of Attorney for person named or Surety Company must be attached to

Bond. CERTIFICATION AS TO CORPORATE PRINCIPAL

I _____ certify that I am the _____

Secretary of the Corporation named as Principal in the within bond; that

_____ who signed the said bond on behalf of the Principal was then

_____ of said corporation; that I know his signature and his signature thereto is genuine and that said bond was duly signed, sealed and attested to for and in behalf of said corporation by authority of its governing body.

_____ Affix Corporate Seal

AFFIDAVIT

STATE OF _____)

COUNTY OF _____)

) SS.

_____ deposes and says, being first duly sworn,
(Name)

That he is _____, the party making the
(Title)

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

Signature of:

Bidder, if the bidder is an Individual;

Partner, if the bidder is a Partnership;

Officer, if the bidder is a Corporation

Subscribed and sworn to before me

this _____ day _____ of 20_____

my commission expires _____ 20_____

STATEMENT OF BIDDER'S QUALIFICATIONS

Do not supply with this Statement of Bidder's Qualifications OR the Previous Participation Certificate which follows with your bid. Rather both of these documents are to be furnished only on request of the Authority after the opening of bids and prior to contract award.

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, add separate sheets for items marked with an *.

1. Name of Bidder; _____
2. Permanent main office address; _____
3. When Organized: _____
4. Where Incorporated: _____
5. How many years have you been engaged in the contracting business under your present firm name? _____
6. *Contracts on hand: (provide a schedule showing gross amount of each contract and approximate anticipated dates of completion).

7. *General character of work performed by your company.

9. Have you ever failed to complete any work awarded to you? _____ If so where and why? _____
10. *List the more important jobs recently completed by your company. Provide the approximate cost for each and the month and year completed.
11. *List your major equipment available for this contract.
12. * Experience in construction work similar in importance to this project.
13. * Background and experience of the principal members of your staff, including the officers.
14. * Amount of credit available (furnish written evidence).
15. *Financial statement no more than sixty (60) days old and containing not less than the information required on the sample balance sheet on the following page.

BALANCE SHEET

As of

ASSETS

Current Assets

Cash	
Joint Venture Accounts	\$
Notes Receivable	\$
Accrued Interest on Notes	\$
Deposits	\$
Materials and Prepaid Expense	\$

TOTAL CURRENT ASSETS \$

Fixed Assets – Net \$

Other Assets \$

TOTAL ASSETS \$

LIABILITIES AND CAPITAL

Current Liabilities

Accounts Payable	\$
Notes Payable	\$
Accrued Interest on Notes	\$
Provision for Income Taxes	\$
Advances Received from Owners	\$
Accrued Salaries	\$
Accrued Payroll Taxes	\$
Other	\$

TOTAL CURRENT LIABILITIES \$

Other Liabilities \$

Capital

Capital Stock	\$
Authorized & Outstanding Shares, Par Value	\$
Earned Surplus	\$

TOTAL LIABILITIES AND CAPITAL \$

16. Will you, upon request fill out a detailed financial statement and furnish any other information that may be required by the Authority? _____

17. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any Information requested by the Authority in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated at _____ this _____ day of _____ 2021

Name of Bidder:

By: _____ Title:

State of _

County of

_____ Being duly sworn deposes and says that he/she
(name)

is _____ of _____
(title) (firm name)

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

Sworn to before me this _____ day of _____, 2021.

_____ my commission expires: _____ 20____
(Notary)

PREVIOUS PARTICPATION CERT FORM – INSERT HERE

**FORM OF AGREEMENT
(SAMPLE ONLY)**

CONTRACT NO. _____

THIS AGREEMENT made this _____ day of _____, 2021 by and between:

_____ hereinafter called the "CONTRACTOR" and the Lebanon County Housing Authority, Lebanon, Pennsylvania, hereinafter called the "AUTHORITY"

WITNESSETH, that the Contractor and the Authority for the consideration stated herein mutually agree as follows:

ARTICLE 1 - STATEMENT OF WORK

The Contractor shall furnish all labor, materials, equipment and services, and perform all work required for the completion of Contract No 2021-014 in accordance with the specifications entitled Project Manual Elevator Replacement Stevens Towers for the HOUSING AUTHORITY OF LEBANON COUNTY, LEBANON, PENNSYLVANIA.

And Addendum thereto numbered _____ and dated _____ and the Drawings referred to therein, which said Specifications, Addenda and Drawings are incorporated herein by reference and made a part thereof.

ARTICLE 2 - THE CONTRACT PRICE

The Authority shall pay the Contractor for the performance of the Contract in current funds, subject to additions and deductions as provided in the Specifications, the sum of:

_____ Dollars (\$ _____)

ARTICLE 3 - CONTRACT DOCUMENTS

The Contract shall consist of the following component parts:

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

This Instrument, together with the other Documents enumerated in this Article 3, which said other Documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision in the component part first enumerated in this Article 3 shall govern, except as otherwise specifically stated. The various provisions in Addenda shall be construed in the order of preference of the component part of the Contract which it modifies.

IN WITNESS HEREOF, the parties hereto have caused this Instrument to be executed in three (3) original counterparts the day and year above written.

ATTEST:

CONTRACTOR

By:

Title:

(business address)

Corporate Certification

I _____, certify that I am the _____ of the Corporation names as Contractor herein, that _____ who signed this Contract on behalf of the Contractor was then _____ of said Corporation; has Authority to execute the same and is the individual who signs similar contracts on behalf of this Company with the public generally and then said Contract was duly signed for and in behalf of said Corporation by authority of its governing body and is within the scope of its corporate powers.

Signature:

ATTEST:

HOUSING AUTHORITY OF THE COUNTY OF LEBANON

By:

Title:

(business 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. 12/31/2011)

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

This form includes those clauses required by OMB's common rule on grantee procurement, implemented at HUD in 24 CFR 85.36, and those requirements set forth in Section 3 of the Housing and Urban Development Act of 1968 and its amendment by the Housing and Community Development Act of 1992, implemented by HUD at 24 CFR Part 135. The form is required for construction contracts awarded by Public Housing Agencies (PHAs).

The form is used by Housing Authorities in solicitations to provide necessary contract clauses. If the form were not used, HAs would be unable to enforce their contracts.

Public reporting burden for this collection of information is estimated to average 1.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Responses to the collection of information are required to obtain a benefit or to retain a benefit.

The information requested does not lend itself to confidentiality.

HUD may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB number.

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24.	Prohibition Against Liens	48.	Procurement of Recovered Materials

1. Definitions

“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.

“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.

“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.

“Contractor” means the person or other entity entering into the contract with the PHA to perform all of the work required under the contract.

“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.

“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.

“Project” means the entire project, whether construction or rehabilitation, the work for which is provided for in whole or in part under this contract.

“PHA” means the Public Housing Agency organized under applicable state laws which is a party to this contract.

“Specifications” means the written description of the technical requirements for construction and includes the criteria and tests for determining whether the requirements are met.

“Work” means materials, workmanship, and manufacture and fabrication of components.

2. Contractor’s Responsibility for Work

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.

The Contractor shall perform on the site, and with its own organization, work equivalent to at least 12 percent of the total amount of work to be performed under the contract. 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.

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.

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.

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.

The Contractor shall confine all operations (including storage of materials) on PHA premises to areas authorized or approved by the Contracting Officer.

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.

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

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

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.

The Architect's duties and responsibilities may include but shall not be limited to:

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;

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;

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,

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

5. Pre-construction Conference and Notice to Proceed

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.

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

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.

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.

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

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.

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

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.

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.

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.

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

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.

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.

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'. '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.

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 information below.

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.

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.

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.

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

'As-built drawings,' as used in this clause, means drawings submitted by the Contractor or subcontractor at any tier to show the construction of a particular structure or work as actually completed under the contract. 'As-built drawings' shall be synonymous with 'Record drawings.'

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.

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

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.

Approval of equipment and materials.

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.

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.

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.

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.

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.

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.

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

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.

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

In performing this contract, the Contractor shall:

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;

Protect the lives, health, and safety of other persons;

Prevent damage to property, materials, supplies, and equipment; and,

Avoid work interruptions.

For these purposes, the Contractor shall:

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

Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

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.

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.

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

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.

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

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.

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.

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.

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.

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.

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.

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.

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.

The Contractor shall give all required notices to any adjoining or adjacent property owner or other party before the commencement of any work.

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.

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

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.

The Contractor shall, as directed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading

capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

18. Clean Air and Water

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

19. Energy Efficiency

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

20. Inspection and Acceptance of Construction

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.

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.

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.

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.

The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material

reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The PHA may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The PHA shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

The PHA may conduct routine inspections of the construction site on a daily basis.

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.

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.

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.

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

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.

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

In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (j) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of one year 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.

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.

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.

The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect or damage.

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.

With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall:

- (1) Obtain all warranties that would be given in normal commercial practice;
- (2) Require all warranties to be executed in writing, for the benefit of the PHA; and,
- (3) Enforce all warranties for the benefit of the PHA.
- (4) 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.

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.

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.

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.

25. Contract Period

The Contractor shall complete all work required under this contract within **240 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

The PHA shall pay the Contractor the price as provided in this contract.

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.

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.

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 14 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.

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;

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,

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:

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.

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.

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

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.

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.

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

Only the Contracting Officer has authority to modify any term or condition of this contract. Any contract modification shall be authorized in writing.

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.

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

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.

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.

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.

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.

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.

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:

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.

Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.

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

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.

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.

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.

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

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.

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.

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.

The Contractor's right to proceed shall not be terminated or the Contractor charged with damages under this clause if—

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

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.

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

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 **five hundred (\$500)** 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.

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.

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.

See additional information concerning liquidated damages in Specification Section 324A.

34. Termination for Convenience

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.

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.

The Contracting Officer will act on the Contractor's claim within days (60 days unless otherwise indicated) of receipt of the Contractor's claim.

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

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 One Million Dollars (\$1,000,000) per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a "claims-made" policy, then the following additional requirements apply: the policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and the extended reporting period may not be less than five years following the completion date of the Contract.

(3) Automobile Liability on owned and non-owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than five hundred thousand (\$500,000) per occurrence.

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.

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

37. Subcontracts

Definitions. As used in this contract –

“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.

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.

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.

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..

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:

Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;

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;

Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises; and

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:

The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap.

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

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.

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.

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.

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

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.

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.

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.

See the attached Section 3 Program addendum for requirements concerning employment and training requirements

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

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.

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

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.

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.

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.

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 (WH21) 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.

- (v) (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.

(3) 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.

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

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.
- (4) 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.

(5) 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.

(6) 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.

(7) 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.

(8) 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.

(9) 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.

(10) 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.

(11) Certification of eligibility.

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).

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).

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

Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

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.

Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in any of these requirements, 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 in these requirements, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in subparagraph (j)(1) of this clause.

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 these requirements.

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

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;

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

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

48. Procurement of Recovered Materials.

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

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

ANTI-POLLUTION LEGISLATION

On October 26, 1972, House Bill number 1969 was enacted into law. This Act (No. 247) became effective on November 25, 1972. It requires that bidders on construction contracts for the Commonwealth of Pennsylvania be advised of those provisions of Federal and State statutes, rules, and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources that affect the project on which bids are being received.

The Bidder shall thoroughly acquaint himself with the terms of the listed statutes, rules, and regulations. No separate or additional payment will be made for such compliance. In the event that the listed statutes, rules, and regulations are amended, or if new statutes, rules, or regulations become effective, after date of receipt of bids upon receipt of documentation which cause the Contractor to perform additional work, the Owner may issue a change order or deviation request setting forth the additional work that must be undertaken. This change order or deviation request shall not invalidate the Contract.

It is the responsibility of the Contractor to determine what local ordinances, if any, will affect his work. He shall check for any county, city, borough, or township rules or regulations applicable to the area in which the Project is being constructed and in addition, for any rules or regulations of other organizations having jurisdiction, such as chambers of- commerce, planning commissions, industries, or utility companies who have jurisdiction over lands which the Contractor occupies. Any costs of compliance with local controls shall be included in the prices bid, even though documents of such local controlling agencies are not listed herein.

STIPULATION AGAINST LIENS

Housing Authority of the County of Lebanon, Pennsylvania

_____)
vs.

_____)

WHEREAS, The Housing Authority of Lebanon County, Lebanon, Pennsylvania, a body politic and corporation of the Commonwealth of Pennsylvania, is about to execute contemporaneously herewith a Contract with _____ a company organized and existing under the laws of _____ for _____ on sites located at Lebanon, Pennsylvania.

NOW, THEREFORE, ON _____, at the time of and immediately before the execution of the Contract and before any authority has been given by the said Housing Authority of the County of Lebanon, Pennsylvania, to said _____ to commence work on said project or purchase material for same, in consideration of the making of the said _____ and for the further consideration of One Dollar paid to the said Housing Authority of the County of Lebanon, Pennsylvania, by _____, it is agreed that no mechanic's claims or other liens shall be filed against the building and/or lot of ground appurtenant thereto by said _____ nor any subcontractor, nor by any of the materialmen or workmen or any person for any materials or labor or extra materials or labor purchased or furnished in connection with the construction of the said project or any part thereof, the right to file such claims or liens being expressly waived and relinquished herewith.

THE HOUSING AUTHORITY OF THE COUNTY OF
LEBANON, PENNSYLVANIA

ATTEST: _____ By:

Title:

CONTRACTOR

ATTEST:

Title: By:

PAYMENT AND PERFORMANCE BONDS

Payment and Performance bonds shall be submitted in a format equivalent to the most recent published version of AIA A312.

IMPORTANT NOTE CONCERNING WAGE RATES

Included on the following pages are wage rates applicable to this solicitation. Please be advised that wage decision PA20200093 Building construction is applicable to all classifications for the proposed work.

General Decision Number: PA20210093 06/04/2021

Superseded General Decision Number: PA20200093

State: Pennsylvania

Construction Type: Building

County: Lebanon County in Pennsylvania.

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

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0	01/01/2021
1	01/08/2021
2	01/15/2021
3	04/23/2021
4	04/30/2021
5	05/07/2021
6	06/04/2021

ASBE0023-007 06/29/2020

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation) (Asbestos Abatement, Removal (from Mechanical Systems Only)	\$ 34.80	27.96

BOIL0013-008 03/01/2018		
	Rates	Fringes
BOILERMAKER	\$ 45.89	33.39

CARP0287-015 06/01/2020		
	Rates	Fringes
CARPENTER (Scaffold Building and Form Work Only)	\$ 30.88	17.10

CARP0443-003 05/01/2019		
	Rates	Fringes
MILLWRIGHT	\$ 35.18	18.82

CARP2235-013 01/01/2021		
	Rates	Fringes
PILEDRIVERMAN	\$ 36.50	19.92

* ELEC0143-011 06/01/2021		
	Rates	Fringes
ELECTRICIAN (Includes HVAC/Temperature Controls Installation, and Low Voltage Wiring; Excludes Installation of Sound and Communication Systems and Alarm Installation)	\$ 33.50	25.63

ELEC0229-004 01/01/2020		
	Rates	Fringes
ELECTRICIAN (Alarm Installation Only)	\$ 33.84	19.67

ELEC0743-013 09/01/2016		

	Rates	Fringes
ELECTRICIAN (Installation of Communication and Sound Systems Only)	\$ 34.77	20.19

ELEV0059-004 01/01/2021

	Rates	Fringes
ELEVATOR MECHANIC	\$ 49.95	35.825+a+b

FOOTNOTES:

A. Employer contributes 8% of basic hourly rate for 5 years or more of service as vacation pay credit, and 6% of basic hourly rate for less than 5 years of service.

B. Eight Paid Holidays (provided employee has worked 5 consecutive days before and the working day after the holiday): New Years's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day and the Friday after Thanksgiving Day, and Christmas Day.

ENGI0066-044 07/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Mechanic	\$ 28.37	15.66
Pump	\$ 25.20	15.66

ENGI0542-032 05/01/2021

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Crane	\$ 42.12	28.60
Hoist (Single Drum), Forklift (under 20 ft., excludes masonry work)	\$ 36.87	27.04
Hoist (With Two Towers), Forklift (20 ft and over, excludes masonry work)	\$ 39.59	27.85
Oiler	\$ 34.40	26.32

IRON0404-015 07/01/2020

	Rates	Fringes
IRONWORKER (Ornamental and Structural)	\$ 33.76	30.13

LABO0373-001 01/01/2017

	Rates	Fringes
LABORER (Asbestos Abatement (Removal from Floors, Walls, and Ceilings))	\$ 22.60	15.44

LABO1180-013 05/01/2019

	Rates	Fringes
LABORER		
Concrete Worker; Concrete Saw (Walk Behind/Hand Held)	\$ 22.29	14.53
Forklift (Masonry Work Only)	\$ 26.32	14.53
Jack Hammer; Mason Tender-Brick	\$ 24.82	14.53

PAIN0057-036 06/01/2014

	Rates	Fringes
PAINTER (Spray Only)	\$ 26.98	15.65

PAIN0411-005 05/01/2017

	Rates	Fringes
PAINTER: Brush and Roller Only	\$ 23.47	13.20

PLUM0520-020 05/01/2020

	Rates	Fringes
PLUMBER	\$ 37.52	28.04

PLUM0520-022 05/01/2020

	Rates	Fringes
PIPEFITTER (Includes HVAC Unit Installation, Excludes HVAC Pipe Installation)	\$ 37.52	28.04

SFPA0669-004 04/01/2021

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)	\$ 40.33	26.69

SHEE0019-014 06/01/2020

	Rates	Fringes
SHEET METAL WORKER (Excluding HVAC Duct Installation)	\$ 37.26	38.35

FOOTNOTE: Paid Holiday: Election Day

* UAVG-PA-0016 01/01/2016

	Rates	Fringes
OPERATOR: Bulldozer	\$ 37.85	22.72

SUPA2011-051 08/20/2014

	Rates	Fringes
BRICKLAYER, Includes Pointing, Caulking, and Cleaning	\$ 28.56	11.56

CARPENTER (Acoustical Ceiling Installation Only)	\$ 37.73	4.59
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CARPENTER (Drywall Hanging and Metal Stud Installation Only)	\$ 24.18	12.02
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CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging and Metal Stud Installation, Form Work, and Scaffold Building	\$ 25.93	11.29
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	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	\$ 27.76	8.21
FLOOR LAYER: Carpet Only	\$ 18.78	5.02
FLOOR LAYER: Hardwood Floors Only	\$ 26.91	11.88
FLOOR LAYER: Vinyl Flooring Only	\$ 19.71	5.94
GLAZIER	\$ 20.19	6.92
IRONWORKER, REINFORCING	\$ 28.97	6.47
LABORER: Common or Genera	\$ 19.70	7.14
LABORER: Landscape	\$ 15.01	0.00
LABORER: Mason Tender - Cement/Concrete	\$ 26.17	4.88
OPERATOR: Backhoe/Excavator/Trackhoe	\$ 31.05	10.85
OPERATOR: Bobcat/Skid Steer/Skid Loader	\$ 24.14	13.55
OPERATOR: Drill	\$ 25.58	17.07
OPERATOR: Gradall	\$ 32.70	18.43
OPERATOR: Grader/Blade	\$ 32.51	17.98
OPERATOR: Loader	\$ 27.05	14.52
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	\$ 30.39	15.05
OPERATOR: Roller	\$ 30.39	13.72
PIPEFITTER (HVAC Pipe Installation Only)	\$ 47.38	6.89
ROOFER, Excludes Waterproofing	\$ 17.00	2.78
ROOFER: Waterproofing Only	\$ 28.60	18.02
SHEET METAL WORKER (HVAC Duct Installation Only)	\$ 29.56	19.21

	Rates	Fringes
TILE FINISHER	\$ 20.65	8.24
TILE SETTER	\$ 24.31	11.62
TRUCK DRIVER: Dump Truck	\$ 19.77	5.02

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

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

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example:

PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

Write to:

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

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

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

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

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

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END OF GENERAL DECISION"

IMPORTANT REQUIREMENTS CONCERNING SECTION 3

The Housing Authority is required by Federal law to meet employment requirements of the Section 3 program. Section 3 is a program which mandates that 25% of the total labor hours worked under a construction contract be performed by Section 3 employees. Also an additional 5% of the total hours worked must be performed by targeted Section 3 employees.

1. A Section 3 employee is any worker, when hired within the past five years, fits at least one of the following categories:

a) The worker's total family income for the previous or annualized calendar year is below the income limit established by HUD. The current income limit for Lebanon County for a one person family is \$42,700, two person \$48,800, three person \$54,900, four person \$60,950, five person \$65,850 and six person \$75,750. A signed certification from the employee that their total family income in the previous calendar year meets the above requirement is sufficient to document the employee's low income status. Further proof of the employee's total family income (such as copies of their income tax return is not required).

b) The worker is employed by a Section 3 business concern.

To qualify as a Section 3 business concern, a company must meet at least one of the following criteria, documented within the last six-month period:

(i) It is at least 51 percent owned and controlled by low- or very low-income persons;

(ii) Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers; or

(iii) It is a business at least 51 percent owned and controlled by current public housing residents or residents who currently live in Section 8-assisted housing.

c) The worker is a Youth Build participant.

2. A Targeted Section 3 employee means:

a) The worker is employed by a Section 3 business concern or;

b) A resident of public housing or Section 8 assisted housing or;

c) A Youth Build participant.

3. Job Qualifications: Section 3 workers are not exempt from meeting the qualifications of the position to be filled.

4. Alternative to labor hour requirements. As was noted above, the Section 3 labor hour requirements are not optional, they are **MANDATORY**. However, the Authority recognizes that as a practical reality, many contractors will have difficulty meeting the 30% labor hours worked requirement. Such difficulties may result

from a lack of openings for new employees to perform the work, a lack of appropriately trained workers or even just a lack of available workers in general. As such the Authority is providing an alternative to meeting the mandatory labor hour requirement. In lieu of meeting the 30% labor hour requirement, the contractor may, at the contractor's discretion, provide a monetary contribution to the Authority's employment training program. Contribution to the employment training program is based on the following schedule.

<u>Labor Hours Achieved</u>	<u>Contribution Amount</u>
Less than 10%	3% of the contract price
10% to 19%	2% of the contract price
20% to 29%	1% of the contract price

For the purpose of the Section 3 requirements, the contract price shall be established at the time of contract execution and shall not be adjusted to reflect the cost of any change orders (increase or decrease) during the contract term.

If the contractor elects to provide the maximum 3% employment training contribution at contract execution, monitoring of labor hours worked by Section 3 employees will not be required during the term of the contract. However, if the contractor elects to comply with all or part of the 30% labor hours requirement, then the contractor will be required to document, on a weekly basis, all labor hours worked by Section 3 employees. Documentation of labor hours worked by Section 3 employees will be achieved through the weekly payroll reports required under the Davis Bacon reporting requirements and the employee self certification described in section 1 (a).

Should contractor elect to attempt to meet the 30% labor hour requirement and fail to do so by the end of the contract, the contractor will be required to submit the appropriate job training fund contribution as outlined above.

SPECIFICATIONS

100 SCOPE OF WORK

The modernization and maintenance of two (2) elevators for the Lebanon County Housing Authority, Stevens Towers, 930 Willow Street, Lebanon, PA.

Brief Description:

The complete modernization and maintenance of both elevators at this building. Which will include but not be limited to; new gearless machines, controllers, governors, all wiring, fixtures, all switches, roller guides, buffers, safeties, cabs, etc. We will also increase the speed of car #1 to 250 fpm.

General Comments:

The contractor is strongly urged to review the site conditions very carefully. It is imperative for the contractor to read and review all of the specifications and drawings very carefully to fully understand the scope of work. No compensation shall be allowed for failure to fully and correctly understand the scope of work and related expenditure.

The Owner's Representative of the property is:

Housing Authority of the County of Lebanon
Bryan Hoffman, Executive Director
PO Box 2005
Cleona, PA 17042

The Consultant for this project is:

Vertical Systems Analysis, Inc.
307 West 36 Street
8th Floor
New York, NY 10018

200 INSTRUCTIONS TO BIDDERS

201 Submission of Bids

- Bids must be submitted to the address outlined on the cover page prior to the deadline.
- All bids should be in strict accordance with the Elevator Modernization Specifications.
- All bidders shall utilize the bid form included in this solicitation to submit their bids.
- Submission of a bid will be considered proof that the bidder is familiar with the location, facilities and conditions, requirements of the documents and of pertinent state and local codes, state of labor and material markets.
- The bidder shall make allowances in his/her bid for all contingencies. All governmental regulations

shall be adhered to as necessary including, but not limited to the entities indicated in Section 300. Any questions concerning the Project Specifications, Codes, Standards, etc. shall be communicated to Vertical Systems Analysis, Inc. immediately in writing.

- All discrepancies, omissions or doubts as to the meaning of specifications should be communicated in writing to the Owner and Vertical Systems Analysis, Inc.. Bidders shall act promptly well in advance of the bid due date.

Should the bidder desire to furnish different item(s) from that specifically mentioned in the specifications, the bidder shall immediately notify Vertical Systems Analysis, Inc. of the intentions to do so in writing. The bidder shall do so prior to bid submission (within a reasonable time in relation to the bid due date). The bidder shall supply the elevator Consultant with information (data, pictures, cuts, designs, etc.) of the item(s) the bidder desires to furnish, to enable Vertical Systems Analysis, Inc. to decide whether the item intended to be furnished is equal to or better than that specified

- Any exception to the specifications should be submitted in a transmittal letter, together with and as part of the bid. The bidder agrees to furnish all labor material and fees required for the complete elevator modernization as outlined in the Project Specifications. All work shall be in accordance with the job specification and in accordance with all regulations and requirements of National and Local Municipalities.
- The bidder also agrees to include all additions and/or addenda in the contract price subject to any additions and/or deductions decided on by the Owner and/or Consultant.
- The bidder shall include all taxes, fees and levies with the exception of sales tax only in the price indicated on the Bid Form. The Authority as a public entity is exempt from the payment of all Pennsylvania sales tax.

202 Mandatory Submission

As a mandatory requirement, any person(s) submitting a bid will comply with all of the following: The bidder shall submit a list of names of all subcontractors or other persons or organizations to be involved with the project and describe the work to be performed. Under no circumstances may the Elevator Contractor receiving the Elevator Modernization Contract transfer or pass it to any other party without the prior written consent of the Owner.

300 GENERAL INFORMATION

300 The Consultant

Vertical Systems Analysis, Inc., (hereinafter called VSA) the Consultant, shall act as the Owner's representative on all matters pertaining to the elevator work with the exception of signing the contract. Vertical Systems Analysis, Inc. shall interpret the specifications and other contract documents. Prior to the acceptance by the Owner, the Consultant will check and review all submittals of the Elevator Contractor, including billings, review technical details and construction procedures and shall arrange for inspection and testing of the completed work for compliance with the specification. The conformity of all work with the contract requirements shall be subject to review by the Consultant whose determination shall be final and binding to both Owner and Elevator Contractor.

301 Project Specifications

Through-out this document the terms Elevator Modernization Specification and Project Specifications are used interchangeably. Any questions or interpretations concerning this Project Specifications shall be addressed to the Consultant. Ultimately, Vertical Systems Analysis, Inc., must be notified. If the Elevator Contractor does not contact the Consultant to determine and evaluate a specific problem, the Elevator Contractor shall address the most extreme condition and/or install the most expensive item.

302 Site Inspection

The Elevator Contractor is required to study the Project Specifications so the bidder can provide a qualified bid. All measurements are to be verified by Elevator Contractor before work begins, so that the drawings submitted are correct and represent true field conditions. Before the fabrication of any items, the exact dimensions shall be calculated. The Elevator Contractor shall examine surface and site conditions to which his/her work is to be attached or applied to, and notify the Architect/Consultant, in writing, if conditions or surfaces are detrimental to the his/her workers and/or expeditious Modernization of the his/her work. Starting the work, shall imply acceptance of the surfaces and conditions to perform the work as specified.

At the time of their inspection, the contractor shall perform the following:

Fully inspect all mechanical and electrical systems at the property, including but not limited to all wiring. The contractor, by doing this, shall ensure that mechanical and electrical requirements of the new equipment being proposed by them are met. In the event that something requires a change, the elevator Contractor shall bring this to the attention of the Owner and the Consultant no later than at the time of submission of his/her bid. Otherwise, the Contractor will be responsible for any required modifications.

At the time of submission of the bid, the contractor is to identify any/all potential hazardous materials (including but not limited to asbestos) at the job site that may affect the procedures used to complete the project. The Contractor will be responsible for the proper handling and disposal of these materials. After the submission of bids, the Contractor will not be entitled to any additional charges for the proper and legal completion of the project, including the handling or disposal of hazardous materials (including Asbestos). Contractor must identify, with their bid, any job-site related safety issues. Any safety issues not identified by the Contractor in their bid will be the responsibility of the Contractor to correct without additional cost to the Owner.

303 Guarantee of Work

All the work performed under the heading of this Project Specifications shall have a minimum guarantee of ONE YEAR. The Elevator Contractor will guarantee that all work, materials and workmanship is first-class, and all apparatus which is damaged or defective shall be replaced. Any item Deemed installed improperly by Owners representatives, which wears incorrectly, shall be replaced within one year. If it is hazardous to the operation or any other equipment, it shall be replaced immediately. No provision included in the Project Specifications shall relieve the Elevator Contractor of any responsibility to meet the regulations of governing authorities, good workmanship, and accepted recognized industry practices. Any negligence or faulty materials or workmanship shall be the responsibility of the Elevator Contractor. The Contractor's responsibility shall extend to the period provided by law. The date of final acceptance shall trigger the commencement date of the guarantee period.

The elevator company further guarantees that the equipment being installed on this project shall be maintainable for a minimum of twenty (20) years. Should a manufacturer stop making a part discontinue a

product or fail in business, the elevator company shall replace the component(s) at their expense or provide a place to purchase reasonably priced parts.

304 Workmanship

All work shall be subject to VSA's, the Consultant, final approval. Any physically damaged property caused during the Elevator Modernization shall be restored to original condition. If this is not possible, then the damage will be restored to a like-new condition. All materials not used on the job shall be removed on a daily basis. If the Elevator Contractor fails to remove the materials, owner will remove and back charge the Elevator Contractor, with a 10% markup. All workers will be skilled and work in the strictest accordance with the Project Specifications and the drawings which have been approved. All applications of materials shall comply with the manufacturer's instructions and recommendations. The original structural needs of the existing building take precedence over the elevators structural needs.

305 Materials – New

With the exception of all reused equipment, all materials and equipment furnished shall be new and the best of their respective kinds. Each item shall be installed in a professional, accurate, workman-like manner and subject to the approval of Vertical Systems Analysis, Inc. All cab and hall fixtures included in elevator contractor's bid will be selected from the fixture manufacturer's luxury line or top of the line range. The materials and design of these fixtures shall be as selected by Owner or duly appointed representative. All materials and equipment furnished shall conform to the regulations of the bodies having jurisdiction over such modernization. The Elevator Contractor shall furnish Vertical Systems Analysis, Inc. with samples as directed. All materials installed shall comply with approved samples. All materials shall be properly stored and protected from internal and external elements. The Elevator Contractor shall be responsible for any damages and costs incurred due to improperly stored material.

305A Materials – Reused or Refurbished

All material that is scheduled to be reused or refurbished shall be properly adjusted for optimal performance as per design by the Manufacturer like-new conditions.

306 Applicable Codes, Documents and Reference Manuals

The entire Elevator Modernization Project shall comply with all applicable Codes, ordinances, and Local Laws of the Authority Having Jurisdiction (AHJ) at the time of filing, including but not limited to the following codes and standards as applicable:

- American Society of Mechanical Engineers
 - ASME A17.1 Safety Code for Elevators and Escalators
 - ASME A17.2 Inspectors' Manual for Elevators and Escalators
 - ASME A17.3 Safety Code for Existing Elevators and Escalators
 - ASME A17.5 Elevator and Escalator Electrical Equipment
 - ASME A18.1 Safety Standards for Platform Lifts and Stairway Chairlifts
 - ASME QEI-1 Standard for the Qualification of Elevator Inspectors
- The AHJ Building Code
- The AHJ Electrical Code
- The American National Standards Institute
 - ANSI A117.1 Accessible and Usable Buildings and Facilities
- The Vertical Transportation Handbook 2010 by George Strakosch.
- National Fire Protection Association (NFPA).
 - NFPA No. 70 - The National Electrical Code

NFPA No. 80, Fire Safety of Hoistway Entrances.
NFPA No. 101, Life Safety Code.
Americans with Disabilities Act (ADA) Application Guidelines
Environmental Protection Agency (EPA)
BOCA Code
IEEE (Institute of Electrical and Electronics Engineer)
International Building Code (IBC) and Other Codes as Applicable

All materials, machinery, procedures, workmanship shall conform to the above standards. The equipment used shall be from a manufacturer regularly engaged in the manufacturing of elevator equipment.

At the end of the modernization, the elevator shall fully comply with ACI 350-06, Chapter 21 "Special Provisions for Seismic Design."

307 Accident Reports

Should any accident occur of any kind, the Elevator Contractor shall furnish Vertical Systems Analysis, Inc. with copies of all reports. All reports should be sent without delay and in addition, forwarded to any other parties concerned.

308 Definitions

Terms used in this Project Specifications can be found in the American Society of Mechanical Engineers (ASME A17.1, 2, 3, 5). When there are any technical questions to be resolved, the Consultant will refer to the standards listed in this Project Specifications under Applicable Codes. For the purpose of this Project Specifications please see the following terms:

Consultant: Vertical Systems Analysis, Inc.

Owner/Manager: Lebanon County Housing Authority

Project Specifications: This entire document including Addendums & attachments as applicable.

Elevator Modernization Specification: (Same as Project Specifications.)

Contract Document or Document: (Same as Project Specifications.)

Elevator Contractor: Organization awarded this Project or the Bidder or its legal assignee.

Subcontractor: Organization working for the Prime (Elevator Contractor).

NOTE: IN ANY CASE WHERE A WORD IS USED IN THE SINGULAR IN THIS SPECIFICATION, IT IS INTENDED TO INCLUDE THE PLURAL OR MULTIPLE AS APPLICABLE IN ORDER TO COMPLETE THE ELEVATOR MODERNIZATION.

THIS STATEMENT SHALL APPLY TO THE ENTIRE PROJECT SPECIFICATIONS.

309 Work By Others

All work performed by Sub-Contractors, which the Elevator Contractor hires, shall be strictly supervised by the Elevator Contractor. Any negligence, errors or commissions on the part of the Subcontractor is the responsibility of the Elevator Contractor. At the onset of the Elevator Modernization, the Elevator Contractor will be required to provide the Consultant with a list of subcontractors that will be working at the project site

for approval, (will not be withheld arbitrarily). A competent supervisor for the Elevator Contractor will be present when a Subcontractor is at the site. All coordination is the responsibility of the Elevator Contractor.

310 Coordination

The Elevator Contractor shall familiarize himself/herself with the Elevator Modernization Specifications, any drawings, manufacturers' modernization procedures and work schedules for those phases of work performed by his/her subcontractors. If the contractor's work or the work of any of his/her subcontractors depends upon the execution of the work of another subcontractor or upon his/her own work, the bidder shall so coordinate all phases of work, to avoid conflicts in modernization procedures and construction schedules. The Elevator Contractor shall be fully responsible for any conflicts caused by his/her workers and any subcontractors. Where the apparatus and equipment have been indicated on the drawings, the dimensions have been taken from typical equipment of the type specified in this section. The Elevator Contractor shall carefully check the drawings to verify that the equipment that was specified will actually fit into the spaces available. The Elevator Contractor shall make timely examinations of the work of all subcontractors before they proceed further. The bidder shall resolve all problems in terms of coordination. The Elevator Contractor shall allow the Cab Elevator Contractor to have exclusive use of the cab at the lobby or basement landing for two weeks during the modernization work.

Any coordination with other companies, as required by the Owner, including but not limited to Captivate Network, electricians, construction, security cameras, hoistway, pit, wiring by other trades, or any other elevator related work required / requested by the Owner or the Owners representative, shall be included at no additional cost.

311 Additional Work

See attached HUD General Conditions for Construction Contracts

312 Extensions of Time and Project Delays

See attached HUD General Conditions for Construction Contracts

313 Liens and Affidavits

Final payments do not, in any way, relieve the Elevator Contractor of responsibility. Neither the final payment nor any part of the retained percentage shall become due, until the Elevator Contractor shall deliver to the Owner a complete release of all liens arising out of this contract from the Elevator Contractor and all subcontractors and vendors entitled to file a lien on the premises. In addition, the Elevator Contractor shall furnish an affidavit to the Owner that so far as the bidder has knowledge or information, the release includes all labor and materials for which a lien could be filed or receipts in full in lieu thereof. If any lien remains unsatisfied, after all payments are made, the Elevator Contractor shall refund to the Owner, all monies that the Owner is compelled to pay in discharging such a lien, including all costs, expenses and attorney's fees.

314 Payments

See attached HUD General Conditions for Construction Contracts

315 Withholding Payments

See attached HUD General Conditions for Construction Contracts

316 Additional Matters

Work not particularly specified in the specifications, nor detailed on the contract drawings, but involved in carrying out the obvious intent, necessary to complete and properly execute the work, is required and shall be performed by the Elevator Contractor at no extra cost to the Owner.

It is the intent of these specifications to furnish a complete installation in all respects to provide properly functioning elevator service as designed and as per all applicable laws, codes, and ordinances. Therefore wherever the words "Provide", "Furnish" etc. appear in these specifications it shall mean "Furnish and Install" which will include labor and material unless specifically indicated otherwise.

In the event of a real or apparent discrepancy on material or product selection or on labor needed to perform all or part of these specifications, it will be determined that the Elevator Contractor has based their bid on the more expensive option.

The Elevator Contractor shall not use as part of the permanent equipment any experimental devices, construction or materials which have not been fully tried in at least substantially similar or under comparable service except as may be especially approved by the Consultant. These tests shall be in addition to tests herein specified and shall be made at the expense of the Elevator Contractor. The intent of these specifications is to not detail the construction and design of the several parts of equipment, but it is expected that the type, material, design, workmanship and construction of each and every part shall be fully adequate for the service required/durable/properly coordinated with all other parts, in accordance with the best commercial standards of quality and of the highest commercial efficiency. All parts of electric and magnetic circuits shall be ample and proper size, design and material to avoid injurious heating and arcing, and all other objectionable effects which may reduce the efficiency of operation and/or economy of maintenance and upkeep below the best commercially available results. Minimum requirements for design, materials, etc., are given herein for certain parts of the equipment.

317 Maintenance

The Elevator Contractor shall provide monthly elevator maintenance service and 24 hour unlimited callback service for the passenger elevators upon signing of the Modernization Contract. Such maintenance shall be provided continuously through the modernization work. The attached preventive maintenance contract will become effective immediately upon signing this contract on all elevators included herein, unless otherwise stated in writing by Owner or Consultant.

As each elevator is removed from service to be modernized, the preventive maintenance for that elevator will stop. The elevator contractor shall not be paid any preventive maintenance fees on the newly modernized elevator until that elevator has been signed off by the Consultant. Again, any preventive maintenance fee will not resume until each elevator has received final approval by the Elevator Consultant. All work under this preventive maintenance contract shall be performed by competent personnel under the supervision and in the direct employ of the Elevator Contractor from the date of sign-off from the consultant. Emergency call-back service shall be available at all times at no additional cost. All maintenance shall be performed by the Elevator Contractor. The agreement shall include monthly visits, examinations, adjustments and lubrication of all equipment. The maintenance agreement shall be of the full service type. Replacements or repairs necessitated by reason of negligence or misuse of the equipment or by reason of any other cause beyond the control of the Elevator Contractor, except ordinary wear-and-tear, shall be the responsibility of the Owner. Any claim of vandalism must be brought to the attention of the Owner immediately following the incident and will then be investigated by both parties. No work shall commence until Owner(s)/ Owner's Agent approval.

The maintenance agreement shall provide the Owner with the right of inspection or to have an Elevator Consultant inspect and review all work to be performed under the maintenance contract. The maintenance contract shall include a thirty (30) day cancellation clause, to be exercisable by the Owner in its discretion. The Elevator Contractor must show that the bidder has had experience in the elevator maintenance field and that the bidder employs competent personnel to handle this service, maintains local and adequate stock of parts for replacement for emergency purposes, and has qualified men and women available at such places to insure the fulfillment of this service without unreasonable loss of time in reaching the job site. The maintenance agreement is not transferable/assignable to anyone without the prior written consent of the Owner. The Owner shall also be notified, in writing of a change in a maintenance mechanic.

318 Mechanical Design

All of the following requirements shall apply to all parts whether replaced, restored, repaired or used in existing condition. All moving parts and equipment shall be protected by guards and other protection devices that are stipulated by agencies having jurisdiction; moving parts, belts, pulleys, chains, gears, couplings, projecting setscrews, keys cables, and other moving parts so arranged that one might become injured if there were contact. Any bolts used to connect moving parts, bolts carrying hoisting stresses, and all other bolts except guide rail bolts, subject to vibration or shock, shall be fitted with adequate means to prevent loosening of the nuts and bolts. Also, there shall be a PE stamp on all three (3) sets of machine layouts including welding details and/or bolt torque.

Bolts transmitting important shearing stresses between machine parts shall tight body fit in drilled holes.

All bolts subject to vibration shall be provided with split ring lock washers. Rail securing bolts shall meet with strict standards in relationship to all codes. Machine work, assembling and installing shall be done by skilled and experienced mechanics using only first class modern equipment and tools. Parts shall be manufactured to high precision standards so that wearing parts will be readily interchangeable with stock repair parts. Bushings, bearings, pins, guides, gears, etc., shall be properly fabricated. They shall be assembled and installed in accurate alignment and with working clearance most suitable for the load, speed, lubrication and other conditions of use. During the maintenance period specified herein, all bearings shall be regularly checked for any tendency to run hot, and any defects corrected in an approved manner. Should any questions arise about Mechanical Design the reference tool shall be ANSI A17.1 2000/03.

319 Wiring and Electrical Design

All wiring shall comply with the requirements of local Electrical Codes and local municipality. All wiring shall be installed in wire raceways with approved outlet boxes. Terminal boxes, pull boxes and other similar items shall be of approved substantial construction, thoroughly reinforced, and in no case less than the approved rating. All piping and raceways shall be rigid steel conduit, IMC, EMT or UL Approved metal trough. Switches, relays, contacts, circuits and all other electrical parts shall be the latest improved type for the conditions of use. They shall function properly in full accordance with the requirements of the machines controlled, and with the specified operating requirements of the elevator industry codes. Forked or ring type wire connectors or equivalent devices, shall be used for all connections of smaller stranded conductors. Proper crimping tools shall be used for the selected lugs. Terminals shall be identified in a neat, permanent, legible manner.

“Wire nut” or scotch locks will not be used . All wire runs to be labeled from “Point A” to “Point B” with waterproof ink on laundry tags.

The entire wiring system shall be tested as required and inspected before operation. All electrical wiring in hoistway, on the cab-sling and in the machine room shall be replaced with new wire, unless otherwise stipulated. The Elevator Contractor shall use only copper wiring. All conduit runs or ducts shall contain 20% spare wires. If there are ten (10) or less wires in any conduit then there shall be a minimum of two (2) spare wires. Existing conduit or duct may be reused where approved by the Consultant. All wiring from the controller, selector, dispatch panels, etc. and from the separate outlet for car lights and intercom

to all elevator equipment shall be furnished and installed as part of this work. Wiring shall be properly insulated and have a flame-retardant and moisture-resisting outer cover, using strain boxes as required. The traveling cables shall have steel-supporting means to relieve the conductors of strain. Travelers may be run directly to the machine room, suspended at the top of the hoistway and enclosed in conduit within six foot of the hoistway suspension point. Traveling cable will be hung in the hoistway and under the car with its steel core, utilizing Draka's universal hanging system when the length in excess of 200 feet. For hanging lengths of less than 200 feet, provide proper rated Kellum grips sized for each traveler. Installation method to be followed as set forth in Draka's installation guide. Traveler suspension brackets are to be approved by the consultant. Manufacturer's installation procedure shall be adhered to for warranty purposes. The outer covering shall be fire resistant. Cables shall have a proper size loop and be free from contact with the hoistway construction, car or other equipment. All traveling cables shall contain 20% spare wires and, in any event not less than two spare wires for each type. Provisions shall be included for wiring of voice communication, music, cameras and monitors. The traveling cables shall include conductors required to operate all devices included in the specification.

320 Acceptance of Elevator Work

The approval of all work shall take place after all punch lists have been completed and the Consultant verifies the same. Approval of the elevator work will take place after the Elevator Contractor claims all work is complete and the Modernization has been checked by his/her representative. When all punchlist items have been resolved and the elevator work meets with Vertical Systems Analysis, Inc. approval, then final payment will be approved and the one (1) year guarantee will commence. Any major failure corrected during the one year warranty period shall extend by one year from such correction the warranty for such part that failed.

321 Tests

The Project Specifications includes all tests required by law. Should the Consultant request any test, the Elevator Contractor shall perform such tests in the presence of the Consultant. All parts, work and associated equipment shall be tested and adjusted to work properly and be left in perfect operational condition. The Elevator Contractor is to correct any defects disclosed by these tests without any additional costs to the Owner. Should any damage result from tests, the Elevator Contractor is fully responsible. The Elevator Contractor shall furnish a team of competent workers, materials and instruments to assist Vertical Systems Analysis, Inc. in making the following tests after all work has been completed by the Elevator Contractor. The Elevator Contractor is to perform a Category One (1) and a Category Five (5) Safety Test at the completion of all work. All tests and testing will be included in the base bid price. All tests are to be coordinated with Vertical Systems Analysis, Inc in order to witness the acceptance of each elevator. VSA must be contacted no less than five (5) business days prior to the test.

322 Inspections

Vertical Systems Analysis, Inc. shall inspect the entire Modernization for compliance and workmanship. The Elevator Contractor shall comply fully with any Buildings Department Inspections. All performance ratings will be checked and adjusted. The applicable document for elevator performance criteria will be The Vertical Transportation Handbook by George Strakosch (2010). The Owner/and the Elevator Consultant reserve the right to re-adjust all performance times until it is deemed that the system is operating correctly, this also includes program changes. The Owner has the option to inspect the entire system as well.

323 Work By Owner

The following work shall be the Owner's responsibility:

Property maintain the self-closing, self-locking, fire rated machine room door.

Provide machine room HVAC. to maintain recommended ambient temperature and humidity range.

Provide 3 Phase AC Electrical Service. Requirements to be confirmed by the elevator contractor

Provide proper venting of hoistway and machine room.

Provide dedicated telephone service for elevator emergency communication each machine room.

Provide notification to building occupants as needed prior to and during construction.

324 Liquidated Damages Clause

The contractor shall provide a detailed schedule of completion for the elevator modernization project. The contractor is to provide three (3) copies of this schedule. Two (2) copies are to be given to building Ownership/Management and One (1) copy to VSA. The schedule, as outlined in section 400, should be received no later than two (2) weeks prior to mobilization of the project. It should not only outline lead time and work progress on a daily basis, but shall have expected dates of tests to be performed and punch list deficiencies are to be incorporated into the inspection schedule. All punch list items relative to the elevator must be completed prior to returning the modernized elevator back to service. The contractor shall set forth this schedule and abide by it. The parties agree that because actual damages will be impossible to calculate, Ownership shall be entitled to \$500.00 per calendar day, as liquidated damages and not as a penalty, for every day over the schedule with a one (1) week grace period, from any payment owned to the contractor, whether in modernization fees or monthly maintenance charges, until the contractor has completed all work under the Modernization Contract.

324A Liquidated Damages Clause (Accelerated Schedule)

Time is of the essence of this contract. If the executed contract incorporates either or both of the accelerated work schedule alternatives listed on the certification of bid as alternates 1 or 2, then the Contractor will be additional liquidated damages. If the Contractor shall neglect, fail, or refuse to complete the work within the time specified for Substantial Completion in the Contract, then the Contractor does hereby agree, as a part consideration for the awarding of this Contract, to pay to the Owner, as liquidated damages and not as a penalty, the prorated sum as indicated in **Alternate No. 1 & 2**, beyond the dates set forth in the Agreement that the Contractor fails to achieve Substantial Completion for the Project. The said amount is fixed and agreed on by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the true value of the damages which the Owner will sustain by failure of the Contractor to complete the Work on time. Said amount is agreed to be a reasonable estimate of the amount of damages which the Owner will sustain and said amount shall be deducted from any monies due or that may become due to the Contractor.

325 Violations

The Elevator contractor will be responsible to have all pending Violations, regardless of age, on the newly modernized elevator(s) removed once modernization work on that elevator is complete. Any paperwork, expediting, hearings and/or any other means necessary to clear all violations shall be the sole responsibility of the elevator contractor. If there is work that needs to be performed by someone other than the elevator contractor, or work that was not include in the modernization scope of work, the contractor **MUST** inform the Owner/Management and Vertical Systems Analysis in writing. The contractor, however, is not responsible for fines incurred up to the point of the elevator being returned to normal service.

326 Acceptance and Category One (1) and Category Five (5) Testing of Elevators

Although not required by the Authority Having Jurisdiction (AHJ) Building Code, Vertical Systems Analysis

requires that a Category One (1) and Category Five (5) test be performed at the time of the final acceptance test. It is the sole responsibility of the contractor to ensure that all necessary paperwork has been submitted, in a timely manner, to the AHJ and all weights, staffing and any other items needed for the test be available. The contractor is to perform and file such test the same day as the acceptance test providing the inspector has passed the newly modernized elevator.

Should the elevator contractor fail to notify the elevator consultant of the acceptance test at least five days in advance and VSA is not able to attend the test, it will be the elevator contractor's responsibility to perform the test in the presence of the consultant at no additional charge to the client.

327 Electrical Filing

When filing the proper elevator permits with the AHJ, the contractor shall also file the proper electrical permits. It is the sole responsibility of the elevator contractor to file and have all permits signed off, as well as all and any filing fees. VSA shall provide all expediting services to the chosen elevator contractor for a nominal fee. Any questions regarding same shall be directed to VSA Management or Executive staff.

IT IS ABSOLUTELY IMPERATIVE THAT THE ELEVATOR CONTRACTOR KEEP VSA INFORMED ABOUT ELEVATOR STATE ACCEPTANCE TEST DATES AND CHANGES THERETO SUCH AS CANCELLATIONS AND RESCHEDULES. FAILURE TO DO SO WILL RESULT IN FORFEITURE OF 5% OF THE CONTRACT AMOUNT.

329 Cancellation of Current Services

By submitting a bid, the current elevator contractor hereby agrees to waive any and all rights to any clause, section, paragraph or article, in whole or in part, which holds the building, cooperative, condominium, corporation, Owner, manager or managing agent, responsible for monies due or penalties imposed in accordance with early cancellation of the elevator maintenance agreement in effect. This submission by the incumbent elevator maintenance firm, or a subsidiary of same, will thereby allow the Owner to cancel the current elevator maintenance agreement with or without cause upon 30 days written notice to the elevator maintenance provider.

400 DRAWINGS AND DIAGRAMS

400 Submittals

All submittals shall be sent directly to Vertical Systems Analysis, Inc. for code compliance approval only. If necessary, the Consultant will forward the drawings and diagrams to all appropriate parties. Approval is necessary by Ownership before the fabrication of any material or parts may be used. The Elevator Contractor will supply as many copies of submittals as are needed. The Elevator Contractor will proceed only after Vertical Systems Analysis, Inc. has returned approved drawings and/or submittals. The contractor shall provide a Submittal Log showing the status of all submissions.

VSA will be providing the chosen elevator contractor all AHJ Filing drawings required for this project, In order to insure proper scope is filed with the AHJ, for a nominal fee. These drawings will be for filing purposes only. Any questions regarding same shall be directed to VSA Management or Executive staff.

Four (4) Copies of the following will be submitted to the Consultant:

1. Fixture details shall be prepared and supplied to the Owner/Consultant for approval. All colors and finishes will be chosen by the Owner or his/her Architect. Elevator Contractor shall supply samples to Owner for approval. Samples required include push buttons, Braille tags, jamb markers, (3) 6" X 6" pieces of cab material, entrance and signal fixture materials and type of edge on fixture plates.
2. All wiring diagrams.
3. A detailed task schedule to be submitted for approval. The schedule shall include the following starting from contract signing:
 - a. Contract Signing
 - b. Five (5) weeks for drawings
 - c. Approval turnaround time (2 Weeks)
 - d. Lead time for fabrication after approval
 - e. Delivery of each major component.
 - f. Task breakdown that includes machine room, hoistway, elevator car, pit, hall buttons, punchlist deficiencies, etc.
 - g. Building Responsibilities, such as telephone, power, machine room items, etc.
 - h. Subcontractors that will be used on the project.

If the above information is not provided before the commencement of Elevator Contractor on-site, a 5% deduction of the total price of the Contract will be forfeited by the Elevator Contractor.

4. Elevator cab enclosure drawings and details. Cab weight required for new cabs and weight difference for remodeling.
5. Information on drives, controls, dispatchers and sequence of operation, all equipment, devices and material being installed.
6. Machines, door equipment, door reopening device, limits, communication, position indicators in a loose leaf indexed booklet.
7. A list of manufacturers and their equipment being used for approval at the time of the bid package.
8. **Where applicable**, the following job specific equipment, drawings and/or catalog cuts must be submitted in binders. The binder shall be indexed and tabbed for each section. This submission is not for a generic submittal. This equipment must be exactly what will be supplied for this project.

Machine	Controller & Drive Unit	Regen Drives
Hoist	Rope Gripper	Sheaves
Main Line Disconnect	110 VAC Car Lighting	Disconnect
Limit Switches	Lighting Fixtures (Pit, Top of Car, Machine Room)	
Governor	Governor Tension Frame	Safeties
Saddles	Roller Guides	Rail Brackets
Top of Car Inspection Buffers	Station	Emergency Power Unit & Alarm Bell
Door Operator		
Detector Edge	Whisper Flex	Car Door Equipment
Hall Door Equipment	Cabs	
Wire Rope (Hoist & Governor)		

401 Electrical Wiring Diagrams

The Elevator Contractor shall furnish two (2) sets of neatly bound instructions describing control, operation and data of installation of all devices. A separate set of laminated electrical prints for each different device will be provided for each machine room bound with grommets and ring clips. In addition, one set of Mylar "as built" drawings shall be provided to the Owner. Furnish two (2) copies of maintenance recommendations and complete field wiring diagrams, straight line diagrams showing all electrical functions, connections and sequence operation. Provide complete manufacturer's information to obtain any replacement parts necessary. A ledger sheet shall be furnished with each set of drawings.

Riser, pipe and wire runs are to be submitted as line drawings. Each cable run requires a tag on both ends describing "To" and "From" location written in waterproof ink.

402 AutoCAD Drawings

All drawings must be submitted to VSA in an AutoCAD 2017 format or in a format requested by VSA and Owner. A DVD, CD or flash drive to be provided if requested by the Owner or consultant.

500 PROJECT REQUIREMENTS

500A Insurance

Prior to commencement of design or actual work, the Elevator Contractor shall furnish all Certificates of Insurance which are requested, naming the Owner and/or the Corporation additionally insured. The Elevator Contractor shall provide insurance for the entire period that the work takes place at the premise referenced herein and have a minimum of one million dollars' worth of insurance, with three million dollars' worth of aggregate insurance. It shall be the Contractor's full responsibility to maintain his/her insurance. The Contractor's insurance shall cover all of his/her tools and elevator equipment not yet installed on the elevators. It is also the Contractor's responsibility to provide or cause any Subcontractors to have equal insurance coverage. The Elevator Contractor agrees to assist in reporting and investigating any accident and, to cooperate with all interested insurance carriers in the handling of any claim by securing and giving evidence and obtaining the attendance of witness as required for any claims or suit. The Elevator Contractor shall have the following coverage:

Comprehensive General Liability Policies shall include: Standard Broad Property damage endorsed for Elevator Contractor, The Elevator Contractor's Subcontractor and any and all tradesmen engaged on the project. All insurance shall include the "occurrence" basis wording.

Comprehensive General Liability Insurance; Public Liability; including premises, products completed operations and contractual.

The Elevator Contractor shall maintain Fire Insurance for storage of any equipment in and on the Owner's premise. In the event that storage is necessary on the job site, the Elevator Contractor shall inform Owner of such necessity and Owner shall offer available space, (if available), for storage of such materials or equipment. The Elevator Contractor shall use said space only for such purpose. Any and all materials which may be stored in such space or which may be brought onto the job site at any time by Elevator Contractor shall be left at Contractor's sole risk. The Owner will not be responsible to Elevator Contractor for loss of or damage to said materials or equipment for any cause whatsoever, except where such loss or damage is caused by gross negligence of Owner, its' agents, servants and/or employees. It is expressly understood and agreed that the Elevator Contractor assumes all risk of loss or damage and the Owner shall not be required to furnish or supply watchmen or security service at any time.

The following entity (ies) shall be named as insured's as applicable:

Owner

The following entity (ies) shall be named as Additional Insured's:

Vertical Systems Analysis, Inc.

500B Project Schedule

Immediately upon contract award, the Contractor will make arrangements for Engineering and Approvals. The number of sets of all drawings (requested previously) requiring approval to maintain the schedule must be submitted to the Owner and Consultant within Four (4) weeks of the date of the signed Contract. If the above information is not provided before the commencement of Elevator Contractor on-site, a 5% deduction of the total price of the Contract will be forfeited by the Elevator Contractor. This is an absolute requirement and failure to follow this requirement may lead to forfeiture of contract at the Owners discretion. The lead time and completion time indicated on the Bid Form shall become effective after Four (4) weeks regardless of the drawing submission situation.

501 AHJ Buildings Inspections

The Elevator Contractor shall be responsible for all costs of inspections and arrangements of same. All necessary authorities shall be contacted to witness tests. Any necessary certificates of inspection(s) and/or permit(s) for operation of the elevator shall be applied for (in advance) by the Elevator Contractor. All applicable Building Codes shall be conformed to in a timely professional manner.

502 Project Manager

All projects awarded for over \$1,000,000.00 or more than four (4) elevators, either in banks or individuals, will have a Project Manager assigned with a minimum of 10 years elevator experience. Their responsibilities will include, but not limited to, (1) - Holding meetings in person or a conference call to the Owner as scheduled by the Owner. (2) - The Project Manager will be required to prepare a job schedule and update it weekly, including but not limited to, signing of contracts, surveying of job sites, submittal packages, all deliverables, duration of jobs (broken down per elevator), and inspections. Once the schedule is agreed-upon, it will become part of the contract. (3) - Any changes or adjustments must be agreed-upon by both, the Contractor and the Owner or the Owner's Representative. (4) - All change orders

will be the Project Manager's responsibility to log and track. Any change order not signed by Owner or Owner's Representative within 30 days from issuing will be consider rejected.

503 Project Supervisor

The Elevator Contractor shall provide a qualified elevator person at the job site to supervise all work and answer any questions which will surface during the duration of the contract. This person shall be informed of all aspects of the project and be directly responsible for workmanship. Routine business concerning the Elevator Modernization- shall be conducted through the Consultant's office unless otherwise stated. The project supervisor shall be answerable to the Consultant. All instructions given to the supervisor shall be binding and represent part of the contract. All verbal instructions issued to the project supervisor will be followed-up by written documentation by Vertical Systems Analysis, Inc.. The project supervisor shall be available for all job and progress meetings. Job meetings shall be decided on as necessary and coordinated with the Consultant.

504 Material Storage

Should the need to store equipment at the job site arise, the Elevator Contractor shall limit the storage of materials to areas approved by the Owner. The Elevator Contractor shall not encumber the premises or overload any portion of it with equipment and materials to a greater extent than it is calculated to bear. The Elevator Contractor stores any and all materials and equipment at his/her own risk. All materials shall be properly stored and protected from internal and external elements. The Elevator Contractor shall be responsible for any damages and costs incurred due to improperly stored material.

505 Rubbish Removal

The Elevator Contractor shall remove all rubbish, on a daily basis. The bidder shall keep the building and premise clean during all work, and leave the premises at completion in perfect condition as far as the work is concerned. If the Elevator Contractor needs a dumpster service it will be coordinated with the Elevator Consultant. The cost for rubbish removal is the contractor's responsibility. The Elevator Contractor shall not hinder the building's rubbish removal system.

506 Equipment Removal

In cases where there is existing equipment, all equipment in good working order designated to be removed and retained for future reuse by the building shall be decided on at the commencement of all work. Any equipment being replaced or made inoperative by the Elevator Contractor shall be removed from the site at the Elevator Contractor's expense. Any questions concerning the retention of elevator equipment shall be made to Vertical Systems Analysis, Inc. The elevator equipment that is replaced does not convert into Contractor's Ownership and shall remain the Owner's property. The Owner of the building's service department may require clean up and removal of rubbish accumulation at any time.

507 Shaftway Protection

Orange safety screening with $\frac{1}{4} \times \frac{1}{4}$ holes shall be provided in any open shaftways. The entire shaft shall be protected to guard against falling debris. In addition to wire mesh, the Elevator Contractor shall exercise extreme caution while performing shaft work. All precautionary measures shall be provided to protect the riding public.

508 Barricades

During the time of the Elevator Modernization, the Elevator Contractor shall provide OSHA acceptable 8

foot tall, 6 panel collapsible barricade protection devices on shaftway entrances. Means to protect the public's safety shall be paramount. Protection shall be provided for the entire elevator shaftway. If the need arises plywood walls shall be constructed to protect the public from the elevator shaftway, also an 8ft tall, 6 panel collapsible barricade shall be provided. This includes but is not limited to dust control protection.

509 Patents

Where any disputes over patents arise, the Elevator Contractor shall hold and save the Owner and its officers, agents, servants and employees and the Consultant harmless from liability of any nature and/or kind on account of any patented invention, process, article or appliance manufactured or used in the performance of the contract, including its use by the Owner, including all cost and expenses for defending any suits unless otherwise specifically stipulated in the contract documents.

510 Permits

All Department of Buildings permits are the Elevator Contractor's responsibility. The Elevator Contractor shall secure any necessary building permits required for performance of work to be done by other trades. The Elevator Contractor shall obtain and pay for all municipal and state permits necessary for execution of the elevator work. VSA will be providing all expediting services to the chosen elevator contractor for a nominal fee. Any questions regarding same shall be directed to VSA Management or Executive staff. The Elevator Contractor is responsible for signing off all elevators.

511 Advertising

No Elevator Contractor advertising will be permitted. The advertising privileges will be retained by the Owner and it shall be the duty of the Elevator Contractor to keep the premises free from unauthorized posters, signs, decorations, etc.

512 Property Protection

The Elevator Contractor shall continuously maintain adequate protection of the Owner(s) property from damage and injury or loss arising out of this contract. The bidder shall make good any such damage, injury or loss, except such as may be directly caused by agents or employees of the Owner. Stairwells, stairways, floors, walls, doors, etc. shall be carefully protected and where necessary, guards provided.

513 Assignments

This Elevator Modernization is not assignable. Neither party to the contract shall assign the contract nor sell it in whole or in part without the written consent of the Owner. The Elevator Contractor may not assign any payment due or to become due, without the prior consent of the Owner.

514 Performance Requirements

Ride quality analysis will be completed on all elevators before and after modernization. All elevator performances requirements and specifications not outlined in the Modernization Specification, shall comply with The Vertical Transportation Handbook by George Strakosch (2010) Included are the following performances criteria:

- Elevator Speeds
- Elevator Capacities
- Governor Tripping Speeds

Floor to Floor Performance Times
 Brake to Brake Performance Times
 Nudging Times
 Leveling
 Door Close Times
 Door Open Times
 Door Closing Force (Regular and Nudging)
 Ride Quality Analysis Before & After Modernization

Any questions concerning the specific times shall be made to Vertical Systems Analysis, Inc. The Owner and Consultant retain the right to make any changes in any performance times. Prior to the final approval of all work, the Elevator Contractor will deliver to the Owner, documentation concerning the performance times.

515 Acceptable Elevator Equipment Manufacturers

Below is a list of equipment manufacturers which can be used and whose equipment can be installed on the project description. Acceptable and/or equivalent manufacturers must meet with the approval of the Owner and the Elevator Consultant. One choice of a controller, door operator, and machine should be chosen, and then an alternate shall be provided to VSA.

Fixtures

Monitor Controls
 MAD Elevator Fixtures
 EPCO

Roller Guides/Shoes
 ELSCO

Controller

MCE
 GAL Galaxy
 Smartrise
 Claddagh

Door Protective

Devices

Tri-Tronics
 Janus
 Adams

Safety Brake

Hollister Whitney Roper
 Gripper

AC Motor

Imperial
 Reuland

Door Equipment

GAL Corp.

Traction Machine

Hollister Whitney
 Imperial
 Torin

Motor Control & Regen

Magnatek
 KEB

The Owner / Consultant retain the right to change or assign a product manufacturer to the contractor.

516 Painting

All equipment new or existing with metal surfaces including, but not limited to, conduits, trough, fittings, fascia, frames, doors, etc., shall be protected with at least one (1) coat of high gloss black rust inhibiting paint system. All parts made of structural steel sections and plates shall be thoroughly cleaned to remove all loose mill scale, rust and foreign matter and then painted. Except where encased in concrete, all these parts shall be given one (1) coat of linseed oil paint, applied thoroughly and evenly, and will be worked into the joints and other spaces. Parts that will be inaccessible after assembly shall be given two (2) shop coats. Machine finished surfaces shall be protected against corrosion by a coat of rust inhibiting paint system or other effective means as soon as the machining is completed. All new machinery and equipment shall be given a shop finish of the best quality normally used paint by the manufacturer of the machinery or equipment. After final adjustment of all machinery, work, metal fittings, etc. exposed in the hoistways or throughout the entire elevator system shall be painted one (1) coat in the field. All machinery, cabinets, etc., shall be painted the same color and numbered as required by code. All surface holes and imperfections shall be filled with iron filler thoroughly rubbed in and smoothed off. Upon completion of the Modernization, all equipment, new and existing, shall be thoroughly cleaned and touched-up and given two (2) additional coats of machine enamel. The motor room, secondary floors, and steps shall be repaired to a smooth surface and painted in a high gloss gray floor enamel. If manufacturers paint cannot be matched, high gloss light gray paint shall be used on all machinery. There should be no black paint on the machine, red or yellow paint should be used on all moving parts and pinch points.

517 Keys

All keyed devices furnished by the Elevator Contractor shall be of common design and available to the open market. At the completion of all work, the Elevator Contractor shall furnish twelve (12) sets of each key device installed.

518 Handicapped Requirements

Handicap code requirements shall be complied with on all aspects of the Elevator Modernization. The American Disabilities Act (ADA) and all state and local laws shall be complied with. The alarm bell button and elevator emergency stop switch shall be 35 inches minimum above the cab floor. Elevator car control buttons shall be located 35 to 48 inches above the cab floor. Braille markings shall be provided adjacent to the floor and control buttons on the car station panel. They shall be a contrasting color background to the left of each button. All letters and numbers shall be a minimum of 5/8" and raised .03". The center line of the hall pushbutton station shall be 42" above the floor when mounting boxes are replaced. The elevator directional lanterns (see drawings) illuminate their respective directions and sound once for the "up" direction and twice for the "down" direction. On each floor landing, "Designations Signs" shall be placed on all entrances on both sides of jamb at a height of 60" above the floor. Designations Signs shall be 2" high, raised .03". The elevator shall have an audible signal to tell passengers that the car is stopping or passing a floor served by the elevator. This signal must have the ability to have its volume lowered or raised, as the building deems fit. All handicap markings and designs shall be approved by the Consultant.

519 Security

The Elevator Contractor will be responsible for the conduct of his/her employees and all subcontractors which work on this project. All machine rooms and elevator spaces will be secured at the end of each work day.

520 Controllers and Selectors

Where applicable, the following specifications shall apply. Provide a solid state control system for each car controller and group dispatcher as required. The system shall utilize isolated solid state input/output interface for the majority of signals. It is understood, where required by the Code, relays and/or contracts are to be utilized for safety and power control considerations. The use of relays as input and/or output devices are not acceptable. All controller components shall be designed to provide the required operation as herein specified. All assemblies, power supplies, switches, relays and other items shall be securely mounted on a substantial, self-supporting steel frame of angles or channels and shall be totally enclosed with covers in a floor mounted cabinet. Equipment shall not be mounted on any of the covers.

All controller switches and relays shall be magnetically operated with contacts of design and material to insure maximum conductivity, long life and reliable operation without overheating. Car and/or landing calls and the "parked" car shall automatically start the car up in response to the "UP" call registered below and "UP" traveling "free" car, or an "UP" or "DOWN" call registered above a "DOWN" traveling "free" car. Either car shall always respond to calls initiated at its' own operating panel. If the "parked" car shall leave the main landing for any reason, it shall assume the duties of the "free" car and the "free" car shall proceed, upon completion of its calls, to the main landing to become the "parked" car.

Delayed Car:

When any car becomes shut down or delayed for a predetermined time interval after it receives start signal, system shall automatically permit remaining car in group to respond to signals and to be dispatched in normal manner. When cause of delay is corrected, car shall automatically resume normal operation, unless it has been manually removed from system.

False Car Call Canceling:

If an excessive number of car calls have been registered, all car calls are canceled after the car has made two (2) consecutive stops without the door protective beams being interrupted. Arrange doors to open automatically when car stops at a landing, and close at a predetermined time interval after opening unless closing is prevented or interrupted by car door reversing device, or "door-open" button in car operation new panel. Pressing of a landing button at floor where car is standing shall reopen doors.

Applicable Tools / Handhelds

In the event that an "OEM" controller, or any controller applicable, is approved by the VSA and installed under these specifications, the manufacture must provide one (1) complete set of adjusting and troubleshooting tools and testing manuals for each type of controller installed to the Owner or Owners representative at the commencement of the project and prior to removing any elevator from service. Additionally, one (1) laptop computer, access tool and / or any hand held devices needed to make any and all adjustments, any item needed for trouble shooting purposes, synchronization, calibration, repair, maintenance and / or proper testing / to safely perform all periodic inspections and tests as mandated by the local jurisdiction, for each type of controller shall also be supplied at no additional cost. This laptop / device shall have full access to all elevator functions. The items provided must be capable of making any type of parameter changes and these tools must provide the same level of access to the controller equipment as the OEM contractor. In the event the controller has separate / additional boards or cards used for adjusting, troubleshooting or testing, these must also be supplied to the Owner.

This equipment will become property of the Owner. In the event these items need repair or replacement, at any time, the manufacturer shall sell new ones to the Owner, upon written request. If, in the future, the Owner requires any software changes, the contractor shall do so, even if they are no longer the service provider.

The Contractor will provide all the necessary tools and analyzers required to adjust, repair, maintain and test the new elevator system as required by Code.

Maintenance instructions and procedures of all elevator equipment installed, including parts lists with part numbers, for type of elevator system.

Lubrication charts indicating all lubricating points and type of lubricant recommended for all equipment.

Complete parts catalogs for all replaceable parts.

Four (4) additional sets of neatly bound instruction manuals explaining all operating features of each elevator system, including all apparatus in the car and lobby control panels.

The Contractor shall provide (on a separate disk) a backup copy of any and all software that is on the tools listed above.

Upon cancellation of such service agreement, the Elevator Contractor shall provide all such upgrades indicated above.

521 Simplex Selective/Collective Operation

Where applicable, the operation of the elevator shall be simplex selective/collective automatic with a flush mounted operating device in the car which shall include a bank of buttons numbered to correspond to the landings served. Single call push buttons shall be mounted at each terminal landing, and "up" and "down" call buttons at intermediate landings. Each push-button station shall be of the "call register" type. Whenever a landing call is registered, the button shall illuminate corresponding to the direction of travel selected. Buttons shall remain illuminated until the call is answered. The operation shall be such that momentary pressure of one or more car or landing buttons (other than those for the landing at which the car is standing) shall start the car, provided interlock circuits are established and causes the car to stop at the first landing for which a car or landing button is pressed corresponding to the direction in which car is traveling. The Elevators shall stop at all landings for which calls are registered and these stops shall be made in the order in which landings are reached, irrespective of the sequence in which buttons are pressed, provided the button for a given landing is pressed sufficiently in advance of the arrival of the car at that landing to permit the stop to be made. If no car buttons are pressed and the car starts up in response to several down calls, the car shall proceed first to the highest down call, and then reverse to collect the other down calls. "Up" calls shall be collected similarly. If the car stops for a landing call and a car button is pressed within a predetermined interval after the stop for a landing corresponding to the direction the car was traveling, car shall proceed in the same direction regardless of other landing calls registered. If "down" landing buttons are pressed while the car is traveling up, car shall not stop at these landings, but these calls shall remain registered. After the highest car and landing calls have been answered and door interlock circuit is established, car shall reverse automatically and respond to "down" car and landing calls. When traveling down, the car shall not respond to "up" landing calls but these calls shall remain registered and be answered on the next "up" trip.

522 Dispatching

The Dispatcher shall continually scan all external inputs to gather data. This information will be used, along with the time of day and field programmable parameters, to select the optimal dispatching strategy for current use.

Corridor call assignments are made on the basis of time, rather than distance of the car from the floor to be served; taking into account such critical factors as car position, system demands, car direction, motor-generator status, door position, number and location of car calls and "This Car Next & Next Car Up" status in the lobby. Hall assignments may be reassigned to an alternate car as traffic conditions change.

If an elevator is in service and available, the Dispatcher has the ability to send the car to any floor. When the car arrives at this floor, the doors do not open. The floor to which the elevator is dispatched is selected as

such that the car is in the best position to service future corridor calls.

Each Dispatcher shall be equipped with a built-in diagnostic CRT monitor which provides complete information on all aspects of the dispatching system. Nomenclature shall be in plain English. Built in CRT screen displays the status of all input and output devices as well as other important information such as status of the car to dispatcher communication links, all hall assignments and use as a terminal during programming.

The system shall be available with an optional lobby color graphics display. The signal is sent from the dispatcher to the remote display over a single twisted pair of wires.

523 Speed Regulation

The rate of acceleration and deceleration of the cars under any condition of load shall be as constant as possible with the method of control specified and employed, and shall be independent of the operating devices in the car.

The acceleration, deceleration and velocity shall be computer controlled. The detection of velocity and position of the car shall be fed into the computer. The computer shall compare this information with the velocity profile and adjust as necessary to insure a fast and smooth acceleration and deceleration curve.

The maximum acceleration/deceleration shall be 4 ft./sec.² and shall change uniformly. The entire elevator system, including hoisting machines and controllers, shall operate without noticeable irregularities, and as quietly as can be obtained by use of high grade materials, first-class workmanship and adjustments.

524 Components

The microprocessor based group dispatcher and communications network shall be designed and installed to meet the following requirements:

Provisions shall be made in the dispatch computer or computers so that the elevator system dispatching can be modified at a future time.

The system shall be so designed that the modifications to the software shall be all that is required to revise the dispatching.

It shall be further designed so that there will be minimum shut down time should changes be required.

The latching circuitry (outputs) shall be of fail-safe design which turns off all the outputs in the event of a processor malfunction.

Power Supplies:

All power supplies utilized shall be UL recognized. They shall all have short-circuit protection.

Frame:

All assemblies, power supplies, chassis, switches, relays, and other items shall be securely mounted on a substantial, self-supporting steel frame. The equipment shall be completely enclosed with covers. No equipment is to be mounted on the covers.

Wiring:

All factory wiring shall utilize UL labeled copper wires. All wiring interconnections shall be neatly routed. All wiring connections to studs or terminals shall be made by means of solder or solderless lugs.

Marking:

All components shall be clearly and permanently identified adjacent to each device and shall be identical to the wiring schematic drawings.

Provide extender boards when computing devices are used inside a computer chassis so as to have access to the printed circuit cards utilized.

Electronic time delay devices shall use stable capacitor or crystals as the time base.

Terminals shall be provided for a future connection to a computerized test system. An adequate number of terminals shall be provided so as to monitor all of the various functions of the elevators. These shall include but not be limited to: car positions, running functions up and down, door "open" and "close", hall and car calls, door protective devices, safety circuits, elevator recapture, etc.

Should noise or frequency filters be required, they shall be furnished by the elevator contractor. A complete set of spare circuit boards will be provided by the Elevator Contractor.

525 Printed Circuits and Related Hardware

All printed circuit boards shall be fabricated with G10 glass epoxy material with a minimum equivalent one ounce copper.

All printed circuitry shall be coated with tin-lead.

All double sided boards shall have plated-through holes.

All printed circuit board edge connections shall be gold plated.

All solid state hardware and devices shall have built-in noise suppression devices which provide a high level of noise immunity.

Power supplies shall have noise suppression devices provided.

All inputs from external devices (such as pushbuttons) and all outputs to external devices (such as indicators, relays) shall be isolated with opto-isolation modules.

The use of relays as input and/or output devices are not acceptable.

A separate, regulated power supply shall be used for each computer chassis.

The control circuits shall be so designed so that one side of the power supply is grounded to provide for testing.

Under no circumstances shall the safety circuits be affected by accidental grouping of any part of the system.

In the event of a power failure or interruption, the system shall be designed so that it will start properly when power is returned.

System memory shall be provided so that data shall not be lost in the event of a power failure or disturbance.

The Elevator Contractor shall provide any dedicated power supply required to the machine room Group Controller or Controllers.

526 As Built Closeout Package

The following as built drawings (One (1) Set), spare parts, spare boards and diagnostic tools.

Machine room and hoistway layouts indicating all changes which have occurred in CAD drawings.

“As Built” wiring diagrams of the controller and drive units. (CAD Drawings on storage media) detailing machine room, hoistway, wiring diagrams and “run sheets” used for point to point wiring.

“As Built” drawing for all signal fixtures and cab enclosures. (CAD Drawings on storage media)

One complete set of disks and or tapes for the base program of the system with all required instructions and a list of vendors for all parts. This package, in the presence of a VSA representative, shall be tested then removed from the controller and dispatcher, and then given to that representative.

Copies of the AHJ final approval certificate and electrical sign-offs for all elevators must be submitted to Owner and Consultant.

All diagnostic tools including proprietary software and computers that are required to trouble shoot and/or electronically interact with installed equipment must be submitted as part of closeout.

Written confirmation, to both the client and VSA, that all outstanding elevators related violations, which pertain to the elevator(s) covered under these specifications, have been cleared.

527 Shaftway Work

It is the responsibility of the elevator contractor to provide smooth and legal hoistways and eliminate any and all voids and holes in the elevator shaftway and machinery room(s). The contractor shall use masonry and/or drywall or sheetrock to accomplish this task. Sheet metal is not fire rated.

Any and all shaftway projection of 2 inches or more shall be angled at 75° to prevent the area from being used as a refuge space.

All work required to achieve the above shall be the contractors responsibility and included in the base bid.

528 Fixtures

All fixtures shall be flush mounted unless otherwise specified. All buttons will be at handicap height. Refer to section 517 to be (ADA) co-compliant. The elevator contractor will be responsible for all cutting and repairing of hall walls to a smooth surface ready for painting. We reserve the right to engrave verbiage on any button panel.

These specifications call for the inclusion of all fixtures outlined to be new and to be chosen by the Owner / Owners representative. If the contractor has included a specific allowance for the fixtures, which could result in a change order after selection is made, the contractor shall clearly state same on their bid form and submission, otherwise, regardless of what is chosen, it shall be deemed as included.

**ELEVATOR AND BUILDING PROFILE
TWO PASSENGER ELEVATORS**

600 ELEVATOR PROFILE OF EXISTING EQUIPMENT

Machine Room Location Roof
Device No. 1
Type Geared
Machine Overhead
Brake Type..... Single Plunger
Motor Data 45 AMPS 1050 RPM 208 VOLTS 15 HP
Operation Automatic
Controller / Date MCE 1000 / 1999
Hoist Cabling 1:1 Size 5/8" / Quantity 4
Electrical Service 100 AMPS
Governor Type Centrifugal Rope
Use Passenger
Cab Capacity 2,500 LBS
Speed 100 FPM
Landing/ Openings 12 / 12 In Line
Car and Hall Door Size / Type 35" x 80" / Single Speed Slide
Door Operation Automatic
Door Protective Devices Yes
Position Indicators Illuminated
Rail Type T-Rail
Rails..... Center
Rail Contact Car Roller / CWT Roller
Buffers Spring

600 ELEVATOR PROFILE OF EXISTING EQUIPMENT

Machine Room Location Roof
Device No. 2
Type Geared
Machine Overhead
Brake Type..... Single Plunger
Motor Data 23.9 AMPS 1050 RPM 208 VOLTS 7.5 HP
Operation Automatic
Controller / DateMCE 1000 / 1999
Hoist Cabling 1:1 Size 5/8" / Quantity 4
Electrical Service 100 AMPS
Governor Type Centrifugal Rope
Use Passenger
Cab Capacity 1,200 LBS
Speed..... 100 FPM
Landing/ Openings12 / 12 In Line
Car and Hall Door Size / Type 30" x 80" / Single Speed Slide
Door Operation Automatic
Door Protective Devices Yes
Position IndicatorsIlluminated
Rail Type T-Rail
Rails..... Center
Rail Contact..... Car Roller / CWT Roller
Buffers Spring

SECTION 700
SPECIFICATION DETAILS

700 SPECIFICATION DETAILS

NOTE: THE INTENT OF THIS SECTION IS TO ENSURE MODERNIZATION/INSTALLATION OF COMPONENTS FOR A FULLY FUNCTIONAL ELEVATOR THAT WILL MEET ALL APPLICABLE LOCAL, REGIONAL AND NATIONAL CODES, REGULATIONS & GUIDELINES. WHILE EVERY ATTEMPT HAS BEEN MADE TO INCLUDE ALL REQUIRED COMPONENTS IN THIS SECTION, ANY COMPONENT THAT MAY NOT BE SPECIFICALLY MENTIONED AND WHICH IS ESSENTIAL WILL BE CONSIDERED INCLUDED IN THIS SECTION AND CONSEQUENTLY IN THE CONTRACTORS BID PRICE.

VERIFICATION

Preliminary Balanced Load Test

The Contractor is required to perform a preliminary balanced load test on typical elevator(s) by bank. This test is to be performed ***PRIOR TO ANY WORK BEING DONE ON THE ELEVATOR as part of this specification. The results of this test must be reported to VSA,*** and should include the counterbalance weightage increase or decrease to achieve balance assuming a car load of 40% of rated capacity. The contractor must include the cost associated with replacing the counterweight frame in their bid as a separate item if required.

Any additionally required counterbalancing that may cause any of the following scenarios to occur, the contractor must report results to VSA:

- A. Modified counterweight renders existing counterweight frame unusable.
- B. Building reactions to change by greater than 5%.
- C. Any hoistway clearances, modified counterweight or additional cab weight rendered insufficient in relation to applicable elevator and building codes and all local codes and ordinances.

The contractor must include the price of a counterweight frame in the alternate section, in the event that a preliminary balanced load test is conducted, and the results show the counterweight frame cannot accept enough weight to counterbalance the cab and 40%.

Equipment Labeling

The device number tags shall be securely attached to the driving machine, motor-generator and/or transformer, controller, main line disconnect switch, and crosshead. The device number shall be engraved on the main car operating panel. This device labeling shall comply with AHJ Building code

A Code Data Plate shall be securely attached to the main line disconnect switch or controller of each elevator. It shall indicate the Code and edition in effect at the time of the installation. The data plate shall also indicate the Code in effect at the time of any alteration and indicate the applicable requirements of 8.7.

Hatch doors shall have their respective landing designation applied to the hoistway side of the door. When more than one elevator exists in a building, each elevator shall be assigned a unique alphabetical or numerical designation. The identification shall be painted on, engraved, or securely attached to the driving machine, motor generator, controller, selector, governor, mainline disconnect switch, crosshead,

and car operating panel.

A counterweight Runby data plate shall permanently and securely provided in the pit, in the vicinity of the counterweight buffer, indicating the maximum designed counterweight runby. The data plate shall conform to A17.1 standard, except that the letters shall be not less than 25 mm (1 in.) in height.

All equipment labeling shall comply with ASME 17.1 and AHJ Building Code.

Handicapped Requirements

Handicap code requirements shall be complied with on all aspects of the Elevator Modernization. The American Disabilities Act (ADA) and all state and local laws shall be complied with. The alarm bell button and elevator emergency stop switch shall not be lower than 35 inches from floor level, and not above 54 inches from the floor level. Braille markings shall be provided adjacent to the floor and control buttons on the car station panel. They shall be contrasting color background to the left of each button. All letters and numbers shall be a minimum of 5/8" and raised .03". The centerline of the hall pushbutton station shall be 42" above the floor when mounting boxes are replaced. The elevator directional lanterns illuminate their respective directions and sound once for the "up" direction and twice for the "down" direction. On each floor landing, "Designations Signs" shall be placed on all entrances on both sides of jamb at a height of 60" above the floor. Designations Signs shall be 2" high, raised .03". The elevator shall have an audible signal to tell passengers that the car is stopping or passing a floor served by the elevator. All handicap markings and designs shall be approved by the Consultant.

Local Law Conformance

The contractor shall comply with all aspects of Local Laws 5, 16 and 58. The elevator system shall fully comply with all fire standards, handicap code requirements and any other applicable regulatory standards. Where applicable, the contractor shall be responsible for the furnishing and installation of smoke detectors as required by Code and to be located where required.

Building Department Filing

The contractor shall include in their base bid, any and all filing and expediting fees, as well as any costs associated with filing this project with the Authority having Jurisdiction, including but not limited to all elevator & electrical permits necessary to complete this elevator project. All expediting services shall be made through the offices of Vertical Systems Analysis.

Smoke Detectors

Smoke detectors shall be installed in elevator shaftways and machine rooms in accordance with ASME A17.1. These smoke detectors when activated shall initiate Phase I emergency recall operation.

Electrical Service

Contractor to verify that adequate power supply is available for the new system which includes, but is not limited to DC to AC conversion. Any discrepancies must be noted in bid.

Electrical Requirements

Contractor shall be responsible for review for adequacy, coordination and compliance of electrical service with AHJ electrical code. All fusing shall be upgraded to code compliance. Existing grounding, feeding service and distribution in the elevator machine room shall be reviewed and upgraded as per code and equipment requirements. Although the electric power supply details are provided elsewhere in these specifications, it is the responsibility of the elevator contractor to take all readings and measurements with

proper instruments to determine actual electric draws by existing equipment. This information will be utilized to design and size the proposed new equipment based upon actual current and voltage draws to prevent electrical tripping and elevator shutdowns with new equipment.

MACHINE ROOM

Machine Room Lighting

The existing machine room lighting shall be reused. If any additional (LED) lights are required in order to achieve the minimum Code requirement of 19 foot-candles, they will be provided by the Contractor.

Main Line Switches

The elevator contractor shall furnish and install new main line disconnect switches and wiring in the machine room. The main line disconnect switch shall be visible from the elevator controller. The main line disconnect switch shall conform to all authorities having jurisdiction. Contractor is to verify all power characteristics for proper sizing of the equipment.

Electrical Sub-Panel

The elevator contractor shall be responsible to furnish and install a circuit breaker panel, approved by the applicable Electrical Code, in the elevator machine room capable of disconnecting the following on per circuit basis;

- ~ Car Lights
- ~ Shaftway & Pit Lights
- ~ Machine Room Lights

All labeling shall follow applicable electrical Codes. Each circuit shall be rated no less than 15 amps.

Cab Lighting Disconnect Switch

The elevator contractor shall provide maximum 15-amped fused and lockable disconnect switch for the cab lighting circuit, approved by the applicable Electrical Code, for each elevator. The contractor shall provide fuses, wiring, and conduit for a complete installation. All work shall comply with the Electrical Code. The disconnect switch shall be properly labeled with the elevator designation.

Machine Room Equipment

All elevator machinery and control equipment shall be located in the machine rooms. Machine, controller, selector, solid state drives, motor generators and mainline switches shall be identified by number. Any work required to facilitate installation of new units in the machine rooms and repair thereof shall be the responsibility of the Contractor. In cases where there are two differ levels in the machine room, a secondary stop switch shall be installed at the controller. The placement of any new equipment shall meet all current and applicable codes including, but not limited to, ASME A17.1 and all local codes and ordinances. Any non-elevator related equipment in machine room and hoistway shall be brought to the Owner and consultant's attention immediately.

Machine Beams

Provide support beams, angles, plates, bearing plates, blocking steel members and all structured members required to properly support machine, governors, deflector and overhead sheaves. Provide anchor bolts, templates and support beams for machine.

Equipment Isolation

Elevator contractor to ensure that all mechanical and electrical equipment is suitably isolated from vibration, harmonic distortion, mechanical and electrical noise, audible noise and radio frequency interference to within acceptable limits as deemed by applicable code(s).

DUPLEX/GROUP

Controllers and Selectors

A microprocessor based Supervisory System (Duplex/Group) utilizing a call allocation algorithm shall be provided for the elevators operating from a common riser of hall buttons.

The system shall be designed so that under any circumstances, there shall not be a pre-planned shutdown of the system or any part of the system other than that for safety. Reset or power loss shall not necessitate reprogramming the system. In any event upon restoration of power or reset, the microprocessor system shall be ready to operate in accordance with specified design criteria without special codes, passwords, etc.

There shall not be any special or proprietary codes or devices introduced in to the system that are not available to the Owner.

Any special components manufactured by the Contractor shall be made available to the Owner for a period of not less than 20 years.

All dispatching features shall be selected internally automatically to meet the passenger traffic demand. The system as a minimum shall monitor landing calls, car calls, loading and unloading of the cars, direction of travel of each car, car operation status, car load status, door position, call frequency and number of elevators in service. This information shall be analyzed by the Group Computer which will instantly select and dispatch the proper action for each car. The selection of action shall correspond to actual current traffic conditions.

The system shall provide for continuously changing operation in various peak traffic situations which include predominantly one way, intense directional traffic with opposite direction traffic, balanced two-way traffic, light traffic and occasional traffic. All traffic analysis shall be done by optimization and call allocation. All program changes shall be selected automatically.

The system operations shall change continuously by demand and not rely on a forced method of program change.

The system shall be capable of being readily programmed to suit varying building requirements. A seven day clock shall be provided to the programs.

The Group Supervisory System shall provide for continuously changing operations in various traffic situations and shall incorporate the following features designed to efficiently handle the varying passenger traffic demands:

It shall provide for a continuously changing program of varying combination when there are landing calls registered. These shall include components of incoming, outgoing, inter-floor and

special traffic in varying intensities, designated parking operations are carried out as previously specified.

The main floor up call is to be given priority. The system shall have forecasting capabilities which will assign the desired degree of priority to any additional entrance floor.

The system shall measure the call waiting times on all the floors, and determine through forecasting whether the elevator, on becoming vacant, shall continue in the previously running direction or reverse and assist in concentrated inter-floor traffic in specific areas of the building. The system shall constantly evaluate the service quality of all forecasted waiting times. The landing calls will be allocated by the process of optimization with no final assignment established until the total quality of passenger service is assessed.

A light traffic mode is assumed when there are no registered landing calls within a preset time. During periods of traffic, elevators shall be parked in anticipation of new landing calls. At least one elevator of each group is to be parked at the main floor. Other elevators can be parked at upper or lower floors, as previously stated. The elevators shall be parked with the doors closed. The need for parking shall be checked by the system at frequent intervals.

With the increase of traffic intensity, a priority method of call assignments shall be initiated. Priority of service for landing calls is determined by the call waiting time in relation to the prevailing traffic condition. The system shall prevent waiting times that are excessive as compared to the traffic intensity.

Peak type of demands shall be recognized by monitoring the total traffic flow including a predominance of car calls in one direction, a high intensity of landing calls in one direction, a sudden high percentage of load increase when answering landing calls, main floor landing corridor call intensities and departure of elevators from a designed floor with a predetermined load several times in a preset time.

When an up peak type of demand is recognized the main floor up call is immediately classified as priority call. The first vacant elevator is always dispatching to the main floor, the dispatch of another vacant elevator to the main floor is subject to optimization by the computer and decisions depending on the degree of up intensity and the amount of traffic flow against the main flow. When passengers enter the elevator, the elevator can start as soon as the first car call has been registered. The doors shall, however, stay open as long as further passengers are detected entering the elevator. Once the car call has been registered, the control system shall dispatch another vacant elevator to the main floor, unless a vacant elevator is already there.

With an up peak traffic type of operation, the main traffic flow (incoming traffic) shall receive preferential service. The system shall continuously re-evaluate the traffic pattern, and adjust the group operation. If it detects a sudden simultaneous intensity down demand, it shall cancel the automatic return to the main floor.

When a down peak condition is recognized, the down call shall be served through the optimization process to provide efficient traffic handling. In extremely intense down traffic situations, the priority of the up calls is decreased to a preset value according to the main traffic flow preference system. The system shall provide equal service to every floor, even during exceptionally heavy down traffic.

The system operation shall continuously change by demand and shall not require forced system changes to provide optimum operation and call response.

In the event that any elevator is delayed for more than a predetermined time interval after it receives a start signal, the system shall automatically remove the elevator from Group Automatic Operation (as applicable) and permit the remaining elevators in the group to respond to signals and be dispatching in the specified manner. When the cause of the delay is corrected, the elevator shall automatically return to Group Automatic Operation unless it has been manually removed from the system.

In the event of failure of the automatic dispatching system, the elevators shall continue to be automatically dispatching by auxiliary means so as to provide reasonable service. Failure of the automatic dispatching system shall be indicated by an illuminated signal in the Supervisory Control Panel.

Programmable features shall include but not be limited to the following:

- 1) Ability to recognize continuing demand for service from more than one lobby by causing multiple cars to stop based on car loading at that lobby, lack of demand at other lobbies or programmed stopping at a number of lobbies.
- 2) Inclusion of electronic, programmable clock control to initiate return to the dispatching lobby during prearranged times each day.
- 3) Provisions to provide specialized service to a floor or group of floors with the ability to assign an elevator to park at a given floor.
- 4) Changing of the priority of calls which will be given preference.
- 5) Provisions to change the load weighing settings from the respective car controllers. Contractor's proposal for Contractor's standard demand dispatched, multiple zoned, microprocessor supervised group automatic operation will be given consideration, providing detailed proposal specifications of standard features accompany bid, that there is no additional cost, and that all specified special operating features are provided.

Dispatching

The dispatching of cars to answer hall calls is the primary function of the Microprocessor. A thorough understanding of the methods involved and the programming would take far more than this document to be able to explain. We can however, summarize the basic concepts of the Microprocessor. The process of dispatching is selecting the most appropriate car to answer each hall call. Some of the factors in deciding which car is the appropriate car to answer a call include:

- Location of the cars
- Direction of travel
- Registered car calls
- Anticipated car calls
- Door position
- Loading of the car
- Current traffic pattern
- Past traffic patterns

With the power in the Microprocessor, we are able to make complex decisions based on this

information. The speed of the computer provides split-second analysis of the total situation. The system shall be designed so that under any circumstances, there shall not be a pre-planned shutdown of the system or any part of the system other than that for safety. Reset or power loss shall not necessitate reprogramming the system. In any event upon restoration of power or reset, the microprocessor system shall be ready to operate in accordance with specified design criteria without special codes, passwords, etc.

There shall not be any special or proprietary codes or devices introduced in to the system that are not available to the Owner.

Any special components manufactured by the Contractor shall be made available to the Owner for a period of not less than 20 years.

All dispatching features shall be selected internally automatically to meet the passenger traffic demand. The system as a minimum shall monitor landing calls, car calls, loading and unloading of the cars, direction of travel of each car, car operation status, car load status, door position, door position, call frequency and number of elevators in service. This information shall be analyzed by the Group Computer which will instantly select and dispatch the proper action for each car. The selection of action shall correspond to actual current traffic conditions.

The system shall provide for continuously changing operation in various peak traffic situations which include predominantly one way, intense directional traffic with opposite direction traffic, balanced two-way traffic, light traffic and occasional traffic. All traffic analysis shall be done by optimization and call allocation. All program changes shall be selected automatically.

The system operations shall change continuously by demand and not rely on a forced method of program change.

The system shall be capable of being readily programmed to suit varying building requirements. A seven day clock shall be provided to the programs.

The Group Supervisory System shall provide for continuously changing operations in various traffic situations and shall incorporate the following features designed to efficiently handle the varying passenger traffic demands:

It shall provide for a continuously changing program of varying combination when there are landing calls registered. These shall include components of incoming, outgoing, inter-floor and special traffic in varying intensities, designated parking operations are carried out as previously specified.

The main floor up call is to be given priority. The system shall have forecasting capabilities which will assign the desired degree of priority to any additional entrance floor.

The system shall measure the call waiting times on all the floors, and determine through forecasting whether the elevator, on becoming vacant, shall continue in the previously running direction or reverse and assist in concentrated inter-floor traffic in specific areas of the building. The system shall constantly evaluate the service quality of all forecasted waiting times. The landing calls will be allocated by the process of optimization with no final assignment established until the total quality of passenger service is assessed.

A light traffic mode is assumed when there are no registered landing calls within a preset time.

During periods of traffic, elevators shall be parked in anticipation of new landing calls. At least one elevator of each group is to be parked at the main floor. Other elevators can be parked at upper or lower floors, as previously stated. The elevators shall be parked with the doors closed. The need for parking shall be checked by the system at frequent intervals.

With the increase of traffic intensity, a priority method of call assignments shall be initiated. Priority of service for landing calls is determined by the call waiting time in relation to the prevailing traffic condition. The system shall prevent waiting times that are excessive as compared to the traffic intensity.

Peak type of demands shall be recognized by monitoring the total traffic flow including a predominance of car calls in one direction, a high intensity of landing calls in one direction, a sudden high percentage of load increase when answering landing calls, main floor landing corridor call intensities and departure of elevators from a designed floor with a predetermined load several times in a preset time.

When an up peak type of demand is recognized the main floor up call is immediately classified as priority call. The first vacant elevator is always dispatching to the main floor, the dispatch of another vacant elevator to the main floor is subject to optimization by the computer and decisions depending on the degree of up intensity and the amount of traffic flow against the main flow. When passengers enter the elevator, the elevator can start as soon as the first car call has been registered. The doors shall, however, stay open as long as further passengers are detected entering the elevator. Once the car call has been registered, the control system shall dispatch another vacant elevator to the main floor, unless a vacant elevator is already there.

With an up peak traffic type of operation, the main traffic flow (incoming traffic) shall receive preferential service. The system shall continuously re-evaluate the traffic pattern, and adjust the group operation. If it detects a sudden simultaneous intensity down demand, it shall cancel the automatic return to the main floor.

When a down peak condition is recognized, the down call shall be served through the optimization process to provide efficient traffic handling. In extremely intense down traffic situations, the priority of the up calls is decreased to a preset value according to the main traffic flow preference system. The system shall provide equal service to every floor, even during exceptionally heavy down traffic.

The system operation shall continuously change by demand and shall not require forced system changes to provide optimum operation and call response.

In the event that any elevator is delayed for more than a predetermined time interval after it receives a start signal, the system shall automatically remove the elevator from Group Automatic Operation (as applicable) and permit the remaining elevators in the group to respond to signals and be dispatching in the specified manner. When the cause of the delay is corrected, the elevator shall automatically return to Group Automatic Operation unless it has been manually removed from the system.

In the event of failure of the automatic dispatching system, the elevators shall continue to be automatically dispatching by auxiliary means so as to provide reasonable service. Failure of the automatic dispatching system shall be indicated by an illuminated signal in the Supervisory Control Panel.

Programmable features shall include but not be limited to the following:

- 1) Ability to recognize continuing demand for service from more than one lobby by causing multiple cars to stop based on car loading at that lobby, lack of demand at other lobbies or programmed stopping at a number of lobbies.
- 2) Inclusion of electronic, programmable clock control to initiate return to the dispatching lobby during prearranged times each day.
- 3) Provisions to provide specialized service to a floor or group of floors with the ability to assign an elevator to park at a given floor.
- 4) Changing of the priority of calls which will be given preference.
- 5) Provisions to change the load weighing settings from the respective car controllers.

Contractor's proposal for Contractor's standard demand dispatched, multiple zoned, microprocessor supervised group automatic operation will be given consideration, providing detailed proposal specifications of standard features accompany bid, that there is no additional cost, and that all specified special operating features are provided.

Attendant Service

The elevators shall be arranged for operation with or without an attendant. The transfer from automatic to attendant operation shall be accomplished by means of a key operated switch in the car station. This switch shall be located behind a locked cover in the car station which shall contain an "up" and "down" direction button, and a "Pass" button. Also, included in the car station, shall be a service demand electronic adjustable tone device and up and down signal light. When the transfer switch is in the attendant position, the car shall answer calls normally, except that the attendant operating either the "Up" or the "Down" button shall established the direction of travel, close the doors, and start the car after each stop. The car landings and the door opening shall be completely automatic. The doors shall remain open until a direction is initiated by the attendant. All elevator key switches shall be non-removable under the specified mode. If the button is released before the doors are fully closed and interlocked, the doors shall reopen. Continuous pressure on one of these buttons shall cause the car to by-pass corridor calls and respond only to pre-registered calls in the direction of travel. The by-pass calls shall remain registered to be answered during another elevator trip.

Independent Service

The elevator control system shall be arranged for independent service. The operating panel shall be provided with a key operated switch, which when closed shall permit the car to by-pass all corridor calls and permit dispatching of the car directly to any floor by pressing the corresponding car button. The door shall not close until a car button is pressed or until the key operated switch is opened. Upon opening of the independent service station, normal service shall resume.

Shabbat Service

The elevator control system shall be arranged for Shabbat service. The operating panel shall be provided with a key operated switch where the key is removable in both the "ON" and "OFF"

positions. When turned "ON", the key switch shall activate this feature. In this special mode, the elevator shall automatically stop on every floor, open its door, stay for a fixed predetermined time, and close its doors, to continue its trip in either direction. This feature shall operate in both the up and down directions, allowing people to step in and out without having to press any buttons.

Motor Control

The contractor shall furnish and install a new VVVF Drive. The Variable frequency drive must be capable of varying the torque on the motor during acceleration and deceleration. It shall be capable of programming the volts per hertz and changing the acceleration deceleration profiles. The drive shall not create excessive audible noise in elevator machine room. The drive shall meet all IEEE requirements for noise and harmonic distortion. Energy regenerative equipment is required.

AC Regeneration System

Furnish and install a new AC Regenerative Drive manufactured by Magnetek and capable of recapturing overhaul energy for building use. The regenerative drive shall return power to the AC line during dynamic braking. A contactor shall be used to disconnect the hoist motor from the output of the drive unit each time the elevator stops. This contactor shall be monitored and the elevator shall not start again if the contactor has not returned to the de-energized position when the elevator stops. The drive shall meet all IEEE requirements for noise and harmonic distortion.

Elevator Electronic Monitoring System

The system shall include flat screen LCD monitor(s) in the machine room(s) and any other remote location, as per the client's discretion, for diagnostic purposes as well as observation and system modifications. A computer and keyboard shall also be provided. This should also be a web-based system. The system shall have capability to display on the monitors car movement, car operation status, car position, car calls, landing calls, reserved calls, car load status, car direction, door motion, door position, elevator status, group status, fault indications, emergency power indications, and fire alarm. This system shall be interactive, and the software shall be compatible with the building management system. Prior to ordering this equipment, the contractor is responsible to verify that the monitoring system is compatible with all new or existing control systems. Details of the building system should also be ascertained by the contractor. The system shall be capable of displaying graphically the status of the various components of dispatch.

Protection Devices

All new equipment being installed shall be equipped with the latest industry approved protective devices. The Controller and Selector shall be protected with overload, phase reversal and failure devices. The hoist motors shall be protected against overload or single phasing in all three phases. Motor control tachs shall be provided to continuously monitor car speeds and automatically protect against over speeding. All equipment shall be grounded to protect against shorts and device failure.

Emergency Power Operation

The elevator system shall be made to operate properly with the building emergency power system, based on the capabilities of that system and according to Code requirements for sequencing and operation. The Contractor will coordinate the emergency power system with building management. Contractor to provide an emergency power selector switch panel at the designated level. This panel shall be labeled "ELEVATOR EMERGENCY POWER" in red lettering a minimum of 0.25 inch in height and shall include:

1. An illuminated signal marked "Elevator Emergency Power" to indicate the normal power supply has failed and emergency power is in effect.
2. A selector switch with marked positions to correspond with the elevator ID numbers and a position marked "Auto".
3. Provide indication on the panel that each elevator is at the designated level with doors in the normally open position.

Gearless Machine

Permanent Magnet AC Gearless Machine

Furnish and install a new Permanent Magnet AC Gearless Traction machine capable of low speed and high torque operation. The AC motor shall be totally enclosed and self-cooling. The machine shall be rated for the load and speed requirements of this application. All accessories and components will be included with the machine, including hoist cables of the proper design, size and number. It will be the elevator contractor's responsibility to relocate any machine room or overhead steel. All masonry work shall be included. All steel plates, modifications and sheaves will be included in the installation of the machine. A complete machine, motor, brake, rope gripper and mounting steel shall be provided.

The new gearless traction machine shall be provided with a brake and de-mountable traction drive sheave, mounted in alignment on a common bedplate. The drive sheave shall be de-mountable type, casting from the highest grade of metal with a Brinell hardness of 215 to 230 and shall be machined with grooves of proper depth and shape providing maximum traction with a minimum of cable and sheave wear. The entire machine shall be of ball bearings construction containing ample means for lubrication. All accessories and components will be included with the machine, including hoist cables of the proper design, size and number. It will be the elevator contractor's responsibility to relocate any machine room or overhead steel. All masonry work shall be included. All bearings, steel, plate modifications and sheaves will be included in the installation of the machine. A complete machine, motor, brake and mounting steel shall be provided.

Deflector Sheave Assembly

The deflector sheaves shall be furnished and installed new. The entire assembly shall be ANSI Code compliant. All bearings shall be included and shall be ball bearing type. The grease fittings shall be easily accessible. All cables and guards shall also be provided.

Hoist Rope Gripper- in addition to any dual brake system

The elevator contractor shall furnish and install a new Hydraulic Hollister Whitney "Rope

Gripper”, it is the only one in the specifications that will be allowed. The gripper shall protect against injuries caused by elevator cars leaving the floor with the doors open and over speeding in the up direction. This device shall grab elevator suspension ropes to stop the elevator in the event of a mechanical or electrical failure, and if an ascending elevator over speeds in the up direction and also if the elevator leaves the floor with the doors opened.

This device shall decelerate the car at a rate no greater than 32 feet per second squared. It shall apply a gentle yet a powerful "grip" which doesn't damage the ropes or cause any undue stress to the machine or traction sheave and shall protect even when slipping traction occurs. It shall be mechanically activated and hydraulically reset.

Governors, Governor Tension Sheave and Frame

The new governor and tension frame assembly shall be installed. The proper tension in the governor rope shall be maintained by the weighted tension sheave located in the pit. The governor shall be equipped with rope grip jaws designed to clamp the governor rope to actuate the car safety upon a predetermined over speed downward. The governor shall be set at an over speed not less than 115% of specified rated car speed and not more than the maximum governor tripping speed specified in the ANSI CODE for the specified rated car speed. The rope grips jaws must be positively tripped within the permitted range of speeds. The governor rope tripping device shall be so designed that no appreciable damage to or deformation of the governor rope shall result from the stopping action the device in operating the car safety. If necessary, a governor switch shall be installed. The governor over speed switches shall conform to the ANSI CODE requirements and be so located that excess lubricant will not enter the switch enclosure. The governor shall be accurately adjusted and sealed with the tripping speed specified on the tag as specified in the ANSI CODE. The governor shall be capable of tripping in both directions, as per Code.

Additional Guards Throughout

Any and all guards which are required by the industry standards and codes shall be included in this specification, including cable guards, car top fall protection railing and beveling of hoistway ledges.

HOISTWAY

Hoist Ropes

All new, suitably designed wire hoist rope cables to be installed. All cables will be covered under the Preventive Maintenance Contract at the completion of the modernization. Only new steel wire ropes that have the commercial classification "Elevator Wire Rope" or wire rope specifically constructed for elevator use shall be used for car and counterweight suspension. The factor of safety shall be as specified for the speed in the ANSI CODE. The hoisting rope data shall be on the "Crosshead Data Plate" and on the "Rope Data Tag". The hoist ropes shall be shackled and secured by the method outlined by the ANSI CODE.

Shackles and Springs

New wedge clamp shackles shall be provided on hoist cables. Springs shall be provided at the car and counterweight termination points. The shackles shall be staggered in height to ensure

proper alignment in the hitch plate. The shackles shall conform to ASME requirements. The shackles shall be free from defects and all threads shall be in working order upon assuming the maintenance agreement. The contractor will not paint the shackles and springs. The contractor shall provide a proper anti-spin device on all shackles, with proper sized cabling and secured with two (2) Crosby Clips on both the car and counterweight. If required, at the discretion of the consultant, a new hitch plate on the car and counterweight sling shall also be provided by the elevator contractor at no additional cost.

Governor Ropes

The governor rope/cable(s) shall be installed new. All cables will be covered under the Preventive Maintenance Contract at the completion of the modernization. The factor of safety shall be as specified for the speed in the ANSI CODE.

Car and Counterweight Roller Guides

The contractor shall provide new roller guides on the cab-sling and the counterweight assemblies. The roller guides shall be approved by the consultant and properly rated for the rated speed and capacity of the elevator. They are to be bolted to the car frame at top and bottom of the slings as well as the counterweight frame. The guide roller shall run on non-lubricated t. The rails on which the roller guides travel, will be cleaned and adjusted. There should be a plumb to + or - $\frac{1}{8}$ " attachment point not to exceed 13 feet. All bolts and clips shall be secured. All necessary adapter plates shall be included.

Shaftway Entrances

All existing shaftway door entrances/frames shall be reused. All necessary stops, pockets, sight guards and appurtenances at all floors on all panels shall be provided. Hatchway door sight guards will be secured on all doors as needed. Any missing fascia's and dust covers will be installed on all floors. All entrance panels and frames shall be thoroughly cleaned. Properly seal all unused key access holes. Eight inch (8") "Z" brackets shall be installed on all hatchway door panels. Furnish and install kick blocks on all entrance saddles and car door. Two (2) new gib assemblies shall be provided at the bottom of each door and engage the sill at least $\frac{1}{4}$ of an inch as required by Code.

Shaftway Interlocks

The elevator's shaftway doors shall be equipped with new GAL hoistway door interlocks. The interlock shall prevent the operation of the elevator driving machine by means of opening the safety circuit, unless the shaftway door is locked in the closed position (as defined by the ANSI CODE), except when the car is in the landing zone and is either stopped or being stopped. Interlocks shall be so located that they are not accessible from the landing side of the shaftway doors. Hoistway door unlocking devices shall be provided and be of the type specified by the governing code. All hoistway interlocks, contacts and unlocking devices shall have met all applicable functional and engineering tests required by the ANSI CODE and all such equipment shall have been certified by a competent approved laboratory.

Shaftway Door Equipment – Slide

Shaftway Door Hangers Rollers, Tracks, Spring Closers, Fascia's, Astragals, Door Bumpers, Vision Glass and Guards, Gibs, Door Jam Markings, Dust Covers, "Z" Brackets, and Sight

Guards.

The hoistway door equipment will be new. New shaftway entrance accessories shall be furnished on all doors. If damaged, new stainless steel sills will be installed with proper supports. New vision glass guards permanently attached to each hatchway door will be installed. There will be steel "Z" brackets located at the bottom of all doors. The "Z" brackets will be at least 8" in length. The "Z" brackets and gibs installed will provide added support at the base of the door in case the doors are pushed out of the track. Doors shall include service or emergency key ways to meet all code requirements. All door jambs shall have the correct door jamb markings located on both sides of the door jamb. All cab and hatchway door Astragals shall be replaced. Any additional support or bracing needed for the proper operation shall be included at no additional charge.

Cab Slings

The contractor shall completely overhaul the cab-sling. The contractor is to ensure the cab sling is square and provide all missing hardware. The cab sling shall be completely cleaned and painted. All bolts on the safety plank, stiles and crosshead will be re-secured. Any worn holes in the sling shall be re-drilled and be fitted with oversized bolts in order to properly secure the frame.

Counterweights

All counterweight assemblies shall be reused. As necessary, weights will be removed and heavier, more compact plates can be used to balance the elevators. Additional weights shall be added or removed as required. All changes to the counterweight, including a new frame if necessary, due to changes in the elevator cab weight, as a result of the cab modifications whether remodeled or new shall be included in the scope of work. All elevators must be completely balanced as per manufacturer's requirements. Counterweight guards shall be furnished. A counterweight Runby data plate shall permanently and securely provided in the pit, in the vicinity of the counterweight buffer, indicating the maximum designed counterweight runby. The data plate shall conform to A17.1 standard, except that the letters shall be not less than 25 mm (1 in.) in height.

Guide Rails

The main and counterweight guide rails shall be reused. All brackets, inserts and hardware shall be furnished if needed. The rails shall be aligned and all fishplates tightened. If additional brackets or inserts are required they shall be included. The rails shall be filed, rough edges removed and the surfaces totally cleaned. All bolts and guide clips shall be tightened to provide for smooth and quiet operation of the car and counterweight. The guide rails shall be plumb to $+1/32"$. The contractor shall also furnish all necessary guide rail brackets, clips, bolts, inserts, etc. Adequate clearances shall be provided at the top and bottom to compensate for building compression.

Shaftway Limits

New limit switches shall be provided and conform to ASME CODE requirements. The present switches shall be removed. These switches shall be silent when activated. All switches should be adjustable for future stopping modifications. If rollers are used, they shall be equipped with engaging cams and provided with soft resilient type rollers for quiet operation. Provide terminal slow-down switches and wiring. Switches should be set to allow for a smooth stop. The normal limit switch when activated shall bring the elevator automatically to a stop at the top and bottom

terminal landings with any load up to and including 125% of the contract capacity and speed attained in normal operation. Final terminal stopping devices shall be provided and arranged to stop the car and counterweight automatically, independent of all other operating devices, but with the buffers operative when the final terminal stopping devices operate normal operation in either direction shall be prevented. In cases where the limit cam will obstruct the pit ladder, they will be re-located to the other side of the elevator. If a music box is installed, it shall be removed and replaced with limit switches and/or a TLS system.

Traveling Cables

The contractor shall provide all new traveling cables. The traveling cables shall have steel-supporting means to relieve the conductors of strain. Travelers may be run directly to the machine room, suspended at the top of the hoistway and enclosed in conduit within six foot of the hoistway suspension point.

Traveling cables will be hung in the hoistway and under the car with its steel core, utilizing Draka's universal hanging system when the length in excess of 100 feet. For hanging lengths of less than 100 feet, provide proper rated Kellum grips sized for each traveler. Installation method to be followed as set forth in Draka's installation guide. Traveler suspension brackets are to be approved by the consultant. Manufacturer's installation procedure shall be adhered to for warranty purposes. The outer covering shall be fire resistant. Cables shall have a proper size loop and be free from contact with the hoistway construction, car or other equipment. All traveling cables shall contain 20% spare wires and, in any event not less than two spare wires for each type. Provisions shall be included for wiring of voice communication, music, cameras and monitors. The traveling cables shall include conductors required to operate all devices included in the specification. Included shall be two (2) cat 5 cables or an approved equivalent.

Electrical Wiring

The elevator contractor is to furnish and install new wiring. The Contractor shall follow the applicable Electrical Code. Each conduit and duct which is suitable and meets code requirements may be reused. All rusted conduit, boxes and Greenfield must be replaced new. Terminal connections for all conductors at equipment panels, center of hoistway terminal blocks or studs shall have identifying numbers. All wiring from the controller, selector, dispatching panels, etc., shall be furnished and installed as part of this work. Wiring shall be properly insulated and have flame-retarding and moisture-resisting outer cover and shall be run in galvanized metallic conduit or duct, using strain boxes as required. All material used and method of Modernization shall conform to the applicable Electrical Codes and any other governing and regulatory agencies. Each device will have a ground stud with grounding returning back to the controller.

Switches

All switches for safety and the operation of the elevator, mounted in the hoistway, pit, overhead sheave rooms, secondary spaces and machine room as well as on the elevator cab sling and enclosure shall be replaced or added new as required for this installation and Code requirements. All stop switches must be the push/pull design.

Wiring, Electrical Boxes, and Conduit

All aspects of electrical technology, sound design and workmanship will be conformed to by the contractor. The absence of any item in this specification does not waive the contractor obligation.

All wiring shall be replaced new. Only code complying pipe and conduit can be used. The car operating panel, position indicator and other electrical equipment on the car shall be connected with the controller by means of flexible cables, run from the bottom of the car to an approved outlet in the hoistway. Traveling cables that exceed 100 feet in length shall have steel supporting means and shall be suspended directly from them to relieve the conductors of strain. All wiring shall conform to the applicable Electrical Code and Building Code.

PIT

BUFFERS

The contractor shall install new car and counterweight oil buffers. The buffers shall comply in all respect with the requirements of the ANSI CODE requirements. Suitable buffers with the necessary blocking and supports shall be provided under the car and counterweight supports shall be provided under the elevator car and counterweight. At the completion of the job, the buffers will be checked and tested.

Buffer Ladder, Platform, and Railing

The contractor shall furnish and install a fixed inclined ladder if the buffer extends over five feet above the pit floor. The contractor shall install a fixed vertical or inclined ladder, platform and railing if the buffer extends over seven feet above the pit floor. This equipment shall comply to ASME A17.1. A stop switch must be provided on the platform.

Work Lights and Ground Fault Receptacles

The hoistway pit shall be equipped with new LED work light(s) with guard(s) controlled by an illuminated switch located adjacent to the pit access door. The elevator car top, platform underside, overhead machinery space, and secondary space shall be equipped with new LED work light(s) with guard(s). Energy efficient LED lighting is required. Contractor to insure LED illumination meets requirements of all authorities having jurisdiction. A ground fault protected 120VAC/15 Amp outlet shall be provided in the elevator pit, car top, platform underside, overhead machinery space, and secondary space. The machine room shall be provided with a ground fault protected, 120VAC/20 Amp duplex outlet. The machine room outlet shall not be used for any permanently installed equipment.

Pit Ladders

The elevator contractor shall furnish and install new pit ladder(s). The ladder is to be located in such a way to not obstruct elevator operation. It shall allow convenient access from the lowest floor landings. The pit ladder shall extend 48 inches above the lowest landing and the nearest point of the ladder must be within 39 inches (measured horizontally) from the means to unlock the egress door of the pit. The pit ladder shall be secured so work persons can ascend and descend safely.

If necessary due to hoistway dimensional constraints, a retractable ladder shall be installed. The safety switch on the retractable ladder shall be wired in series with the pit stop switch circuit to prevent elevator operation when the ladder is in the extended position. All wiring and conduit shall be provided for a complete installation.

Sump Pump

The elevator contractor shall furnish and install a heavy duty submersible sump pump in each elevator pit. This pump shall be designed to automatically start and stop as needed. The pump should be located below the pit floor level and covered with 1½" subway grating. A sump pit shall be provided by the elevator contractor as per Code, but at a minimum of two foot cubed. The pump should be hardwired with proper precautions taken to prevent electrical hazards. The pit floor shall be properly graded to accommodate water flow to the sump. The elevator contractor shall also coordinate, with the Owner, the plumbing for the outlet, with all new piping. All electrical and plumbing costs shall be included.

CAB

Load Weighing Device

The elevator platform shall be equipped with a new proximity sensor which senses the amount of deflection in the platform. The device shall be equipped with the ability to have three separate settings. Each setting shall be adjustable. The device shall be able to identify specific loads in the cab so as to aid the dispatcher in correctly identifying the cab load and either by-pass hall calls or zone the elevators. Also included shall be additional inputs for adjustable torque compensation if required for smooth operation.

Automatic Leveling

All elevators shall be equipped with a floor leveling device which shall automatically bring the car to a stop within 1/32 of an inch of the floor for which a stop has been initiated. A leveling device shall be provided should the elevators become off leveled any distance below or above the floors serviced, whether the hoistway door or car gate is open or closed, provided there is no interruption of the power to the elevator. The leveling control and operation shall be effective to avoid under travel as well as over travel, in order to maintain leveling accuracy, regardless of the car load or rope slippage. This system shall operate within a defined range of 14 inches, so as to effectively deliver and accept passengers.

Top of Cab Inspection Device

The elevator shall have a new inspection and operating station which is mounted on top of the passenger elevator cab-slings. This station shall contain up and down direction and safety buttons and an emergency stop button. This station may be fixed to the car crosshead or may be portable provided the extension cord is permanently attached to the car crosshead. The car will be operated by constant pressure on the appropriate directional button and safety button. Provisions shall be made to make the normal operating devices inoperative while this device is in use. The Fireman's Recall System shall not function under this mode. The stop switch on this panel will override the Fireman's Recall Systems. Also included shall be a work light, with an on/off switch and guard. Illumination shall meet with all authorities having jurisdiction.

Emergency Exits

The top emergency cab exit on the cab enclosure shall be equipped with mechanical locks so designed that elevator passengers cannot exist without assistance. Also included shall be hinges or a chain which connects the hatch to the top of the cab enclosure. The cab top

emergency exit shall be provided with a manual reset electrical switch which will prevent the operation of the elevator if the hatch is opened. All cab side emergency exits shall be bolted closed and rendered inoperable to comply with ASME A17.1.

Cab Door Operator

The contractor shall install a new solid state closed loop operator. This operator will be designed to operate the car and hatchway doors. The door shall be designed to operate at an average opening speed for 2 feet per second. This closing door speed shall be reduced as required to limit the Kinetic Energy striking force to within industry standards. The ANSI CODE requirements shall be complied with. The doors shall operate smoothly without a slam in both the opening and closing direction. They shall be cushioned in their final movement in both directions of travel by motor control and rubber bumpers. Electrical powered motors shall be used to open and close doors. In case of interruption or failure of electric power from any cause, the door operating mechanism shall be so designated that it shall instantly permit emergency manual operation of both the car door and the hoistway door, and the hoistway door shall continue during emergency operation to be self-locking and self-closing. The door operator shall operate in conjunction with or be equipped with all interlocks and safety contacts.

Car Door Operations

The door operators shall have separately adjustable timers to enable varying the time that the hoistway doors remain open after stopping in response to a car call or a landing call. The dwelling time for a car call stop shall be adjustable between 1 and 4 seconds, and the timing for a landing call stop shall be adjustable between 3 and 8 seconds. If a stop is made in response to both a landing call and a car call, the timing of the landing call shall predominate. In the event the light beam is interrupted while the doors are opening or after the doors are fully open, the time that the doors remain open after the light beam has been re-established shall be reduced to an adjustable time between 1/2 and 1 second, depending upon whether a landing call or a car call predominated. The car door shall remain open for a minimum amount allowed by code. This time shall also be a minimum time that the doors remain open if the beam is interrupted and re-established before the door is fully open. Minimum times shall be initially established. The door operators shall be adjustable to allow for adjustment of the premature door opening time within the landing zone. The amount of time the door remains open shall be controlled through the door operator or through and electric beam device. The car door edge shall be provided with built in nudging feature that can be turned on or off on demand.

Car Door Operator Accessories

The contractor shall install new car door hanger track assemblies and header which shall be of the heavy duty type. All door accessories shall be approved. Two, two-point suspension sheave hanger roller assemblies, with related operating linkages, gate switch, clutch, zone lock and accessories shall conform to the ANSI CODE requirements.

Safety Device

The contractor shall provide a complete new safety device. The safeties shall be completely tested before any elevator is restored to service. The safety device shall be interacted with the over speed governor (upon a predetermined speed downward from any cause) in such a manner as to grip both sides of each guide rail with substantially the same compressive force and thus stop and hold the elevator car. The safety mechanism when tripped shall engage the rails with

sufficient force to stop the car from governor tripping speed with a fully loaded car. The pressure of the two pairs of safety jaws shall be equalized. The safety device shall be designed so that the jaws will engage the rails in no more than 30 inches of travel after the governor jaws grip the governor rope.

Elevator Cab Platform

The existing platform shall be retained. All steel shall be scraped and painted. Replace all missing fireproofing. Seal any and all holes in platform. Replace or repair all damaged wood to create a solid substrate to accept flooring. Provide new safety plate escutcheons / covers to match cab saddle. All metal constructed platforms shall be checked for loose welds and repaired as necessary to prevent creaking of metal flooring.

Cab Enclosure

Contractor shall include in their base bid the price for the Contractor's portion of the work as described in Part A of this subsection. Contractor shall include an allowance of **\$20,000.00** per elevator for the Cab Company's portion of the work as described in Part B of this subsection. The Owner reserves the right to deduct the allowance for Section B from the Contractor's total price and obtain the cab interiors separately. In either event, the Contractor would still be responsible for their entire scope of work as indicated in Part A, including all required coordination to complete the installation of the cabs.

A. Contractor Scope of Work

1. The Contractor is to use the results of the Preliminary Balance Load Test and the weight differential between existing elevator equipment and the proposed equipment to be installed in order to determine the maximum amount of cab weight that can be installed without requiring a new counterweight frame, without exceeding the load rating of the equipment or without violating requirements of the Code. This weight must be reported to the Owner and the Cab Company.
2. The Contractor must provide all information necessary to the Cab Company and Cab Designer to ensure that the equipment to be installed by the Contractor is accommodated in the design and manufacture of the cab.
3. Perform all necessary work to uninstall/remove/dispose of the existing electrical and mechanical equipment.
4. Perform all necessary work to remove and dispose of the interior.
5. Provide all necessary coordination to ensure efficient and timely installation of the cab.
6. The Contractor is responsible to perform all work required to reinstall all equipment that is being retained. The Contractor is responsible to perform all work required to install and wire all new elevator equipment being installed in the cab.
7. Contractor is to include in the base bid price any work and cab-related equipment specified elsewhere in this specification, as well as the following:
 - i. Cab Flooring and Cab Sub-Flooring
 - ii. Car Door Saddle & Safety Plate Covers
 - iii. Car Door Hangers
 - iv. Gate Switches
 - v. Suitably designed Ventilation Fan
 - vi. Emergency Exit Switches

- vii. One set of hanging cab wall pads per elevator. The pads shall be appropriate for protection of the cab interior if the elevator is used as a service car. Each set must contain all accessories required for building personnel to hang pads.
8. Contractor is responsible to include in their base bid all permits, tests, fees, and all other costs required by the authorities having jurisdiction to complete the installation according to Code.
9. It is the responsibility of the Contractor to insure that all alterations shall not increase the original building design reactions by more than 5%.
10. A balanced load test will be conducted when all work including door equipment, wiring, cab, etc. has been completed.
11. Contractor shall statically balance the cab after refurbishment is completed.

B. Cab Company Scope of Work

The net allowance, covering the elevator cars of a design and material as selected, shall include ventilation, lighting, doors, base wainscoting, handrails, entrance columns, transoms as required, all necessary cutouts and other cab associated appurtenances that may be designed.

Cab Door Panels

The cab door panel shall be installed new. The door panels shall be rigidly constructed in steel or aluminum. The door shall be manufactured in 14 gauge furniture steel or aluminum. All necessary bolt hole patterns shall be pre-drilled and tapped. The cab door shall have "Z" bracket and code required gibs and kick blocks.

Elevator Cab Door Saddle

The elevator contractor shall install new cab saddles. Saddles will be priced as stainless steel and match any new cab design.

Elevator Cab Flooring

The elevator contractor shall install new cab flooring. The flooring shall be priced as rubber floor tiles with stainless steel studs, but will be chosen by the Owner / Owners representative(s) after award.

Cab Signage

All elevator cabs shall be equipped with all code required signage. The following signs shall be engraved directly on to the cab pushbutton panels.

1. Cab Capacity
2. Location for Inspection Certificate
3. Elevator Designation.

Cab Camera / Communications Wiring

The elevator contractor will be responsible for running two coaxial cables and/or 8 pair shielded from the cab top and two pairs of shielded communication wires from the in-car emergency phone to the basement as part of this modernization. Additionally one cat 5 cable shall be run to the same locations as noted above. This wiring will be terminated in junction boxes located adjacent to the pit that are accessible to telephone and CCTV installers. Provide an additional GFCI duplex receptacle on the car top for the camera power supply, as required.

Emergency Lighting and Alarm Bells

Each elevator shall have a self-powered emergency standby power unit which uses the car canopy light to illuminate the cab and to light in the event of normal power failure, provide illumination in the cab for a minimum of four (4) hours and power for the alarm bells for at least one (1) hour as per code. The system shall operate automatically upon failure of the normal power supply. The emergency lighting and alarm unit, including solid state charger and testing device, shall be accessible and securely mounted on top of the cab. The guide rails cab camera guide \fixture to contain a minimum of two (2) incandescent lamps and shall be incorporated into the car operating panel. All coordination and connections shall be the responsibility of the elevator contractor. Emergency lighting and bell back up system shall light up the canopy with LED lighting in the ceiling, also Man-D-Tec shall be used for the car top.

Two (2) alarm bells shall be provided, one (1) on the car top and one (1) inside the hoistway at the designated landing. The alarm bell button indicator lamp shall also be powered by the standby system and illuminate when pressed.

Detector Edges

The contractor shall furnish and install a new automatic reopening device on the elevator(s). The device shall be designed and adjusted to minimize the possibility of injury to passengers and shall be a 3D Edge. The contractor may use Tritronic Leading-Edge (waterproof) detector edges or approved equal. Any other edge which is being submitted as an equal must be approved by the Consultant. Any interruption of the beams, while the doors are closing shall cause the doors to reopen.

Toe Guards

All toe guards must be new. The contractor shall furnish toe guards which extend down 48 inches, when a rope gripper is provided, or a minimum of 21 inches when a rope gripper is not provided / required, from the cab platform. For a traction elevator it will be 48 inches and for a hydraulic elevator it will be 24 inches. The guards should be made of 3/16 sheet metal. The guards shall extend below all door openings. At a point six inches from the bottom of the guards a 30 degree bend shall exist. Any questions concerning this guard should be referenced from the ASME A17.1.

Car-Top Railing

Provide a standard railing conforming to ASME A17.1 (2.10.2) on the outside perimeter of the car top on all sides where the distance from the edge of the car top to the hoistway wall exceeds 12 inches. The standard railing shall consist of a 42 inch high top rail, intermediate rail, 4 inch toe board and posts.

FIXTURES

Each elevator cab shall contain a new pushbutton station with a series of “top of the line” pushbuttons to correspond to the landing served. The button panels shall be vandal resistant and include back plates. The panel shall be hinged and secured with key locks. Ownership shall approve materials, finishes and aesthetics.

The following key switches shall be provided in a locked service cabinet at the bottom of the car station: light, inspection, access, independent, two-speed fan. The service cabinet panel shall also include an emergency light “press to test” button and a GFCI duplex receptacle. Two Spare key switches shall also be provided.

Elevator designation, city device number, phone instructions, capacity, and location of the inspection certificate shall be engraved on the face of the car station. Applied plates shall not be permitted. Any additional engraving required by Ownership shall be provided.

Provide the following features:

- Door open and close buttons
- Fire service features in compliance with Building Code.
- Emergency light with flush lens
- Minimum two-inch digital position indicator with voice pronunciation
- Vandal resistant call buttons illuminated with L.E.D. type bulbs
- ADA communication system with visual acknowledgement for the hearing impaired
- Alarm button with acknowledgement light
- Stop switch
-

The entire system shall comply with ADA and all authorities having jurisdiction.

Contractor to include all costs to modify cab wall to accommodate the new position of car station if existing cabs are being retained.

Provide all the necessary equipment and material to allow for two way communication between the fire command station and the elevator.

Communication System

The contractor shall provide a complete intercom/telephone system as required by Code and shall include the provisions listed below:

1. Furnish and install a complete ADA compliant hands-free phone in the car operating panel of each elevator cab.
 - a. This system shall be connected to a dedicated telephone line and be programmed to place a call to a central point as selected by the Owner.
 - b. The telephone shall be activated by pressing the phone push button on the car panel. It shall automatically dial a pre-programmed number to alert the building/contractor personnel that there is a problem in the elevator.
 - c. If after a predetermined number of rings there is no answer at the primary location, it will automatically dial a second pre-programmed telephone number.

The system shall be capable of storing at least three phone numbers.

2. Furnish and install master stations at the following locations:
 - a. Each elevator machine room.
 - b. Elevator lobby.
 - c. Fire command station (If provided)
3. The master stations shall have the capability of two-way communication between all other master stations and each elevator cab.
4. The entire system shall be designed and located in accordance with ADA Standards to include visible call acknowledging, engraved advisories, etc.
5. Provide a complete battery backup power supply capable of providing sufficient power to operate the complete system for a minimum of four (4) hours.
6. All wiring, conduit, fittings, etc., shall be provided for a complete intercom/telephone system.
7. The Owner reserves the right to relocate the communication system before the modernization begins.
8. Location and type of system is to be acceptable to industry standards and subject to Vertical Systems Analysis approval.

Access Switches

The elevator contractor shall furnish and install new hoistway access spring return key switch fixtures adjacent to the top and bottom landing entrances. The car operating panel shall have a key switch to activate the system. All switches shall be keyed alike. New access limit switches and system wiring shall also be furnished and installed. The installation shall comply with ASME A17.1.

Hallway Pushbutton Stations

New pushbuttons shall be installed at each floor landing. A "top of the line" button, selected by the Owner, will be utilized for this modernization. Unless otherwise stated, there shall be new button panels on every floor. All buttons will be at handicap height. The elevator contractor will be responsible for all cutting and repairing of hall walls to a smooth surface ready for painting. We reserve the right to engrave verbiage on the hall button panels. All hall buttons shall have dual buttons except for the terminal landings. Lobby hall stations will incorporate a Firemen's Recall Key Switch above the buttons. All buttons shall be equipped with L.E.D. call registered lights. Those lights shall operate individually to indicate that a call has been registered. The lights shall extinguish as the calls are answered. The Ownership reserves the right to select finishes of buttons and button panels. Extended panels and surface mounted fixtures are not an option.

When existing hall buttons are located in the door frame and are not at the proper height, existing boxes will be patched with steel plates "Bond O" and sanded and made smooth for painting. A new cutout will be made to accommodate the new hall button box and plate. This is

so the hall button plate does not exceed 10"-12" in height.

Hall Position Indicators

Provide a minimum of two inch position indicators will be installed on all floors above the entrance. All cutting and patching of walls is the responsibility of the contractor.

Lobby Next Car Lights

On all elevators in the lobby, the "Next Car" lights shall be newly installed. All "Next Car" lights shall match in design and be equipped with adjustable electronic tone devices. All floor directional lanterns shall be overhauled and rewired and all damaged components replaced. The electronic adjustable tone devices shall sound once for an up traveling elevator. All wiring, electrical box, and hardware shall be included. New position indicators shall be included in a master panel.

Cab Directional Arrows

The contractor shall provide new cab directional arrows on the elevator cab door jambs. The direction arrows shall be equipped with chimes, to indicate the direction that the car is traveling. The arrows shall remain illuminated until the doors close and shall sound and illuminate prior to the arrival of the elevator. An adjustable electronic chime shall be incorporated in the fixtures to sound as it is illuminated to call the attention of the waiting passengers. The arrows and electronic adjustable tone devices shall comply with ANSI CODE requirements.

Fireman Recall Key Switches

Incorporated into the cab pushbutton panel and the lobby panel shall be all necessary Fireman Recall buttons and key switches. Key switches shall function in conjunction with the Fireman's Recall System. All the latest Fire Codes shall be adhered to. If any changes occur in the Fire Code during the modernization, the new standards will be included in the elevator modernization.

Fireman's Recall Systems

Emergency Fire Operation shall be designed to meet current code for Phase I & II operation. Emergency Operation shall equip the elevator with a control system to operate under, and/or recall the cars in fire or other emergency condition. All the features shall meet with the governing Firemen's Recall codes. Emergency return to the lobby shall also be initiated with the Fire Emergency Procedures.

**SECTION 800
BID ALTERNATES**

ALTERNATE PROPOSALS

ALTERNATE NO. 1

This is an alternate which calls for the Elevator Contractor to provide a price for an extended work day. If this alternate is accepted, the contractor will be required to work Ten (10) hour days Monday thru Friday, or a 50-Hour work week until such time that the elevator is restored to service.

ALTERNATE NO. 2

This is an alternate which calls for the Elevator Contractor to provide a price for an extended work day and work week. If this alternate is accepted, the contractor will be required to work Ten (10) hour days Monday thru Saturday, or a 60-Hour work week until such time that the elevator is restored to service.

ALTERNATE NO. 3

This is an alternate which calls for the Elevator Contractor to provide a price to furnish and install new Rails on the number 2 car and increase the speed to a minimum of 250 fpm in lieu of overhauling and reusing same as stated in section 700 of these specifications. The new equipment shall meet or exceed the following requirements;

ALTERNATE NO. 4

This is an alternate which calls for the Elevator Contractor to provide a price to furnish and install required equipment on the number 1 car to increase the speed to a minimum of 250 fpm in lieu of overhauling and reusing same as stated in section 700 of these specifications. The new equipment shall meet or exceed the following requirements;

Final material selection to be made by Owner/Architect.

Should any alternate change the lead or shutdown time the elevator contractor indicates on the bid form, based on the base specifications, it shall be the responsibility of that elevator contractor to clearly include a new shutdown time with their bid to the Owner. Should the elevator contractor fail to include any alternate lead or shutdown times, it shall be assumed that any or all of the alternates have not affected these times.