REQUEST FOR BIDS

EASTRIDGE HOUSE ELEVATOR MODERNIZATION

120 W. SUNSET WAY ISSAQUAH, WA 98027

RELEASED BY:



CAPITAL CONSTRUCTION DEPARTMENT

700 ANDOVER PARK WEST, SUITE C TUKWILA, WA 98188

BID DATES

ISSUANCE DATE: FEBRUARY 10, 2022

DUE DATE: MARCH 3, 2022

TIME: 1:00PM

CAPITAL CONSTRUCTION DEPARTMENT

TABLE OF CONTENTS SECTIONS

- A. INFORMATIONAL FORMS
- B. BID PROPOSAL
- **BB.** NO PARTICIPATION RESPONSE FORM
- C. CONTRACT DOCUMENTS
- D. THIRD PARTY REPORTS
- E. DRAWINGS AND SPECIFICATIONS



A - SECTION

INFORMATIONAL FORMS

- A.1 Invitation to Bid
- A.2 Notice to All Bidders
- **A.3** Instructions to Bidders for Contracts (form HUD 5369)
- A.4 Fair Housing / Accessibility Notice
- A.5 Pre-Bid Conference MANDATORY ATTENDANCE
- A.6 Project Wage Rates
- **A.7** Tax Applications
- A.8 Section 3
 - a. Clause
 - b. Supplemental Instruction to Bidders
- A.9 Progress Payment Suspension Criteria
- A.10 Executive Order 11246 (as Amended)
- A.11 Compliance with Executive Order 13496
- A.12 Requirements for Public Works Jobs
 - a. Requirements for Public Works Jobs
 - **b.** Screenshots of Intent
 - c. Requirements for Certified Payroll

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

INVITATION FOR BID

DUE DATE: MARCH 3, 2022

The King County Housing Authority (KCHA) will accept bids from qualified general contractors to furnish labor, materials and necessary equipment to perform the following:

SCOPE OF WORK: EASTRIDGE HOUSE ELEVATOR MODERNIZATION

Eastridge House was built in 1980 and consists of thirty nine (39) one (1) bedroom apartments on three (3) floors. The elevator services all three (3) of these floors. Eastridge House is located in Issaquah, WA and houses seniors and disabled persons.

The scope of work for this project includes (but is not limited to) all work related to the renovation and/or replacement of the following items: elevator jack, new pit ladder, pit floor sealing, new door and hardware, new lighting, new elevator controls, and new fan in elevator car, add sprinkler head and test in elevator equipment room, rough carpentry to include infill and siding for wall vent removal in elevator shaft, painting, necessary electrical and mechanical upgrades, and adjacent architectural improvements (call buttons, alarms, trim panels etc.), new DHP, machinery, including any code related fire blocking or fire rated insulation, and interior cab upgrades for one elevator at Eastridge House.

For complete scope, please see E.1 Scope of Work and Technical Specifications

DRAWINGS - PROJECT MANUAL DISTRIBUTION:

Drawing and bid documents can be downloaded from:

https://www.kcha.org/business/construction/open

PRE-BID CONFERENCE:

Date: **February 17, 2022**

Time: **10:00 AM**

Jobsite Address: 120 W. Sunset, Issaquah, WA 98027

Notation: Attendance of the Pre-Bid Site Visit is <u>MANDATORY</u>.

Ouestions / Direct Ouestions, Requests or Clarification by Email or Fax to:

Contact Person: Project Manager: Don Hatfield

Email Address: donaldh@kcha.org Phone Number: 206-574-1213 No Later Than: February 24, 2022

Website Posting: https://www.kcha.org/business/construction/open

All responses shall be in the form of Addenda

All Addenda(s) will post As Occurs Plan Holder's List posts every Friday

BIDS ARE DUE:

Date: March 3, 2022

Time: 1:00 pm (see KCHA Process – COVID-19 Process Changes)
Address: King County Housing Authority - Capital Construction Office

700 Andover Park West, Suite C, Tukwila, WA 98188

Submittal Procedure: **Envelope MUST BE:**

a. Sealed

b. List Name and Address of your Firm/Company

c. List Due Date and Timed. List Project Name:

EASTRIDGE HOUSE ELEVATOR MODERNIZATION



CAPITAL CONSTRUCTION DEPARTMENT

e. Mailing / Shipping Package or Wrapping **must also be marked** with this information.

KCHA Process: All Bids MUST BE Time and Date Stamped at KCHA – Capital

Construction Office by the above Due Date and Time.

- a. No Bids will be accepted after that Date and Time
- b. No Bids Faxed or Email will be accepted

COVID-19 Process Changes

- a. Bids should be dropped off at the front desk at 600 Andover Park West, Tukwila, WA 98188.
- b. Bids will be accepted between 11:00AM 1:00PM ONLY. **The front desk will only be open during these hours.**
- c. A KCHA representative will be present at the front desk to time stamp
- d. There will be NO PUBLIC READING of the bids.
- e. At 1:00PM bidding will be closed and KCHA staff will tabulate the bids and notify bidders by email of the bid results.

**NOTE: Contractors have the option to mail in bids, but bids must be received by the deadline of 1:00PM. KCHA does not recommend mailing in bids due to possible complications or difficulties that may arise with the mail delivery.

BID BOND OR CERTIFIED CHECK:

Amount: Five (5%) Percent of the Total bid must accompany Each Bid greater than one

hundred fifty (\$150,000) dollars.

Payable to: King County Housing Authority

Process: Bid Bond or Certified Check will be returned to the Unsuccessful Bidders within

Ten (10) Days after the Contract Award.

BONDS MUST BE ORIGINAL, NO PHOTOCOPIES OR SCANNED BONDS WILL BE ALLOWED

COVID-19 REQUIRED COMPLIANCE

Contractor must submit a signed copy of COVID-19 Job Site Requirements (see Section B.2). Signing the document is an indication that the Contractor has read and understands what is required to comply with the COVID-19 Requirements. If selected, the Contractor will be required to submit COVID-19 Protection Protocols in place for the Contractor's company, as well as a site specific COVID-19 safety plan; both of which will be placed into the contract as exhibits.

ASSURANCE OF COMPLETION:

Projects valued over one hundred fifty thousand (\$150,000) dollars **require** a one hundred (100%) percent Performance and Payment Bond. (See Section C – Contract Documents)

BONDING CAPACITY:

Provide **with your bid proposal**, a written statement from the contractor's bonding agent of the contractor's ability and capacity for providing a one hundred (100%) percent Performance and Payment Bond for the project. The statement shall be made on the official letterhead of the bonding company and signed by an authorized agent of the bonding company.

BONDING & INSURANCE FOR CONTRACT AWARD:

The contract award will be contingent on full performance bonding, or equivalent and contractor's ability to meet KCHA insurance requirements as outlined in the bid documents.

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

NON-ROUTINE MAINTENANCE WAGE RATES:

Bidders should note that the current prevailing HUD Non-Routine Maintenance wage rates and weekly payroll reporting requirements apply to this project.

WASHINGTON STATE REQUIREMENT:

All contractors and subcontractors working on this project are required to file a "Statement of Intent to Pay Prevailing Wages", "Affidavit of Wages Paid" and certified payroll with L&I. (See Form A.12 for additional information.)

EEOE:

The King County Housing Authority is an Equal Employment Opportunity Employer and strongly encourages minority-owned and women-owned businesses, socially and economically disadvantaged businesses, and small businesses to submit bids or to participate as subcontractors and suppliers on KCHA Contracts.

KCHA RESERVED RIGHTS:

The King County Housing Authority reserves the right to reject any or all bids or to waive any informality in the bidding. No bid shall be withdrawn for a period of thirty (30) calendar days subsequent to the opening of the bids without the written consent of KCHA.

The King County Housing Authority also reserves the right to reject all bids, for any reason, prior to Contract Execution.

PUBLIC RECORDS:

All information submitted to KCHA will become public records, as per RCW 42.56. If you are submitting information, which you think is confidential and/or proprietary to your business, KCHA recommends that you do not submit that information, as KCHA cannot guarantee that type of information will be withheld from a public disclosure request.

PLAN CENTERS:

Bid documents, including drawings, specifications and conditions of the agreements may be examined at the following offices:

BUILDERS EXCHANGE OF WA
2607 Wetmore Ave.
Everett, WA 98201
www.bxwa.com
425-258-1303

CONTRACTOR PLAN CENTER 5468 SE International Way Milwaukie, OR 97222 www.contractorplancenter.com 503-650-0148 BLUE BOOK 33801 1st Way S., Ste. 251 Federal Way, WA 98003 www.thebluebook.com 888-303-2243

DAILY JOURNAL OF COMMERCE
www.djc.com
206-622-8272

DODGE DATA & ANALYTICS

www.construction.com

800-326-3826 x9360

ISQFT <u>www.isqft.com</u> 800-364-2059 x8290

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CAPITAL CONSTRUCTION DEPARTMENT

PUBLICATION: Daily Journal of Commerce Daily

The Seattle Medium Wednesday
Northwest Asian Weekly Thursday

KCHA Web Site www.kcha.org/business/construction/open

CONTACT PERSON:

Don Hatfield Project Manager 206-574-1213 Phone Number Donaldh@kcha.org Email Address

EXAMPLE OF SEALED ENVELOPE PROCEDURE / PREPARATION:

FROM:

ENTER YOUR COMPANY NAME Street Address City, State, Zip Code

TO:

KING COUNTY HOUSING AUTHORITY CAPITAL CONSTRUCTION DEPARTMENT

700 Andover Park West, Suite C

Tukwila, WA 98188

BID DUE:

Date: March 3, 2022 Time: 1:00 PM

PROJECT NAME: EASTRIDGE HOUSE

ELEVATOR MODERNIZATION

Upon Receipt, the Envelope will be Time and Date Stamped by King County Housing Authority



NOTICE TO ALL BIDDERS

In order to be considered as **RESPONSIVE BIDS**, all bidders <u>MUST</u> submit Signed Section B forms no later than the **Bid Due Date and Time**:

- B.1 Bid Form
- **B.2** COVID-19 Job Site Requirements
- **B.3** Bidder's Experience Record
- **B.4** Contractor Certification
- **B.5** Non-Collusive Affidavit
- **B.6** Equal Opportunity
- B.7 Bid Security (Submit only for bids greater than \$150,000)
- **B.8** Debarment / Suspension Compliance Certification
- **B.9** Proposed Subcontractor List
- B.10 Section 3
 - a. Business Certification
 - b. Subcontractor Work Plan
 - c. Individual Certification and FAQ's
- **B.11** Harassment and Discrimination Policies
- **B.12** WMBE Survey (Form is not required to be responsive, but requested)
- **B.13** Preliminary Project Schedule Provided by Contractor

From HUD Website 2021

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

Table of Contents

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

1. Bid Preparation and Submission

- (a) Bidders are expected to examine the specifications, drawings, all instructions, and, if applicable, the construction site (see also the contract clause entitled **Site Investigation and Conditions Affecting the Work** of the *General Conditions of the Contract for Construction*). Failure to do so will be at the bidders' risk.
- (b) All bids must be submitted on the forms provided by the Public Housing Agency/Indian Housing Authority (PHA/IHA). Bidders shall furnish all the information required by the solicitation. Bids must be signed and the bidder's name typed or printed on the bid sheet and each continuation sheet which requires the entry of information by the bidder. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority. (Bidders should retain a copy of their bid for their records.)
- (e) Bidders must submit as part of their bid a completed form HUD-5369-A, "Representations, Certifications, and Other Statements of Bidders," NO LONGER REQUIRED BY HUD
- (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.

Previous edition is obsolete Page 1 of 4 form HUD-5369 (10/2002)

5. Late Submissions, Modifications, and Withdrawal of Bids

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

6. Bid Opening

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

7. Service of Protest

(a) Definitions. As used in this provision:

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

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

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

Contracting Officer
Capital Construction Department
King County Housing Authority
600 Andover Park West
Tukwila, WA 98188

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

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

8. Contract Award

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

- (e) Unless precluded elsewhere in the solicitation, the PHA/IHA may accept any item or combination of items bid.
- (f) The PHA/IHA may reject any bid as nonresponsive if it is materially unbalanced as to the prices for the various items of work to be performed. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.
- (g) A written award shall be furnished to the successful bidder within the period for acceptance specified in the bid and shall result in a binding contract without further action by either party.
- Bid Guarantee (applicable to construction and equipment contracts exceeding \$25,000)

KCHA Procurement Policy requires Bid Guarantees for Projects valued at \$150,000 or more.

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

10. Assurance of Completion

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

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

Preconstruction Conference (applicable to construction contracts)

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

- 12. Indian Preference Requirements (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)
- (a) HUD has determined that the contract awarded under this solicitation is subject to the requirements of section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)). Section 7(b) requires that any contract or subcontract entered into for the benefit of Indians shall require that, to the greatest extent feasible
- (1) Preferences and opportunities for training and employment (other than core crew positions; see paragraph (h) below) in connection with the administration of such contracts or subcontracts be given to qualified "Indians." The Act defines "Indians" to mean persons who are members of an Indian tribe and defines "Indian tribe" to mean any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians; and,
- (2) Preference in the award of contracts or subcontracts in connection with the administration of contracts be given to Indian organizations and to Indian-owned economic enterprises, as defined in section 3 of the Indian Financing Act of 1974 (25 U.S.C. 1452). That Act defines "economic enterprise" to mean any Indianowned commercial, industrial, or business activity established or organized for the purpose of profit, except that the Indian ownership must constitute not less than 51 percent of the enterprise; "Indian organization" to mean the governing body of any Indian tribe or entity established or recognized by such governing body; "Indian" to mean any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act; and Indian "tribe" to mean any Indian tribe, band, group, pueblo, or community including Native villages and Native groups (including

Treasury website: https://www.fiscal.treasury.gov/surety-bonds/

- corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.
- (b) (1) The successful Contractor under this solicitation shall comply with the requirements of this provision in awarding all subcontracts under the contract and in providing training and employment opportunities.
- (2) A finding by the IHA that the contractor, either (i) awarded a subcontract without using the procedure required by the IHA, (ii) falsely represented that subcontracts would be awarded to Indian enterprises or organizations; or, (iii) failed to comply with the contractor's employment and training preference bid statement shall be grounds for termination of the contract or for the assessment of penalties or other remedies.
- (c) If specified elsewhere in this solicitation, the IHA may restrict the solicitation to qualified Indian-owned enterprises and Indian organizations. If two or more (or a greater number as specified elsewhere in the solicitation) qualified Indian-owned enterprises or organizations submit responsive bids, award shall be made to the qualified enterprise or organization with the lowest responsive bid. If fewer than the minimum required number of qualified Indian-owned enterprises or organizations submit responsive bids, the IHA shall reject all bids and readvertise the solicitation in accordance with paragraph (d) below.
- (d) If the IHA prefers not to restrict the solicitation as described in paragraph (c) above, or if after having restricted a solicitation an insufficient number of qualified Indian enterprises or organizations submit bids, the IHA may advertise for bids from non-Indian as well as Indian-owned enterprises and Indian organizations. Award shall be made to the qualified Indian enterprise or organization with the lowest responsive bid if that bid is
- (1) Within the maximum HUD-approved budget amount established for the specific project or activity for which bids are being solicited; and
- (2) No more than the percentage specified in 24 CFR 905.175(c) higher than the total bid price of the lowest responsive bid from any qualified bidder. If no responsive bid by a qualified Indian-owned economic enterprise or organization is within the stated range of the total bid price of the lowest responsive bid from any qualified enterprise, award shall be made to the bidder with the lowest bid.
- (e) Bidders seeking to qualify for preference in contracting or subcontracting shall submit proof of Indian ownership with their bids. Proof of Indian ownership shall include but not be limited to:
- (1) Certification by a tribe or other evidence that the bidder is an Indian. The IHA shall accept the certification of a tribe that an individual is a member.
- (2) Evidence such as stock ownership, structure, management, control, financing and salary or profit sharing arrangements of the enterprise.

- (f) (1) All bidders must submit with their bids a statement describing how they will provide Indian preference in the award of subcontracts. The specific requirements of that statement and the factors to used by the IHA in determining the statement's adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement shall be rejected as nonresponsive. The IHA may require that comparable statements be provided by subcontractors to the successful Contractor, and may require the Contractor to reject any bid or proposal by a subcontractor that fails to include the statement.
- (2) Bidders and prospective subcontractors shall submit a certification (supported by credible evidence) to the IHA in any instance where the bidder or subcontractor believes it is infeasible to provide Indian preference in subcontracting. The acceptance or rejection by the IHA of the certification shall be final. Rejection shall disqualify the bid from further consideration.
- (g) All bidders must submit with their bids a statement detailing their employment and training opportunities and their plans to provide preference to Indians in implementing the contract; and the number or percentage of Indians anticipated to be employed and trained. Comparable statements from all proposed subcontractors must be submitted. The criteria to be used by the IHA in determining the statement(s)'s adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement(s), or that includes a statement that does not meet minimum standards required by the IHA shall be rejected as nonresponsive.
- (h) Core crew employees. A core crew employee is an individual who is a bona fide employee of the contractor at the time the bid is submitted; or an individual who was not employed by the bidder at the time the bid was submitted, but who is regularly employed by the bidder in a supervisory or other key skilled position when work is available. Bidders shall submit with their bids a list of all core crew employees.
- (i) Preference in contracting, subcontracting, employment, and training shall apply not only on-site, on the reservation, or within the IHA's jurisdiction, but also to contracts with firms that operate outside these areas (e.g., employment in modular or manufactured housing construction facilities).
- (j) Bidders should contact the IHA to determine if any additional local preference requirements are applicable to this solicitation.
- (k) The IHA [] does [] does not [Contracting Officer check applicable box] maintain lists of Indian-owned economic enterprises and Indian organizations by specialty (e.g., plumbing, electrical, foundations), which are available to bidders to assist them in meeting their responsibility to provide preference in connection with the administration of contracts and subcontracts.

FAIR HOUSING/ACCESSIBILITY NOTICE

A. SUBJECT:

Accessibility Notice: Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 and the Fair Housing Act of 1988.

B. PURPOSE:

The purpose of this Notice is to remind recipients of Federal funds (in this instance, the Public Housing Authority) of their obligation to comply with pertinent laws and implementing regulations which provide for non-discrimination and accessibility in Federally funded housing and non-housing programs for people with disabilities.

C. NOTIFICATIONS:

Public housing agencies (PHAs) and other recipients of Federal PIH funds are responsible for providing this Notice to all current and future contractors participating in covered programs / activities or performing work covered under the above subject legislation and implementing regulations.

D. TO READ THE FULL TEXT OF THE NOTICE:

Go to www.kcha.org/business/requirements

Scroll down to Fair Housing Laws and Read: Fair Housing / Accessibility Notice

PRE-BID CONFERENCE

There will be a Pre-Bid Conference prior to the date of the bid opening for the purpose of providing a general discussion and review of any questions that might pertain to the bidding documents and procedures. All interested contractors are required to attend this meeting after reading the Project Manual. Please bring Project Manual and drawings, if any, to this conference. Project Manuals will be available for purchase at the Pre-Bid Conference. ATTENDANCE OF THE PRE-BID CONFERENCE IS REQUIRED FOR ACCEPTANCE OF BID FROM THE CONTRACTOR.

PROJECT SITE ADDRESS: Eastridge House

120 W. Sunset Way Issaquah, WA 98027

CONFERENCE DATE: February 17, 2022

TIME: 10:00 AM

CONTACT NAME: Don Hatfield

EMAIL: donaldh@kcha.org



PROJECT WAGE RATES

- A. DAVIS BACON WAGE RATES (NA)
- **B. NON-ROUTINE MAINTENANCE WAGES**

TYPE OF WAGE RATES: NON-ROUTINE MAINTENANCE

WAGE DATE: 01-01-21

For contracts entered into pursuant to competitive bidding procedures, the bid opening date "locks-in" the Non-Routine Maintenance Wage Rates that will be used during the course of the project.

NOTE: The awarded bidder will be required to submit, along with other contractual documentation, Form C.9 Certification of Compliance with Washington State Wage Payment Statutes.



KCHA / 08-05-21

TAX APPLICATIONS

TAX APPLICATIONS

If you have questions regarding the application of the retail sales tax exemption to the King County Housing Authority, please call your personal tax advisor or the Washington State Department of Revenue Office toll-free for one-on-one help: Telephone Information Center 1-800-647-7706.

WAC 458-20-17001

Government contracting -- Construction, installations, or improvements to government real property.

- (1) Special business and occupation tax applications and special sales/use tax applications pertain for prime and subcontractors who perform certain construction, installation, and improvements to real property of or for the United States, its instrumentalities, or a county or city housing authority created pursuant to chapter 35.82 RCW. These specific construction activities are excluded from the definition of "sale at retail" under RCW 82.04.050. All other sales to the United States, its agencies or instrumentalities are taxable as retail sales or wholesale sales, as appropriate. See WAC 458-20-190.
- (2) The definitions of terms and general provisions contained in WAC 458-20-170 apply equally for this rule, as appropriate. In addition, the terms, "clearing land" and "moving earth" include well drilling, core drilling, and hole digging, whether or not casing materials are installed and any grading or clearing of land, including the razing of buildings or other structures.

Business and Occupation Tax

- (3) Amounts derived from constructing, repairing, decorating, or improving new or existing buildings or other structures, including installing or attaching tangible personal property therein or thereto, and clearing land or moving earth, of or for the United States, its instrumentalities, or county or city housing authorities of chapter 35.82 RCW are taxable under the government contracting classification of business and occupation tax. The measure of the tax is the gross contract price.
- (4) Government contractors who manufacture or produce any tangible personal property for their own commercial or industrial use as consumers in performing government contracting activities are subject to the manufacturing classification of business and occupation tax measured by the value of the property manufactured or produced. See also, WAC 458-20-134. The manufacturing tax applies even though the property manufactured or produced for commercial use may be subsequently incorporated into buildings or other structures under the government contract and may thereby enhance the gross contract price.

Retail Sales Tax

(5) The retail sales tax does not apply to the gross contract price, or any part thereof, for any business activities taxable under the government contracting classification. Prime and subcontractors who perform such activities are themselves included within the statutory definition of "consumer" under RCW 82.04.190 and are required to pay retail sales tax upon all purchases of materials, including prefabricated and precast items, equipment, and other tangible personal property which is installed, applied, attached, or otherwise incorporated in their government contracting work. This applies for all such purchases of tangible personal property for installation, etc., even though the full purchase price of such property will be reimbursed by the government or housing authority in the gross contract price. It also applies notwithstanding that the contract may contain an immediate title vesting clause which provides that the title to the property vests in the government or housing authority immediately upon its acquisition by the contractor.

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

(6) Also, the retail sales tax must be paid by government contractors upon their purchases and leases or rentals of tools, consumables, and other tangible personal property used by them as consumers in performing government contracting.

Use Tax

- (7) The use tax applies upon the value of all materials, equipment, and other tangible personal property purchased at retail, acquired as a bailee or donee, or manufactured or produced by the contractor for commercial or industrial use in performing government contracting and upon which no retail sales tax has been paid by the contractor, its bailor or donor.
- (8) Thus the use tax applies to all property provided by the federal government to the contractor for installation or inclusion in the contract work as well as to all government provided tooling.
- (9) The use tax is to be reported and paid by the government contractor who actually installs or applies the property to the contract. Where the actual installing contractor pays the tax, no further use tax is due upon such property by any other contractor.
- (10) Note to contractors: The United States Supreme Court has sustained the government contracting tax applications for this state, even though the ultimate economic burden of the tax is borne by the United States Government (Washington v. US, 75 L.Ed 2d 264, 1983).
- (11) This rule does not apply to public road construction. See WAC 458-20-171. [Statutory Authority: RCW 82.32.300. 86-10-016 (Order ET 86-9), § 458-20-17001, filed 5/1/86.]



CAPITAL CONSTRUCTION DEPARTMENT

SECTION 3 - CLAUSE

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3) as implemented by HUD under 24 CFR Part 75 (collectively, the "Section 3 Regulations"). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD- assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants.
- В. The parties to this contract agree to comply with Section 3 Regulations. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual obligation or other impediment that would prevent them from complying with Section 3 Regulations.
- C. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with Section 3 Regulations, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of Section 3 Regulations. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of Section 3 Regulations.
- E. The Contractor will certify that any vacant employment positions, including training positions, that are filled; (1) after the Contractor is selected but before the contract is executed, and (2) with persons other than those to whom Section 3 Regulations require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under Section 3 Regulations.
- F. Noncompliance with HUD's Section 3 Regulations may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. Section 3 Employment and Training. Without limiting Contractor's obligation to comply with Section 3 Regulations, the Contractor specifically agrees to use best efforts to provide employment and training opportunities to Section 3 workers in the following order of priority:
 - 1. To residents of the KCHA development where the work is being performed;
 - 2. To residents of other KCHA developments or for residents of Section 8-assisted housing managed by KCHA;
 - 3. To participants in YouthBuild programs; and

KCHA - EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

- 4. To low- and very low-income persons residing within the Puget Sound Region.
- H. Section 3 Contracting. Without limiting Contractor's obligation to comply with Section 3 Regulations, Contractor specifically agrees to use best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order of priority:
 - 1. To Section 3 business concerns that provide economic opportunities for KCHA residents of the development where the work is being performed;
 - 2. To Section 3 business concerns that provide economic opportunities for KCHA residents of other KCHA developments or Section–8 assisted housing managed by KCHA;
 - 3. To YouthBuild programs; and
 - 4. To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the Puget Sound Region.



SECTION 3 – SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

LOCAL RESIDENT HIRING AND CONTRACTING (SECTION 3) REQUIREMENTS:

The Owner's or King County Housing Authority's (KCHA) goal for this project is to participate in Section 3 activities by including efforts that will provide employment opportunities to Section 3 workers and contracting opportunities to Section 3 businesses. (Section 3 workers and Section 3 Businesses are defined below and in 24 CFR 75.)

The Contractor and its Subcontractors at all tiers for this specific contract will partner with the Owner to contribute to the Owner's overall "Section 3" goals, as described below.

Because local hiring and contracting requirements are defined under Section 3 of the Housing and Community Development Act of 1968, these requirements are commonly referred to as Section 3. The definitions and goals are defined in Sections A and B below. Section C describes the process. Section D discusses consequences of non-compliance with Section 3 goals and Section E describes some local hiring resources. For more information on the Owner's employment and training efforts, or compliance with Section 3, please contact KCHA by email at Section3@kcha.org.

A. Section 3 Definitions

For the purposes of this solicitation:

- 1. "Section 3 worker" means any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:
 - a. The worker's income for the previous or annualized calendar year is below the income limit established by HUD. (See Pg. 4 of this section for HUD income limits)
 - b. The worker is employed by a Section 3 business concern.
 - c. The worker is a YouthBuild participant.
- 2. "Targeted Section 3 worker" means a Section 3 worker who is:
 - a. A worker employed by a Section 3 business concern; or
 - b. A worker who currently fits or when hired fit at least one of the following categories, as documented within the past five years:
 - i. A resident of public housing or Section 8–assisted housing;
 - ii. A resident of other public housing projects or Section 8–assisted housing managed by the PHA that is providing the assistance; or
 - iii. A YouthBuild participant.
- "Business concern" means a business entity formed in accordance with State law, and which is licensed under State, county, or municipal law to engage in the type of business activity for which it was formed.
- 4. "Section 3 business concern" means a business concern meeting at least one of the following criteria, documented within the last six-month period:
 - a. It is at least 51 percent owned and controlled by low- or very low-income persons;
 - b. Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers; or
 - c. 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.
- 5. The greatest extent feasible means:
 - a. Completing and submitting a Section 3 Work Plan to designated Owner staff prior to contract signing (template to be provided by the Owner).
 - b. If contracting with Section 3 business concerns:





- i. Placing qualified business enterprises on solicitation lists.
- ii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation of qualified Section 3 businesses.
- iii. 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 to identify potential Section 3 businesses.
- iv. Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources.
- c. If hiring Section 3 workers:
 - i. Post job opportunities for a mutually agreed upon length of time through the Owner's employment agency service partners and at project site as appropriate.
 - ii. Conduct interviews with qualified Section 3 workers.
 - iii. Notify designated Owner (KCHA) staff of all new hires.
- d. For both: Complete Section 3 compliance and tracking paperwork as necessary.

B. Section 3 Goals

The Owner will require, to the greatest extent feasible, for the Contractor to demonstrate participation in the local hiring and contracting requirements as defined under Section 3 of the Housing and Community Development Act of 1968.

- 1. Bidders shall demonstrate compliance with the Section 3 goals by making a best faith effort to achieve the following benchmarks:
 - a. Twenty-five (25) percent or more of the total number of labor hours worked by all workers are Section 3 workers; and
 - b. Five (5) percent or more of the total number of labor hours worked by all workers are Targeted Section 3 workers.
- 2. The successful bidder and covered subcontractors shall direct their efforts to provide Section 3 employment opportunities to Section 3 workers in the following order of priority:
 - a. First Priority: Current residents of KCHA development(s) benefitting from project.
 - b. Second Priority: Other Owner public housing and Section 8 voucher- assisted residents.
 - c. Third Priority: Participants in HUD Youthbuild programs.
 - d. Fourth Priority: Other low or very low income individuals in the Housing Authorities metropolitan area (Puget Sound region) who are at or below the Area's Low Income calculation.
- 3. The Contractor and covered subcontractors shall direct their efforts to award contracts to Section 3 business concerns in the following order of priority:
 - a. First Priority: To Section 3 business concern that provides economic opportunities for KCHA residents at the site(s) where the work will take place.
 - b. Second Priority: To Section 3 business concerns that provide economic opportunities for residents of other KCHA developments or Section–8 assisted housing managed by KCHA.
 - c. Third Priority: A subcontractor that is a HUD Youthbuild company.
 - d. Fourth Priority: To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (Puget Sound).

4. Sealed Bidding

In order for KCHA to meet or exceed its adopted goal that 3% of all non-construction contracts and 10% of construction contracts paid in whole or in part with HUD funds be awarded to Section 3 businesses, KCHA may elect, on a contract-by-contract basis, to award a competitively bid contract to a responsible bidder other than the lowest responsive bidder by using the following procedure:



Bids shall be solicited from both Section 3 and non-Section 3 business concerns. KCHA may award the contract to the qualified Section 3 business concern with the highest priority ranking and with the lowest responsive bid if:

- a. the specific project or KCHA as an agency is otherwise not expected to meet Section 3 utilization goals; and,
- b. the bid is within the maximum total contract price established in KCHA's budget for the specific project for which bids are being taken; and,
- c. the sources of funds for the project are such that there are no conflicts between this procedure and applicable state law; and,
- d. the bid is not more than "X" higher than the total bid price for the lowest responsive bid from any responsible, bidder. "X" is determined as follows:

(FOR KCHA USE ONLY)	X = LESSER OF:
• When the lowest responsive bid is less than \$100,000	10%
• When the lowest responsive bid is: \$100,000, but less than \$200,000 At least \$200,000 but less than \$300,000 At least \$300,000 but less than \$400,000 At least \$400,000 but less than \$500,000 At least \$500,000 but less than \$1 million At least \$1 million but less than \$2 million At least \$2 million but less than \$4 million At least \$4 million but less than \$4 million \$7 million \$7 million or more	9% 8% 7% 6% 5% 4% 3% 2% 1 ½ % of the lowest responsive bid with no dollar limit

If no responsive bid by a Section 3 business concern meets the requirements above, the contract shall be awarded to a responsible bidder with the lowest responsive bid.

C. The Process

- 1. Contract is awarded to lowest responsible Bidder.
- 2. Section 3 orientation with Owner. Once the Notice of Intent to Award has been issued to the successful Bidder, Owner's staff will contact that Bidder and arrange for a meeting to discuss local hiring and contracting goals and strategies in greater detail. At this meeting, the Contractor will be provided a packet that will include a Section 3 overview, Section 3 certification form, and all Section 3 compliance and tracking forms that will be used throughout the contract.
- 3. Contractor reports on Section 3 activities monthly.

FOR CONTRACTS EXCEEDING \$500K ONLY:

- 4. Contractor submits Section 3 Work Plan, including hiring and subcontracting activities, prior to contract execution. Owner reviews and approves work plan prior to contract execution. Section 3 Work Plan shall be included in contract. Owner issues Notice to Proceed, providing all requirements are met.
- 5. Section 3 Work Plan implemented throughout the duration of contract.



D. Penalties for Non-compliance

Owner's commitment to this program is reflected in part by the cost of administering the program. Failure to make a good faith effort to the greatest extent feasible negates such funding and impairs the Owner's efforts to promote workforce diversity and to provide fair and equal opportunities to the public as a whole as a result of the expenditure of public funds. Therefore, if awarded this contract, the parties will mutually agree that failure to meet the requirements, including but not limited to the submission of required documentation, constitutes a material breach of contract. In the event of such breach, Owner may take any or all of the actions as contained in the Contract Documents.

E. Local Hiring Resources

Contact KCHA by email at Section3@kcha.org to obtain a list of local hiring resources.

SECTION 3 – 2021 INCOME GUIDELINES

Location	Bremerton Silverdale (Kitsap County)		Seattle, Bellevue Everett (King/Snohomish Counties)		Tacoma (Pierce County)		Sedro Woolley (Skagit County)		
Income	Extremely Low	\$19,800	Extremely Low	\$24,300	Extremely Low	\$19,100	Extremely Low	\$17,300	
Limit 1 Person	Very low income	\$23,950	Very low income	\$40,500	Very low income	\$31,800	Very low income	\$28,850	
	Low income	\$52,750	Low income	\$63,350	Low income	\$50,900	Low income	\$46,100	

CAPITAL CONSTRUCTION DEPARTMENT

PROGRESS PAYMENT SUSPENSION CRITERIA

CRITERIA will include:

- 1. Non-submittal of Certified Payroll documents (see Informational Form A.12)
- 2. Non-submittal of Section 3 Labor Hours Benchmark Status Report (see Section C for sample)
- 3. No lien release with Application for Payment
- 4. Insurance expires
- 5. Federal and/or State liens on general contractor
- 6. Suspension/expiration of WA State contractor's license
- 7. Work not accomplished
- 8. Work not approved/accepted
- 9. Repeated safety violations not resolved if warnings from KCHA are ignored
- 10. Incorrect Application for Payment or invoice (whichever is applicable)
- 11. Non-submittal of the GC Certification Upon Application for Payment (see Section E, Division 1 for sample of KCHA Pay Application which includes the continuation sheet, the payment application and the GC Certification)

CAPITAL CONSTRUCTION DEPARTMENT

EXECUTIVE ORDER 11246 (as AMENDED)

---DISCLAIMER--- http://www.dol.gov/general/disclaim#statutory

Executive Order 11246 - Equal Employment Opportunity

SOURCE: The provisions of Executive Order 11246 of Sept. 24, 1965, appear at 30 FR 12319, 12935, 3 CFR, 1964-1965 Comp., p.339, unless otherwise noted.

Under and by virtue of the authority vested in me as President of the United States by the Constitution and statutes of the United States, it is ordered as follows:

Part I - Nondiscrimination in Government Employment

[Part I superseded by EO 11478 of Aug. 8, 1969, 34 FR 12985, 3 CFR, 1966-1970 Comp., p. 803]

Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors Subpart A - Duties of the Secretary of Labor

SEC. 201. The Secretary of Labor shall be responsible for the administration and enforcement of Parts II and III of this Order. The Secretary shall adopt such rules and regulations and issue such orders as are deemed necessary and appropriate to achieve the purposes of Parts II and III of this Order.

[Sec. 201 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart B - Contractors' Agreements

SEC. 202. Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advancements 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 or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.



CAPITAL CONSTRUCTION DEPARTMENT

- (5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor 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 such litigation to protect the interests of the United States."

[Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

- **SEC. 203.** Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.
- (b) Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.
- (c) Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, That to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.
- (d) The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684; EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

- **SEC. 204** (a) The Secretary of Labor may, when the Secretary deems that special circumstances in the national interest so require, exempt a contracting agency from the requirement of including any or all of the provisions of Section 202 of this **Order** in any specific contract, subcontract, or purchase **order**.
- (b) The Secretary of Labor may, by rule or regulation, exempt certain classes of contracts, subcontracts, or purchase orders (1) whenever work is to be or has been performed outside the United States and no recruitment of workers within the limits of the United States is involved; (2) for standard commercial supplies or raw materials; (3) involving less than specified amounts of money or specified numbers of workers; or (4) to the extent that they involve subcontracts below a specified tier.
- (c) Section 202 of this **Order** shall not apply to a Government contractor or subcontractor that is a religious corporation, association, educational institution, or society, with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities. Such contractors and subcontractors are not exempted or excused from complying with the other requirements contained in this **Order**.
- (d) The Secretary of Labor may also provide, by rule, regulation, or **order**, for the exemption of facilities of a contractor that are in all respects separate and distinct from activities of the contractor related to the performance of the contract: provided, that such an exemption will not interfere with or impede the effectuation of the purposes of this **Order**: and provided further, that in the absence of such an exemption all facilities shall be covered by the provisions of this **Order**."

[Sec. 204 amended by EO 13279 of Dec. 16, 2002, 67 FR 77141, 3 CFR, 2002 Comp., p. 77141 - 77144]

Subpart C - Powers and Duties of the Secretary of Labor and the Contracting Agencies

SEC. 205. The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or regulations. All contracting agencies shall comply with the terms of this Order and any implementing rules, regulations, or orders of the Secretary of Labor. Contracting agencies shall cooperate with the Secretary of Labor and shall furnish such information and assistance as the Secretary may require.

[Sec. 205 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

- **SEC. 206.** The Secretary of Labor may investigate the employment practices of any Government contractor or subcontractor to determine whether or not the contractual provisions specified in Section 202 of this Order have been violated. Such investigation shall be conducted in accordance with the procedures established by the Secretary of Labor.
- (b) The Secretary of Labor may receive and investigate complaints by employees or prospective employees of a Government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Section 202 of this Order.

[Sec. 206 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 207. The Secretary of Labor shall use his/her best efforts, directly and through interested Federal, State, and local agencies, contractors, and all other available instrumentalities to cause any labor union



engaged in work under Government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this Order. The Secretary of Labor shall, in appropriate cases, notify the Equal Employment Opportunity Commission, the Department of Justice, or other appropriate Federal agencies whenever it has reason to believe that the practices of any such labor organization or agency violate Title VI or Title VII of the Civil Rights Act of 1964 or other provision of Federal law.

[Sec. 207 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 208. The Secretary of Labor, or any agency, officer, or employee in the executive branch of the Government designated by rule, regulation, or order of the Secretary, may hold such hearings, public or private, as the Secretary may deem advisable for compliance, enforcement, or educational purposes.

(b) The Secretary of Labor may hold, or cause to be held, hearings in accordance with Subsection of this Section prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. No order for debarment of any contractor from further Government contracts under Section 209(6) shall be made without affording the contractor an opportunity for a hearing.

Subpart D - Sanctions and Penalties

SEC. 209. In accordance with such rules, regulations, or orders as the Secretary of Labor may issue or adopt, the Secretary may:

- (1) Publish, or cause to be published, the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this Order or of the rules, regulations, and orders of the Secretary of Labor.
- (2) Recommend to the Department of Justice that, in cases in which there is substantial or material violation or the threat of substantial or material violation of the contractual provisions set forth in Section 202 of this Order, appropriate proceedings be brought to enforce those provisions, including the enjoining, within the limitations of applicable law, of organizations, individuals, or groups who prevent directly or indirectly, or seek to prevent directly or indirectly, compliance with the provisions of this Order.
- (3) Recommend to the Equal Employment Opportunity Commission or the Department of Justice that appropriate proceedings be instituted under Title VII of the Civil Rights Act of 1964.
- (4) Recommend to the Department of Justice that criminal proceedings be brought for the furnishing of false information to any contracting agency or to the Secretary of Labor as the case may be.
- (5) After consulting with the contracting agency, direct the contracting agency to cancel, terminate, suspend, or cause to be cancelled, terminated, or suspended, any contract, or any portion or portions thereof, for failure of the contractor or subcontractor to comply with equal employment opportunity provisions of the contract. Contracts may be cancelled, terminated, or suspended absolutely or continuance of contracts may be conditioned upon a program for future compliance approved by the Secretary of Labor.
- (6) Provide that any contracting agency shall refrain from entering into further contracts, or extensions or other modifications of existing contracts, with any noncomplying contractor, until such contractor has satisfied the Secretary of Labor that such contractor has established and will carry out personnel and employment policies in compliance with the provisions of this Order.
- (b) Pursuant to rules and regulations prescribed by the Secretary of Labor, the Secretary shall make reasonable efforts, within a reasonable time limitation, to secure compliance with the contract provisions of this Order by methods of conference, conciliation, mediation, and persuasion before proceedings shall be instituted under subsection (a)(2) of this Section, or before a contract shall be cancelled or terminated in whole or in part under subsection (a)(5) of this Section.

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

[Sec. 209 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 210. Whenever the Secretary of Labor makes a determination under Section 209, the Secretary shall promptly notify the appropriate agency. The agency shall take the action directed by the Secretary and shall report the results of the action it has taken to the Secretary of Labor within such time as the Secretary shall specify. If the contracting agency fails to take the action directed within thirty days, the Secretary may take the action directly.

[Sec. 210 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p 230]

SEC. 211. If the Secretary shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless the bidder or prospective contractor has satisfactorily complied with the provisions of this Order or submits a program for compliance acceptable to the Secretary of Labor. [Sec. 211 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 212. When a contract has been cancelled or terminated under Section 209(a)(5) or a contractor has been debarred from further Government contracts under Section 209(a)(6) of this Order, because of noncompliance with the contract provisions specified in Section 202 of this Order, the Secretary of Labor shall promptly notify the Comptroller General of the United States.

[Sec. 212 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart E - Certificates of Merit

SEC. 213. The Secretary of Labor may provide for issuance of a United States Government Certificate of Merit to employers or labor unions, or other agencies which are or may hereafter be engaged in work under Government contracts, if the Secretary is satisfied that the personnel and employment practices of the employer, or that the personnel, training, apprenticeship, membership, grievance and representation, upgrading, and other practices and policies of the labor union or other agency conform to the purposes and provisions of this Order.

SEC. 214. Any Certificate of Merit may at any time be suspended or revoked by the Secretary of Labor if the holder thereof, in the judgment of the Secretary, has failed to comply with the provisions of this Order.

SEC. 215. The Secretary of Labor may provide for the exemption of any employer, labor union, or other agency from any reporting requirements imposed under or pursuant to this Order if such employer, labor union, or other agency has been awarded a Certificate of Merit which has not been suspended or revoked.

Part III - Nondiscrimination Provisions in Federally Assisted Construction Contracts

SEC. 301. Each executive department and agency, which administers a program involving Federal financial assistance shall require as a condition for the approval of any grant, contract, loan, insurance, or guarantee thereunder, which may involve a construction contract, that the applicant for Federal assistance undertake and agree to incorporate, or cause to be incorporated, into all construction contracts paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to such grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the provisions prescribed for Government contracts by Section 202 of this Order or such modification thereof, preserving in substance the contractor's obligations thereunder, as may be approved by the Secretary of Labor, together with such additional provisions as the Secretary deems appropriate to establish and protect the interest of the United States in the enforcement of those obligations. Each such applicant shall also undertake and agree (1) to assist and cooperate actively with the Secretary of Labor in obtaining the compliance of contractors and subcontractors with those contract provisions and with the rules, regulations and relevant orders of the Secretary, (2) to obtain and to furnish to the Secretary of Labor such information as the Secretary may require

King County Housing Authority

CAPITAL CONSTRUCTION DEPARTMENT

for the supervision of such compliance, (3) to carry out sanctions and penalties for violation of such obligations imposed upon contractors and subcontractors by the Secretary of Labor pursuant to Part II, Subpart D, of this Order, and (4) to refrain from entering into any contract subject to this Order, or extension or other modification of such a contract with a contractor debarred from Government contracts under Part II, Subpart D, of this Order.

[Sec. 301 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

- **SEC. 302.** "Construction contract" as used in this Order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.
- (b) The provisions of Part II of this Order shall apply to such construction contracts, and for purposes of such application the administering department or agency shall be considered the contracting agency referred to therein.
- (c) The term "applicant" as used in this Order means an applicant for Federal assistance or, as determined by agency regulation, other program participant, with respect to whom an application for any grant, contract, loan, insurance, or guarantee is not finally acted upon prior to the effective date of this Part, and it includes such an applicant after he/she becomes a recipient of such Federal assistance.
- **SEC. 303.** The Secretary of Labor shall be responsible for obtaining the compliance of such applicants with their undertakings under this Order. Each administering department and agency is directed to cooperate with the Secretary of Labor and to furnish the Secretary such information and assistance as the Secretary may require in the performance of the Secretary's functions under this Order.
- (b) In the event an applicant fails and refuses to comply with the applicant's undertakings pursuant to this Order, the Secretary of Labor may, after consulting with the administering department or agency, take any or all of the following actions: (1) direct any administering department or agency to cancel, terminate, or suspend in whole or in part the agreement, contract or other arrangement with such applicant with respect to which the failure or refusal occurred; (2) direct any administering department or agency to refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received by the Secretary of Labor from such applicant; and (3) refer the case to the Department of Justice or the Equal Employment Opportunity Commission for appropriate law enforcement or other proceedings.
- (c) In no case shall action be taken with respect to an applicant pursuant to clause (1) or (2) of subsection (b) without notice and opportunity for hearing.

[Sec. 303 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 304. Any executive department or agency which imposes by rule, regulation, or order requirements of nondiscrimination in employment, other than requirements imposed pursuant to this Order, may delegate to the Secretary of Labor by agreement such responsibilities with respect to compliance standards, reports, and procedures as would tend to bring the administration of such requirements into conformity with the administration of requirements imposed under this Order: Provided, That actions to effect compliance by recipients of Federal financial assistance with requirements imposed pursuant to Title VI of the Civil Rights Act of 1964 shall be taken in conformity with the procedures and limitations prescribed in Section 602 thereof and the regulations of the administering department or agency issued thereunder.

Part IV - Miscellaneous

SEC. 401. The Secretary of Labor may delegate to any officer, agency, or employee in the Executive branch of the Government, any function or duty of the Secretary under Parts II and III of this Order.

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

[Sec. 401 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 402. The Secretary of Labor shall provide administrative support for the execution of the program known as the "Plans for Progress."

SEC. 403. Executive Orders Nos. 10590 (January 19, 1955), 10722 (August 5, 1957), 10925 (March 6, 1961), 11114 (June 22, 1963), and 11162 (July 28, 1964), are hereby superseded and the President's Committee on Equal Employment Opportunity established by Executive Order No. 10925 is hereby abolished. All records and property in the custody of the Committee shall be transferred to the Office of Personnel Management and the Secretary of Labor, as appropriate.

(b) Nothing in this Order shall be deemed to relieve any person of any obligation assumed or imposed under or pursuant to any Executive Order superseded by this Order. All rules, regulations, orders, instructions, designations, and other directives issued by the President's Committee on Equal Employment Opportunity and those issued by the heads of various departments or agencies under or pursuant to any of the Executive orders superseded by this Order, shall, to the extent that they are not inconsistent with this Order, remain in full force and effect unless and until revoked or superseded by appropriate authority. References in such directives to provisions of the superseded orders shall be deemed to be references to the comparable provisions of this Order.

[Sec. 403 amended by EO 12107 of Dec. 28, 1978, 44 FR 1055, 3 CFR, 1978 Comp., p, 264]

SEC. 404. The General Services Administration shall take appropriate action to revise the standard Government contract forms to accord with the provisions of this Order and of the rules and regulations of the Secretary of Labor.

SEC. 405. This Order shall become effective thirty days after the date of this Order.

EXECUTIVE ORDER 13496

New Employee Notification Requirements for Federal Contractors and Subcontractors

Under Department of Labor regulations, www.gpo.gov/fdsys/pkg/FR-2010-05-20/pdf/2010-11639.pdf, contractors holding contracts with the Federal government and their subcontractors are required, beginning on June 21, 2010, to post notices informing employees of their rights under the National Labor Relations Act (NLRA). The notice to employees required by the regulations inform employees about their rights under the NLRA to form, join and assist a union and to bargain collectively with their employer; provides examples of unlawful employer and union conduct that interferes with those rights; and indicates how employees can contact the National Labor Relations Board, the Federal agency that enforces those rights, with questions or to file complaints. Contractors that violate the Labor Department's regulations requiring employee notification of these rights may be subject to sanctions, including suspension or cancellation of the contract.

The regulations require Federal contractors:

- to post the required employee notice conspicuously in and around their plants and offices so that it is prominent and readily seen by employees who are covered by the NLRA and who engage in contract-related activity;
- 2. to post the required notice electronically if they communicate with employees electronically, which requires posting a link to the Department of Labor's website containing the employee notice where they customarily place other electronic notices to employees about their jobs; and
- 3. to insert provisions in their subcontracts that require their subcontractors to comply with the same posting requirements as well.

Contractors and subcontractors may obtain the required poster in any of the three ways. The Labor Department will print posters and provide them to Federal contracting departments and agencies for supply to contractors and subcontractors. In addition, contractors and subcontractors can request posters from the field offices of the Labor Department's Office of Federal Contract Compliance Programs (http://www.dol.gov/ofccp/contacts/ofnation2.htm), or Office of Labor-Management Standards (OLMS) (http://www.dol.gov/olms/contacts/lmskeyp.htm). Finally, contractors and subcontractors can acquire the poster from OLMS' website by downloading it from http://www.dol.gov/olms or by calling (202) 693-0123. Compliance information for contractors and subcontractors can be found at OFCCP's website Construction Compliance Checks Frequently Asked Questions | U.S. Department of Labor (dol.gov)

EXECUTIVE ORDER 13496 - FREQUENTLY ASKED QUESTIONS

Executive Order 13496 Frequently Asked Questions | U.S. Department of Labor (dol.gov)



REQUIREMENTS FOR PUBLIC WORKS PROJECTS

REQUIREMENTS FOR PUBLIC WORKS PROJECTS – All projects require that the contractor and all subcontractors performing labor on the project site must file the Statement of Intent with L&I regardless of the wage determination is set as HUD Non-Routine Maintenance, State Prevailing wages or Davis-Bacon.

Statement of Intent to Pay Prevailing Wages - filed at the start of the project

- A. **Filed Immediately** after the contract is awarded and before work begins, if that is possible. **NO PAYMENTS CAN BE MADE** until the contractor has submitted an Intent form that has been approved by the Industrial Statistician.
- B. SUBCONTRACTORS must file using the PRIME CONTRACTOR'S "Form ID Number" after the PRIME has received approval for their Statement of Intent.
- C. Wage payment requirements for this project are determined to be
 - 1. Davis-Bacon (NA)

2. HUD Non-Routine Maintenance

- a. The Intent is then filed with the question "Is this a Housing Act of 1937 Project?" answered as Yes.
- b. See the Informational Form A.13b for the sample of Intent to Pay Prevailing Wages with the highlighted statement shown on the form.

Certified Payroll - filed each week for the duration of the project

- A. Submitted on a weekly basis, beginning with the first week that the Contractor works on the Project, and for every week afterward until the Contractor completes the Work.
- B. Consisting of a certified payroll report and a statement of compliance.
- C. See Informational Form A.13c for more information.

 NOTE: These requirements will also apply to HUD Non-Routine Maintenance Wages.

Affidavit of Wages Paid - filed at the end of the project

A. Submitted at the end of the project once all of the work has been completed, showing the wages paid to employees who worked on the project.

SCREEN SHOTS OF INTENT

File Intent: Enter the Project Details

STEP 1
Select
Contract Type

STEP 2
Project Details
STEP 3
Intent Details
STEP 4
Add Wages
STEP 5
Review Intent
Details

Project Details	
Contract Type	Bid-Build (Traditional)
Bid Due Date (required) (i)	mm/dd/yyyy
Contract Award Date (required) (i)	mm/dd/yyyy
Awarding Agency	KING COUNTY HOUSING AUTHORITY
Awarding Agency Address	700 ANDOVER PARK SW TUKWILA, WA – 98188
Awarding Agency Contact Name (required)	
awarding Agency Contact Phone Number (required)	Ext
warding Agency Contract Number (required) (1)	
roject Name (<mark>required)</mark>	
s apprentice utilization required? (required)	○ Yes ○ No
s OMWBE utilization required? (required)	○ Yes ○ No
s this a Housing Act of 1937 project? (required)	○ Yes ○ No
Project Site Address or Directions 📵	





Prevailing Wage Section - Telephone 360-902-5335 PO Box 44540, Olympia, WA 98504-4540

Statement of Intent to Pay Prevailing Wage

This is a Housing Act of 1937 project per 24 CFR 26-101 and is exempt from the state prevailing wage rates but not exempt from the application of other prevailing wage requirements under the Washington State laws, rules and policies

Document Received Date:	Intent id:	Affidavits:	Status:
Company Details			
Company X		UBI:123 456 789	
123 Somewhere Renton, WA 98111		Reg#: companyx122 Email: puppies@yahoo.com	
OMWRE Certifications as of 2/26/2020		Filed By: Pup Pies	
No active certifications exist for this business.			
Workers' Compensation Account ID		688.825-01	
Prime Contractor			
Company Name		Company X	
Contractor Registration No.		companyx122	
WA UBI No.		123 456 789	
Phone Number		206-555-1212	
Project Information			
Awarding Agency		KING COUNTY HOUSING AUTHORITY	
Awarding Agency Contact Name		Amy Kurtz	
Awarding Agency Contact Phone Number		206-574-1283	
Contract Number		CC2000165	
Project Name		Munro Manor	
Contract Type		Bid-Build (Traditional)	
8id Due Date		1/29/2020	





KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

REQUIREMENTS FOR CERTIFIED PAYROLL per CFR TITLE 29 SUBTITLE A – DAVIS BACON & RELATED ACTS PROVISIONS & PROCEDURES

§5.5 Contract provisions and related matters.

- (a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in §5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, *Provided*, That such modifications are first approved by the Department of Labor):
- (1) Minimum wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), 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 paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §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 paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, 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 the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit 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.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (2) Withholding. The (write in name of Federal Agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- (3) Payrolls and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.*, the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) 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, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) Apprentices and trainees—(i) Apprentices. Apprentices 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, 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 the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where 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

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, 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.

- (ii) 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 on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor 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.
- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) *Compliance with Copeland Act requirements*. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) *Contract termination: debarment.* A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- (10) Certification of eligibility. (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

KCHA - EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by §5.5(a) or §4.6 of part 4 of this title. As used in this paragraph, the terms *laborers* and *mechanics* include watchmen and guards.
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section 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 clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) 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 other 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 clause set forth in paragraph (b)(2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in §5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

For On-Line Certified Payroll Form, refer to:

http://www.dol.gov/whd/forms/wh347.pdf

B - SECTION

EASTRIDGE HOUSE ELEVATOR MODERNIZATION

120 W. SUNSET WAY, ISSAQUAH, WA 98027

DUE DATE: March 3, 2022

TIME: 1:00 pm

In order to be considered as **RESPONSIVE BIDS**, all bidders **MUST** submit the following <u>Signed</u> <u>Documents (each single sided)</u> no later than the **Bid Due Date and Time**.

Forms to Return if Bidding

B.1	Bid Form
B.2	COVID-19 Job Site Requirements
B.3	Bidder's Experience Record
B.4	Contractor Certification
B.5	Non-Collusive Affidavit
B.6	Equal Opportunity
B.7	Bid Security (Submit only for bids greater than \$150,000)
B.8	Debarment / Suspension Compliance Certification
B.9	Proposed Subcontractor List
B.10	Section 3
	a. Business Certification
	b. Subcontractor Work Plan
B.11	Harassment and Discrimination Policies
B.12	WMBE Survey (Form is not required to be responsive, but requested)
B.13	Preliminary Project Schedule – Provided by Contractor



BID FORM – RETURN EACH FORM SINGLE SIDED

BID TO:

KING COUNTY HOUSING AUTHORITY CAPITAL CONSTRUCTION DEPARTMENT 700 Andover Park West, Suite C * Tukwila, WA 98188

PROJECT NAME AND LOCATION:

Eastridge House Elevator Modernization 120 W. Sunset Way, Issaquah, WA 98027

SCOPE OF WORK:

Eastridge House was built in 1980 and consists of thirty nine (39) one (1) bedroom apartments on three (3) floors. The elevator services all three (3) of these floors. Eastridge House is located in Issaquah, WA and houses seniors and disabled persons.

The scope of work for this project includes (but is not limited to) all work related to the renovation and/or replacement of the following items: elevator jack, new pit ladder, pit floor sealing, new door and hardware, new lighting, new elevator controls, and new fan in elevator car, add sprinkler head and test in elevator equipment room, rough carpentry to include infill and siding for wall vent removal in elevator shaft, painting, necessary electrical and mechanical upgrades, and adjacent architectural improvements (call buttons, alarms, trim panels etc.), new DHP, machinery, including any code related fire blocking or fire rated insulation, and interior cab upgrades for one elevator at Eastridge House.

For complete scope, please see E.1 Scope of Work and Technical Specifications

BASE BID:

Bidders must provide a cost for **each and every** bid item (even if the amount is **\$0.00**), for the bid to be considered responsive. Where conflict occurs between the bid item values entered and the total amount written, the bid item price(s) shall prevail, and totals will be corrected to conform thereto. The work of the various items is described throughout the Contract Documents.

Total Base Bid Lump Sum Amount (Gross Contract Price) should include all applicable taxes. King County Housing Authority (KCHA) will only pay this Gross Contract Price. Contractors shall review the State of Washington Department of Revenue Ruling WAC 458-20-17001 (included in bid documents) and all other applicable documents for tax obligations.

Contractor must pay the attached \square Davis Bacon $/ \square$ No	on-Routine Maintenance as the M	Minimum
Wages and Fringe Benefits for the construction workers under	this contract.	

The Bidder agrees to accept as full payment for the Work, as specified in the Contract Documents, and based upon the undersigned's own estimate of quantities and costs, the following stipulated sums.

Bidding Contractor's Company Name:		Initials:
Bid Form Return Form - B.1	Page 1 of 8	KCHA / 08-05-21



BASE BID PRICE		
Α.	Materials, including all applicable Taxes	\$
В.	Labor	\$
C.	O & P, including all applicable Fees	\$
D.	Owner Allowance for added work contingency, as authorized by	\$24,000.00
ъ.	KCHA	\$24,000.00
TOTAL BID AMOUNT: (all costs inclusive – A, B, C& D)		
Round to Nearest Dollar		
		And No/100 Dollars
PRINT (in words) Total Bid Amount. Sample – Three Hundred Thousand, Two Hundred Sixty-Six		

ADDITIONAL COVID-19 REQUIREMENTS

Should there be new COVID-19 requirements instituted by the State or County prior to the bid date, they will be addressed in an Addendum.

UNIT PRICES:

Unit prices are considered for use when small quantities are needed and additional competitive bidding is not required for price justification. An unforeseen condition requiring large quantities resulting in a substantial change in scope of new work will not be considered applicable for unit pricing. Large deviations in the scope of work will be addressed and evaluated through a bid process or on a Time Material basis as stipulated in the contract documents. Acceptance of any unit pricing is at the Owner's discretion.

COMPLETE BID:

Contractor shall include all costs of doing the work shown, described, and intended by the Contract Documents, within the lump sum bid prices in the Proposal.

LOW BIDDER DETERMINATION:

The determination of the Low Bidder will be determined on the basis of the Grand Total of the Total Base Bid Price plus Owner-Directed Work Total. The Owner reserves the right to accept any, all, or no Additive items at the time of Award, or at any time thereafter.

RIGHT TO AWARD THE CONTRACT:

KCHA reserves the right to award the Contract to the Contractor based on the Contractor's Qualifications, Bonding Capacity and ability to Complete the Project within the Completion Time allowed for project. If written notice of the acceptance of this bid is mailed, or delivered to the undersigned within Seven (7) days after the opening thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver a Contract in the prescribed form within Seven (7) calendar days after the Contract is presented for signature.

RIGHT TO REJECT BIDS:

KCHA Reserves the Right to Reject any and all Bids and select any bid options (Base Bid/Alternate Bid or both). In addition, KCHA Reserves the Right to Refuse to Award a Bid to a Contractor based on the Contractor's Past Performance, and/or Unresolved Issues with KCHA, as well as unresolved issues with Washington State Labor & Industries. No Extension of Completion is allowed.

KCHA also Reserves the Right to Reject all bids, for any reason, prior to Contract Execution.

	Initials:
Page 2 of 8	KCHA / 08-05-21
	Page 2 of 8



The undersigned hereby agrees that this proposal shall be a Valid and Firm Offer for the following calendar days from the date of the Bid Opening.

> **Calendar Days: SIXTY (60)**

If the Contractor's Bid is determined to be "Not Responsible", KCHA will issue in writing the specific reasons for this determination. Your company will be allowed to appeal this decision. The appeal must be in writing. The appeal must be delivered to KCHA at the address provided in the determination of 'Not Responsible' within two (2) business days after KCHA makes the decision. The appeal may include additional information that was not included in the original Bid Documents. KCHA will make a final determination after the receipt of the appeal. The final determination may not be appealed.

ADDENDUM RECEIPT:	(Receipt of the following Addenda is	s acknowledged)
Addendum No.:	Date:	
NO ADDENDA were received		
START TIME OF CONSTRUCTION for the project must by KCHA.	ICTION: st be started in accordance with the wr	ritten Notice to Proceed Date issued
duration (Construction Period work required under the Contr	to significantly complete the project /Duration: NTP "construction start act and in accordance with the Continuous list items) shall be the following	t" to physical completion) all the tract Documents. Time allowed to
Calendar Days	: <u>NINETY (90)</u>	
	: or is to provide a preliminary Master Pr clude task durations and a project durat	
Contractor's Invoice of percenta	by KCHA to the Contractor monthly fage of 'Completion'. Contractor shall to Payment for Invoice Submittal.	
be released upon receipt of the	etention at the following Rate, pursuan Proper clearances from all pertinent s rements for Release, including clearance	tate agencies. Release of Retention
Retention Rate	: FIVE PERCENT (5%)	
Bidding Contractor's Company Nat		Initials:
Bid Form	Page 3 of 8	KCHA / 08-05-21

Return Form - B.1



CLOSEOUT PERCENTAGE:

Contractor to include in his Schedule of Values **Closeout Costs**; this is a percentage of the contract bid amount for costs associated with closing out the project as described in Section 01 77 00.

Closeout Percentage: FIVE PERCENT (5%)

LIQUIDATED DAMAGES:

Timely performance and completion of the Work is essential to the Owner and time limits stated in the Agreement are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work or Contract Completion of the entire project does not occur in the time limits defined in the Contract. Liquidated damages are not assessed as a penalty, but as liquidated damages for breach of contract. The amount is fixed and agreed upon by the Contractor and Owner due to the extreme difficulty and impracticability of fixing and ascertaining the actual damages the Owner would sustain.

This amount is construed as actual amount of damages to the Owner and may be retained by the Owner and deducted from any payments to the Contractor. Assessment of liquidated damages does not release the Contractor for obligations in the Agreement. If different and separate completion dates are stated in the Agreement for separate parts or stages of the Work, the amount of liquidated damages shall apply and may be assessed on those parts or stages of the Work which are delays.

If the Contractor fails to complete the Work by the Time for Substantial Completion stated above, then the Contractor agrees to abide by all provision of the Liquidated Damages clause to the Contract. Liquidated Damages shall be in the following DOLLAR AMOUNT per Calendar Days and will be assessed for each day that the Contractor exceeds the time for substantial completion stated above as follows:

Dollar Amount: TWO HUNDRED FIFTY DOLLARS AND NO/100 (\$250.00)

INDEMNIFICATION AND HOLD HARMLESS:

The Contractor hereby agrees that, to the fullest extent permitted by law, it will defend, indemnify and hold KCHA and its officials, partners, volunteers, agents and employees (the "Indemnities") harmless from and against any and all claims, losses, damages and expenses, including attorney's fees incurred with respect thereto or in enforcing this indemnity, which in any manner arise out of or in connection with, or result from:

- 1. The Work to be performed pursuant to this contract (the 'Work'), or
- 2. Any Act or Omission of:
 - a. The Contractor:
 - b. Any Subcontractor, Lower Tier Contractor, or Supplier engaged with respect to the Work;
 - c. Any other party acting at the direction, at the request or under the control of the Contractor with respect to this contract or the Work; or
 - d. The Officers, Directors, Partners, Employees, Volunteers or Agents of any of the foregoing, or the successors in interest of any of them.

Notwithstanding the foregoing, however, the Contractor shall not be required to indemnify and Indemnitee against liability for damages arising out of bodily injury to persons or damage to property caused by or resulting from the intentional misconduct or sole negligence of the Indemnitee, and if such damages are caused by or result from the concurrent negligence of the Indemnitee and the Contractor or its employees or agents, then the Contractor's indemnity hereunder shall be limited to the extent of the negligence of the Contractor or its employees or agents. For purposes of this Indemnity, the Contractor waives its immunity

Bidding Contractor's Company Name:	Initials:	
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KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION





under industrial insurance, Title 51 of the Revised Code of Washington, and acknowledges that the parties have negotiated this waiver for the purposes of this agreement.

The Contractor hereby agrees to require all its Subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this contract to execute an indemnity agreement substantively identical to the proceeding one, specifically naming KCHA as an indemnitee, and the Contractor's failure to do so shall constitute a material breach of this contract by the Contractor.

LOCAL RESIDENCE HIRING AND CONTRACTING REQUIREMENTS FOR SECTION 3:

The undersigned agrees to adhere to the Local Resident Hiring and Contracting Requirements as defined in the Section 3 Documents. Failure to comply with this program "to the greatest extent feasible" may result in the withholding of progress payments until the breach of the contract is remedied. See Section 3 Certification Forms attached.

I certify, under penalty of perjury, that my company	Is a Section 3 Business
	Is Not a Section 3 Business

(For further clarification for Section 3 Certification, refer to Sections A.8 and B.10.a)

BID WITHDRAWAL AFTER BID OPENING:

- A bidder who submits an erroneous low bid may withdraw the bid at the risk of forfeiting 1. the bid bond. The bid withdrawal is permissible if there was an obvious error in the low bid and the mistake is readily apparent from the bid itself. The bidder must notify KCHA and submit evidence of the error within twenty-four (24) hours of the bid opening.
- 2. Evaluating factors for return or forfeiture of bid bonds should include:
 - Whether the bidder acted in good faith;
 - Whether the bidder acted without gross negligence; b.
 - Whether the bidder gave prompt notice of the error; c.
 - d. Whether the bidder will suffer substantial detriment by forfeiture;
 - Whether KCHA's status has not greatly changed, and no substantial hardship will e. be caused.
- Any low bidder who withdraws its bid is prohibited from bidding on the same project if it 3. is subsequently re-solicited.

NOTIFICATION:

Contractors submitting bids must have current industrial insurance and not be disqualified from bidding (not suspended or debarred by any federal, state, or other public agency).

All or a portion of this contract is paid for by Federal Funds. As a result, Successful Contractors are subject to the following statures: Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 and the Fair Housing Act of 1988.

It will be the Contractor's obligation to comply with pertinent laws and implementing regulations, which provide for non-discrimination and accessibility in Federally Funded Housing and Non-Housing Programs for people with Disabilities. To read the full text of the Notice go to Go to www.kcha.org/business/requirements Scroll down to Fair Housing Laws and Read: Fair Housing / **Accessibility Notice**

Bidding Contractor's Company Name:		Initials:	
Bid Form	Page 5 of 8	KCHA / 08-05-2	



The undersigned acknowledges:

- 1. To have carefully reviewed and understood the scope of work and requirements under the Contract Documents and the complete scope of work as required under the Bid Proposal,
- 2. To have been provided the opportunity to physically assess the project site,
- 3. And affirms that the bid entered herein, shall be a complete bid in accordance with the terms of the Contract Documents.
- 4. And hereby agrees to complete the Work required under the terms of the Contract Documents by the Completion Dates enumerated therein, and
- 5. That all Documents Submitted to KCHA will become Public Records, as per RCW 42.56. If you are submitting information, which you think is confidential and / or proprietary to your business; KCHA recommends that you do not submit that information, as KCHA cannot guarantee that type of information will be withheld from a public disclosure request.

Bidding Contractor's Company	Name:	Initials:



COMPANY INFORMATION (please print all information):

Name of Bidder's Company	
Physical Street Address: (Contractor MUST have a Physical Street Address)	
City-State-Zip:	
Mailing Address if different than Physical:	
City-State-Zip:	
Telephone: Name of Person Authorized to Sign Contract: (if Company is Awarded Contract) Title of Person Authorized to Sign Contract: (if Company is Awarded Contract)	
Email Address of Person Authorized to Sign Contract: (if Company is Awarded Contract)	
Website:	
Contractor's License (WA State) Number:	
UBI (Unified Business License) Number:	
Employment Security Account Number:	
State Excise Tax Registration Number:	
Federal Tax I.D. Number:	
Duns Number:	Exempt
Public Works Training (RCW39.04.350):	Not Exempt – signed Compliance Statement in Accordance with RCW 9A.72.085 is provided

Bidding Contractor's Company Name:___

_____ Initials: _____



	Check Box if your company is a Corporation and name the State Incorporated in below.				
	Check Box if your company is a Partnership and provide Full Name(s) and Address of all parties below.				
	Check Box if your company is also known as (aka) and list that name and address below.				
NOTE: The p	enalty for making false statements in offer	is prescribed in 18 U.S.C. 1001.			
SUBMITTED	ON: Day of	<u>,</u> 20			
Signature of Bidde	er	Print Name and Title			

Bidding Contractor's Company Name:______ Initials: _____



COVID -19 JOB SITE REQUIREMENTS – RETURN EACH FORM SINGLE SIDED

COVID-19 Job Site Requirements

Prior to recommencing work all contractors are required to develop for at each job site a comprehensive COVID-19 exposure control, mitigation, and recovery plan. The plan must include policies regarding the following control measures: PPE utilization; on-site social distancing; hygiene; sanitation; symptom monitoring; incident reporting; site decontamination procedures; COVID-19 safety training; exposure response procedures; and a post-exposure incident project wide recovery plan.

A copy of the Site Specific COVID-19 plan must be available on the job site during construction and available for inspection by state and local authorities, KCHA staff, and residents. Workers must be trained on the safety protocols listed below before the activity begins.

All contractors have a general obligation to keep a safe and healthy worksite in accordance with state and federal law and must comply with the Washington State Department of Labor & Industries General Requirements and Prevention Ideas for Workplaces and the Washington State Department of Health Workplace and Employer Resources & Recommendations at https://www.doh.wa.gov/Coronavirus/workplace. Failure to follow these requirements will be considered a violation of these duties and be penalized accordingly. Under RCW 49.17.060, "each employer shall furnish to each of their employees a place of employment free from recognized hazards that are causing or likely to cause serious injury or death to his or her employees and shall comply with the rules, regulations, and orders promulgated under this chapter."

- The Contractor must ensure operations follow the main L&I COVID-19 requirements to protect workers.
- Educate workers about coronavirus and how to prevent transmission and the employer's COVID-

A worker may refuse to perform unsafe work, including hazards created by COVID-19. And, it is unlawful for their employer to take adverse action against a worker who has engaged in safety-protected activities under the law if their work refusal meets certain requirements.

COVID-19 Site Supervisor

1. A site-specific COVID-19 Supervisor shall be designated by the Contractor to monitor the health of employees and enforce the COVID-19 job site safety plan. A designated COVID-19 Supervisor must be present at all times during construction activities, except on single family residential job sites with 6 or fewer people on the site. The name and contact information for the site specific COVID-19 Supervisor must be clearly displayed on all jobsite COVID-19 required postings.

Bidding Contractor's Company Name:		Initials:
Dhaca 2 Construction Destart	Page 1 of 4	KCHA / 01 21 2



COVID-19 Safety Training

- 1. A Safety Stand-Down/toolbox talk/tailgate training must be conducted on all job sites on the first day of returning to work, and weekly thereafter, to explain the protective measures in place for all workers. Social distancing must be maintained at all gatherings.
- 2. Attendance will be communicated verbally and the trainer will sign in each attendee.

Social Distancing

- 1. Social distancing of at least 6 feet of separation must be maintained by every person on the worksite at all possible times. In instances where the 6 feet separation cannot be maintained, other prevention measures are required such as barriers, staggering breaks or work shift starts, etc.
- 2. Gatherings of any size must be precluded by taking breaks and lunch in shifts. Any time two or more persons must meet, ensure minimum 6 feet of separation.
- 3. Identify "choke points" and "high-risk areas" on job sites where workers typically congregate and control them so social distancing is always maintained.
- 4. Minimize interactions when picking up or delivering equipment or materials, ensure minimum 6-foot separation.

Personal Protective Equipment (PPE) – Employer Provided

- 1. Appropriate eye protection for all hazards must be worn at all times by every employee while on the worksite.
- 2. If appropriate PPE cannot be provided, the work is not authorized to commence, recommence, or the site must be shut down.
- 3. Provide personal protective equipment (PPE) such as gloves, goggles, face shields and face masks as appropriate or required to employees for the activity being performed. Cloth facial coverings must be worn by every employee not working alone (with no chance of human interaction) on the jobsite unless their exposure dictates a higher level of protection under Department of Labor & Industries safety and health rules and guidance. Refer to Coronavirus Facial Covering and Mask Requirements for additional details. A cloth facial covering is described in the Department of Health guidance, https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/ClothFacemasks.pdf.

Sanitation and Cleanliness

1. Hand-washing stations, with soap and running water, shall be abundantly provided on all job sites for frequent handwashing. When running water is not available, portable washing stations, with soap, are required.

Bidding Contractor's Company Name:	Initials:	
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KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION



CAPITAL CONSTRUCTION DEPARTMENT

- 2. Workers should be encouraged to leave their workstations to wash their hands regularly, before and after going to the bathroom, before and after eating and after coughing, sneezing or blowing their nose.
- 3. Alcohol-based hand sanitizers with greater than 60% ethanol or 70% isopropanol can also be used, but are not a replacement for the water requirement.
- 4. Post, in areas visible to all workers, required hygienic practices, including not to touch face with unwashed hands or with gloves; washing hands often with soap and water for at least 20 seconds; use hand sanitizer with at least 60% alcohol; cleaning and disinfecting frequently touched objects and surfaces such as workstations, keyboards, telephones, handrails, machines, shared tools, elevator control buttons, and doorknobs; covering the mouth and nose when coughing or sneezing as well as other hygienic recommendations by the U.S. Centers for Disease Control (CDC).
- 5. Make disinfectants available to workers throughout the worksite and ensure cleaning supplies are frequently replenished.
- 6. Frequently clean and disinfect high-touch surfaces on job sites and in offices, such as shared tools, machines, vehicles and other equipment, handrails, doorknobs, and portable toilets. If these areas cannot be cleaned and disinfected frequently, the jobsite shall be shut down until such measures can be achieved and maintained.
- 7. Shared tools and other equipment must be wipe sanitized between users.
- 8. When the worksite is an occupied home, workers should sanitize work areas upon arrival, throughout the workday and immediately before they leave, and keep a personal distance of at least 10 feet from occupants at all times.
- 9. If an employee reports feeling sick and goes home, the area where that person worked should be immediately disinfected.

Employee Health/Symptoms

- 1. Create policies which encourage workers to stay home or leave the worksite when feeling sick or when they have been in close contact with a confirmed positive case. If they develop symptoms of acute respiratory illness, they must seek medical attention and inform their employer.
- 2. Have employees inform their supervisors if they have a sick family member at home with COVID-19. If an employee has a family member sick with COVID-19, that employee must follow the isolation/quarantine requirements as established by the State Department of Health.
- 3. Screen all workers at the beginning of their day by asking them if they have a fever, cough, shortness of breath, fatigue, muscle aches, or new loss of taste or smell.
- 4. Ask employees to take their temperature at home prior to arriving at work or take their temperature when they arrive. Thermometers used shall be 'no touch' or 'no contact' to the greatest extent possible. If a 'no touch' or 'no contact' thermometer is not available, the thermometer must be properly sanitized between each use. Any worker with a temperature of 100.4°F or higher is considered to have a fever and must be sent home.

Bidding Contractor's Company Name	:	Initials:
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- 5. Instruct workers to report to their supervisor if they develop symptoms of COVID-19 (e.g., fever, cough, shortness of breath, fatigue, muscle aches, or new loss of taste or smell). If symptoms develop during a shift, the worker should be immediately sent home. If symptoms develop while the worker is not working, the worker should not return to work until they have been evaluated by a healthcare provider.
- 6. Failure of employees to comply will result in employees being sent home during the emergency actions. For example, if an employee refuses to wear the appropriate facial covering they would be sent home.
- 7. Any worker coming to work on a construction site in Washington from any state that is not contiguous to Washington must self-quarantine for the required number of days to become eligible to work on a job site in Washington.
- 8. If an employee is confirmed to have COVID-19 infection, employers should inform fellow employees of their possible exposure to COVID-19 in the workplace but maintain confidentiality as required by the Americans with Disabilities Act (ADA). The employer should instruct fellow employees about how to proceed based on the CDC Public Health Recommendations for Community-Related Exposure.

No jobsite may operate until the Contractor can meet and maintain all requirements, including providing materials, schedules and equipment required to comply.

All issues regarding worker safety and health are subject to enforcement action under L&I's Division of Occupational Safety and Health (DOSH).

- Employers can request COVID-19 <u>prevention advice and help</u> from L&I's Division of Occupational Safety and Health (DOSH).
- Employee Workplace safety and health complaints may be submitted to the L&I DOSH Safety Call Center: (1-800-423-7233) or via e-mail to adag235@lni.wa.gov

Contractor's Company Name:	
I have read and understand what is required to	comply with the COVID-19 Requirements.
Signature	Title
Name (Please Print)	Date
(
Bidding Contractor's Company Name:	Initials:



BIDDER'S EXPERIENCE RECORD – RETURN EACH FORM SINGLE SIDED

KCHA WILL AWARD CONTRACTS ONLY TO RESPONSIBLE PROSPECTIVE CONTRACTORS WHO HAVE THE ABILITY TO PERFORM SUCCESSFULLY UNDER THE TERMS AND CONDITIONS OF THE PROPOSED CONTRACT. PRINT ALL INFORMATION.

ATTACH ADDITIONAL SHEETS AS NECESSARY TO FULLY PROVIDE THE INFORMATION REQUIRED.

NAME OF BIDDER:				
PHYSICAL ADDRESS	S:			
CITY-STATE-ZIP:				
MAILING ADDRESS:				
CITY-STATE-ZIP:				
CONTRACTOR'S LICENSE NUMBER:	(Must be a valid WA State License)	EMPLOYMENT SECURITY NUMBER:		
BOND REGISTRATION NUMBER:		L&I's WORKERS' COMP. ACCT. ID:		
L&I PUBLIC WORKS TRAINING:	YES NO			
BIDDER IS A(N):	INDIVIDUAL	PARTNERSHIE)	
	JOINT VENTURE	INCORPORATION	IN STATE OF	
CONTINUOUSLY	Y BEEN IN BUSINESS FROM YEAR	NO. OF REC	GULAR FULL TIME EMPLOYEES	
TOTAL NUMBER OF I	PROJECT COMPLETED IN TH	E PAST 5 YEARS		
NUMBER OF PROJEC	TS COMPLETED	AHEAD	ON-TIME	_ BEHIND
	PRIME CONTRACTOR: NO.	ARABLE TO THAT REQ AS SUB-COF YEARS		OJECT . OF YEARS
BIDDERS LIST THE F	OLLOWING INFORMATION: 1	PRINT ALL INFORMA	ATION	
NAME OF BONDING	COMPANY:			
	ADDRESS:			
PHON				
CONTAC				
BONDING	CAPACITY:			
Bidding Contractor's Compa	ıny Name:		Initials:	
Bidders Experience	Page	1 of 4	KCHA /	01-12-22



LIST THE SUPERVISORY PERSONNEL TO BE EMPLOYED BY THE BIDDER AND AVAILABLE FOR, AND INTENDED TO WORK ON THIS PROJECT (PROJECT MANAGER, PRINCIPAL FOREPERSON, SUPERINTENDENTS AND ENGINEERS): **PRINT ALL INFORMATION**

NAME	TITLE	HOW LONG WITH BIDDER
	_	
LIST ALL PUBLICLY FUNDED PROJECTS O WITHIN THE PAST 5 YEARS. INCLUDE A SEPARATE SHEET(S), USING THE FORMAT B	REFERENCE FOR EACH. IF I	NECESSARY, ATTACH A
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
TOTAL CONTRACT AMOUNT:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
TOTAL CONTRACT AMOUNT:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
Bidding Contractor's Company Name:		Initials:



Return Form -B.3

SCHEDULED PERIOD, EXPLAIN WHY			HEIR ORIGINALLY
LIST ALL PROJECTS UNDERTAKEN I FINAL SETTLEMENT OF THE CONTR ALL INFORMATION			
NAME OF CLIENT & PROJEC	CONTRACT AMT.	TOTAL CLAIM ARBITRATED / LITIGATED	AMT. OF SETTLEMENTS OF CLAIM
HAS BIDDER, OR ANY REPRESENTA CONTRACT? PRINT ALL INFORMA		EREOF, EVER FAILED	TO COMPLETE A
NO YES IF YE	S, EXPLAIN		
HAS THE BIDDER EVER HAD ANY PA WORK? PRINT ALL INFORMATION		E BOND CALLED AS A	A RESULT OF THIS
NO YES <i>IF YES, COMPLETI</i> PROJECT NAME		TING PARTY	BOND AMOUNT
HAS BIDDER EVER BEEN FOUND G LAWS? PRINT ALL INFORMATION	UILTY OF VIOLATING AN	NY STATE OR FEDER	AL EMPLOYMENT
NO YES IF YE	S, EXPLAIN		
HAS BIDDER EVER FILED FOR BANKRUPTCY LAWS OR STATE INS			
NO YES IF YE	S, EXPLAIN		
Bidding Contractor's Company Name:Bidders Experience	Page 3 of 4		Initials: KCHA / 01-12-22



Return Form -B.3

HAS ANY ADVERSE LEGAL JUDGEMENT RELATED TO CONSTRUCTION BEEN RENDERED AGAINST THE BIDDER IN THE LATE 5 YEARS? **PRINT ALL INFORMATION**

NO	YES	IF YES, EXPLAI	N		
WORKER	'S COMPENSA	OF ITS EMPLOYEES TION OR OTHER INSI MEMBERMENT IN THE	URANCE COMPANY	Y FOR ACCIDENTS	RESULTING IN
NO	YES IF YE	S, COMPLETE THE FOL	LOWING:		
DAT	<u> </u>	TYPE OF INJU	RY	AGENCY RECE	IVING CLAIM
	ER IS SELF-INS	MODIFICATION RATE URED, ATTACH PROOF	· -	2020SHOWING COMPLE	2021 TE WORKSHEET
to disquali EXCEEDS	fy Bidders where S 1.0. KCHA ma	AFETY IS A PRIMARY either the current or three y require additional inform	e (3) year average of t nation from Bidders th	he Experience Modific nat have an EMR of mo	cation Rate (EMR) ore than 1.0.
	VISHA OR O	TION CITATIONS ISSU THER APPLICABLE	WORKPLACE SAF	ETY PROGRAMS.	YEARS UNDER PRINT ALL
S	SUBJECT OF V	IOLATION	DATE OF INSPECTION / INCIDENT	OSHA ACTIVITY NO.	CLOSED / PENDING
BEFORE A A STATE LISTED A RENDER	MENT OR OTH BOVE. FAILU THE BIDDER N	DERED FOR AWARD, T IER DOCUMENTATION RE BY THE BIDDER TO ON-RESPONSIVE AND	N REGARDING ANY O PROVIDE SUCH A NON-RESPONSIBLI	OF THE BASIC Q DDITIONAL INFOR E, AND INELIGIBLE	UALIFICATIONS MATION SHALL FOR AWARD.
INFORM <i>A</i> UNDERSI INFORM <i>A</i>	ATION IS COME GNED AUTHO ATION CONTAI	WARRANTS UNDER PLETE, TRUE AND ACC PRIZES THE KING (NED HEREIN. (IF THI IDERED NON-RESPONS	TURATE TO THE BEST COUNTY HOUSING S INFORMATION IS	ST OF HIS / HER KNO G AUTHORITY TO	OWLEDGE. THE VERIFY ALL
	BIDDER	S SIGNATURE	B	SIDDER'S NAME (PLEASI	E PRINT)
	BIDDER'S TIT	LE (PLEASE PRINT)		DATE	
Bidding Cor Bidders Ex	ntractor's Company		Page 4 of 4		Initials:
DIGGETS EX	aperience	1	age + 01 4		IXC11/1/ U1-12-22



PROJECT NAME:

${\bf KCHA-EASTRIDGE\ HOUSE\ ELEVATOR\ MODERNIZATION}$

CAPITAL CONSTRUCTION DEPARTMENT

CONTRACTOR CERTIFICATION – RETURN EACH FORM SINGLE SIDED

EASTRIDGE HOUSE ELEVATOR MODERNIZATION

NAME OF COMPANY: PHYSICAL STREET ADDRESS: CITY - STATE - ZIP: MAILING ADDRESS: CITY - STATE - ZIP: PHONE NUMBER: FEDERAL TAX ID NO.: WA STATE UBI NO.: TYPE OF BUSINESS: CORPORATION LLC - PARTNERSHIP SOLE PROPRIETOR **OWNERS OF THIS COMPANY** (List All Owners from the inception of the Company. Use an additional sheet of paper if necessary.) NAME OF OWNER(S) DATE(S) OF OWNERSHIP (from – to) UNDER PENALTIES OF PERJURY, I/ We hereby certify that: (Check the appropriate responses) ____I / _____ We have a complete copy of the Bid Documents and Drawings (if applicable) for this project 1. as supplied by the King County Housing Authority. ___I / ____ We have no contractual obligation or other disabilities that would prevent ____ Me / __ 2. Us from meeting the various requirements contained in the Bid Documents to the greatest extent feasible and with good faith efforts to attempt to meet the attached goals. I/ We do not and will not maintain, nor permit My/ Our employees to work in a 3. location where segregated facilities are maintained, except for separate or single-user toilets and changing facilities, if necessary, to assure privacy between the sexes. ___I / _____ We that _____Have / _____ Have Not participated in an Equal Employment Opportunity 4. Plan in the past that required filing reports with the Government; and that if ____I/____We have, ____I / _____ We _____ Have / _____ Have Not filed all reports due. If not, the reports will be filed within the next (_____) days. The number shown on this form is _____My / ____ Our correct Taxpayer Identification Number OR 5. ____I Am / ____ We Are waiting for a number to be issued to ____Me / ____ Us and ___I / _____ We further certify that _____I / ____ We are not subject to Backup Withholding because; 6. (a) _____I Am / ____ We Are Exempt from Backup Withholding, or (b) ____I / ____ We have not been notified by the Internal Revenue Service (IRS) that _____I Am / ____ We Are subject to Backup Withholding as a result of a failure to report all interest or dividends, or



(c) the IRS has notifiedP Withholding. (If you ARE subject to Backu			We Are no longer subject to Backup go to #7)
7. <u>I / We</u> have been Backup Withholding because of (If you filled out #6 – you are	of under reporting inter	rest or dividend	
8	gnated, as the responsible	y title thee official to ensur	re required reports are submitted, and record
SIGNATURE		NAMI	E (PLEASE PRINT)
TITLE (PLEASE PRINT)		DATE	1



NON-COLLUSIVE AFFIDAVIT – RETURN EACH FORM SINGLE SIDED

FOR CONTRACTS AND EQUIPMENT \$50	0,000 AND ABOVE
STATE OF WASHINGTON)	
COUNTY OF KING) ss	
	, being first duly sworn, deposes and says:
That he / she is a Partner or Officer of the Fir	m of, etc.
sham; that said bidder has not colluded, corbidder or person, to put in a sham bid or to indirectly, sought by agreement or collusion, bid price of affiant or of any other bidder, or to f that of any other bidder, or to secure any according to the same of th	d, that such proposal or bid is genuine and not collusive or a aspired, connived or agreed, directly or indirectly, with any refrain from bidding, and has not in any manner, directly or or communication or conference, with any person, to fix the o fix any overhead, profit or cost element of said bid price, or dvantage against KING COUNTY HOUSING AUTHORITY ract; and that all statements in said proposal or bid are true.
	SIGNATURE OF AUTHORIZED OFFICIAL
	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	
(Signature)	
(Print Name)	
My Commission Expires:	, 20
Bidding Contractor's Company Name:	Initials:



EQUAL OPPORTUNITY CLAUSE - RETURN EACH FORM SINGLE SIDED

DURING THE PERFORMANCE OF THIS CONTRACT, THE CONTRACTOR AGREES AS FOLLOWS:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, citizenship status, creed, age, marital status, physical or mental disability, sexual orientation, political ideology, or status as a Vietnam era or specially disabled veteran. The Contractor will take affirmative action to ensure that applicants are employed and the employees are treated during employment without regard to the aforementioned conditions. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; lavoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
- The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to the aforementioned conditions of paragraph 1 above.
- The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- 5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and relevant orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records and accounts by the Owner and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- 6. In the event of the Contractor's non-compliance with the non-discrimination clauses of the Contract or with any of such rules, regulations or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government Contracts, in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7. The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulation, or order of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Owner may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Owner, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

AUTHORIZED OFFICIAL:

SIGNATURE	NAME (PLEASE PRINT)		
TITLE (PLEASE PRINT)		DATE	
Bidding Contractor's Company Name:			Initials:
Equal Opportunity Clause	Page 1 of 1		KCHA / 08-05-21



BID SECURITY – RETURN EACH FORM SINGLE SIDED

BID DEPOSIT: The undersigned Principal hereby deposits a Bid Deposit with the King County Housing Authority in the form of a cash deposit, certified or cashier's check, or postal money order in the amount of: ______ Dollars (\$_____) -- OR --**BID BOND:** The undersigned, ______(Principal), and _____(Surety), are held and firmly bound unto the King County Housing Authority (Owner) in the penal sum of: _____ Dollars (\$_____), which for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally. The liability of surety under this Bid Bond shall be limited to the penal sum of this Bid Bond. **CONDITIONS:** The Bid Deposit or Bid Bond shall be an amount not less than **five percent** (5%) of the total bid, including any Alternates, Additives, and Owner-Directed Work, if any, including sales tax, if any, and is submitted by Principal to Owner in connection with a Proposal in according to the terms of the Proposal and Bid Documents for: EASTRIDGE HOUSE ELEVATOR MODERNIZATON **NOW THEREFORE:** If Principal requests, in writing, to withdraw its Bid, prior to Bid Opening, or If the Proposal is rejected by Owner, or b. Owner in accordance with the terms of the Proposal and furnishes a bond for the faithful c. performance of said Project and for the payment of all persons performing labor or furnishing materials in connection therewith, with Surety or Sureties approved by Owner, then this Bid Security shall be released; otherwise it shall remain in full force and effect and Principal shall forfeit the Bid Deposit or Surety shall immediately pay and forfeit to Owner the amount of the Bid Bond, as penalty and liquidated damages. The obligations of Surety and its Bid Bond shall be in no way impaired or affected by any extension of time within which Owner may accept bids; and Surety does hereby waive notice of any such extension.

Initials:

Bidding Contractor's Company Name:_____



SIGNED AND DATED THIS	Day of	20
		ATTEST to Principal's Signature:
PRINCIPAL (Print Company Name)		
Signature of Authorized Official		Signature
Printed Name		Printed Name
Title (Please Print)		Title (Please Print)
Corporate Seal (if Applicable)		
		ATTEST to Surety's Signature:
SURETY (Print Company Name)		
Signature of Authorized Official		Signature
Printed Name		Printed Name
Title (Please Print)		Title (Please Print)
Corporate Seal (if Applicable)		The above is Attorney in Fact:
		Yes No (If Yes, attach Power of Attorney)
Local Office of Agent and / or Surety	Company (please	print):
	Name: -	
	Street Address: -	
	City, State, Zip: _	
Power of Attorney of person signing for	r Surety Company n	nust be attached to this Bond Form.
Surety Companies executing Bonds mu Washington.	ast appear on the cu	rrent Authorized Insurance List in the State of
Bidding Contractor's Company Name:		Initials:
Did Coopeity	Daga 2 of 2	VCHA / 08 05 21

Bid Security $Return\ Form-B.7$



DEBARMENT / SUSPENSION COMPLIANCE CERTIFICATION RETURN EACH FORM SINGLE SIDED

The Bidder certifies to the best of its knowledge and belief, that it and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- 2. Have not within a three (3) -year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- 4. Have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.

BIDDING COMPANY

Company Name	
Physical Street Address	
City / State / Zip	
Print Name of Authorized Official	Title
Signature of Authorized Official	Date
SUBSCRIBED AND SWORN to before me: this day of, 20	
(Signature)	
(Print Name)	
My Commission Expires:, 20	
Bidding Contractor's Company Name:	Initials:



SUBCONTRACTOR - FIRST TIER - LISTING - RETURN EACH FORM SINGLE SIDED

NAMI	E OF BIDDING COMPANY:						
PHYS	SICAL STREET ADDRESS:						
CITY	/ STATE / ZIP:						
1.	List Approximate Percent (%) of World	k Your Company will actually Perform:					
2.	Do You Intend on using Subcontractor	r(s) for this Project? Yes No					
3.	(If Yes, you must show on this form the name and information of All First Tier Subcontractors performing work that will be associated with this Bid.) Attach additional sheets if necessary. This form needs to be completed to the best of the Bidder's ability at time of bid. If Bidder is Awarded Contract a fin subcontractor list will be submitted prior to Notice to Proceed. PRINT ALL INFORMATION						
	SUBCONT	RACTOR – FIRST TIER - LIST					
Bus	Address: Phone: UBI No.:	Contact: Years of Experience:					
Bus	Address: Phone: UBI No.:	Contact: Years of Experience:					
Bus	Address: Phone: UBI No.:	Contact: Years of Experience:					
Bus	Address: Phone: UBI No.:	Trade: Contact: Years of Experience:					
	idder hereby certifies that the information, is accurate, complete, and current:	contained in this Proposed Subcontractor List, including any attached					
Print N	Name of Authorized Official	Title					
Signatu	ure	Date					
Biddir	ng Contractor's Company Name:	Initials:					



SECTION 3 – BUSINESS CERTIFICATION RETURN FORM SINGLE SIDED

THIS FORM MUST BE SIGNED AND RETURNED

	Project Name:							
(
			Contact Title:					
			Contact Email:					
T								
			r, Full Time Employees (Puget Sound Region):					
1.		cent o	f the labor hours performed for your business over the prior three-month period					
	Yes	No	If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full time employees (Puget Sound Region).					
2.	Is your company	a HUE	YouthBuild Program?					
	Yes	No	If "yes" is checked, please provide supporting documentation.					
3.		ore of your business owned and controlled by low- or very low-income persons (persons or less of the median income level for the past 12 months - see attached income						
	Yes	No	If "yes" is checked, submit either the section 3 Individual Certification form(s) or the Section 3 Subcontractor Business Work Plan form.					
4.	4. Does your business provide economic opportunities for KCHA residents at the site(s) where the will take place?							
	Yes	No	If "yes" is checked, please provide supporting documentation.					
5.	5. Does your business provide economic opportunities for residents of other KCHA development Section-8 assisted housing managed by KCHA?							
	Yes	No	If "yes" is checked, please provide supporting documentation.					
6.	•	oes your business provide economic opportunities to Section 3 workers residing within the aetropolitan area (Puget Sound Region)?						

Yes

No

If "yes" is checked, please provide supporting documentation.



I certify, under penalty of perjury, that my company Is Is Not a Section 3 Business.

I further certify that, if my company is awarded the bid, and needs to hire additional employees for the project, we will carry out Section 3 hiring, training and subcontracting requirements to the best of our ability.

Signature

Name

Title Date

Phone Number Email Address

If you have more specific questions about Section 3 requirements, contact KCHA by email at Section3@kcha.org.

SECTION 3 – 2021 INCOME GUIDELINES

Location	Bremerton Silverdale (Kitsap County)			Seattle, Bellevue Everett (King/Snohomish Counties)		Tacoma (Pierce County)		Sedro Woolley (Skagit County)	
Income	Very low income	≤\$23,950		Very low income	≤\$40,500	Very low income	≤\$31,800	Very low income	≤\$28,850
Limit 1 Person	Low income	\$23,951 to \$52,750		Low income	\$40,501 to \$63,350	Low income	\$31,801 to \$50,900	Low income	\$28,851 to \$46,100



SECTION 3 – SUBCONTRACTOR WORK PLAN RETURN FORM SINGLE SIDED

RETURN THIS FORM WITH THE BID <u>IF:</u>

CLAIMING YES TO QUESTION 4 or 5 on the SECTION 3 BUSINESS CERTIFICATION FORM

	Project Name:	
	Company Name:	
	Contact Name:	
	Contact Phone:	Contact Email:
	SECTION 3 BUSINESS CONCER	SUBCONTRACTED SUBCONTRACT OVERALL CONTRACT
	Subcontractor's Name:	
1.	Subcontractor's Address:	
	Subcontractor's Phone No.:	
	Subcontractor's Name:	
2.	Subcontractor's Address:	
	Subcontractor's Phone No.:	
	Subcontractor's Name:	
3.	Subcontractor's Address:	
	Subcontractor's Phone No.:	
	Subcontractor's Name:	
4.	Subcontractor's Address:	
	Subcontractor's Phone No.:	
TO	OTAL CONTRACT VALUE:	TOTAL SUBCONTRACT VALUE:
	PERCENTAGE Of Sortified Businesses, pttps://portalapps.hud.gov/Sec3BusReg/BReg	ease go to:



SUMMARY OF HARASSMENT AND DISCRIMINATION RETURN EACH FORM SINGLE SIDED

KCHA prohibits harassment and discrimination based on race, color, national origin, citizenship status, creed, religion, sex, age, marital or veteran's status, physical or mental disability, sexual orientation, political ideology, or any other basis protected by law ("protected status"). This policy applies to KCHA's employees, vendors, contractors, visitors and others who conduct business with KCHA. The following are examples of prohibited conduct. This list is not exclusive; employees should see KCHA's Personnel Policies and Procedures for more details and vendors/contractors should contact the Human Resources Department for more details:

- Unwelcome conduct based on protected status when sufficiently severe or pervasive to create a hostile work environment; or a supervisor's improper conduct results in a tangible change in an employee's status or benefits (demotion, termination, etc.).
- Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when (1) submission to such conduct is made an implicit or explicit condition of employment; (2) submission to or rejection of such conduct affects employment opportunities or decisions; or (3) such conduct interferes with an employee's work or creates an intimidating, hostile or offensive work environment.
- Sexually suggestive or racially derogatory words, pictures, videos, cartoons, emails, etc.
- Leering, staring in a sexually suggestive manner or making offensive remarks about looks, clothing, or body.
- Touching in a way that may make an individual feel uncomfortable, such as patting, pinching or intentional brushing against another's body.
- Gestures, pictures or drawings which would offend a particular racial or ethnic group or other protected class.
- Comments about an individual's skin color, accent, or other racial/ethnic characteristics.
- Disparaging remarks or stereotypes about an individual's gender, race, birthplace, ethnicity or ancestry.
- Negative comments about an individual's religious beliefs (or lack of religious beliefs).
- Negative comments regarding an individual's age if age 40 and over.
- Derogatory or intimidating references to an employee's mental or physical impairment.

Anyone who has been harassed and/or discriminated against is expected to promptly report the alleged incident(s) to the Supervisor, Department Director, Director of Human Resources, Deputy Executive Director/Chief Administrative Officer or the Executive Director. KCHA will protect the confidentiality of such complaints to the extent possible. Complaints will be promptly, thoroughly and impartially investigated and KCHA will take immediate and appropriate corrective action when it determines that harassment has occurred. Individuals who make complaints or provide information related to complaints will be protected from retaliation.

The Bidder hereby certifies that the information contained above is understood and agreed upon.

Bidder's Company Name:	
Print Name of Authorized Official	Title
Signature	Date
Bidding Contractor's Company Name:	Initials:
Harassment and Discrimination Page 1 of 1	KCHA / 08-05-2

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT



WMBE SURVEY – RETURN EACH FORM SINGLE SIDED

PLEASE COMPLETE THIS SURVEY AND RETURN WITH YOUR BID / PROPOSAL DOCUMENTS. NOT SUBMITTING THIS SURVEY WILL <u>NOT DISQUALIFY</u> YOUR BID/PROPOSAL. THIS IS FOR INFORMATIONAL PURPOSES <u>ONLY</u>.

Bidding Company Name: Address: City / State / Zip:				
Type of Business:		_ Incorporated – Federa _ Sole Proprietorship – S _ Other – Describe:		
WMBE:		_Yes	_ No	
Describe:	12.		E) E or MWBE) (4 5	
Registered WMBE:	Yes	No		Registration in Progress
Authorized Signer		Print Name and Tit	le	Date
FOR KCHA USE ONLY: IF TO: Tim Baker – KCHA S Phone: 206-574-1113	Senior Manage	ement Analyst	ED THE CONTR	ACT, FORWARD THIS FORM

Bidding Contractor's Company Name:

Initials:

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT



CONTRACTOR'S SUPPLIED SCHEDULE - RETURN EACH FORM SINGLE SIDED

- A. Gantt-Chart Schedule: Submit to the Owner a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Final Master Project Schedule within fourteen (14) days of date after Letter of Award. Base schedule on the Preliminary Master Project Schedule and whatever updating and feedback was received since the start of Project. The Gantt-Chart Final Master Project Schedule can be either in MS Project or equivalent format.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three (3) months or longer to complete, indicate an estimated completion percentage in ten (10%) percent increments within time bar.
- C. Contractor's Final Master Project Schedule Updating: At two (2) week intervals, update schedule to reflect actual construction progress and activities. Issue schedule three (3) days before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate Actual Completion percentage for each activity.

CONTRACTOR
TO INSERT
PRELIMINARY
MASTER PROJECT
SCHEDULE HERE
MUST BE IN
MICROSOFT PROJECT,
PRIMAVERA or SIMILAR

D'11' C / / 1 C N	T '.' 1
Ridding Lonfractor's Lombany Name:	Initials:
Bidding Contractor's Company Name:	illitais.



BB - SECTION

NO PARTICIPATION for Bid Package

BB.1 No Participation Form



KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

NO PARTICIPATION RESPONSE FORM

IF YOU CHOOSE NOT TO BID ON THIS PROJECT

RETURN ONLY THIS FORM PRIOR TO THE BID DUE DATE. (NOT RETURNING THIS DOCUMENT COULD RESULT IN YOUR NAME BEING REMOVED FROM FURTHER KCHA SOLICITATIONS.)

BID DUE DATE:		March 3, 2022				
PROJECT NAME:	ROJECT NAME: <u>Eastridge House Elevator Modernization</u>					
RETURN FORM TO: <u>donaldh@kcha.org</u>						
be received by the d	leadline of 1:00PM.	o mail in the No Participation Response For KCHA does not recommend mailing in the rise with the mail delivery.				
If using the mail pleas	e return the form to:	KING COUNTY HOUSING AUTHORITY ATTN: Don Hatfield, Project Manager 700 Andover Park West, Suite C Tukwila, WA 98188				
1. My Company is No	OT BIDDING on this	Contract because: (check all response(s) that ap	ply:			
Does not per	form the requested typ	pe of work				
☐ Has other wo	ork which would interf	fere with the proposed work schedule				
☐ Job is too big	5					
☐ Job is too sm	☐ Job is too small					
Can't meet the bonding and/or insurance requirements						
☐ The documents were not received in time to prepare a bid						
☐ The specifications were not clear. Please describe:						
Other:						
2. I would have Bid o	on this Contract if:					
COMPANY NAME:						
ADDRESS:						
CITY-STATE-ZIP						
SIGNATURE:	PRINCIPAL OR OFFICE	ER	DATE			



C - SECTION

CONTRACT DOCUMENTS for Bid Package

C.1	Construction Contract and General Conditions – Sample Template
C.2	Performance and Payment Bond with Directions (for projects \$35,000 & over)
C.3	Certificate as to Corporate Principal (If Performance & Payment Bonds are required)
C.4	Instructions to Bidders for Insurance Requirements
C.5	Site Specific Safety Plan – List of Plan Requirements
C.6	Subcontractor Verification
C.7	Certification of Payments to Influence Federal Transactions (for all subcontracts \$100,000 & over)
C.8	Disclosure of Lobbying Activities (for all subcontracts \$100,000 & over)
C.9	Certification of Compliance with Washington State Wage Payment Statutes
C.10	Vendor Set Up Form
C.11	Final Affidavits of Amounts Paid – Contractors
C.12	Section 3 Individual Certification Form and FAQ's
C.13	Section 3 Labor Hours Benchmark Status Report – Sample Template

If selected, the documents that are numbered 2 through 9 will need to be submitted prior to the "Notice of Award" along with a copy of the completed Statement of Intent to Pay Prevailing Wages that you have filed with the Washington State Department of Labor and Industries.



CONSTRUCTION CONTRACT / GENERAL CONDITION SAMPLES

PLEASE SEE ATTACHED AIA DOCUMENTS

DRAFT AIA Document A101 - 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the « » day of « » in the year « » (In words, indicate day, month and year.)

CONTRACT NUMBER: « »

BETWEEN the Owner:

(Name, legal status, address and other information)

KING COUNTY HOUSING AUTHORITY

600 Andover Park West Tukwila, Washington 98188

and the Contractor:

(Name, legal status, address and other information)

NAME OF CONTRACTOR

Street Address City, State Zip

for the following Project: (Name, location and detailed description)

(Name, location and detailed description

NAME OF SITE

Street Address
City, State Zip
PROJECT NAME:

The Architect and/or The Engineer: (Name, legal status, address and other information)

NAME OF ARCHITECT OR ENGINEER

Street Address City, State Zip

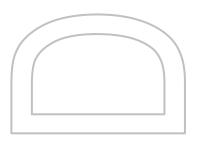
The Owner and Contractor agree as follows.

In consideration of the mutual covenants and agreements herein contained, the Contractor agrees to furnish all labor, material, tools, equipment, and other items necessary to perform and complete all work described in the contract documents. This agreement includes Owner Directed Work Items. The Owner Directed Work Items may or may not be completed under this agreement. If the Owner elects to exclude any or all Owner Directed Work Items, an adjustment shall be made to this Agreement.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201™-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.



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TABLE OF ARTICLES 1 THE CONTRACT DOCUMENTS 2 THE WORK OF THIS CONTRACT 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION CONTRACT SUM 5 **PAYMENTS** DISPUTE RESOLUTION 6 7 TERMINATION OR SUSPENSION 8 MISCELLANEOUS PROVISIONS **ENUMERATION OF CONTRACT DOCUMENTS** ARTICLE 1 THE CONTRACT DOCUMENTS The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9. ARTICLE 2 THE WORK OF THIS CONTRACT The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. The Contractor shall comply with the Detailed Summary of the Scope of Work per Exhibit A. ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION § 3.1 The date of commencement of the Work shall be: (Check one of the following boxes.)

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work, as indicated in the **Notice to Proceed**.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work no later than the date stipulated in the **Notice to Proceed**.

Con Substantial (Completion Date Month, Day, Completion Date Month, Day,	Year to Month, Day, Year Year Year (Liquidated Damages Start)	ı	
§ 3.3.3 If the Contractor fails to ac any, shall be assessed as set forth		provided in this Section 3.3, liquidated damage	es, if	
		ent funds for the Contractor's performance of ons and deductions as provided in the Contrac		
§ 4.2 Alternates § 4.2.1 Alternates, if any, included	d in the Contract Sum:			
Alternate Number and Des	scription	Price		
§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)				
Item	Price	Conditions for Acceptan	ce	
§ 4.3 Allowances, if any, included (Identify each allowance.) Allowance Description Owner's Contingency	d in the Contract Sum:	Price		
§ 4.4 Unit prices, if any:	it price and quantity limitations, i	f any, to which the unit price will be applicab	le)	

§ 4.4 U

(Identify Unit prices will be used for unforeseen conditions where small quantities are needed. An unforeseen condition requiring large quantities resulting in a substantial change in the scope of work will not be considered applicable for unit pricing. Large deviations in the Scope of Work will be evaluated and addressed through a change order process as stipulated in the Contract Documents.

Unit Item Description Price per Unit (\$0.00)

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

Timely performance and completion of the Work is essential to the Owner and Time limits stated in the Agreement are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work or Contract Completion of the entire project does not occur in the time limits defined in the Agreement. Liquidated Damages will not be assessed as a penalty, but as Liquidated Damages for breach of contract. The amount is fixed and agreed upon by the Contractor and Owner due to the extreme difficulty and impracticability of fixing and ascertaining the actual damages the Owner would sustain. This amount is construed as an actual amount of damages to the Owner and may be retained by the Owner and deducted from any payment to the Contractor for obligations in the Agreement. If different and separate completion dates are stated in the Agreement for separate parts or stages of the Work, the amount of Liquidated Damages shall apply and may be assessed on those parts or those stages of the Work which are delayed. The Owner therefore may impose and assess Liquidated Damages in the following amount per calendar day:

« »

•		,	\sim	. 1			
0	4	h	0	tΙ	'n	$^{\Delta 1}$	••

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

NA

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

- § 5.1.1 Based upon Applications for Payment submitted to the Owner by the Contractor, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.
- § 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

NA

§ 5.1.3 Provided that an Application for Payment is received by the Owner not later than the **25th** day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the **25th** day of the **following** month.

(Federal, state or local laws may require payment within a certain period of time.)

- § 5.1.3.1 Applications for Payment may be delayed by Owner should any criteria listed in A201TM-2017 General Conditions Section 9.5.1 be evident or if the As-Built Documents have not been updated per Division 01 10 10 Scope of Work Section 2.0.B.6.
- § 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's Applications for Payment.
- § 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- § 5.1.6 In accordance with AIA Document A201TM–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
- § 5.1.6.1 The amount of each progress payment shall first include:
 - .1 That portion of the Contract Sum properly allocable to completed Work;
 - .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing.; and
- § 5.1.6.2 The amount of each progress payment shall then be reduced by:
 - .1 The aggregate of any amounts previously paid by the Owner;
 - .2 The amount, if any, for Work that remains uncorrected and for which the Owner has previously withheld an Application for Payment as provided in Article 9 of AIA Document A201–2017;
 - .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
 - .4 For Work performed or defects discovered since the last payment application, any amount for which the Owner may withhold payment, or nullify an Application of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
 - .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.6.3 The General Contractor Certification upon the Application for Payment form, per Exhibit B will accompany each Application for Payment. By submitting an Application for Payment, the Contractor certifies, agrees and warrants to the Owner as follows:

- .1 The Contractor has made full payment to all laborers, subcontractors and suppliers of material and equipment whose charges were included in any prior Application for Payment, subject only to (a) retainage at the contract rate, and (b) the matters set forth below or on an attachment hereto.
- .2 The Contractor knows of no one making a claim for payment other than those included in the current Application for Payment, who will be paid when the current Application for Payment is paid by the Owner, except as noted below or on an attachment hereto.
- .3 In consideration of payments made by the Owner, the Contractor hereby waives and releases any and all claims and demands against Owner and the Project for all periods up to and including the period covered by this Application for Payment, subject only to (a) receipt of payment of the current Application, (b) applicable retainage, and (c) the matters set forth below or on an attachment hereto.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

«Five Percent » « 5% »

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

$\ll NA \gg$

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

\ll NA \gg

- § 5.1.7.3 Retainage shall be held at the rate stated in § 5.1.7.1 for the duration of the project. There shall be no reduction or limitation of retainage. There shall also be no early release of retainage by the Owner to the Contractor. The Owner must obtain all releases in relation to Contractor Compliance from the Washington State Department of Revenue, the Washington State Department of Labor and Industries, and the Washington State Department of Employment Security prior to any release of retention by the Owner to the Contractor.
- § 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.
- § 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

- § 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when
 - the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
 - .2 a final Application for Payment has been approved by the Owner;
 - .3 verification of final Affidavits of Wages Paid (L&I) is provided by the Contractor to the Owner;
 - 4 final Review and Approval of all Certified Payroll Documents for all Prevailing Wages.
- § 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the Owner's approval of the Final Application for Payment,

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Any claim between the Owner and Contractor shall be resolved in accordance with the provisions set forth in Article 15 of AIA Document A201–2017.

TERMINATION OR SUSPENSION ARTICLE 7

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201-2017.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner's representative:

(Name, address, email address, and other information)

Nikki Parrott, Director of Capital Construction & Weatherization

- « », Project Manager
- « », Construction Coordinator
- « », Project Engineer

§ 8.3 The Contractor's representative:

(Name, address, email address, and other information)

« », President

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Contractor shall purchase and maintain insurance as set forth in AIA Document A101TM–2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum.

Type of insurance or bond Limit of liability or

bond amount (\$0.00)

Certificate of Liability Insurance Requirements: Limit (Exhibit – C) Coverage (Exhibit – C) Completed Value of Project **Builders Risk Insurance:** (Exhibit – C) Performance and Payment Bond: Gross Contract Amount 100%

§ 8.6 Other provisions:

§ 8.6.1 Section 3: Instruction, Requirements and Income Guidelines

§ 8.6.1.1 The Contractor shall comply with all requirements of the Section 3 Program for Economic Opportunities providing to the greatest extent possible, job training, employment and contract opportunities for low and very low income residents in connection with projects and activities in their neighborhoods per Exhibit D.0-D.4 and as designated in AIA A201-2017, Section 17 of the General Conditions.

§ 8.6.2 Davis-Bacon / State Prevailing Wage Certified Payroll

§ 8.6.2.1 The Contractor shall comply with requirements and regulations of the Davis-Bacon Act per Exhibit E.0 and **E.1**.

- .1 Payment of Wages to Workers shall be weekly.
- .2 Certified Payroll Reports recording wages paid to each worker will be submitted to the Owner weekly.
- Failure to submit weekly Certified Payroll Reports or errors in payroll reports for the Contractor and any and all Subcontractors, and any Lower Tier Subcontractors will be cause for the Owner to suspend or delay Contract Progress Payments.
- .4 The Owner shall withhold progress payments until all issues regarding full compliance with the submission of Certified Payroll Reports are resolved to the complete and full satisfaction of the Owner.
- The Contractor is required and shall perform a complete review of all Certified Payroll Reports .5 including those of the Contractor, and all Subcontractors and any and all Lower Tier Subcontractors prior to the submission of the reports by the Contractor to the Owner.
- The Davis Bacon Wage Decision for this project is:

Davis-Bacon Wage Decision « » and Modification No. « », Dated « »

§ 8.6.3 Prevailing Wage Exemption

§ 8.6.3.1 For all contracts with a Bid Date of May 15, 2011 or later:

- .1 When a Contractor claims an exemption from State Prevailing Wage Requirements on HUD Projects, the Contractor and all Subcontractors and all tiers must file an Intent and Affidavit with the Washington State Department of Labor and Industries for that project.
- .2 The Statement of Intent must also include an Exemption Claim stating that the project is exempt from the payment of State Prevailing Wage Rates based on the Housing Act of 1937 and 24CFR 965.101 and further stating that all workers will be paid in accordance with the requirements of the Davis-Bacon Wage Requirements, per Exhibit E.2.

.3	Pursuant to RCW 39.12.040, the Owner will not make any payments to a Contractor who has not submitted an Intent Form that has been approved by the Washington State Department of Labor and Industries Industrial Statistician, or release funds retained until the Contractor and all subcontractors have submitted Affidavit forms that have been certified by the Industrial Statistician.				
ARTICLE 9 § 9.1 This Aş .1 .2 .3					
.4	Specifications				
	Section Refer to Exhibit G	Title Specifications Table of Contents	Date	Pages	
.5	Addenda, if any:				
	Number	Date	Pages		
.6	Documents unless the bidd Other documents, if any, li (List here any additional d Document A201 TM –2017 p sample forms, the Contract requirements, and other in proposals, are not part of t documents should be listed Changes in the Work shall A201-2017, by means of co.1 Change Order Req.2 Change Order App. 3 Contractor's Break.4 Subcontractor's Break.4	cocuments that are intended to form provides that the advertisement or invitor's bid or proposal, portions of Adformation furnished by the Owner in the Contract Documents unless enual there only if intended to be part of the documented as provided in Section pleting: Just be documents and provided in Section pleting	part of the C vitation to be Idenda relation in anticipation inerated in the he Contract on 7.3.1 of to Approval For er Approval	cod in this Article 9. Contract Documents. AIA id, Instructions to Bidders, ing to bidding or proposal in of receiving bids or his Agreement. Any such Documents.) the AIA Document Exhibit – H.0 Exhibit – H.1 rm Exhibit – H.2a Form Exhibit – H.2b	

AIA Document A101^m - 2017. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1987, 1991, 1997, 2007 and 2017 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This draft was produced by AIA software at 18:16:12 on 06/29/2018 under Order No.5266129296 which expires on 06/07/2019, and is not for resale.

(2034653549)

KING COUNTY HOUSING AUTHORITY

XXX CONSTRUCTION COMPANY

OWNER (Signature)		CONTRACTOR (Signature)		
(Printed name and title)		(Printed name and title) Contractor's License No.:		
EXHIBIT OVER DESCRIPTION	EVIEW:	CROSS REFERENCE		
Exhibit – A Exhibit – B Exhibit – C	Detailed Summary of Scope of Work Application for Payment Insurance Requirements	Contractor Scope of Work GC Certification Limits Coverage Builders Risk Article 2 5.1.6.3 8.5.1 8.5.1		
Exhibit – D.0 Exhibit – D.1 Exhibit – D.2 Exhibit – D.3 Exhibit – D.4 Exhibit – E.1 Exhibit – E.1 Exhibit – E.2 Exhibit – F Exhibit – G Exhibit – H.0 Exhibit – H.1 Exhibit – H.2a Exhibit – H.2b Exhibit – H.2C Exhibit – H.3 Exhibit – I	Section 3 Documents Certified Payroll Certified Payroll Prevailing Wage Exemption Drawings Specifications Change Order Request Change Order General Contractor Breakdown Summary Subcontractor Breakdown Summary Subcontractor Breakdown Summary Construction Change Directive Contractor's Bid Documents	New Hire Status Report 8.6.1 New Hire Instructions 8.6.1 Business Certification 8.6.1 Individual Business Certification 8.6.1 FAQ's 8.6.1 Labor Relations Training Overview 8.6.2 Requirements for Certified Payroll 8.6.2 Statement of Intent 8.6.3.1 Table of Contents 9.1.3 Table of Contents 9.1.4 COR 9.1.6.1 CO 9.1.6.2 GC-COR 9.1.6.3 SC-COR 9.1.6.4		

DRAFT AIA Document A201™ - 2017

General Conditions of the Contract for Construction

CONTRACT NUMBER:

for the following PROJECT:

(Name and location or address)

Project Site

Address

City, State Zip

Project Name:

THE OWNER:

(Name, legal status and address)

KING COUNTY HOUSING AUTHORITY

600 Andover Park West

Tukwila, Washington 98188

THE CONTRACTOR:

(Name, legal status and address)

CONTRACTOR'S NAME

Address

City, State Zip

THE ARCHITECT and/or THE ENGINEER:

(Name, legal status and address)

ARCHITECT/ENGINEER NAME

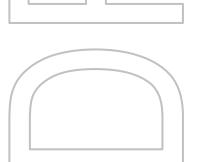
Address

City, State Zip

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences.
Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.



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TABLE OF ARTICLES

- 1 **GENERAL PROVISIONS**
- 2 OWNER
- 3 **CONTRACTOR**
- **ARCHITECT** 4
- **SUBCONTRACTORS** 5
- CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS 6
- CHANGES IN THE WORK 7
- 8 TIME
- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
- 11 **INSURANCE AND BONDS**
- UNCOVERING AND CORRECTION OF WORK 12
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- **CLAIMS AND DISPUTES** 15
- FEDERAL PROVISIONS 16
- 17 **AUDITS AND INSPECTIONS**
- 18 **SECTION 3**



INDEX Architect's Copyright (Topics and numbers in bold are Section headings.) 1.1.7, 1.5 Architect's Decisions 3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.2.14, 6.3, Acceptance of Nonconforming Work 7.3.4, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4.1, 9.5, 9.8.4, 9.9.1, 9.6.6, 9.9.3, **12.3** 13.4.2, 15.2 Acceptance of Work Architect's Inspections 9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, 12.3 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 13.4 Access to Work Architect's Instructions **3.16**, 6.2.1, 12.1 3.2.4, 3.3.1, 4.2.6, 4.2.7, 13.4.2 **Accident Prevention** Architect's Interpretations 4.2.11, 4.2.12 Acts and Omissions Architect's Project Representative 3.2, 3.3.2, 3.12.8, 3.18, 4.2.3, 8.3.1, 9.5.1, 10.2.5, 4.2.10 10.2.8, 13.3.2, 14.1, 15.1.2, 15.2 Architect's Relationship with Contractor Addenda 1.1.2, 1.5, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5, 1.1.1 3.7.4, 3.7.5, 3.9.2, 3.9.3, 3.10, 3.11, 3.12, 3.16, 3.18, Additional Costs, Claims for 4.1.2, 4.2, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7, 3.7.4, 3.7.5, 10.3.2, 15.1.5 9.8, 9.9, 10.2.6, 10.3, 11.3, 12, 13.3.2, 13.4, 15.2 **Additional Inspections and Testing** Architect's Relationship with Subcontractors 9.4.2, 9.8.3, 12.2.1, **13.4** 1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.3 **Additional Time, Claims for** Architect's Representations 3.2.4, 3.7.4, 3.7.5, 3.10.2, 8.3.2, **15.1.6** 9.4.2, 9.5.1, 9.10.1 **Administration of the Contract** Architect's Site Visits 3.1.3, **4.2**, 9.4, 9.5 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4 Advertisement or Invitation to Bid Asbestos 1.1.1 10.3.1 Aesthetic Effect Attorneys' Fees 4.2.13 3.18.1, 9.6.8, 9.10.2, 10.3.3 Allowances Award of Separate Contracts 6.1.1, 6.1.2 Award of Subcontracts and Other Contracts for **Applications for Payment** 4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.5.4, 9.6.3, 9.7, 9.10 Portions of the Work 5.2 2.1.1, 2.3.1, 2.5, 3.1.3, 3.10.2, 3.12.8, 3.12.9, **Basic Definitions** 3.12.10.1, 4.2.7, 9.3.2, 13.4.1 1.1 **Bidding Requirements** Arbitration 8.3.1, 15.3.2, **15.4** 1.1.1 **ARCHITECT** Binding Dispute Resolution 8.3.1, 9.7, 11.5, 13.1, 15.1.2, 15.1.3, 15.2.1, 15.2.5 Architect, Definition of 15.2.6.1, 15.3.1, 15.3.2, 15.3.3, 15.4.1 Bonds, Lien 7.3.4.4, 9.6.8, 9.10.2, 9.10.3 Architect, Extent of Authority 2.5, 3.12.7, 4.1.2, 4.2, 5.2, 6.3, 7.1.2, 7.3.4, 7.4, 9.2, **Bonds, Performance, and Payment** 9.3.1, 9.4, 9.5, 9.6.3, 9.8, 9.10.1, 9.10.3, 12.1, 12.2.1, 7.3.4.4, 9.6.7, 9.10.3, **11.1.2**, 11.1.3, **11.5** 13.4.1, 13.4.2, 14.2.2, 14.2.4, 15.1.4, 15.2.1 **Building Permit** Architect, Limitations of Authority and Responsibility 3.7.1 2.1.1, 3.12.4, 3.12.8, 3.12.10, 4.1.2, 4.2.1, 4.2.2, 4.2.3, Capitalization 4.2.6, 4.2.7, 4.2.10, 4.2.12, 4.2.13, 5.2.1, 7.4, 9.4.2, 1.3 Certificate of Substantial Completion 9.5.4, 9.6.4, 15.1.4, 15.2 Architect's Additional Services and Expenses 9.8.3, 9.8.4, 9.8.5 **Certificates for Payment** 2.5, 12.2.1, 13.4.2, 13.4.3, 14.2.4 4.2.1, 4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, Architect's Administration of the Contract 3.1.3, 3.7.4, 15.2, 9.4.1, 9.5 9.10.1, 9.10.3, 14.1.1.3, 14.2.4, 15.1.4 Certificates of Inspection, Testing or Approval Architect's Approvals 2.5, 3.1.3, 3.5, 3.10.2, 4.2.7 13.4.4 Certificates of Insurance Architect's Authority to Reject Work

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9.10.2

3.5, 4.2.6, 12.1.2, 12.2.1

Change Orders

1.1.1, 3.4.2, 3.7.4, 3.8.2.3, 3.11, 3.12.8, 4.2.8, 5.2.3, 7.1.2, 7.1.3, **7.2**, 7.3.2, 7.3.7, 7.3.9, 7.3.10, 8.3.1, 9.3.1.1, 9.10.3, 10.3.2, 11.2, 11.5, 12.1.2

Change Orders, Definition of

7.2.1

CHANGES IN THE WORK

3.11, 4.2.8, **7**, 7.2.1, 7.3.1, 7.4, 8.3.1, 9.3.1.1, 11.5

Claims. Definition of

15.1.1

Claims, Notice of

1.6.2, 15.1.3

CLAIMS AND DISPUTES

3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, 9.10.4, 10.3.3, **15**, 15.4 Claims and Timely Assertion of Claims 15.4.1

Claims for Additional Cost

3.2.4, 3.3.1, 3.7.4, 7.3.9, 9.5.2, 10.2.5, 10.3.2, **15.1.5**

Claims for Additional Time

3.2.4, 3.3.1, 3.7.4, 6.1.1, 8.3.2, 9.5.2, 10.3.2, **15.1.6**

Concealed or Unknown Conditions, Claims for 3.7.4

Claims for Damages

3.2.4, 3.18, 8.3.3, 9.5.1, 9.6.7, 10.2.5, 10.3.3, 11.3,

11.3.2, 14.2.4, 15.1.7

Claims Subject to Arbitration

15.4.1

Cleaning Up

3.15, 6.3

Commencement of the Work, Conditions Relating to 2.2.1, 3.2.2, 3.4.1, 3.7.1, 3.10.1, 3.12.6, 5.2.1, 5.2.3, 6.2.2, 8.1.2, 8.2.2, 8.3.1, 11.1, 11.2, **15.1.5**

Commencement of the Work, Definition of

8.1.2

Communications

3.9.1. **4.2.4**

Completion, Conditions Relating to 3.4.1, 3.11, 3.15, 4.2.2, 4.2.9, 8.2, 9.4.2, 9.8, 9.9.1, 9.10, 12.2, 14.1.2, 15.1.2

COMPLETION, PAYMENTS AND

Completion, Substantial

3.10.1, 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1,

9.10.3, 12.2, 15.1.2

Compliance with Laws

2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14.1.1, 14.2.1.3, 15.2.8,

15.4.2, 15.4.3

Concealed or Unknown Conditions

3.7.4, 4.2.8, 8.3.1, 10.3

Conditions of the Contract

1.1.1, 6.1.1, 6.1.4

Consent, Written 3.7.4, 3.12.8, 3.14.2, 9.3.2, 11.3.1, 13.3, 13.4.2

3.4.2, 3.14.2, 4.1.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 13.2, 15.4.4.2

Consolidation or Joinder

15.4.4

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

1.1.4.6

Construction Change Directive, Definition of 7.3.1

Construction Change Directives

1.1.1, 3.4.2, 3.11, 3.12.8, 4.2.8, 7.1.1, 7.1.2, 7.1.3, **7.3**, 9.3.1.1

Construction Schedules, Contractor's

3.10, 3.11, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2

Contingent Assignment of Subcontracts

5.4, 14.2.2.2

Continuing Contract Performance

15.1.4

Contract, Definition of

1.1.2

CONTRACT, TERMINATION OR

SUSPENSION OF THE

5.4.1.1, 5.4.2, 11.5, 14

Contract Administration

3.1.3, 4, 9.4, 9.5

Contract Award and Execution, Conditions Relating

3.7.1, 3.10, 5.2, 6.1

Contract Documents, Copies Furnished and Use of

1.5.2, 2.3.6, 5.3

Contract Documents, Definition of

1.1.1

Contract Sum

3.7.4, 3.7.5, 3.8, 3.10.2, 5.2.3, 7.3, 7.4, **9.1**, 9.2, 9.4.2, 9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.5, 12.1.2, 12.3, 14.2.4, 14.3.2, 15.1.4.2, **15.1.5, 15.2.5**

Contract Sum, Definition of

9.1

Contract Time

1.1.4, 2.2.1, 3.7.4, 3.7.5, 3.10.2, 5.2.3, 6.1.5, 7.2.1.3, 7.3.1, 7.3.5, 7.3.6, 7, 7, 7.3.10, 7.4, 8.1.1, 8.2.1, 8.2.3, 8.3.1, 9.5.1, 9.7, 10.3.2, 12.1.1, 12.1.2, 14.3.2,

15.1.4.2, 15.1.6.1, 15.2.5

Contract Time, Definition of

8.1.1

CONTRACTOR

Contractor, Definition of

3.1, 6.1.2

Contractor's Construction and Submittal

Schedules

3.10, 3.12.1, 3.12.2, 4.2.3, 6.1.3, 15.1.6.2

Contractor's Employees

3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3, 11.3, 14.1, 14.2,1.1

Contractor's Liability Insurance

Contractor's Relationship with Separate Contractors and Owner's Forces

$3.12.5, 3.14.2, 4.2.4, 6, 11.3, 12.\overline{2.4}$

Contractor's Relationship with Subcontractors Date of Commencement of the Work, Definition of 1.2.2, 3.3.2, 3.18.1, 3.18.2, 4.2.4, 5, 9.6.2, 9.6.7, 8.1.2 9.10.2, 11.2, 11.3, 11.4 Date of Substantial Completion, Definition of Contractor's Relationship with the Architect 8.1.3 1.1.2, 1.5, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5.1, Day, Definition of 3.7.4, 3.10, 3.11, 3.12, 3.16, 3.18, 4.2, 5.2, 6.2.2, 7, 8.1.4 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3, Decisions of the Architect 12, 13.4, 15.1.3, 15.2.1 3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 6.3, 7.3.4, Contractor's Representations 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4, 9.5.1, 9.8.4, 9.9.1, 13.4.2, 3.2.1, 3.2.2, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2 14.2.2, 14.2.4, 15.1, 15.2 Contractor's Responsibility for Those Performing the **Decisions to Withhold Certification** 9.4.1, **9.5**, 9.7, 14.1.1.3 3.3.2, 3.18, 5.3, 6.1.3, 6.2, 9.5.1, 10.2.8 Defective or Nonconforming Work, Acceptance, Contractor's Review of Contract Documents Rejection and Correction of 3.2 2.5, 3.5, 4.2.6, 6.2.3, 9.5.1, 9.5.3, 9.6.6, 9.8.2, 9.9.3, Contractor's Right to Stop the Work 9.10.4, 12.2.1 **Definitions** Contractor's Right to Terminate the Contract 1.1, 2.1.1, 3.1.1, 3.5, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 5.1, 6.1.2, 7.2.1, 7.3.1, 8.1, 9.1, 9.8.1, 15.1.1 Contractor's Submittals **Delays and Extensions of Time** 3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 9.2, 9.3, 9.8.2, **3.2**, **3.7.4**, 5.2.3, 7.2.1, 7.3.1, **7.4**, **8.3**, 9.5.1, **9.7**, 9.8.3, 9.9.1, 9.10.2, 9.10.3 10.3.2, **10.4**, 14.3.2, **15.1.6**, 15.2.5 Contractor's Superintendent **Disputes** 3.9, 10.2.6 6.3, 7.3.9, 15.1, 15.2 Contractor's Supervision and Construction **Documents and Samples at the Site** Procedures 3.11 1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, **Drawings**, Definition of 7.3.4, 7.3.6, 8.2, 10, 12, 14, 15.1.4 1.1.5 Coordination and Correlation Drawings and Specifications, Use and Ownership of 1.2, 3.2.1, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1 Copies Furnished of Drawings and Specifications Effective Date of Insurance 1.5, 2.3.6, 3.11 8.2.2 Copyrights **Emergencies** 1.5, 3.17 **10.4**, 14.1.1.2, **15.1.5** Correction of Work Employees, Contractor's 3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 2.5, 3.7.3, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, **12.2**, 12.3, 15.1.3.1, 15.1.3.2, 15.2.1 10.3.3, 11.3, 14.1, 14.2.1.1 **Correlation and Intent of the Contract Documents** Equipment, Labor, or Materials 1.2 1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.12, 3.13, 3.15.1, 4.2.6, Cost, Definition of 4.2.7, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 7.3.4 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2 Costs 7 Execution and Progress of the Work 1.1.3, 1.2.1, 1.2.2, 2.3.4, 2.3.6, 3.1, 3.3.1, 3.4.1, 3.7.1, 2.5, 3.2.4, 3.7.3, 3.8.2, 3.15.2, 5.4.2, 6.1.1, 6.2.3, 7.3.3.3, 7.3.4, 7.3.8, 7.3.9, 9.10.2, 10.3.2, 10.3.6, 11.2, 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.6, 8.2, 9.5.1, 12.1.2, 12.2.1, 12.2.4, 13.4, 14 9.9.1, 10.2, 10.3, 12.1, 12.2, 14.2, 14.3.1, 15.1.4 **Cutting and Patching** Extensions of Time 3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3, 7.4, 9.5.1, 9.7, 10.3.2, **3.14**, 6.2.5 Damage to Construction of Owner or Separate 10.4, 14.3, 15.1.6, **15.2.5 Failure of Payment** Contractors 9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2 3.14.2, 6.2.4, 10.2.1.2, 10.2.5, 10.4, 12.2.4 Damage to the Work Faulty Work 3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 12.2.4 (See Defective or Nonconforming Work) **Final Completion and Final Payment** Damages, Claims for 3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.3.2, 4.2.1, 4.2.9, 9.8.2, **9.10**, 12.3, 14.2.4, 14.4.3 11.3, 14.2.4, 15.1.7 Financial Arrangements, Owner's Damages for Delay 2.2.1, 13.2.2, 14.1.1.4 6.2.3, 8.3.3, 9.5.1.6, 9.7, 10.3.2, 14.3.2**GENERAL PROVISIONS**

Governing Law Interpretations, Written 4.2.11, 4.2.12 13.1 Guarantees (See Warranty) Judgment on Final Award **Hazardous Materials and Substances** 15.4.2 10.2.4, **10.3** Labor and Materials, Equipment Identification of Subcontractors and Suppliers 1.1.3, 1.1.6, **3.4**, 3.5, 3.8.2, 3.12, 3.13, 3.15.1, 5.2.1, 5.2.1 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, Indemnification 10.2.4, 14.2.1.1, 14.2.1.2 7.3.7 3.17, **3.18**, 9.6.8, 9.10.2, 10.3.3, 11.3 **Labor Disputes** Information and Services Required of the Owner 8.3.1 2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10.1, 6.1.3, 6.1.4, 6.2.5, Laws and Regulations 4.1.1 9.6.1, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2, 1.5, 2.3.2, 3.2.3, 3.2.4, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 14.1.1.4, 14.1.4, 15.1.4 9.9.1, 10.2.2, 13.1, 13.3.1, 13.4.2, 13.5, 14, 15.2.8, **Initial Decision** 15.4 15.2 Liens 2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8 Initial Decision Maker, Decisions Limitations, Statutes of 14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5 12.2.5, 15.1.2, 15.4.1.1 Initial Decision Maker, Extent of Authority Limitations of Liability 14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5 3.2.2, 3.5, 3.12.10, 3.12.10.1, 3.17, 3.18.1, 4.2.6, **Injury or Damage to Person or Property** 4.2.7, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 9.6.8, 10.2.5, 10.3.3, **10.2.8**, 10.4 11.3, 12.2.5, 13.3.1 Inspections Limitations of Time 3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3, 11, 3.12.5, 3.15.1, 4.2.7, 9.9.2, 9.10.1, 12.2.1, 13.4 5.2, 5.3, 5.4.1, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, Instructions to Bidders 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15, 1.1.1 15.1.2, 15.1.3, 15.1.5 Instructions to the Contractor Materials, Hazardous 3.2.4, 3.3.1, 3.8.1, 5.2.1, 7, 8.2.2, 12, 13.4.2 10.2.4, **10.3** Instruments of Service, Definition of Materials, Labor, Equipment and 1.1.7 1.1.3, 1.1.6, 3.4.1, 3.5, 3.8.2, 3.12, 3.13, 3.15.1, 5.2.1, Insurance 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1.2, 6.1.1, 7.3.4, 8.2.2, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 10.2.5, 11 10.2.4, 14.2.1.1, 14.2.1.2 Insurance, Notice of Cancellation or Expiration Means, Methods, Techniques, Sequences and 11.1.4, 11.2.3 Procedures of Construction Insurance, Contractor's Liability 3.3.1, 3.12.10, 4.2.2, 4.2.7, 9.4.2 11.1 Mechanic's Lien Insurance, Effective Date of 2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8 8.2.2, 14.4.2 Insurance, Owner's Liability 8.3.1, 15.1.3.2, 15.2.1, 15.2.5, 15.2.6, **15.3**, 15.4.1 11.2 15.4.1.1 **Minor Changes in the Work Insurance, Property** 1.1.1, 3.4.2, 3.12.8, 4.2.8, 7.1, 7.4 **10.2.5**, 11.2, 11.4, 11.5 Insurance, Stored Materials MISCELLANEOUS PROVISIONS 9.3.2 INSURANCE AND BONDS Modifications, Definition of 1.1.1 11 Insurance Companies, Consent to Partial Occupancy Modifications to the Contract 1.1.1, 1.1.2, 2.5, 3.11, 4.1.2, 4.2.1, 5.2.3, 7, 8.3.1, 9.7, 9.9.1 Insured loss, Adjustment and Settlement of 10.3.2 **Mutual Responsibility** Intent of the Contract Documents 6.2 Nonconforming Work, Acceptance of 1.2.1, 4.2.7, 4.2.12, 4.2.13 9.6.6, 9.9.3, 12.3 **Interest**

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12.2

Nonconforming Work, Rejection and Correction of 2.4, 2.5, 3.5, 4.2.6, 6.2.4, 9.5.1, 9.8.2, 9.9.3, 9.10.4,

13.5

Interpretation

1.2.3, **1.4**, 4.1.1, 5.1, 6.1.2, 15.1.1

Notice Patching, Cutting and **1.6**, 1.6.1, 1.6.2, 2.1.2, 2.5, 3.2.4, 3.3.1, 3.7.4, 3.7.5, **3.14**, 6.2.5 3.9.2, 3.12.9, 3.12.10, 5.2.1, 7.4, 8.2.2 9.6.8, 9.7, **Patents** 9.10.1, 10.2.8, 10.3.2, 11.5, 12.2.2.1, 13.4.1, 13.4.2, 3.17 14.1, 14.2.2, 14.4.2, 15.1.3, 15.1.5, 15.1.6, 15.4.1 Payment, Applications for 4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5, 9.6.3, 9.7, 9.8.5, 9.10.1, Notice of Cancellation or Expiration of Insurance 11.1.4, 11.2.3 14.2.3, 14.2.4, 14.4.3 **Payment, Certificates for Notice of Claims** 1.6.2, 2.1.2, 3.7.4, 9.6.8, 10.2.8, **15.1.3**, 15.1.5, 15.1.6, 4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 15.2.8, 15.3.2, 15.4.1 9.10.3, 14.1.1.3, 14.2.4 Notice of Testing and Inspections Payment, Failure of 9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2 13.4.1, 13.4.2 Observations, Contractor's Payment, Final 3.2, 3.7.4 4.2.1, 4.2.9, **9.10**, 12.3, 14.2.4, 14.4.3 Occupancy Payment Bond, Performance Bond and 2.3.1, 9.6.6, 9.8 7.3.4.4, 9.6.7, 9.10.3, **11.1.2** Orders, Written **Payments, Progress** 9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4 1.1.1, 2.4, 3.9.2, 7, 8.2.2, 11.5, 12.1, 12.2.2.1, 13.4.2, PAYMENTS AND COMPLETION 14.3.1 2 **OWNER** Payments to Subcontractors 2 Owner, Definition of 5.4.2, 9.5.1.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7, 14.2.1.2 **PCB** Owner, Evidence of Financial Arrangements 10.3.1 **2.2**, 13.2.2, 14.1.1.4 **Performance Bond and Payment Bond** Owner, Information and Services Required of the 7.3.4.4, 9.6.7, 9.10.3, **11.1.2** 2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.3.2, Permits, Fees, Notices and Compliance with Laws 9.6.1, 9.6.4, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2, 2.3.1, **3.7**, 3.13, 7.3.4.4, 10.2.2, 7.3.7.4 14.1.1.4, 14.1.4, 15.1.4 PERSONS AND PROPERTY, PROTECTION OF Owner's Authority 1.5, 2.1.1, 2.4, 2.5, 3.4.2, 3.8.1, 3.12.10, 3.14.2, 4.1.2, Polychlorinated Biphenyl 4.2.4, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2.1, 7.3.1, 10.3.1 8.2.2, 8.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2, 10.3.2, Product Data, Definition of 11.4, 11.5, 12.2.2, 12.3, 13.2.2, 14.3, 14.4, 15.2.7, 3.12.2 **Owner's Insurance Product Data and Samples, Shop Drawings** 11.2 3.11, **3.12**, 4.2.7 Owner's Relationship with Subcontractors **Progress and Completion** 1.1.2, 5.2, 5.3, 5.4, 9.6.4, 9.10.2, 14.2.2 4.2.2, **8.2**, 9.8, 9.9.1, 14.1.4, 15.1.4 Owner's Right to Carry Out the Work **Progress Payments** 9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4 **2.5**, 14.2.2 Owner's Right to Clean Up Project, Definition of 1.1.4 Owner's Right to Perform Construction and to **Project Representatives Award Separate Contracts** 4.2.10 **Property Insurance** 10.2.5, **11.2** Owner's Right to Stop the Work **Proposal Requirements** Owner's Right to Suspend the Work 1.1.1 PROTECTION OF PERSONS AND PROPERTY 14.3 Owner's Right to Terminate the Contract 14.2, 14.4 Regulations and Laws 1.5, 2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 9.9.1, Ownership and Use of Drawings, Specifications 10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14, 15.2.8, 15.4 and Other Instruments of Service 1.1.1, 1.1.6, 1.1.7, **1.5**, 2.3.6, 3.2.2, 3.11, 3.17, 4.2.12, Rejection of Work 4.2.6, 12.2.1 5.3 Releases and Waivers of Liens **Partial Occupancy or Use**

9.3.1, 9.10.2

9.6.6. **9.9**

Representations **Specifications** 3.2.1, 3.5, 3.12.6, 8.2.1, 9.3.3, 9.4.2, 9.5.1, 9.10.1 1.1.1, **1.1.6**, 1.2.2, 1.5, 3.12.10, 3.17, 4.2.14 Representatives Statute of Limitations 2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.10, 13.2.1 15.1.2, 15.4.1.1 Responsibility for Those Performing the Work Stopping the Work 2.4, 9.7, 10.3, 14.1 3.3.2, 3.18, 4.2.2, 4.2.3, 5.3, 6.1.3, 6.2, 6.3, 9.5.1, 10 Retainage Stored Materials 9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3 6.2.1, 9.3.2, 10.2.1.2, 10.2.4 **Review of Contract Documents and Field** Subcontractor, Definition of **Conditions by Contractor 3.2**, 3.12.7, 6.1.3 **SUBCONTRACTORS** Review of Contractor's Submittals by Owner and Architect Subcontractors, Work by 3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 6.1.3, 9.2, 9.8.2 1.2.2, 3.3.2, 3.12.1, 3.18, 4.2.3, 5.2.3, 5.3, 5.4, 9.3.1.2, Review of Shop Drawings, Product Data and Samples 9.6.7 by Contractor **Subcontractual Relations** 3.12 **5.3**, 5.4, 9.3.1.2, 9.6, 9.10, 10.2.1, 14.1, 14.2.1 **Rights and Remedies** Submittals 3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.4, 9.2, 9.3, 9.8, 1.1.2, 2.4, 2.5, 3.5, 3.7.4, 3.15.2, 4.2.6, 5.3, 5.4, 6.1, 6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.1, 12.2.2, 9.9.1, 9.10.2, 9.10.3 12.2.4, **13.3**, 14, 15.4 Submittal Schedule Royalties, Patents and Copyrights 3.10.2, 3.12.5, 4.2.7 Subrogation, Waivers of Rules and Notices for Arbitration 6.1.1. **11.3** 15.4.1 Substances, Hazardous **Safety of Persons and Property** 10.3 **10.2**, 10.4 **Substantial Completion Safety Precautions and Programs** 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, **9.8**, 9.9.1, 9.10.3, 12.2, 3.3.1, 4.2.2, 4.2.7, 5.3, **10.1**, 10.2, 10.4 15.1.2 Samples, Definition of Substantial Completion, Definition of 3.12.3 9.8.1 Samples, Shop Drawings, Product Data and Substitution of Subcontractors 3.11, **3.12**, 4.2.7 5.2.3, 5.2.4 Samples at the Site, Documents and Substitutions of Materials 3.11 3.4.2, 3.5, 7.3.8 **Schedule of Values** Sub-subcontractor, Definition of **9.2**, 9.3.1 5.1.2 Schedules, Construction **Subsurface Conditions** 3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2 3.7.4 Separate Contracts and Contractors **Successors and Assigns** 1.1.4, 3.12.5, 3.14.2, 4.2.4, 4.2.7, 6, 8.3.1, 12.1.2 13.2 **Superintendent Separate Contractors**, Definition of **3.9**. 10.2.6 6.1.1 Shop Drawings, Definition of **Supervision and Construction Procedures** 1.2.2, **3.3**, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, **Shop Drawings, Product Data and Samples** 7.3.4, 8.2, 8.3.1, 9.4.2, 10, 12, 14, 15.1.4 3.11, 3.12, 4.2.7 **Suppliers** Site, Use of 1.5, 3.12.1, 4.2.4, 4.2.6, 5.2.1, 9.3, 9.4.2, 9.5.4, 9.6, 9.10.5, 14.2.1 **3.13**, 6.1.1, 6.2.1 **Site Inspections** Surety 3.2.2, 3.3.3, 3.7.1, 3.7.4, 4.2, 9.9.2, 9.4.2, 9.10.1, 13.4 5.4.1.2, 9.6.8, 9.8.5, 9.10.2, 9.10.3, 11.1.2, 14.2.2, Site Visits, Architect's 15.2.7 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4 Surety, Consent of 9.8.5, 9.10.2, 9.10.3 Special Inspections and Testing 4.2.6, 12.2.1, 13.4 Surveys **Specifications**, Definition of 1.1.7, 2.3.4

14.3

Suspension by the Owner for Convenience

1.1.6

Suspension of the Work

3.7.5, 5.4.2, 14.3

Suspension or Termination of the Contract

5.4.1.1, 14

Taxes

3.6, 3.8.2.1, 7.3.4.4

Termination by the Contractor

14.1, 15.1.7

Termination by the Owner for Cause

5.4.1.1, **14.2,** 15.1.7

Termination by the Owner for Convenience

Termination of the Contractor Employment 14.2.2

TERMINATION OR SUSPENSION OF THE CONTRACT

Tests and Inspections

3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 12.2.1, **13.4**

TIME

Time, Delays and Extensions of

3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4, **8.3**, 9.5.1, 9.7,

10.3.2, 10.4, 14.3.2, 15.1.6, 15.2.5

Time Limits

2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2, 5.2, 5.3, 5.4, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15.1.2, 15.1.3, 15.4

Time Limits on Claims

3.7.4, 10.2.8, 15.1.2, 15.1.3

Title to Work

9.3.2, 9.3.3

UNCOVERING AND CORRECTION OF WORK 12

Uncovering of Work

12.1

Unforeseen Conditions, Concealed or Unknown

3.7.4, 8.3.1, 10.3

Unit Prices

7.3.3.2, 9.1.2

Use of Documents

1.1.1, 1.5, 2.3.6, 3.12.6, 5.3

Use of Site

3.13, 6.1.1, 6.2.1

Values, Schedule of

9.2, 9.3.1

Waiver of Claims by the Architect

13.3.2

Waiver of Claims by the Contractor

9.10.5, 13.3.2, **15.1.7**

Waiver of Claims by the Owner

9.9.3, 9.10.3, 9.10.4, 12.2.2.1, 13.3.2, 14.2.4, **15.1.7**

Waiver of Consequential Damages

14.2.4, 15.1.7

Waiver of Liens

9.3, 9.10.2, 9.10.4

Waivers of Subrogation

6.1.1, 11.3

Warrantv

3.5, 4.2.9, 9.3.3, 9.8.4, 9.9.1, 9.10.2, 9.10.4, 12.2.2,

15.1.2

Weather Delays

8.3, 15.1.6.2

Work, Definition of

1.1.3

Written Consent

1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.10.3

13.2, 13.3.2, 15.4.4.2

Written Interpretations

4.2.11, 4.2.12

Written Orders

1.1.1, 2.4, 3.9, 7, 8.2.2, 12.1, 12.2, 13.4.2, 14.3.1

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Owner. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

- § 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.
- § 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

- § 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of \$ervice. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.
- § 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner.

§ 1.6 Notice

- § 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission.
- § 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

ARTICLE 2 **OWNER**

§ 2.1 General

- § 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.
- § 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lier rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 For the purposes of this Agreement the Owner has provided sufficient and adequate funding for this project. The Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change.

§ 2.3 Information and Services Required of the Owner

- § 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- § 2.3.2 The Owner may retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.
- § 2.3.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.
- § 2.3.6 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.
- § 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the additional professional design services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the professional design services, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15,

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

- § 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.
- § 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Owners's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.
- § 3.1.4 Progress Meetings. The Contractor shall schedule and conduct meetings with the Owner and as determined by the Owner with the Architect also present, to discuss such matters as procedures, progress, coordination, and the Final Project Schedules. The Contractor shall prepare, record, and promptly distribute minutes of each progress meeting to each attendee and identified stakeholders. The Contractor shall also provide a short-term look ahead schedule for presentation and review at each progress meeting. The short-term schedule shall be in sufficient detail to allow the Contractor and Owner to make any necessary schedule modifications to maintain the progress of the Work and for adherence to the time frames stipulated in the Agreement. The following shall also be included in the progress meeting agenda:
 - .1 Coordination of architectural, structural, mechanical, electrical, civil work or any other item associated with the Work.
 - .2 Measures to mitigate adverse effects of construction on the residents of the development during construction.
 - .3 Resolving issues with governing agencies.
 - .4 Status of submittals, RFI's, COR's and COR's.
 - .5 Site safety and associated issues.
 - .6 Segregated and comingled material recycling reports.
 - .7 Section 3 compliance and status.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

- § 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.
- § 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Owner any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Owner may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.
 - .1 If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the drawings.
- § 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Owner any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Owner may require.
- § 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Owner issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, and shall propose alternative means, methods, techniques, sequences, or procedures. The Owner shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Owner objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures and shall not proceed with that portion of the Work without further written instructions from the Owner. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

- § 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.
- § 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

- § 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- § 3.4.2 Except in the case of minor changes in the Work authorized by the Owner in accordance with Section 3.12.8, the Contractor may make substitutions only with the consent of the Owner, and in accordance with a Change Order or Construction Change Directive.
- § 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

- § 3.5.1 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality, new and in conformance with the Contract Documents unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- § 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

- § 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay permits other than those acquired and paid by the Owners.
- § 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.
- § 3.7.3 If the Contractoror performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction. The Contract shall provide the required tenant notices as directed by the Owner.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Owner will promptly investigate such conditions and, if the Owner determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Owner determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Owner shall promptly notify the Contractor in writing, stating the reasons.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the shall be included in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall confirm for the Owner of the name and qualifications of the superintendent as identified in the Bid Documents. Within 14 days of receipt of the information, the Owner may notify the Contractor, stating whether the Owner (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.

- § 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.
- § 3.9.4 The Contractor's Superintendent(s) shall be physically present at the jobsite from daily commencement of work to daily completion of work. The site shall be managed daily without interruption. Daily commencement and daily completion are defined as the actual hours of operation for the project.

§ 3.10 Contractor's Construction and Submittal Schedules

- § 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.
- § 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Owner's approval. The Owner's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Owner reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.
- § 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Owner, and delivered to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

- § 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.
- § 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- § 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.
- § 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.
- § 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Owner, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

- § 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- § 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Owner.
- § 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Owner's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Owner of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Owner's approval thereof.
- § 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such notice, the Owner's approval of a resubmission shall not apply to such revisions.
- § 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.
- § 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Owner. The Owner shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner has specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Owner will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- § 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

- § 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.
- § 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by

excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. Contractor to be in compliance with Section 6002 of the Solid Waste Disposal Act as amended by Resource Conservation & Recovery Act.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Owner. Contractor is to be in compliance with the Right of Inventions Act (37 CFR Part 401).

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Owner will provide administration of the Contract as described in the Contract Documents during construction until the date the Owner issues the final Certificate for Payment.

- § 4.2.2 The Owner will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Owner will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.
- § 4.2.3 On the basis of the site visits, the Owner will identify (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Owner will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Owner will not have control over or charge of. and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.
- § 4.2.4 The Owner will conduct a mandatory pre-construction meeting with the Contractor. The meeting will include but is not limited to a review of the scope of work, project schedules, general requirements for construction work, jobsite security, staging and storage areas, material recycling and salvage, jobsite cleanup, and tests, samples and construction observation. The meeting will also include a review of the submittal process for applications for payment, the change order process, the process for progress payments, the final application for payment, and release of retention. A review of the Certified Payroll process will also be conducted. A separate Certified Payroll training session will be conducted by the Owner with the Contractor and with each subcontractor.
- § 4.2.5 A separate meeting will be also be conducted to review the Section 3 plan submitted by the Contractor and to review of the Section 3 reporting procedures.
- § 4.2.6 The Contractor shall contact the local jurisdiction to conduct a pre-construction conference with building officials and other local agencies as applicable for the project.

§ 4.2.4 Communications

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other directly about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Owner, Communications by and with Subcontractors and suppliers shall be through the Contractor, Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

- § 4.2.5 Based on the Owner's evaluations of the Contractor's Applications for Payment, the Owner will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.
- § 4.2.6 The Owner has authority to reject Work that does not conform to the Contract Documents. Whenever the Owner considers it necessary or advisable, the Owner will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Owner nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.
- § 4.2.7 The Owner and/or Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Owner and/or Architect's action will be taken in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Owner's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Owner's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Owner and/or Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or

procedures. The Owner's and/or Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

- § 4.2.8 The Owner will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Owner will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.
- § 4.2.9 The Owner will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.
- § 4.2.11 The Owner will interpret and decide matters concerning performance under, and requirements of, the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.
- § 4.2.12 Interpretations and decisions of the Owner will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings..
- § 4.2.13 The Owner's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.
- § 4.2.14 The Owner will review and respond to requests for information about the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will assist the Owner and respond to Requests For Information (RFI's) as directed by the Owner and will prepare and issue supplemental Drawings and Specifications in response to the Requests For Information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

- § 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.
- § 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor,
- § 5.2 Award of Subcontracts and Other Contracts for Portions of the Work
- § 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall confirm for the Owner of the persons or entities for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design as identified in the Bid Documents. Within 14 days of receipt of the information, the Owner may notify the Contractor whether the Owner (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.
- § 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection. The Contractor shall ensure that all and any Subcontractor(s) are not on any Debarment Lists and are Not Excluded from performing work on Federally Funded Projects. The Contractor shall provide written evidence of such to the Owner prior to the commencement of work.
- § 5.2.3 If the Owner has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time

shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

- § 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that
 - assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
 - .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

- § 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.
- § 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

- § 6.1 Owner's Right to Perform Construction and to Award Separate Contracts
- § 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.
- § 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- § 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction

schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

- § 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- § 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Owner of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Owner of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.
- § 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.
- § 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.
- § 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.
- § 6.2.6 The Contractor is obligated to comply with all Davis-Bacon and/or State Prevailing regulations if applicable, and shall inform all Subcontractors of this mandatory requirement. Strict compliance of the provisions of certified payrolls and monitoring of that compliance is a direct responsibility of the Contractor for each Subcontractor. Failure of the Contractor to monitor Davis-Bacon requirements including certified payroll compliance by Subcontractors, as evidenced by the Owner's review and written correction notices provided to the Contractor of non-compliance, will result in delay of progress payments to the Contractor by the Owner.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Owner will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK § 7.1 General § 7.1.1

- The Owner anticipates that it will desire the Contractor to accomplish Work that was not able to .1 be reasonably defined in sufficient detail during the solicitation for Bids for this Project. The Contractor agrees to perform such Owner Directed Work in accordance with the Contract Documents.
- .2 A fixed sum has been determined by the Owner for each individual and separate Owner Directed Work Item. The total Contract Amount includes the lump sum total of all combined Owner Directed Work Items. It is at the Sole Discretion and Decision of the Owner to Authorize the Contractor to proceed with each individual Owner Directed Work Item. If any or all Owner Directed Work Items are determined to be excluded from the Work, the Owner will provide a Change Order to the Contractor to deduct those amounts from the Contract.

- .3 If any or all Owner Directed Work Items are authorized by the Owner to be completed. The Owner will issue an Owner Directed Work Order to the Contractor for that Work Item.
- .4 For each Owner Directed Work Order issued to the Owner, the Contractor shall provide a complete and detailed cost estimate for that item to the Owner. The Contractor's estimate shall be approved by the Owner, prior to the commencement of any Owner Directed Work. Adjustments to the Contract may be made as an additive or deductive Change Order as determined by the difference between the Owner Directed Work Item Allowance, the Final Approved Estimated Cost as submitted by the Contractor, and the final Analysis of the Cost as conducted by the Owner.
- .5 The Contractor shall provide a complete and accurate time and material account and reconciliation report to the Owner for each issued work authorization for each Owner Directed Work Item.
- .6 Owner Directed Work Items are defined in the Contract Documents.
- § 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

All changes in the Work shall be completed for a Fixed Fee.

- .1 Overhead, Profit, and General Conditions
 - (a.) The allowed markup shall cover all indirect project costs, including but not limited to: project Overhead, Profit, and General Conditions
 - (b.) The Contractor shall be allowed a maximum of 14% Overhead, Profit, and General Conditions, on the cost of craft labor, equipment, small tools and materials for self-performed Change Order work.
 - (c.) The Contractor shall be allowed a maximum of 8% Overhead, Profit, and General Conditions on the cost of craft labor, equipment, small tools and materials for Subcontractor Change Order work. The Contractor is not allowed to take a profit on the profit of the Subcontractor, as stated in form HUD-5370, section 29.
 - (d.) A Subcontractor shall be allowed a maximum of 14% of the cost of craft labor, equipment, materials, and small tools for Overhead, Profit, and General Conditions, for performing self-performed Change Order work.
 - (e.) A Lower Tier Subcontractor shall be allowed a maximum of 14% of the cost of craft labor, equipment, materials, and small tools for Overhead, Profit, and General Conditions, for performing Change Order work.
- § 7.1.2 A Change Order shall be based upon agreement among the Owner and Contractor. A Construction Change Directive requires agreement by the Owner and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Owner.
- § 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

- § 7.2.1 A Change Order is a written instrument prepared by the Owner and signed by the Owner and Contractor stating their agreement upon all of the following:
 - .1 The change in the Work;
 - .2 The amount of the adjustment, if any, in the Contract Sum; and
 - .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives

§ 7.3.1

A Construction Change Directive shall be provided as stipulated by the Owner and in accordance with the King County Housing Authority Change Order Request documents (COR) per Exhibit as designated in Document A101-2017, Article 9.1.7.2. The COR is a written order prepared by the Owner and signed by the Owner and upon Owner's request, by the Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the

Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

- § 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order. The Owner's Change Order Request / Change Order Approval Form (COR/COA) per Exhibit as designated in Contract Document A101-2017, Article 9.1.7.2, including the General Contractor Breakdown Summary (GC-COR) Exhibit, and the Subcontractor Breakdown Summary (SC-COR) Exhibit, shall be used by the Contractor for all construction change directives.
- § 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
 - Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
 - .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
 - .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
 - .4 As provided in Section 7.3.4.
- § 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Owner shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:
 - .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Owner;
 - .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
 - .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others:
 - .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
 - .5 Costs of supervision and field office personnel directly attributable to the change.
- § 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.
- § 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Owner of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.
- § 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
- § 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Owner. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- § 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Owner will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Owner determines to be reasonably justified. The Owner's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Owner will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

- § 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- § 8.1.2 The date of commencement of the Work is the date established in the Agreement.
- § 8.1.3 The date of Substantial Completion is the date certified by the Owner in accordance with Section 9.8.
- § 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

- § 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
- § 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.
- § 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

- § 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Owner determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Owner may determine.
- § 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.
- § 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

- § 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.
- § 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Owner before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Owner. This schedule shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Owner and supported by such data to substantiate its accuracy as the Owner may require, and unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Owner an itemized Application for Payment using AIA Form G701 and AIA Form G702 and in accordance with Article 5 of A101-2017 prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Owner, based on the Owner's evaluation of the Work and the data in the Application for Payment, that, to the best of the Owner's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Owner. However, the issuance of a Certificate for Payment will not be a representation that the Owner has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means,

methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Owner may withhold Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Owner's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Owner is unable to certify payment in the amount of the Application, the Owner will notify the Contractor as provided in Section 9.4.1. If the Contractor and Owner cannot agree on a revised amount, the Owner will promptly release Payment for the amount for which the Owner is able to make such representations. The Owner may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Payment previously issued, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.
- § 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.
- § 9.5.3 When the reasons for withholding certification are removed, approval will be made for amounts previously withheld.
- § 9.5.4 If the Owner withholds payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

- § 9.6.1 After the Owner has issued a Application for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents.
- § 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.
- § 9.6.3 The Owner will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner on account of portions of the Work done by such Subcontractor.
- § 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. The Owner shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.
- § 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

- § 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
- § 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.
- § 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Owner does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Owner or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

- § 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.
- § 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- § 9.8.3 Upon receipt of the Contractor's list, the Owner will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Owner. In such case, the Contractor shall then submit a request for another inspection by the Owner to determine Substantial Completion.
- § 9.8.4 When the Work or designated portion thereof is substantially complete, the Owner will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.
- § 9.8.5 The Certificate of Substantial Completion shall be submitted to the Contractor for written acceptance of responsibilities assigned in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Owner as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner will promptly make such inspection. When the Owner finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner will promptly notify the Contractor that to the best of the Owner's knowledge, information and belief, and on the basis of the Owner's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Application for Payment is due and payable. The Owner's acceptance will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, the Owner shall, upon application by the Contractor and certification by the Owner, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Owner prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

PROTECTION OF PERSONS AND PROPERTY ARTICLE 10

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

- § 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to
 - employees on the Work and other persons who may be affected thereby:
 - .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
 - .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.
- § 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.
- § 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.
- § 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- § 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Sub-contractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.
- § 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner.
- § 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

- § 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner of the condition.
- § 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor will promptly reply to the Owner in writing stating whether or not there is reasonable objection to the persons or entities proposed by the Owner. If the Contractor has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor has no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.
- § 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.
- § 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.
- § 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.
- § 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

INSURANCE AND BONDS ARTICLE 11

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

- § 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.
- § 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.
- § 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

- § 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.
- § 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work, Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.
- § 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor; (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors. sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Owner, be uncovered for the Owner's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Owner has not specifically requested to examine prior to its being covered, the Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Owner's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, the Owner may correct it in accordance with Section 2.5.

- § 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.
- § 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.
- § 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- § 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.
- § 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents 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 the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

- § 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.
- § 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

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§ 13.3 Rights and Remedies

- § 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.
- § 13.3.2 No action or failure to act by the Owner, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

- § 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.
- § 13.4.2 If the Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Owner will instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Owner of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.
- § 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's services and expenses, shall be at the Contractor's expense.
- § 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner.
- § 13.4.5 If the Owner is to observe tests, inspections, or approvals required by the Contract Documents, the Owner will do so promptly and, where practicable, at the normal place of testing.
- § 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

- § 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:
 - .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
 - .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
 - .3 Because the Owner has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or

- The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.
- § 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.
- § 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.
- § 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, terminate the Contract and recover from the Owner as provided in Section 14.1.3.
- § 14.2 Termination by the Owner for Cause
- § 14.2.1 The Owner may terminate the Contract if the Contractor
 - repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
 - .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
 - .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
 - otherwise is guilty of substantial breach of a provision of the Contract Documents. .4
- § 14.2.2 When any of the reasons described in Section 14.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:
 - Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
 - .2 Accept assignment of subcontracts pursuant to Section 5.4; and
 - Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.
- § 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.
- § 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, upon application, and this obligation for payment shall survive termination of the Contract.
- § 14.3 Suspension by the Owner for Convenience
- § 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.
- § 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent
 - that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause .1 for which the Contractor is responsible; or
 - .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.
 \$ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall cease operations as directed by the Owner in the notice; take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.
ARTICLE 15 CLAIMS AND DISPUTES § 15.1 Claims § 15.1.1 Definition A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.
§ 15.1.2 Time Limits on Claims The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.
§ 15.1.3 Notice of Claims § 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.
§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party.
§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

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§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on

the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

- § 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.
- § 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.
- § 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.
- § 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

- § 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.
- § 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.
- § 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.
- § 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

- § 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.
- § 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

- § 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.
- § 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

- § 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).
- § 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.
- § 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

ARTICLE 16 FEDERAL PROVISIONS

§ 16.1 PROHIBITION AGAINST THE USE OF LEAD BASED PAINT

The Contractor shall comply with the prohibition against the use of lead based paint contained in the Lead Based Paint Poisoning Act (42 USC 4821-4846) as implemented by 24 CFR Part 35.

§ 16.2 FEDERAL HEALTH, SAFETY, AND ACCIDENT PREVENTION

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 the construction safety and health standards promulgated by the Secretary of Labor by regulation. The Contractor shall comply with \$5.07 and with the regulations and standards issued by the Secretary of Labor at 29 CFR Parts 1904 and 1926 Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 9154, 83 Stat. 96), 40 USC 3701 to 3708 et seg.

§ 16.3 CLEAN AIR AND WATER APPLICABLE TO CONTRACTS IN EXCESS OF \$150,000

The Contractor shall comply with all requirements of the United States Environmental Protection Agency (EPA) 40 CFR Part 15, 42 USC 7401, 33 USC 1251 et seq., the Federal Water Pollution Control Act 33 USC 1281 et seq., and Executive Order 11738.

§ 16.4 ENERGY EFFICIENCY

The Contractor shall comply with all 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) in Washington State and the Federal Energy Policy and Conservation Act (42 USC 6201).

§ 16.5 LABOR STANDARDS; DAVIS-BACON AND RELATED ACTS, IF APPLICABLE

The Contractor shall comply with all provisions of the Davis-Bacon Act and Related Acts such as the Housing Act of 1937, the National Housing Act, the Housing and Community Development Act of 1974, the National Affordable Housing Act of 1990, Equal Employment Opportunity 41 CFR Part 60 or similar related Acts for Federal Labor Standards for this Contract. The Contractor is responsible for the full compliance of all employers, including the Contractor, Subcontractors, and all the Lower-Tier Subcontractors with the Labor Standards Provisions applicable to this Project.

§ 16.6 INTEREST OF MEMBER 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 to arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit. Copeland Anti-Kickback Act 40 USC 3145.

§ 16.7 INTEREST OF MEMBERS, OFFICERS, COMMISSIONERS AND EMPLOYEES, OR FORMER MEMBERS, OFFICERS AND EMPLOYEES

No member, officer, or employee of King County Housing Authority, no member of the Governing body of the locality in which the project is situated, no member of the governing body in which the Owner was activated, and no other public official or such 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.

§ 16.8 ORGANIZATION CONFLICTS OF INTEREST

- .1 The Contractor warrants that to the best of its knowledge and belief and except as otherwise disclosed, it does not have any organizational conflict of interest which is defined as a situation in which the nature of the work under this Contract and the Contractor's organizational, financial, contractual or other interests are such as:
 - .a Award of the Contract may result in an unfair competitive advantage; or
 - .b The Contractor's objectivity in performing the Contract Work may be impaired.
- .2 The Contractor agrees that if after award they discover an organizational conflict of interest with respect to this Contract, they shall make an immediate and full disclosure in writing to the Contracting Officer, which shall include a description of the action, which the Contractor has taken or intend to take to eliminate or neutralize the conflict. The Owner may, however, terminate the Contract if it deems the action to be in the best interest of the Owner.
- .3 In the event the Contractor was aware of an organizational conflict of interest before the award of this Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.
- .4 In the event the Contractor was aware of an organizational conflict of interest before the award of this Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.

§ 16.9 Lobbying

Contractor shall be in compliance with the Byrd Anti-Lobbying Amendment 31 USC 3145

§ 17 AUDITS AND INSPECTIONS

The records and documents with respect to all matters covered by this Contract shall be subject at all times to inspection, review or audit by the Owner or any other government agency so authorized by law during the performance of this Contract. The Owner shall have the right to an annual audit of the Contractor's financial statement and condition.

- .1 The Contractor shall maintain accounts and records in accordance with State Auditor's procedures, including personnel, property, financial and programmatic records which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed in the performance of this Contract and other such records as may be deemed necessary by the Owner to ensure proper accounting for all funds contributed by the Owner to the performance of this Contract and compliance with this Contract.
- The Owner shall maintain these records for a period of six (6) years after termination hereof unless permission to destroy them in granted by the office of the archivist in accordance with RCW Chapter 40.14

§ 18 SECTION 3 – INSTRUCTIONS, REQUIREMENTS AND INCOME GUIDELINES, IF APPLICABLE

Contractor shall comply with all requirements of the Section 3 Program for economic opportunities providing to the greatest extent possible, job training employment and contract opportunities for low or very low income residences in connection with projects and activities in their neighborhoods per the Exhibit, as designated in AIA Contract Document A101-2007, Section 8.6.1.

§ 18.1 The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that

employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

§ 18.2 The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

§ 18.3 The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

§ 18.4 The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

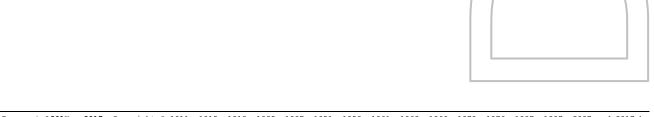
§ 18.5 The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities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

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

§ 18.7 The Contractor shall submit to the Owner a Section 3 Work Plan, including hiring and subcontracting activities, prior to the contract execution. The Contractor will submit to the Owner with each Application for Payment the Section 3 New Hire Status Report and Individual Certification form. Noncompliance, incorrect, or missing documents will result in progress payments being withheld until all issues are resolved to the satisfaction of the Owner.

§ 19 OTHER INFORMATIVE INFORMATION

§ 19.1 Certificate of Endorsement, Final Project Schedule, Subcontractor List, Performance and Payment Bond and Section 3 Plan must be received and approved by the Owner prior to the issuance of the Notice to Proceed.





PERFORMANCE AND PAYMENT BOND INSTRUCTIONS

DIRECTIONS FOR PREPARATION OF PERFORMANCE AND PAYMENT BOND

- 1. Individual sureties, partnerships, or corporations not in the surety business will not be acceptable.
- 2. The name of the Principal shall be shown exactly as it appears in the Contract.
- 3. The penal sum shall not be less than required by the Specifications.
- 4. If the Principals are partners or joint venturers, each member shall execute the bond as an individual and state is place of residence.
- 5. If the principal is a corporation, the bond shall be executed under its corporate seal. If the corporation has no corporate seal, it shall so state and affix a scroll or adhesive seal following the corporate name.
- 6. The official character and authority of the person(s) executing the bond for the Principal, if a corporation, shall be certified by the Secretary or Assistant Secretary thereof under the corporate seal, or copies attached to such records of the corporation as will evidence the official character and authority of the officer signing, duly certified by the Secretary or Assistant Secretary, under the corporate seal, to be true copies.
- 7. The current power-of-attorney of the person signing for the surety company must be attached to the bond.
- 8. The date of the bond must not be prior to the date of the Contract.
- 9. The following information must be placed on the bond by the surety company:
 - a. The Rate of premium in dollars per thousand; and
 - b. The total dollar amount of premium charged
- 10. The signature of a witness shall appear in the appropriate place attending to the signature of each party of the bond.
- 11. Type or print the name underneath each signature appearing on the bond
- 12. An executed copy of the bond must be attached to each copy of the Contract (original counterpart) intended for signing.

King County Housing Authority

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

PERFORMANCE AND PAYMENT BO	hat we the Undersigned,	
as PRINCIPAL, and	G COUNTY HOUSING AUTHORITY of Seattle	
\$	y in the pental sum of.	and No/100
(\$) DOLLARS , lav	wful money of the United States, for the payment of f which sum will and truly be made, we bind oursel s, jointly and severally, firmly by these presents.	which Lawful
WHEREAS the Principal has entered into	a certain Contract with the Public Housing A	authority dated
, 20, a cop	by of which is hereto attached and made a part hereof.	
may be granted and during any guaranty period f all claims arising out of the prosecution of the W Authority for all expenses which it may incur by and if the Principal shall make full payment to a prosecution of the Work under the contract, in hereupon, and if the Principal shall pay or cause to of the Contract as well as payment of gasoline a all motor vehicle fees required for commercial mo then this obligation shall be void; otherwise, it sl or extension of the term thereof, nor any forbeat release the Principal or the Surety from liability l or forbearance is hereby waived.	ons thereof, during its original term and any extension of which the Contract provides, and if the Principal shows which the contract and shall fully indemnify the Foreson of such claims, including its attorney's fees a sall persons supplying labor, services, materials, or equal default of which such persons shall have a direct to be paid all sales and use taxes payable as a result of the such special motor fuels taxes in the performance of the otor vehicles used in connection with the performance of hall remain in full force and effect. No modification of the part of the Public Housing Authority, she hereunder. Notice to the Surety of any such modification of the part of the part of the surety of any such modification of the part of the surety of any such modification. Lipal and Surety have executed this instrument and affirm the part of the part of the surety of any such modification.	all fully satisfy Public Housing and court costs, uipment in the right of action as performance to Contract and of the Contract, of the Contract all in any way ion, extension,
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	(Business Address)	(Seal)
	(Individual Principal)	(Seal)
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	(Business Address)	
	(By)	(Corporate Seal
	(Title)	
ATTEST:	(Surety)	
	(Business Address)	
	(By)	(Corporate Seal
	(Title)	£
The Rate of Premium on this Bond is \$ The Total Amount of Premium Charges is \$		
	ny. * Power of Attorney of person signing for Sur	rety Company



CERTIFICATE AS TO CORPORATE PRINCIPAL

CERTIFICATE AS TO CORPORATE PRINCIPAL

I,	certify that I am the
President / Vice President / Secretary /	of the Entity: Corporation
/LLC /, na	amed as the Principal in the aforegoing bond. The authorized
Official of the named bonding agent who sign	ed the said bond on behalf of the Principal, hereby certifies
that said bond was fully signed, sealed and a	ttested for and in behalf of said Entity by authority of its
Governing body.	
Named Bonding Agent:	
<u> </u>	
Affix Corporate Seal / Authorized Signature:	



INSTRUCTION TO BIDDERS FOR INSURANCE REQUIREMENTS

INSTRUCTIONS / ENDORSEMENT TO BIDDERS COMPLETING, EXECUTING, AND SUBMITTING EVIDENCE OF INSURANCE

A. INSURED CONTRACTOR:

- 1. In order to reduce problems and time delays in providing evidence of insurance to the King County Housing Authority you are requested to give your insurance agent or broker a copy of the Insurance Requirements Sheet along with the Instructions/Endorsement Form(s) for Completing, Executing, and Submitting Evidence of Insurance.
- 2. If the agreement requires Workers' Compensation coverage and you have been authorized by the State to self-insure Workers' Compensation, then a copy of the certificate from the State authorizing self-insurance for Workers' Compensation shall meet the requirements for Workers' Compensation insurance covering activities within the State.
- 3. All questions relating to insurance should be directed to the department or office responsible for your contract, lease, permit, or other agreement.

B. INSURANCE AGENT OR BROKER:

- 1. The appropriate Endorsement Form shall include:
 - a. King County Housing Authority as Additional Insured
 - b. State that the Contractor's Insurance Is Primary
 - c. State King County Housing Authority's Insurance Is Non-Contributory In Claims Settlement Funding

PLEASE NOTE: King County Housing Authority **WILL NOT ACCEPT** Certificates of Insurance Alone.

- 2. More than one insurance policy may be required to comply with the insurance requirements. Endorsement forms appropriate to your insured's agreement, contract, lease or permit are included. In each instance, King County Housing Authority shall be named as additionally insured on the appropriate endorsement forms.
- 3. You shall have an authorized representative of the insurance company forward the completed endorsement forms with his/her phone number noted at the bottom of the page, to King County Housing Authority.
- 4. The name of the Insurance Company underwriting the coverage and its address shall be noted on the endorsement form.
- 5. The "General description of agreement(s) and/or activity(s) insured" shall include reference to the activity and/or to either the specific King County Housing Authority's:
 - a. Project or Site Name
 - b. Contract Number
 - c. Lease Number
 - d. Permit Number
 - e. Construction Approval Number

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- 6. The Coverage and limits for each type of insurance are specified on the insurance requirements sheet. When coverage is on a scheduled basis, then a separate sheet is to be attached to the endorsement listing such scheduled locations, vehicles, etc. so covered.
- 7. Endorsements to excess policies will be required when primary insurance is insufficient in complying with King County Housing Authority's requirements.
- 8. If there is insufficient space on the form to note pertinent information, such as inclusions, exclusions or specific provisions, etc., a separate sheet may be attached.
- 9. When additional sheets are attached, change the number of pages at the bottom of the form to so indicate.
- 10. Completed Endorsement(s) including cancellation notices and questions relating to the required insurance are to be directed to:

KING COUNTY HOUSING AUTHORITY ATTN: CAPITAL CONSTRUCTION DEPARTMENT 700 ANDOVER PARK WEST, SUITE C TUKWILA, WA 98188

- 11. Improperly Completed Endorsements will be returned to your insured for correction by an authorized representative of the insurance company.
- 12. For extensions or renewals on insurance policies which have King County Housing Authority Endorsement Form(s) attached, the Housing Authority will accept a copy of the endorsement to extend the period of coverage as evidence of continued coverage.

C. MINIMUM LIMITS:

1. REFER TO "Insurance Requirements" attached.



INSURANCE REQUIREMENTS FOR BUILDING TRADE CONTRACTORS (with Construction Risks)

The Awarded Contractor shall comply as follows:

Contractor shall procure and maintain, at their expense, for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

<u>THE KING COUNTY HOUSING AUTHORITY (AUTHORITY) SHALL BE NAMED AS</u> ADDITIONALLY INSURED ON THE APPROPRIATE ENDORSEMENT FORMS.

MINIMUM SCOPE OF INSURANCE:

Coverage shall be at least as broad as:

- 1. Insurance Services Office Commercial General Liability coverage including Products / Completed Operations.
- 2. Insurance Services Office covering any Owned, Leased, Hired and Non-owned, and Automobile Liability.
- 3. Workers' Compensation insurance as required by State law and Employers Liability coverage.
- 4. Builders Risk (Property / Course of Construction insurance covering for all risks of loss for all projects in excess of \$250,000.)
- 5. Professional Liability / Errors and Omission (when applicable).

MINIMUM LIMITS OF INSURANCE:

Contractor shall maintain limits no less than:

- 1. General Liability: \$1,000,000 per occurrence, \$2,000,000 general aggregate, including \$1,000,000 Products / Completed Operations for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project / location or the general aggregate limit shall be twice the required occurrence limit.
- 2. Automobile Liability: \$1,000,000 per accident for bodily injury / property damage.
- 3. Employer's Liability / Washington Stop Gap: \$1,000,000 per accident for bodily injury, sickness or disease.
- 4. Builder Risk (Property) / Course of Construction: Completed value of the project.
- 5. Professional Liability / Errors and Omissions: \$1,000,000 per claim; \$2,000,000 aggregate (when applicable).

DEDUCTIBLES AND SELF-INSURED RETENTIONS:

Any deductibles or self-insured retentions must be declared to and approved by the Authority. At the option of the Authority, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Authority, its successors and assigns, director, officers, officials, employees,

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agents, partners and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the Authority guaranteeing payment of losses and related investigations, claim administration and defense expenses. NOTE: If this contract deals with hazardous materials or activities (i.e. lead based paint, asbestos, armed security guards) additional provisions covering those exposures must be included in order to protect the Authority's interests.

OTHER INSURANCE PROVISIONS:

General Liability and Automobile Liability Policies are to contain, or be endorsed to contain, the following provisions:

- The Authority, its successors and assigns, director, officers, officials, employees, agents, 1. partners, and volunteers are to be covered as additional insureds with respect to (i) general liability arising out of work done or operations performed by or on behalf of the contractor, including materials, parts or equipment furnished in respect to such work or operations. The endorsement(s) effectuating the foregoing additional insured coverage shall be ISO form CG 20 10 11 85, or CG 20 10 10 01 issued concurrently with CG 20 37 10 01, or their equivalent as long as it provides additional insured coverage, and not limited to the minimum acceptable as required herein, for completed operations; (ii) automobile liability arising out of vehicles owned, leased, hired, or borrowed by or on behalf of the Contractor; (iii) any insurance written on a claims made basis, shall have a retroactive date that coincides with, or precedes, the commencement of any work under this contract. Evidence of such coverage shall be maintained for a minimum of six (6) years beyond the expiration of the project and if a Claims Made policy is not renewed or replaced, then evidence of an extended reporting period of six (6) years shall be provided.
- 2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers. Any insurance or self-insurance maintained or expired by the Authority, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- 3. The Contractor on behalf of itself and its liability insurance carriers release and waive any claims and subrogation rights against The Authority, its successors and assigns, director, officers, officials, employees, agents, partners, and volunteers. The Contractor agrees that they will cause its insurance carriers to include in its policies such a clause or endorsement. If extra cost shall be charged therefore, the Contractor shall pay the same.
- 4. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled or materially changed, except after thirty (30) days / (ten (10) days for non-payment of premium) without prior written notice given to the Authority through certified mail, with return receipt requested.
- 5. Maintenance of the proper insurance for the duration of the contract is a material element of the contract. Material changes in the required coverage or cancellation of the coverage shall constitute a material breach of the contract.

Builders Risk / Course of Construction Policies shall contain the following provisions:

- 1. The Authority and its insurers shall be named as loss payees.
- 2. The insurer shall waive all rights of subrogation against the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers.

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ACCEPTABILITY OF INSURERS:

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than **A-:VII**. Contractors must provide written verification of their insurer's rating.

VERIFICATION OF COVERAGE:

Contractor shall furnish the Authority with **original certificates** and **amendatory endorsements** affecting coverage required by this clause. The endorsements should be on forms provided by the Authority or on other than the Authority's forms, provided those endorsements conform fully to the requirements. All certificates and endorsements are to be received and approved by the Authority before work commences in sufficient time to permit contractor to remedy any deficiencies. The Authority reserves the right to require complete, certified copies of all required insurance policies, or pertinent parts thereof, including endorsements affecting the coverage required by these specifications at any time.

SUBCONTRACTORS:

- 1. Subcontractor shall include the Contractor as additional insured under their policies. All coverages for subcontractors shall be subject to all of the requirements stated herein.
- 2. Contractor shall be responsible for the adequacy of required coverages for subcontractors, and compile related certificates of insurance and endorsements evidencing subcontractors' compliance.

INDEMNIFICATION AND HOLD HARMLESS:

- 1. To the fullest extent permitted by law the Contractor hereby agrees to indemnify and hold harmless the KCHA, its successors and assigns, directors, officials, officers and employees, volunteers, partners and agents (all foregoing singly and collectively "Indemnitees"), from and against any and all claims losses, harm, costs, liabilities, damages and expenses including, but not limited to, reasonable attorneys' fees arising or resulting from the performance of the Work, or the acts or omissions of the Contractor its successors and assigns, employees, subcontractors or anyone acting on the Contractor's behalf in connection with this Contract or its performance; PROVIDED, however, that the Contractor shall not be required to so indemnify any such Indemnitees against liability for damages caused by or resulting from the sole negligence of Indemnitees; PROVIDED FURTHER that if such damages are caused by or result from the concurrent negligence of the Indemnitees and the Contractor or anyone acting on the Contractor's behalf, then the Contractor's indemnity hereunder shall be limited to the extent of the negligence of the Contractor, its successors and assigns, et al.
- 2. The foregoing indemnity is specifically and expressly intended to constitute waiver of the Contractor's immunity under Washington's Industrial Act, RCW Title 51, and that this waiver has been specifically negotiated and agreed upon by the parties.
- 3. The Contractor hereby agrees to require all its subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this Contract to execute an indemnity clause identical to the preceding clause, specifically naming KCHA as Indemnitee, and failure to do so shall constitute a material breach of this Contract by the Contractor.

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY CG 20 10 10 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:	

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

- A. Section II Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.
- B. With respect to the insurance afforded to these additional insureds, the following exclusion is added:
 - 2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or
- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

COMMERCIAL GENERAL LIABILITY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – (FORM B)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART.

SCHEDULE

Name of Person or Organization:

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you.

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY CG 20 37 10 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:
Location And Description of Completed Operations:
Additional Premium:

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

Section II – Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" at the location designated and described in the schedule of this endorsement performed for that insured and included in the "products-completed operations hazard".



SITE SPECIFIC SAFETY PLAN REQUIREMENTS

Following is a list of the elements that are typically addressed in a construction site specific safety plan. A site specific safety plan will be one of the required post-selection documents be submitted by the contractor selected through this bid solicitation.

In addition to the typical elements of a construction safety plan that addresses the contractor, the Governor of the State of Washington has instituted additional proclamations and rules surrounding the COVID-19 virus that must be included. Because COVID-19 is a pandemic which is evolving rapidly, when warranted, it is expected that these project-specific safety plan(s) will be updated by the Contractor to reflect the most current rules in effect.

NOTE: For any project that requires entry into occupied units, the Contractor's Site Specific Safety Plan **will be required** to describe the specific construction techniques and use of PPE designed planned to keep the tenants and the workers safe from COVID-19 virus transmission.

The selected contractor with responsible for obtaining similar plans from all subcontractors and for the supervision and enforcement of safety requirements on the site. The contractor's Site-Specific Safety Plan will be submitted to KCHA before any work can begin. The Plan will need to address the following:

- 1. An initial job/job-site safety orientation and a schedule of weekly safety meetings that show employees and subcontractors what they need to know to perform their job assignments safely.
- 2. Details how and when to report on-the-job injuries.
- 3. Identifies on-site available 1st Aid / CPR trained personnel, readily accessible first-aid on the job site and/or access to the nearest clinic or hospital from the job site.
- 4. Identifies what to do in an emergency, including how to exit the workplace.
- 5. Lists the required personal protective equipment (PPE) and describes the proper use and care of the PPE.
- 6. Details the on-site Haz-Com Program that identifies hazardous materials (Asbestos, Lead) or chemicals including instruction about the safe use and storage.
- 7. Designates an on-site representative responsible for job-site Safety.
- 8. Designates who is responsible for performing and recording regular periodic site reviews, and inspections for your employees and subcontractors.
- 9. Describes programs related to housekeeping and jobsite safety.
- 10. Outlines the job-site specific fall protection plan.
- 11. Describes electrical and/or power generation controls on-site.
- 12. Has provisions for trenching /excavations and/or confined space entry.

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION



CAPITAL CONSTRUCTION DEPARTMENT

- Outlines procedures that comply with the governor's requirements as stated in his COVID-19 Phase 2 Construction Restart Job Site Work Plan; including the following:
 - a. General site COVID-19 measures.
 - b. Occupied unit entry (what workers PPE workers will be required to wear, sanitization protocols, etc. that will keep both the worker and the tenant safe).
 - c. Occupied unit exit (what workers will be required to do upon exiting an occupied unit that will keep both the work and the tenant safe).
 - d. Procedures workers will have to follow if entering multiple units within a day (with emphasis on PPE protocols between units if worker(s) are entering multiple units one after the other).

KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION



CAPITAL CONSTRUCTION DEPARTMENT

SUB-CONTRACTOR VERIFICATION FORM

It is the responsibility of the General Contractor to obtain and verify the Subcontractor's Information described below. For compliance, the General Contractor must submit a copy of the Subcontractor Verification form prior to the sub starting work. A copy of the Affidavit of Intent form must accompany the applicable Certified Payroll. Without these forms, the Pay Application maybe withheld.

KCHA will review subcontractors' qualifications, safety record, and the history of compliance (including subcontractor's principals working under another company name) with labor and other state and federal laws. Based on this review, KCHA reserves the right at its sole discretion to reject subcontractors and require the selected General Contractor to replace or substitute a subcontractor with one acceptable to KCHA.

Name of Company:	
Physical Address:	
Contact Name and Title	
Email Address:	Phone No.:
WA State Contractor's License:	UBI Number:
Employment Security Number:	L&I's Workers' Comp. Acct. ID:
Federal Tax ID Number:	DUNS Number:
SUB-CONTRACTOR IS A(N): Individu	ual Partnership* Corporation** – in state of
* If Partnership, prov	ride Full Name(s) and Address(es) of all parties
** If your company is "also kno	own as (AKA)" or "doing business as (DBA) list all names
· · · · ·	· , • • · ,
	FICATION RATE (EMR): 2019; 2020; 2021; of EMR stated, showing complete worksheet calculations).
Sub-Contractor is not presently debarred, suspen excluded from covered transactions by any feder	ded, proposed for debarment, declared ineligible, or voluntarily al department or agency:
NOTE : The penalty for making false statement	in offer is prescribed in 18 U.S.C. 1001.
SUBMITTED ON : Day of	, 20
Signature of General Contractor	Name of General Contractor (Print)
Title of General Contractor (Print)	Date

OMB Approval No. 2577-0157 (Exp. 01/31/2017)

Certification of Payments to Influence Federal Transactions

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

CONTRACT DOCUMENT C.7

Applicant Name	
Program/Activity Receiving Federal Grant Funding	
The undersigned certifies, to the best of his or her knowledge and	belief, that:
(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement. (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLI, Disclosure Form to Report Lobbying, in accordance with its instructions.	(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
I hereby certify that all the information stated herein, as well as any info Warning: HUD will prosecute false claims and statements. Conviction 1012; 31 U.S.C. 3729, 3802)	
Name of Authorized Official	Title
Signature	Date (mm/dd/yyyy)

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

0348-0046

(See reverse for public burden disclosure.) **CONTRACT DOCUMENT C.8** 1. Type of Federal Action: 2. Status of Federal Action: 3. Report Type: a. contract a. bid/offer/application a. initial filing b. grant b. initial award b. material change c. cooperative agreement For Material Change Only: c. post-award year _____ quarter ____ e. loan guarantee date of last report f. loan insurance 4. Name and Address of Reporting Entity: 5. If Reporting Entity in No. 4 is a Subawardee, Enter Name Subawardee and Address of Prime: Prime Tier _____, if known: Congressional District, if known: **Congressional District**, *if known*: 6. Federal Department/Agency: 7. Federal Program Name/Description: CFDA Number, if applicable: 9. Award Amount, if known: 8. Federal Action Number, if known: b. Individuals Performing Services (including address if 10. a. Name and Address of Lobbying Registrant (if individual, last name, first name, MI): different from No. 10a) (last name, first name, MI): 11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact Signature: upon which reliance was placed by the tier above when this transaction was made Print Name: _____ or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. Telephone No.: _____ _____ Date: ____

Federal Use Only:

Authorized for Local Reproduction

Standard Form LLL (Rev. 7-97)

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity 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 covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational evel below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
- 11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.



CERTIFICATION OF COMPLIANCE WITH WASHINGTON STATE WAGE PAYMENT STATUTES

· ·		ree year period immediately preceding the bid solicitation date of
		I" violator, as defined in RCW 49.48.082, of any provision of chapters
	•	final and binding citation and notice of assessment issued by the WA
State Department of La	bor & Industries of through	n a civil judgement entered by a court of limited or general jurisdiction.
I certify under penalty	of perjury under the laws o	of the State of Washington that the forgoing is true and correct.
Bidder		
Signature of Authorized	I Official*	
Printed name		
Title		
Date	City	State
Check one:		
Individual Partners	ship Joint Venture	Corporation
State of Incorporation,	or if not a corporation, Stat	te where business entity was formed:
If a co-partnership, give	company name under wh	ich business is transacted:

^{*}If a corporation, this Certification must be executed in the corporate name by the president or vice president (Or any other coporate officer accompanied by evidence of authority to sign). If a co-partnership, Certification must be executed by a partner.

CONTRACT DOCUMENTS C.10

⚠ King County Housing Authority Vendor Set-up Form (Alternative W-9)

FOR KCHA USE ONLY Submitted by:	Vendor Number:	Date:
Name (as shown on your income tax return):		
Business name/disregard entity name, if different from above:		
Check appropriate box for Federal tax classification (required):		
☐ Individual ☐ S Corporation ☐ 1	rust/Estate	ons)
☐ C Corporation ☐ Partnership ☐ E	xempt Payee	
Limited Liability Company (LLC). Enter the tax classification (C=C P=Partnerships)	corporation, S=S Corporation,	>>
	State, and Zip Code: Telephon	e:
Remit to address (if different from above): City,	State, and Zip Code: Email:	
Taxpayer Identification Number (TIN)	PROV	DE ONE ONLY
Enter your TIN in the appropriate box. The TIN provided must match the nathe "Name" line to avoid backup withholding. For individuals, this is your so (SSN). For other entities, it is your employer identification number (EIN).	ocial security number EIN:	
Terms of Payment Net 30 Net 10th c	f Month Other	-
☐ Net 10 ☐ Due upon	receipt	
*Section-3: O Yes O No *Questions can be directed to KCHA Sec	tion 3 Coordinator 206-826-5335	
WMBE: OMINORITY OWNED (MBE OR OWNEN OWNER)	OWNED (WBE) ONot Applicable	
1. White American	American NONE OF THE A	BOVE (NEC)
	acific American Other	541 51
3. Native American 6. Hasidic		
3. Native American		
Certification		
Under the penalties of perjury, I certify that:	and any writing for a number to be issued to me) and	
 The number shown on this form is my correct taxpayer identification number (a I am not subject to backup withholding because: a) I am exempt from backup w 	withholding, or b) I have not been notified by the Interna	Il Revenue Service (IRS) that I am
subject to backup withholding as a result of a failure to report all interest or div		
3. I am a U.S. citizen or other U.S. person. See instructions Certification Instructions: You must cross out item 2 above if you have been notified by the report all interest and dividends on your tax return. For real estate transactions, item 2 distance and the contributions to an individual retirement arrangement (IRA), and generalification, but you must provide your correct TIN.	he IRS that you are currently subject to backup withholo oes not apply. For mortgage interest paid, acquisition o nerally, payments to other than interest and dividends,	ding because you have failed to fabandonment of secured property,
The IRS doe not require your consent to any provision of this document other than the co	rtification required to avoid backup withholding.	
SIGN HERE Signature of U.S. Person:	Date:	
Return completed form to King County Housing Authority, 600 A	ndover Park West, Tukwila, WA 98188	
See instructions below or refer to the IRS instructions at		



FINAL AFFIDAVIT OF AMOUNTS PAID

the Sta	atement from the Sub-	n a Final Affidavit Form, re Contract Participant. Not	gardless of tier. Every Prim ary must witness and verify F	rime Participant must Comp Prime Participant.	blete and Sign, Certifying
PROJECT NAME / TITLE:	CONTRACT	CONTRACT NUMBER:			
SCOPE OF WORK:					
PRIME CONTRACTOR / CONSULTANT:				UBI NU	IMBER:
ADDRESS-CITY-STATE-ZIP:					
CONTRACT TYPE:	CONSTRUCTION	ARCHITECT / ENGINE	ERING CONSULTANT	OTHER:	
ORIGINAL CONTRACT AM	IOUNT:	\$			
TOTAL # OF AMENDMENTS:	()	\$		•	
TOTAL # OF CHANGE ORDERS	5: ()	\$	$\overline{}$		
FINAL CONTRACT	AMOUNT:	\$	0.00		
SUB - CONTRACT PARTIC	IPANT:				
CHECK BOX THAT APPLIES:	SUB-C	CONTRACTOR	SUB - CONSULTAN	MATERIAI	LS SUPPLIER
ENTER NAME AND ADDRESS OF CO	OMPANY UBI N	DATE WO		AMOUNTS IN RETAINAGE TO DATE	AMOUNT PAID TO DATE
I, the Undersigned, do hereby c and Department of Revenue h Contractors, Sub-Consultants an for any retainage that is agreed	nave been paid and and Materials Supplie	d all accounts are in rs who have worked u	n good standing . I fuunder my company on th	rther certify that all of its project have been	employees and Sub- paid in full, except
NAME OF COMPANY:					
PRINT NAME OF AUTHORIZED PERSON		TITLE	SIGNATURE		DATE
The Sub-Contractor Participa with all work on the project for shown for work completed or po	which this statemer	nt is submitted, by the	ounts paid. I, the unders e Sub-Contract Participan	igned, do hereby certi t named above has be	fy that in connection een paid the amount
PRIME PARTICIPANT Signature / Title:				DATE:	
Subscribed and Sworn before	e me this	_ day of	20		
(PRINT NAME)	Nota	ry Public in and for t	he State of Washington.	n. i	lahaw.
Residing at:					lotary Seal
_					



SECTION 3 – INDIVIDUAL CERTIFICATION FORM RETURN FORM SINGLE SIDED

Section 3 of the Housing and Urban Development (HUD) Act of 1968, as amended, requires that Housing Authorities and agencies receiving HUD funding, to the greatest extent feasible, provide economic opportunities to low-income persons. **Information provided on this form shall remain confidential and be used for reporting purposes only.** *Print all information*

NAME:			
ADDRESS:			
EMAIL ADDRESS:	PHONE NUMBER:		
HIRE DATE:	POSITION TITLE:		
EMPLOYER / COMPANY NAME	l:		
DD O VE CE AVANCE			
` · ·	operty. the name of the property and skip to Qu		No
2. I am currently in KCHA's Sec		Yes	No
3. I am currently a participant in	a HUD YouthBuild Program. (If "Yes", skip to Question 5)	Yes	No
4. Based on the chart below:			
a. The Region / Area I live in	n is		
b. My total income level for 12 months was at – or below.	the past ow the amount identified on the table belo		

Location		Bremerton Silverdale (Kitsap County)		Seattle, Bellevue Everett (King/Snohomish Counties)		Tacoma (Pierce County)		Sedro Woolley (Skagit County)	
Income	Very low income	≤\$23,950	Very low income	≤\$40,500		Very low income	≤\$31,800	Very low income	≤\$28,850
Limit 1 Person	Low income	\$23,951 to \$52,750	Low income	\$40,501 to \$63,350		Low income	\$31,801 to \$50,900	Low income	\$28,851 to \$46,100

KCHA - EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT



5.	I work for a Section 3 business concern (If "Yes", skip Question 6)	Yes	No
6.	In the past five years, I have been a resident of public housing or Section 8 assisted housing managed by KCHA; a resident of other public housing projects or Section 8 assisted housing, or a YouthBuild participant.	Yes	No
	by certify under the penalty of perjury that the information above is true are, for the last 12 months , has been at or below the income limits designated		my total
Signat	ure Date		

If submitting for a new hire, attach completed forms to Labor Hours Benchmark Status Report and submit to project manager. If submitting for Section 3 business qualification, attach to Section 3 Business Certification Form and submit to project manager. If submitting for general Section 3 certification, or for questions, please contact KCHA by email at Section3@kcha.org.



SECTION 3 – INDIVIDUAL CERTIFICATION FORM FAQ's RETURN FORM SINGLE SIDED

Question: What is this form?

Answer: This form is a Section 3 Certification Form that will be used to determine if an individual

is a Section 3 worker as defined by HUD 24 CFR 75 and the KCHA.

Question: Who fills out this form?

Answer: Any individual who is paid in full or part with HUD funds. (If unsure if position is HUD

funded, please contact Contract administrator.)

Question: What will this form be used for?

Answer: This form will be used for the purpose of determining Section 3 eligibility and for statistical

purposes.

Question: Who collects this form and where does it go?

Answer: Any employer or contractor that has a contract with the KCHA that is HUD funded will

collect this data from any employee who was employed within the last five years. Once the

data is collected the original copy will come to KCHA.

Question: Who is a KCHA Resident?

Answer: Someone who lives in a KCHA Housing Development whose name is listed on a current

lease.

Question: How long should I go back to calculate my income?

Answer: Individuals should calculate back 12 months from their date of hire.

Question: What if I don't live in King County?

Answer: Individuals who do not reside in King County may still be eligible to be certified by KCHA

as a Section 3 resident.

If you have more specific questions, please contact KCHA by email at Section3@kcha.org.



KCHA - EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

SECTION 3 - LABOR HOURS BENCHMARK STATUS REPORT (1) COMPANY NAME: (2) CONTACT PERSON: (3) CONTACT PHONE NO. & EMAIL: (4) PROJECT NAME: (6) CONTRACT AWARD DATE: (5) CONTRACT NO: **SECTION 3 LABOR HOUR BENCHMARKS** FROM: _____ TO: _____ (7) REPORTING PERIOD: AGGREGATE LABOR HOURS PERFORMED BY ALL WORKERS ON (8)PROJECT DURING REPORTING PERIOD: AGGREGATE LABOR HOURS PERFORMED BY SECTION 3 WORKERS ON PROJECT DURING REPORTING PERIOD: AGGREGATE LABOR HOURS PERFORMED BY TARGETED SECTION (10) 3 WORKERS ON PROJECT DURING REPORTING PERIOD: I certify that the information in this report is true and correct to the best of my knowledge: SIGNATURE TITLE PRINT NAME DATE To be completed by KCHA staff **RECEIVED BY:** SIGNATURE TITLE PRINT NAME DATE



SECTION 3 - LABOR HOURS BENCHMARK STATUS REPORT - INSTRUCTIONS

Complete the Labor Hours Benchmark Status Report as indicated below and return the completed form <u>along</u> with the pay application(s) for the same period.

Return the Labor Hours Benchmark Status Report and pay application to:

King County Housing Authority Attn: 700 Andover Park West Tukwila, WA 98188

- (1) Company Name
- (2) Name of Person filling out the Labor Hours Benchmark Status Report
- (3) Phone number and email address of the person filling out the Labor Hours Benchmark Status Report
- (4) Name of the project as it appears on the contract
- (5) Contract Number
- (6) Contract Award date (date of LOA)
- (7) Reporting period should be the same as the pay application period
- (8) Total hours worked by all workers on the project includes Section 3 workers and Targeted Section 3 workers, during the reporting period
- (9) Total hours worked on the project by Section 3 workers during the reporting period
- (10) Total hours worked on the project by Targeted Section 3 workers during the reporting period



D - SECTION

THIRD PARTY REPORTS

D.1	2012 Lead-Based Paint Ins	pection and Risk A	Assessment Report
-----	---------------------------	--------------------	-------------------

D.2 2013 Limited Asbestos and Lead Containing Materials Survey Report



Lead-Based Paint Inspection and Risk Assessment Report

Eastridge House 120 West Sunset Way Issaquah, Washington

Prepared for:

Deborah McCaslin King County Housing 625 Andover Park Tukwila, WA 98188

May 3, 2012 Project No. 40573.071

LEAD-BASED PAINT INSPECTION AND RISK ASSESSMENT

King County Housing Authority
Eastridge House
Issaquah, Washington

Prepared for:

King County Housing Authority 625 Andover Park West Tukwila, Washington 98188

This lead-based paint inspection and risk assessment is for the exclusive use of the client and/or building owner and is not to be photographed, photocopied, or similarly reproduced in total or in part without the expressed written consent of the client and/or building owner.

Prepared by
PBS Engineering + Environmental
2517 Eastlake Avenue East, Suite 100
Seattle, Washington 98102
206.233.9639

LEAD-BASED PAINT INSPECTION AND RISK ASSESSMENT KING County Housing Authority Eastridge House Issaquah, Washington

TABLE OF CONTENTS

1.0	IDENTIFYING INFORMATION	1
2.0	LEAD PAINT INSPECTION	2
2.1	Site Information	
2.2	Lead-Based Paint Inspection and Sampling	2
2.3	Components with Lead-Based Paint	
2.4	Deteriorated Lead-Based Paint Surfaces	
3.0	LEAD-BASED PAINT RISK ASSESSMENT	3
3.1	Locations and Types of Lead Hazards Identified	3
3.2	Dust Sample Results	3
3.3	Soil Samples	4
4.0	LEAD HAZARD CONTROL	4
4.1	Definitions	4
4.2	Program Development	4

SUPPORTING DATA

TAB 1 - SAMPLING INVENTORIES AND LABORATORY DATA SHEETS

XRF Data Sheets Bulk Paint Chip Samples Results

TAB 2 - CERTIFICATIONS

Risk Assessor PBS Engineering + Environmental Analytical Laboratory

i

1.0 **IDENTIFYING INFORMATION**

BUILDING DATA

CLIENT DATA

Eastridge House 120 West Sunset Way Issaquah, WA 98027 King County Housing Authority 625 Andover Park West Tukwila, Washington 98188

Attn: Ms. Deborah McCaslin

SCOPE OF ASSESSMENT

PBS Engineering + Environmental (PBS) conducted a lead-based paint inspection and risk assessment on April 27th and 30th, 2012, in accordance with the U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. Twenty-four units in the building were randomly selected to be included in the inspection and risk assessment. The halls, stairwells, laundry rooms, offices, restrooms, janitor's closets, shop and maintenance shed were also included in the scope.

DWELLING SELECTION PROCESS

The client provided access and input in the unit selection process. Unit selection here was partly based on tenant agreement.

CERTIFICATIONS

Risk Assessor

Janet Murphy

State of Washington

Department of Community, Trade and Economic Development Risk Assessor Certification No: 0258 Expiration Date:3/8/2013

Signature

May 3, 2012

Date

Certifying Firm

PBS Engineering + Environmental 2517 Eastlake Avenue East Seattle, Washington 98102

Telephone: 206.223.9639

Certification No: 0178 Expiration Date: 9/3/2013

Certified Laboratory

NVL Laboratories, Inc 4708 Aurora Avenue North Seattle, Washington 98102 Telephone: 206.547.0100 AIHA NLLAP Certification No: 101861

2.0 **LEAD PAINT INSPECTION**

2.1 **Site Information**

The building is a 40-unit, three story apartment building constructed in 1971. The building is of wood construction with gypsum interior walls and ceilings. The exterior is brick with wood trim. Apartment units are studio or one bedroom each with a bathroom and a kitchen/living room area. The building is in good condition.

The majority of the interior surfaces are painted. Walls are painted gypsum wallboard. Bathroom walls have ceramic tile or laminate inserts around tubs. Door frames are medium-density fiberboard (MDF) or metal with factory-painted coatings. The doors are painted wood or metal. The window frames are unpainted aluminum.

2.2 Lead-Based Paint Inspection and Sampling

The presence of lead in paint was determined through two methods, x-ray fluorescence spectroscopy and paint chip sampling.

2.2.1 XRF Sampling

A handheld INNOV-X Systems Inc. X-Ray Fluorescence Analyzer (XRF) operating in lead paint mode was used to perform a surface by surface lead paint inspection of each selected unit and building.

HUD and Environmental Protection Agency (EPA) have set 1.0 milligrams per square centimeter (mg/cm²) as the threshold limit for lead-based paint as determined through X-Ray Fluorescence (XRF) testing. HUD and EPA have set 5,000 parts per million (ppm), or 0.5 percent by atomic absorption laboratory analysis as the threshold limit for lead-based paint. Paint that is known to contain lead levels less than those described above does not have to be evaluated, although all deteriorated paint (paint surfaces in poor condition) should be repaired because it may contain lower levels of lead that may contribute to lead dust or lead contaminated soil hazards.

All calibration readings were within the tolerance for this instrument. No substrate correction is required with the INNOV-X Systems XRF per the instrument's performance characteristic sheet.

The "Side" information presented on the XRF data sheets is in relation to the side of the rooms, or building exteriors where the XRF test spot is located. The inspector/risk assessor used the north side of each residence as the basis to establish side "A". Sides B, C, and D follow in clockwise rotation.

Please refer to the XRF sample data table for the complete list of XRF samples located in Tab 1.

2.2.2 Bulk Paint-Chip Sampling

Bulk paint chip verification samples were collected from selected painted surfaces. Paint chip samples were submitted to a qualified lab for analysis by atomic absorption, EPA Method 7000. Bulk paint chip sample laboratory results are located in Tab 1.

2.3 Components with Lead-Based Paint

Lead was not found in any painted components above the HUD level of 1.0mg/cm² by XRF or 0.5% by flame atomic absorption spectrometry (FAAS).

2.4 Deteriorated Lead-Based Paint Surfaces

Painted surfaces were evaluated to be in an intact or fair condition. It was determined that no lead was present in any areas tested.

Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

The EPA/HUD threshold for bare residential soil is 1,200 parts per million (ppm) and for child's play areas is 400 ppm.

Analysis of the composite soil samples collected from the exterior drip lines of selected buildings revealed lead in soil below the EPA/HUD threshold for bare residential soil. Lead soil sample chain-of-custody and lab reports are located under Tab 1. There were no playground areas in the complex for soil sampling.

3.0 LEAD-BASED PAINT RISK ASSESSMENT

3.1 Locations and Types of Lead Hazards Identified

Lead hazards were not identified at this facility. Lead was not found in any painted components above the HUD level of 1.0mg/cm² by XRF or 0.5% by flame atomic absorption spectrometry (FAAS).

3.2 **Dust Sample Results**

The purpose of dust sampling is to determine the lead concentration in settled dust. Dust is an important pathway for childhood exposure to lead. Children can be exposed to leaded dust by inhalation or ingestion. Ingestion of leaded dust is a common pathway during normal hand to mouth activities involving their fingers, or toys that that have come in contact with leaded dust wipe sampling is the recommended method for collecting surface dust samples. Dust samples are typically collected from floors near friction and impact spots or areas of deteriorated paint, interior window sills, and window wells. Cabinets, shelves, and table tops may also be sampled if there is reason to suspect a surface dust hazard may exist caused by friction, impact points, or from areas of deteriorated paint nearby.

Dust wipes were collected in accordance with EPA 747-R-95-001, Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All wipe samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

HUD has established the following threshold limits for lead in settled dust in target housing: $40 \mu g/ft^2$ on floors, $250 \mu g/ft^2$ on window sills, and $400 \mu g/ft^2$ in window wells.

Results of the single surface dust sampling conducted during this assessment revealed lead concentrations below EPA/HUD lead standards indicating that lead hazards do not exist as discussed above. The following table lists the locations and findings from lead dust wipe sampling.

PBS Sample #	Surface	Sample Location	Results (µg/sq. ft)
40573.071 W-1	Sill	Unit 105 Bedroom	<18.0
40573.071 W-2	Floor	Unit 107 Kitchen	<36.0
40573.071 W-3	Floor	Unit 312 Bedroom	<18.0
40573.071 W-4	Floor	Unit 206 Kitchen	<36.0
40573.071 W-5	Floor	Unit 306 Kitchen	<18.0
40573.071 W-6	Sill	Unit 306 Bedroom	<18.0

3.3 **Soil Samples**

Composite soil sampling was conducted around the foundation or "drip line" of the buildings and from the play area. The soil samples were collected in accordance with EPA 747-R-95-001, Residential Sampling for Lead: Protocols for Dust and Soil Sampling. All samples were analyzed using EPA Method SW846-7000B, Flame Atomic Absorption.

The EPA/HUD threshold for bare residential soil is 1,200 parts per million (ppm).

Analysis of the composite soil samples collected from the exterior drip line of the building revealed lead in soil **below** the EPA/HUD threshold for bare residential soil.

4.0 **LEAD HAZARD CONTROL**

4.1 **Definitions**

Lead-based paint hazards have not been identified at this site. Lead-based paint was not identified at this property.

4.2 **Program Development**

A lead hazard control program is not required to be established for this property.

TAB 1

Lab Reports and Sample Data Sheets XRF Data Sheets Bulk Sample Analyses

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
1	Standardization	-0.011613	PASS				Test		
2	Calibration	surface	Negative	0.99			Test		
3	Calibration	surface	Positive	1.11			Test		
4	Standardization	-0.012951	PASS				Test		
5	Calibration	surface	Positive	1.02			Test		
6	Calibration	surface	Positive	1.05			Test		
7	Calibration	surface	Positive	1.01			Test		
					1st Floor Janitor's Closet				
8	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall A	Gypsum wallboard	Good	White
9	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall B	Gypsum wallboard	Good	White
10	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall C	Gypsum wallboard	Good	White
11	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Wall D	Gypsum wallboard	Good	White
12	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Ceiling	Gypsum wallboard	Good	White
13	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Door	Wood	Good	White
14	Lead Paint Fixed-Time		Negative	0	1st flr janitor's closet	Door frame	Metal	Good	White
					1st Floor Stairwell W				
15	Lead Paint Fixed-Time	surface	Negative	0.16	1st flr stairwell, west	Rail	Metal	Good	Black
16	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Riser	Wood	Good	Brown
17	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Door	Wood	Good	White
18	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Door frame	Metal	Good	White
19	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall A	Gypsum wallboard	Good	White
20	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall B	Gypsum wallboard	Good	White
21	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall C	Gypsum wallboard	Good	White
22	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Wall D	Gypsum wallboard	Good	White
23	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, west	Ceiling	Gypsum wallboard	Good	White
					1st Floor Electrical Rm				
24	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall A	Gypsum wallboard	Good	White
25	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall B	Gypsum wallboard	Good	White
26	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall C	Gypsum wallboard	Good	White
27	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Wall D	Gypsum wallboard	Good	White
28	Lead Paint Fixed-Time		Negative	0.02	1st flr electrical room	Ceiling	Gypsum wallboard	Good	White
29	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Door	Wood	Good	White
30	Lead Paint Fixed-Time		Negative	0	1st flr electrical room	Door frame	Metal	Good	White
					1st Floor Shop				
31	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall A	Gypsum wallboard	Good	White
32	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall B	Gypsum wallboard	Good	White
33	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall C	Gypsum wallboard	Good	White
34	Lead Paint Fixed-Time		Negative	0	1st flr shop	Wall D	Gypsum wallboard	Good	White
35	Lead Paint Fixed-Time		Negative	0	1st flr shop	Ceiling	Gypsum wallboard	Good	White
36	Lead Paint Fixed-Time		Negative	0	1st flr shop	Door	Wood	Good	White
37	Lead Paint Fixed-Time		Negative	0	1st flr shop	Door frame	Metal	Good	White

PBS Project # 40573.071 1 of 5

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
_					1st Floor Hall	•			
38	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall A	Gypsum wallboard	Good	White
39	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall B	Gypsum wallboard	Good	White
40	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall C	Gypsum wallboard	Good	White
41	Lead Paint Fixed-Time		Negative	0	1st flr hall	Wall D	Wall paper and GWB	Good	White
					1st Floor Lobby				
					1st flr lobby	Wall A	No Gypsum wallboar	d - windows	White
					1st flr lobby	Wall B	Wall paper over Gyps	um wallboard	White
					1st flr lobby	Wall C	Wall paper over Gyps	um wallboard	White
					1st flr lobby	Wall D	Wall paper over Gyps	um wallboard	White
42	Lead Paint Fixed-Time		Negative	0	1st flr lobby	Ceiling	Gypsum wallboard	Good	White
					1st Floor Office				
43	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall A	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall B	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall C	Gypsum wallboard	Good	White
46	Lead Paint Fixed-Time		Negative	0	1st flr office	Wall D	Gypsum wallboard	Good	White
47	Lead Paint Fixed-Time		Negative	0	1st flr office	Ceiling	Gypsum wallboard	Good	White
48	Lead Paint Fixed-Time		Negative	0	1st flr office	Door	Wood	Good	White
49	Lead Paint Fixed-Time		Negative	0	1st flr office	Door frame	Metal	Good	White
					Office Vestibule/Waiting Rm				
50	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Ceiling	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time		Negative	0	Office vestibule/ waiting room	Wall A	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Wall B	Gypsum wallboard	Good	White
53	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Wall C	Gypsum wallboard	Good	White
54	Lead Paint Fixed-Time		Negative	0	Office vestibule/ waiting room	Wall D	Gypsum wallboard	Good	White
55	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Door	Wood	Good	White
56	Lead Paint Fixed-Time		Negative	0	Office vestibule /waiting room	Door frame	Metal	Good	White
					1st Floor Elevator Equip Rm				
57	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Wall A	Gypsum wallboard	Good	White
58	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Wall B	Gypsum wallboard	Good	White
59	Lead Paint Fixed-Time		Negative	0.01	1st flr elev equipment room	Wall C	Gypsum wallboard	Good	White
60	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Wall D	Gypsum wallboard	Good	White
61	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Ceiling	Gypsum wallboard	Good	White
62	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Door	Wood	Good	White
63	Lead Paint Fixed-Time		Negative	0	1st flr elev equipment room	Door frame	Metal	Good	White
64	Lead Paint Fixed-Time	surface	Negative	0.08	1st flr elev equipment room	Floor	Concrete	Good	Gray
					1st Flr Womens Restroom				
65	Lead Paint Fixed-Time	surface	Negative	0.02	1st flr Women's restroom	Wall A	Gypsum wallboard	Good	White
66	Lead Paint Fixed-Time		Negative	0	1st flr Women's restroom	Wall B	Gypsum wallboard	Good	White
67	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Women's restroom	Wall C	Gypsum wallboard	Good	White
68	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Women's restroom	Wall D	Gypsum wallboard	Good	White
69	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Women's restroom	Ceiling	Gypsum wallboard	Good	White

PBS Project # 40573.071 2 of 5

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
70	Lead Paint Fixed-Time		Negative	0	1st flr Women's restroom	Door	Wood	Good	White
71	Lead Paint Fixed-Time		Negative	0	1st flr Women's restroom	Door frame	Metal	Good	White
72	VOID		· ·						
					1st Floor Mens Restroom				
73	Lead Paint Fixed-Time	surface	Negative	0.03	1st flr Men's restroom	Wall A	Gypsum wallboard	Good	White
74	Lead Paint Fixed-Time		Negative	0	1st flr Men's restroom	Wall B	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time		Negative	0.03	1st flr Men's restroom	Wall C	Gypsum wallboard	Good	White
76	VOID								
77	Lead Paint Fixed-Time		Negative	0.01	1st flr Men's restroom	Ceiling	Gypsum wallboard	Good	White
78	Lead Paint Fixed-Time		Negative	0	1st flr Men's restroom	Door	Wood	Good	White
79	Lead Paint Fixed-Time		Negative	0	1st flr Men's restroom	Door frame	Metal	Good	White
80	VOID								
81	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Men's restroom	Wall D (repeat)	Gypsum wallboard	Good	White
					1st Floor Kitchen				
82	Lead Paint Fixed-Time	surface	Negative	0.06	1st flr Kitchen	Wall A	Gypsum wallboard	Good	White
83	Lead Paint Fixed-Time	surface	Negative	0.09	1st flr Kitchen	Wall B	Gypsum wallboard	Good	White
84	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Kitchen	Wall C	Gypsum wallboard	Good	White
85	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Kitchen	Wall D	Gypsum wallboard	Good	White
86	Lead Paint Fixed-Time	surface	Negative	0.04	1st flr Kitchen	Ceiling	Gypsum wallboard	Good	White
87	Lead Paint Fixed-Time		Negative	0	1st flr Kitchen	Door	Wood	Good	White
88	Lead Paint Fixed-Time		Negative	0	1st flr Kitchen	Door frame	Metal	Good	White
					1st Floor Community Rm				
89	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Ceiling	2'x4' Ceiling Tile	Good	White
90	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall A	Gypsum wallboard	Good	White
91	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall B	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall C	Gypsum wallboard	Good	White
93	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Wall D	Gypsum wallboard	Good	White
94	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Door	Wood	Good	White
95	Lead Paint Fixed-Time		Negative	0	1st flr Community room	Door frame	Metal	Good	White
96	Lead Paint Fixed-Time	surface	Negative	0.01	1st flr Community room	Windowsill	Wood	Good	Brown
				_	1st Floor Stairwell N				
97	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Ceiling	Gypsum wallboard	Good	White
98	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall A	Gypsum wallboard	Good	White
99	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall B	Gypsum wallboard	Good	White
100	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall C	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Wall D	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	surface	Negative	0.08	1st flr stairwell, north	Riser	Wood	Good	Brown
103	Lead Paint Fixed-Time		Negative	0	1st flr stairwell, north	Rail	Metal	Good	Black
404			NI C	•	Unit 107	0 '''		0 1	14/1 1/
104	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Ceiling	Gypsum wallboard	Good	White
105	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Wall A	Gypsum wallboard	Good	White
106	Lead Paint Fixed-Time	surface	Negative	0.02	Kitchen/dining room	Wall B	Gypsum wallboard	Good	White

PBS Project # 40573.071 3 of 5

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
107	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Wall C	Gypsum wallboard	Good	White
108	VOID		· ·		· ·		••		
109	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Closet roll door	Wood	Good	White
110	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Kitchen cabinet	Wood	Good	Brown
111	Lead Paint Fixed-Time		Negative	0	Kitchen/dining room	Wall D (repeat)	Gypsum wallboard	Good	White
112	Lead Paint Fixed-Time		Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
113	Lead Paint Fixed-Time		Negative	0.01	Bedroom	Wall A	Gypsum wallboard	Good	White
114	VOID								
115	VOID								
116	Lead Paint Fixed-Time		Negative	0.07	Bedroom	Wall D	Gypsum wallboard	Good	White
117	Lead Paint Fixed-Time		Negative	0	Bedroom	Door	Wood	Good	White
118	Lead Paint Fixed-Time		Negative	0	Bedroom	Door frame	Metal	Good	White
119	Lead Paint Fixed-Time		Negative	0	Bedroom	Windowsill	Wood	Good	White
120	Lead Paint Fixed-Time		Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
121	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
122	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
123	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
124	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
125	Lead Paint Fixed-Time		Negative	0	Bathroom	Door	Wood	Good	White
126	Lead Paint Fixed-Time		Negative	0	Bathroom	Door frame	Metal	Good	White
127	Lead Paint Fixed-Time		Negative	0	Patio	Column	wood	Good	Black
128	Lead Paint Fixed-Time		Negative	0	Patio	Soffit	wood	Good	BlackBlack
129	Lead Paint Fixed-Time		Negative	0	Patio	Trim	wood	Good	Brown
					Unit 105				
130	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
131	VOID								
132	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Wall B	Gypsum wallboard	Good	White
133	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Wall C	Gypsum wallboard	Good	White
134	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Wall D	Gypsum wallboard	Good	White
135	Lead Paint Fixed-Time		Negative	0	Back of kitchen	Wall D	Gypsum wallboard	Good	White
136	Lead Paint Fixed-Time		Negative	0	Side of kitchen	Wall C	Gypsum wallboard	Good	White
137	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Roll closet door	Wood	Good	White
138	Lead Paint Fixed-Time		Negative	0	Kitchen/living room	Kitchen cabinet	Wood	Good	Brown
139	Lead Paint Fixed-Time		Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
140	VOID								
141	Lead Paint Fixed-Time		Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
142	Lead Paint Fixed-Time		Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
143	Lead Paint Fixed-Time		Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
144	Lead Paint Fixed-Time		Negative	0	Bedroom	Windowsill	Wood	Good	White
145	Lead Paint Fixed-Time		Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
146	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
147	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White

PBS Project # 40573.071 4 of 5

PBS Engineering + Environmental April 27, 2012 Part 1

Lead-Based Paint Inspection Eastridge House - Issaquah Issaquah, WA

Reading	Mode	Pass/Fail	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
148	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
149	Lead Paint Fixed-Time		Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
150	Lead Paint Fixed-Time		Negative	0	Bathroom	Door	Wood	Good	White
151	Lead Paint Fixed-Time		Negative	0	Bathroom	Door frame	Metal	Good	White

PBS Project # 40573.071 5 of 5

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
				2nd Floor W Stairwell		0 4.00 1.4.0		00.0.
1	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Ceiling	Gypsum wallboard	Good	White
2	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall A	Gypsum wallboard	Good	White
3	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall B	Gypsum wallboard	Good	White
4	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall C	Gypsum wallboard	Good	White
5	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Wall D	Gypsum wallboard	Good	White
6	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Rail	Metal	Good	Black
7	Lead Paint Fixed-Time	Negative	0	2nd flr, west stairwell	Riser	Wood	Good	Brown
		· ·		2nd Floor N Stairwell				
8	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Ceiling	Gypsum wallboard	Good	White
9	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall A	Gypsum wallboard	Good	White
10	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall B	Gypsum wallboard	Good	White
11	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall C	Gypsum wallboard	Good	White
12	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Wall D	Gypsum wallboard	Good	White
13	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Rail	Metal	Good	Black
14	Lead Paint Fixed-Time	Negative	0	2nd flr, north stairwell	Riser	Wood	Good	Brown
				Unit 107				
15	Lead Paint Fixed-Time	Negative	0	Unit 107	Front door	Wood	Good	White
16	Lead Paint Fixed-Time	Negative	0	Unit 107	Door frame	Metal	Good	White
				Unit 105				
17	Lead Paint Fixed-Time	Negative	0	Unit 105	Front door	Wood	Good	White
18	Lead Paint Fixed-Time	Negative	0	Unit 105	Door frame	Metal	Good	White
				Unit 201				
19	Lead Paint Fixed-Time	Negative	0	Unit 201	Front door	Wood	Good	White
20	Lead Paint Fixed-Time	Negative	0	Unit 201	Door frame	Metal	Good	White
				Unit 202				
21	Lead Paint Fixed-Time	Negative	0	Unit 202	Front door	Wood	Good	White
22		Negative	0	Unit 202	Door frame	Metal	Good	White
23	Standardization	PASS				Test		
24	Calibrate	Positive	1.07			Test		
25	Calibrate	Positive	1.01			Test		
26	Calibrate	Positive	1			Test		
27	Calibrate	Negative	0.98			Test		
		N 1 (1)	•	Unit 201	0 '''		0 1	100
28	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
29		Negative	0	Unit 201 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
30		Negative	0	Unit 201 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
31	Lead Paint Fixed-Time	Negative	0	Unit 201 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
32		Negative	0	Unit 201 - Kitchen/living room	Wall D	Wood	Good	White
33		Negative	0	Balcony	Pole	Wood	Good	Black
34	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
35	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White

PBS Project # 40573.071 1 of 7

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
36	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
37	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
38	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
39	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
40	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White
41	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
42		Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
43	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
46	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
47	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Metal	Good	White
		· ·		Unit 203				
48	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
49	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
50	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time	Negative	0	Unit 203 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
53	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
54	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
55	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
56	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
57	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
58	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White
59	Lead Paint Fixed-Time	Negative	0	Bedroom	Door	Wood	Good	White
60	Lead Paint Fixed-Time	Negative	0	Bedroom	Door Frame	Wood	Good	White
61	VOID							
62	VOID							
63	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
64	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall B	Gypsum wallboard	Good	White
65	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall C	Gypsum wallboard	Good	White
66	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
67	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
68	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
69	VOID							
70	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
				2nd Floor Janitor's Closet				
71	Lead Paint Fixed-Time	Negative	0.02	2nd flr janitor's closet	Ceiling	Gypsum wallboard	Good	White
72	Lead Paint Fixed-Time	Negative	0.03	2nd flr janitor's closet	Wall A	Gypsum wallboard	Good	White
73	Lead Paint Fixed-Time	Negative	0.04	2nd flr janitor's closet	Wall B	Gypsum wallboard	Good	White
74	Lead Paint Fixed-Time	Negative	0.02	2nd flr janitor's closet	Wall C	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time	Negative	0.03	2nd flr janitor's closet	Wall D	Gypsum wallboard	Good	White

PBS Project # 40573.071 2 of 7

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
			_	Unit 202	o			
76		Negative	0	Unit 202 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
77		Negative	0	Unit 202 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
78		Negative	0.07	Unit 202 - Kitchen/living room	Wall B	Test	0 1	100
79		Negative	0	Unit 202 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
80		Negative	0	Unit 202 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
81		Negative	0	Unit 202 - Kitchen/living room	Kitchen Cabinet	Wood	Good	Tan
	Lead Paint Fixed-Time	Negative	0	Unit 202 - Kitchen/living room	Closet door	Wood	Good	White
83		Negative	0	Unit 202 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
84		Negative	0	Unit 202 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
85		Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
86		Negative	0	Bedroom	Windowsill	Wood	Good	Brown
87	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
88	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
89	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
90	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
91	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
93	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
94	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
95	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
96	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
97	VOID							
98	Lead Paint Fixed-Time	Negative	0	Deck	Column	Wood	Good	Brown
99	Lead Paint Fixed-Time	Negative	0	Deck	Soffit	Wood	Good	Brown
				Unit 204				
100	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
103	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
104	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
105	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall B (Back of kitchen)	Gypsum wallboard	Good	White
106	Lead Paint Fixed-Time	Negative	0	Unit 204 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
107	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
108	Lead Paint Fixed-Time	Negative	0.07	Balcony	Column	Wood	Good	Black
109	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
110	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
111		Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
112	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
113	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
114	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
115	Lead Paint Fixed-Time	Negative	0.03	Bathroom	Wall A	Gypsum wallboard	Good	White

PBS Project # 40573.071 3 of 7

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
116	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
117	Lead Paint Fixed-Time	Negative	0.05	Bathroom	Wall C	Gypsum wallboard	Good	White
118	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
119	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
120	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Metal	Good	White
		· ·		2nd Floor Laundry Room				
121	Lead Paint Fixed-Time	Negative	0.02	2nd flr laundry room	Ceiling	Gypsum wallboard	Good	White
122	Lead Paint Fixed-Time	Negative	0.02	2nd flr laundry room	Wall A	Gypsum wallboard	Good	White
123	Lead Paint Fixed-Time	Negative	0.01	2nd flr laundry room	Wall B	Gypsum wallboard	Good	White
124	Lead Paint Fixed-Time	Negative	0.04	2nd flr laundry room	Wall C	Gypsum wallboard	Good	White
125	Lead Paint Fixed-Time	Negative	0.03	2nd flr laundry room	Wall D	Gypsum wallboard	Good	White
126	Lead Paint Fixed-Time	Negative	0	2nd flr laundry room	Door	Wood	Good	White
127	Lead Paint Fixed-Time	Negative	0	2nd flr laundry room	Door frame	Metal	Good	White
128	Lead Paint Fixed-Time	Negative	0.02	2nd flr laundry room	Windowsill	Wood	Good	Brown
				2nd Floor Hall				
129	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall A	Gypsum wallboard	Good	White
130	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall B	Gypsum wallboard	Good	White
131	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall C	Gypsum wallboard	Good	White
132	Lead Paint Fixed-Time	Negative	0	2nd flr hall	Wall D	Gypsum wallboard	Good	White
				Unit 209				
133	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
134	Lead Paint Fixed-Time			Test Canceled				
135	Lead Paint Fixed-Time			Test Canceled				
136	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
137	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
138	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
139	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
140	Lead Paint Fixed-Time	Negative	0.05	Unit 209 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
141	Lead Paint Fixed-Time	Negative	0	Unit 209 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
143	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
144	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
145	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
146	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
147	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	White
148	VOID							
149	VOID		_					
150	Lead Paint Fixed-Time	Negative	0	Bathroom	Roll closet door	Wood	Good	White
151	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
152	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
153	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
154	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White

PBS Project # 40573.071 4 of 7

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
•	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
156	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
157	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
158	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Black
159	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
		. roga o	· ·	Unit 210	5 5		0000	2.00.0
160	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
161	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
162	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
163	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
164	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
165	Lead Paint Fixed-Time	Negative	0	Unit 210 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White
166	VOID							
167	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
168	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
169	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
170	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
171	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
172	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
173	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
174	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall A	Gypsum wallboard	Good	White
175	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
176	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall C	Gypsum wallboard	Good	White
177	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
178	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
179	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
180	Lead Paint Fixed-Time	Negative	0	Bedroom	Roll door on closet	Wood	Good	White
181	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
182	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	White
183	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	White
				Unit 211				
184	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
185	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
186	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
187	Lead Paint Fixed-Time	Negative	0.03	Unit 211 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
189	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
190	Lead Paint Fixed-Time	Negative	0	Unit 211 - Kitchen/living room	Wall B (back of kitchen)	Gypsum wallboard	Good	White
191	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
192	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
193	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
194	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White

PBS Project # 40573.071 5 of 7

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
195	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
196	Lead Paint Fixed-Time	Negative	0.05	Bedroom	Windowsill	Wood	Good	Brown
197	Lead Paint Fixed-Time	Negative	0.07	Bathroom	Ceiling	Gypsum wallboard	Good	White
198	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
199	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
200	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
201	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
202	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
203	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
204	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
205	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown
				Unit 213				
206	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
207	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
208	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
209	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
210	Lead Paint Fixed-Time	Negative	0.02	Unit 213 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
211	Lead Paint Fixed-Time	Negative	0	Unit 213 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
212		Insufficient Test Time	0	Unit 213 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
213		Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
214	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
_	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
216	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
217	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
218	Lead Paint Fixed-Time	Negative	0.04	Bedroom	Windowsill	Wood	Good	Brown
219	VOID							
220	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
221	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
222		Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
223	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
224	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
227	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
228	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown
000		N. a		Unit 215	0 ""		0 1	140.5
229	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
230	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
231	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
232	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
233	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
234	VOID							

PBS Project # 40573.071 6 of 7

Reading	Mode	Pass Fail Standard	Pb	Room	Component	Substrate	Condition	Color
235	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
236	Lead Paint Fixed-Time	Negative	0	Unit 215 - Kitchen/living room	Wall D (side of kitchen)	Gypsum wallboard	Good	White
237	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
238	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
239	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
240	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
241	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Ceiling	Gypsum Wallboard	Good	White
242	Lead Paint Fixed-Time	Negative	0.02	Bedroom	Wall D	Gypsum wallboard	Good	White
243	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
244	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
245	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
246	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
247	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
248	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
249	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
250	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
251	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Brown
252	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Brown

PBS Project # 40573.071 7 of 7

Dandina	Mada	Dece/Feil Ctenderd	Dh	D. a. a. a.	Commonant	Cubatnata	Condition	Calan
Reading		Pass/Fail Standard PASS	Pb	Room	Component	Substrate	Condition	Color
1			0.02			Test Test		
2		Negative	0.93 0.74			Test		
2		Negative	0.74			Test		
		Negative Positive	1.12			Test		
		Negative	0.96			Test		
7			0.90			Test		
8		Negative	0.73			Test		
(Negative	0.96			Test		
10		Negative Negative	0.85			Test		
10	Calibrate	Negative	0.65	Building Exterior		1621		
4.	Lead Paint Fixed-Time	Negativo	0.13		Plywood under window	Wood	Cood	Black
	Lead Paint Fixed-Time Lead Paint Fixed-Time	Negative	0.13	Building Exterior Building Exterior	Door C	Wood	Good Good	Black
	Lead Paint Fixed-Time Lead Paint Fixed-Time	Negative	0.07	Building Exterior	Plywood under window	Wood	Good	Black
	Lead Paint Fixed-Time	Negative	0.07	<u> </u>	Door C	Wood	Good	Black
	Lead Paint Fixed-Time Lead Paint Fixed-Time	Negative		Building Exterior	Bench	Wood		
	Lead Paint Fixed-Time Lead Paint Fixed-Time	Negative	0 0	Building Exterior	Bench	Wood	Good Good	Black Black
	Lead Paint Fixed-Time Lead Paint Fixed-Time	Negative	0	Building Exterior		Wood		Black
17	Leau Faiiil Fixeu-Tiiile	Negative	U	Building Exterior Exterior Shed	Bench	vvood	Good	DIACK
11	Lead Paint Fixed-Time	Negative	0	Exterior shed	Wall A	Wood	Good	Tan
	Lead Paint Fixed-Time	Negative	0		Wall B	Wood	Good	Tan
	Lead Paint Fixed-Time Lead Paint Fixed-Time		0	Exterior shed Exterior shed	Wall C	Wood	Good	Tan
	Lead Paint Fixed-Time	Negative Negative	0		Wall D	Wood	Good	Tan
	Lead Paint Fixed-Time	Negative	0	Exterior shed Exterior shed	Door	Metal	Good	White
22	. Leau Faiiil Fixeu-Tiille	Negative	U	Unit 206	D001	ivietai	Good	vviile
2'	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0.02	Unit 206 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0.02	Unit 206 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Unit 206 - Kitchen/living room		Gypsum wallboard	Good	White
29		Negative	0	Unit 206 - Kitchen/living room		Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Black
	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Balcony	Wall A	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Balcony	Wall B	Gypsum wallboard	Good	White
_	Lead Paint Fixed-Time	Negative	0	Balcony	Wall C	Gypsum wallboard	Good	White
36		Negative	0	Balcony	Wall D	Gypsum wallboard	Good	White
37		Negative	0.03	Balcony	Windowsill	Wood	Good	Brown
38			0.00	23.00119			2304	2.5
	Lead Paint Fixed-Time	Negative	0		Closet door	Wood	Good	White

PBS Project # 40573.071 1 of 6

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
40	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
41	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
42	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
43	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
46	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
47	VOID	· ·						
				Unit 306				
48	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall A	Gypsum wallboard	Good	White
49	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
50	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall B (Back of kitchen)	Gypsum wallboard	Good	White
53	Lead Paint Fixed-Time	Negative	0	Unit 306 - Kitchen/living	Wall C (back of kitchen)	Gypsum wallboard	Good	White
54	Lead Paint Fixed-Time	Negative	0	Balcony	Pole	Wood	Good	Black
	Lead Paint Fixed-Time	Negative	0	Balcony	Soffit	Wood	Good	Black
56	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
57	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
58	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
59	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
60	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
61	Lead Paint Fixed-Time	Negative	0.04	Bedroom	Windowsill	Wood	Good	Brown
62	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Ceiling	Gypsum wallboard	Good	White
63	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
64	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
65	Lead Paint Fixed-Time	· ·		Cancelled Test		71		
66	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
67	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
68	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
69	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
70	VOID	· ·						
				Unit 307				
71	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Ceiling	Gypsum wallboard	Good	White
72	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall A	Gypsum wallboard	Good	White
73	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
74	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
76	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall D (back of kitchen)	Gypsum wallboard	Good	White
77	Lead Paint Fixed-Time	Negative	0	Unit 307 - Kitchen/living	Wall C (Side of kitchen)	Gypsum wallboard	Good	White
78	VOID	Ü		ğ	,	••		
	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White

PBS Project # 40573.071 2 of 6

80 Lead Paint Fixed-Time Negative 0 Bedroom Wall A Gypsum wallboard Good Wh 81 Lead Paint Fixed-Time Cancelled Test Test 82 Lead Paint Fixed-Time Negative 0 Bedroom Wall B Gypsum wallboard Good Wh 83 Lead Paint Fixed-Time Negative 0 Bedroom Wall C Gypsum wallboard Good Wh 84 Lead Paint Fixed-Time Negative 0 Bedroom Wall D Gypsum wallboard Good Wh 85 Lead Paint Fixed-Time Negative 0 Bedroom Windowsill Wood Good Bro	White White White White White Brown White White White White
81 Lead Paint Fixed-Time Cancelled Test Test 82 Lead Paint Fixed-Time Negative 0 Bedroom Wall B Gypsum wallboard Good Wh 83 Lead Paint Fixed-Time Negative 0 Bedroom Wall C Gypsum wallboard Good Wh 84 Lead Paint Fixed-Time Negative 0 Bedroom Wall D Gypsum wallboard Good Wh 85 Lead Paint Fixed-Time Negative 0 Bedroom Windowsill Wood Good Bro	White White White Brown White White White White White
82Lead Paint Fixed-TimeNegative0BedroomWall BGypsum wallboardGoodWh83Lead Paint Fixed-TimeNegative0BedroomWall CGypsum wallboardGoodWh84Lead Paint Fixed-TimeNegative0BedroomWall DGypsum wallboardGoodWh85Lead Paint Fixed-TimeNegative0BedroomWindowsillWoodGoodBro	White White Brown White White White White White
83 Lead Paint Fixed-Time Negative 0 Bedroom Wall C Gypsum wallboard Good Wh 84 Lead Paint Fixed-Time Negative 0 Bedroom Wall D Gypsum wallboard Good Wh 85 Lead Paint Fixed-Time Negative 0 Bedroom Windowsill Wood Good Bro	White White Brown White White White White White
84 Lead Paint Fixed-Time Negative 0 Bedroom Wall D Gypsum wallboard Good Wh 85 Lead Paint Fixed-Time Negative 0 Bedroom Windowsill Wood Good Bro	White Brown White White White White
85 Lead Paint Fixed-Time Negative 0 Bedroom Windowsill Wood Good Bro	Brown White White White White
· ·	White White White White
	White White White
87 VOID	White White
88 VOID	White White
**	White White
· · · · · · · · · · · · · · · · · · ·	White
· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·	Brown Brown
	White
	rville rellow
95 Lead Faint Fixed-Time Negative 0.96 Battilooffi Tile Tile Good Feii	ellow
Unit 304	
	White
	Brown
, ,	Brown
· · · · · · · · · · · · · · · · · · ·	White
	White
	White
	White
· · · · · · · · · · · · · · · · · · ·	White
· · · · · · · · · · · · · · · · · · ·	Brown
	Brown
	White
Unit 302	
	White

PBS Project # 40573.071 3 of 6

120 Lead Paint Fixed-Time Negative 0 Kitchen/living Wall C (Side of kitchen) Gypsum wallboard Good 121 Lead Paint Fixed-Time Negative 0 Bedroom Ceiling Gypsum wallboard Good 122 Lead Paint Fixed-Time Negative 0 Bedroom Wall A Gypsum wallboard Good	White White White White
121 Lead Paint Fixed-Time Negative 0 Bedroom Ceiling Gypsum wallboard Good	White White White
	White White
	White
123 Lead Paint Fixed-Time Negative 0 Bedroom Wall B Gypsum wallboard Good	
	White
126 Lead Paint Fixed-Time Negative 0 Bedroom Windowsill Wood Good	White
	White
128 Lead Paint Fixed-Time Negative 0.02 Bathroom Ceiling Gypsum wallboard Good	White
129 Lead Paint Fixed-Time Negative 0.01 Bathroom Wall A Gypsum wallboard Good	White
130 Lead Paint Fixed-Time Negative 0 Bathroom Wall B Gypsum wallboard Good	White
131 Lead Paint Fixed-Time Negative 0 Bathroom Wall C Gypsum wallboard Good	White
132 Lead Paint Fixed-Time Negative 0 Bathroom Wall D Gypsum wallboard Good	White
133 Lead Paint Fixed-Time Negative 0 Bathroom Door Wood Good	White
134 Lead Paint Fixed-Time Negative 0 Bathroom Door frame Wood Good	White
3rd Floor Janitor's Closet	
135 Lead Paint Fixed-Time Negative 0.01 3rd flr janitor's closet Ceiling Gypsum wallboard Good	White
136 VOID	
137 VOID	
138 Lead Paint Fixed-Time Negative 0.02 3rd flr janitor's closet Wall A Gypsum wallboard Good	Yellow
139 Lead Paint Fixed-Time Negative 0.01 3rd flr janitor's closet Wall B Gypsum wallboard Good	Yellow
140 Lead Paint Fixed-Time Negative 0.02 3rd flr janitor's closet Wall C Gypsum wallboard Good	Yellow
141 Lead Paint Fixed-Time Negative 0.02 3rd flr janitor's closet Wall D Gypsum wallboard Good	Yellow
142 Lead Paint Fixed-Time Negative 0 3rd flr janitor's closet Door Wood Good	White
143 Lead Paint Fixed-Time Negative 0 3rd flr janitor's closet Door frame Metal Good	White
3rd Floor Hall Wall	
144 Lead Paint Fixed-Time Negative 0 3rd flr Hall wall Wall A Gypsum wallboard Good	Yellow
145 Lead Paint Fixed-Time Negative 0 3rd flr Hall wall Wall B Gypsum wallboard Good	Yellow
146 Lead Paint Fixed-Time Negative 0 3rd flr Hall wall Wall C Gypsum wallboard Good	Yellow
147 Lead Paint Fixed-Time Negative 0 3rd flr Hall wall Wall D Gypsum wallboard Good	Yellow
3rd Floor Laundry	
148 Lead Paint Fixed-Time Negative 0.02 3rd flr Laundry Ceiling Gypsum wallboard Good	White
149 VOID	
150 VOID	
151 Lead Paint Fixed-Time Negative 0.02 3rd flr Laundry Wall C Gypsum wallboard Good	White
152 VOID	
153 Lead Paint Fixed-Time Negative 0 3rd flr Laundry Door Wood Good	White
154 Lead Paint Fixed-Time Negative 0 3rd flr Laundry Door frame Wood Good	White
155 Lead Paint Fixed-Time Negative 0 3rd flr Laundry Windowsill Wood Good Unit 310	Brown
156 Lead Paint Fixed-Time Negative 0 Unit 310 - Kitchen/living Ceiling Gypsum wallboard Good	White
	White

PBS Project # 40573.071 4 of 6

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
158	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
159	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
160	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
161	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall A (back of kitchen)	Gypsum wallboard	Good	White
162	Lead Paint Fixed-Time	Negative	0	Unit 310 - Kitchen/living	Wall B (back of kitchen)	Gypsum wallboard	Good	White
163	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
164	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
165	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
166	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
167	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
168	Lead Paint Fixed-Time	Negative	0.06	Bedroom	Windowsill	Wood	Good	Brown
169	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
170	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
171	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
172	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
173	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
175	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
176	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	Brown
177	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	Brown
178	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
179	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
		J		Unit 312				
180	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
181	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
182	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
183	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
184	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
185	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White
186	Lead Paint Fixed-Time	Negative	0	Unit 312 - Kitchen/living room	Wall B (side of kitchen)	Gypsum wallboard	Good	White
187	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
188	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
189	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
190	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
191	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
192	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
193	Lead Paint Fixed-Time	Negative	0	Bedroom	Door	Wood	Good	White
194	Lead Paint Fixed-Time	Negative	0	Bedroom	Door frame	Metal	Good	White
195	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
196	VOID	-			· ·	- ·		
197	Lead Paint Fixed-Time	Negative	0.06	Bathroom	Wall B	Gypsum wallboard	Good	White
198	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White

PBS Project # 40573.071 5 of 6

PBS Engineering + Environmental April 30, 2012 Part 3

Lead-Based Paint Inspection Eastridge House - Issaquah Issaquah, WA

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
199 Lea	ad Paint Fixed-Time	Negative	0.05	Bathroom	Wall D	Gypsum wallboard	Good	White

PBS Project # 40573.071 6 of 6

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
1	Calibration	Negative	0.97	Room	Component	Test	Condition	COIOI
2	Calibration	Positive	1.01			Test		
3	Calibration	Positive	1.02			Test		
4	Calibration	Positive	1.02			Test		
5	Calibration	Negative	0.02			Test		
		. rogao	0.02	2nd Floor Laundry		. 551		
6	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Ceiling	Gypsum wallboard	Good	White
7	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall A	Gypsum wallboard	Good	White
8	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall B	Gypsum wallboard	Good	White
9	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall C	Gypsum wallboard	Good	White
10	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Wall D	Gypsum wallboard	Good	White
11	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Windowsill	Wood	Good	Brown
12	Lead Paint Fixed-Time	Negative	0	2nd flr laundry	Door	Wood	Good	White
		· ·		Unit 314				
13	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
14	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
15	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
16	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
17	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
18	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White
19	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall B (back of kitchen)	Gypsum wallboard	Good	White
20	Lead Paint Fixed-Time	Negative	0	Unit 314 - Kitchen/living room	Wall D (back of kitchen)	Gypsum wallboard	Good	White
21	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
22	Lead Paint Fixed-Time	Negative	0	Balcony	Rail	Metal	Good	Black
23	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
24	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
25	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
26	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
27	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
28	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
29	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
30	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
31	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
32	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
33	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
34	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
35	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
				Unit 313				
36	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
37	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
38	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
39	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White

PBS Project # 40573.071 1 of 5

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
40	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
41	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall C (back of kitchen)	Gypsum wallboard	Good	White
42	Lead Paint Fixed-Time	Negative	0	Unit 313 - Kitchen/living room	Wall D (back of kitchen)	Gypsum wallboard	Good	White
43	Lead Paint Fixed-Time	Negative	0	Bedroom	Ceiling	Gypsum wallboard	Good	White
44	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall A	Gypsum wallboard	Good	White
45	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall B	Gypsum wallboard	Good	White
46	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall C	Gypsum wallboard	Good	White
47	Lead Paint Fixed-Time	Negative	0	Bedroom	Wall D	Gypsum wallboard	Good	White
48	Lead Paint Fixed-Time	Negative	0	Bedroom	Windowsill	Wood	Good	Brown
49	Lead Paint Fixed-Time	Negative	0	Bedroom	Closet door	Wood	Good	White
50	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
51	Lead Paint Fixed-Time	Negative	0.02	Bathroom	Wall A	Gypsum wallboard	Good	White
52	Lead Paint Fixed-Time	Negative	0.01	Bathroom	Wall B	Gypsum wallboard	Good	White
53	VOID							
54	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
55	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
56	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
57	Lead Paint Fixed-Time	Negative	0	Balcony	Column	Wood	Good	Brown
58	Lead Paint Fixed-Time	Negative	0	Balcony	Trim	Wood	Good	Brown
				Unit 110				
59	Lead Paint Fixed-Time	Negative	0.11	Unit 110 - Kitchen/living	Ceiling	Gypsum wallboard	Good	White
60	Lead Paint Fixed-Time	Negative	0.06	Unit 110 - Kitchen/living	Wall A	Gypsum wallboard	Good	White
61	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall B	Gypsum wallboard	Good	White
62	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall C	Gypsum wallboard	Good	White
63	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall D	Gypsum wallboard	Good	White
64	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall A (back of kitchen)	Gypsum wallboard	Good	White
65	Lead Paint Fixed-Time	Negative	0	Unit 110 - Kitchen/living	Wall B (side of kitchen)	Gypsum wallboard	Good	White
66	Lead Paint Fixed-Time	Negative	0	Patio	Soffit	Wood	Good	Brown
67	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
68	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
69	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
70	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
71	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
72	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
73	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
				Unit 112				
74	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
75	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
76	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
77	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
78	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
79	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall A (back of kitchen)	Gypsum wallboard	Good	White

PBS Project # 40573.071 2 of 5

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
80	Lead Paint Fixed-Time	Negative	0	Unit 112 - Kitchen/living room	Wall B (side of kitchen)	Gypsum wallboard	Good	White
81	Lead Paint Fixed-Time	Negative	0	Bathroom	Ceiling	Gypsum wallboard	Good	White
82	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
83	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
84	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
85	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
86	Lead Paint Fixed-Time	Negative	0	Bathroom	Door	Wood	Good	White
87	Lead Paint Fixed-Time	Negative	0	Bathroom	Door frame	Wood	Good	White
88	Lead Paint Fixed-Time	Negative	0	Kitchen/living room	Closet door	Wood	Good	White
89	Lead Paint Fixed-Time	Negative	0	Patio	Soffit	Wood	Good	Brown
90	Lead Paint Fixed-Time	Negative	0	Patio	Pole	Wood	Good	Brown
				Unit 113				
91	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Ceiling	Gypsum wallboard	Good	White
92	Lead Paint Fixed-Time	Negative	0.06	Unit 113 - Kitchen/living room	Wall A	Gypsum wallboard	Good	White
93	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Wall B	Gypsum wallboard	Good	White
94	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Wall C	Gypsum wallboard	Good	White
95	Lead Paint Fixed-Time	Negative	0	Unit 113 - Kitchen/living room	Wall D	Gypsum wallboard	Good	White
96	Lead Paint Fixed-Time	Negative	0	Patio	Soffit	Wood	Good	Brown
97	Lead Paint Fixed-Time	Negative	0	Patio	Rail	Metal	Good	Black
98	Lead Paint Fixed-Time	Negative	0.07	Bathroom	Ceiling	Gypsum wallboard	Good	White
99	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall A	Gypsum wallboard	Good	White
100	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall B	Gypsum wallboard	Good	White
101	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall C	Gypsum wallboard	Good	White
102	Lead Paint Fixed-Time	Negative	0	Bathroom	Wall D	Gypsum wallboard	Good	White
103	Lead Paint Fixed-Time	Negative	0	Kitchen	Ceiling	Gypsum wallboard	Good	White
104	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall A	Gypsum wallboard	Good	White
105	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall B	Gypsum wallboard	Good	White
106	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall C	Gypsum wallboard	Good	White
107	Lead Paint Fixed-Time	Negative	0	Kitchen	Wall D	Gypsum wallboard	Good	White
				Unit Front Door/Frame				
108	Lead Paint Fixed-Time	Negative	0	Unit 204	Front door	Wood	Good	White
109	Lead Paint Fixed-Time	Negative	0	Unit 204	Frame	Metal	Good	White
110	Standardization	PASS		Unit 209	Front door	Wood	Good	White
111	Standardization	PASS		Unit 209	Frame	Metal	Good	White
112	Lead Paint Fixed-Time	Negative	0	Unit 210	Front door	Wood	Good	White
113	Lead Paint Fixed-Time	Negative	0.02	Unit 210	Frame	Metal	Good	White
114	Lead Paint Fixed-Time	Negative	0.01	Unit 211	Front door	Wood	Good	White
115	Lead Paint Fixed-Time	Negative	0	Unit 211	Frame	Metal	Good	White
116	Lead Paint Fixed-Time	Negative	0	Unit 213	Front door	Wood	Good	White
117	Lead Paint Fixed-Time	Negative	0	Unit 213	Frame	Metal	Good	White
118	Lead Paint Fixed-Time	Negative	0	Unit 215	Front door	Wood	Good	White
119	Lead Paint Fixed-Time	Negative	0	Unit 215	Frame	Metal	Good	White

PBS Project # 40573.071 3 of 5

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
120	Lead Paint Fixed-Time	Negative	0	Unit 206	Front door	Wood	Good	White
121	Lead Paint Fixed-Time	Negative	0	Unit 206	Frame	Metal	Good	White
122	Lead Paint Fixed-Time	Negative	0	Unit 306	Front door	Wood	Good	White
123	Lead Paint Fixed-Time	Negative	0	Unit 306	Frame	Metal	Good	White
124	Lead Paint Fixed-Time	Negative	0	Unit 307	Front door	Wood	Good	White
125	Lead Paint Fixed-Time	Negative	0	Unit 307	Frame	Metal	Good	White
126	Lead Paint Fixed-Time	Negative	0	Unit 304	Front door	Wood	Good	White
127	Lead Paint Fixed-Time	Negative	0	Unit 304	Frame	Metal	Good	White
128	Lead Paint Fixed-Time	Negative	0	Unit 302	Front door	Wood	Good	White
129	Lead Paint Fixed-Time	Negative	0	Unit 302	Frame	Metal	Good	White
130	Lead Paint Fixed-Time	Negative	0	Unit 310	Front door	Wood	Good	White
131	Lead Paint Fixed-Time	Negative	0	Unit 310	Frame	Metal	Good	White
132	Lead Paint Fixed-Time	Negative	0	Unit 312	Front door	Wood	Good	White
133	Lead Paint Fixed-Time	Negative	0	Unit 312	Frame	Metal	Good	White
134	Lead Paint Fixed-Time	Negative	0	Unit 314	Front door	Wood	Good	White
135	Lead Paint Fixed-Time	Negative	0.02	Unit 314	Frame	Metal	Good	White
136	Lead Paint Fixed-Time	Negative	0	Unit 313	Front door	Wood	Good	White
137	Lead Paint Fixed-Time	Negative	0	Unit 313	Frame	Metal	Good	White
138	Lead Paint Fixed-Time	Negative	0	Unit 110	Front door	Wood	Good	White
139	Lead Paint Fixed-Time	Negative	0	Unit 110	Frame	Metal	Good	White
140	Lead Paint Fixed-Time	Negative	0	Unit 112	Front door	Wood	Good	White
141	Lead Paint Fixed-Time	Negative	0	Unit 112	Frame	Metal	Good	White
142	Lead Paint Fixed-Time	Negative	0	Unit 113	Front door	Wood	Good	White
143	Lead Paint Fixed-Time	Negative	0	Unit 113	Frame	Metal	Good	White
				2nd Floor N Stairwell				
144	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Rail	Metal	Good	Black
145	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Riser	Wood	Good	Brown
146	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Door	Wood	Good	White
147	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Door frame	Metal	Good	White
148	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall A	Gypsum wallboard	Good	White
149	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall B	Gypsum wallboard	Good	White
150	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall C	Gypsum wallboard	Good	White
151	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall D	Gypsum wallboard	Good	White
152	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Rail	Metal	Good	Black
153	Lead Paint Fixed-Time	Negative	0.01	2nd flr north stairwell	Riser	Wood	Good	Brown
154	Lead Paint Fixed-Time	Negative	0.02	2nd flr north stairwell	Door	Wood	Good	White
155	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Door frame	Metal	Good	White
156	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall A	Gypsum wallboard	Good	White
157	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall B	Gypsum wallboard	Good	White
158	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall C	Gypsum wallboard	Good	White
159	Lead Paint Fixed-Time	Negative	0	2nd flr north stairwell	Wall D	Gypsum wallboard	Good	White

PBS Project # 40573.071 4 of 5

THIRD PARTY REPORTS - D.1

PBS Engineering + Environmental April 30, 2012 Part 4

Reading	Mode	Pass/Fail Standard	Pb	Room	Component	Substrate	Condition	Color
				Exterior				
160	Lead Paint Fixed-Time	Negative	0	Exterior side A outside	Bench	Wood	Good	Brown

PBS Project # 40573.071 5 of 5

May 1, 2012

Janet Murphy

PBS Environmental (Seattle)

2517 Eastlake Ave E, Suite 100

Seattle, WA 98102



RE: Metals Analysis; NVL Batch # 1206516.00

Dear Ms. Murphy,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846-3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested. Lead test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more details.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. if you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure:





NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103 Tel: 206.547.0100, Fax: 206.634.1936 www.nvliabs.com

Analysis Report

AIHA - IH # 101861 WA - DOE # C1765



Total Lead (Pb)

Client: PBS Environmental (Seattle) Address: 2517 Eastlake Ave E, Suite 100

Seattle, WA 98102

Attention: Ms. Janet Murphy

Project Location: KCHA - Eastridge House 120 W. Sunset Way Issaquah WA

Batch #: 1206516.00

Matrix: Paint Chips Method: EPA 7000B

Client Project #: 40573.071 Date Received: 05/01/2012

Samples Received: 10 Samples Analyzed: 10

Lab ID	Client Sample #	Sample Area (cm²)	RL in mg/cm²	Results mg/cm²	
12038505	40573.071-Pb-1	1.00	0.01000	0.03000	
12038506	40573.071-Pb-2	1.00	0.01000	< 0.00900	
12038507	40573.071-Pb-3	1.00	0.01000	0.02000	
12038508	40573.071-Pb-4	1.00	0.01000	< 0.00900	
12038509	40573.071-Pb-5	1.00	0.01000	< 0.00900	
12038510	40573.071-Pb-6	1.00	0.01000	< 0.00900	
12038511	40573.071-Pb-7	1.00	0.01000	0.05000	
12038512	40573.071-Pb-8	1.00	0.01000	0.07000	
12038513	40573.071-Pb-9	1.00	0.01000	0.04000	
12038514	40573.071-Pb-10	1.00	0.01000	0.02000	

Sampled by: Client

Reviewed by: Nick Ly

cm² = Square centimeter

Analyzed by: Aaron Brown

Date Analyzed: 05/01/2012

Date Issued: 05/01/2012

mg =Milligrams RL = Reporting Limit

Note: Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 32-0501-04

'<' = Below the reporting Limit

Technical Director

Page 1 of 1



THIRD PARTY REPORTS - D.1

BATCH ID

PBS 1206516.00

Eastridge House

Project	KCHA 1206.	Sunset Way Issagioh	Project #: 405 73.071
Analysi	is requested:	AAS Lead Paint CA	hips Date: 5/1/12
Relinq'	d by/Signature:	gand Murply	Date/Time: 5/1/12
Receive	ed by/Signature: 🏻 🎮	Noise Vinn	Date/Time: 5.1.12 800
	sults to: Brian Stanford Ernest Edwards Gregg Middaugh Mark Hiley	☐ Prudy Stoudt-McR☐ Joe Lucas☐ Janet Murphy☐ Willem Mager	Rae □ Ferman Fletcher □ Tim Ogden □ Mike Smith □ Chuck Greeb
	AROUND TIME: 1 Hour 2 Hours 4 Hours Annly	24 Hours # 48 Hours First by Amon Brown Med by Amon Brown BULK SAMPLE DATA	3-5 Days Other N/L 5/1/12 16:05 N/L 5/2/12 17:10
Lab #	Sample #	Material Material	
	Sample #		Location Lab
<u> </u>	Pb-1	Black/Metal/Rail	A Exterior
		1 . 1	
	Pb-2	white/66B/Wall	1st FI Mean RR Wall
	Pb-2 Pb-3	<u> </u>	/ //
		White/GlaB/Wall	3rd Fl Candry Rm Wall
	Pb-3	white/GWB/Wall	3rd Fl Caundry Rm Wall 105 Kitch/Liv Wall A
	Pb = 3 Pb = 5	white/GWB/Wall white/GWB/Wall	3rd Fl Caundry Rm Wall 105 Kitch/Liv Wall A 105 Bedroom Wall A
	Pb Fb - 4 Pb - 5 Pb - 6	white/GWB/Wall white/GWB/Wall white/GWB/Wall	3rd Fl Caundry Rm Wall 105 Kitch/Liv Wall A 105 Bedroom Wall A 107 Kitch/Liv Wall O
	Pb = 3 Pb = 4 Pb - 5 Pb - 6 Pb - 7	white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall	3rd Fl Caundry Rm Wall 105 Kitch/Liv Wall A 105 Bedroom Wall A 107 Kitch/Liv Wall D 307 Bath room Wall A
	Pb-3 Pb Fb-4 Pb-5 Pb-6 Pb-7 Pb-8	white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall White/GWB/Wall White/GWB/Wall	3rd Fl Caundry Rm Wall 105 Kitch/Liv Wall A 105 Bedroom Wall A 107 Kitch/Liv Wall D 307 Bathroom Wall A 307 Buthroom Ceiling
	Pb-3 Pb-5 Pb-5 Pb-6 Pb-7 Pb-8 Pb-9	white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall White/GWB/Wall White/GWB/Wall White/GWB/Wall	3rd Fl Caundry Rm wall 105 kitch/Liv wall A 105 Bedroom wall A 107 Kitch/Liv wall D 307 Bathroom wall A 307 Buthroom Ceiling 312 Bathroom wall A
	Pb-3 Pb Fb-4 Pb-5 Pb-6 Pb-7 Pb-8	white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall White/GWB/Wall White/GWB/Wall White/GWB/Wall	3rd Fl Caundry Rm wall 105 kitch/Liv wall A 105 Bedroom wall A 107 Kitch/Liv wall D 307 Bathroom wall A 307 Bathroom Ceiling 312 Bathroom wall A
	Pb-3 Pb-5 Pb-5 Pb-6 Pb-7 Pb-8 Pb-9	white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall white/GWB/Wall White/GWB/Wall White/GWB/Wall White/GWB/Wall	3rd Fl Caundry Rm wall 105 kitch/Liv wall A 105 Bedroom wall A 107 Kitch/Liv wall D 307 Bathroom wall A 307 Buthroom Ceiling 312 Bathroom wall A

May 1, 2012

Janet Murphy

PBS Environmental (Seattle)
2517 Eastlake Ave E, Suite 100
Seattle, WA 98102



RE: Metals Analysis; NVL Batch # 1206514.00

Dear Ms. Murphy,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846-3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested. Lead test results are not blank corrected.

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Thank you for using our laboratory services. if you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure:





4708 Aurora Ave. N., Seattle, WA 98103 Tel: 206.547.0100, Fax: 206.634.1936 www.nvllabs.com

Analysis Report

AIHA - IH # 101861 WA - DOE # C1765



Total Lead (Pb)

Client: PBS Environmental (Seattle)
Address: 2517 Eastlake Ave E, Suite 100

Seattle, WA 98102

Attention: Ms. Janet Murphy

Project Location: KCHA - Eastridge House 120 W. Sunset Way Issaquah WA

Batch #: 1206514.00 Matrix: Dust/wipe (Area) Method: EPA 7000B Client Project #: 40573.071

Date Received: 05/01/2012 Samples Received: 6 Samples Analyzed: 6

Lab ID	Client Sample #	Element	Sample sq ft	RL ug/ sq ft	Results in ug/wipe	Results in ug/sq. ft
12038493	40573.071-W-1	Lead (Pb)	0.25	36.0	< 9.0	< 36.0
12038494	40573.071-W-2	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038495	40573.071-W-3	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038496	40573.071-W-4	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038497	40573.071-W-5	Lead (Pb)	0.50	18.0	< 9.0	< 18.0
12038498	40573.071-W-6	Lead (Pb)	0.25	36.0	< 9.0	< 36.0

Sampled by: Client

Analyzed by: Aaron Brown

Reviewed by: Nick Ly

Date Analyzed: 05/01/2012

Date Issued: 05/01/2012

ug/ sq. ft. =Micrograms per square foot

ug / wipe = Micrograms per wipe

RL = Reporting Limit

'<' = Below the reporting Limit

Note: Method QC results are acceptable unless stated otherwise. Concentration (ug/ft²) not reported if sample area is zero. Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 32-0501-05

Page 1 of 1



BATCH ID PBS 1206514.00

	Fratridae	- House	1 05				
Project:	Eastridge RCITA 120 C	i. Sunset le	ay Issagua	<u>/</u> Pr	oject #:	40573.07	<u>/</u>
	requested: A A				ate:	5/1/12	
Relinq'd	by/Signature:	and m	unh_	. Da	ate/Time:_	5/1/12	
Received	l by/Signature: <u>h</u>	·Koike V	war	_ Da	ate/Time:_	51.12	SOUDE
□ E □ G □ M TURN AR □ 1 □ 2	rian Stanford rnest Edwards Gregg Middaugh Mark Hiley ROUND TIME: Hour Hours	act by Aman	Prudy Stoudt-McR. Joe Lucas Janet Murphy Willem Mager 24 Hours 48 Hours	L	•	Ferman Fletche Tim Ogden Mike Smith Chuck Greeb 3-5 Days Other	r ———
			K SAMPLE DATA	FORM			
Lab#	Sample #	M	aterial		Locati	on	Lab
-	W-1	Dust		165 B	ed1001	n Sil	
	4-2	DUST		1		en Floor	
	W-3	DUST		312 B	athro	ON Floor	
	W-4	DUST		206 A	ritch .	en Floor	
	W-5	DUST		366 1	kitch	en Floor	
	W-6	DUST		306 1	Bedr	00m5,1	
· · ·							
	l						ı i

May 2, 2012

Janet Murphy **PBS Environmental (Seattle)**2517 Eastlake Ave E, Suite 100

Seattle, WA 98102



RE: Metals Analysis; NVL Batch # 1206513.00

Dear Ms. Murphy,

Enclosed please find the test results for samples submitted to our laboratory for analysis. Preparation of these samples was conducted following protocol outlined in EPA Method SW 846-3051 unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with U.S. EPA, NIOSH, OSHA and other ASTM methods.

For matrix materials submitted as paint, dust wipe, soil or TCLP samples, analysis for the presence of total metals is conducted using published U.S. EPA Methods. Paint and soil results are usually expressed in mg/Kg which is equivalent to parts per million (ppm). Lead (Pb) in paint is usually expressed in mg/Kg (ppm), Percent (%) or mg/cm² by area. Dust wipe sample results are usually expressed in ug/wipe and ug/ft². TCLP samples are reported in mg/L (ppm). For air filter samples, analyses are conducted using NIOSH and OSHA Methods. Results are expressed in ug/filter and ug/m³. Other matrix materials are analyzed accordingly using published methods or specified by client. The reported test results pertain only to items tested. Lead test results are not blank corrected.

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Thank you for using our laboratory services. if you need further assistance please feel free to call us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure:





NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103 Tel: 206.547.0100, Fax: 206.634.1936 www.nvllabs.com

Analysis Report

AIHA - IH # 101861 WA - DOE # C1765



Total Lead (Pb)

Client: PBS Environmental (Seattle)
Address: 2517 Eastlake Ave E, Suite 100

Seattle, WA 98102

Batch #: 1206513.00

Matrix: Soil

Method: EPA 7000B

Client Project #: 40573.071 Date Received: 05/01/2012

> Samples Received: 1 Samples Analyzed: 1

Attention: Ms. Janet Murphy

Project Location: KCHA - Eastridge House 120 W. Sunset Way Issaquah WA

Results in Results Sample RL Lab ID Client Sample # Wt (g) mg/Kg in ppm mg/ kg 12038492 40573.071-S-1 0.2939 32.0 < 32.0 < 32.0

Sampled by: Client

Reviewed by: Nick Ly

Analyzed by: Aaron Brown

mg/ kg = Milligrams per kilogram

Date Issued: 05/02/2012

Date Analyzed: 05/02/2012

RL = Reporting Limit

'<' = Below the reporting Limit

ppm = Parts per million

Note: Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 32-0502-01

Page 1 of 1



BATCH ID

1206513 00

			PDS	1200313.00	
?roject:	E45t KCHA - 120 G	ridge Houset	be Way Issugual	44 Project #: 405 73.	071
	s requested:A_A			Date: 5///12	
Relinq'd	by/Signature:	met my	mh	Date/Time:	
Receive	d by/Signature: <u>}</u>	1. Loike	Verys	Date/Time: 511/12	2800D
ax resi	ılts to:				
	Brian Stanford		Prudy Stoudt-McRa		her
	Ernest Edwards		Joe Lucas	☐ Tim Ogden ☐ Mike Smith	
	Gregg Middaugh Mark Hiley	□ Æ	Janet Murphy Willem Mager	☐ Chuck Greeb	1
ΓURN A	ROUND TIME:	92			
	1 Hour	No E	24 Hours	□ 3-5 Days	
	2 Hours	yes A 67 Amon Bron	48 Hours	□ Other NU 5/2/12 10:05	
J '	4 Hours Analyzed	by Auron Brown	~ 4	M 5/2/2 17:10	
		Silin's L. Jan	LK SAMPLE DATA FO		
luka H					
Lab#	Sample #	l N	laterial	Location	Lab
	40573071	Soil	,	All 4 Sides of Bldg	
		Soil		All 4 Sides of Bldg	
1		5011		All 4 sides of Bldg Orip Line	
1		Soil		All 4 sides of Bldg Orip Line	
		5011		All 4 Sides of Bldg Orip Line	
		5011		All 4 Sides of Bldg Orip Line	
		5011		All 4 Sides of Bldg Orip Line	
		5011		All 4 sides of Bldg Orip Line	
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		5011		All 4 sides of Bldg Orip Line	
		5011		All 4 Sides of Bldg Orip Line	
		5011		All 4 Sides of Bldg Orip Line	



TAB 2

Certifications



Department of Commerce

Lead-Based Paint Program

Janet J. Murphy

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200 as a:

Risk Assessor

Certification #	Issuance Date	Expiration Date
0258	3/8/2010	3/8/2013



Department of Commerce

Lead-Based Paint Program

PBS Engineering & Environmental

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200:

Certification # Issuance Date Expiration Date
0178 7/14/2010 9/3/2013





February 28, 2013

Alton Leung King County Housing Authority 600 Andover Park West Tukwila, Washington 98188

RE: Limited Asbestos and Lead Containing Materials Survey Report – Piping Renovation Pathway

Areas Surveyed Include all Common Areas and Units 111, 113, 211, 213, 311 and 313

Eastridge House 120 West Sunset Way Issaquah, Washington 98027 (Project # KCHA32114)

Dear Mr. Leung,

Attached is the RGA Environmental limited asbestos and lead containing materials survey report for the piping renovation pathway throughout the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The areas surveyed include all common areas and units 111, 113, 211, 213, 311 and 313.

We appreciate the opportunity to have been of service to you. If you have any questions regarding this report feel free to contact me at (206) 281-8858.

Sincerely,

Angela Harkins Project Manager

RGA Environmental, Inc.

1730 Minor Avenue ~ Seattle, Washington ~ 98101 ~ 206.281.8858 ~ 206.281.8922 fax



Improving Lives, Reducing Risks







Limited Asbestos and Lead Containing Materials Survey Report – Piping Renovation Pathway

Eastridge House 120 West Sunset Way Issaquah, Washington 98027

Project No. KCHA32114

Prepared for:

Alton Leung King County Housing Authority 600 Andover Park West Tukwila, Washington 98188

Prepared by:

RGA Environmental, Inc. 1730 Minor Avenue, Suite 900 Seattle, WA 98101 206-281-8858

February 28, 2013

Report prepared and reviewed by:

Project Manager Angela Harkins

www.rgaenv.com

Table of Contents

<u>Section</u>	<u>Page</u>
1.0 EXECUTIVE SUMMARY	
2.0 INTRODUCTION	2
3.0 REGULATORY COMPLIANCE	3
4.0 SAMPLING PLAN AND LABORATORY ANALYSIS	5
5.0 SURVEY RESULTS	(
6.0 CONCLUSIONS AND RECOMENDATIONS	
7.0 LIMITS OF SURVEY	

Attachments:

- Laboratory Results
- Field Notes
- Sample Location Drawings
- RGA Certifications

1.0 EXECUTIVE SUMMARY

On February 15, 2013, Mr. John McCaslin and Mr. Russell Browne of RGA Environmental, Inc. (RGA) conducted a limited asbestos and lead containing materials survey for suspect asbestos-containing building materials and lead containing coatings throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington as outlined by the Client. This survey was conducted at the request of Mr. Alton Leung of the King County Housing Authority in preparation for the planned renovation at this location.

1.1 Asbestos

See Table 1 below for a summary of the asbestos containing materials found in the survey.

Table 1 - Summary of Asbestos-Containing Materials found Throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House

located at 120 West Sunset Way in Issaquah, Washington

Total Car at 120 Trest Sanset T	vay iii issaquan, vvasiiington		
Material Description	Location	Asbestos Content	Approximate
(Homogeneous Material)			Quantity*
Texturing on gypsum	Throughout the building	2% Chrysotile	7,200 SF
wallboard walls and ceilings			
Wallboard and joint	Throughout the building	Layers 2 and 4: Joint compound	7,200 SF
compound		– 2% Chrysotile	·
·		Wall unit as a whole - <1%	
		Chrysotile	
Brown mastic associated	Throughout the building	<1% Tremolite	500 LF
with 4" tan, beige and olive			
green cove base			
Black sink undercoating	Throughout the building in	2% Chrysotile	Up to 40 EA
_	both common areas and	-	-
	units		
Gray sink undercoating	1 st floor community area	5% Chrysotile	1 EA
Beige/Tan speckled vinyl	1 st floor common restrooms,	Layer 2: Black mastic – 3%	530 SF
sheet flooring and mastic	common kitchen and 3 rd	Chrysotile	
_	floor laundry rooms	-	
Beige/Gray tile pattern vinyl	Throughout 1 st , 2 nd and 3 rd	30% Chrysotile	4,500 SF
sheet flooring/mastic over	floor units bedroom closets,	-	
green mosaic pattern vinyl	bathrooms and kitchens		
sheet flooring and mastic			
12"X12" Beige/Tan streaks	1 st floor chair storage, 2 nd	Vinyl tile – 2% Chrysotile	250 SF
vinyl floor tile and mastic	floor janitor's closet and 3 rd	Black mastic – 2% Chrysotile	
	floor janitor's closet	-	
Mudded pipe fittings	Throughout building	3% Amosite	160 EA

^{*}SF - Square Feet, LF - Linear Feet, EA - Each

Table 2 - Summary of Assumed Asbestos-Containing Materials found Throughout the Plumbing Renovation Pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaguah, Washington

Material Description (Homogeneous Material)	Location	Asbestos Content	Approximate Quantity*	
Piping gaskets	Piping	Assumed	Unknown	
Hidden piping insulation not sampled	Throughout	Assumed	Unknown	
4" Beige ceramic wall tile, grout and mortar or mastic	Common men's restroom	Assumed	130 SF	
Mastic behind white fiberglass reinforced poly on walls	Garbage room	Assumed	140 SF	
Ceramic wall tile, grout and mastic or mortar	Unit 111 bathroom – assumed in all bathrooms	Assumed	30 SF each unit	
Mastic behind shower surround	Unit 113 bathroom – assumed in all bathrooms	Assumed	30 SF each unit	

^{*}SF - Square Feet

The full scope of sampling is presented in Section 5.

1.2 Lead

Based on XRF paint testing, 3 homogeneous painted components tested were found to have detectable quantities of lead; 2 of them were classifiable as lead-based paint¹. A complete table of paint coatings tested can be found in section 5.2 below.

2.0 INTRODUCTION

On February 15, 2013, Mr. John McCaslin and Mr. Russell Browne of RGA Environmental, Inc. (RGA) conducted a limited asbestos and lead containing materials survey for suspect asbestos-containing building materials and lead containing coatings throughout the plumbing renovation pathway including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington as outlined by the Client. Both Mr. McCaslin and Mr. Browne are Asbestos Hazard Emergency Response Act (AHERA) certified building inspectors (Certificate # 12-0923, Expiration Date 05/10/2013 and Certificate #12-1560, Expiration Date 08/10/13). Mr. McCaslin is a Washington State Department of Commerce certified lead risk assessor/inspector (Certificate # 6039, Expiration Date 06/09/15). A copy of their certificates can be found in the enclosed attachments.

This survey was conducted to document the presence of and locations of both asbestos containing materials and lead containing paints or coatings within the plumbing renovation pathway including all common areas and units 111, 113, 211, 213, 311 and 313 of the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. All applicable and accessible building areas were visited and samples were collected of building materials suspected to contain asbestos (wallboard, flooring materials, and other miscellaneous materials). Paint coatings were non-destructively tested for lead content using an XRF analyzer. See Table 3 for a list of materials sampled for asbestos and table 4 for a list of paint coatings tested.

Efforts were made during the inspection to find all asbestos containing materials in the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 of the

¹ As defined by EPA/HUD, See Section 3.2 below

Eastridge House. Limited penetrations were made through walls, floors, and ceilings to identify concealed materials. If additional suspect materials are identified in wall cavities or under the building that were not included in this survey, the renovation work should halt and an accredited AHERA inspector should sample untested suspect materials for the presence of asbestos. Any materials not sampled and properly identified must be sampled by an AHERA inspector prior to disturbance.

The Eastridge House located at 120 West Sunset Way in Issaquah, Washington is a 3-story multi-family residential structure with 40 units and approximately 6,000 square feet of interior space that consists of a stick-built structure with wood siding. Interior finishes include the following: walls are gypsum wallboard and ceilings are a mixture of gypsum wallboard and suspended ceiling tiles; flooring materials include carpet, vinyl sheeting and vinyl tiles.

All contractors working on the building site must review this inspection report prior to participating in the renovation, per WAC 296-62-07721 "Communication of Hazards to Employees."

3.0 REGULATORY COMPLIANCE

3.1 Asbestos

The intent of the asbestos survey is to comply with governing asbestos regulations required by the State of Washington and Puget Sound Clean Air Agency (PSCAA). The State of Washington requires a written "good faith inspection" for identification of asbestos-containing materials prior to any remodeling, maintenance, or demolition work. During demolition and construction work, it is the responsibility of the owner and the contractors to make this survey document available to all concerned parties who may be handling the building materials.

Additionally, PSCAA requires that a copy of the written asbestos survey be made available on-site for inspection by a PSCAA Control Officer during construction and demolition work. The survey is required to be performed in accordance with 40 CFR 763.86. These federal standards require inspections to be conducted by an EPA/AHERA accredited building inspector with analysis to be provided by an asbestos laboratory accredited by the National Bureau of Standards. The requirements are described in Article 1 and Article 4 of PSCAA's Asbestos Control Standards. All survey work was conducted in compliance with the above mentioned standards.

3.2 Lead

The Washington State Department of Labor and Industries defines a lead-based paint to be a coating with any detectable lead. The United States Environmental Protection Agency (EPA) and US Department of Housing and Urban Development (HUD) have defined a lead-based paint as any coating containing greater than 0.5% lead or 1.0 mg/cm² of lead.

In Washington, workers disturbing lead-containing coatings are covered under the lead standard (WAC 296-155-176) until shown they are not being exposed above the action limit of 30 $\mu g/m^3$ and the permissible exposure limit of 50 $\mu g/m^3$. The requirements of this standard include, but are not limited to, air monitoring, respiratory protection, medical surveillance, lead work plan, warning signs, and wash stations.

When lead is discovered in a paint coating, worker protection and environmental protection requirements apply to all construction activities that may disturb these coatings. The issues surrounding the demolition of materials that have lead-containing coatings include worker exposure, public health, and waste characterization.

3.2.1 Worker Exposure to Lead

WAC 296-155-176, Lead, applies to all construction work where an employee may be occupationally exposed to lead. Construction work includes activities such as demolition or salvage, removal or encapsulation, and renovation of materials that contain lead. When a worker may be exposed to lead, the employer must take the following actions according to WAC 296-155-176:

- 1. Perform an exposure assessment for each operation where the employee may be exposed to lead at or above 30 micrograms per cubic meter ($\mu g/m^3$). The exposure assessment consists of personal air monitoring to determine representative lead exposure levels for the work being performed.
- 2. During the exposure assessment for demolition operations, the employer must provide and require to be worn half-mask air-purifying respirators equipped with high efficiency particulate air (HEPA) filters and disposable clothing.
- 3. A designated change area which allows for separate storage areas for work and street clothing to prevent cross contamination.
- 4. Hand washing facilities to allow employees to wash their hands and faces.
- 5. Biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels.
- Training to include hazard communication, safety, and the limitations, proper use, and maintenance of respirators.

In addition to the protective equipment and hygiene requirements, the employer must attempt to reduce the levels of airborne lead through the use of engineering controls such as ventilation and wet methods.

3.2.2 Public Health

The owner should ensure that the general public will not have access to the site during renovation activities. In addition, controlling visible emissions (dust) will decrease the airborne concentration of lead, thus decreasing the airborne exposure levels of the general public and potential contamination of surrounding areas from dust migration.

Lead-Based Paint Renovation

The requirements of WAC 365-230-270, Lead-Based Paint Renovation, apply to "Target Housing or child-occupied facilities" that have paint or other surface coatings that contain lead equal to or in excess of 1.0 mg/cm² or 0.5% by weight as determined by an inspector or risk assessor or by a certified renovator using an EPA approved test kit. Requirements of WAC 365-230-270 for performing work in target housing include the following:

- 1. Distribution of information on lead paint hazards to housing occupants
- 2. Certification of the (Contractor) as a Lead Renovator
- 3. Certification of the firm as a lead renovation firm
- 4. Documented training of project workers, and working supervisor, in Lead Safe Work Practices
- 5. Utilize Lead Safe Work Practices in execution of the project
- 6. Documentation of cleaning verification or clearance testing, as required, at the completion of the project

7. Recordkeeping packet to be kept for 3 years by contractor, with a copy supplied to client at close of project.

4.0 SAMPLING PLAN AND LABORATORY ANALYSIS

4.1 Asbestos

4.1.1 Objectives

The objective of the survey was to determine the quantity and location of building materials (wallboard, flooring materials, etc.) that contain asbestos.

4.1.2 Asbestos Sampling Protocol

This survey was conducted using a protocol adapted from the Asbestos Hazard Emergency Response Act (AHERA). The protocol is as follows:

- 1. Group materials into homogeneous sampling areas based on visual observations and information provided about building renovations.
- 2. Quantify each homogeneous sampling area and collect samples from each area using the "3-5-7" criteria for surfacing material to determine the number of samples needed. Quantify and collect a minimum of three samples of each thermal system insulation. The number of samples collected of miscellaneous materials was determined by the inspector.
- 3. Samples were collected from areas of easy access and minimum disturbance to building occupants.
- 4. Samples of each material were taken to the substrate, ensuring that all components of the material were included.
- 5. Sampling was performed by an AHERA accredited building inspector.

4.1.3 Asbestos Sampling Procedure

- 1. Label sample container with unique identification number. Record sample number, sample location, type of material, and approximate material quantity on data form.
- 2. Extract sample using a clean knife or other tool to collect approximately one tablespoon of the material. Penetrate all layers of material.
- 3. Place sample in a container and tightly seal it.
- 4. Clean tools with wet wipes. Clean any material debris from sampling area.

4.1.3 Asbestos Laboratory Analysis

The bulk samples were analyzed by RGA Laboratory using polarized light microscopy (PLM) with dispersion staining in accordance with US EPA method 600/R-93/116 as specified in 40 CFR Chapter I (7-1-93 edition) Part 763, Subpart F, Appendix A, pages 499-504. Polarizing light microscopy quantifies asbestos concentrations at between 100% and 1% detection levels. Levels below 1% can only be stated as "trace" or "less than 1% (< 1%)". RGA Laboratory is a member of the National Voluntary Laboratory

Accreditation Program (NVLAP), NVLAP Code #200613-0. Samples were not analyzed by point count to determine asbestos concentrations.

For samples containing more than one separable layer of materials, the laboratory report will include findings for each layer (labeled L-1 for layer one and L-2 for layer two, etc.) and a total percentage for the entire sample, if applicable. The asbestos concentration in the sample is determined by visual estimation.

4.2 XRF (Lead Painted Coatings) Testing

4.2.1 Objectives

The objective of the testing was to determine locations of coatings that are lead containing and the percentage of lead in these coatings.

4.2.2 XRF Testing Procedure

Each painted component type was tested for the presence of LBP and one bulk paint chip sample was collected for quality control purposes. All building components to be impacted during renovations were tested. The results were recorded on data sheets (see attached documents).

After completing the testing of the building, components were identified as LBP or non-LBP based on presence of detectable lead. Painted components, which resulted in positive results, were classified as positive. Painted components testing as negative were classified as negative. No destructive QC samples (paint samples) were taken, as typically done when inconclusive results are found, as there were no inconclusive results.

4.2.3 X-Ray Fluorescence (XRF)

An XRF Lead Analyzer is a portable, in-situ measuring instrument that uses x-ray fluorescence to test for lead in paint. The XRF sends energy in the form of a gamma ray photon into the paint or coating on a wall. Some of the gamma rays strike the inner shells of atoms, resulting in the electron being dislodged from their orbit. The atom then becomes unstable. To regain stability, the atom fills the gap left by the lost electron with an electron from one of its outer shells. This causes the release of an x-ray photon (fluorescence). This photon has an energy level "characteristic" of the type of element (like lead) that it came from. The XRF then measures the energy level and quantity of returning x-ray photons to determine the quantity of lead (or other element of interest) present at the sample point.

The instrument used for this inspection was an Innov-X Inspector XRF Lead Analyzer, serial # M11820. Samples were collected in "Lead Paint Analysis" mode requiring no substrate correction sampling (paint chip sampling).

Calibration checks of the instrument were performed using NIST Standard Reference Material (SRM) 2573 (1.040 $\,\mathrm{mg/cm^2}$ ± 0.064) and 2570 (0.0 $\,\mathrm{mg/cm^2}$) before each sampling activity, every 4 hours during sampling, and after each sampling activity. Calibration checks were satisfactory, indicating the instrument was functioning properly and in calibration.

5.0 SURVEY RESULTS

5.1 Asbestos

Table 3 (below) contains an inventory of the building materials sampled for asbestos throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The location column

identifies all locations in the building where the homogenous materials were identified. Actual sample locations are identified in the attached site maps.

Table 3 - Building Materials Sampled for Asbestos by RGA throughout the Plumbing Renovation Pathway,including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington.

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-01A, 01B, 01C	wallboard walls and ceilings	Throughout building hallways and common areas	2% Chrysotile	Friable
EH-02A, 02B, 02C	Gypsum wallboard walls and ceilings with joint compound	Throughout building hallways and common areas	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-03A	Light green wallpaper and adhesive on gypsum wallboard	1 st floor hallway	No Asbestos Detected	Friable
EH-04A, 04C	Beige mastic associated with 4" tan cove base	Throughout building	No Asbestos Detected	Non-Friable
EH-05A, 05B	Mastic under blue/tan carpet	Throughout building	No Asbestos Detected	Non-Friable
EH-06A, 06B	2'X4' Fissure suspended ceiling tiles	Throughout hallways in building	No Asbestos Detected	Friable
ЕН-07А, 07В	Brown mastic associated with 4" tan cove base	1 st floor men's and women's restroom, common kitchen and throughout 2 nd floor common areas	Layer 1: Brown adhesive <1% Tremolite	Non-Friable
EH-08B, 08C	Beige/tan speckled vinyl sheet flooring and mastic	1 st floor men's and women's restroom, common kitchen, 2 nd and 3 rd floor laundry rooms	Layer 2: Black mastic – 3% Chrysotile	Non-Friable
EH-09A	White caulking	1 st floor men's restroom	No Asbestos Detected	Non-Friable
EH-10A, 10C	Fiberglass piping insulation with cloth wrap and bridging	Throughout building	No Asbestos Detected	Friable
EH-11A, 11B	Mudded piping elbows	Throughout building	3% Amosite	Friable
EH-12A	Black fiberglass batting insulation	Throughout building – interior walls	No Asbestos Detected	Friable
EH-13A	Black gaskets at sink drain	1 st floor men's restroom	No Asbestos Detected	Non-Friable
EH-14A	Black sink undercoating with gasket and putty	1 st floor Common Kitchen	2% Chrysotile	Non-Friable
EH-15A	Gray sink undercoating with gasket and putty	1 st floor Community Area	5% Chrysotile	Non-Friable
EH-16A, 16B	12"X12" Beige/tan streaks vinyl floor tile and mastic	1 st floor chair storage, 2 nd floor janitor's closet and 3 rd floor janitor's closet	Tile – 2% Chrysotile Black mastic – 2% Chrysotile	Non-Friable

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-17A	Gypsum wallboard and joint compound	Throughout 1 st floor	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile Layer 7: Brown adhesive – <1% Tremolite	Friable Non-Friable
EH-17C	Gypsum wallboard and joint compound	Throughout 1 st floor	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-18A	Mastic associated with 4" brown cove base	1 st floor garbage room	No Asbestos Detected	Non-Friable
EH-19A, 19B	Texturing on gypsum wallboard walls and ceilings	Throughout 1 st floor	2% Chrysotile	Friable
EH-20A	Gasket at sink drain	1 st and 2 nd floor janitor's closet	No Asbestos Detected	Non-Friable
EH-21A, 21B	Mastic associated with 4" tan cove base	1 st floor – Units 111 and 113 (assumed in all units on floor)	Layer 2: Brown adhesive – <1% Tremolite Layer 3: Joint compound – 2% Chrysotile	Non-Friable Friable
EH-22A, 22B	Beige/gray tile pattern vinyl sheet flooring and mastic	1 st floor – Units 111 and 113 bathroom and kitchen (assumed in all units on floor)	No Asbestos Detected	Friable
EH-23A, 23B	Gypsum wallboard and joint compound	1 st floor – Units 111 and 113 (assumed in all units on floor)	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-24A, 24B	Texturing on gypsum wallboard walls and ceilings	1 st floor – Unit 111 bedroom closet and 113 bathroom (assumed in all units on floor)	2% Chrysotile	Friable
EH-25A, 25B	Gray sink undercoating with gasket and putty	1 st floor – Units 111 and 113 kitchen (assumed in all units on floor)	No Asbestos Detected	Non-Friable
EH-26A	Pink wallpaper and adhesive on gypsum wallboard	2 nd floor hallway	No Asbestos Detected	Friable
ЕН-27А, 27В	Gypsum wallboard and joint compound	2 nd and 3 rd floor laundry rooms	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-28A, 28B	Texturing on gypsum wallboard walls and ceilings	2 nd and 3 rd floor laundry rooms	Layers 2 and 4 – 2% Chrysotile	Friable
EH-29A	Mastic associated with 4" beige cove base	2 nd floor – Unit 211 bathroom (assumed in all units on floor)	Layer 1: Brown adhesive – <1% Tremolite Layer 3: Joint compound – 2% Chrysotile	Non-Friable Friable
EH-30A	Beige/gray tile pattern vinyl sheet flooring and mastic over pebble pattern vinyl sheet flooring and mastic	2 nd floor – Unit 211 bathroom (assumed in all units on floor)	30% Chrysotile	Friable
EH-31A, 31B	Gypsum wallboard and joint compound	2 nd floor – Units 211 and 213 bedroom closet (assumed in all units on floor)	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-32A, 32B	Texturing on gypsum wallboard walls and ceilings	2 nd floor – Units 211 and 213 bedroom closet (assumed in all units on floor)	2% Chrysotile	Friable
EH-33A	Gray sink undercoating with gasket and putty	2 nd floor – Unit 211 kitchen (assumed in all units on floor)	No Asbestos Detected	Non-Friable
EH-34A, 34B	Mastic associated with 4" olive green cove base	2 nd and 3 rd floors – Units 213 and 311 bathroom (assumed in all units on floors)	Layer 1: Brown adhesive – <1% Tremolite	Non-Friable
EH-35A, 35B	Green mosaic pattern vinyl sheet flooring and mastic	2 nd and 3 rd floors – Units 213 and 311 bathroom (assumed in all units on floors)	30% Chrysotile	Friable
EH-36A	Black sink undercoating with gasket and putty	2 nd floor – Unit 213 kitchen (assumed in all units on floor)	2% Chrysotile	Non-Friable
ЕН-37А, 37В	Gypsum wallboard and joint compound	3 rd floor – Units 311 and 313 bedroom closet (assumed in all units on floors)	Layer 2 and 4: Joint compound – 2% Chrysotile Wall unit as a whole – <1% Chrysotile	Friable
EH-38A, 38B	Texturing on gypsum wallboard walls and ceilings	3 rd floor – Units 311 and 313 bedroom closet (assumed in all units on floors)	2% Chrysotile	Friable
EH-39A	Mastic associated with 4" tan cove base	3 rd floor – Unit 313 bathroom (assumed in all units on floors)	Layer 2: Brown adhesive – <1% Tremolite	Non-Friable

Sample ID	Material Description	Location	Asbestos Content	Friability
EH-40A	Beige/gray vinyl sheet flooring and mastic over pebble pattern vinyl sheet flooring and mastic	3 rd floor – Unit 313 bathroom (assumed in all units on floors)	30% Chrysotile	Friable
EH-41A, 41B	Black sink undercoating with gasket and putty	3 rd floor – Unit 313 kitchen (assumed in all units on floors)	2% Chrysotile	Non-Friable
EH-42A	Blue wallpaper and adhesive on gypsum wallboard	Throughout 3 rd floor	No Asbestos Detected	Friable

5.2 XRF Testing Results

Table 4 contains the XRF testing results found throughout the plumbing renovation pathway, including all common areas and units 111, 113, 211, 213, 311 and 313 in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. Bolded readings indicate lead-based paint or coating and Italicized bold readings indicate lead-containing paint or coating.

Table 4 – XRF Results

Date	Reading	Lead Based	Lead	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
			Containing									
15-Feb-13	1	NA	NA					Standard				
15-Feb-13	2	NA	NA	0	0	Eastside House	Calibration	Calibration		Calibration	White	Calibration
15-Feb-13	3	NA	NA	1.01	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	4	NA	NA	1.15	0.08	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	5	NA	NA	1.01	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	6	Negative	Negative	0	0	Eastside	Floor 1 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	7	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	8	Negative	Negative	0	0	Eastside House	Floor 1 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	9	Negative	Positive	0.04	0.02	Eastside House	Common Men's Restroom	West	Wall	Drywall	White	Intact
15-Feb-13	10	Negative	Negative	0	0	Eastside House	Common Men's Restroom	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	11	Negative	Positive	0.02	0.02	Eastside House	Common Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	12	Negative	Positive	0.03	0.02	Eastside House	Common Kitchen	South	Wall	Drywall	White	Intact
15-Feb-13	13	Negative	Negative	0	0	Eastside House	Chair Storage	East	Wall	Drywall	White	Intact

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	14	NA	NA					Standard				
15-Feb-13	15	Negative	Negative	0	0	Eastside House	Garbage Room	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	16	Negative	Negative	0	0	Eastside House	Floor 1 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	17	NA	NA					Standard				
15-Feb-13	18	Negative	Positive	0.1	0.08	Eastside House	Unit 111 - Kitchen	East	Wall	Drywall	White	Intact
15-Feb-13	19	Negative	Negative	0	0	Eastside House	Unit 111 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	20	Negative	Negative	0	0	Eastside House	Unit 113 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	21	Negative	Negative	0	0	Eastside House	Unit 113 - Bathroom	North	Wall	Drywall	White	Intact
15-Feb-13	22	Negative	Negative	0	0	Eastside House	Unit 113 - Kitchen	West	Wall	Drywall	White	Intact
15-Feb-13	23	Negative	Negative	0	0.01	Eastside House	Floor 2 - Laundry Room	East	Wall	Drywall	White	Intact
15-Feb-13	24	Negative	Positive	0.01	0.01	Eastside House	Floor 2 - Laundry Room	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	25	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	26	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	East	Wall	Drywall	Off White	Intact
15-Feb-13	27	Negative	Negative	0	0	Eastside House	Floor 2 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	28	Negative	Positive	0.02	0.02	Eastside House	Floor 2 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	29	Negative	Positive	0.01	0.01	Eastside House	Floor 2 - Janitor's Closet	West	Wall	Drywall	White	Intact

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	30	Negative	Negative	0	0	Eastside	Unit 211 -	North	Wall	Drywall	White	Intact
						House	Bathroom					
15-Feb-13	31	Negative	Positive	0.02	0.03	Eastside	Unit 211 -	Ceiling	Ceiling	Drywall	White	Intact
						House	Kitchen					
15-Feb-13	32	Negative	Positive	0.01	0.02	Eastside	Unit 211 -	North	Wall	Drywall	White	Intact
						House	Kitchen					
15-Feb-13	33	Negative	Negative	0	0	Eastside	Unit 213 -	South	Wall	Drywall	White	Intact
						House	Kitchen					
15-Feb-13	34	Negative	Negative	0	0	Eastside	Unit 213 -	North	Wall	Drywall	White	Intact
						House	Bathroom					
15-Feb-13	35	Negative	Negative	0	0	Eastside	Unit 213 -	North	Wall	Drywall	White	Intact
						House	Bedroom Closet					
15-Feb-13	36	NA	NA					Standard				
15-Feb-13	37	Negative	Negative	0	0	Eastside	Unit 313 -	North	Wall	Drywall	White	Peeling
						House	Bedroom Closet					
15-Feb-13	38	Negative	Negative	0	0	Eastside	Unit 313 -	North	Wall	Drywall	White	Peeling
						House	Bathroom					
15-Feb-13	39	Negative	Positive	0.02	0.04	Eastside	Unit 313 -	South	Wall	Drywall	White	Intact
						House	Kitchen					
15-Feb-13	40	Negative	Positive	0.03	0.03	Eastside	Unit 311 -	South	Wall	Drywall	White	Intact
						House	Kitchen					
15-Feb-13	41	Negative	Negative	0	0	Eastside	Unit 311 -	North	Wall	Drywall	White	Intact
						House	Bedroom Closet					
15-Feb-13	42	Negative	Positive	0.02	0.02	Eastside	Unit 311 -	North	Wall	Drywall	White	Intact
						House	Bathroom					
15-Feb-13	43	Positive	Positive	1	0.02	Eastside	Floor 3 -	West	Wall	Drywall	White	Intact
						House	Laundry Room					
15-Feb-13	44	Positive	Positive	1	0.14	Eastside	Floor 3 -	West	Wall	Drywall	White	Intact
						House	Laundry Room					
15-Feb-13	45	Positive	Positive	1	0.02	Eastside	Floor 3 -	Ceiling	Ceiling	Drywall	White	Intact
						House	Laundry Room					

THIRD PARTY REPORTS - D.2

Date	Reading	Lead Based	Lead Containing	*Pb	Pb +/-	Unit / Bldg.	Room Type	Side	Component	Substrate	Color	Condition
15-Feb-13	46	Negative	Negative	0	0	Eastside House	Floor 3 - Hallway	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	47	Negative	Negative	0	0	Eastside House	Floor 3 - Hallway	East	Wall	Drywall	White	Intact
15-Feb-13	48	Negative	Positive	0.03	0.02	Eastside House	Floor 3 - Janitor's Closet	West	Wall	Drywall	White	Intact
15-Feb-13	49	Negative	Positive	0.02	0.02	Eastside House	Floor 3 - Janitor's Closet	Ceiling	Ceiling	Drywall	White	Intact
15-Feb-13	50	NA	NA					Standard				
15-Feb-13	51	Negative	Positive	0.07	0.03	Eastside House	Exterior	East	Wall	Wood	Brown	Intact
15-Feb-13	52	Negative	Positive	0.09	0.03	Eastside House	Exterior	East	Wall	Wood	Brown	Intact
15-Feb-13	53	NA	NA	1.09	0.05	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	54	NA	NA	1.14	0.06	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	55	NA	NA	1.03	0.03	Eastside House	Calibration	Calibration		Calibration	Red	Calibration
15-Feb-13	56	NA	NA	0	0	Eastside House	Calibration	Calibration		Calibration	White	Calibration

6.0 CONCLUSIONS AND RECOMENDATIONS

Extreme caution should be used during any renovation activities to ensure that additional materials are not uncovered. This report should be presented to any contractor or subcontractor participating in the plumbing renovation at the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. In the event that additional materials are discovered, the material should be sampled and analyzed to determine if it contains asbestos prior to disturbance.

6.1 Asbestos

Asbestos-containing materials are required to be removed and disposed of in accordance with Washington State Regulations prior to any demolition, renovation, or remodeling that would disturb these materials. Washington State Department of Labor and Industries and PSCAA require that the abatement be performed using Certified Asbestos Workers under the direct on-site supervision of a Certified Asbestos Supervisor.

Materials that contain <1% asbestos (i.e. gypsum wall board and joint compound materials) are not regulated for disposal purposes. However, removal of materials containing <1% asbestos is considered an unclassified asbestos operation by OSHA and WISHA. Unclassified asbestos operations cover employees likely to be exposed in excess of the airborne asbestos permissible exposure limit (PEL), and who are performing operations not covered by Class I through IV. For construction work involving unclassified asbestos operations, the applicable requirements will include: an airborne exposure assessment, use of vacuum cleaners equipped with HEPA filters, use of wet methods and prompt cleanup of debris, use of respirators and protective clothing, training, and record keeping. The requirements for the removal of <1% wallboard systems are addressed in WRD 23.30, which is attached for your convenience.

RGA recommends that a Certified Asbestos Project Designer design any asbestos abatement job to ensure that the job is completed according to regulation standards.

6.2 Lead

Based on XRF testing, 3 of the 4 paint coatings tested by RGA contained detectable and reportable quantities of lead and 2 of them contained lead-based paint throughout the plumbing renovation pathway in the Eastridge House located at 120 West Sunset Way in Issaquah, Washington. The presence of lead in coatings raises concerns about worker and environmental protection. Special precautions will need to be taken to renovate the building. The recommendations are addressed in the Regulatory Compliance Section above.

7.0 LIMITS OF SURVEY

This report does not represent all conditions at the subject site as it only reflects the information gathered from the applicable and accessible plumbing renovation pathway, including common areas and units 111, 111, 113, 211, 213, 311 and 313 in the Eastridge House as outlined by the client. RGA's observations and sampling included all accessible interior areas and observation or sampling of inaccessible areas such as behind closed walls or within ductwork was not within the scope of RGA's work and was not performed.

This report was prepared pursuant to the contract RGA has with the client. Unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party. Contact us at 206-281-8858 with any questions.



Attachment 1

RGA Asbestos Laboratory Results

www.rgaenv.com



Issaquah, WA

1730 Minor Avenue, Suite 900, Seattle, WA 98101

OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components e)	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-01A 13004153	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material Layer Comments: First positive	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles

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Page 1 of 26



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key		
C lient Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-02A 13004156	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile	13% Mineral Wool	85% Calcite Filler and Binder
	Layer Comments: The wall unit, as	s a whole, contains <1% Ch	rysotile asbestos by visual es	timation.
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit, as	s a whole, contains <1% Ch	rysotile asbestos by visual es	timation.
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-6	No Asbestos Detected		80% Gypsum Filler and Binder

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White blocky crystalline material

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Page 2 of 26 2/27/2013

20% Mineral Particles



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components e)	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-02B 13004157	L-1 Beige paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit,	, as a whole, contains <1% Ch	rysotile asbestos by visual es	stimation.
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: The wall unit,	, as a whole, contains <1% Ch	rysotile asbestos by visual es	stimation.
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder

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2/27/2013



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key			
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if application)	Asbestos Components able)	Non-Asbestos Fibrous Components	Non-Fibrous Components	
EH-02 C 13004158	L-1 Beige paint	No Asbestos Detected		100% Paint	
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.				
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose		
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall u	nit, as a whole, contains <1% Ch	rysotile asbestos by visual es	stimation.	
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
	L-6	No Asbestos Detected		80% Gypsum Filler and Binder	

13004159			15% Filler and Binder
EH-04A 13004160	L-1 Beige adhesive	No Asbestos Detected	80% Resin and Binder 20% Mineral Particles
	L-2 White fibrous material	No Asbestos Detected 35% Cellulo	se 50% Resin and Binder 15% Filler and Binder

No Asbestos Detected

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EH-03A

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Brown blocky crystalline material

White fibrous material

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35% Cellulose

Page 4 of 26 2/27/2013

20% Mineral Particles

50% Resin and Binder



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

NVLAP LAB CODE 200613-0

RGA Project Number: KCHA32114

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-04C 13004162	Beige adhesive	No Asbestos Detected		80% Resin and Binder 20% Mineral Particles
EH-05A 13004163	L-1 Multi-color fibrous material	No Asbestos Detected	100% Synthetic	
	L-2 White plasticy weave	No Asbestos Detected		100% Plastic Particles
	L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-05B 13004164	L-1 Multi-color fibrous material	No Asbestos Detected	100% Synthetic	
	L-2 White plasticy weave	No Asbestos Detected		100% Plastic Particles
	L-3 White adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-06A 13004166	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Tan fibrous material	No Asbestos Detected	50% Mineral Wool 30% Cellulose	20% Filler and Binder

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Page 5 of 26 2/27/2013



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-06B 13004167	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Tan fibrous material	No Asbestos Detected	50% Mineral Wool 30% Cellulose	20% Filler and Binder
EH-07A 13004168	L-1 Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
	L-2 Beige adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-07B 13004169	Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-08B 13004171	L-1 Beige vinyl tile	No Asbestos Detected		50% Vinyl Filler and Binder 40% Calcite Filler and Binder 10% Mineral Particles
	L-2 Black asphaltic material Layer Comments: First positive sto	3% Chrysotile		90% Asphalt Filler and Binder 7% Mineral Particles
EH-09A 13004173	White resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles

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Page 6 of 26



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

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Number of Samples: 59

King County Ho	ousing Authority	RGA Batch Number:	13-0423
Project Location:	120 West Sunset Way	RGA Project Number:	KCHA32114
	Issaquah, WA	Number of Samples:	59

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-10A 13004174	L-1 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-2 White fibrous weave	No Asbestos Detected	100% Glass Fiber	
	L-3 Silver foil	No Asbestos Detected		100% Foil
	L-4 Yellow adhesive	No Asbestos Detected		95% Resin and Binder 5% Filler and Binder
	L-5 Yellow fibrous material	No Asbestos Detected	100% Fiberglass	
EH-10C 13004176	L-1 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-2 White fibrous weave	No Asbestos Detected	100% Glass Fiber	
	L-3 Silver foil	No Asbestos Detected		100% Foil
	L-4 Yellow adhesive	No Asbestos Detected		95% Resin and Binder 5% Filler and Binder
	L-5 Yellow fibrous material	No Asbestos Detected	100% Fiberglass	

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



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King County Ho	ousing Authority	RGA Batch Number:	13-0423
Project Location:	120 West Sunset Way	RGA Project Number:	KCHA32114
	Issaquah, WA	Number of Samples:	59

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-11A 13004177	L-1 White fibrous weave	No Asbestos Detected	100% Cellulose	
	L-2 White powdery material Layer Comments: First positive st	3% Amosite op.		75% Calcite Filler and Binder 22% Mineral Particles
EH-12A 13004179	L-1 Black/tan fibrous asphaltic material	No Asbestos Detected	60% Cellulose	40% Asphalt Filler and Binder
	L-2 Black fibrous material	No Asbestos Detected	100% Fiberglass	
EH-13A 13004180	Black hard rubbery material	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
EH-14A 13004181	L-1 Black asphaltic material	2% Chrysotile		85% Asphalt Filler and Binder 13% Mineral Particles
	L-2 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-3 Black fibrous material	No Asbestos Detected	100% Cellulose	

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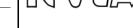
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Page 8 of 26 2/27/2013



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



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King County Housing Authority

Project Location: 120 West Sunset Way

Issaquah, WA

RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-15A 13004182	L-1 Gray resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Beige resinous mateiral	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-3 Gray resinous fibrous material	5% Chrysotile		85% Resin and Binder 10% Mineral Particles
EH-16A 13004183	L-1 Beige vinyl tile	2% Chrysotile		50% Vinyl Filler and Binder 40% Calcite Filler and Binder 8% Mineral Particles
	Layer Comments: First positive sto	op.		
	L-2 Black asphaltic material	2% Chrysotile		90% Asphalt Filler and Binder 8% Mineral Particles
	Layer Comments: First positive sto	op.		

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Page 9 of 26 2/27/2013



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components (e)	Non-Asbestos Fibrous Components	Non-Fibrous Components		
EH-17A 13004186	L-1 Beige paint	No Asbestos Detected		100% Paint		
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual		rysotile asbestos by visual es	stimation.		
	L-3 No Asbestos Detecto White fibrous material	No Asbestos Detected	100% Cellulose			
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binde 20% Mineral Particles		

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<1% Tremolite

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L-7

Brown adhesive

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85% Resin and Binder

>14% Mineral Particles



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components le)	Non-Asbestos Fibrous Components	Non-Fibrous Components		
EH-17C 13004188	L-1 Beige paint	No Asbestos Detected		100% Paint		
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose			
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles		
EH-18A 13004189	Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles		

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Page 11 of 26 2/27/2013



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key		
C lient Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-19A 13004190	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive sto	op.		
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	
EH-20A 13004192	Black hard rubbery material	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder
				10% Mineral Particles
EH-21A	L-1	No Asbestos Detected		85% Resin and Binder
13004193	Yellow adhesive			15% Mineral Particles
	L-2	<1% Tremolite		85% Resin and Binder
	Brown adhesive			>14% Mineral Particles
	L-3	2% Chrysotile		85% Calcite Filler and Binder
	Beige crystalline material			13% Mineral Particles
EII A1D	II	No Asbestos Detected		80% Resin and Binder
EH-21B 13004194	White adhesive	NO ASDESIOS DETECTED		20% Mineral Particles
	L-2	No Asbestos Detected		85% Calcite Filler and Binder
	Beige crystalline material			15% Mineral Particles

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

NVLAP LAB CODE 200613-0

Number of Samples:

King County Housing Authority Project Location: 120 West Sunset Way RGA Project Number: KCHA32114 Issaquah, WA

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-22A 13004195	L-1 Beige vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 White adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles
EH-22B 13004196	L-1 Gray vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles

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Page 13 of 26



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components		
EH-23A 13004197	L-1 White paint	No Asbestos Detected		100% Paint		
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, a	s a whole, contains <1% Ch	rysotile asbestos by visual es	timation.		
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose			
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles		
EH-23B 13004198	L-1 White crystalline material	No Asbestos Detected		85% Calcite Filler and Binder 15% Mineral Particles		
	L-2 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-3 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles		

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

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King County Housing Authority

Project Location: 120 West Sunset Way

Issaquah, WA

RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

Number of Samples: 59

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-24A 13004199	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	Layer Comments: First positive sto	op.		
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles
EH-25A 13004201	L-1 Gray resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Brown fibrous material	No Asbestos Detected	100% Cellulose	
	L-3 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
EH-25B 13004202	L-1 Gray resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-2 Black hard rubbery material	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles

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Received By: Abdulrazzak Mansur 2/19/2013 2/27/2013 Reviewed By: Aruna Turaga

Analyzed By:

Allison Reagan

Page 15 of 26 2/27/2013



OFFICE: (206) 281-8858 FAX: (206) 281-8922 email: laboratory@rgaenv.com

Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples: 59

King County Housing Authority			
Project Location:	120 West Sunset Way		
	Issaquah, WA		

Report Key Layer ID (if applicable) Asbestos Non-Asbestos Fibrous Non-Fibrous Client Sample ID Components Components Components RGA Lab ID Layer Description Layer Comments (if applicable) L-1 No Asbestos Detected 35% Cellulose 50% Resin and Binder EH-26A White fibrous material 13004203 15% Filler and Binder L-2 No Asbestos Detected 90% Resin and Binder Beige adhesive 10% Mineral Particles L-1No Asbestos Detected 100% Paint EH-27A White paint 13004204 2% Chrysotile 85% Calcite Filler and Binder L-2 White crystalline material 13% Mineral Particles Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.

L-3 No Asbestos Detected 100% Cellulose

White fibrous material

2% Chrysotile 85% Calcite Filler and Binder

White crystalline material

13% Mineral Particles

Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.

No Asbestos Detected 100% Cellulose L-5

Tan fibrous material

L-6

No Asbestos Detected 80% Gypsum Filler and Binder

White blocky crystalline material

20% Mineral Particles

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Page 16 of 26 2/27/2013



Issaquah, WA

1730 Minor Avenue, Suite 900, Seattle, WA 98101

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

2/27/2013

Number of Samples:

		Report Key				
C lient Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components		
EH-27B 13004205	L-1 White paint	No Asbestos Detected		100% Paint		
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose			
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles		

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Issaquah, WA

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-28A 13004206	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose	
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
EH-28B 13004207	L-1 White paint	No Asbestos Detected		100% Paint
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles
EH-29A 13004208	L-1 Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles

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No Asbestos Detected

2% Chrysotile

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L-2

Beige adhesive

Beige crystalline material

Analyzed By: Allison Reagan Page 18 of 26

80% Resin and Binder

20% Mineral Particles

13% Mineral Particles

2/27/2013

85% Calcite Filler and Binder



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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-30A 13004209	L-1 Beige vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	No Asbestos Detected	60% Cellulose	40% Filler and Binder
	L-3 Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-4 Green vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-5 Gray fibrous backing	30% Chrysotile	30% Cellulose	40% Filler and Binder
	L-6 Beige adhesive	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

2/27/2013

Number of Samples:

		Report Key				
C lient Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components le)	Non-Asbestos Fibrous Components	Non-Fibrous Components		
EH-31A 13004210	L-1 White paint	No Asbestos Detected		100% Paint		
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose			
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder		

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key				
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components		
EH-31B 13004211	L-1 White paint	No Asbestos Detected		100% Paint		
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as	s a whole, contains <1% Ch	rysotile asbestos by visual es	stimation.		
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose			
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.					
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose			
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles		
EH-32A 13004212	L-1 White paint	No Asbestos Detected		100% Paint		
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles		
	Layer Comments: First positive ste	ор.				
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose			

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

NVLAP LAB CODE 200613-0

Number of Samples:

King County Housing Authority		RGA Batch Number: 13-0423
Project Location:	120 West Sunset Way	RGA Project Number: KCHA32114
	Issaquah, WA	Number of Samples: 59

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-33A 13004214	L-1 White resinous fibrous material	No Asbestos Detected	20% Cellulose	65% Resin and Binder 15% Mineral Particles
	L-2 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
	L-3 Brown fibrous material	No Asbestos Detected	100% Cellulose	
EH-34A 13004215	Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-34B 13004216	Brown adhesive	<1% Tremolite		85% Resin and Binder >14% Mineral Particles
EH-35A 13004217	L-1 Green vinyl sheeting	No Asbestos Detected		60% Vinyl Filler and Binder 30% Calcite Filler and Binder 10% Mineral Particles
	L-2 Gray fibrous backing	30% Chrysotile	30% Cellulose	40% Filler and Binder
	Layer Comments: First positive st	ор.		
	L-3 Yellow adhesive	No Asbestos Detected		90% Resin and Binder 10% Mineral Particles

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Page 22 of 26



Issaquah, WA

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

		Report Key			
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components	
EH-36A 13004219	L-1 Black asphaltic material	2% Chrysotile		90% Asphalt Filler and Binder 8% Mineral Particles	
	L-2 Black fibrous material	No Asbestos Detected	100% Cellulose		
	L-3 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles	
EH-37A 13004220	L-1 White paint	No Asbestos Detected		100% Paint	
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.				
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose		
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as	s a whole, contains <1% Ch	rysotile asbestos by visual es	timation.	
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles	

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Page 23 of 26 2/27/2013



Issaquah, WA

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423 RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

Number of Samples:

			Transer of Sam		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components	
EH-37B 13004221	L-1 White paint	No Asbestos Detected		100% Paint	
	L-2 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit,	, as a whole, contains <1% Ch	rysotile asbestos by visual es	stimation.	
	L-3 White fibrous material	No Asbestos Detected	100% Cellulose		
	L-4 White crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: The wall unit, as a whole, contains <1% Chrysotile asbestos by visual estimation.				
	L-5 Tan fibrous material	No Asbestos Detected	100% Cellulose		
	L-6 White blocky crystalline material	No Asbestos Detected		80% Gypsum Filler and Binder 20% Mineral Particles	
EH-38A 13004222	L-1 White paint	No Asbestos Detected		100% Paint	
	L-2 Beige crystalline material	2% Chrysotile		85% Calcite Filler and Binder 13% Mineral Particles	
	Layer Comments: First positive	stop.			
	L-3 Tan fibrous material	No Asbestos Detected	100% Cellulose		

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Issaquah, WA

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)

RGA Batch Number: 13-0423

NVLAP LAB CODE 200613-0

Number of Samples: 59

King County Housing Authority Project Location: 120 West Sunset Way RGA Project Number: KCHA32114

Report Key Layer ID (if applicable) Asbestos Non-Asbestos Fibrous Non-Fibrous Client Sample ID Components Components Components RGA Lab ID Layer Description Layer Comments (if applicable) L-1 No Asbestos Detected 85% Resin and Binder EH-39A Beige adhesive 13004224 15% Mineral Particles L-2 <1% Tremolite 85% Resin and Binder Brown adhesive >14% Mineral Particles L-1No Asbestos Detected 60% Vinyl Filler and Binder **EH-40A** Beige vinyl sheeting 30% Calcite Filler and Binder 13004225 10% Mineral Particles No Asbestos Detected 60% Cellulose L-2 40% Filler and Binder Gray fibrous backing L-3 No Asbestos Detected 90% Resin and Binder Yellow adhesive 10% Mineral Particles L-4 No Asbestos Detected 60% Vinyl Filler and Binder Green vinyl sheeting 30% Calcite Filler and Binder 10% Mineral Particles 30% Chrysotile 30% Cellulose 40% Filler and Binder Gray fibrous backing No Asbestos Detected L-6 90% Resin and Binder Yellow adhesive 10% Mineral Particles

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Bulk Asbestos Fiber Analysis (EPA 600/R-93/116)



RGA Batch Number: 13-0423

RGA Project Number: KCHA32114

NVLAP LAB CODE 200613-0

85% Resin and Binder

15% Mineral Particles

Number of Samples:

		Report Key		
Client Sample ID RGA Lab ID	Layer ID (if applicable) Layer Description Layer Comments (if applicable)	Asbestos Components	Non-Asbestos Fibrous Components	Non-Fibrous Components
EH-41A 13004226	L-1 Black asphaltic material Layer Comments: First positive s	2% Chrysotile		90% Asphalt Filler and Binder 8% Mineral Particles
	L-2 Brown fibrous material	No Asbestos Detected	100% Cellulose	
	L-3 Beige resinous material	No Asbestos Detected		85% Resin and Binder 15% Mineral Particles
EH-42A 13004228	L-1 White fibrous material	No Asbestos Detected	35% Cellulose	50% Resin and Binder 15% Filler and Binder

No Asbestos Detected

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L-2

Beige adhesive

Analyzed By: Allison Reagan Page 26 of 26

X__ PM - Angela Harkins angela.harkins@rgaenv.com fax: 206-281-8922

Sr. PM-E.Hartman

eric.hartman@rgaenv.com fax: 206.281.8922

RGA CLIENT: King County Housing Authority_

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

х	Stop Analysis at First Positive	PAGE

е <u>l</u>of**S**

___ Analyze All Samples

	Point Count Analysis (400-point)
Project Name/Add	ress: 120 West Sunset Way Issaquah, WA. Samples Submitted 46
GA Project #: KO	CHA32114 Sampled By // Sample Date: 2/15 Zov3
'ample(a) Sont To	: X_RGAEMSLOther:TAT:Rush24Hrs48Hrs X3-5 Days
** <u>FAX OR</u>	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)***
ADDITION	AL REPORT RECIPIENT(S):_Angela*
HM# O(
Sample ID	Material Description: Texture on GWB Walls / Ceiling - Hallway Sample Location & Material Location Quantity:
EH-OIA	Floor 1- Etallway-EEnd
1 -013	Floor2- 1
-010	Floor 3 - V
HM# '02_	Material Description: GWB on Walls/(Lill up W/Joint Compound - Hullways Sample Location & Material Location Quantity:
Sample ID	Sample Location & Material Location Quantity:
EH- DZA	Floor 1 - E Hallway - EEnd
	Floer 2 4
+ -026	Floors J V
HM# 03	Material Description: Und Green Wellpaper on GWB Sample Location & Material Location Quantity:
Sample ID	Sample Location & Material Location Quantity:
EH-03A	Floor 1- E Hallway - E Enl
EH 03B	Floor 25
-	
HM# O4	Material Description: Mustic Assoc, W/ 4"Tan Covebase (Beigg) Sample Location & Material Location Quantity:
Sample ID	
EH-0919	Floor 1- EHallway - E Each
EH 043	Flore &
EH-04C	Floor 3 4 V
HM# 05	Material Description: Mastic Beneath Blue Tan Carpet
Sample ID	Sample Location & Material Location Quantity:
EH-05A	Floor 1 - E Hall way - EEnl
EH-05B	Fluor 2 - 4
EH - 05C	Fluer3
HM# 06	Material Description: Suspended Ceilig Tile - 2'X4' - White Would Complete Sample Location & Material Location Quantity:
Sample ID	Campie Location & Material Location
EH-06A	Floor 1 - E Hallway - E End
EH-06B	Fluor2 - 1
Relinquished By	v: John Mashe Signature: Date/Time: 2/15/2013 73
Received By:	Signature: Date/Time:
Relinquished By	D. 4. //Diagram
Received By:	RAT MANSURI Signature: Date/Time: 2/19/13
Received by:	VA CONTRACTOR OF THE CONTRACTO



X PM - Angela Harkins angela.harkins@rgaenv.com fax: 206-281-8922

____Sr. PM-E.Hartman eric.hartman@rgaenv.com fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive

PAGE <u>2</u>OF <u>₹</u>

___ Analyze All Samples

Sample Submitted The Sample Statumited The Sample ID Sample		7/
Sample 10 Sample	Project Name/Add	ress: 120 West Sunset Way Issaquah, WA. Samples Submitted 76
Sample 10 Sample	RGA Project #: <u>K</u>	CHA32114 Sampled By M/NB Sample Date: Z 15 2013
***ADDITIONAL REPORT RECIPIENT(S): Angela *** *** *** *** *** *** ***	Sample(s) Sent To	: _X_RGA EMSL Other: <u>TAT:</u> Rush24Hrs48Hrs X 3-5 Days
ADDITIONAL REPORT RECIPIENT(S): Angela *** *** *** *** *** *** ***	***FAX OR	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)
EH-07A Floor I-Men'D Restroom - WSIde EH-07B		
EH-07A Floor I-Men'D Restroom - WSIde EH-07B	HM# AT	Motorial Description: Mullion Anna Lillian Couche de (Braum)
EH-07A Floor I-Men'D Restroom - WSIde EH-07B		Sample Location & Material Location Quantity:
HM# 08 Material Description: Beig Tem Speckled Ving Floor Sheeting W Martic Sample ID Sample Location & Material Location CH-08A Floor March E Side -08B - Kitche E Side -08C Floor 2 - Landing Row - Side MM# 09 Material Description: White Caully @ Toilet Sample ID Sample Location & Material Location CH-09A Floor Meigheutron - W Side HM# 10 Material Description: Floor Gas Pipe Insulation Quantity: EH-09A Floor Meigheutron - W Side HM# 10 Material Description: Floor Gas Pipe Insulation Quantity: EH-10A Floor Meigheutron - W Side - Inside Wall -10C V - Unit 113 - Bedfrom - NSide - Inside Wall HM# 11 Material Description: Modeld Elbow Sample ID Sample Location & Material Location Quantity: EH-1A Floor Meigheutron - W Side - Inside Wall -1B - Chair Storage - Side HM# 17 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side HM# 10 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side HM# 11 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side HM# 10 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side HM# 10 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side HM# 10 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side HM# 10 Material Description: Black Floor Inside Wall -1B - Chair Storage - Side		
### 08 Material Description: Beign Tours pecked Ving Floor Sheeting W Mastic Sample ID Sample Location & Material Location EH-08A Floor Men's Pecknown W Side -08B Nithur E Side -08C Floor 2 - Landry Row - Side -08C Floor 2 - Landry Row - Side Material Description: White Caully & Toilet Sample ID Sample Location & Material Location Quantity: EH-09A Floor Men's Restroor - W Side ### 10 Material Description: Fibraglass Proclassification Quantity: EH-10A Floor Men's Restroor - W Side - Inside Wall -10C V - Unit 113 - Bostom - N Side - Inside Wall ### 11 Material Description: Model Elbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor Men's Rostroor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Block Floor - W Side - Inside Wall -11B - Chair Storage - E Side HM# 10 Material Description: Bloc		
HM# 04 Material Description: Beige Tem Special Ving Floor Sheeting W Mastic Sample ID Sample Location & Material Location -08B		DIVINDITY TOTAL DELLA
EH-08A Foor Men's Restroom Wide -08B J - Kitcher E Side -08C Floor 2 - Landry Power - SSide -08C Floor 2 - Landry Power - SSide HMM# OG Material Description: White Caully & Toilet Sample ID Sample Location & Material Location Quantity: EH-09A Floor - Men's Restroom - W Side HMM# (U Material Description: Fiberalars Pipe Insulation Quantity: EH-10A Floor - Men's Restroom - W Side - Inside Wall -10C V - White IIS - Restroom - W Side - Inside Wall HMM# Material Description: Nowled ELDOW Sample ID Sample Location & Material Location Quantity: EH- A Floor - Men's Restroom - W Side - Inside Wall -1 B Floor - Men's Restroom - W Side - Inside Wall HMM# \(Material Description: Black Fibergles Inside Wall -1 B Floor - Men's Restroom - W Side - Inside Wall HMM# \(Material Description: Black Fibergles Inside Wall EH-12A Floor - Men's Restroom - W Side - Inside Wall Relinquished By: Signature: Date/Time: Z/15/2013 TERECEIVED BY: Received By: Signature: Date/Time: Signature: Date/Time: Paper Facing Instinct Date/Time: Z/15/2013 TERECEIVED BY: Signature: Date/Time: Paper Facing Instinct Date/Time: Date/Time: Paper Facing Instinct Date/Time: Paper Facing Ins		Material Description: Rober Tune Special Vived Floor Sheeting W/ Wastic
EH-08A Foor Men's Restroom Wide -08B J - Kitcher E Side -08C Floor 2 - Landry Power - SSide -08C Floor 2 - Landry Power - SSide HMM# OG Material Description: White Caully & Toilet Sample ID Sample Location & Material Location Quantity: EH-09A Floor - Men's Restroom - W Side HMM# (U Material Description: Fiberalars Pipe Insulation Quantity: EH-10A Floor - Men's Restroom - W Side - Inside Wall -10C V - White IIS - Restroom - W Side - Inside Wall HMM# Material Description: Nowled ELDOW Sample ID Sample Location & Material Location Quantity: EH- A Floor - Men's Restroom - W Side - Inside Wall -1 B Floor - Men's Restroom - W Side - Inside Wall HMM# \(Material Description: Black Fibergles Inside Wall -1 B Floor - Men's Restroom - W Side - Inside Wall HMM# \(Material Description: Black Fibergles Inside Wall EH-12A Floor - Men's Restroom - W Side - Inside Wall Relinquished By: Signature: Date/Time: Z/15/2013 TERECEIVED BY: Received By: Signature: Date/Time: Signature: Date/Time: Paper Facing Instinct Date/Time: Z/15/2013 TERECEIVED BY: Signature: Date/Time: Paper Facing Instinct Date/Time: Date/Time: Paper Facing Instinct Date/Time: Paper Facing Ins	-	Sample Location & Material Location Quantity:
-08B J - Kither E Side -08C Floor 2 - Landry Row - SSide HM# OQ Material Description: White Cault & Toilet Sample ID Sample Location & Material Location Quantity: EH-09A Floor - Meric Reoffcor - W Side HM# (U Material Description: Fiberal as Pipe Insulation Quantity: Sample ID Sample Location & Material Location Quantity: EH-10A Floor - Meric Restrow - W Side - Inside Wall -10C J - Unit 113 - Rostrow - W Side - Inside Wall HM# 11 Material Description: Norded ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor - Mais Restrow - W Side - Inside Wall -11B J - Chair Storage - ESide HM# (7 Material Description: Block Floor of Side - Inside Wall -11B Sample ID Sample Location & Material Location Floor - Material Description: Block Floor of Side - Inside Wall Sample ID Sample Location & Material Location Guantity: EH-12A Floor - Mass Restrow - W Side - Inside Wall Relinquished By: Signature: Date/Time: Z/15/2013 T2 Received By: Signature: Date/Time: Part/Time: Part/Time: Z/15/2013 T2 Received By: Signature: Date/Time: Part/Time: Part		Floor - Maris Restroom W Side
HM# 09 Material Description: White Caults & Toilet Sample ID Sample Location & Material Location EH-09A Floor - Weight Restron - W Sicle HM# (U Material Description: Fiberalian Pipe Insulation Quantity: EH-10A Floor - Merical Description: Fiberalian Pipe Insulation Quantity: EH-10A Floor - Merical Pipe Insulation Quantity: EH-10A Floor - Merical Picktrow - W Sicle - Inside Wall -10C J - Unit 113 - Bothow - N Sicle - Inside Wall HM# II Material Description: Modeld ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor - Merical Description: Black Floor - W Sicle - Inside Wall -11B J - Chair Storage - ESide HM# Y Material Description: Black Floor - W Sicle - Inside Wall Sample ID Sample Location & Material Location Quantity: EH-12A Floor - Man Rastrom - W Side - Inside Wall Sample ID Sample Location & Material Location Quantity: EH-12A Floor - Man Rastrom - W Side - Inside Wall Relinquished By: Signature: Date/Time: Z/15/2013 172 Received By: Signature: Date/Time: Date/Time		
HM# 09 Material Description: White Carlle & Toilet Sample ID Sample Location & Material Location EH-09A Floor - Weighter Corn - W Sicle HM# 10 Material Description: Fiscardans Pipe Insulation W Cloth Wrap + Bridging Sample ID Sample Location & Material Location Quantity: EH-10A Floor - Mexic Pestrow - W Sicle - Inside Wall -10C J - Unit 113 - Bothom - N Sicle - Inside Wall HM# 11 Material Description: Modeld ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor - Mexic Robron - W Sicle - Inside Wall -11B J - Chair Storage - ESide HM# 17 Material Description: Black Floor wall wall Sample ID Sample Location & Material Location Quantity: EH-12A Floor - Mass Restron - W Side - Inside Wall Sample ID Sample Location & Material Location Quantity: EH-12A Floor - Mass Restron - W Side - Inside Wall Relinquished By: Signature: Date/Time: 2/15/2013 172 Received By: Signature: Date/Time: Date/Time: Pate/Time: Date/Time: Date/Time		Flor 2 - Landry Row - SSide
Sample ID Sample Location & Material Location EH-09A Floor - Mein Restrour - W Sicle HM# (U Material Description: Fischalars Pipe Insulation W Cloth Wrap + Briologium Sample ID Sample Location & Material Location Quantity: EH-10A Floor Mein Rustrour - W Sicle - Inside Wall -10C J - Mein Rustrour - W Sicle - Inside Wall -10C J - Mein Rustrour - W Sicle - Inside Wall HM# Material Description: Modeld ELbow Sample ID Sample Location & Material Location Quantity: EH-1 A Floor Mein Rustrour - W Sicle - Inside Wall -1 B J - Chair Storage - E Sicle HM# (Material Description: Black Flooring Wall -1 B J - Chair Storage - E Sicle HM# (Material Description: Black Flooring Insulation Paper Facing in Int. Wall Sample ID Sample Location & Material Location Relinquished By: Signature: Date/Time: Date/Time: Relinquished By: Signature: Date/Time: Signature: Date/Time:	HM# ()9	
HM# (V Material Description: Fiberalus Pipe Insulation W Cloth Wrap + Bridging Sample ID Sample Location & Material Location EH-10A Floor -Mens Restron-Wside - Inside Wall -10C V - Unit 113 - Bothma - NSide - Inside Wall HM# Material Description: Maddle ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor -Mens Restron-W Side - Inside Wall -11B L - Chair Storage - ESide HM# \(\text{Material Description: Black Floor walls Malerial Description: Black Floor Quantity: \) EH-12A Floor -Mens Restron-W Side - Inside Wall Sample ID Sample Location & Material Location Quantity: \(\text{Quantity:} \) EH-12A Floor -Mens Restron-W Side - Inside Wall Relinquished By: \(\text{Signature:} \) Signature: \(\text{Date/Time:} \) Signature: \(\text{Date/Time:} \) Pate/Time: \(\text{Date/Time:} \) Signature: \(\text{Date/Time:} \) Signature: \(\text{Date/Time:} \) Date/Time: \(\text{Date/Time:} \)		Sample Location & Material Location Quantity:
HM# (V Material Description: Fiberalus Pipe Insulation W Cloth Wrap + Bridging Sample ID Sample Location & Material Location EH-10A Floor -Mens Restron-Wside - Inside Wall -10C V - Unit 113 - Bothma - NSide - Inside Wall HM# Material Description: Maddle ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor -Mens Restron-W Side - Inside Wall -11B L - Chair Storage - ESide HM# \(\text{Material Description: Black Floor walls Malerial Description: Black Floor Quantity: \) EH-12A Floor -Mens Restron-W Side - Inside Wall Sample ID Sample Location & Material Location Quantity: \(\text{Quantity:} \) EH-12A Floor -Mens Restron-W Side - Inside Wall Relinquished By: \(\text{Signature:} \) Signature: \(\text{Date/Time:} \) Signature: \(\text{Date/Time:} \) Pate/Time: \(\text{Date/Time:} \) Signature: \(\text{Date/Time:} \) Signature: \(\text{Date/Time:} \) Date/Time: \(\text{Date/Time:} \)	EH-09A	Floor - Meis Restrour - W Sicle
EH-10A Floor-Meris Restrow-WSide - Inside Wall -10C V - Mit 113 - Bother - NSide - Inside Wall HM# 11 Material Description: Modeld ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor-Meris Restrow - WSide - Inside Wall -11B L - Chair Storage - ESide HM# Material Description: Black Floory by Insulation Paper Facing in Int. Walls Sample ID Sample Location & Material Location EH-12A Floor-Meris Restrow - WSide - Inside Wall Relinquished By: Signature: Date/Time: Received By: Signature: Date/Time: Relinquished By: Signature: Date/Time: Signature: Date/Time: Date/Time:		
EH-10A Floor-Meris Restrow-WSide - Inside Wall -10C V - Mit 113 - Bother - NSide - Inside Wall HM# 11 Material Description: Modeld ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor-Meris Restrow - WSide - Inside Wall -11B L - Chair Storage - ESide HM# Material Description: Black Floory by Insulation Paper Facing in Int. Walls Sample ID Sample Location & Material Location EH-12A Floor-Meris Restrow - WSide - Inside Wall Relinquished By: Signature: Date/Time: Received By: Signature: Date/Time: Relinquished By: Signature: Date/Time: Signature: Date/Time: Date/Time:		
EH-10A Floor-Meris Restrow-WSide - Inside Wall -10C V - Mit 113 - Bother - NSide - Inside Wall HM# 11 Material Description: Modeld ELbow Sample ID Sample Location & Material Location Quantity: EH-11A Floor-Meris Restrow - WSide - Inside Wall -11B L - Chair Storage - ESide HM# Material Description: Black Floory by Insulation Paper Facing in Int. Walls Sample ID Sample Location & Material Location EH-12A Floor-Meris Restrow - WSide - Inside Wall Relinquished By: Signature: Date/Time: Received By: Signature: Date/Time: Relinquished By: Signature: Date/Time: Signature: Date/Time: Date/Time:	HM# (U	Material Description: Fiberalars Pipe Insulation Wath Wrap + Bridging
HM# 1 Material Description: Modeld Elbow Sample ID Sample Location & Material Location Quantity: EH-IIA Floor I- Mais Restrant - W Side - Inside Wall -IIB I - Chair Storage - ESide HM# 1 Material Description: Black Floorages Waldthaw Paper Fairm in Int. Walls Sample ID Sample Location & Material Location Quantity:) EH-12A Floor I- Mas Restrant - W Side - Inside Wall Relinquished By: Signature: Signature: Date/Time: Received By: Signature: Signature: Date/Time: Relinquished By: Signature: Date/Time:	Sample ID	
HM# Material Description: Muddled Elbow Sample ID Sample Location & Material Location Quantity: EH- A Floor - Music Restruction - W Side - I would will -1 B	EH-10A	
HM# Material Description: Modeld ELbow Sample ID Sample Location & Material Location EH-IA Floor - Mais Robrow - W Side - Inside Would -IIB		- the Chair Storage - 5 Side
Sample ID Sample Location & Material Location Quantity: EH-IIA Floor I- Mais Restron - W Sick - Inside Wall -IIB - Chair Storage - ESick HM# 17 Material Description: Black Fiberglas Insulation Paper Facing in Int. Walls Sample ID Sample Location & Material Location Quantity: EH-IZA Floor I- Manstestron - W Sick - Inside Wall Relinquished By: Signature: Date/Time: Received By: Signature: Date/Time: Relinquished By: Signature: Date/Time: Date/Time:	luC	
EH-IIA Floor 1- Mais Rotron - W Side - Inside Wall -IIB	HM# \\	Material Description: Muddled ELbow
HM# 17 Material Description: Bluck Fiberglus Insulation Waper Facing in Int. Walls Sample ID Sample Location & Material Location Quantity: EH-12A Floor I- Mas Restron - W Sidl - Inside Wall Relinquished By: Signature: Date/Time: Date/Time: Received By: Signature: Date/Time: Date/Time:		
HM# 17 Material Description: Black Fiberglas Insulation Water Facing in Int. Wells Sample ID Sample Location & Material Location Quantity: EH-1217 Floor I- Man Rustran - W Sidl ~ Inside Wall Relinquished By: Signature: Date/Time: Pate/Time: Pate/Time: Date/Time: Date/Time		Floor 1- Mais Restron - W Side - Unside World
Relinquished By: Relinquished By: Signature: Signature: Signature: Date/Time: Date/Time: Date/Time:	-11B	1 - Chair Storage - @ Side
Relinquished By: Relinquished By: Signature: Signature: Signature: Date/Time: Date/Time: Date/Time:		
Relinquished By: Relinquished By: Signature: Signature: Signature: Date/Time: Date/Time: Date/Time:	· · ·	Material Description: Black Fiberglas Insulation W/ Paper Facing in Int. Wells
Relinquished By: Signature: Date/Time: 2/15/2013 173 Received By: Signature: Date/Time: Date/Time: Date/Time:		
Received By: Relinquished By: Signature: Date/Time: Date/Time:	EH-12A	Hur HIMMS astron - N Har Inside wany
Received By: Relinquished By: Signature: Date/Time: Date/Time:		
Received By: Relinquished By: Signature: Date/Time: Date/Time:		L He
Received By: Date/Time:	Relinquished By	Signature: Date/Time: 2/15/2013 175
Relinquished By: Date/Time:		
		A
	-	



_____Sr. PM-E.Hartman eric.hartman@rgaenv.com fax: 206.281.8922

RGA CLIENT: King County Housing Authority_____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

<u>X</u>	Stop Analysis at First Positive	PAGE 3_OF
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___ Analyze All Samples

Project Name/Add	dress: 120 West Sunset Way Issaquah, WA. Samples Submitted
RGA Project #: K	CHA32114 Sampled By: ALAB Sample Date: 2 15 7013 CHA32114 Sampled By: ALAB Sample Date: 2 15 7013 CHA32114 TAT: Rush 24Hrs X 3-5 Days
Sample(s) Sent To	b: _X_RGA EMSL Other: ^t <u>TAT:</u> Rush24Hrs48Hrs X 3-5 Days
FAX OR	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)
	AL REPORT RECIPIENT(S):_Angela***
HM# 13	Material Description: Black Crasket @ Sink Drain
Sample ID	Sample Location & Material Location Quantity:
	Floor 1- Meris Restrum - WSide
HM# u	Material Description: Black Sink Under coat W Gashet & Putty Sample Location & Material Location Quantity:
Sample ID	Sample Location & Material Location Quantity:
EH-14A	Flour 1- Common Kitchen - SSide
·	
·	·
HM# 15	Material Description: Blade Gushet @ Sich Drait
Sample ID	Sample Location & Material Location Quantity:
EMS15A	+ loor 1- Comm. Kitcher Stick
HM# 15	Material Description: Gray Sink Undercoct w Gushet + Putty Sample Location & Material Location Quantity:
Sample ID	
EH-15A	Flour - Commity Area - B) Sich
HM# \/o	Material Description: 121 Beige/Tan Street UFT W/ Mastic
HM# ∖⊘ Sample ID	Sample Location & Material Location Quantity:
EH-16A	Floor 1-Chair Storage - E Side
EH-16B	Floor 2 - Janitor Closet - E Side
EH-16C	Florizo V
HM# 17-	Material Description: GWB W Doint Compound
Sample ID	Sample Location & Material Location Quantity:
EH-I7A	Floor 1 - Chair Storage - SE Corner
1-178	Floor - Gunbage Room - SE Corner
J-17C	1 - Janitor Closet - SE Corna
Relinquished B	y: John Muslin Signature: Date/Time: 2/15/2013 173
Received By:	Signature:Date/Time:
Relinquished B	y: Signature: Date/Time:
Received By:	MANSULI Signature: MDate/Time: 2/9/13



fax: 206-281-8922

____Sr. PM-E.Hartman eric.hartman@rgaenv.com fax: 206.281.8922

RGA CLIENT: King County Housing Authority____

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X Stop Analysis at First Positive

PAGE 4 OF 8

___ Analyze All Samples

roject Name/Au	CCHA32114 Sampled By: ACS Sample Date: 2/15/2013 O: X RGA EMSL Other: TAT: Rush 24Hrs X 3-5 Days
JA Project #. <u>r</u>	o: X_RGAEMSLOther:TAT:Rush24Hrs48Hrs X3-5 Days
	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)***
*ADDITION	AL REPORT RECIPIENT(S):_Angela***
1M# 1B	Material Description: Mastic Assoc. W/4" Brown Corrbuse Quantity:
Sample ID	Sample Location & Material Location Quartery.
EH-18A	Flour 1 - Causbage Ron - S Wall
UNA# C.	Material Proprietion True I and the Carlotte A
HM# 9 Sample ID	Material Description: Texture on GWB Walls /Ceilims Quantity:
EH-19A	Flour - Garbace Roon - E Wall
J-19B	1 - Juni tor Closet - E Wall
HM# zo	Material Description: Gashet @State Drain
Sample ID	Sample Location & Material Location Quantity:
EH-20A	Floor 1 - Janitor Choset - WW Corner
HM# Z1	Material Description: Mustic Assoc. W/ 4" Tan Covebuse
Sample ID	Sample Location & Material Location Quantity:
EH-ZIA	Floor 1 - Unit 111 - Bathrow - SW Corner L. Unit 113 - U - SWall
EH-21A	1 Unit 113 - U - 5 Wall
HM# 22	Material Description: Beige/Gran Tile Patter VFSW/Mustic Sample Location & Material Location Quantity:
Sample ID	Salliple Location & Material Location
EH-21A	Floor 1- Unit 111 - Bathrow - SW Corner L - Unit 113 - J - 5 Side
EH-22B	D VMHII) V S
HM# 23	Material Description: GWBW/Joint Compound
Sample ID	Sample Location & Material Location Quantity:
EH-23A	Floor 1- Unit 111 - Bedron Closet - NW Corner
EH-2313	1 Mix113 - Bathron - Swall
Relinquished I	By: John Marie Signature: Date/Time: 2/15/2013 7
Received By: _	Signature: Date/Time:
Relinquished I	
Received By:	Signature: Date/Time: C 19 15

X__ PM - Angela Harkins angela.harkins@rgaenv.com fax: 206-281-8922

Sr. PM-E.Hartman eric.hartman@rgaenv.com

fax: 206.281.8922

RGA CLIENT: King County Housing Authority_

Project Name/Address: 120 West Sunset Way Issaquah, WA

ACM BULK SAMPLE DATA SHEET

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X	Stop Analysis at First Positive	PAGE <u>5</u> 0F <u>8</u>

___ Analyze All Samples

Point Count Analysis (400-point)

Samples Submitted

RGA Project #: <u>K</u>	CHA32114 Sampled By 103 Sample Date: 415/2613				
Sample(s) Sent To	o: _X_RGA EMSL Other: <u>TAT:</u> Rush24Hrs48Hrs X 3-5 Days				
FAX OR	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)				
	AL REPORT RECIPIENT(S):_Angela***				
HM# 24 Sample ID	Material Description: Texture เทษเซ ฟลใโร/Cei Limp Sample Location & Material Location Quantity:				
EH-24A	Floor 1- Unit 111 - Bedrow Cheset - N Wall				
EH-24B	U - Uit 113 - Bathren - SWall				
HM# 25	Material Description: Gras Sixt Undercoat w/Gashet + Putty				
Sample ID	Material Description: Gray Sink Undercoat w/Gushet + Putty Sample Location & Material Location Quantity:				
EH-25A	Floor 1- Unit 111 - Kitcher - Sinh (S Side)				
EH-25B	Floor 1 - Unit 111 - Kitchen - Sinh (S Side) + - Unit 113 - + - h (W Side)				
HM# 26	Material Description: Pich Wellpaper and WB Sample Location & Material Location Quantity:				
Sample ID	Sample Location & Material Location & Quantity:				
EH-26A	Floor 2- EHall Way-E End				
HM# 2구 Sample ID	Material Description: GWB W Joint Compound Sample Location & Material Location Quantity:				
EH-27A	Flor3 - Loudray Roc - NW Corner				
EH-27B	FLANTS - LO - L				
<u> </u>					
HM# 28	Material Description: Texture on CowB Walls / Ceilins				
Sample ID	Sample Location & Material Location Quantity:				
EH-28A	Floor Z - Landry Row - W Wall				
EH-28B	Flour3 - V - V				
HM# 29	Material Description: Music Assoc. W/4" Being Coveluse Sample Location & Material Location Quantity:				
Sample ID	Campic Location a material Location				
EH-29A	Flux 2 - Unit 211 - Bothroon - SW Corner				
	11 0466 11 - 1-1-1 - 1-1				
Relinquished By: Date/Time: 2/15/2013 173					
Received By:	Signature: Date/Time:				
Relinquished By	y:Signature: Date/Time:				
Received By:	RAT MANSUCO Signature: Date/Time: 7 19 17				



Sr. PM-E.Hartman eric.hartman@rgaenv.com fax: 206.281.8922

RGA CLIENT: King County Housing Authority_

ACM BULK SAMPLE DATA SHEET

* PLM Analysis

X	Stop Analysis at First Positive	PAGE 6 OF 8

Analyze All Samples

Point Count Analysis (400-point)

Project Name/Add	lress: 120 West Sunset Way Issaquah, WA. Samples Submitted 76
	CHA32114 Sampled By 10 Sample Date: 2 15/2013
	o: _X_RGA EMSL Other: TAT:Rush24Hrs48Hrs X 3-5 Days
	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)***
	AL REPORT RECIPIENT(S):_Angela***
***ADDITION.	
HM# 30	Material Description: Rege Gray Tile Parter VFS W/Martic Over Pelode Parter Sample Location & Material Location Quantity: VFS W/Martic
Sample ID	Sample Location & Material Location Quantity: V+5 W/6/WAHC
EH-30A	Unit 211 - Bathroon - SW Corner
HM# 3\	Material Description: ເຊເມເຊັ ເພດ ປາ ໄພພຊາຍພາມ Sample Location & Material Location Quantity:
Sample ID EH-31A	Unit 211 - Bedrow Closet - SE Come
	Mit 213 - V - NECorner
EH-31B	
HM# :32	Material Description: Texture on GWB Walls / Ceilius Sample Location & Material Location Quantity:
Sample ID.	Sample Location & Material Location Quantity:
EH-3002A	Wit 211 - Bedrum Closet - W Wall
EH-32B	Unit 211 - Bedrum Closet - W Wall Unit 213 - I - NE Corner
HM# 33	Material Description: Gran Sink Under cout W Gashet & Putty
Sample ID	Sample Location & Material Location Quantity:
EH-33A	Unit 211 - Kitche - S Side Sink
HM# 34	Material Description: Mustic A SSOC. W/4" Olive Green Covelage
Sample ID	Sample Location & Material Location Quantity:
EH-34A	Mit 213-Bathrou - SE comer
EH-3413	Unit 211 - V - SW Corner
HM# 35	Material Description: Cacen Mosaic Pattern VFS W/ Mastic
Sample ID	Material Description: Green Mosaic Pattern VFS W/ MWHC Sample Location & Material Location Quantity:
EH-35A	Min + 213 - Bathreem - SE Corner
EN-35B	Mi+311 - V - 8W Corner
	Masl' Signature: Date/Time: 2/15/2013 1730
Relinquished By	
Received By:	
Relinquished By	
Received By:	(LAL MAJSURO) Signature: MDate/Time: 2/19/13



_Sr. PM-E.Hartman eric.hartman@rgaenv.com fax: 206.281.8922

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A	CM	RIILK	SAMPLE	DATA	SHEET
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* PLM Analysis

X Stop Analysis at First Positive

PAGE 7 OF S

Analyze All Samples

roject Name/Add	dress: 120 West Sunset Way Issaquah, WA. Samples Submitted 46
	CHA32114 Sampled By 128 Sample Date: 3 15 2015
mple(s) Sent To	o: _X_RGA EMSL Other: , TAT:Rush24Hrs48Hrs X3-5 Days
	E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)***
*	AL REPORT RECIPIENT(S):_Angela***
HM# 3/e	Material Description: Black Sink Induscock w Gushe + Pully Sample Location & Material Location Quantity:
Sample ID	Sample Location & Material Location Quantity:
EH-36A	Mit 213 - Kitcher - S Side - Sih
-	
HM# 37-	Material Description: GwB W / So: at Compound
Sample ID	Sample Location & Material Location Quantity:
EH-37A	Uni+313 - Bedroon Closet - NE Corner
2H-37B	Uni+311 - U
HM# SC	Material Description: Texture on GWB walls leiling
Sample ID	Sample Location & Waterial Location & Waterial Location
EH-38A	Uni+313 - Bedwar Closet - Netonia N Wall
EH-38B	Unit 311 - V
HM# 39	Material Description: Mustic Assoc. W/ 4"Tan Corebuse
Sample ID	Sample Location & Material Location Quantity:
EH-39A	Uni+313-Bathroon-SE Corner
,	
A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
HM# 40	Material Description: Bejec/Gran Tile Pattern VFS exes PD/mostic Over Pethology Sample Location & Material Location Quantity: VFS w/mester
Sample ID	Sample Location & Material Location \(\sqrt{\text{Uantity:}} \sqrt{\text{V}} \sqrt{\text{V}} \(\sqrt{\text{V}} \)
EH-40A	Unit 313 - Bathrow - SECorner
HM# U\	Material Description: Bleach Sinh Under 10at w/ Gasket + Putty
Sample ID	Sample Location & Material Location Quantity:
EH-41A	Unit 313- Kitchen - SSide - Sinte
EH-UIR	11-7-311-7-7-7-1
Relinguished B	v: In Mastine Signature: My Date/Time: 2/15/2013
Received By:	Signature: Date/Time:
Relinquished B	1 1 0 0
Actinquisited D	Date/Time: 2 19 13



Received By:

Received By: _

Relinquished By:

Sr. PM-E.Hartman

ACM BULK SAMPLE DATA SHEET

Date/Time:

Date/Time: 1

* PLM Analysis

fax: 206-281-8		X Stop Analysis at First Positive PAGE 5 OF		
RGA CLIENT	King County Housing Authority	Analyze All Samples		
NOA OLILINI.		Point Count Analysis (400-point)		
roject Name/Ad	ldress: 120 West Sunset Way Issaquah, WA.	Samples Submitted 76		
_	KCHA32114 Sampled By:			
Sample(s) Sent T	Fo: X_RGAEMSLOther:	<u>TAT:</u> Rush24Hrs48Hrs X3-5 Days		
_		OVE PROJECT MANAGER (PM)***		
	,	***		
	NAL REPORT RECIPIENT(S):_Angela			
HM# 42_	Material Description: Blue Wallpa	Quantity:		
Sample ID	Sample Location & Material Location \	i Quantity.		
EH-42A	Floor 3-E Hallway - 2 End			
HM#	Material Description			
Sample ID	Material Description: Sample Location & Material Location	Quantity:		
oumpie ib	Campio accusion a material accusation			
	·			
HM#	Material Description:			
Sample ID	Sample Location & Material Location	Quantity:		
HM#	Material Description:			
Sample ID	Sample Location & Material Location	Quantity:		
11884				
HM#	Material Description: Sample Location & Material Location	Quantity:		
Sample ID	Sample Location & Material Location	quarity.		
HM#	Material Description:	· production of the state of th		
Sample ID	Sample Location & Material Location	Quantity:		
	By: John Marlin Signatur	Date/Time: 2/15/2013		
-		, ,		
Received By:	Signatur	re:Date/Time:		

Signature:<u>_</u> Signature:

THIRD PARTY REPORTS - D.2 RGA Laboratory Services

Sample Log **Chain of Custody**

INTERNAL

Client: Client Contact				RGA Batch #: 13-0423			
Company: King County Housing Authority			thority		RGA Project#: KCHA3		114
Client Address: 15455 65th Ave S				Client Job #:			
CHOIR TRUCK		98188-2583		Number of Samples:			
City		State	Zip	ſ			
Phone	. 4.	(206)244-7750			TYPE (OF ANALYSIS	5
				ı	ASBESTOS:	METALS:	
Fax #	r Cell #:	(206)242-0733			PCM (air)	Paint	Soil
	l Address:	(200)2.2			X PLM (bulk)	Wipe	Air
C-IIIAI	1 Autress.				Pt. Count (bulk)	TCLP	Water
					MOLD: P&K 100	0 101 102	105 117
Proj	ect Manager:	Angela Hark	ins		Other Method:		
				i			
Proj	ect Location: 120 V	Vest Sunset Way			Turn Around Time		
	Issaq	uah, WA			2 hour / 4 hour	Same Day	One Day
					Two Day	3-5 days	10 days
L	3 /	· · · · · · · · · · · · · · · · · · ·			Price per Sample:	\$	
Condi	ion: KGoodI	DamagedSevere I	Damage		rnce per Sample.	*	
#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
	EH-01A	13004153		11	EH-05A	13004163	
2	EH-01B	13004154		12	EH-05B	13004164	
3	EH-01C	13004155		13	EH-05C	13004165	Hold
4	EH-02A	13004156		14	EH-06A	13004166	
5	EH-02B	13004157		15	EH-06B	13004167	
6	EH-02C	13004158		16	EH-07A	13004168	
7	EH-03A	13004159		17	EH-07B	13004169	
8	EH-04A	13004160		18	EH-08A	13004170	Hold
9	EH-04B	13004161	Hold	19	EH-08B	13004171	
10	EH-04C	13004162	110101	20	EH-08C	13004172	
10	L11-040	11000-1102	<u> </u>	Si	gnature	Dațe	Time
Sam	pled by:		M WHOC		LIN RUSSELL BROWNS	12/5/3	
Relinquished by:					, , ,		
Received by:							
Relinquished by:		12	1		7/16/13	945	
Received for Laboratory by:		1/200	10	10	022713	1545	
Analyzed by:			An M	-11/1	\sim	OCCTIS	1975
Preliminary Results Reported to P.M. by:							
Final Report to P.M. by:							
-	cial Instructions:				Stop analysis at first	positive.	
Due by 2/26/2013							

Sample Log Chain of Custody

INTERNAL

RGA Laboratory Services

					•		
Client: Client Contact			RGA Batch #:		13-042	3	
Company: King County Housing Aut		thority			KCHA32114		
Client Address: 15455 65th Ave S							
Seattle	9	WA	98188-2583		Number of Samples:	76	
City		State	Zip	•	D	0 6	0
					Page:	of	3
#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
21	EH-09A	13004173		41	EH-21A	13004193	
22	EH-10A	13004174		42	EH-21B	13004194	
23	EH-10B	13004175	Hold	43	EH-22A	13004195	
24	EH-10C	13004176		44	EH-22B	13004196	
25	EH-11A	13004177		45	EH-23A	13004197	
26	EH-11B	13004178		46	EH-23B	13004198	
27	EH-12A	13004179		47	EH-24A	13004199	
28	EH-13A	13004180		48	EH-24B	13004200	
29	EH-14A	13004181		49	EH-25A	13004201	
30	EH-15A	13004182		50	EH-25B	13004202	
31	EH-16A	13004183		51	EH-26A	13004203	
32	EH-16B	13004184		52	EH-27A	13004204	
33	EH-16C	13004185	Hold	53	EH-27B	13004205	
34	EH-17A	13004186		54	EH-28A	13004206	
35	EH-17B	13004187	Hold	55	EH-28B	13004207	
36	EH-17C	13004188	_	56	EH-29A	13004208	
37	EH-18A	13004189		57	EH-30A	13004209	
38	EH-19A	13004190		58	EH-31A	13004210	
39	EH-19B	13004191		59	EH-31B	13004211	
40	EH-20A	13004192		60	EH-32A	13004212	
A							
				Si	gnature	Date	Time
Sam	Sampled by: 50MA				WRUSIELL BROWNE		
Relinquished by:							
-	Received by:						
Relinquished by: Received for Laboratory by:			M			2/19/13	945
Analyzed by:			An T	11	111	022713	1545
Preliminary Results Reported to P.M. by:				V			, ,
Fine	l Report to P.M. by:						
Special Instructions: Stop analysis at first p				oositive.			

Due by 2/26/2013

Sample Log **Chain of Custody**

RGA Laboratory Services INTERNAL

					ous to a j	40.046	20
Client: Client Contact			RGA Batch #: _				
Company: King County Housing Auth		thority			KCHA32		
Client Address: 15455 65th Ave S				Client Job #:			
Seattle	9	WA	98188-2583		Number of Samples:	76	
City		State	Zip		Page:	3 of _	3
#	Client Sample ID	RGA Laboratory ID	Comments	#	Client Sample ID	RGA Laboratory ID	Comments
61	EH-32B	13004213		81			
62	EH-33A	13004214		82			
63	EH-34A	13004215		83			
64	EH-34B	13004216		84			
65	EH-35A	13004217		85			
66	EH-35B	13004218		86			
67	EH-36A	13004219		87			
68	EH-37A	13004220		88			
69	EH-37B	13004221		89			
70	EH-38A	13004222		90			
71	EH-38B	13004223		91			
72	EH-39A	13004224		92			
73	EH-40A	13004225		93			
74	EH-41A	13004226		94			
75	EH-41B	13004227		95			
76	EH-42A	13004228		96			
77				97			
78				98			
79				99			
80				100			
L	<u> </u>						
				Sig	nature	Date	Time
Sam	pled by:		ZOHUMA		N/RUSSELL FROMNE		
Relinquished by:) = (I			1 (1)	
Rec	Received by:				6		
Relinquished by:			M	V	1 11 6	2/19/13	auk
Received for Laboratory by: Analyzed by:			An	1/1/1	Tun-	022713	1545
Preliminary Results Reported to P.M. by:				~~~			
Fine	ıl Report to P.M. by:						
Spe	Special Instructions: Stop analysis at first positive.						

Due by 2/26/2013



Attachment 2

RGA Technician Field Notes

www.rgaenv.com

		PAGE OF THIRD PARTY REPORTS - D.2
Anex	PROJECT NAME:RGA PROJECT #: KCHA	DATE:
ERGA	RGA REPRESENTATIVE:	- DAIL.
ENVIRONMENTAL	DESCRIPTION:	
WWW.RGAENV.COM		
	NOTES:	
Eastridge Apt	2 (King Co Housing Auth	
ACM +Pb by XR		
3 Story Slda - 40 m	its (2 mits per thor - Co	(m. +5 fotal)
		
Full Dumbing Herov	alt peplacened	
		-word plubing wan
- Kitchus / Baths/B	searour (Coscies)	
Common areas w	pumbin access + Sx1. Sid	Cu components
Est Smoles -		
	unit (Bath/Closet)	
ok GWD Ca	ant Bath/Closet	
	allway	3
2 Flooring ea m	mt =	12 / / / /
11208 ea mit		12 / 1/5
7 Diboring ea ha	llung a liser pen. = 5.	3
100 ea Hall	(A)	
1 CS Ea Hall	WUN F	
		2
4Ch. Didin		
lea with the	C-Text	
Pige woul!	10 ea) = 1	0



Attachment 3

ACM Materials Sample Location Drawing

www.rgaenv.com

THIRD PARTY REPORTS - D.2

-3/4" P CM

COMMUNITY AREA 107

EH-IYA MA

Assumed Matts - Mens RR - 41" Beige CWT W/growt + mortan

STAIR #2

<u>U</u>P

107

Acmsuple Locations

- Garbage Roon - White FRP on Walls (to 24')
- Witil - Bathroom - CWT @ Bath (-10 #)
- Witil - Bathroom - Maste @ Shower surround

unit III- Both+ Kitche have some VFS

ANO Vaporbarrier or Other SACM @ Ext. Penetration Vocation

EH-20A

EH-19B

EH-17C.

EH-1917

115

EH-ITB

EH-18A

GENERAL NOTES

- 1. PIPING OFFSET FOR CLARITY. ROUTE SHOWN IS IDEAL. ADDITIONAL OFFSETS AND FITTINGS MAY BE REQUIRED DUE TO EXISTING SYSTEMS.
- 2. CW MAINS IN CORRIDORS SHALL BE COPPER AND SUSPENDED FROM STRUCTURE ABOVE DROPPED CEILING. LIVING UNIT'S SUPPLY BRANCHES SHALL BE PEX PIPING.

CONSTRUCTION NOTES

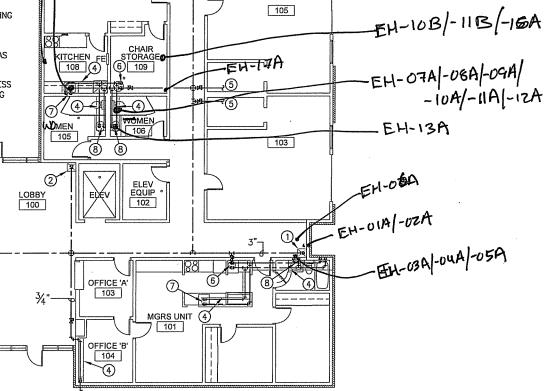
112

- 1) REFER TO ARCHITECTURAL PLANS FOR CONCEALMENT OF VERTICAL PORTION OF DOMESTIC CW MAIN.
- (2) VERTICAL CHASE UP THRU SECOND FLOOR. SEE SHEET M3.2 FOR CONTINUATION. REFER TO ARCHITECTURAL PLANS FOR CHASE DETAILS AND REQUIREMENT.
- 3 FREEZE PROOF LOCKABLE WALL HYDRANT. REFER TO ARCHITECTURAL PLANS FOR CONCEALMENT OF INTERIOR VERTICAL PORTION OF PIPING.
- (4) CONCEALMENT SOFFIT. SEE ARCHITECTURAL SHEETS FOR DETAILS AND REQUIREMENTS.
- (5) SEE TYPICAL LIVING UNIT PLAN ON SHEET M4.1 FOR CONTINUATIO
- (6) ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO EXISTING HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.
- 7) DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE BEHIND FIXTURE'S CABINET TO PULL NEW CW AND HW LINES TO SERVE KITCHEN SINK. PROVIDE NEW SUPPLY STOPS, SEAL AS REQUIRED.
- (8) DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE BEHIND FIXTURE'S CABINET TO PULL NEW CW AND HW LINES TO SERVE EXISTING LAVATORY AND TOILET. PROVIDE NEW SUPPLY STOPS, MOUNT TOILET'S SUPPLY STOP ON CABINET. SEAL AS REQUIRED.
- (9) NEW 6 GALLON POINT OF USE HOTWATER TANK TO SERVE EXISTING JANITOR SINK. PROVIDE WALL MOUNT KIT.
- (1) ROUTE CW PIPING DOWN ALONG WALL AND CONNECT TO HOT WATER TANK. CAP AND ABANDON EXISTING CW & HW LINES AND ROUTE NEW DISTRIBUTION AS SHOWN.
- ① DRILL HOLE ABOVE FIXTURE TO ACCESS STUD BAY. CUT ACCESS HOLE AT FIXTURE'S HW/CW SUPPLY CONNECTION TO PULL NEW HW & CW LINES TO JANITOR SINK. PROVIDE NEW SUPPLY STOPS, SEAL AS REQUIRED.
- (2) DRILL HOLE IN WALL ABOVE TO ACCESS STUD BAY. REMOVE EXISTING SHOWER SURROUND, CUT ACCESS TO FACILITATE REMOVAL AND REPLACEMENT OF THE SHOWER'S NEW CW/HW CONNECTIONS AND MIXING VALVE. PROVIDE OVERSIZED REMODELER PLATE TO CONCEAL WALL OPENING. SEAL AS REQUIRED.

112

110

EH-23 A-24A



FIRST FLOOR PLUMBING PLAN

SCALE: 1/8"=1-0"

109



\$ All matter in Women's PR some as Men's PR & Texture on Good Uniforthour common areas thallways bce engineers, inc p:(253) 922-0440 f: (253) 922-0890 f: (253) 922-0890 freet east, sulte 200, tacoma, wa 9842



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KCHA EASTRIDGE HOUSE PLUMBING REPLACEMENT

> FIRST FLOOR PLUMBING PLAN

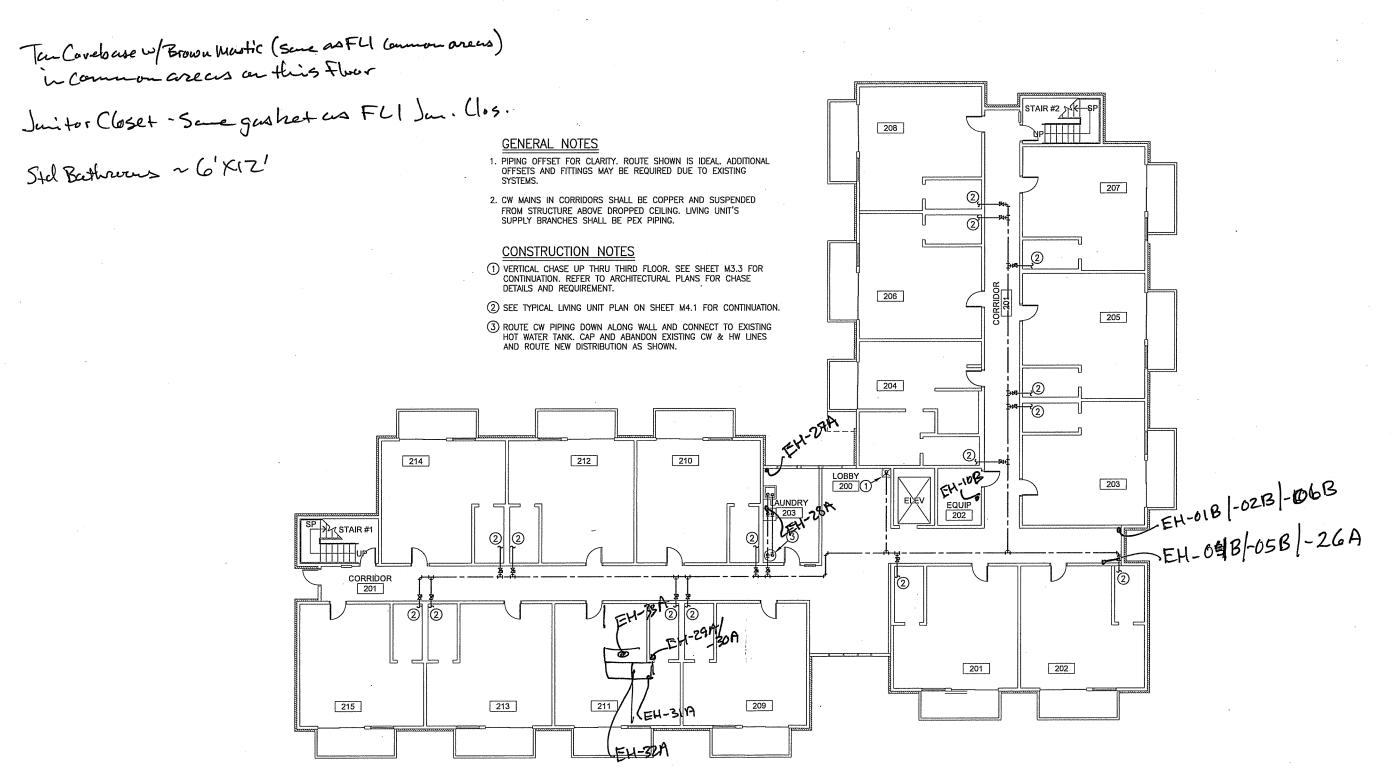
DRAWN BY:
CB
CHECKED BY:
SZ
REVISIONS:

M3.

DATE: 1-10-12 CHECK SET PROJECT No. 212-223

THIRD PARTY REPORTS - D.2

Mensingle Location



2 SECOND FLOOR PLUMBING PLAN (SCALE: 1/8"=1-0"



bce engineers, inc.

p:(253) 922-0446
f: (253) 922-0896
foot1 12th street east, sulte 200, tacoma, wa 98424



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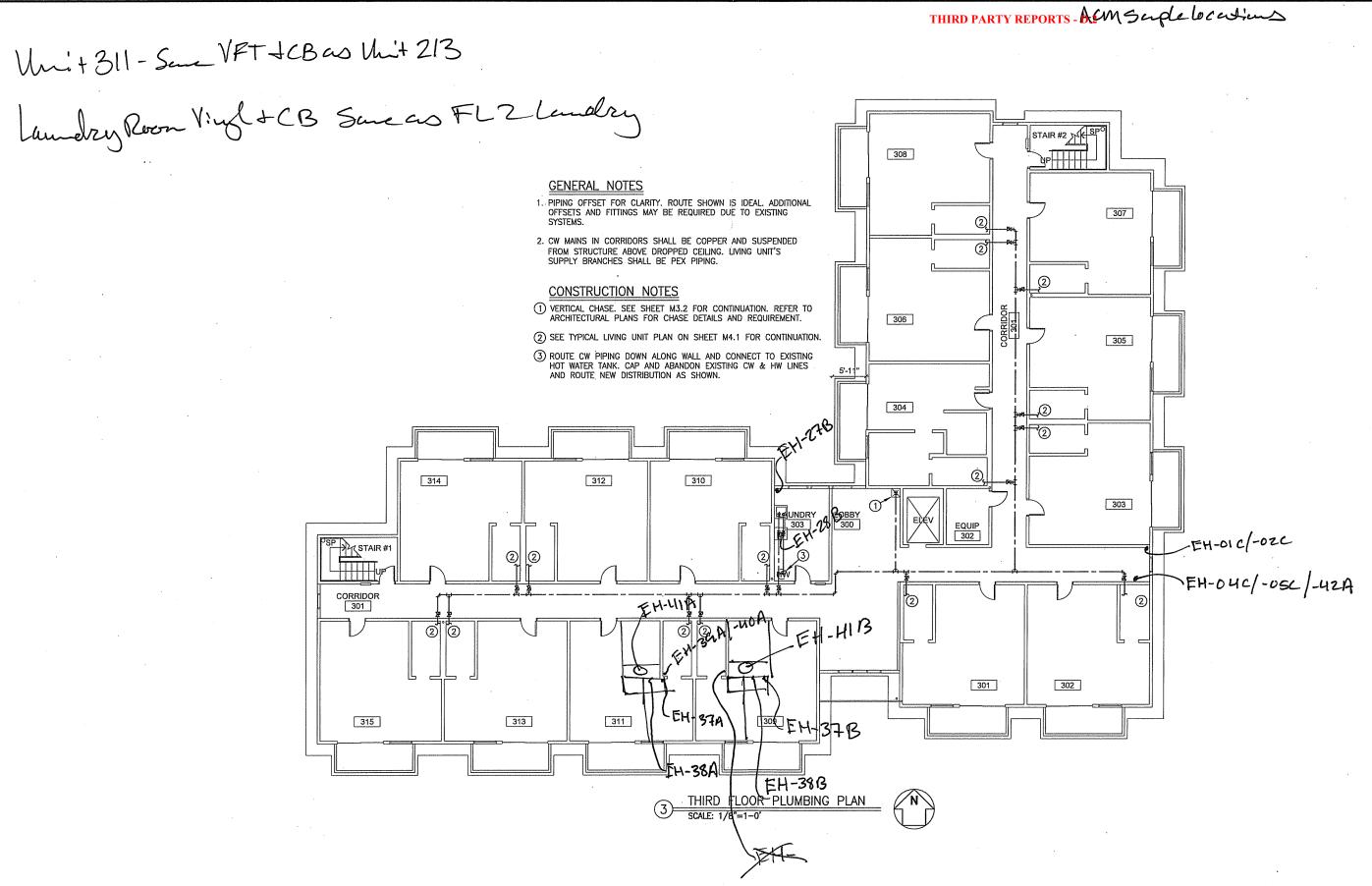
ISSAQUAH, WA

SECOND FLOOR PLUMBING PLAN

DRAWN BY: CB CHECKED BY: SZ REVISIONS:

M3.2

DATE: 1-10-12 CHECK SET PROJECT No. 212-223



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> THIRD FLOOR PLUMBING PLAN

DRAWN BY:
CB
CHECKED BY:
SZ
REVISIONS:

M3.3

DATE: 1-10-12 CHECK SET PROJECT No. 212-223



Attachment 4

RGA Certifications

www.rgaenv.com

Certificate of Completion This is to certify that

Angela Harkins has satisfactorily completed

8 hours of refresher training as an

AHERA Project Designer

in compliance with TSCA Title II AHERA 40 CFR Part 763 U.S. EPA Region 10 Accreditation #792

Course Date: 05/07/2012

Cort.# 12-0906 Refresher required by: 5/7/2013



8 hours of refresher training as an **AHERA Project Designer**

Angela Harkins Cert.# 12-0906

Course Date: 05/07/2012 Refresher required by: 5/7/2013

Instructor: Ethel Kaufman

Training Manager: Wendy Newell RGA Training: 206.269.6313 RGA Laboratory: 206.956.3775 RGA Consulting: 206.2696302 Corporate Office: 510.547.7771

RCA 1730 Minor Ave Suite 900, Seattle, WA 98101

4 hours of refresher training as an **AHERA Building Inspector**

David L. Welch Сетт.# 12-1164

Course Date: 06/25/2012 Refresher required by: 6/25/2013

Instructor: Ethel Kaufman

Training Manager: Wendy Newell RGA Training: 206.269.6313 RGA Laboratory: 206.966.3775 RGA Consulting: 206.2696302 Corporate Office: 510.547.7771

RCA 1730 Minor Ave Suite 900, Seattle, WA 98101

Certificate of Completion

This is to certify that

David L. Welch

has satisfactorily completed 4 hours of refresher training as an

AHERA Building Inspector

in compliance with TSCA Title II AHERA 40 CFR Part 763 U.S. EPA Region 10 Accreditation #792

Course Date: 06/25/2012

Cert.# 12-1164

Refresher required by: 6/25/2013

1730 Minor Ave Suite 900' Seattle, WA 98101 - 888.281.8858 ENVIRONMENTAL www.rgatraining.com

8 hours of refresher training as an **AHERA Project Designer**

David L. Welch Cert.# 12-2319

Course Date: 11/19/2012 Refresher required by: 11/19/2013

Instructor Ethel Kaufman

Mich Marston

Training Manager: Wendy Newell RGA Training: 206.269.6313 RGA Laboratory: 206.956.3775 RGA Consulting: 206.2696302 Corporate Office: 510.547.7771



1730 Minor Ave Suite 900, Seattle, WA 98101

Certificate of Completion

This is to certify that

David L. Welch

has satisfactorily completed

8 hours of refresher training as an

AHERA Project Designer

in compliance with TSCA Title II AHERA 40 CFR Part 763 U.S. EPA Region 10 Accreditation #792

Course Date: 11/19/2012

Cert.# 12-2319

Retresher required by: 11/19/2013



1730 Minor Ave Suite 900 Seattle, WA 98101 - 888.281.8858 www.rgatraining.com

Certificate of Completion

This is to certify that

John McCaslin

has satisfactorily completed

4 hours of refresher training as an

AHERA Building Inspector

in compliance with TSCA Title II AHERA 40 CFR Part 763 U.S. EPA Region 10 Accreditation #792

Course Date: 05/10/2012

Cert.# 12-0923

Refresher required by: 5/10/2013



4 hours of refresher training as an **AHERA Building Inspector**

John McCaslin Cert# 12-0923

Course Date: 05/10/2012 Refresher required by: 5/10/2013

Instructor: Ethel Kaufman

Training Manager: Wendy Newell RGA Training: 206.269.6313 RGA Laboratory: 206.565.3775 RGA Consulting: 206.2696302 Corporate Office: 510.547.7771

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E - SECTION

DRAWINGS & SPECIFICATIONS

- **E.1** Scope of Work and Technical Specifications
- E.2 Drawings (if not included see attached)



SCOPE OF WORK & TECHNICAL SPECIFICATIONS

SCOPE OF WORK

DIVISION 1 – GENERAL REQUIREMENTS

01 10 00	Summary
01 26 00	Contract Modification Procedures
01 29 00	Payment Procedures
01 31 00	Project Management & Coordination
01 32 00	Construction Progress Documentation
01 33 00	Submittal Procedures
01 40 00	Quality Requirements
01 50 00	Temporary Facilities & Controls
01 60 00	Product Requirements
01 73 00	Execution
01 73 29	Cutting and Patching
01 74 19	Construction Waste Management
01 77 00	Closeout
01 78 23	Operation and Maintenance Data
01 78 39	Project Record Documents
*****	KCHA Pay Application Form (sample)
*****	KCHA Substitute Request Form (sample)

DIVISION 02 – EXISTING CONDITIONS

02 41 00 Selective Demolition

DIVISION 03 – CONCRETE

03 30 00 Cast-In-Place Concrete

DIVISION 05 – METALS

05 50 00 Metal Fabrications

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 10 00 Rough Carpentry

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07/26/16	Below-Grade Vapor Retarders
07 92 00	Joint Sealants

DIVISION 08 - OPENINGS

08 11 13	Hollow Metal Doors And Frames
08 31 00	Access Doors And Panels

08 71 00 Door Hardware

DIVISION 09 - FINISHES

	1202220
09 21 00	Gypsum Wallboard
09 67 23	Resinous Flooring System
09 91 00	Painting



KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION CAPITAL CONSTRUCTION DEPARTMENT

DIVISION 14 – CONVEYING SYSTEMS

14 25 00 Hydraulic Passenger Elevator

DIVISION 23 – MECHANICAL

23 05 00	Basic Mechanical Requirements
23 05 02	Basic Mechanical Materials And Methods
23 07 00	Mechanical Insulation
23 23 00	Refrigerant Piping
23 81 26	Heat Pump

DIVISION 26 – ELECTRICAL

1011 20		TRICAL
26 00	00	Electrical General Conditions
26 00	05	Electrical-Existing Systems
26 05	19	Wires And Cables
26 05	26	Grounding
26 05	32	Outlet And Pull Boxes
26 05	33	Raceway
26 05	34	Metal Clad Cable (Type Mc) And Fittings
26 05	73	Electrical System Studies
26 24	16	Panelboards
26 24	19	Motor Controllers
26 27 2	26	Switches And Receptacles
26 28	13	Fuses
26 28	16	Disconnects And Fused Switches
26 51	00	Lighting



KCHA – EASTRIDGE HOUSE ELEVATOR MODERNIZATION

CAPITAL CONSTRUCTION DEPARTMENT

LIST OF DRAWINGS

A0.0	Cover Sheet
A1.0	Site Plan & Floor Plan
A2.0	Enlarged Floor Plans
A3.0	Details & Interior Elevations
M0.1	Abbrevs, Legend, Drawing Index, General Notes, HP Load Calculation Schedules and Mechanical Details
MD2.1	Mechanical Demolition Floor Plans
M2.1	Mechanical Floor Plans
EVD2.1	Elevator Landing & Machine Room Elevator Demolition Floor Plans
EV2.1	Elevator Landing & Machine Room Elevator Floor Plans
EV2.2	Elevator Diagrams
E0.1	Electrical Legend
E1.0	Electrical Site Plan
E2.0	Enlarged Electrical Plans
E6.0	Electrical One-Line Diagram
E6.1	Panel Schedules
E6.2	Panel Schedules

TABLE OF CONTENTS - SCOPE OF WORK

1.	0	Pro	iect	Sun	ımary

2.0 Project Administration Requirements

- A. Pre-construction
- **B.** Construction Administration
- C. Closeout

3.0 General Requirements

- A. Acknowledgement
- B. Staffing and experience
- C. Quality assurance & Quality Control
- D. Inspection of work
- E. Site requirements
 - 1. Work hours
 - 2. Restrictions
 - 3. Contractor responsibilities
- F. Project Phasing

4.0 Safety, Protection & Restoration

- A. Safety
- **B.** Protection
- C. Restoration
- D. Hazardous Material

5.0 Divisions (See Specification Sections for complete details)

Division 1 General Conditions

Division 2 Site Construction

02 41 00 Selective Demolition

Division 03 - Concrete

03 30 00 Cast-In-Place Concrete

Division 05 – Metals

05 50 00 Metal Fabrications

Division 06 - Wood, Plastics, and Composites

06 10 00 Rough Carpentry

Division 07 – Thermal and Moisture Protection

07 26 16 Below-Grade Vapor Retarders

07 92 00 Joint Sealants

Division 08 – Openings

08 11 13 Hollow Metal Doors and Frames

Division 09 – Finishes

09 21 00	Gypsum Wallboard
09 91 00	Painting
09 96 00	High Performance Coatings

Division 14 – Conveying Systems

14 25 00 Hydraulic Elevators

Division 23 – Mechanical

23 05 00	Basic Mechanical Requirements
23 05 02	Basic Mechanical Materials and Methods
23 07 00	Refrigerant Piping
23 81 26	Heat Pump

Division 26 – Electrical

26 00 00	Electrical General Conditions
26 00 05	Electrical-Existing Systems
26 05 19	Wires And Cables
26 05 26	Grounding
26 05 32	Outlet and Pull Boxes
26 05 33	Raceway
26 05 34	Metal Clad Cable (Type MC) and Fittings
26 05 73	Electrical System Studies
26 24 16	Panelboards
26 24 19	Motor Controllers
26 27 26	Switches and Receptacles
26 28 13	Fuses
26 28 16	Disconnects and Fused Switches
26 51 00	Lighting

12-17-21 Page 2 of 21

SECTION 001010 SCOPE OF WORK

1.0 PROJECT SUMMARY

A. Overview

Eastridge House was built in 1980 and consists of thirty nine (39) one (1) bedroom apartments on three (3) floors. The elevator services all three (3) of these floors. Eastridge House is located in Issaquah, WA and houses seniors and disabled persons.

The scope of work for this project includes (but is not limited to) all work related to the renovation and/or replacement of the following items: elevator jack, new pit ladder, pit floor sealing, new door and hardware, new lighting, new elevator controls, and new fan in elevator car, add sprinkler head and test in elevator equipment room, rough carpentry to include infill and siding for wall vent removal in elevator shaft, painting, necessary electrical and mechanical upgrades, and adjacent architectural improvements (call buttons, alarms, trim panels etc.), new DHP, machinery, including any code related fire blocking or fire rated insulation, and interior cab upgrades for one elevator at Eastridge House.

The Contractor will be responsible for the following:

- 1. Providing L&I, Electrical and Specialty permits, equipment, labor, and materials to complete the work in a safe, clean and workman like manner.
- 2. Ensuring that the Work is compliant with L&I and local building codes.
- 3. Ensuring that all Work shall be performed using new materials, free of defects, installed in a professional, workmanlike manner to provide a "Turn Key" complete, safe and operable installation as specified in the project documents and/or related addenda (to follow).
- 4. Contractor will also monitor and provide daily sign in sheets for all sub-contractors and turned into KCHA weekly.

The Contractor will be responsible to coordinate and sequence the Work as stated with the Owner and their representatives so as to not interfere with ongoing property operations and first responder services (i.e. laydown and storage, parking, deliveries, utility coordination, etc.).

Before the Work begins, the Contractor will provide the following:

- 1. All administrative assurances necessary as required by contract as well as those mutually agreed to.
- 2. Detailed Critical Path Method project schedule for this site.
- 3. Schedule of Values.
- 4. Submittal list prioritizing long lead and critical path items to be expedited and approved/reviewed prior to work commencing.

The Contractor will provide one (1) lead person on each site responsible for implementing the Work and manage all inspections, commissioning, and quality control as necessary. Modernize (1) hydraulic elevator, rearrange equipment in machine room to comply with elevator code, electrical improvements to bring elevator power up to current code, and miscellaneous cutting and patching.

12-17-21 Page 3 of 21

2.0 PROJECT ADMINISTRATION REQUIREMENTS

A. Pre-Construction Administration

BEFORE commencement of work begins on-site the Contractor will provide the Owner the following items:

1. Project Master Schedule

- a. Completed in Microsoft Project, Primavera or similar.
- b. Must be cost loaded to reflect Schedule of Values items.
- c. Project phasing shall be integrated into master schedule.
- d. Shall include the following project milestones.

Contract start date (CS)	TBD
Notice to Proceed (NTP)	TBD
Construction Duration (CD) Start Date/Stop Date	TBD - TBD
Substantial Completion (SC)	TBD
Physical Completion (PC) and Warranty Start Date of Entire Project	TBD
Contract Completion (CC) of Entire Project	TBD

^{*}The dates listed above are estimated milestone dates, provided to the Contractor for incorporation and inclusion in the negotiated final project Critical Path Method (CPM) schedule. These estimated dates may change. Such changes, if any, shall not result in an automatic extension of the Final Completion date. The Contractor shall make reasonable flexibility in the schedule to accommodate any such date changes in order to accomplish the interim milestone dates (NTP, CD Start/Stop, SC, PC).

2. Schedule of Values (SOV)

- a. Each item must correlate to the project schedule.
- b. Schedule of Values to contain a two and one-half (2.5%) percent [for jobs OVER 500K] / five (5%) percent line item for the closeout documents.
- c. Schedule of Values to reflect detailed tasks by labor and material.
- d. Contractor to include a separate line item for each item listed below.
 - i. Overhead and Profit
 - ii. General Conditions
 - iii. Material and Labor for each task or based on subcontracted work. This will allow KCHA to pay for materials purchased at the beginning of the project or during the course of construction (once KCHA has established Contractor has ordered, been invoiced, and has a suitable location to store materials. See Contract documents for requirements.)
 - iv. Mobilization
 - v. COVID Monitoring/Cost

3. Submittal Schedule

All submittals to King County Housing Authority (KCHA) prior to start of related work.

a. The Contractor shall provide and manage a schedule of all submittals required on the project as listed in each specification section.

12-17-21 Page 4 of 21

- b. Submittals will be processed with enough time for the Owner to reasonably provide feedback fourteen (14) days prior to materials being delivered to the site.
- c. Any material submitted that is not listed in the project specifications will need to be submitted with a Substitution Request Form for review.
- 4. Site Specific Safety Plan: The Site Specific Plan should be submitted for review then kept on site during construction. Verify regular safety meetings are being held per proposed plan. Contractor must submit a signed copy of KCHA's "COVID-19 Job Site Requirements" (See Section B.2a in bid documents) If selected, Contractor will be required to submit COVID-19 protection protocols in place for Contractor's company, as well as a site specific safety plan detailing all required COVID-19 protections to be implemented. A dedicated COVID-19 supervisor must be on site and is responsible to monitor the workers for required PPE and daily health reports of the workers. Proper disposal required for all PPE.
- **5. Phasing and Coordination Plan** including the following (See section 3 item I, regarding Phasing):
 - a. Resident access plan for entry and exiting of apartment units.
 - b. Resident parking plan for proposed parking lot closings and openings.
- **6. Subcontractor List** with the names all subcontractors including contact information.

*NOTE: All items stated above must be submitted and approved BEFORE Contractor commences work.

B. Construction Administration

- 1. Master Schedule: The Contractor shall maintain (update and track) the provided project master schedule using CPM for the project. This work will progress and be reflected with the project SOV. Project phasing shall be reflected in the master schedule. The Contractor is responsible for all scheduling and coordination between all trades and any other subcontractors' working for the Contractor.
- 2. Two (2) Week Look-Ahead: The Contractor will provide weekly a two (2) week "look-ahead" schedule updating the relationship of this report with master project schedule. This shall be provided for review and be a topic of discussion during weekly site meetings. This schedule will be specific to the individual tasks as well as to identify work requiring site notifications and coordination.
- **3. Daily Reports:** Contractor to provide copies of daily site reports on a weekly basis. The daily report will describe daily man power, weather conditions, work in progress, delays and issues. Daily report format shall be submitted (during pre-construction phase) to Owner for review.
- **4. Meeting Minutes:** Contractor to manage and provide copies of meeting minutes/notes for all pre-construction, coordination, safety and weekly Owner/Architect/Contractor (OAC) meetings. Meeting minutes format to be submitted (during pre-construction phase) to Owner for review.
- **5. Notices:** It is the Contractor's responsibility to plan, coordinate and inform KCHA of work which shall require notice. Failure to provide adequate notice that results in a delay will be fully on the Contractor.
 - a. Unit Entry: The Contractor must coordinate unit entry with the Owner such that all required Notices-to-Tenants can be posted forty-eight (48) business hours PRIOR to Entry.

12-17-21 Page 5 of 21

- b. Shut Downs: Contractor will provide proper notification (minimum of seventy-two (72) business hours to the Owner and (minimum of forty-eight (48) business hours to the tenants.
- c. General Notices: The Contractor shall provide notice to Owner related to project start, potential impacts on tenants' accessibility and moving if items which could interfere with construction progress.
- **6. As-Builts:** The Contractor will be responsible to assess and record the existing conditions of any damaged or non-working items, such as existing electrical and mechanical equipment, pipe, utilities, concrete, asphalt etc., prior to removal of work. Contractor is responsible to restore or replace all finishes that become damaged as a result of work being performed. Contractor is not responsible for repairs of existing damage. As-Built drawings shall be current-to-date and will be reviewed on-site prior to each pay application.
- **7. Certified Payrolls:** All Contractor employees and all sub-contractor employees will need to know their trade classification and pay rate.
 - a. Owner will be conducting on-site wage interviews verifying job classification and wage rate
 - b. Non Routine Labor Rates apply to this project and must be posted on-site at all times.
- 8. Punch List: When the Contractor has deemed the project as substantially complete, meaning all base bid work is complete and conforms to requirements of the specifications and quality standards established through the mock-ups and as stated in the contract documents, the Contractor and a KCHA representative shall thoroughly inspect and list work that is non-conforming that the Contractor must complete prior to final payment. The work may include incomplete or incorrect installations or incidental damage to existing finishes, material, and structures. The list shall be provided to the Owner for their review and approval. All punch list items are expected to be finished and accepted by the physical completion date.

C. Closeout Administration

- 1. O&M Manuals: One (1) hard copy and one (1) electronic copy of the Operation and Maintenance (O&M) manual for all major materials and equipment shall be supplied by the Contractor to the Owner upon Project completion and prior to request for final payment.
 - a. Electronic copy to be submitted for approval prior to submitting hard copy.
 - b. O&M manual will include all warranties associated with the Work.
 - c. O&M manual will include relevant data associated with warranties and works such as
 - i. Name of installer with all contact information.
 - ii. Name of manufacturer and location material was purchased with all contact information.
 - d. All O&M manuals are subject to Owner approval
- **2. Final As-Built Drawings:** Upon substantial completion of the Project, the marked-up set of site documents shall be converted into as-built drawings and submitted to the Owner for review and approval.
- **3. Permits Finals:** Upon physical completion of the Project, all completed permits and permit drawings to be submitted to Owner and City of Kirkland with final sign offs.
- **4. Master Keys and Access Cards:** Upon physical completion of the Project, contractor shall return all master keys and access cards, signing off a Key Return Form.

12-17-21 Page 6 of 21

5. Punch List(s): Upon physical completion of the Project, all lists shall be completed and signed off by the Owner.

3.0 GENERAL REQUIREMENTS

A. Acknowledgements

- By signing the contract, the Contractor acknowledges that they have reviewed and can fully
 implement all administrative and physical aspects of the work as described in the project scope
 of work, specifications and drawings. The Contractor also acknowledges that they have
 completed an extensive site walk of the site and accepts the site conditions.
- 2. The Contractor will be responsible to assess and record the existing conditions of any damaged items, such as interior, sills, drywall, and window coverings, existing pipe, and utilities, prior to removal of work. KCHA's assumption is that all items are in good working order. Contractor is responsible to restore or replace all finishes that become damaged as a result of work being performed. Contractor is not responsible for repairs of existing damage.
- 3. The Contractor will provide all materials, fasteners, shoring, staging, labor, equipment, and expertise necessary to provide a quality "Turnkey" project, complete with all elements of the work, safely, on time, and within budget.
- 4. The Owner does not foresee any change orders for work resulting in site conditions that were clearly visible and present during the Mandatory Pre-bid Site Visit. By submitting a bid the Contractor acknowledges any labor, material and equipment required for a "Turnkey" project not specifically covered in the plans and specifications has been included in their base bid.
- 5. The Contractor's Superintendent or Foreman will be assigned a construction master key and will be held responsible for all costs related to the re-keying should the key be lost or stolen. If the master key is lost or stolen the Contractor will be responsible for re-keying all related locksets to a new keying system by the **end of the day** the issue is reported.
- 6. The Contactor has and will continue to field verify all visible existing site conditions, adjacent conditions/components and quantities. If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the Drawings.
- 7. Any questions occurring during bidding or construction shall be resolved by <u>direction in writing</u> from Owner. Any issues not so resolved or any conflicts between the scope of work, specifications and plans, shall result with the Contractor bidding, furnishing and installing the most stringent condition. No exceptions. Contractor must submit an RFI if a conflict exists between the scope of work, specifications and plans.
- 8. Contractor must demonstrate a comprehensive understanding that all work described in the project documents is all-inclusive and results in a complete system. Contractor to provide all materials, unless stated otherwise. All tasks must be complete with uniform fit, function, form, style and type.
- 9. Permits: The Owner will obtain the building permit; all other permits (including city of jurisdiction permits or agency of jurisdiction permits) are the Contractor's responsibility. Contractor shall keep permits posted and onsite at all times

12-17-21 Page 7 of 21

- 10. Plans & Specifications: The Contractor shall keep all associated permits and the approved permit plan set on site at all times. The Contractor will keep and maintain, on-site, a separate but complete set of construction drawings and specifications for markups and daily use.
- 11. Any damage caused by construction related activities (i.e. demolition, laydown areas) to existing physical assets to remain will be the Contractor's responsibility to correct at no cost to the Owner.

B. Staffing and Experience Requirements

- 1. The Contractor is expected to be on-site working each consecutive weekday unless directed otherwise by Owner.
- 2. A qualified and experienced full time site Superintendent or Foreman will be on site at all times.
- 3. The Contractor shall employ a sufficient number of workers and equipment to perform the Work in a diligent and expeditious manner. KCHA expects the Contractor to adequately staff the project to maintain the schedule, including reallocating and increasing staffing as needed to correct any slippage in the schedule.
- 4. Contractor and sub-contractor employees shall perform all work in a professional manner. All tasks must be complete with uniform fit, function, form, style and type.
- 5. All trades are to have a minimum of three (3) years of experience in their given trade.
- 6. Tradesmen must have the proper certification to perform work or to operate specific equipment that requires certifications and/or licenses.
- 7. The Contractor shall immediately remove from the site any of its employees or its subcontractors' employees, as the Owner shall deem incompetent, careless, insubordinate or otherwise disruptive to the progression of the project.

C. Quality Assurance / Quality Control

- 1. All Work shall be performed using new materials, installed plumb, level, true to the line, free of defects, and completed in a professional workmanlike manner to provide a complete, safe, and operable "Turnkey" installation.
- 2. The Contractor will follow all manufacturers' requirements and recommendations for the installation of all products to maintain the integrity of all manufacturer's warranties.
- 3. Mock-Ups: The Contractor will provide all mockups, within his base scope, required for the project as listed in each specification section. Mockups and color samples will be produced with enough time for the Owner to reasonably provide feedback one (1) week prior to these components being staged and implemented on site. Mockups will set expectations of quality expected for the project.
- 4. Quality Assurance/ Quality Control: The Contactor will provide ongoing QA/QC at each step of work and take corrective measures prior to the next element of work being performed. This will include, but is not limited to, sequencing partial punches and substantial completions throughout the project.

12-17-21 Page 8 of 21

5. Contractor responsible for subcontractor's quality of workmanship and materials, completion of scope, and scheduling on site.

Note: It is incumbent on the Contractor to inform the Owner of any conflicts between manufacturers' requirements and the provided plans and specifications through the RFI process and prior to submitting a bid.

D. Inspection of Work

- 1. Code Compliance: All work will be code compliant and without defect for all materials and applications at time of KCHA punch inspection.
- 2. Owner Progress Inspections: All work is subject to Owner inspection and approval and is the responsibility of the Contractor until it is turned over to Owner.
- 3. Jurisdiction Inspections (as required per permit): The Contractor is required to attend all inspections, and inform KCHA representative within 48 hours prior to such scheduled inspections. Contractor is responsible for any costs associated with re-inspections for work not approved by the Authority Having Jurisdiction.

E. Site Requirements

- 1. All communication and coordination will be with Owner representatives only.
- 2. On-site tenant support services (i.e. laundry, common space, maintenance facilities and storage) must be fully accessible and operational at all times.
- 3. Work shall be coordinated not to interrupt services (i.e. garbage, mail, EMS, etc.).
- 4. Emergency and tenant access must be maintained at all times.
- 5. The Contractor is required to maintain the cleanliness of the work-site; there will be daily inspections by the Owner to verify cleanliness, safety and tenant access. The Contractor will be responsible for clean-up and housekeeping of work limits, staging areas, and Contractor's parking areas by the end of each business day. Contractor to secure all equipment, materials, and tools, ensure that unfinished work areas are protected and secure prior to leaving for the weekend.
- 6. No noise prior to 8:00am but layout and work setup can begin at 7:30am until further notice.
- 7. All interior work in each unit to be completed within 5 consecutive days.
- 8. If Unit access is required, Contractor will not enter units before 8:00AM, once proper notification has been posted by KCHA.
- 9. The Contractor is responsible for providing sanitary services, potable water and field office spaces for their agents. No public bathroom, drinkable water or office space is available onsite, for the Contractor or its agents.
- 10. The Contractor must read and comply with all safety requirements as stated in Section 4 A.
- 11. The Contractor is responsible for all necessary locates (both private and public), grading, and staking as required.

12-17-21 Page 9 of 21

12. See Division 1 related to staging and deliveries.

F. Restrictions

- 1. No parking in fire lanes. Fire lanes will be uninhibited at all times for first responder and tenant service access, unless otherwise approved by Fire Marshal.
- 2. No smoking on site by any Contractor or any of the Contractor's representatives (i.e. subcontractors, suppliers, consultants, etc.).
- 3. No washing out of any materials on site will be allowed. All contaminated or silt laden water must be contained and responsibly disposed of offsite.
- 4. No loud or offensive music is permitted.
- 5. No dumping on site. Contractor will not be allowed to use Owner's waste facilities.

G. Work Hours

- 1. Work to be performed during normal hours of operation from <u>8:00am to 4:30 pm</u>. There will be no work on weekends (unless prior approval has been granted by Owner). Owner does not pay overtime.
- 2. There will be no work on Owner holidays. Contractor to verify with Owner's Representative if there are any Owner holidays occurring during the duration of the project.

H. Contractor's Responsibilities

- 1. Contractor will be responsible to provide power for all work described. Contractor will not be allowed to use any on-site power unless prior approval has been granted by the Owner.
- 2. Water use available with previous approval from Owner. Contractor must obtain approval of Owner for water usage forty-eight (48) hours prior to use.
- 3. The Contractor is responsible for City of Issaquah hauling route, plans, and street use permits.
- 4. The Contractor is required to maintain the cleanliness of the work-site; there will be daily inspections by the Owner to verify cleanliness, safety and tenant access. The Contractor will be responsible for daily clean up and housekeeping of work limits, staging areas, and Contractor's parking areas.
- 5. Contractor will be responsible, along with any cost associated, to secure any tools, materials, or equipment required on site. This may include but is not limited to the contractor erecting temporary walls (with lockable gate/door), use of conex if a location on site is suitable, off site storage if required. Contractor will work with KCHA project team to evaluate suitable areas on site or within the building that is suitable for storage.

I. Project Phasing

1. Eastridge House was built in 1971 and consists of thirty eight (39) one (1) bedroom apartments on three (3) floors. The Owner's expectation is to have the elevator down for the least amount of time possible. Eastridge House is comprised of senior and disabled persons and due to the

12-17-21 Page 10 of 21

amount of stairs, some tenants will need to climb it's important to get the elevator up and running in a timely manner.

- 2. Any phasing plan modifications must be reviewed and approved by Owner prior to work on site
- 3. The Contractor's phasing plan must meet Owner expectations of providing the least impact on resident parking and unit and site access.
- 4. Owner anticipates multiple sequencing sections in the envelope replacement of these buildings. The Owner's expectation is not to open up "Vast" areas of the project for prolong periods of time or shutting down public areas to accommodate staging, stock piling, mobilization or for convenience of construction. Contractor must realize and accept that this project is being conducted in a fully occupied housing development and all that it encompasses (families, elderly, children out of school, daily traffic from families coming and going at all times during the day). The Owner is not only concerned about scope, schedule and budget, but the impact on its residents. The Contractor must take these considerations in to their phasing and sequencing accordingly. The Contractor must review their risk factors to accommodate these considerations in their bid.

4.0 SAFETY, PROTECTION & RESTORATION

A. Safety

- 1. Contractor shall provide and have on site at all times a site specific safety plan.
- 2. Contractor must submit a signed copy of KCHA's "COVID-19 Job Site Requirements" (See Section B.2a in bid documents). If selected, Contractor will be required to submit COVID-19 protection protocols in place for Contractor's company, as well as a site specific safety plan detailing all required COVID-19 protections to be implemented.
- 3. Comply with all safety and health codes within Local, State and Federal jurisdictions.
- 4. All work must operate within OSHA and State-equivalent (WISHA) standards and requirements.
- 5. The Contractor shall conduct weekly safety meetings; the minutes from these meeting are to be available to the Owner upon request. A schedule for safety meetings will be provided with the Contractor's submittal of the Safety Plan. Confirmation that the weekly safety meeting did take place and the topic of the safety meeting will be stated in the weekly site meeting minutes.
- 6. All workers on-site will wear high visibility vests or apparel with company logo or name that clearly identifies the workers.
- 7. All workers must be equipped with proper personal protective equipment (PPE) and be wearing it when appropriate or required while they are on-site (i.e. hardhat, safety glasses, ear plugs and fall arrest etc.).
- 8. Contractor to keep walkways free of debris, materials, tools and equipment at all times. Access must be maintained for residents at all times. If access is blocked or limited, the Contractor must ensure that a safe, alternative route can be maintained and accessed by residents.

12-17-21 Page 11 of 21

- 9. The Contractor will be diligent in ensuring that all safety measures are performed at all times for all aspects of work being performed.
- 10. Work Areas shall be cordoned off with safety fencing and/or caution tape while work is in progress.
- 11. Contractor is responsible for safety and security of work areas affected by work and will provide temporary guardrails, temporary cover and/or locks for openings. Contractor's main focus is the safety of his work force and the safety of KCHA's residents and staff.

B. Protection

- 1. Protect existing roofing, concrete walkways, paving, landscaping and all other finished surfaces which are to remain.
- 2. Contractor will provide protection at landscape areas where material laydown, storage, construction trailers or equipment are stored.
- 3. Contractor is responsible to protect and maintain all areas within the project work limits including, but not limited to, landscaping, hardscapes, exterior amenities, existing improvements, and adjacent/abutting finishes to remain (roofing, soffits, gutters etc.). If necessary, Contractor shall coordinate with Owner for removal / relocation of tenant property on front and back patios.
- 4. See individual scope item related to protection Dust and debris control. Best Management Practices (BMPs) will be applied daily in all work areas (i.e. use of tarps, water truck, street sweeper etc.).
- 5. Contractor is responsible for protecting and maintaining existing conditions within project work limits. Contractor to install ram board around elevator entrance, including a pathway of ram board from the building entrance used by the contractor during this project to the elevator entrance. Contractor to install dust containment around elevator work area.
- 6. All construction activities, including staging and traffic area, shall be prohibited within five (5') feet of drip lines of protected trees.

C. Restoration

- 1. Contractor responsible for restoration of any damage due to construction related activities. Contractor is advised to do a pre-construction walk and do an assessment with KCHA site personal prior to construction to note and document existing conditions.
- 2. Contractor will restore all landscape impacted by construction to existing pre-construction conditions.
- 3. Contractor to restore all lawn areas with Sod.
 - a. Grass areas that are identified for replacement or are damaged from construction activities are to be conditioned with new 3-way topsoil mix to a depth of (4") inches and tilled in to existing soils.
 - b. The Contractor shall roll to consolidate topsoil for areas to be sodded leaving surface smooth, uniform, firm against deep foot printing, and with a fine loose texture.

12-17-21 Page 12 of 21

- c. Contractor must ensure that sod is adequately watered until it becomes established and will survive through the 1 year warranty period.
- d. Existing sod that has been removed shall be disposed of legally.
- 4. Planted areas that are damaged are to be conditioned with new wood chip mulch:
 - a. Will be free from deleterious materials and suitable as a top dressing.
 - b. Loosen subgrade of planting beds to a minimum of 4 inches. Remove stones larger than 1" and sticks, roots, rubbish and other extraneous matter and legally dispose. Mulch shall contain minimal nutrient content.
 - c. Areas shall be conditioned with new top soil, tilled in to a depth of two (2") inches, and then two (2") inches of mulch placed throughout the affected area. Mulch should be a minimal nutrient, non-growth promoting mulch (non-die/stain/colored, wood chip/mulch, mulch that does not promote growth) spread around the affected area and section of planting bed/box/defined area. Contractor should work with KCHA to determine limits of mulch required for the project.

D. Hazardous Materials

- If lead based paint is known to be present, the Contractor is responsible for removal using the HUD Lead-Safe-Work protocol. HUD Lead Safe Work protocol is more restrictive than RRP protocols. Contractors should refresh all workers on the HUD portion of Lead Safe work Practices before the project starts. The contractor will be responsible to retain copies of all workers RRP training certificates on the work site at all times, and be able to produce them when asked.
- 2. Owner will make any hazardous material reports available to the Contractor. Contractor will be responsible to determine at what level of abatement and protection is required when disturbing hazardous materials.
- 3. Contractors are responsible for reviewing all Hazmat surveys provided by KCHA and must identify all areas or works that have lead base paint, or asbestos containing materials. Contractor is responsible for sharing hazmat surveys with their sub-contractors prior to any work completed on site.
- 4. The Contractor agrees to indemnify, defend and hold the Owner harmless from any claims arising out of or relating to the presence of asbestos/hazardous material in the Owner's building that the Contractor has sub-contracted the removal and legal disposal of the asbestos/hazardous material.

5.0 DIVISIONS

DIVISION 1 GENERAL CONDITIONS

A. Site Staging & Deliveries

- 1. Contractor will coordinate bulk material deliveries with Owner forty-eight (48) hours prior to delivers where potential for parking access will be temporarily blocked no more than fifteen (15) minutes.
- 2. Contractor and subcontractors will only be allowed to off load and load up tools no more than fifteen (15) minutes. Heavy equipment used specifically for construction will not block emergency access. Construction activities will not block parking areas not scheduled for work.

12-17-21 Page 13 of 21

3. Contractor to use existing parking on site to stage materials in areas approved by the property manager. Property manager to designate parking spaces that will be fenced off around the perimeter and locked, to store materials for current phases of work. KCHA will work with property manager to designate areas around the building for additional material storage. No trash and debris will be stored, and must be removed from the site on a daily basis. Contractor must perform daily clean up around staging site to ensure dust and debris does not build up in the parking lot.

B. Temporary Facilities

- 1. Use of onsite restroom facilities will not be permitted. Contractor is responsible for portable toilets; Contractor to consult with Owner for placement.
- 2. Contractor is not permitted to use tenant or building power without KCHA approval. For bidding purposes, Contractor is to provide power for this project.
- 3. Contractor to provide all dumpsters, job shacks, con-x boxes, fencing etc. Locations to be negotiated and approved by Owner.

DIVISION 2 SITE CONSTRUCTION

A. Demolition

Refer to Specification Section 024100 Selective Demolition.

- 1. The Contractor shall remove and legally dispose of all materials as required by the contract documents to allow for the installation of all new specified materials. Materials included to be removed and disposed of are as follow (but non-inclusive): interior lighting fixtures, elevator cab wall, ceiling, and select electrical service and all related components from structure per scope of work, drawings and specifications.
- 2. Contractor shall salvage and/or protect all materials as necessary until they are to be reinstalled, (i.e. select hardware, fire extinguishers and cabinets, communication boxes, pipe penetrations, etc.). This list is not all inclusive and the Contractor must verify which items are to be salvaged per the contract documents and in coordination with the Owner prior to demolition activities.
- 3. Install temporary barriers as necessary to protect tenants and staff during demolition.
- 4. Recycling efforts will be performed to the fullest extents possible as specified in the contract documents. Contractor to comply with recycling measures and reporting per Specification section 01 74 19 Construction Waste Management and Disposal.

B. Existing Utilities

- 1. Contractor to verify any existing equipment, devices, fixtures, cabling, wires and conduit is in operational order prior to moving, relocating, replacing or rerouting. KCHA makes the assumption that equipment was working prior to Contractor's arrival on site and should continue to work at the end of the project.
- Contractor to include in bid all necessary modifications, labor and parts necessary to run/reroute all existing cabling and exposed conduit. All costs associated with work noted will be Contractor's responsibility.

12-17-21 Page 14 of 21

- 3. The Contractor will coordinate the decommissioning of electrical, plumbing, fire and HVAC elements with the Owner and respective service providers.
- 4. Contractor responsible for repairing all wires, cables, communication boxes etc. damaged by construction activities on same day incident occurs.
- 5. Contractor is responsible to air seal and /or fire seal all penetrations, vents and appurtenances.
- 6. Contractor is responsible to carefully remove and protect all utility and communication services on structure to be reinstalled. Services shall be maintained and operational for duration of project unless otherwise scheduled disruption is required to perform work.
- 7. Terminations and caps will be clearly marked on site and recorded in the project record drawings (i.e. red line drawings or as-builts) with clear and accurate dimensions.

C. Locating And Utilities

- 1. Contractor responsible to locate all public and private utilities that may be impacted by construction work.
- 2. Contractor to be responsible to repair and or replace all utilities and building components damaged by construction work.

D. Selective Demolition Summary

- 1. The Contractor shall remove and legally dispose of all items listed below and as shown, described and inferred in the drawings to allow for the installation of specified materials unless otherwise specified. Existing Materials included to be removed and disposed of are as follow but are non-inclusive:
 - a. Elevator Jack, hydraulic power unit, controller, hall fixtures
 - b. Existing pit ladder and spring buffers
 - c. Existing hoistway vent
 - d. Existing shut off valve, rupture valve, and associated length of pipe
 - e. Existing hydraulic lines
 - f. Existing hall lanterns and fixtures
 - g. Existing pit channels and buffers
 - h. Machine room door and hardware
 - i. Machine room and elevator pit lights
 - j. Miscellaneous demolition incidental to the work of this contract
 - k. Protect existing building and site elements scheduled to remain during demolition activities and while new work is being installed
 - 1. Removal and infill of hoist way wall vents in elevator shaft
 - m. Sprinkler line removal in hoist way
 - n. Interior cab walls, ceiling and flooring
 - o. Existing floor drain, cap pipe, and patch floor per in machine room and hoistway
 - p. Existing casing if damaged and needs to be replaced

E. Selective Demolition General Requirements

Refer to Specification Section 024100 Selective Demolition

1. Install temporary barriers as necessary to protect tenants and staff during demolition. Contractor to provide a clear and safe pathway to allow tenant's access to their units.

12-17-21 Page 15 of 21

- 2. Recycling efforts will be performed to the fullest extents possible as specified in the contract documents.
- 3. Contractor. Burying of rubbish on-site or otherwise is prohibited. <u>Due to limited parking, demolished materials cannot be stockpiled on site and must be removed each workday or contained in dumpsters located in Owner approved areas.</u>

DIVISION 3 CONCRETE

A. Cast-in Place Concrete

Refer to Specification Section 033000 Cast in Place Concrete

- 1. The Contractor to install a non-shrink type grout in elevator pit.
- 2. Finish should be a smooth, hard uniform finish.
- 3. Once Jack is replaced concrete to be poured back with a hard trowel finish with smooth transitions to existing concrete floor.
- 4. Contractor to add #4 rebar doweled in every 16" to existing concrete and extend 12" into where new concrete will be poured.

DIVISION 5 METALS

Refer to Specification Section 055000 Metal Fabrications

A. Contractor to install new pit ladder 48" above sill, 16" wide and have ladder rungs from top to bottom with uniform 12" spacing.

DIVISION 6 WOOD & PLASTICS

A. Rough Carpentry

Refer to Specification Section 061000 Rough Carpentry

- 1. Contractor is responsible to shim, modify and repair minor irregularities in the assemblies in order to produce a finished product that is consistent in plane prior to cover. The Contractor will be responsible to ensure that all new components provide the necessary structural support for new elements to be installed as well as plane out with existing surfaces.
- 2. Contractor will be responsible for 100% blocking required for all GWB patching.
- 3. General Contractor to field coordinate layout of work prior to beginning installation.
- 4. General Contractor to provide labor and materials to infill hoist way vents, install new matching siding, caulk and paint new exterior siding.

B. Rough Carpentry General Conditions

Refer to Specification Section 061000 Rough Carpentry

1. Field coordinate and layout work prior to beginning installation. Cut, fit and install rough carpentry construction at locations indicated in drawings, and required to complete work of contract.

12-17-21 Page 16 of 21

- 2. Secure with sufficient hot-dip galvanized fasteners, anchorages, and accessories to insure rigidly in place.
- 3. Contractor responsible to coordinate, design, and all installation requirements with manufacturer and all code requirements.
- 4. Contractor to install all necessary fire blocking, fire caulking and any associated costs to satisfy all code requirements.

C. Interior Finish Carpentry Work Summary

General Contractor to provide labor and materials to complete interior finish carpentry inclusive of the modification, removal and replacement of interior trim items such as door, door casings, chair rails, or handrails where applicable.

D. Interior Finish Carpentry General Conditions

- 1. General Contractor to provide labor and materials to complete interior trim removal and replacement at door. Provide and install new fire rated door and trim, along with door hardware and closer.
- 2. Interior base shall be modified as necessary for the proper installation of doors and casing, base shall match existing.
- 3. The Contractor shall be responsible for the repair of any damage to interior GWB that is incurred from the modification, removal and replacement of the interior finishes (i.e. interior door) GWB, texture and paint repairs shall be required at areas where new trim does not cover the caulk line of the old trim.

DIVISION 7 THERMAL & MOISTURE PROTECTION

Refer to Specification Section 070000

A. Penetration Firestopping

- 1. Contractor is responsible to restore and / or install fire stop systems for all penetration joints, and perimeter fire containment designed and tested to maintain fire-resistance rated assemblies, conforming to provisions of latest version of the International Building Code (IBC).
- 2. Contractor shall ensure that all Fire stopping material installed by its employees or subcontractors is secured, fastened, adhered and properly placed at locations per industry standards.
- 3. Contractor to coordinate inspections with building officials, AHJ and/or the Owner for inspecting firestop penetrations prior to cover.

B. Below Grade Vapor Retarders

Below Grade Vapor Retarders 079200 Joint Sealants

1. Contractor to install a 15 mil polyolefin vapor retarder in elevator pit. Apply per manufacturer's recommendations.

12-17-21 Page 17 of 21

C. Joint Sealers

- 1. Provide joint sealants, joint fillers and accessory joint material from a single manufacturer for each different product required to ensure compatibility.
- 2. All joint surfaces to be properly prepared, dry, clean and remove loose materials and foreign matter which might impair adhesion for new sealant application. Sealants applied shall be tooled and with joint seams no wider than ³/₄" per project specifications.
- Sand for sanded sealant joint: sand aggregate to match texture, color and appearance of adjacent substrates.
- 4. Contractor is responsible for fire stopping at all joints and penetrations in fire resistance rated and smoke resistant assemblies. Contactor to comply with manufacturer requirements and all applicable codes and regulations.
- 5. Use only skilled installers who are trained and experienced with specified sealants.
- 6. The Contractor shall provide labor and materials required for weather-tight installation and fire rated assembly of all work associated.

DIVISION 8 OPENINGS

Refer to Specification Section 081113 Hollow Metal Doors and Frames

A. Interior Doors Work Summary

Interior door removal and replacement of elevator equipment room door, door per plans and door schedule. The Contractor shall provide and install new prefinished hollow metal door and jamb bored, mortised and machined to fit the hardware specified per the door hardware schedule. Door and frame to be removed and replaced within the same day.

B. Interior Doors General Conditions

Refer to Specification Sections 081113 Hollow Metal Doors

- 1. The Contractor shall verify existing rough openings and conditions prior to ordering. It is recommended door modifications be made prior to application of finish.
- 2. All doors will be installed true, level and plumb with square and consistent reveals and close (and latch) firmly with the single push of a hand (i.e. entry closers, bomber hinges, etc.).
- 3. Contractor to install doors and provide a proper seal and not allow daylight to be seen from either side of door.
- 4. Thresholds shall be installed on a firm foundation and supported to prevent bow or bend when pressure is applied to threshold. Where applicable thresholds shall be grouted with non-shrink grout between threshold and concrete slab. In locations were grout may degrade existing substrate, Contractor shall use shims, adhesive, or other approved materials that will prevent threshold from bow or bending when pressure is applied.
- 5. Contractor to protect all doors prior and during installation. KCHA will not accept doors damaged during transport or installation.
- 6. All interior door casing will be replaced with new and match existing trim.

12-17-21 Page 18 of 21

- 7. All doors to be <u>pre-painted</u> prior to installation. Do not touch-up door paint. If door paint is damaged, entire door to be repainted to original specifications. <u>Do not</u> paint fire rated door labels.
- 8. Contractor to pack fire rated door jamb with a fire rated grout before installing jamb.

C. Door Hardware Work Summary

Contractor to provide a complete finish hardware package and suitable fastenings for the Project in accordance with Drawings, Specifications and Schedules.

D. Door Hardware General Conditions

Refer to Specification Section 081113

1. Contractor to coordinate keying with owner prior to ordering.

E. Door Hardware Work Summary

Contractor to provide a complete finish hardware and suitable fastenings for the Project in accordance with Drawings, Specifications and Schedules.

DIVISION 9 FINISHES

See Specification Section 092100 Gypsum Wallboard 099100 Painting 099600 High Performance Coatings

A. Gypsum Wallboard Work Summary

Contractor will patch any interior wall damage incurred during demolition or installation. Contractor shall install all required fire rated assemblies to complete applicable code attic drafts stops and access doors.

B. Gypsum Wallboard General Conditions

Refer to Specification Sections 092100

- 1. Contractor shall install all fire rated assemblies per plans and specifications.
- 2. Contractor will protect all <u>finished surfaces from dust, joint compound, tape, texture or</u> overspray.
- 3. Contractor to install 100% backing on all drywall patch seams that do not lay on an existing joist or stud. 2x lumber or ³/₄" plywood is acceptable material for use as backing on all edges.
- 4. Contractor will apply an interior GWB, tape, joint compound and texture to match and blend in to the existing surface plane and texture quality/density. Transition between new and old drywall should be smooth and seamless.

C. Exterior Painting General Conditions

Refer to Specification Sections 099100 Painting

- 1. Exterior siding & trim
 - a. All new installed exterior T-111 siding and trim to have one (1) coat of primer and two (2) coats of paint applied.
 - b. New painted surfaces to match adjacent surfaces.
- 2. Interior doors and jambs
 - a. All doors and jambs to be pre-painted (all six [6] sides) prior to installation.

12-17-21 Page 19 of 21

Note: Contractor will be responsible for full protection of door finish (up to substantial completion) and will be responsible for repair and repaint of all doors top to bottom.

4. General Exterior Paint

- a. Contractor will protect all finished surfaces from dust, mud, texture or overspray. Contractor will clean and/or replace any damaged items not receiving paints and coatings.
- b. Contractor will supply all exterior paint and leave all excess paint on site (in addition to a 1 gallon unopen can) in a location designated by building staff.

D. Interior Paint Work Summary

This work shall be inclusive labor and materials to perform surface preparation, fill, sanding and prime and paint interior walls and trim.

E. Interior Paint General Conditions

Refer to Specification Section 091000 Painting

1. General Interior Paint

- a. Contractor will protect all finished surfaces from dust, joint compound, texture or overspray and clean and/or replace any items not to receive paints and coatings.
- b. All caulking and putty will be allowed to cure per manufacturer's instruction prior to paint touch up. (Refer to Section 079200 Joint Sealants). Caulk to be high quality paintable latex caulk. Caulk and/or putty all joints, seams and nail holes using approved materials and methods as specified and per manufacturer's instructions.
- c. All caulking and putty to be applied in a smooth and uniform fashion without defect, gaps, seams, or smears to plane and seamlessly integrate with abutting surfaces.
- d. Contractor to coordinate with Owner's representative in regards to color, placement and line breaks.
- e. Contractor will supply a one (1) un-opened gallon can of each paint used and leave paint on site in location designated by building staff

2. Interior walls

- a. Contractor will patch, texture and paint to match any existing interior or exterior wall or siding damage incurred during demolition and/or installation.
- b. Minimum of two (2) coats (primer is not considered a coat) or as necessary shall be applied upon completion of all wall preparation and priming for a finished cover.
- c. Touchup shall be allowed for interior walls unless there is otherwise noticeable variation of the new versus the existing paint color/texture. Interior walls shall be painted from corner to corner, top to bottom, contractor may not feather in finishes.

DIVISION 14 CONVEYING SYSTEMS

- A. The elevator is to be an all-inclusive build project. The Contractor is responsible to price the entire scope of work for a lift system that will meet or exceed all jurisdictional codes. In addition to all physical work, the Contractor is to provide the following (this is not an all-inclusive list): all permits, as-built drawings, warranties, and all other associated work.
- B. Contractor to install selected interior cab finish option #3 warm tones per specification section 14 24 00/2.15.

12-17-21 Page 20 of 21

DIVISION 21 FIRE SUPPRESSION

A. Contractor to install a new sprinkler head at a max of 24" from finish floor and extend existing pipe to new sprinkler head for connection, refer to plan.

DIVISION 23 MECHANICAL

Refer to Specification Section 230000 Mechanical.

- A. Contractor to install new heat pump, refer to plans and specifications.
- B. Contractor to provide all materials, equipment, labor, supervision, tools and items necessary for the construction, installation, connection, testing and operation of all mechanical work for this project.
- C. The mechanical drawings and specifications are intended to schematically describe the scope of all mechanical work, unless otherwise shown. Provide all materials which are necessary for the proper completion of the installation or operation of the equipment.

DIVISION 26 ELECTRICAL

A. Electrical

Refer to Plans

- Contractor responsible for repairing all wires, cables, etc. damaged by construction activities
 on same day incident occurs. Terminations and caps will be clearly marked on site and recorded
 in the project record drawings (i.e. red line drawings or as built) with clear and accurate
 dimensions.
- 2. Contractor to supply and install Electrical Fixtures per lighting fixture plans and specifications and all associated materials required for the complete installation of all fixtures requiring electrical connection for the Elevator and Electrical Equipment per plans and specifications. New fixtures to include but not limited to outlets, switches, heating unit and exhaust fan, and car lighting.
- 3. Contractor to provide demolition, removal and legal disposal of all existing lights and fixtures.
- 4. Contractor to verify any existing equipment, devices, fixtures, cabling, wires, and conduit is in operational order prior to relocating, replacing or rerouting.
- 5. Contractor is responsible to air seal all penetrations, vents and appurtenances.
- 6. Contractor to have rough in inspections performed and approval to cover from AHJ prior to covering.
- 7. Contractor shall have a lock out / tag out procedure in place while performing any electrical service work.
- 8. Contractor responsible to verify all cable routing and all work required to facilitate a complete and fully functioning system that meets all jurisdictions codes and requirements.

END OF SECTION

12-17-21 Page 21 of 21

SECTION 01 1000 SUMMARY

PART 1	GENERAL				
1.1	RELATED DOCUMENTS				
A.	Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.				
1.2	SUMMARY				
A.	 This Section includes the following: Work covered by the Contract Documents. Phased construction. Work under other contracts. Owner-furnished products. Owner's occupancy requirements. Applicable Codes. Reference standards. Use of premises and work restrictions. Specification formats and conventions. Execution, correlation and intent – Contract Documents. 				
1.3	WORK COVERED BY CONTRACT DOCUMENTS				
A.	Project Identification:				
	1. Project Name: Eastridge House Elevator Modernization				
	2. Project Location: 120 W. Sunset Way, Issaquah, WA 98027				
B.	Owner/Developer: King County Housing Authority				
	1. Owner's Representative: Don Hatfield				
	2. Contact Phone:				
C.	Architects / Engineer:				
	1. Representative: SHKS				
	2. Contact Phone: 206-675-9151				
D.	Reference Section A of the Bid Documents for scope of work.				

1.4 PHASED CONSTRUCTION

A. Construction shall be phased to accommodate Owner's desired schedule as noted in the bid documents and/or drawings, if applicable. Final Project Schedule shall include

phasing schedule to be prepared by the Contractor, and reviewed and approved by the Owner.

- B. Contractor shall prepare a phasing plan to maintain access to residential units during construction. Plan to be reviewed and approved by Owner prior to Work commencing.
- C. Before commencing Work of each phase of construction, submit an updated copy of Contractor's Final Project Schedule showing the sequence, commencement and completion dates, and move-out and -in dates of residents for all phases of the Work.

1.5 WORK UNDER OTHER CONTRACTS

A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.

1.6 OWNER-FURNISHED PRODUCTS

- A. Owner will furnish products as indicated. This section includes receiving, unloading, handling, storing, protecting, and installing Owner-furnished products.
- B. Owner-Furnished Products:
 - 1. Products and materials as noted on drawings or otherwise indicated for re-use.
 - 2. Products and materials as noted on drawings or otherwise indicated to be supplied by Owner.

1.7 OWNER'S OCCUPANCY REQUIREMENTS

- A. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of the building before Substantial Completion. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work. PRIOR to partial Owner Occupancy:
 - 1. Owner will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied.
 - 2. Contractor is responsible for obtaining a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
 - 3. The mechanical and electrical systems shall be fully operational; all required tests and inspections shall be successfully completed for areas to be occupied. On occupancy, Owner will operate and maintain mechanical and electrical systems serving the occupied portions of building.
 - 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for the occupied portions of building.
 - 5. Coordinate insurance requirements with Owner prior to Owner occupancy of completed areas of the building.
- 1.8 CUTTING & PATCHING Refer to Section 01 7329 Cutting and Patching.

1.9 APPLICABLE CODES

A. Perform all Work in accordance with the current code requirements of the city holding jurisdiction over the site where Work is to be completed.

B. Certification of Code Compliance: All materials, methods and equipment shall comply with requirements of applicable codes and the Contract Documents, including requirements of all incorporated standards. The Contractor shall furnish, as a part of the Contract, certification of such compliance if requested by the Architect or the Code Enforcing Agency. Such certification shall be submitted in the form of test results or other data from a recognized independent testing laboratory. Contractor shall coordinate and provide all required submittals to the Code Enforcing Agency in a timely manner so as to not delay progress of the Project.

1.10 USE OF PREMISES AND WORK RESTRICTIONS

- A. General: Contractor shall have full use of premises for construction operations subject to phased construction requirements as specified in this Section and as indicated on Drawings by the Contract limits.
 - 1. Security Procedures: Refer to the Scope of Work Division 1, Section 4 Safety, Protection & Restoration and 01 5000 Temporary Facilities and Controls, for required security procedures to be followed while working at this building.
 - 2. Contractor Identification: All Contractors on site shall be easily identifiable and must wear clothing, name badges, hardhats, safety vests, or other visible identification or identifying article (approved by Owner) with employee's, laborer or staff member's company logo or company name.
- B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to areas as indicated on drawings.
- C. Use of Parking Lot: Limited.
- D. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- E. On-Site Work Hours: Work in the existing occupied buildings will start no earlier than 8:00am, and will be completed by 4:30pm. Hours for work performed outside of the building will be at the discretion of Owner's Representative.
 - 1. Early Morning Hours: As approved by Owner's representative.
 - 2. Hours for Utility Shutdowns: Notify Owner and all affected utility companies seventy-two (72) hours in advance of proposed shutdown.
 - 3. Contractor to notify residents of Work a minimum of forty-eight (48) hours prior to start of Work.
 - a. If Work progress or new work affects additional or a new set of residents, the Contractor must give a new notice of work to all affected residences a minimum of forty-eight (48) hours prior to start of Work.
 - 4. Hours for Core Drilling and other loud activities must comply with city of jurisdiction's noise codes.
- F. Nonsmoking Properties. All of King County Housing Authority properties are nonsmoking.

- G. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- H. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.11 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 33-division format and CSI/CSC's "2010 Master Format" numbering system.
 - 1. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular, where applicable, as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

1.12 EXECUTION, CORRELATION AND INTENT – CONTRACT DOCUMENTS

- A. General: If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the drawings. Contact Owner immediately for clarification of conflicts, corrections and clarifications.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

END OF SECTION 01 1000

SECTION 01 2600 CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract Modifications.
- B. Related Sections:
 - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 MINOR CHANGES IN THE WORK

A. Reference Article 7 in the General Conditions.

1.4 PROPOSAL REQUESTS

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. Owner-Initiated Change Order Requests (COR): Contractor will issue a detailed description of:
 - 1. Proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 2. Change Order Requests (COR) and Construction Change Directives (CCD) shall be initiated by the Owner, dated and sequentially numbered on Owner provided forms.
 - 3. CORs are not instructions either to stop Work in progress or to execute the proposed change.
 - 4. After receipt of COR, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Provide a cost breakdown, including overhead and profit as a separate line item, and time extension request as provided for in Article 7 of The General Conditions.
 - b. Provide all necessary product information, specifications, etc. required to justify any Contractor requested changes.
 - 5. The allowed markup shall cover all indirect project costs, including but not limited to, the project Overhead, Profit and General Conditions
 - a. The Contractor shall be allowed a maximum of fourteen (14%) percent Overhead, Profit, and General Conditions, on the cost of craft labor,

- equipment, small tools and materials for self-performed Change Order work.
- b. The Contractor shall be allowed a maximum of eight (8%) percent Overhead, Profit and General Conditions on the cost of craft labor, equipment, small tools and materials for Subcontractor Change Order work. The Contractor is not allowed to take profit on the profit of the Subcontractor as stated in form HUD-5370, section 29.
- c. A Subcontractor shall be allowed a maximum of fourteen (14%) percent of the cost of craft labor, equipment, materials and small tools for Overhead, Profit and General Conditions, for self-performed Change Order work.
- d. A Lower-Tier Subcontractor shall be allowed a maximum of fourteen (14%) percent of the cost of craft labor, equipment, materials and small tools for Overhead, Profit and General Conditions, for self-performed Change Order work.
- 6. Include a list of quantities of products required (or eliminated) their unit costs and a total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 7. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
- 8. Include costs of labor and supervision directly attributable to the change.
- 9. Include an updated Contractor's Final Project Schedule that indicates the effect of the change, including but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - a. Time extension requests must demonstrate the impact on the project Critical Path Schedule. See the General Conditions Article 15 and Section 01 3200 -Construction Progress Documentation.
- 10. Review all pricing provided by subcontractors and suppliers for accuracy and completeness. Verify that their scope of work is consistent with the requested change. Verify math is correct and that markup rates complies with the General Conditions.
- 11. After signing the Change Order Request or CCD, the Contractor shall return it to the Owner.
- 12. Quotation Form: Use forms acceptable to Owner.
- 13. After review of the Contractor's price, cost breakdown and requested time extension, if any, the Owner will submit for estimation and do one of the following:
 - a. Sign and route for approval.
 - b. Reject and resubmit to the Contractor for pricing correction.
 - c. Revise the Change Order Request or CCD and submit to the Contractor for repricing.
- 14. Prior to the Owner's acceptance of Change Order Requests, appropriate personnel shall also review the change requests.
- C. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Owner.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

- 2. Provide a cost breakdown, including overhead and profit as a separate line item, and time extension request as provided for in Article 7 of the General Conditions.
- 3. Provide all necessary product information, specifications, etc. required to justify any Contractor requested changes.
- 4. Allowances for direct supervision, safety, small tools, overhead and profit are limited by the General Conditions, Article 7.1.1.
- 5. Include a list of quantities of products required (or eliminated), their unit costs and total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 6. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
- 7. Include costs of labor and supervision directly attributable to the change.
- 8. Include an updated Contractor's Final Project Schedule that indicates the effect of the change, including but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - a. Time extension requests must demonstrate the impact on the project Critical Path Schedule. See the General Conditions, and Section 01 3200-Construction Progress Documentation.
- 9. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- 10. Proposal Request Form: Use form acceptable to Owner.
- 11. After review of the Contractor's price, cost breakdown and requested time extension, if any, the Owner will submit for estimation and do one of the following:
 - a. Sign and send on for approval.
 - b. Reject and resubmit to the Contractor for pricing correction.
 - c. Revise the Change Order Request or CCD and submit to the Contractor for repricing.
- 12. Prior to the Owner's acceptance of Change Order Requests, appropriate personnel shall also review the change requests.

1.5 CONSTRUCTION CHANGE DIRECTIVE (CCD)

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. Construction Change Directive: The Owner may issue a Field Authorization in accordance with provisions in Article 7, General Conditions. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- C. Documentation: Maintain detailed records on a time and material basis of Work required by the CCD, with supporting documentation as required by CORs.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract, consistent with Article 7 of the General Conditions of the Contract.

1.6 CHANGE ORDER PROCEDURES

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. When approved and signed by the Owner, the Construction Change Directive will either be included in a Change Order Request (COR) to be charged against the Contract Allowance, or will be included in a formal Change Order, which will modify the Contract amount.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

END OF SECTION 01 2600

SECTION 01 2900 PAYMENT PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Master Project Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittal Schedule.
 - 2. Submit the Schedule of Values to Owner at earliest possible date but no later than fourteen (14) calendar days after the date of bid opening.
 - 3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Documents as a guide to establish line items for the Schedule of Values. Lines items are based on Scope of Work and sequencing.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Owner.
 - c. Owner's contract number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:

- a. Item #, including separate line for an Allowance (if applicable).
- b. Description of the Work.
- c. Total Dollar Value.
- d. Previous Application Amount.
- e. Dollar Amount Charged on Current Pay Application.
- f. Stored Materials.
- g. Total Complete and Stored.
 - Percentage of the Contract Sum to nearest onehundredth percent, adjusted to total one hundred (100%) percent.
- h. Balance to Finish
- i. Retainage
- 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Documents. Provide several line items for principal subcontract amounts, where appropriate.
- 4. Round amounts to nearest one (1) cent; total shall equal the Contract Sum
- 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - Differentiate between items stored on-site and items stored offsite. Include evidence of insurance or bonded warehousing per Article 9.3.2 AIA A201-2017 General Conditions.
- 6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Owner and paid for by Owner.
- B. Payment Application Times:
 - 1. The date for each progress payment is indicated in the Contract between Owner and Contractor.
 - 2. The period of construction Work covered by each Application for Payment is the period indicated in the Contract.
- C. Payment Application Forms:

- 1. Use Payment Application forms as provided by Owner for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Final Project Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 3. Provide current Subcontractor List with each Application for Payment.
- E. Transmittal: Submit one (1) signed and notarized original Application for Payment to Owner by a method ensuring receipt within forty-eight (48) hours. The Application for Payment shall include intent to pay prevailing wages and a running spreadsheet that itemizes both the intent and affidavit of wages paid to date for each subcontractor.
 - 1. Transmit Application for Payment with a transmittal form listing attachments and recording appropriate information about the application.
- F. General Contractor Certification Upon Application For Payment: Refer to attached Exhibits in Contract.
- G. Initial Application for Payment: Administrative actions and submittals that must precede the first Application for Payment include the following:
 - 1. List of subcontractors. (Required at pre-construction conference.)
 - 2. Schedule of Values.
 - 3. Contractor's Final Project Schedule to be created in MS Project or equivalent format. (Required at pre-construction conference.)
 - 4. Certificates of insurance and insurance policies. (Required prior to contract award.)
 - 5. Performance and payment bonds. (Required prior to contract award.)
 - 6. Section 3 Work Plan, for projects whose contract value is five hundred thousand dollars (\$500,000) or higher.
 - 7. Intent to Pay Prevailing Wages must be filed with L&I.
 - 8. Contractor to provide Owner with initial Cash Flow Projections. Cash Flow Projection needs to reflect Work as detailed in Final Project Schedule.
- H. **All** Application for Payments will be reviewed for completion and correctness, including reasons outlined in A201-2017 General Conditions.
- I. Application for Payment at Substantial Completion: After Owner issues the Certificate of Substantial Completion, submit an Application for Payment showing one hundred (100%) percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

- 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following (refer to Article 9.10 in AIA A201-2017 General Conditions:
 - 1. Completion of Project closeout requirements.
 - 2. Completion of Items specified.
 - 3. Ensure that unsettled claims will be settled.
 - 4. Ensure that incomplete Work is not accepted and will be completed without undue delay.
 - 5. Transmittal of required Project construction records to the Owner.
 - 6. Proof that fees and similar obligations were paid.
 - 7. Removal of temporary facilities and services.
 - 8. Removal of surplus materials, rubbish and similar elements.
 - 9. Operations and Maintenance Manuals
 - 10. Record Drawings (i.e. As-built drawings, redline drawings)
 - 11. Final Affidavits of Wages Paid filed with L&I.
- 1.6 SPECIAL PAYMENT REQUIREMENTS (Not Used)
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

END OF SECTION 01 2900

SECTION 01 3100 PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Coordination Drawings.
 - 3. Project meetings.
 - 4. Requests for Information (RFIs).
- B. See Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.3 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Document.

1.4 COORDINATION

- A. Coordination: Contractor's Responsibility to coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Final Project Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.

- 6. Pre-installation conferences.
- 7. Project closeout activities.

1.5 PROJECT MEETINGS

- A. General: Contractor is responsible for scheduling and conducting meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants, others who are involved and individuals whose presence is required, of date and time of each meeting. Notify Owner of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned; send the electronic version of the meeting minutes to the Project Manager and the Project Engineer, within three (3) business days of the meeting.
- B. Pre-construction Conference: A pre-construction conference shall be scheduled before starting construction. Owner to hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference.
 - 2. Agenda: Owner to discuss items of significance that could affect progress, including the following:
 - a. Scope of Work.
 - b. Contract Start and End Dates.
 - c. Authority of Owner's Personnel.
 - d. Davis Bacon/Prevailing Wage Certified Payroll Reports/Labor Relations and Section 3.
 - e. Insurance Certificate, Endorsement and Performance and Payment Bonds.
 - f. General Requirements/Special Conditions.
 - g. Final Project Schedule, including Phasing.
 - h. Easements, Permits, Lines & Grades.
 - i. Contractor's Superintendent.
 - j. Subcontractor List.
 - k. Safety Plan (see attachment at end of this section).
 - 1. Tests, Samples and Observations.
 - m. Progress Meetings and Reports.
 - n. Applications and Certificates of Payment, and Retention.
 - o. Progress Payments.
 - p. Change Orders.
 - q. Warranty Requirements.
 - r. Submittals.
 - s. Temporary and Storage Facilities, Staging Areas and Jobsite Security.
 - t. Clean-up and Trash Removal.
 - u. Salvage of Materials and Spare Materials.
 - v. Record Drawings.
 - w. Substantial Completion, Final Payment and Retainage.
 - x. Recycling and Energy Conservation.

- y. Minutes: The Owner will record and distribute Pre-construction meeting minutes via email.
- C. Progress Meetings: The Contractor will conduct progress meetings at weekly intervals. (refer to Article 3.1.4 of General Conditions).
 - 1. Attendees: In addition to representatives of Owner and the Contractor, each subcontractor, supplier and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Final Project Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Final Project Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Contractor shall provide a short term look-ahead schedule for presentation and review at each progress meeting.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
 - 21) Safety
 - 22) Section 3 compliance and status
 - 3. Minutes: Contractor will record the meeting minutes.
 - 4. Reporting: Contractor will email the minutes to all concerned prior to the meeting and will distribute written copies of the minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Two (2)-Week Look Ahead Schedule after each progress meeting. This schedule will be discussed in

- each progress meeting. Issue revised schedule concurrently with the report of each meeting.
- b. Contractor's weekly reports will consist of five (5) daily reports, each reflecting the preceding five (5) days. These reports will be sent electronically to the Owner on a schedule that will be determined at the Pre-Construction Meeting or at each progress meeting.

1.6 REQUESTS FOR INFORMATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 - 1. RFIs generated from subcontractor or supplier of the Contractor must be routed through the General Contractor.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
 - 3. If a suggestion can be determined or derived at by the initiator of the RFI, it is required the suggestion be supplied with the submitted RFI. If no suggestion is given where one is possible, the RFI will be returned as incomplete.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
 - 1. Project name and number.
 - 2. RFI Subject.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. Specification Section number and title and related paragraphs, as appropriate.
 - 8. Drawing number and detail references, as appropriate.
 - 9. Field dimensions and conditions, as appropriate.
 - 10. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 11. Contractor's signature.
 - 12. Attachments: Include drawings, descriptions, measurements, photos, product data, shop drawings and other information necessary to fully describe items needing interpretation.
- C. Hard-Copy RFIs: Form established by Contractor's Project Management system.
 - 1. Identify each page of attachments with the RFI number and sequential page number.
- D. Owner's Action: Owner will review each RFI, determine action required and return it. Allow five (5) working days for Owner's acknowledgement of each RFI.
 - 1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Owner's actions on submittals.
 - f. Incomplete RFIs or RFIs with numerous errors.

- 2. Owner's action may include a request for additional information, in which case Owner's time for response will start again.
- 3. Owner's action may include architect and/or engineer recommendation or approval of proposed solution.
- 4. Owner's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Order Request according to General Conditions.
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Owner in writing within five (5) days of receipt of the RFI response.
- E. On receipt of Owner's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Owner within three (3) days if Contractor disagrees with response.
- F. Contractor RFI Log: Prepare, maintain and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive and Change Order Request, as appropriate.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

GENERAL CONTRACTOR SITE SAFETY PLAN CHECKLIST

Instructions: Please indicate whether or not your Site Safety Plan contains the following provisions.

Contractors:	Site Safe	ety Plan	Evaluation
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Yes	No	N/A		
[]	[]	[]	1.	Will your company have a written, established, supervised and enforced site safety plan for the project? (<i>The site safety plan must be presented before</i>
				starting work)
[]	[]	[]	2.	Does the site safety plan include an orientation and weekly safety meetings that show your employees and other subcontractors what they need to know to perform their job assignments safely?
[]	[]	[]	3.	Does the site safety plan describe how and when to report on-the-job injuries?
[]	[]	[]	4.	Does the site safety plan identify on-site available 1st Aid / CPR trained personnel, readily accessible first-aid and and/or access to the nearest clinic or hospital on job site?
[]	[]	[]	5.	Does the site safety plan identify what to do in an emergency, including how to exit the workplace?
[]	[]	[]	6.	Does the site safety plan explain how employees and other subcontractors report unsafe conditions and practices?
[]	[]	[]	7.	Does the site safety plan describe the required personal protective equipment (PPE) and the proper use and care of the PPE?
[]	[]		8.	Is there an on-site Haz-com Program that identifies hazardous materials
				(Asbestos, Lead) or chemicals including instruction about the safe use and storage?
[]	[]	[]	9.	Does the site safety plan identify the designated representative responsible for job-site Safety?
[]	[]	[]	10.	Does the site safety plan describe who is responsible for performing and recording regular periodic site reviews, and inspections for your employees and subcontractors?
[]	[]	[]	11.	Does the site safety plan describe programs related to housekeeping and jobsite safety?
[]	[]	[]	12.	Does the site safety plan include a job-site specific written fall protection plan covering potential falls hazards and protections?
[]	[]	[]	13.	Does the site safety plan describe electrical and or power generation controls?
[]	[]	[]	14.	Does the site safety plan have provisions for trenching /excavations and/or confined space?

Notes:

SECTION 01 3200 CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Final Project Schedule.
 - 2. Submittals Schedule (refer to Article 3.10.2 in General Conditions AIA A201-2017).
 - 3. Daily construction reports.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring and controlling the construction project. Activities included in a Final Project Schedule consume time and resources.
 - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical Path Method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
- E. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- F. Major Area: A story of construction, a separate building or a similar significant construction element.

1.4 SUBMITTALS

- A. Submittals Schedule: Submit one (1) electronic copy of schedule to the Owner. Arrange the following information in a tabular format
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor (if applicable).
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's final release or approval.
- B. Contractor's Final Project Schedule: Submit one (1) electronic copy and one (1) hard copy of initial schedule to the Owner. The hard copy should be large enough to show entire schedule for entire construction period.

1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Final Project Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from parties involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals to the Owner, arranged in chronological order by dates required by Final Project Schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Final Project Schedule.
 - 2. Submit concurrently with the first complete submittal of Contractor's Final Project Schedule.
- 2.2 CONTRACTOR'S FINAL PROJECT SCHEDULE, GENERAL (refer to Article 3.10.1in the General Conditions AIA A201)
 - A. Contractor to provide a baseline, cost-loaded schedule in MS Project or Primavera to the Owner's Representative one (1) day **prior** to the weekly project meeting. Contractor is to update the schedule weekly.
 - B. Time Frame: Extend schedule from date established for commencement of the Work to date of Substantial Completion as set by the date of Notice to Proceed.

- 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 - 1. Activity Duration.
 - 2. Procurement Activities: Include procurement process activities for long lead items and major items as separate activities in schedule.
 - a. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Final Project Schedule with Submittals Schedule.
 - 4. Startup and Testing Time: Include not less than ten (10) days for startup and testing.
 - 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in Final Project Schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 - 3. Work Restrictions: Show the effect of the following items on the Final Project Schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
 - 4. Work Stages: Indicate important stages of construction for each major portion of the Work.
- E. Milestones: Include milestones indicated in the Contract Documents in Final Project Schedule, including, but not limited to, the Notice to Proceed, Substantial Completion and Final Completion.
- F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.3 CONTRACTOR'S FINAL PROJECT SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit to the Owner a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Final Project Schedule within fourteen (14) calendar days of date after Letter of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project. The Gantt-Chart Final Project Schedule can be either in MS Project or equivalent format.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three (3) months or longer to complete, indicate an estimated completion percentage in ten (10%) percent increments within time bar.

PART 3 EXECUTION

3.1 CONTRACTOR'S FINAL PROJECT SCHEDULE

- A. Contractor's Final Project Schedule Updating: At two (2) week intervals, update schedule to reflect actual construction progress and activities. Issue schedule three (3) days before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute electronic copies of approved schedule to Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. Post copies in Project meeting rooms and temporary field offices.
 - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01 3200

SECTION 01 3300 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples and other submittals.

B. Related Sections:

- 1. See Division 01 40 00 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
- 2. See Division 01 77 00 Section "Closeout Procedures" for submitting warranties.
- 3. See Division 01 78 39 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- 4. See Division 01 78 23 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Owner's responsive action.
- B. Informational Submittals: Written information that does not require Owner's responsive action. Submittals may be rejected for not complying with requirements.

PART 2 PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals to Owner via email as PDF electronic files.
 - a. Owner will return annotated file. Annotate and retain one (1) copy of file as an electronic Project record document file.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Owner reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows:
 - 1. Time for review shall commence on Owner's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 2. Initial Review: Allow five (5) working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Owner will advise Contractor when a submittal being processed must be delayed for coordination.
 - 3. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 4. Resubmittal Review: Allow seven (7) working days for review of each resubmittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately **4 by 5 inches** on label or beside title block to record Contractor's review and approval markings and action taken by Owner.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect (if applicable).
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use consecutively numbered submittals (001, 002, etc), followed by the Specification Section number, followed by a sequential number indicating version (e.g., 001-13 3300-0).
 - 2) Example: $001 01 \ 1300 0$
 - a) 001: Consecutively numbered submittals
 - b) 01 1300: Specification Section
 - c) 0: Version of submittal (0 = original submittal; 1 = first resubmittal; 2 = 2nd resubmittal; etc.)
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Location(s) where product is to be installed, as appropriate.
 - 1. Other necessary identification.
- E. Deviations: Highlight, encircle or otherwise specifically identify deviations from the Contract Documents on submittals.
 - 1. Substitution Requests.

- F. Additional Copies: Unless additional copies are required for final submittal, and unless Owner observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - 1. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Owner will return submittals, without review, received from sources other than Contractor.
 - 1. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked "Make Corrections Noted" or "No Exceptions Taken".
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers and others as necessary for performance of construction activities. Show distribution on transmittal forms.
 - 1. Use for Construction: Use only final submittals with mark indicating "Make Corrections Noted" or "No Exceptions Taken".

2.2 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

- A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
 - 1. Release of CADD information will be restricted to the following categories:
 - a. Architectural floor plans.
 - b. Site plan.
 - c. Reflected ceiling plans.
 - d. Exterior elevations.
 - e. Stair sections.
 - 2. The CADD database will contain only the background information; the sheet numbers, sheet titles, room names and numbers, reference symbols, and other similar data will not be included.
 - 3. The CADD database will be generated on PC hardware with Autodesk AutoCAD software. Architect has the capability to develop CADD output to meet capabilities of all major platforms and major media types.
 - 4. When requesting CADD databases, specify the output form required.

PART 3 PRODUCTS

3.1 ACTION SUBMITTALS

A. General: Prepare and submit to Owner, Action Submittals required by individual Specification Sections.

- B. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Owner.
 - 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - 1. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number, numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
 - 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- C. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.

- c. Manufacturer's installation instructions.
- d. Manufacturer's catalog cuts.
- e. Wiring diagrams showing factory-installed wiring.
- f. Printed performance curves.
- g. Operational range diagrams.
- h. Compliance with specified referenced standards.
- i. Testing by recognized testing agency.
- 4. Number of Copies: Submit to Owner, four (4) copies of Product Data, unless otherwise indicated. Owner will return two (2) copies. Mark up and retain one (1) returned copy as a Project Record Document.
- D. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal of Architect's CAD Drawings is otherwise permitted.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shop-work manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Notation of coordination requirements.
 - j. Notation of dimensions established by field measurement.
 - k. Relationship to adjoining construction clearly indicated.
 - 1. Seal and signature of professional engineer if specified.
 - m. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 - 2. Sheet Size: Except for templates, patterns and similar full-size drawings, submit to Owner, Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 36 by 48 inches.
 - 3. Number of Copies: Submit to Owner, a minimum of three (3) opaque (bond) copies of each submittal. Submit additional copies as required for each consultant. Owner will return two (2) copies. At the sole discretion of the Owner electronic copies may be acceptable.
- E. Samples: Submit to Owner, Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of appropriate Specification Section.

- 3. Disposition: Maintain sets of approved Samples at Project site, available for quality control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
- 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures and patterns available.
 - a. Number of Samples: Submit one (1) full set of available choices where color, pattern, texture or similar characteristics are required to be selected from manufacturer's product line. Owner will return submittal with options selected.
- 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three (3) sets of Samples. Owner will retain two (2) Sample sets; remainder will be returned.
- F. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.
 - 1. Number of Copies: Submit a minimum of three (3) copies of product schedule or list, unless otherwise indicated. Submit additional copies for each consultant required to review the submittal. Owner will return two (2) copies.
- G. Submittals Schedule: Comply with requirements specified in the General Conditions of the Contract and Owner-Contractor Contract.
- H. Application for Payment: Comply with requirements specified in the Owner-Contractor Contract.
- I. Schedule of Values: Comply with requirements specified in the Owner-Contractor Contract. If needed, combine subcontract list in paragraph below with product list above. Subcontract list is required by General Conditions to be submitted as soon as practical after award of the Contract.
- J. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.
 - 1. Number of Copies: Submit electronically to Owner, one (1) copy of subcontractor list, unless otherwise indicated.

3.2 INFORMATIONAL SUBMITTALS

A. General: Prepare and submit Informational Submittals required by other Specification Sections.

- 1. Number of Copies: Submit to Owner, two (2) copies of each submittal, unless otherwise indicated. Owner will not return copies.
- 2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
- 3. Test and Inspection Reports: Comply with requirements specified in Division 01 40 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 01 31 00 Section "Project Management and Coordination."
- C. Contractor's Final Project Schedule: Comply with requirements specified in the General Conditions of the Contract, and Owner-Contractor Contract.
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and Owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

- M. Pre-construction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- N. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 78 23 Section "Operation and Maintenance Data."
- Q. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address and telephone number of manufacturer.
- S. Manufacturer's Field Reports: Prepare written information documenting factoryauthorized service representative's tests and inspections. Include the following, as applicable:
 - 1. Statement on condition of substrates and their acceptability for installation of product.
 - 2. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
- T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- U. Material Safety Data Sheets (MSDSs): Submit information directly to Owner.
 - 1. Architect will not review submittals that include MSDSs and will return them for resubmittal.

3.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Owner.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, electronically submit three (3) copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
 - 2. If submittal has a wet stamp, then send three (3) hard copies, with the wet stamp to Owner for approval. Owner will return one (1) copy to Contractor.

PART 4 EXECUTION

4.1 CONTRACTOR'S REVIEW

A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions.

4.2 OWNER'S ACTION

- A. Action Submittals: Owner will review each submittal, make marks to indicate corrections or modifications required, and return it. Owner will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- B. Informational Submittals: Owner will review each submittal and will not return it, or will return it if it does not comply with requirements. Owner will forward each submittal to appropriate party.
- C. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- D. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 3300

SECTION 01 4000 QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections and related actions do not limit Contractor's other quality assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. See Divisions 02 through 33 Sections for specific test and inspection requirements, if applicable. Not all Divisions will be used.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Owner.
- C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- D. Pre-construction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Lower Tier Subcontractor, to perform a particular construction operation, including installation, erection, application and similar operations.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- J. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of two (2) previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. General: If compliance with two (2) or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Owner for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Owner for a decision before proceeding.

1.5 TESTING SUBMITTALS

- A. Qualification Data: For testing agencies, as prescribed by Contract, but not provided by Owner shall demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Reports: Prepare and electronically submit to the Owner certified written reports that include the following:
 - 1. Date of issue.

- 2. Project title and number.
- 3. Name, address and telephone number of testing agency.
- 4. Dates and locations of samples and tests or inspections.
- 5. Names of individuals making tests and inspections.
- 6. Description of the Work and test and inspection method.
- 7. Identification of product and Specification Section.
- 8. Complete test or inspection data.
- 9. Test and inspection results and an interpretation of test results.
- 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on re-testing and re-inspecting.
- C. Permits, Licenses and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly or product that is similar to those indicated for this Project in material, design and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.

- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design and extent to those indicated for this Project.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Owner.
 - 2. Notify Owner seven (7) calendar days in advance of dates and times when mockups will be constructed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4. Obtain Owner's approval of mockups before starting work, fabrication or construction.
 - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 6. Demolish and remove mockups when directed, unless otherwise indicated.
- J. Laboratory Mockups: Comply with requirements of pre-construction testing and those specified in individual Sections in Divisions 02 through 33.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

- 2. Notify testing agencies at least twenty-four 24 hours in advance of time when Work that requires testing or inspecting will be performed.
- 3. Where quality-control services are indicated as Contractor's responsibility, electronically submit a certified written report, in duplicate, of each quality-control service to the Owner.
- 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
- 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 33 00 Section "Submittal Procedures."
- D. Re-testing/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including re-testing and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Owner and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Owner and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which onsite tests will be conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Electronically submit to the Owner a certified written report, in duplicate, of each test, inspection and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.

- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples and similar activities.

1.8 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner will engage a qualified special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Owner and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Owner with copy to Contractor and to authorities having jurisdiction.
 - 4. Electronically submitting to the Owner a final report of special tests and inspections, which includes a list of unresolved deficiencies, at Substantial Completion.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Re-testing and re-inspecting corrected work.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
 - 2. Comply with the Contract Document requirements for Division 01 73 29 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

SECTION 01 5000 TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 73 00 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. See Division 01 Section "Execution" for progress cleaning requirements.
- C. See Divisions 02 through 33 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections. Not all Sections will be used

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies and authorities having jurisdiction.
- B. Water Service from Existing System: Water from Owner's existing water system is available for use with approval of Owner's Representative. Provide connections and extensions of services as required for construction operations. Contractor must notify Owner forty-eight (48) hours before use of water service.
- C. Electric Power Service from Existing System: Contractor is responsible for supplying power service and distribution as required for construction operations, unless other arrangements are made with approval of Owner's Representative.

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

1.6 PROJECT CONDITIONS

- A. Temporary Use of Existing Permanent Facilities: Contractor shall assume responsibility for operation, maintenance and protection of each existing permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: The following conditions apply to use of temporary services and existing facilities by all parties engaged in the Work:
 - 1. Keep temporary services and existing facilities clean and neat.
 - 2. Relocate temporary services as required by progress of the Work.
 - 3. Provide temporary keys and lock cores throughout duration of Contractor's occupancy of Owner's space. Contractor to provide Owner's Representative with temporary construction keys matching construction cores installed for access.
 - a. When Contractor is given keys to KCHA property, Contractor will claim responsibility for the keys by signing for keys acquired. If Contractor loses keys, Contractor is responsible for rekeying all locks associated with lost key. Contractor is responsible for returning keys back to Owner's Representative when Work is completed.

PART 2 PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished and equipped to accommodate materials and equipment for construction operations.
- C. Contractor is responsible for security of Temporary Facilities.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 13 at each return air grille in system and remove and replace at end of construction.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated re-circulation, or combustion type; vented; fully-enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.

- D. Drinking-Water Fixtures: Containerized, tap-dispenser, bottled-water, drinking-water units, including paper cup supply.
 - 1. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45 to 55 degrees F.
- E. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110-to-120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button and pilot light.
- F. Power Distribution System Circuits: Where permitted, and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V AC, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.

PART 3 EXECUTION

3.1 INSTALLATION, GENERAL

- A. With Owner's approval, locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services. Provide Owner with seventy-two (72) hour notice if disturbance is to occur to site staff or residents.
- B. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities and drinking water for use by construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation and maintenance of fixtures and facilities.
 - 1. Toilets: Use of Owner's existing toilet facilities will be permitted with Owner's approval, as long as facilities are cleaned and maintained daily. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

- 1. Maintain a minimum temperature of 50 degrees F in permanently enclosed portions of building for normal construction activities, and 65 degrees F for finishing activities and areas where finished Work has been installed.
- 2. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes and odors from entering occupied areas.
- E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- F. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Connect temporary service to Owner's existing power source, as directed by Owner after receiving approval by Owner's Representative.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 73 00 Section "Execution" for progress cleaning requirements. Contractor shall not use Owner's waste receptacles for any disposal.
- B. Parking: Use designated areas of Owner's existing parking areas for construction personnel upon Owner's approval.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway and subsoil contamination or pollution or other undesirable effects.
- C. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
- D. Barricades, Warning Signs, and Lights: Comply with Owner's instructions for erecting structurally adequate barricades, including warning signs and lighting.

- E. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by Owner.
- F. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations and similar activities. Provide temporary weathertight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- G. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by tenants from fumes and noise.
 - 1. Construct dustproof partitions with two (2) layers of 6-mil polyethylene sheet on each side. Overlap and tape full length of joints.
 - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 - 3. Seal joints and perimeter.
 - 4. Protect air-handling equipment.
 - 5. Provide walk-off mats at each entrance through temporary partition.
 - 6. Dust Control/Air handlers
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking on Owner's property.
 - 2. Supervise welding operations, combustion-type temporary heating units and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3.5 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a twenty-four (24) hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.

2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 77 00 Section "Closeout Procedures."

SECTION 01 6000 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. See Division 01 77 00 Section "Closeout Procedures" for submitting warranties for Contract closeout.
- C. See Divisions 02 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted. Not all Sections will be used.

1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.4 SUBMITTALS

- A. Substitution Requests: Electronically submit three (3) copies of each request for consideration to the Owner. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and the names and addresses of Architects and Owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Contractor's Final Project Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - j. Cost information, including a proposal of change, if any, in the Contract
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - 1. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
 - 2. Owner's Action: If necessary, the Owner will request additional information or documentation for evaluation within five (5) calendar days of receipt of a request for substitution. Owner will notify Contractor of acceptance or rejection of proposed substitution within ten (10) calendar days of receipt of request, or five (5) calendar days of receipt of additional information or documentation, whichever is later.
 - a. Form of Acceptance: Signed and Approved Substitution Request Form.

B. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two (2) or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store and handle products using means and methods that will prevent damage, deterioration and loss, including theft. Comply with manufacturer's written instructions.

B. Delivery and Handling:

- 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
- 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged or sensitive to deterioration, theft and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
- 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Store cementitious products and materials on elevated platforms.
- 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation and weather-protection requirements for storage.
- 7. Protect stored products from damage and liquids from freezing.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Pre-printed written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

- 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Electronically submit a draft for approval before final execution to the Owner.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
 - 3. Refer to Divisions 2 through 33 Sections for specific content requirements and particular requirements for submitting special warranties. Not all Sections will be used
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Owner will make selection.
 - 5. Where products are accompanied by the term "match sample," sample to be matched is Owner's.
 - 6. Descriptive, performance and reference standard requirements in the Specifications establish "salient characteristics" of products.

B. Product Selection Procedures:

- 1. Products: Where Specifications include a list of names of both products and manufacturers, provide one (1) of the products listed or equal product that complies with requirements.
- 2. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one (1) of the manufacturers listed or equal manufacturer that complies with requirements.
- 3. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one (1) of the products listed, or a equal product. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed "or Equal" product.

- 4. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one (1) of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed manufacturer.
- 5. Product Options: Where Specifications indicate that sizes, profiles and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
- 6. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one (1) of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions and other characteristics that are based on the product named. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product by the other named manufacturers.
- 7. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Owner's sample. Owner's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
- 8. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns and textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Owner will consider requests for substitutions if received within sixty (60) days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Owner.
- B. Conditions: Owner will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Owner will return requests without action, except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner and similar considerations.
 - 2. Requested substitution does not require extensive revisions to the Contract Documents.

- 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- 4. Substitution request is fully documented and properly submitted.
- 5. Requested substitution will not adversely affect Contractor's Final Project Schedule.
- 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
- 7. Requested substitution is compatible with other portions of the Work.
- 8. Requested substitution has been coordinated with other portions of the Work.
- 9. Requested substitution provides specified warranty.

PART 3 EXECUTION (Not Used)

SECTION 01 7300 EXECUTION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. General installation of products.
 - 3. Progress cleaning.
 - 4. Starting and adjusting.
 - 5. Protection of installed construction.
 - 6. Correction of the Work.
- B. See Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.3 SUBMITTALS

A. Not Applicable

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work. Notify Owner of any discrepancies between plans and actual conditions on site.
 - 1. Before construction, verify the location and points of connection of utility services.
- B. Acceptance of Conditions: Examine substrates, areas and conditions, with Installer or Applicator and Owner present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

- 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
- 3. Examine walls, floors and roofs for suitable conditions where products and systems are to be installed.
- 4. Proceed with installation only after unsatisfactory conditions have been corrected and approved by Owner. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Owner, per Section 01 3100.
 - 1. It is the Contractor's responsibility to coordinate between the various Contract Documents, including the Drawings and Specifications, with neither superseding the other. In the event of conflicts or discrepancies among the Contract Documents, it is the Contractor's responsibility to seek clarification.
 - 2. Where conflicts and/or omissions have not been brought to the attention of the Owner, it is understood that the Contractor has made provisions in the bid for the most costly material or methods.

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Owner promptly.
- B. General: Engage experienced layout engineers to lay out the Work using accepted surveying practices.
 - 1. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 2. Inform installers of lines and levels to which they must comply.
 - 3. Check the location, level and plumb, of every major element as the Work progresses.
 - 4. Notify Owner when deviations from required lines and levels exceed allowable tolerances.

3.4 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts and wiring in finished areas unless otherwise indicated.
 - 4. Install materials in lengths that produce the minimum amount of joints.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produces harmful noise and dust levels. Refer to Dust Control in the Scope of Work.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Attachments: Provide blocking and attachment plates, anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Owner.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, submit proposed joint layout, for Owner's approval. Fit exposed connections together to form hairline joints.
 - Use weather cuts, miters, back caulk as needed. Use lengths that minimize joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
 - 1. If required, Contractor must submit MSDS for all products to be used onsite to Owner for approval. Owner shall have seven (7) calendar days to review and approve/disapprove of the product.

2. If required, Contractor must submit a weekly schedule detailing when and where approved products will be used on an hour-by-hour basis. This schedule must be submitted by 9:00 AM on Wednesday of the week prior to the scheduled work week.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully in compliance with Section 01 7419 "Construction Waste Management and Disposal."
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than seven (7) calendar days during normal weather or three (3) calendar days if the temperature is expected to rise above 80 degrees F
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - 4. Do not use Owner receptacles.
 - 5. Recycle as outlined in Waste Management Plan in Section 01 7419.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units and re-test.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 01 04 00 Section "Quality Requirements."

3.8 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.9 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 73 29 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction as well as landscapes and hardscapes to their original condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched and broken glass or reflective surfaces.

SECTION 01 7329 CUTTING AND PATCHING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. See Divisions 02 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work. Not all Sections will be used.

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.

D. Visual Requirements:

- 1. Unless indicated otherwise, patching, extending or matching shall be performed as necessary to make the Work complete, with all components matching and consistent.
- 2. Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- 3. Patching materials shall meet the requirements of the jurisdictional code authorities.
- 4. All patching procedures shall be reviewed with the Owner prior to proceeding.

1.4 WARRANTY

A. Existing Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Cut, move or remove items as necessary for access to alterations and renovations work; replace and restore at completion.
- E. Contact the Owner when unsuitable materials not marked for removal such as rotted wood, rusted metals and deteriorated concrete and masonry are discovered.
- F. Remove debris and abandoned items from area and from concealed spaces.
- G. Prepare surfaces and remove surface finishes to provide for proper installation of new work and new finishes.

3.3 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. Provide appropriate dust control while cutting through surfaces. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Excavating and Backfilling: Comply with requirements in applicable Division 31 and 33 Sections (Sections may not be used) where required by cutting and patching operations.
 - 5. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - 4. Ceilings: Patch, repair or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Trim existing doors as necessary to clear new floor finishes; refinish trimmed areas.
- E. Where existing items are indicated as cut or reconfigured, cap and finish all exposed edges to match the existing construction to remain. Provide new or relocated supports spaced to be consistent with the installation.
- F. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty and similar materials.

SECTION 01 7419 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Salvaging of non-hazardous demolition and construction waste.
 - 2. Recycling of non-hazardous demolition and construction waste.
 - 3. Disposing of non-hazardous demolition and construction waste.

1.3 DEFINITIONS

- A. Construction Waste: All non-hazardous building and site materials or other non-hazardous solid waste resulting from construction, remodeling, renovation, repair or land-clearing operations. Construction waste includes packaging and material that is recycled, reused, salvaged or disposed as garbage.
- B. Demolition Waste: All non-hazardous building and site materials or other non-hazardous solid waste resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing for the purpose of using the material in the manufacture of a new product.
 - 1. Source-Separated Recycling: The process of separating recyclable materials in separate containers as they are generated on the job-site. The separated materials are hauled directly to a recycling facility or transfer station.
 - 2. Co-mingled Recycling: The process of collecting mixed recyclable materials in one container on-site. The container is taken to a material recovery facility where materials are separated for recycling.
- E. Re-Use: Making use of a material without altering its form. Materials can be reused onsite or reused on other project off-site. Examples include, but are not limited to the following:
 - 1. Grinding of concrete for use as sub-base material.
 - 2. Chipping of land-clearing debris for use as mulch.

- F. Salvage: Recovery of demolition or construction waste and subsequent sale or re-use in another facility.
- G. Salvage and Re-use: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE GOALS

- A. General: Material from demolition projects shall be recycled or reused whenever practicable (RCW 39.04.135). Contractor to develop a waste management plan that results in end-of-Project rates for salvage/recycling of fifty (50%) percent by weight of total waste generated by the Work by one or a combination of the following:
 - 1. Salvage.
 - 2. Reuse.
 - 3. Source-separated Recycling.
 - 4. Co-mingled Recycling.
- B. Salvage/Recycle Goals: Owner's goal is to salvage and recycle as much non-hazardous demolition and construction waste as possible including the following materials:
 - 1. Cardboard.
 - 2. Clean dimensional wood.
 - 3. Metals: Material banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - 4. Gypsum board.

1.5 SUBMITTALS

- A. Waste Management Plan: Submit three (3) copies of plan within seven (7) calendar days of date established for the Notice of Proceed.
- B. Waste Reduction Progress Reports: Electronically submit, concurrent with Final Application for Payment, the report to the Owner. Include separate reports for demolition and construction waste. Include the following information:
 - 1. Material category.
 - 2. Generation point of waste.
 - 3. Destination of waste.
 - 4. Total quantity of waste in tons.
 - 5. Quantity of waste salvaged, both estimated and actual in tons.
 - 6. Quantity of waste recycled, both estimated and actual in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 8. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Waste Reduction Calculations: Before request for Substantial Completion, electronically submit a copy of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work to the Owner.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices. If waste is taken to a facility that landfills and recycles, include facility record of recycling rate for the period of construction.
- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices.

1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Conduct construction waste management activities in accordance with State of Washington RCW 70.95.240, Seattle Municipal Code Chapter 21.36 and all other applicable laws and ordinances.
- B. Review of the following publications and programs (request copies by calling King County Solid Waste Division at 206-477-4466)
 - 1. Construction Recycling Directory for Seattle/ King County.
 - 2. Contractors Guide: Save money and resources through job-site recycling and waste prevention.
 - 3. King County Solid Waste Division Report of Co-mingled Recycling Facilities (available at www.metrokc.gov/dnrp/swd/construction-recycling/comingled.asp)

1.7 WASTE MANAGEMENT PLAN

- A. General: Develop a plan consisting of waste identification, waste reduction work plan and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery and handling and transportation procedures.
 - 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 - 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses and telephone numbers.
 - 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses and telephone numbers.

- 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses and telephone numbers
- 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address and telephone number of each landfill and incinerator facility.
- 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling and designated location on Project site where materials separation will be located.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
 - 1. Total quantity of waste.
 - 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
 - 3. Total cost of disposal (with no waste management).
 - 4. Savings in hauling and tipping fees that are avoided.
 - 5. Handling and transportation costs. Include cost of collection containers for each type of waste.
 - 6. Net additional cost or net savings from waste management plan.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement waste management plan as approved by Owner. Provide handling, containers, storage, signage, transportation and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Waste Management Coordinator: Contractor shall be responsible for implementing, monitoring, and reporting status of waste management work plan.
- C. Training: Train workers, subcontractors and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1. Distribute waste management plan to everyone concerned within one (1) day of submittal return. A hard copy should remain on site. Send the plan electronically to the Owner.
 - 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling and disposal.
 - 3. The General Contractor will ensure that the waste plan is communicated to the crews and subcontractors on site. They will be informed of:
 - a. How materials should be separated, and why.
 - b. Where materials should go.
 - c. How often the materials will be collected and delivered to the appropriate facilities.
 - d. The importance of recycling, and KCHA's recycling goals for the project.

- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated and sold.
 - 2. Comply with Division 01 50 00 Section "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection and noise control.
 - 3. Clearly label the recycling bins and waste containers on site.
 - 4. Post lists of recyclable and non-recyclable materials in many locations, in different languages.
 - 5. The General Contractor will provide feedback to the crew and subcontractors on the results of their efforts
 - E. To the greatest extent possible, include in material purchasing agreements a waste reduction provision requesting that materials and equipment be delivered in packaging made of recyclable material, that they reduce the amount of packaging, that packaging be taken back for reuse or recycling, and to take back all unused product. Ensure that subcontractors require the same provisions in their purchase agreements.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until installation.
 - 4. Protect items from damage during transport and storage.
 - 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports and miscellaneous materials necessary to make items functional for use indicated.
- B. Salvaged Items for Sale and Donation: Not permitted on Project site.
- C. Salvaged Items for Owner's Use:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's designated off-site storage area.
 - 5. Protect items from damage during transport and storage.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Receivers and Processors: The list below is provided for information only; available recycling receivers and processors include, but are not limited to, the following:
 - 1. Washington State Department of Ecology, Recycling, Northwest Region 425-649-7000.
 - 2. Industrial Materials Exchange (IMEX), Hazardous Waste Management Program, King County, Washington.

- 3. The "Recycling Plus Program Manual" published by the Washington State Clean Washington Center can be used to develop a job site reduction program. The manual includes a job-site recycling worksheet and form, tips on waste reduction, and other technical assistance. The manual also includes sample language for waste reduction requirements for subcontractors' agreements, as well as sample provision for a full-service recycling agreement.
- 4. LEED Reference Guide, Construction Waste Management section.
- 5. Recovery 1 is a resource recovery, recycling and research facility dedicated to developing sustainable waste management systems. www.recovery1.com or by phone at 800-949-5852.
- 6. Total Reclaim offers a wide variety of innovative environmental services for management of electronics and other hard to handle materials, including fluorescent lamps, refrigerant gases and appliances. www.totalreclaim.com or by phone 206-343-7443.
- 7. "Contractors' Guide for Preventing Waste and Recycling"

 https://kingcounty.gov/~/media/depts/dnrp/solid-waste/construction-recycling/documents/ConGuide.ashx?la=en
- 8. "Seattle/King County Construction Recycling Directory."

 https://kingcounty.gov/depts/dnrp/solid-waste/programs/green-building/county-green-building.aspx
- C. Recycling Incentives: Revenues, savings, rebates, tax credits and other incentives received for recycling waste materials shall accrue to Owner.
- D. Procedures: Separate recyclable waste from other waste materials, trash and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

- A. Wood Materials: Sort and stack members according to size, type and length. Separate lumber, engineered wood products, panel products and treated wood materials.
- B. Metals: Separate metals by type.
 - 1. Structural Steel: Stack members according to size, type of member and length.
 - 2. Remove and dispose of bolts, nuts, washers and other rough hardware.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.

- D. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- E. Plumbing Fixtures: Separate by type and size.
- F. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers and other components by type and size.
- G. Lighting Fixtures: Separate lamps by type and protect from breakage.
- H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers and other devices by type.
- I. Conduit: Reduce conduit to straight lengths and store by type and size.

3.5 RECYCLING CONSTRUCTION WASTE

A. Packaging:

- 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
- 2. Polystyrene Packaging: Separate and bag materials.
- 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

B. Wood Materials:

- 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
- 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
 - 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off Owner's property and legally dispose of them.



Waste Disposal and Recycling Data Form

The resource conservation program at KCHA tracks the disposal and recycling data for all KCHA activities. These includes all of the waste and recycling generated by residents, food composting, yard waste composting, unit-improvement waste, illegal dumping waste, and all waste created during the construction and demolition process.

Our goals for all of these areas are:

- 1. Track the diversion of our waste and improve when possible
- 2. Meet KCHA recycling goals.

Please provide estimates, to the best of your ability, about the projected waste being generated on this project as well as how much of that waste is being recycled vs disposed. If estimates aren't possible, then we will need this information at project close-out.

Project Name: EASTRIDGE HOUSE ELEVATOR MODERNIZATION

Project Address: 120 W. SUNSET WAY, ISSAQUAH, WA 98027

Work Order No.: 1304

Job No.: 451.6

DESCRIPTION	WEIGHT	QUANTITY (Circle One)				
Total Waste Generated**		Lbs.	CY	Tons		
Waste Disposed		Lbs.	CY	Tons		
Waste Recycled		Lbs.	CY	Tons		
**Waste Disposed plus Waste Recycled should equal Total Waste Generated						
What % of the total waste do you estimate you will recycle?						

The following tables identify materials expected on this project, the quantities generated, whether they will be disposed or recycled, and what facility they will be disposed or recycled at.

DEMOLITION PHASE				
MATERIAL	QUANTITY Lbs./CY/Tons	DISPOSAL / RECYCLE? (CIRCLE ONE)		DISPOSAL OR RECYCLING FACILITY
		Disposal	Recycle	

Example: Roofing, 3 tons, Recycle, DTG Recycle

CONSTRUCTION PHASE				
MATERIAL	QUANTITY Lbs./CY/Tons	DISPOSAL / RECYCLE? (CIRCLE ONE)		DISPOSAL OR RECYCLING FACILITY
		Disposal	Recycle	

Example: Misc. Con. Mat., 30 cy, Recycle, Waste Management

SECTION 01 7700 CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.
- B. See the Owner-Contractor Contract for requirements for Applications for Payment for Substantial and Final Completion.
- C. See Division 01 7839 Section "Project Record Documents" for submitting Record Drawings, Record Specifications and Record Product Data.
- D. See Division 01 7823 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- E. See Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections. Not all Sections will be used.

1.3 SUBSTANTIAL COMPLETION (Refer to Article 9.8 AIA A201-2017)

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications and similar documents (to be included in O&M Manuals)
 - 4. Obtain and submit to Owner, the releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys and similar final record information to the Owner.
 - 6. Deliver tools, spare parts, extra materials and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.

- 8. Complete startup testing of systems.
- 9. Submit test/adjust/balance records to the Owner.
- 10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools and similar elements.
- 11. Advise Owner of changeover in heat and other utilities.
- 12. Submit changeover information related to Owner's occupancy, use, operation and maintenance.
- 13. Complete final cleaning requirements, including touchup painting.
- 14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- 15. Provide training on all newly installed systems by qualified personnel. Training will be presented to those that use the equipment, i.e. tenants site staff, facility users.
- B. Inspection: Submit a written request for inspection for Substantial Completion to the Owner. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Owner, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 CONTRACT COMPLETION (Refer to Article 9.10 in AIA A201-2017)

- A. Preliminary Procedures: Before requesting final inspection for determining date of Contract Completion, complete the following:
 - 1. Submit a final Application for Payment according to the Owner-Contractor Contract provisions to the Owner.
 - 2. Submit to the Owner, a certified copy of Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Owner. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements to the Owner.
 - 4. Instruct Owner's personnel in operation, adjustment and maintenance of products, equipment and systems.
- B. Inspection: Submit a written request for final inspection for acceptance to the Owner. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: After Contractor has performed own Quality Control of the Work, Contractor will notify and schedule punch list inspection with Owner and other team

members. Owner will document items needing correction on Owner provided form listing area inspected and deficient item needing correction. Owner will provide Contractor with copy of punch list after inspection is completed. Owner has right to stop inspection due to quantity of repetitious items identified by Owner, or if Contractor has not performed own Quality Control of the Work

- 1. Organize list of spaces in sequential order.
- 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment and building systems.

1.6 WARRANTIES (Refer to Article 3.5 in AIA A201-2017)

- A. Submittal Time: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

- 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains and other foreign deposits.
 - c. Remove tools, construction equipment, machinery and surplus material from Project site.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Sweep concrete floors broom clean in unoccupied spaces.
 - f. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - g. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - j. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings and other foreign substances.
 - k. Replace parts subject to unusual operating conditions.
 - 1. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers and grills.
 - n. Clean light fixtures, lamps, globes and reflectors to function with full efficiency. Replace burned-out bulbs and those noticeably dimmed by hours of use, and defective or noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - o. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

SECTION 01 7823 OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation manuals for systems, subsystems, and equipment Maintenance manuals for the care and maintenance of products, materials, finishes, systems, and equipment.
- B. See Divisions 02 through 33 Sections for specific operation and maintenance manual requirements for the Work in those Sections. Every Division may not be used.

1.3 SUBMITTALS

- A. Manual: Submit one (1) electronic copy of each manual in final form at least fifteen (15) calendar days before final inspection. Owner will return copy with comments within fifteen (15) calendar days after final inspection.
 - 1. Correct or modify each manual to comply with Owner's comments. Submit two (2) hard copies and one (1) electronic copy on Compact Disk of each corrected manual within fifteen (15) calendar days of receipt of Owner's comments.

PART 2 - PRODUCTS

2.1 MANUALS- GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents and manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.

- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem and equipment. If possible, assemble instructions for subsystems, equipment and components of one (1) system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
 - 4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents and drawing locations.

2.2 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.
- B. Descriptions: Include the following:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include start-up, break-in and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal and weekend operating instructions; and required sequences for electric or electronic systems.

- D. Systems and Equipment Controls: Describe the sequence of operation and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.3 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual; identify by product name and arrange to match manual's table of contents. For each product, list name, address and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern and texture.
 - 4. Material and chemical composition.
 - 5. Re-ordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and inspection procedures, types of cleaning agents, methods of cleaning, schedule for cleaning and maintenance, and repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

2.4 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual; identify by product name and arrange to match manual's table of contents. For each product, list name, address and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including maintenance instructions, drawings and diagrams for maintenance, nomenclature of parts and components, and recommended spare parts for each component part or piece of equipment.

- D. Maintenance Procedures: Include test and inspection instructions, troubleshooting guide, disassembly instructions, and adjusting instructions that detail essential maintenance procedures.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 EXECUTION

3.1 MANUAL PREPARATION

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material and finish incorporated into the Work.
- B. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem and piece of equipment not part of a system.
- C. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data includes more than one (1) item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
- D. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
- E. Comply with Division 01 7700 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

SECTION 01 7839 PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. See Division 01 7823 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- C. See Divisions 02 through 33 Sections for specific requirements for Project Record Documents of the Work in those Sections. Every Division may not be used.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Submit to Owner PDF **and CAD** files of scanned record prints and three (3) sets of prints.
- B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications to the Owner.
- C. Record Product Data: Submit to the Owner, annotated PDF electronic files and directories of each submittal.
 - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities.
- E. Submit annotated PDF electronic files and directories of each submittal.

PART 2 PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one (1) set of black-line white prints of the Contract Drawings and Shop Drawings.

- 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
- 2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
- 3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
- 4. Note Field Authorization numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 - 2. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer and other information necessary to provide a record of selections made.
 - 4. Note related Change Orders, Record Product Data and Record Drawings where applicable.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.

3. Note related Change Orders, Record Specifications and Record Drawings where applicable.

2.4 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one (1) copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Owner's reference during normal working hours.

G703 - Continuation Sheet

SITE NAME - PROJECT NAME; Contract No. CCxxxxx65

 APPLICATION NO:
 06 FINAL

 APPLICATION DATE:
 04.19.21

 PERIOD FROM:
 04.01.21

PERIOD TO: 04.19.21 C G Α В D Ε F Η WORK COMPLETED **MATERIALS** TOTAL BALANCE TO RETAINAGE % PRESENTLY ITEM **SCHEDULED** FROM PREVIOUS COMPLETED & DESCRIPTION OF WORK **FINISH** (AGGREGATE **STORED** STORED TO DATE NO. VALUE APPLICATION(S) THIS PERIOD $(G \div C)$ TO DATE) (C - G) (D + E + F)(NOT IN D OR E) (G) Allowance & Contingencies 29,000.00 18,851.74 10,148.26 0.00 29,000.00 100.00% 0.00 1,450.00 Close out 13,523.33 6,761.00 6,762.33 0.00 13,523.33 100.00% 0.00 676.17 Bond & Insurance 24,050.00 24,050.00 0.00 0.00 24,050.00 100.00% 0.00 1,202.50 Mobilization 17,500.00 17,500.00 0.00 0.00 17,500.00 100.00% 0.00 875.00 Demo Siding and Windows 30,000.00 30,000.00 0.00 0.00 30,000.00 100.00% 0.00 1,500.00 Frame & GWB F/P, Door, Storage 19.000.00 19.000.00 0.00 0.00 19.000.00 100.00% 0.00 950.00 Deck Coatings 15.500.00 15.500.00 0.00 0.00 15.500.00 100.00% 0.00 775.00 Deck Railings 23,500.00 21,150.00 0.00 23,500.00 100.00% 0.00 1,175.00 2,350.00 Roofing incl Ladders and Hatches 57,300.00 28,650.00 28,650.00 0.00 57,300.00 100.00% 0.00 2,865.00 Roof Framing/Backing/Blocking 11.600.00 10.600.00 1.000.00 0.00 11.600.00 100.00% 0.00 580.00 Siding and Flashing Materials 43,000.00 43,000.00 0.00 0.00 43,000.00 100.00% 0.00 2,150.00 Siding Labor 47,000.00 45,000.00 2,000.00 0.00 47,000.00 100.00% 0.00 2,350.00 Window Materials 0.00 100.00% 800.00 16.000.00 16.000.00 0.00 16.000.00 0.00 15,000.00 15,000.00 0.00 0.00 15,000.00 100.00% 0.00 750.00 Window Labor Patio Door Materials 9,600.00 9,600.00 0.00 0.00 9,600.00 100.00% 0.00 480.00 0.00 490.00 Patio Door Labor 9.800.00 9,800.00 0.00 9.800.00 100.00% 0.00 Exterior Doors & Hardware Materials 13,500.00 13,500.00 0.00 0.00 13,500.00 100.00% 0.00 675.00 Exterior Door Labor 10,625.00 10,625.00 0.00 0.00 10,625.00 100.00% 0.00 531.25 **Door Hardware Materials** 2,200.00 2,200.00 0.00 0.00 2,200.00 100.00% 0.00 110.00 Gutters 4.200.00 0.00 4.200.00 0.00 4.200.00 100.00% 0.00 210.00 Flameblock Labor 15,000.00 15,000.00 0.00 0.00 15,000.00 100.00% 0.00 750.00 14,000.00 Flameblock Materials 14,000.00 0.00 0.00 14.000.00 100.00% 0.00 700.00 Blinds 8.500.00 8.500.00 0.00 0.00 8.500.00 100.00% 0.00 425.00 **Electrical & Lighting Fixtures** 12,800.00 0.00 12,800.00 12,800.00 0.00 100.00% 0.00 640.00 900.00 **Exterior Painting** 18,000.00 17,000.00 1,000.00 0.00 18,000.00 100.00% 0.00 Indirect Costs/Overhead/Profit 103.569.63 90.210.00 13,359.63 0.00 103.569.63 100.00% 0.00 5,178.48 CO 1 - Contingency (8.218.97) (8,218.97)0.00 (8,218.97)100.00% (410.95)0.00 0.00 TOTALS 575,548.99 514,297.74 61,251.25 0.00 575,548.99 100.00% 0.00 28,777.45 5% RETAINAGE 28.777.45 25,714.89 3,062.56 0.00 28.777.45 **TOTALS LESS RETAINAGE** 546,771.54 488,582.85 58,188.69 0.00 546,771.54 0.00 28,777.45 TOTAL BALANCE TO FINISH (H+I) 28,777.45 1

NET CHANGE ORDERS THIS PERIOD:(8,218.97)CHANGE ORDERS APPROVED THIS PERIOD (LIST C/O #s)NET C/O ADDITIONS (THIS PERIOD):0.00NET C/O DEDUCTIONS (THIS PERIOD):(8,218.97)TOTAL CHANGE ORDERS TO DATE:(8,218.97)

Form G702

Application and Certificate for Payment

TO OWNER:	King County Housing Authorit	-	SITE NAME		APPLICATION NO:	06 FINAL	Distribution to:
	Attn: Capital Construction Dept. 700 Andover Park W. Suite C	NAME / SCOPE	DD.C	NECT NAME	PERIOD TO:	04.19.21 CCxxxxx65	OWNER: X ARCHITECT:
	Tukwila, WA 98188	OF WORK:	PRC	DJECT NAME	CONTRACT NO: CONTRACT DATE:	11/16/2020	CONTRACTOR:
FROM CONTRACTOR NAME VIA			ARC		NTP DATE:	11/16/2020	FIELD:
CONTRACTOR:	CONTRACTOR ADDRESS	ARCHITECT:	119 S. MAIN ST	SUITE 200	PROJECT NO:	215.1B	1 1225.
CONTINUE TON.	CITY, STATE, ZIP	AROTHIEGT	SEATTLE, WA		WORK ORDER NO:	1243	
CONTRACTO	R'S APPLICATION FOR PA	AYMENT		The undersigned Contractor			
Application is made	for payment, as shown below, in conne	ation with the Contr	aat	belief the Work covered by Contract Documents, that al			
	Form G703, is attached.	ction with the Colli	act.	Certificates for Payment we			
	ACT SUM		\$583,767.96	shown herein is now due.	re issued and payments	received from the 5 when,	, and that carrent payment
	CHANGE ORDERS		(\$8,218.97)	CONTRACTOR:			
	TO DATE (Line 1 +/- 2)		\$575,548.99	By:		Date:	
	ED & STORED TO DATE (Column G on G		\$575,548.99				
5. RETAINAGE:			,	State of:			
a. 5 % of	Completed Work			County of:			
(Column D + I	E on G703: \$575,548.99)=	\$28,777.45		Subscribed and sworn to bef	fore		
	Stored Material		_	me this	day of		
(Column F on	/		_	Notary Public:			
Total Retainage (Lin	nes 5a + 5b or Total in Column I of G70	3)	\$28,777.45	My Commission expires:			
6. TOTAL EARNED L	ESS RETAINAGE		\$546,771.54	OWNER'S REPRES	SENTATIVE CER	RTIFICATE FOR P	AYMENT
(Line 4 Less L	ine 5 Total)			In accordance with the Cor	ntract Documents, base	d on on-site observations	and the data comprising
7. LESS PREVIOUS (CERTIFICATES FOR PAYMENT		\$488,582.85	this application, the Own			
`	prior Certificate)			Representative's knowledge			
	NT DUE		\$58,188.69	of the Work is in accordance the AMOUNT CERTIFIED.		cuments, and the Contrac	t is entitled to payment of
	ISH, INCLUDING RETAINAGE						
(Line 3 Less L	ine 6)	\$28,777.45	_	AMOUNT CERTIFIED			\$58,188.69
				(Attach explanation if amoral Application and on the Cont	0 00 0	* *	2 0
CHANGE ORDER S	UMMARY	ADDITIONS	DEDUCTIONS	OWNER'S REPRESENTATIVE	<u>:</u>		
Total changes appro	ved in previous months by Owner	\$0.00	\$0.00	By:		Date:	
Total approved this r	month. (CO numbers listed below)	\$0.00	(\$8,218.97)	This Certificate is not negoti	ighle. The AMOUNT C	EDTIFIED is noveble and	y to the Contractor named
#s:	1 TOTALS	\$0.00	(\$8,218.97)				
NET CHANGES by (Change Order	(\$8,218.97)	herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.				

GEN	IERAL CONTRAC	TOR CERTIFICATION UP	ON APPLICATION FO	RPAYIVIE	NI
OWN	IER:	King County Housing Author	ity PAY REQUEST NU	MBER:	06
GENE	RAL CONTRACTOR:	CONTRACTOR NAME	DATE: PERIOD F		04.01.21
PROJ	ECT NAME:	SITE NAME	THROUGH	1:	04.19.21
SCOP	PE OF WORK:	PROJECT NAME	CONTRACT NUME	BER:	CCxxxxx65
1.	ORIGINAL CONTR	ACT AMOUNT:		\$	583,767.96
2.	APPROVED CHAN			\$	(8,218.97)
3.	CURRENT CONTR	• •		\$	575,548.99
4.	AMOUNT OF PRE	VIOUS CERTIFICATES FOR PAYN	ΛΕΝΤ:	\$	488,582.85
5.	AMOUNT OF CUF	RENT CERTIFICATE FOR PAYN	FICATE FOR PAYMENT REQUEST:		58,188.69
By su		panying Application for Payme	ent, the Contractor certifie	s, agrees ar	d warrants to the Owner as
			-1		af
1.		as made full payment to all I ere included in any prior App	·		
	•	natters set forth below or on a	• •	ect offig to	a) retainage at the contract
_					
2.		nows of no one making a clain	• •		· ·
		will be paid when the curren	t Application for Payment	is paid by O	vner, except as noted below
or on an attachment hereto.In consideration of payments made by Owner, the Contractor hereby waives and relea					
3.			•		•
		Owner and the Project for all	•	•	
	•	ect only to (a) receipt of paym	• •	tion, (b) app	licable retainage, and (c) the
	matters set forth	below or on an attachment he	reto.		
	EXCEPTION(S) - DESCRII	PTION:			AMOUNT:
	.,				
GENE	RAL CONTRACTOR NA	ME:	CONTRACTO	OR NAME	
DV AL	ITHODIZED CICALED.	DDINT NA		TITLE	
BY AU	JTHORIZED SIGNER:	PRINT NA	AIVIE	TITLE	DATE
	of Washington				
	ty of King				
		satisfactory evidence that ged that sinstr	umant and acknowledged it:		son who appeared before me,
	and purposes mention	, , , ,	ument and acknowledged it	o be (ms/ner	Thee and voluntary act for the
					CEAL
Signe	a before me on this _	Day of			SEAL
	Notary Public in an	d for the State of Washington		-	
	Residing at:	_			
	My Commission Exp			-	
	ATT COMMISSION EX			- 1	

Supporting Data Attached:

Drawings

SUBSTITUTION REQUEST Project: Sub. Request #: From: To: Date: A/E Project #: Re: Contract For: Specification Title: Description: Page: Article / Paragraph: Proposed Substitution: Manufacturer: Address: Phone: Trade Name: Model No .: Installer: Address: Phone: 2 - 5 years old 5 - 10 years old More than 10 years old History: ☐ New Product Differences between proposed substitution and specified product: Point-by-point comparative data attached - REQUIRED BY A/E Reason for not providing specified item: Similar Installation: Project: Architect: Address: Owner: Date Installed: Proposed substitution affects other parts of Work: ☐ No Yes; explain: Savings to Owner for accepting substitution: (\$ Proposed substitution changes Contract Time: □ No ☐ Yes (If Yes): Add Deduct days. * If Contract time is to be extended, a Change Order must be prepared.

Samples

Tests

Reports

Product Data

SUBSTITUTION REQUEST

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent
 are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, included A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

	ed as noted - Make	als in accordance with submittals in accordanterials.			00.	
☐ Substitution Reques	st received too late	- Use specified mater			Date	
Signed by:					Date:	
Additional Comments:	Contractor	Subcontractor	Supplier	Manufacturer	A/E	

1.1 SUMMARY

- A. Section includes selective demolition and removal of elements as indicated on drawings including but not limited to:
 - 1. Existing elevator jack, hydraulic power unit, controller, and hall fixtures,
 - 2. Existing pit ladder,
 - 3. Existing hoistway vent,
 - 4. Existing machine room door,
 - 5. Existing machine room and elevator pit light fixtures,
 - 6. Miscellaneous demolition incidental to the work of this contract,
 - 7. Protect existing building and site elements scheduled to remain during demolition activities and while new work is being installed.

1.2 REFERENCES

- A. 29 CFR 1926- U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241- Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2009.

1.3 SUBMITTALS

- A. Schedule: Submit for approval selective demolition schedule, including schedule for any interruption of utility service to affected units.
- B. Site Plan: Showing:
 - 1. Vegetation to be protected.
 - 2. Areas for temporary construction and field offices.
 - 3. Areas for temporary and permanent placement of removed materials.
- C. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.
 - 4. Indicate protection and separation of occupied premises.
 - 5. Continuity of site utilities: Underground utilities, including water, telephone, data, cable television, gas must remain in full operation during the work.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.
- E. Schedule of demolition activities to be updated at each scheduled construction meeting.
 - Indicate detailed sequence of demolition and removal work with starting and ending dates for each activity.
 - 2. Indicate any interruption of services.
 - 3. Indicate locations of temporary protection from the work and means of egress from the building.

1.4 QUALITY ASSURANCE

A. Codes and Regulations: Comply with governing codes and regulations. Use experienced workers. Maintain watertight integrity as needed to protect construction to remain from structural and environmental damage.

1.5 PROJECT CONDITIONS

- A. Building will remain fully occupied during work of this project. Isolate work areas to limit dust, dirt, noise and debris from impacting occupied space. Contractor is responsible for site control and dust control in accordance with Section 01 50 00 Temporary Facilities and Controls.
- B. Protection of Existing Improvements: Provide, erect and maintain barricades, coverings, or other types of protection necessary to prevent damage to existing improvements. Restore any site improvements, including but not limited to landscaping, pavement, walks, structures, fences and planters, damaged by this work to their original condition, as acceptable to Owner and in accordance with Section 01 50 00 Temporary Facilities and Controls.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.1 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
- B. Refer to Section 01 74 19 Construction Waste Management and Disposal for additional requirements.
- C. Obtain required permits.
- D. Comply with applicable requirements of NFPA 241.
- E. Protect existing structures and other elements that are not to be removed.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Stop work immediately if adjacent structures appear to be in danger.
 - 3. Perform cutting to accomplish removals as specified in Section 01 73 29 Cutting and Patching.
 - 4. Do not damage building elements and improvements indicated to remain.
 - 5. Repair adjacent construction and finishes damaged during removal work to like new condition as specified in Section 01 73 29 Cutting and Patching.
- F. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
- G. Occupied Spaces: The site and buildings will remain occupied during the work of this project. Do not close or obstruct streets, walks, drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner; Owner requires minimum seven (7) days' notice. Email notice to Owner's Project Manager is acceptable as official "written notice".
- H. Provide, erect and maintain temporary barriers and security devices. Provide adequate protection against accidental trespassing. Secure project after work hours.
- I. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
- J. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
- K. Do not close or obstruct roadways or sidewalks without permit.
- L. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
- M. Do not begin removal until receipt of notification to proceed from Owner.
- N. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION ISSAQUAH, WASHINGTON

SECTION 024100 SELECTIVE DEMOLITION

- O. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- P. If hazardous materials are discovered during removal operations, stop work and notify the Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
- Q. Perform demolition in a manner that maximizes salvage and recycling of materials.

3.2 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least seven (7) days' prior written notification to Owner.
- E. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- F. Remove exposed piping, valves, meters, equipment, supports and foundations of disconnected and abandoned utilities.

3.3 SELECTIVE DEMOLITION

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Owner before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions.
- B. Isolate areas in which demolition is being conducted from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions in locations of work.
- C. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
- D. Salvage items indicated for salvage, relocation or recycling.
- E. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- F. Services (including but not limited to HVAC, Fire Suppression, and Electrical): Remove existing systems and equipment as indicated.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
 - 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - 3. Verify that abandoned services serve only abandoned facilities before removal.
 - 4. Remove abandoned pipe and conduits back to source of supply where possible, otherwise cap stub and tag with identification.
- G. Restore landscaping to 'like-new' condition at areas disturbed by construction.

3.4 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site. Do not allow demolished materials to accumulate on site. See Division 01 Project Administration for compliance with Waste Management requirements and procedures. Refer to BID PACKAGE for these GENERAL REQUIREMENTS.
- B. Remove from site all materials not to be reused on site.
- C. Leave site in clean condition, ready for subsequent work.
- D. Clean up spillage and wind-blown debris from public and private lands.

3.5 Schedule

- A. Items for Protection during Demolition and Construction:
 - 1. Common spaces and exterior walkways, including entryways.
 - 2. Adjacent construction.

1.1 SUMMARY

A. Section includes grout infill at existing slab following elevator jack installation.

1.2 REFERENCES

A. ASTM International (ASTM):

- 1. ASTM C31 Practice for Making and Curing Concrete Test Specimens in the Field.
- 2. ASTM C33 Specification for Concrete Aggregates.
- 3. ASTM C39 Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- 4. ASTM C94 Specification for Ready-Mixed Concrete.
- 5. ASTM C143 Test Method for Slump of Portland Cement Concrete.
- 6. ASTM C150 Specification for Portland Cement.
- 7. ASTM C171 Standard Specifications for Sheet Materials for Curing Concrete.
- 8. ASTM C172 Standard Practice for Sampling Fresh Concrete.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Mix Design: Submit for approval mix design proposed for use.

1.4 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

B. Standards:

- 1. ACI 301, Specifications for structural Concrete for Buildings.
- ACI 318, Building Code Requirements for Reinforced Concrete, and CRSI Manual of Standard Practice.
- C. Floor Flatness and Levelness Tolerances:
 - 1. ACI 302.1R and ASTM E 1155, floor flatness (Ff) of 20, floor levelness (Fl) of 17.

PART 2 PRODUCTS

2.1 MATERIALS:

- A. Non-Shrink Grout for General Use: Specified for type and quality:
 - 1. Sika Corp., SikaGrout 328, or approved equal

B. Accessories

- 1. Concrete Design Mixes: ASTM C 94, 28-day compressive strength suitable for project requirements and site conditions.
- 2. Reinforcing Bars: ASTM A 767, Class II, galvanized.
- 3. Waterstops: Rubber, PVC or self-expanding butyl/bentonite waterstops.
- 4. Vapor Retarder: Refer to Section 072616.
- 5. Bonding Compound: Polyvinyl acetate or acrylic base.
- 6. Epoxy Adhesive: ASTM C 881, two-component material.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Comply with ASTM C 94. Do not change mix design without approval. Calcium chloride admixtures are not permitted.
- B. Chamfer exposed edges/corners to provide straight lines.
- C. Tolerance: Plus 1/8 inch in 10 inches for grade, alignment, and straightness.
- D. Construction Joints: Use keyways, continue reinforcement through joint.
- E. Isolation Joints: Provide between slabs and vertical elements such as columns and structural walls.
- F. Trowel Finish: Hard, smooth, uniform surface for areas to receive resilient flooring, carpet, or other thin finish material.
- G. Cure and protect work. Report defective work in writing.

1.1 SUMMARY

A. Section includes metal ladder at elevator pit.

1.2 REFERENCES

A. ASTM International:

1.	ASTM A36	Standard Specification for Carbon Structural Steel
2.	ASTM A53	Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated
		Welded and Seamless
3.	ASTM A123	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and
		Steel Products
4.	ASTM A153	Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
5.	ASTM A500	Standard Specifications for Cold-Formed Welded and Seamless Carbon Steel
		Structural Tubing in Rounds and Shapes
6.	ASTM D6386	Standard Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and
		Steel Product and Hardware Surfaces for Painting

1.3 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.

1.4 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for (3) three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.1 REGULATORY REQUIREMENTS

A. Shop Applied Coatings: Conform to State of Washington and US Environmental Protection Agency for maximum volatile organic compound (VOC) emissions.

2.2 MATERIALS

- A. Miscellaneous Metal: Provide rolled shapes, bars, sheets, strips, accessories, and as detailed or required for complete installations.
- B. Non-Shrink Grout: As specified Section 033000.

2.3 METAL PIT LADDER

- A. Design and certify to meet WISHA and OSHA/ANSI A14.3 Standards.
- B. Ladder shall extend 48" above the sill, be 16" wide, have ladder rungs from top to bottom of ladder with uniform 12" space, and have a clear distance of not less than 4½" from their center line to the nearest obstruction behind it. Coordinate with elevator contractor.
- C. Length: Extend to fullest possible height under hatches and floor doors, not less than required to meet WISHA and OSHA Standards.
- D. Wall Brackets and floor brackets: Locate as instructed by manufacturer.
- E. Fasteners: Stainless steel, screws, bolts and anchors as suitable for installation and as instructed by manufacturer.
- F. Shop Finish: Manufacturer's standard shop applied coating. Color: Black.

2.4 MISCELLANEOUS FABRICATIONS

- A. Form steel to accurate sizes and shapes, with clean lines and angles.
- B. Bolt, drill, tap, punch, and shear to leave clean surfaces.
- C. Joints and Fastenings: Detail for ample strength and stiffness. Where exposed to weather, form to exclude water.
- D. Drill, tap, punch, and shear to leave clean surfaces.
- E. Do not use screws or bolts, where avoidable. When used, countersink heads and draw up tight; nick threads to prevent loosening.
- F. Provide holes and connections for work of other trades.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Take field measurements prior to preparation of fabrication. Do not delay job; allow for cutting and fitting if field measurement not practical.
- B. Form work true to line with sharp angles and edges.
- C. Install work plumb and level with hairline joints and ground flush welds.
- D. Touch up damaged coatings to match shop finish.

3.2 TOUCH-UP AFTER INSTALLATION

A. After installation, clean steel of oil and grease in accordance with SSPC-SP-1. Clean abraded, bolted, and welded areas.

1.1 SUMMARY

- A. Section includes miscellaneous rough carpentry including but not limited to:
 - 1. Infill at existing hoistway vent,
 - 2. Blocking and backing,
 - 3. Hardware, fasteners and other accessories,
 - 4. Miscellaneous rough carpentry incidental to the work of this contract.

1.2 REFERENCES

- A. Western Wood Product Association (WWPA): Western Lumber Product Use Manual Standard Grading Rules for Western Lumber.
- B. West Coast Lumber Inspection Bureau (WCLIB): No. 16 Standard Grading and Dressing Rules for West Coast Lumber.
- C. APA The Engineered Wood Products Association (APA and APA EWS).
- D. APA Product Guide Grades and Specifications.
- E. APA Product Guide Performance Rated Panels.
- F. APA PS 1 Construction and Industrial Plywood (With Typical APA Trademarks).
- G. ASTM A123 Specifications for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- H. ASTM A153 Specifications for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- I. ASTM D1761 Standard Test Methods for Mechanical Fasteners in Wood.
- J. ASTM F1667 Specifications for Driven Fasteners: Nails, Spikes, and Staples.

1.3 COORDINATION

- A. Coordinate rough carpentry with other Sections to make Work fit together.
- B. Coordinate with other Sections for backing support of wall-supported items at stud-framed walls.

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used including fasteners and accessories.

1.5 QUALITY ASSURANCE

- A. Evidence of Grade: Conform to IBC 2303 and DOC PS 20.
 - 1. Rough Lumber: Stamp each piece of lumber and plywood with grademark and trademark of Association having jurisdiction.
 - 2. In Lieu of Grade Stamping Exposed to View Lumber: Certify by manufacturer that products meet or exceed specified requirements.
- B. Preservative Treatment: AWPA C2 for lumber and AWPA C9 for plywood; waterborne pressure treatment. Provide for wood in contact with soil, concrete, roofing, flashing, dampproofing and waterproofing.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store wood materials minimum six (6") inches above ground on framework or blocking away from dirt and moisture, well ventilated and covered with waterproof covering.

PART 2 PRODUCTS

2.1 LUMBER MATERIALS

A. Framing Lumber:

- 1. Species: Douglas Fir-Larch, or Hem-Fir.
- 2. Grade: WWPA No.1 and better.
- 3. Moisture Content: S-DRY, 15 percent maximum moisture content.

2.2 WOOD PANEL PRODUCTS

A. Hoistway Vent Infill Panel: Pressure treated T1-11, match existing thickness.

2.3 FASTENERS

- A. Fastener Types, Sizes, Spacing, and Quantities: Provide fasteners and connectors including nails, spikes, screws, clips, bolts and anchors required for installation of carpentry and millwork, conforming to IBC Table 2304.9.1, and APA recommendations
- B. Nails, Spikes, Staples and Other Driven Fasteners: Conform to ASTM F1667 and IBC Section 2303.6.
- C. Bolts and Lag Bolts: Provide steel plate washers.

2.4 ACCESSORIES

- A. Construction Adhesives: Solvent based, conforming to APA Specification AFG-01.
- B. Pressure Treated Items: Preservative pressure treat wood members contacting concrete, masonry and at exterior conditions. Treat cut ends per manufacturer's recommendations.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Field coordinate and layout work prior to beginning installation. Cut, fit, and install rough carpentry construction at locations indicated in drawings and as required to complete work of contract. Set materials level, plumb, aligned and in correct position in accordance with best practices of trade.
- B. Temporary Bracing: Make provisions for erection loads, sufficient to maintain structure safe, plumb and in true alignment until completion of erection and installation of permanent bracing and framing.
- C. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated.
- D. Provide nailers, blocking, and grounds where required. Set work plumb, level, and accurately cut.
- E. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with other work.
- F. Comply with manufacturer's requirements for cutting, handling, fastening and working treated materials.
- G. Restore damaged components. Protect work from damage.
- H. Provide nails, spikes, screws and bolts as necessary for secure and rigid permanent connections. Conform to IBC Table 2304.9.1-Fastening Schedule, APA recommendations, and provisions of Contract Documents.
- I. Drive nails perpendicular to grain of wood in lieu of toe-nailing, where feasible.

1.1 SUMMARY

A. Section includes repair and installation of vapor barrier below the elevator pit slab.

1.2 REFERENCES

A. ASTM International:

- 1. ASTM E1745-17 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.
- 2. ASTM E1643-18a Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
- B. Technical Reference American Concrete Institute (ACI):
 - 1. ACI 302.2R-06 Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.
 - 2. ACI 302.1R-15 Guide to Concrete Floor and Slab Construction.

1.3 SUBMITTALS

A. Product Data:

- 1. Manufacturer's samples and literature.
- 2. Manufacturer's installation instructions for placement, seaming, penetration prevention and repair, and perimeter seal per ASTM E1643.

1.4 QUALITY ASSURANCE

A. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Insulation Solutions, Viper ViperCheck II, Underslab Vapor Retarder, 15-mil Class A.
 - 1. Web Site http://www.insulationsolutions.com
- B. STEGO Industries LLC., STEGO Wrap 15-mil Class A.
 - 1. Web Site http://www.stegoindustries.com
- C. WR Meadows, Sealtight Perminator 15.
 - 1. Web Site http://www.wrmeadows.com
- D. Fortifiber Building Systems Group, Moiststop Ultra 15.
 - 1. Web Site http://www.fortifiber.com
- E. Or approved equal.

2.2 MATERIALS

- A. Vapor Barrier: Amended ASTM E1745 Class A, 15-mil polyolefin vapor retarder, as specified by this Section.
 - 1. Maintain permeance of less than 0.01 Perms [grains/(ft² · hr · inHg)] as tested in accordance with mandatory conditioning tests per ASTM E1745 Section 7.1 (7.1.1-7.1.5).
 - 2. Other performance criteria:
 - a. Strength: ASTM E1745 Class A.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION ISSAQUAH, WASHINGTON

SECTION 072616 BELOW-GRADE VAPOR RETARDERS

b. Thickness: 15 mils minimum

2.3 ACCESSORIES

A. Seam tape, mastic, perimeter/edge seal, penetration prevention, and other accessories as instructed by manufacturer for watertight underslab vapor barrier meeting or exceeding specified criteria.

PART 3 EXECUTION

3.1 PREPARATION

A. Ensure that subsoil is level and compact base material.

3.2 INSTALLATION

- A. Install vapor barrier in accordance ASTM E1643.
 - 1. Unroll vapor barrier with the longest dimension parallel with the direction of the concrete placement and face laps away from the expected direction of the placement whenever possible.
 - 2. Extend vapor barrier to the perimeter of the slab. If practicable, terminate it at the top of the slab, otherwise (a) at a point acceptable to the Owner or (b) where obstructed by impediments, such as dowels, waterstops, or any other site condition requiring early termination of the vapor barrier. At the point of termination, seal vapor barrier to the existing vapor barrier or slab itself.
 - 3. Overlap joints 6 inches and seal with manufacturer's seam tape.
 - 4. Apply seam tape to a clean and dry vapor barrier.
 - 5. Seal all penetrations (including pipes) per manufacturer's instructions.
 - 6. For interior forming applications, avoid the use of non-permanent stakes driven through vapor barrier.
 - 7. If non-permanent stakes must be driven through vapor retarder, repair as recommended by vapor retarder manufacturer.
 - 8. Use reinforcing bar supports with base sections that eliminate or minimize the potential for puncture of the vapor barrier.
 - Repair damaged areas with vapor barrier material of similar (or better) permeance, puncture and tensile.

1.1 SUMMARY

A. Work includes general sealant work required for fire-rated and weather-tight installation of work of this Contract.

1.2 REFERENCES

- A. Applicable provisions of the following standards shall apply to the work of this Section, except as modified herein, and are hereby made a part of these Contract Specifications to the extent required:
 - 1. ASTM C661 Test Method for Indentation hardness of Elastomeric –Type Sealants by Means of a Durometer
 - 2. ASTM C719 Standard Test Method for Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle)
 - 3. ASTM C834 Specification for Latex Sealing Compounds
 - 4. ASTM C920 Specification for Elastomeric Joint Sealants
 - 5. ASTM C1193 Standard Guide for Use of Joint Sealants
 - 6. ASTM C1330 Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants
 - 7. ASTM D2240 Standard Test Method for Rubber Property—Durometer Hardness
 - 8. ASTM D5893 Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Pavements
- B. Sealant, Waterproofing & Restoration Institute (SWRI), Tel. (816) 472-7979. Fax: (816) 472-7765, Email info@swrionline.org / Web Site http://www.swrionline.org

1.3 SYSTEM DESCRIPTION

A. Definition:

- 1. Sealant systems installed with pressure gun.
 - a. Include sealing of vertical and horizontal joints as required to make air and water tight.
- 2. Regardless of terminology used on Drawings, where "caulking" or "sealant" called for, use specified sealant continuously, entire area and assembly.

1.4 SUBMITTALS

- A. Submit in accordance with the following:
 - 1. Product Data:
 - a. Indicate sealant chemical characteristics, performance criteria, limitations and color availability.
 - b. Include printed statement of VOC content for applicable products.
 - 2. Samples: Color and type of sealant proposed on work. Obtain acceptance from Owner before proceeding.
 - a. Include sealant installation in mock-ups.
 - 3. Provide certification from sealant manufacturers that their products are suitable for the project use intended and comply with specification requirements.

1.5 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this Section.

B. Installer Qualifications:

- 1. Applicator shall have at least three (3) years' experience in installing materials of types specified and shall have successfully completed at least three (3) projects of similar scope and complexity.
- 2. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
- C. Single Source Responsibility for Joint Sealant Materials:
 - 1. Obtain joint sealants from a single manufacturer for each different product required to ensure compatibility.
 - 2. Manufacturer shall instruct applicator in procedures for intersecting sealants.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when temperature or weather conditions deviate from manufacturer's recommendations. Comply with manufacturer's recommended requirements for temperatures, relative humidity and substrate moisture content during application and curing of materials.
- B. Ensure proper ventilation in areas to receive solvent and moisture cured materials, and in enclosed spaces when installing two-component foam sealant.
- C. Comply with manufacturer's MSDS Sheets for use and handling of products.

1.7 SEQUENCING AND SCHEDULING

- A. Do not install work of this Section until work of other trades having an effect on this Section of work has been completed.
- B. Schedule applications of waterproofing, water repellents and preservative finishes after sealant installation unless sealant manufacturer approves otherwise in writing. Ensure that installed sealant is allowed to cure sufficiently prior to subsequent applications.

1.8 WARRANTY

- A. Deliver to the Owner signed copies of the following written warranties against adhesive and cohesive failure of the sealant and against infiltration of water and air through the sealed joint for a period of five (5) years from date of completion.
 - 1. Manufacturer's standard warranty covering sealant materials.
 - 2. Applicator's standard warranty covering workmanship.

PART 2 PRODUCTS

2.1 MATERIALS - GENERAL

A. General:

- 1. Color: White, or as selected by Owner from samples of manufacturer's standard color range.
- 2. Sealant must be compatible with back-up material.
- 3. Compatibility:
 - a. Provide joint sealants, joint fillers and accessory joint materials that are compatible with one another and with joint substrates under project conditions.
 - b. Install joint sealants, joint fillers and related joint materials that are non-staining to visible joint surfaces and surrounding substrate surfaces.

- 4. Pre-compressed foam joint sealant backup sealant at masonry and other rainscreen weather joints.
- 5. Sealing of vertical and horizontal construction joints, making air and watertight.
- Primers: As required and recommended by the sealant manufacturer for surface conditions encountered.

2.2 SILICONE JOINT SEALANTS:

- A. As manufactured by: Dow Corning Corp, Sika Corporation, Tremco Incorporated or accepted
- B. Silicone Joint Sealants:
 - 1. Single-Component, Non-sag, Neutral-Curing Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 100/50, for Use NT.

2.3 LATEX JOINT SEALANTS

- A. As manufactured by Dow Corporation, Sika Corporation, Tremco Incorporated or accepted.
- B. Single Component Latex Joint Sealant: ASTM C834, acrylic latex or siliconized acrylic latex, non-hardening, non-corrosive, Type OP, Grade NF.

2.4 JOINT SEALANT BACKING

- A. Joint-Sealant Backing: ASTM C1330, polyethylene foam rod, closed or open cell to suit job conditions and approved in writing by joint sealant manufacturer; non-staining; compatible with joint substrates, sealants, primers and other joint fillers; and accepted for applications indicated by sealant manufacturer based on field experience and laboratory testing.
 - 1. Diameter twenty-five (25%) percent greater than width of joint where it is to be installed.
 - 2. Polystyrene foam not acceptable.
- B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.5 FIRESTOP SEALANTS AND PUTTY

- A. 3M Fire Barrier Rated Foam FIP 1-Step or accepted.
- B. 3M Type MP+ Putty or accepted.
- C. Firesafe Insulation at Elevator Jambs: Rockwool Roxul Safe or accepted.

2.6 MISCELLANEOUS MATERIALS

- A. Sand for sanded sealant joints: sand aggregate to match texture, color and appearance of adjacent substrates.
- B. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- C. Cleaners for Nonporous Surfaces: chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- D. Masking Tape: Non-staining, non-absorbent material compatible with joint sealants and surfaces adjacent to joints.
- E. Firestop Joint Sealants (flamesafe safing sealant): Elastomeric sealing material intended to resist the passage of fire and toxic gasses in non-fire-resistance rated assemblies, acceptable to AHJ.

F. Other Materials: Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor and approved by the sealant manufacturer as compatible, subject to review of the Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Applicator shall examine the areas and conditions under which work of this Section will be performed.
 - 1. Verify conformance with manufacturer's requirements.
 - 2. Report unsatisfactory conditions in writing to the Owner.
 - 3. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Clean and prime joints in accordance with manufacturer's instructions.
- B. Remove loose materials and foreign matter which might impair adhesion of sealant.
- C. Verify that joint backing and release tapes are compatible with sealant.
- D. Protection: Completely protect surfaces adjacent to joints. Apply masking around joints to protect adjacent surfaces from defacement and staining during sealing operations.

3.3 INSTALLATION, APPLICATION, PERFORMANCE

- A. Install in accordance with manufacturer's directions for conditions of installation.
- B. Apply sealants before application of water repellents or other coatings at surfaces to ensure sealant adhesion.
- C. Keep sealants back from adjacent faces of surfaces.
- D. Backing for surfaces:
 - 1. Apply foam rod back-up material allowing proper space for sealant per the sealant manufacturer's data guide.
 - a. Where more than 3/4" wide pack with foam backer rod material to within 1/2" of surface.
 - b. Where less than 1/2" wide install foam rod backer rod material to within 1/4" of surface.
 - 2. Where less than 1/2" deep, apply bond breaker tape to bottom of joints to prevent adhesion of sealant to bottom of joint.
 - 3. Provide backing materials in as long lengths as practicable; install with proper tool. Force backing into joint to proper depth for sealant.
- E. Sealing: Recess joints as indicated, minimum recess equal to joint width.
 - 1. Apply sealant in accordance with manufacturer's directions and the following:
 - a. Use sealant dispensing equipment to push sealant bead into opening. Fill joint opening to full and proper configuration. Apply in continuous operation, ensure sealant fills entire joint and firmly contacts all surfaces.
 - b. Install sealant vertically or horizontally as necessary to allow moisture to drain.
 - 2. Examine installation carefully. Repair any areas where sealant is not properly adhered due to bubbles, foreign matter or other defects.
 - 3. Seal joints before final coat of finish is applied to adjacent surfaces.

3.4 CURING

- A. General: Prior to painting or coating, allow sealant joints to cure as directed by sealant manufacturer, minimum seven (7) days for a single component and three (3) days for a multi-component.
- B. Environmental Conditions: Ambient temperatures and humidity affect the cure rate and time required for joint to be "tack-free". Notify Owner if cure times exceed the minimums listed.

3.5 FIELD QUALITY CONTROL

- A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:
 - 1. Extent of Testing: Test completed and cured joints as follows:
 - a. Perform ten (10) tests for the first one thousand (1,000') feet of joint length for each type of elastomeric sealant and joint substrate.
 - b. Perform one (1) test for each one thousand (1,000') feet of joint length thereafter or one (1) test per each floor per elevation.
 - 2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C1193 or Method A, Tail Procedure, in ASTM C1521.
 - a. For joints with dissimilar substrates, verify adhesion to each substrate separately; do this by extending cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
 - 3. Inspect joints for complete fill, for absence of voids and for joint configuration complying with specified requirements. Record results in a field-adhesion-test log.
 - 4. Inspect tested joints and report on whether the sealants:
 - a. Filled joint cavities and are free of voids.
 - b. Dimensions and configurations comply with specified requirements.
 - c. In joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion hand-pull test criteria.
 - 5. Field-Adhesion-Test Log: Record test results. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration and sealant dimensions.
 - 6. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.
- B. Evaluation of Field Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.
- C. Owner will engage an independent testing agency to inspect installed spray-on fire barrier rated foam and to prepare reports indicating whether the installed work complies with the contract documents.
 - 1. Notify testing agency at least 7 days prior to date when spray-on fire barrier rated foam installation will be ready for inspection; obtain advance approval of general schedule and phasing, if any, required to allow subsequent construction to proceed.

3.6 CLEANING, INSPECTION AND PROTECTION

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials accepted in writing by manufacturers of joint sealants and of products in which joints occur.
- B. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without

deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.7 SCHEDULE

JOINT SEALANT	APPLICATION
Single-Component Neutral Curing Silicone Sealant	 Exterior vertical and horizontal non-traffic joints in cast-in-place concrete Exterior joins in exterior finish systems Exterior perimeter joints at frames of doors and windows Exterior control and expansion joints in ceilings and other overhead surfaces Exterior vertical joints between different materials listed above All other exterior vertical and horizontal non-traffic joints unless noted otherwise.
Single-Component Mildew-Resistant Neutral- Curing Silicone Sealant	Exterior joints with galvanized steel or insulated glass substrates
Latex Sealant	Perimeter joints between interior wall surfaces and frames of interior doors and windows
Spray-On Fire Barrier Rated Foam	Interior rated penetrations

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 081113 ISSAQUAH, WASHINGTON HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.1 SUMMARY

A. Section includes a hollow metal door at the elevator machine room.

1.2 REFERENCES

A. American National Standard Institute (ANSI):

1.	ANSI A250.4	Test Procedure and Acceptance Criteria for - Physical Endurance for Steel
		Doors, Frames, Frame Anchors and Hardware Reinforcings
2.	ANSI A250.6	Hardware on Standard Steel Doors (Reinforcement - Application)
3	ANSI A250 8	Recommended Specifications for Standard Steel Doors and Frames (formerly

- 3. ANSI A250.8 Recommended Specifications for Standard Steel Doors and Frames (formerly SDI 100)
- 4. ANSI A250.11 Recommended Erection Instructions for Steel Frames (formerly SDI 105)

B. ASTM International (ASTM):

1.	ASTM A366	Standard Specification for Steel, Sheet, Carbon, Cold-Rolled, Commercial
		Quality

- 2. ASTM E152 Standard Methods of Fire Tests of Door Assemblies
- 3. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

1.4 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Standards: ANSI/SDI-100, Recommended Specifications for Standard Steel Doors and Frames.
- C. Performance Standards:
 - 1. Fire-Rated Assemblies: NFPA 80, and acceptable testing agency listing.
 - 2. Thermal-Rated Assemblies at Exterior: ASTM C 236 or ASTM C 976.
 - 3. Sound-Rated Assemblies at Mechanical Rooms: ASTM E 1408, and ASTM E 413.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Interior Preassembled Steel Doors and Frames:
 - 1. Manufacturers: THERMA-TRU DOORS, or approved equal.
 - 2. Material: Minimum 22-gauge steel sheet.
 - 3. Fire Rating: 45 minutes.
 - 4. Door Thickness: 1-1/2 inches.
 - 5. Door Faces: Flush.
 - 6. Hardware: Self closing with lock.
 - 7. Finish: Factory finished.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 081113 ISSAQUAH, WASHINGTON HOLLOW METAL DOORS AND FRAMES

PART 3 EXECUTION

3.1 INSTALLATION

- A. Fabricate work to be rigid, neat and free from seams, defects, dents, warp, buckle, and exposed fasteners. Install doors and frames in compliance with SDI-100, NFPA 80, and requirements of authorities having jurisdiction.
- B. Provide thermally improved doors with maximum U-value of 0.24 BTU/hr./square foot degree F (ASTM C 236) for all exterior doors and elsewhere as noted.
- C. Provide acoustically improved doors with minimum STC of 33 (ASTM E 90 and ASTM E 413) where indicated.
- D. Hardware: Prepare doors and frames to receive hardware on final schedule. Provide for 3 silencers on single doorframes; 2 on double doorframes.
- E. Shop Finish: Clean, treat and prime paint all work with rust-inhibiting primer comparable with finish paint specified in Division 9 section. Provide asphalt emulsion sound deadening coating on concealed frame interiors.
- F. Touch up damaged coatings ready to receive finish painting.

1.1 SUMMARY

A. Section includes valve access panel.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

1. Exact location and size of access door indicated on Drawings is diagrammatic. Obtain specific location and size for access door from trades requiring access to concealed item.

1.3 SUBMITTALS

- A. Product Data: For each product specified.
- B. Manufacturer's installation instructions.
- C. Shop Drawings: Elevations, sections, details, and attachment to other work.

1.4 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 PRODUCTS

- A. Fire rated wall access doors
 - 1. Manufacturers/Products:
 - a. Babcock Davis.
 - b. JL Industries/Activar.
 - c. Karp.
 - d. Larsen's Manufacturing Co.
 - e. Nystrom Inc.
 - f. Or accepted.
 - 2. Interior Flush Access Doors with Exposed Flange:
 - a. Description: Manufactured outward opening metal door panel and exposed metal flange construction. Face of door flush with frame.
 - b. Material: Receive Architect's approval for materials in thickness less than indicated.
 - 1) Door: 14 gauge cold rolled steel.
 - 2) Frame: 16 gauge cold rolled steel.
 - c. Door/Panel: Flush steel door.
 - d. Frame: 1-inch exposed flange.
 - e. Hinges: Concealed continuous piano hinge.
 - f. Latching and Locking: As selected by Owner from available options.
 - g. Sizes: As indicated in Drawings.
 - h. Fire Rating: 45 minutes minimum.

B. Materials:

- 1. Steel:
 - a. Plates, Shapes, and Bars: ASTM A36.
 - b. Steel Sheet: Uncoated or electrolytic zinc-coated, ASTM A879, with cold-rolled steel sheet substrate complying with ASTM A1008, Commercial Steel, exposed.
 - c. Metallic-Coated Steel Sheet: ASTM A653, Commercial Steel, Type B; hot-dip galvanized, with minimum G60 or A60 coating.

- d. Use zinc- or metallic-coated steel in wet and or humid environments.
- 2. Aluminum Extrusions and Plate: ASTM B632, 6061 T6.
- 3. Frame Anchors: Same type as door face.
- Inserts, Bolts, and Anchor Fasteners: Hot-dip galvanized steel per ASTM A153 or ASTM F2329.

C. Fabrication:

- 1. Fabricate units as continuous welded steel construction, of materials with smooth, flat surfaces without blemishes, manufactured as integral units ready for installation.
- 2. Construction. Fabricate units on continuous welded steel construction. Grind welds smooth and flush with adjacent surfaces. Furnish attachment devices, fasteners and mounting holes of the type required to secure access doors to the types of support shown.
- For metal surface exposed to view in the completed work, provide materials with smooth, flat surfaces without blemishes. For doors and frames, grind welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of the type required to secure doors to types of frames indicated.
- 4. Recessed Access Doors: Form face panel to provide recess for application of applied material. Reinforce doors as required to prevent buckling.
- 5. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed. Provide access sleeves for each locking device. Furnish plastic grommets and install in holes cut through finish. Provide two keys; key all locks alike.

D. Finishes:

- 1. Factory-Finish: Factory prep and prime units indicated to be painted.
 - a. Surface preparation, pretreatment and prime coating shall comply with NAAMM.
 - b. Primer: Manufacturer's standard baked-on rust-inhibitive lead- and chromate-free universal primer, compatible with finish coating indicated. Gray color.
- 2. Field-Applied Coating: As specified in Section 09 91 00, Painting.
 - a. Color: Paint color to match adjacent surfaces unless noted otherwise.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections. Install assemblies complete with all hardware, anchors, inserts, supports and accessories. Test and adjust operation.
- B. Restore damaged finishes and test for proper operation. Clean and protect work from damage.

1.1 SUMMARY

- A. Hardware for machine room entry door including, but not limited to: locksets, hinges, closers, stops, kick plates, sweeps and thresholds.
- B. Work includes but is not limited to following:
 - Provide complete finish hardware and suitable fastenings for the Project in accordance with Drawings, Specifications and Schedules.
 - 2. Furnishing items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function.
 - 3. Furnishing items not specifically mentioned, but necessary to complete work. These are to match quality and finish of the items specified.
 - 4. Include all items as required by the authority having jurisdiction for Fire Rated Doors.
 - 5. Coordinate keying with Owner. Unit doors to be supplied with five (5) keys each door.
- C. Quantities: Those listed in any instance are for Subcontractor's convenience only and are not guaranteed.

1.2 REFERENCE STANDARDS

- A. 36 CFR 1191 Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities; Final Rule; current edition; (ADA Standards for Accessible Design).
- B. ANSI/ICC A117.1 American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 2009.
- C. BHMA A156.1 American National Standard for Butts and Hinges; Builders Hardware Manufacturers Association, Inc.; 2006 (ANSI/BHMA A156.1).
- D. BHMA A156.2 American National Standard for Bored and Preassembled Locks & Latches; Builders Hardware Manufacturers Association; 2011 (ANSI/BHMA A156.2).
- E. BHMA A156.4 American National Standard for Door Controls Closers; Builders Hardware Manufacturers Association, Inc.; 2008 (ANSI/BHMA A156.4).
- F. BHMA A156.6 American National Standard for Architectural Door Trim; Builders Hardware Manufacturers Association; 2010 (ANSI/BHMA A156.6).
- G. BHMA A156.7 American National Standard for Template Hinge Dimensions; Builders Hardware Manufacturers Association; 2003 (ANSI/BHMA A156.7).
- H. BHMA A156.8 American National Standard for Door Controls Overhead Stops and Holders; Builders Hardware Manufacturers Association, Inc.; 2010 (ANSI/BHMA A156.8).
- I. BHMA A156.13 American National Standard for Mortise Locks & Latches; Builders Hardware Manufacturers Association; 2005 (ANSI/BHMA A156.13).
- J. BHMA A156.17 American National Standard for Self Closing Hinges & Pivots; Builders Hardware Manufacturers Association, Inc.; 2004 (ANSI/BHMA A156.17).
- K. BHMA A156.18 American National Standard for Materials and Finishes; Builders Hardware Manufacturers Association, Inc.; 2006 (ANSI/BHMA A156.18).
- L. BHMA A156.22 American National Standard for Door Gasketing and Edge Seal Systems, Builders Hardware Manufacturers Association; 2012 (ANSI/BHMA A156.22).
- M. DHI (LOCS) Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; Door and Hardware Institute; 2010.
- N. NFPA 80 Standard for Fire Doors and Other Opening Protectives; 2013.
- O. UL (BMD) Building Materials Directory; Underwriters Laboratories Inc.; current edition.

1.3 COORDINATION

- A. Refer to Section 013100 Project Management and Coordination for additional requirements.
- B. Coordinate the manufacture, fabrication and installation of products onto which door hardware will be installed.
- C. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
- D. Convey Owner's keying requirements to manufactures during the course of the Work.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project.
- B. Hardware Schedule: Detailed listing of each item of hardware to be installed on each door. Use door numbering scheme as included in the Contract Documents. Identify electrically operated items and include power requirements.
- C. Submit manufacturer's parts lists, templates and special tools.
- D. Keying Schedule: Submit for approval of Owner.
- E. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.
- F. Maintenance Data: Include data on operating hardware, lubrication requirements and inspection procedures related to preventative maintenance.
- G. Submit manufacturer's parts lists and templates.
- H. Operation and Maintenance shall be included in Project Operation and Maintenance Manuals. To include in manuals: catalog cuts, manufactures names, address and phone numbers.
- I. Keys: Deliver with identifying tags to Owner by security shipment direct from hardware supplier.
- J. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three (3) years of documented experience.
- B. Hardware Supplier Qualifications: Company specializing in supplying commercial door hardware approved by manufacturer.
 - 1. Supplier to maintain stock and parts inventory of all standard items for future service by the Owner.
 - 2. Authorized representatives for door closers and locksets are to inspect and adjust their hardware.
 - 3. To be factory direct authorized distributor not a broker.
- C. To be staffed with a certified Architectural Hardware Consultant (AHC) and locksmiths available at all reasonable times during construction to meet with Owner, and Contractor for hardware or keying problems.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 016000 Product requirements for additional requirements.
- B. Package hardware items individually; label and identify each package with door opening code to match hardware schedule.
- C. Storage of hardware shall be protected, under lock and key, and storage kept dry for protection of the hardware.

1.7 WARRANTY

- A. Refer to section 017700 Closeout Procedures for additional warranty information.
- B. Provide twenty-five (25) year warranty against ordinary wear and usage for door closers from date of substantial completion.

PART 2 PRODUCTS

2.1 DOOR HARDWARE – GENERAL

- A. Provide all hardware specified or required to make doors fully functional, compliant with applicable codes and secure to the extent indicated.
- B. Attach all closers and panic bars to door reinforcement blocking.
- C. Provide all items of a single type of the same model by the same manufacturer.
- D. Provide products that comply with the following:
 - 1. Applicable provisions of Federal, State and local codes.
 - 2. ADA Standards for Accessible Design.
 - 3. ANSI/ICC A117.1, American National Standard for Accessible and Usable Buildings and Facilities.
 - 4. Applicable provisions of NFPA 101, Life Safety Code.
 - 5. Fire-Rated Doors: NFPA 80.
 - 6. All Hardware on Fire-Rated Doors: Listed and classified by UL as suitable for the purpose specified and indicated.
 - 7. Hardware for Smoke and Draft Control Doors (Indicated as "S" on Drawings): Provide hardware that enables door assembly to comply with air leakage requirements of the applicable code.
 - 8. Products Requiring Electrical Connection: Listed and classified by UL as suitable for the purpose specified and indicated.
- E. Finishes: All door hardware the same finish unless otherwise indicated.
 - 1. Primary Finish: Satin chrome plated over nickel on brass or bronze, 626 (approx. US26D).
 - 2. Finish Definitions: BHMA A156.18.
 - 3. Exceptions:
 - a. Where base metal is specified to be different, provide finish that is an appearance equivalent according to BHMA A156.18.
 - Door Closer Covers and Arms: Color to be selected by Owner from manufacturer's standard colors.

2.2 HINGES AND PIVOTS

- A. Hinges, Pivots and Butts: Provide hinges on every swinging door.
 - 1. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
 - 2. Provide ball-bearing hinges at all doors having closers.
 - 3. Provide hinges in the quantities indicated.
 - 4. Provide non-removable pins on exterior out-swinging doors.
- B. Butt Hinges: Comply with BHMA A156.1 and A156.7; standard weight, unless otherwise indicated.
 - 1. Provide hinge width required to clear surrounding trim.
- C. Quantity of Hinges Per Door:
 - 1. Three (3) hinges per leaf to ninety (90") inches height. Add one (1) for each additional thirty (30") inches in height or any fraction thereof.
- D. Approved manufacturers:
 - 1. Therma-Tru: www.thermatru.com
 - 2. Ives: www.iv es.allegion.com
 - 3. Hager Companies: www.hagerco.com

4. Bommer Industries, Inc.: www.bommer.com

2.3 LOCKS

- A. Locks: Provide a lock for every door, unless specifically indicated as not requiring locking.
 - 1. Hardware Sets indicate locking functions required for each door.
 - 2. Trim: Provide lever handle or pull trim on outside of all locks unless specifically stated to have no outside trim.
 - 3. Lock Cylinders: Provide key access on outside of all locks unless specifically stated to have no locking or no outside trim.
- B. Lock Cylinders: Manufacturer's full size interchangeable core (FSIC) 6-pin cylinder.
 - 1. Provide cams and/or tailpieces as required for locking devices required.
- C. Keying: Grand master keyed per Owner's approval.

2.4 CYLINDRICAL LOCKSETS

- A. Locking Functions: As defined in BHMA A156.2, and as selected by Owner.
- B. Approved manufacturers:
 - 1. Schlage: www.schlage.com

2.5 STOPS AND HOLDERS

- A. Stops/Holders: Complying with BHMA A156.8; provide a stop for every swinging door, unless otherwise indicated.
 - 1. Provide wall mounted stops and floor mounted where wall mounted is impractical. Where no stop can be installed provide closer with cushion type arm. Anvils to be sufficient length to permit closers to be mounted on the pull side of door.
 - 2. If wall stops are not practical, due to configuration of room or furnishings, provide overhead stop.
 - 3. Stop is not required if positive stop feature is specified for door closer; positive stop feature of door closer is not an acceptable substitute for a stop unless specifically so stated.
- B. Approved Manufacturers:
 - 1. Ives: www.iv es.allegion.com
 - 2. Glynn-Johnson: www.glynn-johnson.com.
 - 3. Trimco: www.trimcobbw.com

2.6 PROTECTION PLATES AND ARCHITECTURAL TRIM

- A. Kick-plates, Flat Goods & Trim:
 - 1. Kickplate: Provide on push side of every door with closer, except storefront and all-glass doors.
 - 2. Trim: Per Section 062000 Interior Finish Carpentry and Section 062013 Exterior Finish Carpentry
- B. Approved manufacturers:
 - 1. Ives: www.iv es.allegion.com
 - 2. Hager Companies: www.hagerco.com.
 - 3. Trimco: www.trimcobbw.com

2.7 KEYING REQUIREMENTS

- A. All keyed cylinders shall be subject to the existing Schlage Grand Masterkey system, coordinate with Owner.
- B. Furnish cylinders with construction cores. Following construction supply permanent keyed cores.
- C. Cylinders to be furnished with visual key control with key code. Stamped on the face of the keys and marked on the back or side of the cylinders.

D. Coordinate key quantities with Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. In the event of any discrepancies between job site conditions and the drawings, stop work immediately. Immediately call the Owner and report the nature, extent and impact of the discrepancy. Do not proceed with any and all work relating to the discrepancy until a resolution has been attained.
- C. Commencement of construction or installation means acceptance of existing conditions by contractor as suitable for construction or installation.
- D. Any work which is not acceptable due to a discrepancy which has not been called to the attention of the Owner shall be repaired or replaced to conform to the original intent of the drawings at no additional cost to the owner.
- E. Verify that doors and frames are ready to receive work; labeled, fire-rated doors and frames are present and properly installed, and dimensions are as instructed by the manufacturer.

3.2 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Use templates provided by hardware item manufacturer.
- C. Install hardware on fire-rated doors and frames in accordance with code and NFPA 80.
- D. Mounting heights for hardware from finished floor to center line of hardware item: As listed in Schedule, unless otherwise noted:

3.3 ADJUSTING

- A. Adjust hardware for smooth operation.
- B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.4 CLEANING

A. Clean adjacent surfaces soiled by hardware installation. Clean finished hardware per manufacturer's instructions after final adjustments has been made. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost

3.5 PROTECTION

- A. Do not permit adjacent work to damage hardware or finish.
- B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

PART 4 HARDWARE SETS

4.1 GENERAL

A. These Hardware Sets indicate requirements for single doors of that type, with conditional requirements for pairs and other situations.

4.2 GROUPS:

(Products listed are for listed for design intent)

HW 01 - HOLLOW METAL DOOR @ MACHINE ROOM

		TRIDGE HOUSE – ELEVA WASHINGTON	TOR MODERNIZATION		ON 087100 ARDWARE
1	EA	STOREROOM LOCK	AL80RD SAT	626	SCH
1	EA	LOCK GUARD	LG10	630	IVE
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	1461 EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes gypsum wallboard including but not limited to:
 - 1. Infill at existing hoistway vent,
 - 2. Minor repairs necessary to repair damage on the interior that may occur during the removal of the existing elevator hall fixtures and machine room door,
 - 3. Joint treatment and accessories.

1.2 REFERENCES

A. ASTM International (ASTM):

1.	ASTM C 475/C 475M	Standard Specification for Joint Compound and Joint Tape for
		Finishing Gypsum Board; 2002. (Reapproved 2007).
2.	ASTM C 840	Standard Specification for Application and Finishing of Gypsum
		Board; 2011.
3.	ASTM C 1396/C1396M	Standard Specification for Gypsum Board; 2011.
4.	ASTM E72	Standard Test Methods of Conducting Strength Tests of Panels for
		Building Construction; 2005.
5.	ASTM E84	Standard Test Method for Surface Burning Characteristics of Building
		Materials; 2013a.
6.	GA-216	Application and Finishing of Gypsum Board; Gypsum Association;
		2010.
7.	GA-600	Fire Resistance Design Manual; Gypsum Association; 2009.
8.	UL (FRD)	Fire Resistance Directory; Underwriters Laboratories Inc.; current
		edition.

1.3 SUBMITTALS

A. Product Data: Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board application and finishing, with minimum three (3) years of documented experience.

PART 2 PRODUCTS

2.1 GYPSUM BOARD ASSEMBLIES

- A. Provide completed assemblies complying with ASTM C840 and GA-216.
- B. Fire Rated Assemblies: Provide completed assemblies complying with applicable code.
 - 1. Gypsum Association File Numbers: Comply with requirements of GA-600 for the particular assembly.

2.2 BOARD MATERIALS

A. Manufacturers:

- CertainTeed Corporation, Georgia-Pacific Gypsum, National Gypsum Company, USG Corporation or accepted.
- B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut. Provide completed assemblies complying with ASTM C840 and GA-216.

- 1. Regular Type:
 - a. Application: Use for vertical surfaces and ceilings.
 - b. Thickness: 1/2 inch to match existing adjacent surfaces.
 - c. Edges: Tapered.
- 2. Fire Resistant Type: Complying with Type X requirements; UL or WH rated.
 - a. Application: Use for vertical surfaces and ceilings.
 - b. Thickness: 5/8 inch to match existing adjacent surfaces.
 - c. Edges: Tapered.

2.3 ACCESSORIES

A. Nails and screws of type and size to suit application; to rigidly secure materials in place.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. In the event of any discrepancies between job site conditions and the drawings, stop work immediately. Immediately contact the Owner and report the nature, extent and impact of the discrepancy. Do not proceed with any and all work relating to the discrepancy until a resolution has been attained.
- C. If substrate preparation is the responsibility of another installer, notify Owner of unsatisfactory preparation before proceeding.
- D. Commencement of construction or installation means acceptance of existing conditions by contractor as suitable for construction or installation.
- E. Any work which is not acceptable due to a discrepancy which has not been called to the attention of the Owner shall be repaired or replaced to conform to the original intent of the drawings at no additional cost to the Owner.

3.2 GYPSUM BOARD INSTALLATION

- A. Comply with ASTM C 840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Fire-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

3.3 JOINT TREATMENT

- A. Finish gypsum board in scheduled areas in accordance with levels defined in ASTM C 840.
 - 1. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
- B. Tape, fill and sand exposed joints, edges and corners to produce smooth surface ready to receive finishes.
 - 1. Feather coats of joint compound so that camber is maximum 1/32 inch.

3.4 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

3.5 CLEANING AND PROTECTION

- A. Clean soiled surfaces with cleaning solution.
- B. Touch-up, repair or replace damaged products / materials / connections before Substantial Completion.

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SECTION 092100 GYPSUM WALLBOARD

C. Protect installed products until completion of project.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes a resinous flooring system in the elevator machine room including the following:
 - Preparation of the substrate, the furnishing and application of a pigmented epoxy-based floor coating system with urethane topcoat. The system shall have the color and texture as specified by the Owner with a nominal thickness of 23 mils. It shall be applied to the prepared area(s) as defined in the plans strictly in accordance with the Manufacturer's recommendations.

1.2 SUBMITTALS

- A. Product Data: Latest edition of Manufacturer's literature including performance data and installation procedures.
- B. Manufacturer's Safety Data Sheet (SDS) for each product being used.
- C. Samples: A 3 x 3 inch square sample of the proposed system. Color, texture, and thickness shall be representative of overall appearance of finished system subject to normal tolerances.

1.3 QUALITY ASSURANCE

- A. The Manufacturer shall have a minimum of 10 years' experience in the production, sales, and technical support of epoxy and urethane industrial flooring and related materials.
- B. The Applicator shall have experience in installation of the flooring system as confirmed by the manufacturer in all phases of surface preparation and application of the product specified.
- C. No requests for substitutions shall be considered that would change the generic type of the specified System.
- D. System shall be in compliance with requirements of United States Department of Agriculture (USDA), Food, Drug Administration (FDA), and local Health Department.
- E. System shall be in compliance with the Indoor Air Quality requirements of California section 013500 as verified by a qualified independent testing laboratory.
- F. A pre-installation conference shall be held between Applicator, General Contractor and the Owner to review and clarification of this specification, application procedure, quality control, inspection and acceptance criteria and production schedule.

1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Packing and Shipping

1. All components of the system shall be delivered to the site in the Manufacturer's packaging, clearly identified with the product type and batch number.

B. Storage and Protection

- 1. The Applicator shall be provided with a storage area for all components. The area shall be between 60 F and 90 F, dry, out of direct sunlight and in accordance with the Manufacturer's recommendations and relevant health and safety regulations.
- 2. Copies of Safety Data Sheets (SDS) for all components shall be kept on site for review by the Engineer or other personnel.

C. Waste Disposal

 The Applicator shall be provided with adequate disposal facilities for non-hazardous waste generated during installation of the system.

1.5 PROJECT CONDITIONS

A. Site Requirements

- Application may proceed while air, material and substrate temperatures are between 60 F and 90 F providing the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall be consulted.
- 2. The relative humidity in the specific location of the application shall be less than 85 % and the surface temperature shall be at least 5 F above the dew point.
- 3. The Applicator shall ensure that adequate ventilation is available for the work area.
- 4. The Applicator shall be supplied with adequate lighting equal to the final lighting level during the preparation and installation of the system.
- B. Conditions of new concrete to be coated with epoxy material.
 - Concrete shall be moisture cured for a minimum of 7 days and have fully cured a minimum of twenty-eight days in accordance with ACI-308 prior to the application of the coating system pending moisture tests.
 - 2. Concrete shall have a flat rubbed finish, float or light steel trowel finish (a hard steel trowel finish is neither necessary nor desirable).
 - 3. Sealers and curing agents should not to be used.
 - 4. Concrete surfaces on grade shall have been constructed with a vapor barrier to protect against the effects of vapor transmission and possible delamination of the system.

C. Safety Requirements

- 1. All open flames and spark-producing equipment shall be removed from the work area prior to commencement of application.
- 2. "No Smoking" signs shall be posted at the entrances to the work area.
- 3. The Owner shall be responsible for the removal of foodstuffs from the work area.
- 4. Non-related personnel in the work area shall be kept to a minimum.

1.6 WARRANTY

A. Manufacturer warrants that material shipped to buyers at the time of shipment substantially free from material defects and will perform substantially to Manufacturer's published literature if used in accordance with the latest prescribed procedures and prior to the expiration date.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Dur-A-Flex, Inc., 95 Goodwin Street, East Hartford, CT 06108, Phone: (860) 528-9838, Fax: (860) 528-2802.
- B. Or approved equal. Manufacturer of Approved System shall be single source and made in the USA.

2.2 FLOORING

- A. Basis of Design: Dur-A-Flex, Inc, Dur-A-Gard, Epoxy-Based seamless flooring system
 - 1. System Materials:
 - a. Primer: Dur-A-Flex, Inc, Dur-A-Glaze #4 WB resin and hardener.
 - b. Base Coat: Dur-A-Flex, Inc, Dur-A-Gard resin and hardener.
 - c. Topcoat: Dur-A-Flex, Inc. Armor Top resin, hardener and pigment.

2. Patch Materials

- a. Shallow Fill and Patching: Use Dur-A-Flex, Inc. Dur-A-Glaze #4 Cove Rez.
- b. Deep Fill and Sloping Material (over ¼ inch): Use Dur-A-Flex, Inc. Dur-A-Crete.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION ISSAQUAH, WASHINGTON

SECTION 096723 RESINOUS FLOORING SYSTEM

Dur-A-Gard

Armor Top

2.3 PRODUCT REQUIREMENTS

]	Primer (Basis of Design)	Dur-A-Glaze #4 WB
	1. Percent Solids	56 %
	2. VOC	2 g/L
	3. Bond Strength to Concrete ASTM D 4541	550 psi, substrates fails
4	4. Hardness, ASTM D 3363	3H
	5. Elongation, ASTM D 2370	9 %
(6. Flexibility (1/4: Cylindrical mandrel), ASTM D 1737	Pass
,	7. Impact Resistance, MIL D-2794	>160
;	8. Abrasion Resistance ASTM D 4060,	
	CS 17 wheel, 1,000 g Load	30 mg loss
	-	_

B. Base Coat (Basis of Design)

1.	Percent Solids	100 %
2.	VOC	3.45 g/L
3.	Compressive Strength, ASTM D 695	16,000 psi
4.	Tensile Strength, ASTM D 638	3,800 psi
5.	Flexural Strength, ASTM D 790	4,000 psi
6.	Abrasion Resistance, ASTM D 4060	
	C-10 Wheel, 1,000 gm load, 1,000 cycles	35 mg loss

Flame Spread/NFPA-101, ASTM E 84
 Flammability, ASTM D 635
 Impact Resistance MIL D-3134
 Water Absorption. MIL D-3134
 Potlife @ 70 F
 Class A
 Self Extinguishing
 0.025 inch Max
 0.04 %
 20-25 minutes

C. Topcoat (Basis of Design)

1.	Percent Solids		95 %	
2.	VOC		0 g/L	
3.	Tensile Strength, ASTM D 2370		7,000 g	osi
4.	Adhesion, ASTM 4541		Substra	ate Failure
5.	Hardness, ASTM D 3363		4H	
6.	60 ^o Gloss ASTM D 523		70	
7.	Abrasion Resistance, ASTM D4060	Gloss	Satin	
	CS 17 wheel (1.000 g load) 1.000 cycles	4	8	mg loss v

CS 17 wheel (1,000 g load) 1,000 cycles 4 8 mg loss with grit 10 12 mg loss without grit 8. Pot Life, 70 F, 50% RH 2 Hours

2. Fot Life, 70 F, 50% RH 2 Hours
2. Full Chemical Resistance 7 days

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas and conditions, with Applicator present, for compliance with requirements for maximum moisture content, installation tolerances and other conditions affecting flooring performance.
 - 1. Verify that substrates and conditions are satisfactory for flooring installation and comply with requirements specified.

3.2 PREPARATION

A. General

- 1. New and existing concrete surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, dirt, and bituminous products.
- 2. Moisture Testing: Perform tests recommended by manufacturer and as follows:

SECTION 096723 RESINOUS FLOORING SYSTEM

- a. Perform relative humidity test using is situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75% relative humidity level measurement.
- b. If the relative humidity exceeds 75% then Dur-A-Flex, Inc Dur-A-Glaze MVP Primer moisture mitigation system must be installed prior to resinous flooring installation. Slabon grade substrates without a vapor barrier may also require the moisture mitigation system.
- There shall be no visible moisture present on the surface at the time of application of the system. Compressed oil-free air and/or a <u>light</u> passing of a propane torch may be used to dry the substrate.
- 4. Mechanical surface preparation
 - a. Shot blast all surfaces to receive flooring system with a mobile steel shot, dust recycling machine (Blastrac or equal). All surface and embedded accumulations of paint, toppings hardened concrete layers, laitance, power trowel finishes and other similar surface characteristics shall be completely removed leaving a bare concrete surface having a minimum profile of CSP 2-3 as described by the International Concrete Repair Institute.
 - b. Floor areas inaccessible to the mobile blast machines shall be mechanically abraded to the same degree of cleanliness, soundness and profile using diamond grinders, needle guns, bush hammers, or other suitable equipment.
 - c. Cracks and joints (non-moving) greater than 1/8 inch wide are to be chiseled or chippedout and repaired per manufacturer's recommendations.
- At spalled or worn areas, mechanically remove loose or delaminated concrete to a sound concrete and patch per manufactures recommendations.

3.3 APPLICATION

A. General

- 1. The system shall be applied in four distinct steps as listed below:
 - a. Substrate preparation
 - b. Priming
 - c. Base coat application
 - d. Topcoat application
- Immediately prior to the application of any component of the system, the surface shall be dry and any remaining dust or loose particles shall be removed using a vacuum or clean, dry, oilfree compressed air.
- 3. The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results in accordance with the Manufacturer's recommendations.
- 4. The system shall follow the contour of the substrate unless pitching or other leveling work has been specified by the Owner.
- 5. A neat finish with well-defined boundaries and straight edges shall be provided by the Applicator.

B. Primer

- 1. The primer shall be Dur-A-Glaze #4 WB that is mixed at the ratio of 1 part resin to 4 parts hardener per the manufacturer's instructions.
- The primer shall be applied by 1/8 inch notched squeegee and back rolled at the rate of 200-250 sf/gal to yield a dry film thickness of 4 mils.

C. Base Coat

- The base coat shall be comprised of two components, a resin, and hardener as supplied by the Manufacturer.
- The resin shall be added to the hardener and thoroughly mixed by suitably approved mechanical means.
- 3. The base coat shall be applied over horizontal surfaces using "v" notched squeegee and back rolled at the rate of 100 sf/gal to yield a dry film thickness of 16 mils.

D. Topcoat

- 1. The topcoat of Armor Top shall be roller applied at the rate of 500 sf/gal to yield a dry film thickness of 3 mils.
- 2. The topcoat shall be comprised of a liquid resin, hardener and pigment that is mixed per the manufacturer's instructions.
- 3. The finish floor will have a nominal thickness of 23 mils.

3.4 FIELD QUALITY CONTROL

A. Tests, Inspection

- 1. The following tests shall be conducted by the Applicator:
 - a. Temperature

Air, substrate temperatures and, if applicable, dew point.

Coverage Rates
 Rates for all layers shall be monitored by checking quantity of material used against the area covered.

3.5 CLEANING AND PROTECTION

- A. Cure flooring material in compliance with manufacturer's directions, taking care to prevent their contamination during stages of application and prior to completion of the curing process.
- B. Remove masking. Perform detail cleaning at floor termination, to leave cleanable surface for subsequent work of other sections.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes painting of interior gypsum wallboard, elevator doors and frames, metal door and frame, and other interior surfaces as required for a complete paint job. Work includes:
 - 1. Surface preparation.
 - 2. Field applied primers, sealers, coatings and paints.
 - 3. Painting and coating schedule.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM D523 Standard Test Method for Specular Gloss.
 - 2. ASTM D5324 Standard Guide for Testing Water-Borne Architectural Coatings.
- B. The Master Painters Institute (MPI): Tel 1-888-674-8937, Fax 1-888-211-8708, Email info@paintinfo.com, Web Site http://www.paintinfo.com
 - 1. MPI Approved Product List.
 - 2. MPI Architectural Painting Specification Manual.
- C. United States Environmental Protection Agency (EPA):
 - 1. EPA 40 CFR Part 59 (AD-FRL-6149-71 RIN 2060 National Volatile Organic Compound Emission Standards for Architectural Coatings, Final Rule, Federal Register / Vol. 63, No.176, September 11, 1998/Rules and Regulations).
 - 2. Web Site http://www.epa.gov/ttn/uatw/183e/aim/fr1191.txt

1.3 COORDINATION

- A. Refer to Section 013100 Project Management and Coordination for additional requirements including the following:
 - 1. Pre-Installation Conference:
 - a. Attendance: Contractor, painting subcontractor, Owner and others as requested to attend.
 - b. Meeting Time: Minimum two (2) weeks before beginning work of this Section and work of related Sections affecting work of this Section and as necessary to meet Project Schedule.
 - c. Location: Project Site.

1.4 SUBMITTALS

- A. Product Data: Provide in the same order as scheduled by this Section:
 - 1. Manufacturer's Product Data Sheets for each product.
 - 2. Product/Label Analysis for paint products:
 - a. Pigment and vehicle percentages by weight.
 - b. Pigment composition analysis, including fillers in percent by weight.
 - c. Vehicle composition analysis, including resins, solvents and additives by weight.
 - 3. Material Data Safety Sheets (MSDS):
 - a. Solvents, driers, additives and fillers.
 - b. Volatile organic compounds (VOC) emissions in grams per liter.
- B. Chip Color Samples: Manufacturer's complete selection.
- C. Paint Drawdown Color Samples: Size not less than 8 by 10 (8"x10") inch draw-down for each color selected for final acceptance prior to beginning work.
 - Label back of each drawdown with manufacturer, product, color name and number, and gloss level.

- 2. Furnish additional samples as required for acceptance of colors, finishes and textures.
- 3. Retain approved samples for reference.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 013300 Submittal Procedures.
- B. Maintenance Data: Product data sheets, manufacturer's application instructions, MSDS, product color name and number, cleaning instructions and spot repair and repaint instructions.
- C. Invoices and other data as necessary to verify quantities of each paint product suitable for coverage in conformance to manufacturer's instructions.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Minimum one (1) gallon of each paint and coating type and color.
- B. Identify each container as to manufacturer, product, color name, and number with minimum five (5") inch press type. Tape over with clear tape.
- C. Include manufacturer's instructions and SDS for each product submitted
- D. Turn over to Owner prior to project completion. Obtain signed receipt.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Manufacturer: Employ full time, locally available architectural product representative, technical field representative, testing equipment and services as necessary to perform inspections and to determine compliance with manufacturer's instructions and provisions of Contract Documents.
- B. Applicator Qualifications:
 - 1. Able to document minimum ten (10) years continuous experience in commercial quality projects of similar type and scope.
 - 2. Employ qualified journeymen painters with apprentices under direction of qualified journeymen, conforming to trade regulations.

C. Field Samples:

- 1. Minimum three (3), ten (10) square foot area field sample for each accepted color and substrate type. Provide as a step-down field sample, showing each step of system, including surface preparation.
- 2. Locate as accepted by Owner.
- 3. Protect and retain accepted field samples as standard of quality for work of this Section.
- 4. Accepted field samples may be incorporated into finished work.
- D. Work of this Section to be performed by or under direct supervision of one (1) installer.
- E. A pre-application meeting per General Requirements is required between all parties including painting Sub-contractor, Contractor, paint manufacturer's representative and Owner before work of these sections begin.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Conform to manufacturer's instructions.
- B. Deliver in unopened, sealed containers, bearing manufacturer's original labels with manufacturer's brand name, product name and number, color designation, surface preparation, mixing and reducing instructions, coverage, drying time, clean-up instructions, MSDS and VOC content. Include invoice statements showing quantities of each paint product. Submit to Owner upon request as a means to verify quantities suitable for coverage.
- C. Store and utilize paint in original containers bearing manufacturer's label for ease of identification. Do not put paint in containers bearing labels for other products.

- D. Store at ambient temperature between 45 degrees F and 90 degrees F. Store and mix material outside building.
- E. Take special safety precautions against hazards from toxic and flammable materials.
- F. Place paint and solvent contaminated cloths and materials, subject to spontaneous combustion, in containers and remove from job site each day.

1.9 FIELD CONDITIONS

- A. Environmental Requirements: Do not apply paints and coatings at surface and air temperatures below 50 degrees F, except as specified by this Section or as instructed or accepted by manufacturer.
- B. Weather: Do not apply exterior coatings when precipitation is predicted or appears imminent.
- C. Ventilation: Maintain continuous air exchange ventilation. Move moisture, odors and fumes from painting to outside of building.
- D. Illumination: Maintain lighting level of 50 foot candles measured at mid height at substrate surfaces.

1.10 WARRANTY

A. Manufacturer: Five (5) year materials warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. The following manufacturers are acceptable: Benjamin Moore, Kelly-Moore, Miller Paint Company, Rodda Paint, Cloverdale and Sherwin-Williams. Benjamin Moore products are specified as the basis of design.
- B. Substitution Requests: Submit for acceptance under provisions of Section 016000 Product Requirements.
 - Indicate that manufacturer will conform to specified Qualifications, including requirement for manufacturer to employ and maintain full time architectural product representatives, technical field representatives and testing equipment.
 - 2. Product/Label Analysis: Submit indicating pigments and vehicles in percentages by weight and composition breakdown of pigments and vehicles in percentages by weight.

2.2 PERFORMANCE CRITERIA

- A. Single Source Responsibility: Supply primers, intermediate and finish coats for each paint and coating system from a single manufacturer, except as otherwise specified.
- B. Surface Preparation: Conform to MPI Architectural Painting Specifications Manual, SSPC, manufacturer's instructions and provisions of this Section for work as needed to prepare substrates to be free of conditions that may impair adhesion and uniformity.
 - 1. Remove bond breakers, dust, foreign matter and surface irregularities.
 - 2. Prepare to prevent bleed-through of substrate material.
- C. Paint System Application: Conform to MPI Architectural Painting Specifications Manual and manufacturer's instructions.
 - 1. Paint Grade: Conform to Premium Grade, except as otherwise specified.
 - a. Minimum one (1) primer coat and two (2) finish coats, except as otherwise specified.
 - b. Additional coats as necessary to cover with no holidays or other surface imperfections.
 - 2. Dry film thickness (DFT) and wet film thickness (WFT), as instructed by manufacturer.

2.3 MATERIALS

- A. Painting and Coating Schedule: Refer to Schedule at end of this Section for products specified for specific finishes.
- B. Surfaces Not Scheduled for Paints and Coatings: Where unscheduled surfaces are discovered following Bid, assume premium commercial quality paint or coating, meeting or exceeding Approved Product List, and as instructed by manufacturer's technical representative. Submit to Owner for acceptance prior to beginning work.
- C. Coatings: Ready mixed, except catalyzed coatings. Process pigments to consistency for uniform and homogeneous coatings, good flow and brushing qualities, drying or curing free of streaks and sags.

2.4 GLOSS AND SHEEN LEVELS

A. Conform to Gloss and Sheen Levels as tested in accordance with ASTM D523, regardless of that stated by manufacturer product data and shown on paint containers.

GLOSS AND SHEEN LEVELS		GLOSS @ 60 DEGREES	SHEEN @ 85 DEGREES
Gloss Level 1	Matt or Flat	Maximum 5 Units	Maximum 10 Units
Gloss Level 2	Low Sheen	Maximum 10 Units	10 to 35 Units
Gloss Level 3	Eggshell	10 to 25 Units	10 to 35 Units
Gloss Level 4	Satin	20 to 35 Units	Minimum 35 Units
Gloss Level 5	Semi-Gloss	35 to 70 Units	(N/A)
Gloss Level 6	Gloss	70 to 85 Units	(N/A)
Gloss Level 7	High Gloss	More than 85 Units	(N/A)

2.5 FINISHES AND COLORS

- A. Field Painting Product Systems and Gloss Levels: As Schedules this Section.
- B. Paint and Stain Colors: Match paint colors at existing building from paint drawdown, as accepted by Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify conditions ready to receive work of this Section before beginning work.
- B. Arrange for adequate lighting, temporary heat, and ventilation.
- C. Maximum Moisture Content of Substrates: Conform to manufacturer's instructions and guidelines. Perform tests using commercial quality electronic moisture meter. Where exceeding following values, promptly notify Owner and obtain direction before beginning work.

3.2 MATERIALS TO BE FINISHED

- A. Prepare and finish surfaces of materials, except as specifically excluded or otherwise specified.
- B. Field paint exposed-to-view surfaces, whether or not indicated to receive coatings, except where specifically excluded by Contract Documents.

3.3 MATERIALS NOT TO BE FINISHED

- A. Refer to Finish Schedule for rooms or areas not required to be field painted.
- B. Metals: Brass, bronze, copper, stainless steel, pre-finished metal and plated metals other than galvanized metal, except as specifically indicated.
- C. Plastic laminate, melamine and other finished plastic surfacing.
- D. Roofing, masonry, stone and concrete, except as otherwise indicated.
- E. Glass and clear plastic, except as otherwise indicated.

- F. Substrates with specified factory-applied colored finishes and normally unfinished substrates:
 - 1. Includes: Door hardware, electrical switch plates, fabrics, tackboards, porcelain enameled metal fabrications and lighting fixtures.
 - 2. Exception: Wire mold and other normally prefinished items mounted on surfaces receiving coatings: Paint out to match and blend with field surface.
- G. Inaccessible materials permanently enclosed behind building construction and structural components.

3.4 SURFACE PREPARATION UNDER WORK OF OTHER SECTIONS

A. Field Substrate Preparation Specified Under Work of Related Sections: Crack free, finished, clean as needed to make substrates suitable for primers and finished coats specified for work of this Section, except minimal spot filling, spackling and other preparation normally performed by work of this Section.

3.5 SURFACE PREPARATION PROCEDURES

A. Conform to:

- 1. MPI Architectural Painting Specification Manual, Surface Preparation.
- 2. SSPC- Surface Preparation Procedures.
- 3. Manufacturer's instructions.
- 4. Contract Document provisions.

B. Mildew removal:

- 1. Do not use bleach to remove mold from carbon-based materials. These include paper, cellulous, wood, sucrose (sugar), gypsum board and materials that are considered food for mold.
- 2. Contact Owner for remediation method for mold contamination of carbon-based materials.
- 3. Proceed with methods to remove stains as specified for non-carbon based materials.

C. Gypsum Board Surfaces:

- 1. Repair and remove minor irregularities, contaminations, dust, and dirt.
- 2. Where surface defects appear after prime coating, repair defects under work of appropriate Section, and reprime over repaired areas.
- 3. Do not begin surface preparation on gypsum board and other gypsum board materials that have been saturated by water. Notify Owner.
- D. New Pre-Primed and Prefinished Metals: Solvent clean in accordance with SSPC-SP-1.
- E. Surfaces Not Specified by MPI, SSPC, or manufacturer's Instructions: Verify with Owner for surface preparation procedures.

3.6 RECOATING SURFACE PREPARATION

A. Prepare existing coated substrates as needed to make suitable for work of this Section. Proceed as for new work following initial preparation conforming to Architectural Painting Specification Manual, Surface Preparation, manufacturer's instructions and Contract Document provisions.

3.7 PROTECTION

- A. Take measures to protect surfaces not receiving work of this Section including protection from overspray, adjacent surfaces and downwind surfaces.
 - 1. Provide drop cloths, shields and protective equipment.
 - 2. Repair or replace damaged surfaces caused by failure to provide suitable protection.
- B. Remove or mask electrical outlets and switch plates, mechanical diffusers, escutcheons, registers, surface hardware, fittings, fastenings and other items not receiving coating system.
- C. Correct minor defects and clean substrate surfaces included under work of this Section.
- D. Remove coatings that exhibit surface defects or unsuitable surface adhesion.

3.8 APPLICATION

- A. Conform to manufacturer's instructions, Architectural Painting Specification Manual and provisions of Contract Documents.
- B. Conform to Premium Grade, including application of two (2) finish coats over prepared and primed substrates.
- C. Apply as many additional coats for complete coverage and for acceptable finished appearance, free of holidays and color irregularities.
- D. Back-roll, back-brush and perform other work as necessary to lay down gypsum board fuzz, push spray-applied coatings into surfaces, and to even out and make for smooth, uniform coated surfaces.
- E. Apply primer and each finish coat in slightly different hue as means to verify multiple coat coverage.
- F. Conform to manufacturer's instructions for wet film and dry film thickness of coatings.
 - 1. Verify wet film thickness (WFT) by use of wet film gage during application.
 - 2. Test dry film thickness (DFT) using Tooke or other accepted measuring device.

3.9 PATCHING

A. Repair surfaces damaged during construction activities. Spot repair and refinish as necessary for finished appearance prior to Substantial Completion and Owner occupancy.

3.10 REPLACEMENT OF HARDWARE AND MISCELLANEOUS ITEMS

- A. Reinstall items previously removed for painting, including hardware, electrical plates.
- B. Manufacturer's Field Services: Conduct field services by manufacturer's local senior technical field representative.
 - 1. Attend Pre-Construction Conference, view mockups, make intermittent site visits, make final site visit at project completion.
 - 2. Verify conformance to manufacturer's instructions and provisions of Contract Documents for products and procedures.
 - 3. Provide technical assistance to help achieve high quality results.
 - a. Verify mil thickness with wet film gauge, in selected locations.
 - b. Test surfaces with Tooke or approved dry film gauge, for total DFT in selected areas.
 - 4. Promptly notify Owner of suspected non-conforming work and other irregularities.

3.11 ADJUSTING

A. Take measures as necessary and as directed by Owner to repair, prepare and recoat systems not conforming to Contract Document provisions.

3.12 CLEANING

- A. As Work proceeds, promptly remove spilled and splattered paint and coating products so as not to damage surfaces.
- B. Maintain premises free from unnecessary accumulation of tools, equipment, surplus materials and debris.
- C. At conclusion of work, thoroughly clean paint and coatings from surfaces not designated to be painted.
 - 1. Do not scratch or damage surfaces.
 - 2. Verify chemical compatibility of cleaners to materials to be cleaned.
- D. Leave premises neat and clean; free from debris and residue from work of this Section.
- E. Do not dump paint, stains, chemicals and clean/wash painting equipment anywhere in the landscaping around the building, site or property, including the adjoining property.

3.13 INTERIOR PAINTING AND COATING SCHEDULE

- A. Interior Gypsum Board Primer:
 - 1. Acrylic Primer/Sealer:
 - a. Benjamin Moore, Sure Seal Multi-Purpose Latex Primer Sealer (027).
- B. Interior Ferrous Metal Primer:
 - 1. Acrylic or Alkyd Rust Inhibitive Metal Primer: Apply as shop primer coats under work of Section 081113 and as spot repair / field primer under work of this Section:
 - a. Benjamin Moore, Super Spec HP Acrylic Metal Primer, P04.
 - b. Color: Light gray.
- C. Interior Finish Coating:
 - 1. Two (2)-Coat Acrylic Finish:
 - a. Benjamin Moore Regal Select Waterborne Interior. Match finish to existing conditions.
 - 1) Walls: Flat or Eggshell.
 - 2) Trim: Semi-Gloss.
 - b. Color: Match existing.
- D. Interior Metal Paint Finish:
 - 1. Shop Primer Coat: Refer to This Section and Section 081113.
 - 2. Spot repair / Field Primer: As specified by this Section.
 - 3. Two-Coat, Acrylic Eggshell Finish (Gloss Level 3): 151 Light Industrial Coating, Interior, Water Based (MPI Gloss Level 3).
 - a. Benjamin Moore, Super Hide Latex Eggshell 286
 - b. Color: Match existing.

END OF SECTION

PART 1 GENERAL

1.1 SCOPE

- A. Contractor shall provide all services and materials to modernize (1) in-ground hydraulic, passenger elevator as described by the contract documents.
 - 1. General Conditions, Amendments to the General Conditions, Special Conditions, Instruction to Bidders, Division 1 and all addenda of these specifications are part of the Elevator Specifications.
 - 2. Applicable documents
 - a. Americans with Disabilities Act Accessibility Guidelines (ADAAG), and the equivalent Washington state codes, whichever are more stringent.
 - b. Washington State regulations, including the following:
 - Chapter 296-96 WAC, Safety Regulations and Fees for all elevators, dumbwaiters, escalators, and other conveyances. Within this section, this is referred to as the Elevator Safety Code. Any reference herein to the Elevator Safety Code includes the applicable provisions of this chapter of WAC.
 - ASME A17.1 Safety Code for Elevators and Escalators, latest edition as required by the local building code.
 - d. ASTM A167, Steel, Sheet Stainless.
 - e. ASTM A366, Steel, Sheet, Carbon, Cold Rolled, Commercial Quality.
 - f. AWS D1.1, Structural Welding Code Steel.
 - g. NFPA 70, National Electric Code.

3. Permits and codes

- All equipment and installation work shall comply with requirements of the Elevator Safety Code, and other applicable codes of the State of Washington, County and City.
- b. Give necessary notices, obtain licenses and permits, and pay fees and other costs, including making arrangements for all inspections and tests required by regulating agencies, in accordance with the General Conditions as amended, the Supplemental Conditions, and Division 1 of this specification.
- c. File necessary plans, prepare documents, and obtain necessary approval of governmental departments having jurisdiction and required certificates of inspection for work, in accordance with the General Conditions as amended, the Supplemental Conditions, and Division 1 of this Specification, and deliver these to the Owner before requesting acceptance and final payment for work.
- d. Contractor is not relieved from furnishing and installing work shown or specified which may be beyond requirements of ordinances, laws, regulations and codes.

1.2 CONSTRUCTION DRAWINGS

- A. Drawings are partly schematic in nature and do not attempt to show exact details.
 - The drawings show the best known location of existing equipment but do not attempt to show exact details.
 - 2. The Contractor shall verify exact distances between points shown on the drawings by actual measurements at the site.
 - 3. No extra will be allowed for differences between actual measurements and scaled measurements or stationing.
- B. Cutting and patching: Openings required in the exterior of the existing structure shall be made by drilling or cutting. Contractor shall provide all pipe sleeves, anchor plates, hanger supports, inserts, and bolts required for this work.
- C. Demolition: Remove existing elevator's ancillary equipment. Remove all equipment to be disposed of from the site.

- D. Standard products: Unless otherwise indicated, the equipment to be furnished under these specifications shall be the standard products of manufacturers regularly engaged in its production.
 - 1. Apparatus, equipment and systems furnished must be similar and equal with respect to quality, functional performance, capacity and efficiency.
 - Where the actual equipment furnished requires certain changes in pipe location, controls, electrical equipment and foundations, the Contractor shall coordinate such changes and submit them for approval.
- E. Submittals: Submit shop drawings for approval. They shall contain enough detailed information to determine that the equipment conforms to the requirements of this specification and not less than the following information:
 - Show location of machinery and controls in machine rooms, layout of the hoistway in plan and elevation and all other layout information and clearance dimensions required by the Elevator Safety Code.
 - 2. Arrange the elevator equipment in a neat and workman-like manner so that all valves, fittings, etc. are readily accessible.
 - 3. Submit layout drawings as required by WAC 296-96 to the authority having jurisdiction (AHJ).
 - 4. Submittals to the AHJ shall have all information pertinent to the installation to determine whether the installation complies with all applicable codes.
 - 5. Provide shop drawings and catalog cuts for all contractor-furnished material and equipment, including but not limited to jack, fixtures, power units, safety mechanisms and controllers. Motor data must include temperature rise ratings in a form that can readily be measured in the field after installation.
 - Complete information on motor, electrical services, controls, and all other coordination information.
- F. Wiring diagrams: Provide complete and legible wiring and single line diagrams showing the electrical connections, functions, and sequence of operation of all apparatus connected with the elevators, both in the machine room and in the hoistway.
- G. Operations and maintenance manuals:
 - 1. Furnish an operation and maintenance manual covering the stipulated mechanical systems and equipment. The manual shall comply with all requirements indicated in the Project Closeout section of the specifications. Furnish one complete draft manual for Owner review not later than two weeks after issue of the permanent state operating certificate.
 - 2. The manual shall be complete in all respects for all equipment, controls, accessories and appurtenances stipulated. Include as a minimum the following:
 - a. Drawing or diagram showing equipment location.
 - b. The original factory Adjuster's Manual used to adjust the specific installation.
 - c. Maintenance instructions listing routine maintenance procedures, possible breakdowns and repairs, and troubleshooting guides for all elevator equipment. Include oil flow schematic diagrams and adjusting instructions for hydraulic valves and pump. Include cross section of seals and retainer and procedures for packing hydraulic jack. Provide specification for hydraulic oil.
 - d. Preventative maintenance schedule.
 - e. Lubrication schedule including type, grade, temperature, range and frequency.
 - f. Safety precautions, including diagrams and illustrations as needed for clarity.
 - g. Test procedures.
 - h. Parts list, with manufacturers' names and catalog numbers. Lists shall be complete for the materials installed.
 - i. Serial number of each major piece of equipment.
 - Service organizations and sources of spare parts with names, addresses, and telephone numbers.
 - k. Provide all service and field technical bulletins or manuals normally supplied to the factory Adjuster including video tapes or other media.

1.3 MATERIAL AND EQUIPMENT

- A. General: Material and equipment shall be new, of the best quality used for the purposes in good commercial practice, the best of their respective kinds, and as specified. Equipment shall be standard products of reputable manufacturers. Where two or more units of the same class of equipment are required, those units shall be products of a single manufacturer. Furnish equipment complete with all parts necessary for proper operation. Material and equipment shall be cleaned, free of corrosion, and selected to provide quiet operation.
- B. Type capacity, size and rating of all equipment shall be as indicated on the Drawings, and/or as specified in this section.
- C. Delivery and storage: Material and equipment shall be suitably protected against corrosion, dirt, mechanical damage, weather and chemical damage before and during installation as recommended by the manufacturer and as approved by the Owner. Replace defective and damaged equipment and materials.

1.4 ELEVATOR-ELECTRICAL

- A. Provide electrical components of the elevator equipment and systems, including motors, motor starters, controllers, control instruments, switches, conduit, wire, and relays under this Division as specified in this section and as necessary for complete and operable systems. Furnish interconnecting wiring for components of equipment as an integral part of the equipment. Interconnecting conduit and wiring connecting such assemblies shall conform with Division 26.
- B. Electrical equipment and wiring shall conform to applicable paragraphs of Electrical Specifications and National Electrical Code.
- C. For equipment with electrical components, provide UL label on each component for which published standards exist.

1.5 PAINTING

A. All exposed metal work furnished in these specifications, except as otherwise specified, shall be properly painted after installation.

1.6 MAINTENANCE

- A. Provide maintenance service of the equipment for a period of twelve months after substantial completion.
 - This service shall include regular systematic examinations of the installation by competent and trained employees of this Contractor; and shall include all necessary adjustments, lubrication, cleaning, supplies and parts to keep this equipment in operation, except such parts made necessary by misuse, accidents or negligence not caused by this Contractor.
 - 2. Provide written reports of each service call, whether routine or emergency, describing services performed.
 - 3. Basic service work shall be performed during regular working hours of regular working days. Emergency callback service shall be available on a 24-hour, 7-day basis. Response time shall be 2 hours maximum.
- B. The final elevator installation shall be maintainable by a trained elevator mechanic without the need to purchase or lease additional tools or software to diagnose problems and/or change operational parameters of the elevator system.
 - All tools and software necessary to diagnose problems and/or change operational parameters of the elevator system shall be retained by the Owner and shall function for the life of the installed equipment.
 - 2. Hardware and software needed for diagnosis and operating parameter modification shall be products offered as standard by the manufacturer of the control system.
 - 3. No substitutions of proprietary circuit boards, EPROMS, hardware locks, software passwords or coding shall be allowed.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION ISSAQUAH, WASHINGTON

SECTION 142400 HYDRAULIC PASSENGER ELEVATOR

4. As a condition of the installation, the original equipment manufacturer shall guarantee to sell and deliver, on a timely basis, replacement parts and software updates to the Owner and to a third-party elevator maintenance company at a fair market price.

1.7 WARRANTY

A. Warrant the completed elevator(s) in accordance with Washington State law and regulation, but in no case less than complete coverage of parts and labor for one year after issue, by the State, of the permanent operating permit.

PART 2 PRODUCTS

2.1 GENERAL

A. Description and Performance: Installation will be in accordance with the following details and consist of:

	Elevator #1
Description	Modernized In-ground Hydraulic Elevator
Load (capacity), lbs.	3500
Car speed, fpm	85 (verify)
Leveling	+/- 1/4 inch with any load
Operation	Passenger Elevators; Selective Collective Automatic as normal mode, Independent Service selectable by switch.
Supervisory Control	Solid state microprocessor based system, non-proprietary
Horse Power	30
Power supply	Primary power to be 208 volts, 3 phase, 60 hertz, (coordinate final power with Electrical)
Rise, feet	Per Architectural
Number of stops	3
Number of openings	3 front (existing) 0 rear
Lighting supply	120 volts, 1 phase, 60 hertz
Cab Height	8'-0" Nominal

Clear inside car	4'11" wide x 7'-4" deep (verify)
Type of doors for car and hoistway	Two speed, side opening
Size of opening for car and hoistway doors	42" wide x 84" high

2.2 GENERAL MATERIALS

A. Where stainless steel is specified, it shall be corrosion resisting steel, Type 316 with 150-grit finish on exposed surfaces. Stainless steel shall have the grain of belting in the direction of the longest dimension. All surfaces shall be smooth and without waves. Bright, mirror-like finish for stainless steel is not acceptable because of the difficulty with cleaning and repair.

B. Steel:

- 1. Sheet Steel (Furniture Steel for Exposed Work): Stretcher-leveled, cold-rolled, commercial quality carbon steel, complying with ASTM A1008, matte finish.
- 2. Sheet Steel (for Unexposed Work): Hot-rolled, commercial quality carbon steel, pickled and oiled, complying with ASTM A568 and A1011.
- 3. Structural Steel Shapes and Plates: ASTM A36.

2.3 ELEVATOR MACHINERY - PROVIDE NEW

A. Elevator shall have a positive displacement hydraulic pump driven by an electric motor and operating a hydraulic cylinder with direct plunger. The machine and all its components shall meet the requirements of the Elevator Safety Code.

2.4 POWER UNIT - PROVIDE NEW

- A. Elevator shall include a submersible power unit consisting of the motor, pump, drive assembly, oil control unit, oil reservoir, and oil drip pan, all mounted on a structural steel base and supports. The power unit shall have the capability of delivering oil pressure and volume to lift the assembled elevator with rated load at rated speed. Volume of the oil reservoir shall be sufficient to lift its elevator through the rise specified, plus normal overtravel. The power unit shall have a muffler in the discharge oil line near the pump and an enclosure of steel panels lined with sound-absorbing material.
 - 1. Manufacturers approved for bidding: Elevator Equipment Corporation, Minnesota Elevator, Canton Elevator, Unitec.
- B. Maximum sound generation of 80 dbA within the range of 20 Hz to 20 KHz, measured within the machine room.
- C. Provide vibration isolation mounts capable of minimum 0.25" deflection.

2.5 HYDRAULIC PUMP - PROVIDE NEW

A. The pump shall be a submerged self-contained unit mounted inside the oil reservoir. The pump shall be designed and manufactured for oil-hydraulic elevator service. It shall provide steady discharge with minimum pulsations, and its output shall not vary more than 10% between no-load and full-load conditions of the elevator car.

2.6 PUMP MOTOR - PROVIDE NEW

A. The pump motor shall be submersible type, designed for oil-hydraulic elevator service, of standard manufacturer, and of duty rating to provide the service specified herein.

2.7 OIL CONTROL UNIT - PROVIDE NEW

- A. The oil control unit shall include the necessary valves all built into a single housing; welded manifolds with separate valves for each function will not be accepted. All adjustments shall be accessible and shall be made without removing the assembly from the oil line.
 - 1. Relief valve shall be externally adjustable and shall be capable of bypassing the total oil flow without increasing back pressure more than 50% above working pressure.
 - 2. Up start and stop valve shall be externally adjustable, and designed to bypass oil flow during start and stop of the motor pump assembly. Valve shall close slowly, insuring smooth up starts and stops.
 - 3. Check valve shall be designed to close quietly without permitting any perceptible reverse flow.
 - 4. Lowering valve and leveling valve shall be externally adjustable for drop-away speed, lowering speed, leveling speed and stopping speed to insure smooth down starts and stops. The leveling valve shall be designed to level the car to the floor in the direction the car is traveling when slowdown is initiated.

2.8 HYDRAULIC JACK – PROVIDE NEW

- A. Replace the existing hydraulic jack assembly with a new hydraulic jack assembly in accordance with ASME A17.1.
 - 1. Furnish tools, labor, material and work procedures to safely remove the existing hydraulic jack assembly and spring buffer assemblies.
 - 2. Contractor or subcontractor shall furnish all tools, labor, material and work procedures to clean out the existing cylinder hole. Cleaning shall be by vacuum unit.
 - 3. Furnish and install a protective casing made from standard-weight steel pipe with continuous welded watertight connections to line the jack hole.
 - 4. Furnish and install a new hydraulic jack assembly in accordance with ASME A17.1. The jack assembly shall be of sufficient size to lift the existing gross load at the specified rated speed to the existing height and shall be factory tested to ensure adequate strength and freedom from leakage. No brittle material, such as gray cast iron, shall be used in the jack construction.
 - 5. The jack unit shall consist of the following parts: a plunger of heavy seamless steel tubing accurately turned and polished; a stop ring electrically welded to the plunger to positively prevent plunger leaving its cylinder; an internal Babbitt-lined guide bearing; a packing seal that provides positive sealing with low friction; a drip ring around cylinder top; a cylinder made of steel pipe that is primed, taped and provided with a pipe connection and air bleeder. Weld brackets to the cylinder for supporting the jack on pit channels.
 - 6. Contractor will be required to provide necessary hoisting of the new components into place.

2.9 PIPE AND FITTINGS - PROVIDE NEW

- A. Provide pipe and fittings of the size, type and weight recommended by the manufacturer. Provide two manual gate or ball valves in line for elevator, one adjacent to pump and one adjacent to the jack. All connections shall be welded or bolted flange with welded flanges.
- B. All piping supports to be acoustically isolated with neoprene hangers or mounts to prevent transmission of structural borne noise, Provide isolator capable of minimum 0.25" deflection.
- C. Safety Valve: Provide a safety (rupture) valve in oil hydraulic line in accordance with Rule 8.4.11.12. Pipe Supports provided in accordance with Rule 8.4.11.13 of the Elevator Safety Code shall include acoustical fittings, Hubbard Enterprises "Holdrite Silencer" system or approved equal.

2.10 BUFFERS – PROVIDE NEW

A. Spring buffers and channel of appropriate size shall be fastened to the pit floor.

2.11 GUIDE RAILS - EXISTING TO REMAIN (PROVIDE NEW FISHPLATES AND BACKING)

- A. Steel guide rails shall be reused in place.
 - 1. Clean, realign and tighten existing guide rails.

B. Provide rail backing or fish plates as required to comply with current requirements of the Elevator Safety Code.

2.12 GUIDE SHOES - PROVIDE NEW

A. Replace existing slide guides with spring isolated roller guides. Basis of design manufacturer: Elsco Model B or approved substitution.

2.13 LOW OIL INDICATOR - PROVIDE NEW

A. Provide indicator light on controller to indicate that reservoir is low on oil.

2.14 HYDRAULIC OIL - PROVIDE NEW

A. Provide biodegradable hydraulic fluid that meets the requirements of the elevator manufacturer with minimum flammability.

2.15 ELEVATOR CAR

- A. Car Frame, Platform existing to remain.
- B. Car Enclosure retain existing enclosure, provide new finishes.
 - 1. Car Front and Header: Car Front and Header: Re-clad existing return panel, strike and transom for a stainless steel finish.
 - 2. Car Top: Finish shall be matte white painted.
 - 3. Provide an access hatch with alarm sensor as required by the Elevator Safety Code.
 - 4. Handrails on Sides and Rear: 1 1/2-inch round handrails stainless steel shall be provided on the two sides and at the rear of the car enclosure.
 - 5. Wall and Floor Finish:
 - a. Furnish and install stainless steel and laminate interiors of the style offered as standard by the car manufacturer. Color to be selected by Owner during construction. Ceiling/Cab: Stainless Steel Wall Panel: Panolam WC421 Oiled Cherry
 - Flooring: To be Rubber-Cal "Coin-Grip" PVC flooring or approved equal. Color to be selected by Owner during construction .Color: Rubber-Cal Coin Grip PVC Dark Gray
 - c. Bench: Refer to Architectural.
 - 6. Protective Pad Hooks and Pads: Protective pad hooks of stainless steel and fire retardant protective pads of quilted canvas duck shall be provided at all walls except the entrance walls.
 - 7. Exhaust Fan: Provide new two-speed exhaust fan. Nylube X12F9, or approved substitution.
 - 8. Car Operating Station, General: The main car control in car shall contain the devices required for specific operation mounted in an applied return panel. Applied return shall have a brushed stainless steel finish. The main car operating panel shall be mounted in the return and comply with handicap requirements. Pushbuttons that illuminate using long lasting LED's shall be included for each floor served, and emergency buttons and switches shall be provided per code.
 - a. An access-controlled panel segment shall contain light switch, utility outlet, fan switch, and switch for operating mode selection.
 - b. Car Position and Direction Indicators: Provide LED car position and direction indicator integrated with the main operating panel.
 - 9. Hands Free Phone: A security telephone shall be flush mounted within the primary car operating panel.
 - a. Necessary wires shall be included in the car traveling cables.

10. Interior Car Lighting:

a. The lighting shall be selected during submittals. The bid shall include resources to provide multiple recessed LED fixtures in a stainless steel ceiling. Refer to contract drawings for general ceiling panel layout.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION ISSAQUAH, WASHINGTON HYDRAU

SECTION 142400 HYDRAULIC PASSENGER ELEVATOR

- 11. Emergency Car Lighting: A Nylube Products Model EL-SS emergency power unit shall be provided to illuminate the elevator car and provide current to the alarm bell in the event of power failure.
- 12. Exterior Car Lighting and Power: Provide a work light with switch and a duplex GFCI type utility outlet on the car top. The light shall be located to illuminate the cartop operating station, the hoistway door mechanisms, the car locator mechanism, and limit switches.
- 13. Car Top Inspection: Provide a car top inspection station with an "Auto-Inspection" switch, an "emergency stop" switch, and constant pressure "up and down" direction and safety buttons to make the normal operating devices inoperative. The station will give the inspector complete control of the elevator. The car top inspection station shall be mounted in the door operator assembly.
- 14. Alarm Bell: Provide a Nylube Model ELB-6 alarm bell or approved equal.

C. Car Doors (Provide New)

- 1. The car entrance shall be provided with doors of minimum 16 gauge facing into the car stainless steel, extending around the leading door edges, and suitably reinforced.
 - a. The doors shall have astragals designed for easy replacement.
 - Provide bottom of doors with removable gibs which run in the sill slots with minimum clearance.
 - c. Zone restrictors, designed to prevent car doors from being opened when the car is outside a landing zone, shall be included in all car doors.

2.16 DOOR OPERATOR:

- A. Closed-loop, microprocessor controlled motor-driven door operator, with adjustable torque limits. Door movements shall be electrically cushioned at both limits of travel and the door operating mechanism shall be arranged for manual operation in event of power failure. Doors shall automatically open when the car arrives at the landing and automatically close after an adjustable time interval or when the car is dispatched to another landing. GAL MOVFR or accepted equal.
 - 1. No Un-Necessary Door Operation: The car door shall open only if the car is stopping for a car or hall call, answering a car or hall call at the present position or selected as a dispatch car.
 - 2. Door Open Time Saver: If a car is stopping in response to a car call assignment only (no coincident hall call), the current door hold open time is changed to a shorter field programmable time when the electronic door protection device is activated.
 - 3. Double Door Operation: When a car stops at a landing with concurrent up and down hall calls, no car calls, and no other hall call assignments, the car door opens to answer the hall call in the direction of the car's current travel. If an onward car call is not registered before the door closes to within 6 inches of fully closed, the travel will reverse and the door will reopen to answer the other call.
 - 4. Nudging Operation: The doors shall remain open as long as the electronic detector senses the presence of a passenger or object in the door opening. If door closing is prevented for a field programmable time, a buzzer will sound. When the obstruction is removed, the door will begin to close at reduced speed. If the infra-red door protection system detects a person or object while closing on nudging, the doors will stop and resume closing only after the obstruction has been removed.
 - 5. Limited Door Reversal: If the doors are closing and the infra-red beam(s) is interrupted, the doors will reverse and reopen partially. After the obstruction is cleared, the doors will begin to close
 - 6. Door Open Watchdog: If the doors are opening, but do not fully open after a field adjustable time, the doors will recycle closed then attempt to open six times to try and correct the fault.
- B. Door Edge Protective Device (Provide new): Provide each passenger car door with a Janus Elevator Products Panachrome 3D, or approved substitution, infrared type reopening device extending the full height. Provide voice annunciation feature.
- C. Toe Guard (Provide New): Provide toe guards below each car sill, extending 48in. below the car finished floor. Exception: If pit depth does not permit 48in., provide the maximum practical depth. Toe guards shall have manufacturer's standard enamel finish.

- D. Traveling Cables: A traveling cable shall be provided for electrical connections between each car and its hoistway.
 - Each cable shall have adequate conductor (+15% minimum spares) capacity for all control, communication and lighting functions specified herein. Provide two spare lighting/utility circuits and four spare two-wire communications circuits and one spare coaxial cable assembly in each cable.
 - 2. Each cable shall have flame retarding and moisture resisting outer cover. Cables shall be flexible and shall be suitably suspended to relieve strains in the individual conductors.
 - 3. Terminate all conductors on a terminal board with permanent identification matching that used in schematic and wiring diagrams.

2.17 POWER AND CONTROL DEVICES

- A. Hydraulic Elevators Solid state logic control: Provide a reduced voltage motor starter and solid state logic controller with voltage and current capability ample to operate the elevator at the specified conditions. Basis of design: MCE Motion 2000, or approved equal by ECC or VMI.
 - 1. Solid state power control: Provide a solid state logic controller to operate the pump motor, valves, and other electromechanical devices.
 - a. The controller shall include interfacing pilot electromechanical devices as required for accepting the necessary elevator hoistway switches and operating switches.
 - b. These include, as a minimum, terminal slowdown devices, over-travel limit switches, solid state magnetic leveling devices, inspection operating pushbuttons, and emergency stop switch.
 - 2. Microprocessor elevator logic control: Accomplish the operation utilizing microprocessor computer logic control.
 - The elevator control program shall be contained in nonvolatile, programmable, read-only memory.
 - b. Construct the control such that future alterations in elevator operation, including changes of operating parameters (including but not limited to speed, acceleration, jerk, preopening, door speed, door dwell, floor counts for leveling, and car zoning), can readily be made as part of normal maintenance and service.
 - c. If a separate, detachable device is required, it shall be furnished.
 - Monitor and control safety circuits by the programmable logic control with redundant protection.
 - e. Contain the microprocessor elevator logic control in a NEMA 1 cabinet.
 - 3. Fault diagnosis: Provide capability to diagnose faults to the level of individual circuit boards and individual discreet major components for both the solid state power controller and the elevator logic controller. (Capability to diagnose faults within an individual circuit board is not required.)
 - a. If fault diagnosis requires a separate, detachable device, it shall be furnished by the installing contractor and retained by the owner.
 - 4. Automatic Light and Fan shut down: The control system shall evaluate the system activity and automatically turn off the cab lighting and ventilation fan during periods of inactivity. The settings shall be field programmable.
- B. Battery Lowering Device: Provide battery power and capacity to provide the capability of emergency power operation as follows:
 - 1. Upon loss of normal building power, the elevator shall automatically travel to the lowest landing, open its doors and shutdown until return to normal power occurs.
- C. Firefighters service: Provide all elevator control functions, car operating devices, and hall operating devices necessary for "firefighters service - automatic elevators" as required by the Elevator Safety Code.
 - 1. Coordinate primary and alternate levels with the local fire marshal. Provide statement on the shop drawings stating what the fire marshal's preference is.

- 2. Provide a key box for each recall station and for each elevator machine room door.
- D. Terminal limit switches: Provide terminal limit switches in the hoistway designed to automatically stop the car at terminal landings. Design the final hoistway limit switches to automatically cut off the power and apply the brake, should the car travel beyond either terminal landing.
- E. Automatic Leveling Device: Hydraulic elevator leveling system shall utilize an absolute position multi-turn encoder to minimize the stabilized leveling. System shall adapt slowdown distances to the current load in the elevator and compensate for cold oil conditions. VMI Reflex or approved substitution.

2.18 ENTRANCES

- A. Hoistway Entrances (Existing doors to remain):
 - Hoistway doors are existing to remain. Hoistway doors and entrance jambs to be re-painted by others.
 - 2. Provide new pickup rollers and interlocks.
 - 3. Floor Identification Pads: Provide door jamb pads at each floor. Jamb pads shall comply with Americans with Disabilities Act (ADA) requirements.
- B. Fascia Plates Existing to Remain.
- C. Landing Sills Existing to Remain.
 - 1. Clean existing sills to provide like new appearance.
- D. Door Hangers and Tracks (Provide new):
 - 1. Tracks shall be of bar steel with the working surface contoured to match the sheaves.
 - 2. Design the hangers for power operation and have provisions for vertical and lateral adjustment.
 - 3. Design hangers for two-point suspension of the door panel.
 - 4. Hanger sheaves shall be polyurethane with pre-lubricated and sealed bearings.
- E. Dust Cover (Provide New):
 - 1. Provide dust covers for tracks, hangers and sheaves, fabricated from 14-gauge steel, at each landing.
 - 2. Dust covers shall have manufacturer's standard enamel finish.
- F. Finishes: Structural members and other components for which finish is not otherwise specified shall have prime coat finish.
- G. Hall Buttons:
 - 1. Hall Stations, General: Vandal resistant buttons with center jewels which illuminate to indicate that a call has been registered at that floor for the indicated direction. Each button shall be provided with an internal automatic stop to prevent damage of switches that register the call. Provide 1 set of pushbutton risers. All fixtures shall be vandal resistant type.
 - a. An LED position indicator for each elevator shall be integrated into the hall stations at each landing.
 - b. Phase 1 firefighter's service key switch, with instructions, shall be incorporated into the hall station at the designated level.
- H. Hall Direction Lanterns and Sound Signals:
 - 1. Vertical hall lanterns shall be provided at each landing, located as indicated in the contract drawings. The lanterns, when illuminated, will indicate the intended direction of travel. The lantern will illuminate and a signal will sound when the car arrives at a floor where it will stop. The lanterns shall remain illuminated until the door(s) begin to close.
- I. Intercom: Provide means of communication between primary recall landing and elevator cab. J Fillips Everclear or approved equal.
- J. Hoistway Access Switches: Existing to Remain.

2.19 PIT AND MACHINE ROOM

- A. Emergency Stop Switch: Remove the existing emergency stop switch and provide new stop switch as required by code near the pit ladder installation. Switch shall meet the requirements of the Elevator Safety Code and shall be accessible from the pit access opening. The stop switch may be reused if it meets current code.
- B. Communication: Provide means of communicating between remote elevator machine room and cab.
- C. Pit Ladder: Remove the existing pit ladder and provide a pit ladder that meets the requirements of the Elevator Safety Code.
- D. Fire Extinguisher: Provide and mount a fire extinguisher in the elevator machine room. The fire extinguisher shall meet the requirements of the Elevator Safety Code.

PART 3 EXECUTION

3.1 INSTALLATION OF ELEVATOR SYSTEMS

- A. General: Comply with manufacturer's instructions and the Elevator Safety Code for work required during installation.
- B. Before beginning the installation, examine the hoistway and machine room to verify conditions and provide written notice of any conditions which would substantially hinder or prevent proper execution of the work. Do not proceed with the installation until the cited conditions have been corrected.
- C. Pre-installation Meeting: Prior to installation of any elevator equipment, hold a meeting of Contractor, Elevator Subcontractor, and Owner to review installation approach and identify any special circumstances pertaining to this installation.

D. Rails

- 1. Install rail brackets as needed to meet the requirements of the Elevator Safety Code.
- 2. Align rails plumb and accurately centered for elevator car position and travel.

E. Jack

- 1. Install the jack in a hole excavated, cased and lined to accommodate it.
 - a. Contractor shall provide all tools, labor, material and work procedures to fully protect all building walls, floors, and finishes from damage during the performance of the work.
 - b. Casing shall be steel, not less than ¼-inch in thickness, and with interior diameter not less than 8 inches larger than the outside diameter of the wrapped jack cylinder.
 - c. Prior to insertion of the cylinder, line the casing with plastic in such a manner as to prevent ground contamination with leaking hydraulic fluid. If the cylinder is shipped in sections, wrap joint areas with triple fiberglass sealed with epoxy resin prior to insertion.
 - d. Install cylinder plumb and true with the hoistway. Following installation, backfill between the liner and the jack with clean, dry, salt-free sand in such a manner that alignment of the jack is not disturbed.
 - e. Contractor shall provide an active smoke control system for use during burning (torch) or welding operations. An active smoke control system is defined as a properly sized exhaust fan that utilizes a temporary duct to exhaust contaminated air or similar device.
 - f. If manufacturer requires the cylinder to be welded, a certified welder shall perform the welding. Welding shall be completed following the manufacturer's recommended welding and installation procedures. These specifications and procedures shall be provided with the pre-manufacturing submittals within the Project submittal package prior to the Contractor performing any welding.
 - g. Contractor or subcontractor shall properly remove and dispose of all existing oil and soil spoils in an enclosed container or by a truck-mounted collection system. All removed soil spoils and oil shall be disposed of at a licensed Pollution Control Agency site and a copy of the disposal documents shall be provided to the Owner.
 - h. Contractor will be responsible to adjust and test the elevator to the satisfaction of the State Inspector prior to returning it to passenger use.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION ISSAQUAH, WASHINGTON HY

SECTION 142400 HYDRAULIC PASSENGER ELEVATOR

 The Owner and Elevator Maintenance Superintendent, shall be given prior notice of the arrival of jack at the job site. Give them ample opportunity to inspect jack before it is installed.

F. Doors

- 1. Adjust doors as required to provide smooth operation under normal conditions and to provide reliable operation under pressurized-hoistway conditions.
- G. Welded Construction: Provide welded connections for installation of elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustment, inspection, maintenance and replacement of worn parts.
 - 1. Comply with standards of AWS D1.1 for workmanship and for qualifications of welding operators.
- H. Electrical Work: All work shall conform to the requirements of Division 26 and the KCHA Electrical Standards. Requirements specific to elevators include:
 - Mark each component, including but not limited to relays, switches, timers, fuses and overload devices, with permanent identification that corresponds with the nomenclature of the wiring diagrams and the operations and maintenance manuals specified in paragraphs 1.02.F and 1.02.H of this section.
 - 2. Terminate all field wiring at control cabinet on terminal strips suitable for the use. Field wiring shall not terminate on the studs of relays or other devices and equipment.
- I. Coordination: Coordinate elevator work with work of other trades for proper time and sequence to avoid construction delays.
 - 1. Use benchmarks, lines and levels to ensure dimensional coordination of the work.
 - 2. Coordinate installation of hoistway entrances with installation of elevator guide rails, for accurate alignment of entrances with cars.
 - 3. Where possible, delay final adjustment of sills and doors until car is operable in shaft.
 - 4. Reduce clearances to minimum, safe, workable dimension at each landing.
- J. Sound Isolation: Mount rotating and vibrating elevator equipment and components on vibrationabsorption mounts, designed to effectively prevent transmission of vibrations to structure, and thereby eliminate sources of structure-borne noise from elevator system.
- K. Lubrication: Lubricate operating parts of systems, including ropes, if any, as recommended by manufacturers.

3.2 FIELD QUALITY CONTROL

- A. Compliance Testing: Upon nominal completion of elevator installation, and before permitting use of elevator (either temporary or permanent), perform acceptance tests as required and recommended by Code and governing regulations or agencies.
 - 1. Advise Contractor, Owner, Consultant, and inspection departments of governing agencies, in advance, of dates and times tests are to be performed on elevators.
 - 2. Advise Contractor, Owner, and Consultant, in advance, of dates and times for inspections by governing agencies.
- B. Acceptance Tests: Conduct operational test of car within 2 weeks of issue of the permanent operating certificate. Schedule an Owner's Representative observer with not less than 1 weeks' notice.
 - 1. Running test: Load the elevator to its rated capacity and operate continuously for 30 minutes over its full travel distance, stopping at each level and proceeding immediately to the next.
 - a. Record temperature rise of motor during 30-minute test period.
 - b. Record speed up and down and leveling relative to landing sills at the end of the period.
 - c. Requirements are as follows:
 - 1) Motor temperature rise within manufacturer's tolerances.
 - 2) Speed within 10% of specified speed.

- 3) Leveling within $\pm \frac{1}{2}$ inch. Record failures of elevator to perform as required.
- C. Protection: At time of final completion of elevator work (or portion thereof), provide suitable protective coverings, barriers, devices, signs or such other methods or procedures to protect elevator work from damage or deterioration. Maintain protective measures throughout remainder of construction period. Repair or replace, to the Owner's satisfaction, any components worn significantly or damaged before the Owner obtains beneficial use.

3.3 INSTRUCTION AND MAINTENANCE

- A. Instruct Owner's personnel in proper use, operations and maintenance of elevator.
 - 1. Instruction shall be directed to an audience of building managers.
 - 2. Review emergency provisions, including emergency access and procedures to be followed at time of failure in operation.
- B. Provide table(s) of floor locator settings from the final adjustment, including acceleration and deceleration settings.

3.4 CONDITIONS PRECEDENT TO FINAL ACCEPTANCE

- A. Instructions to operators: Instruction of the designated employees of the Owner in the operation and care of equipment and systems shall have been completed.
- B. Code compliance: All code compliance tests shall have been performed and acceptance certified by the authorities having jurisdiction and permanent elevator operating permit issued to the Owner.
- Acceptance tests: All acceptance tests shall have been completed and compliance certified by the Consultant.
- D. Submittal of maintenance manuals: All manuals shall have been submitted as provided in Section 1.02 and approved by the Owner.
- E. Submittal of construction record drawings: Construction drawings of the work shall have been marked to show changes and actual installation conditions, sufficient to form a complete record for Owner's purposes. Give particular attention to work which will be concealed and difficult to measure and record at a later date, particularly items which may require servicing or replacement during the life of the projects, such as valves, etc.
- F. Final check: Make a final check of elevator operation, with Owner's personnel present and just prior to date of substantial completion to determine that control systems and operating devices are functioning properly. Any and all damage and/or significant wear shall have been repaired.
- G. Cleaning: The work site shall be clean. Clear away all debris, surplus materials, etc., resulting from work or operations, leaving the job and equipment furnished in a clean, first-class condition.
- H. Punchlist: All items on the punchlist shall be completed to the satisfaction of the Owner.

END OF SECTION

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 230500 ISSAQUAH, WASHINGTON BASIC MECHANICAL REQUIREMENTS

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Work includes the following: Provide all materials, equipment, labor, supervision, tools and items necessary for the construction, installation, connection, testing and operation of all mechanical work for this project.
- B. For Closeout Procedures also see Division 1. In case of conflict the most stringent specification as determined by the Project Representative applies.

1.2 DEFINITIONS AND ABBREVIATIONS

- A. The word "provide", as used in these specifications, means "furnish and install".
- B. The word "accepted", as used in these specifications, means the acceptance of the Owner.
- C. The word "Contractor", as used in these specifications, means the Mechanical Subcontractor, his employees and subcontractors. Other contractors shall be referred to by specific trade.

D. Abbreviations:

ANSI American National Standards Institute

ASHRAE American Society of Heating, Refrigerating & Air Conditioning Engineers

ASME American Society of Mechanical Engineers
ASTM American Society for Testing and Materials

AWS American Welding Society

F Fahrenheit

FM Factory Mutual Engineering Corporation

HI Hydraulic Institute

IBC International Building Code
IMC International Mechanical Code

MSS Manufacturers' Standardization Society of the Valve and Fittings Industry, Inc.

NEC National Electric Code

NEMA National Electrical Manufacturer's Association

NFPA National Fire Protection Association

OSHA Occupational Safety and Health Administration

Product Materials and Equipment Provide Furnish and Install psi Pounds per square inch

psig Pounds per square inch gauge pressure

SMACNA Sheet Metal and Air-Conditioning Contractors' National Association

UL Underwriters' Laboratories, Inc.

V Volts

UPC Uniform Plumbing Code

WAC Washington Administrative Code WSEC Washington State Energy Code

WISHA Washington Industrial Safety & Health Act

- Reference also Division 1 for additional acronyms and for additional definitions and explanations
 of terms.
- 2. Some of these abbreviations may not be used. All other abbreviations shall have the definition commonly associated with them by the trade or industry. Confirm the meaning of any unclear or unknown definitions with the Technical Representative before proceeding with any work.

1.3 PLANS AND SPECIFICATIONS

A. The mechanical performance specification drawings and specifications are intended to schematically describe the scope of all mechanical work, unless otherwise shown. Provide all materials which are necessary for the proper completion of the installation or operation of the equipment.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 230500 ISSAQUAH, WASHINGTON BASIC MECHANICAL REQUIREMENTS

B. Any questions occurring during bidding or construction shall be resolved by direction in writing from the Owner. Any issues not so resolved or any conflicts shall result with the Mechanical Subcontractor bidding, furnishing and installing the most stringent condition. No exceptions.

1.4 LAW AND ORDINANCES

A. General

- 1. All mechanical work specified under this contract shall be in strict accordance with the latest rules and regulations of all applicable codes.
- Mechanical Contractor is not relieved from furnishing and installing work shown or specified
 which may be beyond requirements of ordinances, laws, regulations, and codes. This work shall
 be included within the construction contract.

B. Approval

1. File necessary plans, prepare documents and obtain necessary approval of governmental departments having jurisdiction and required certificates of inspection for work and deliver same to Project Manager before requesting acceptance and final payment for work.

C. Permits, Certificates and Taxes

 The Mechanical Subcontractor shall procure and pay for all the necessary permits, certificates, and taxes for all work as required in the General Conditions. In addition, the Mechanical Contractor shall perform all ordinance and performance tests in the presence of the Project Manager, and shall be responsible for advance notification. Submit copies of signed and accepted permits to the Project Manager.

1.5 SAFETY AND PROTECTION

- A. Safety Measures: The Engineer has not been retained to provide design and construction services relating to the Mechanical Subcontractor's safety precautions, or means, methods, techniques, sequences or procedures required for the Mechanical Subcontractor to perform his work. The Mechanical Subcontractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work.
- B. Head Protection: Where pipe hangers, equipment support angles, etc., are exposed in walkways, or in access ways for any maintenance, cover all such potentially injurious protrusions less than 7' 2" above the floor with padding; secure and permanently fasten, and finish to match adjacent finishes.

1.6 TESTING AND DEMONSTRATION

A. Demonstrate that all equipment operates as indicated and in accordance with manufacturer's recommendations. Perform tests in the presence of the Owner; give minimum one-week notice prior to test. Provide all instruments and personnel required to conduct the tests.

1.7 COMMISSIONING

A. The Project Representative may elect to retain an independent agent to provide mechanical system commissioning. The commissioning agent shall not be responsible for testing and balancing, this work is the responsibility of the Mechanical Contractor. The Mechanical Contractor shall budget resources for this work. The Mechanical Subcontractor shall provide system access, adjustments and all operation of systems required to permit the commissioning agent to perform their work.

1.8 OPERATIONS AND MAINTENANCE MANUALS

- A. Furnish operations and maintenance (O&M) manuals to the Owner at least 10 working days before conducting Owner instruction sessions. Furnish copies of the O & M manuals for Owner review and approval. Manuals shall be bound into a three-hole, post type binder, with the following information on the front cover: Name of project, address, Owner, date completed, Mechanical Subcontractor, Mechanical Subcontractor phone number, and Owner's contact information.
- B. O & M manuals shall include full descriptions of all systems and products installed under this contract. Furnish complete narrative descriptions, product and originals of equipment descriptions with

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 230500 ISSAQUAH, WASHINGTON BASIC MECHANICAL REQUIREMENTS

exploded diagrams, parts lists including part numbers, disassembly and assembly instructions and control wiring diagrams.

1.9 RECORD DOCUMENTS

A. The Mechanical Contractor shall maintain record documents as construction commences. Evaluation of pay requests shall be partially based on the level of completion indicated by the record documents. Mechanical Subcontractor shall transfer marks from the jobsite record set to electronic records (AutoCAD) and furnish a reproducible plan set and electronic records at the conclusion of the contract.

1.10 INSTRUCTION PERIODS FOR OWNER'S PERSONNEL

- A. Description: Following installation of all mechanical equipment and prior to acceptance of the mechanical work, conduct demonstrations and instruction periods to point out locations of servicing points and required points of maintenance to Project Representative.
- B. Mechanical Contractor's Representatives: Qualified foremen or superintendents from the trade involved. Submit qualifications before conducting the instruction, if requested by Owner.
- C. General Description of Instruction Periods: Include preliminary discussion and presentation of information from maintenance manuals, with appropriate references to Contract Documents, followed by tour of systems explaining maintenance requirements, access methods, servicing and maintenance procedures, equipment cleaning procedures, control settings and available adjustments.
- D. Scheduling of Instruction Periods: Provide notice of readiness to conduct such instruction and demonstration to the Project Manager at least one week prior to the instruction periods.

1.11 OBSERVATION REPORT

A. The Mechanical Contractor shall notify the Owner when the project is complete. The Owner, General, Contractor and Mechanical Contractor shall prepare lists of items of work that must be performed before the project is considered complete. The Mechanical Contractor shall return the list with each item initialed and dated when completed. All punch list items shall be completed within 10 working days of receipt of the punch list from the Owner.

1.12 WARRANTY

A. The Mechanical Contractor shall issue a one year warranty for the work installed under this contract in writing to take effect upon acceptance of the system by the Owner.

1.13 START-UP

- A. The Contractor shall notify the Project Representative through the Project Manager at least seven (7) days prior to the start-up of the following systems:
 - 1. Heat Pump unit.
- 1.14 No portion or portions of the mechanical system may be used during the construction phase for heating, cooling or ventilation without the written authorization and permission of the Owner, through the Owner.

END OF SECTION

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 230502 ISSAQUAH, WASHINGTON BASIC MECHANICAL MATERIALS AND METHODS

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Work includes motors, control equipment, support appurtenances, seismic restraint, identification, and balancing work.
- B. Contract requirements of the General Conditions, the Supplementary Conditions, and Division 1 apply to all work in this section.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with all applicable City, County, and State codes and ordinances. In case of conflict with drawings or specifications, the codes and ordinances govern.
- B. Basis: Latest version of the following: Uniform Building Code, Uniform Plumbing Code; Uniform Mechanical Code and local amendments to the same. The codes are used as the basis for design throughout these documents.
- C. Coordination and Pre-installation Meetings: As required by Division 1, Quality Control.

1.3 SUBMITTALS

- A. General: Submit in accordance with Section 013300.
- B. Product Data: Motor control equipment.

PART 2 PRODUCTS

2.1 GENERAL

A. Comply with "Quality Assurance" provisions, Specifications, and Manufacturers' Data. Where these may be in conflict, the more stringent requirements govern.

2.2 MOTORS AND CONTROL EQUIPMENT

A. Provided by Division 26.

2.3 EXPANSION SHELLS AND BOLTS (AS REQUIRED TO INSTALL AC-1)

- A. Expansion Shells for Rod Hangers
 - 1. Phillips, Gregory, Omark, or Fastite in holes drilled in concrete.
- B. Expansion Bolts for Equipment
 - 1. USM or McCullough in holes drilled in concrete.

2.4 ANCHOR BOLTS (AS REQUIRED TO INSTALL HP-1)

A. Provide for all equipment; number and size per manufacturers' recommendations or as indicated.

2.5 SUPPLEMENTARY STEEL FRAMING (AS REQUIRED TO INSTALL HP-1)

- A. The contractor shall include in the bid and pay for all costs to provide supplementary intermediate steel to span building structure as required to support the equipment furnished.
- B. Intermediate steel supports, steel framing: Standard structural steel shapes or Schedule 40 steel pipe, galvanized with extra-heavy finish.

2.6 PAINTING

A. Paint all exposed fixtures and equipment. Coordinate color with Technical Representative. Refer to Architectural documents for paint and application requirements.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 230502 ISSAQUAH, WASHINGTON BASIC MECHANICAL MATERIALS AND METHODS

2.7 UNDERWRITERS' LABORATORY, INC. (UL) LISTED EQUIPMENT

A. Whenever UL Standards exist for equipment with electrical components, provide UL-accepted equipment bearing the UL label. Otherwise provide equipment certified in writing by the manufacturer as complying with UL Standards for similar items to the satisfaction of the governing agencies.

PART 3 EXECUTION

3.1 INSPECTION

A. Verify installation conditions as satisfactory to receive work of this Section. Do not install until any unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions as satisfactory.

3.2 PREPARATION

- A. Field Measurements: Field-verify locations of new and existing work prior to commencing work of this Section.
- B. Protect surrounding areas and surfaces to preclude damage from work of this Section.

3.3 INSTALLATION, APPLICATION, ERECTION, AND PERFORMANCE

A. Install, apply, erect, and perform the work in accordance with "Quality Assurance" provisions, Specifications, and manufacturers' written installation instructions and directions. Where these may be in conflict, the more-stringent requirements govern.

3.4 CLEANING

A. Promptly remove waste material and rubbish caused by mechanical construction work. At completion of the project, clean all equipment, piping and fixtures installed or provided under this Contract.

3.5 CUTTING AND PATCHING

A. Cut all openings and holes required for mechanical work. Carefully examine existing conditions prior to commencing work.

3.6 ACCESSIBILITY

- A. Locate valves, dampers, controls, etc., to be easily accessible.
- B. Install all equipment which requires periodic servicing or repairs to be readily accessible. Otherwise, obtain Owner's approval of location.

3.7 SPECIAL PROTECTION

- A. Exercise maximum precaution to provide positive protection for the existing building and equipment from damage of any kind, and in particular prevent any water and dust seepage into the existing building.
- B. Storage of materials: Make all necessary provisions to prevent damage or corrosion of materials.

3.8 EQUIPMENT INSTALLATION

A. General

 Provide supports for all equipment as required, including braces as required for seismic restraint; these include frames or supports for all mechanical equipment. Bracing shall conform with the requirements of IBC and IMC. Sizing and installation of these members is the responsibility of the Mechanical Contractor.

3.9 PAINTING

A. General

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 230502 ISSAQUAH, WASHINGTON BASIC MECHANICAL MATERIALS AND METHODS

1. Paint exposed equipment, piping, sheet metal work and mechanical system appurtenances.

B. Application

- 1. Thoroughly clean surfaces to be painted to remove dirt, grease and scale. Wash galvanized surfaces with mild solution of acid prior to painting to effectively clean oils from surface and to etch zinc.
- 2. Paint insulated surfaces and covered piping with one primer coat and two finish coats.
- 3. Paint exposed equipment, pipes and supports with one primer coat and two finish coats. Equipment painted at the factory with lacquer or enamel need not be painted; touch up damaged areas with paint to match factory color.
- 4. Paint the supporting devices for mechanical devices or systems specified to be painted.

3.10 WIRING

- A. Wiring shall conform to applicable sections of these specifications. Provide wiring from branch circuit overcurrent device to motor controller to motor terminals, including installation of starter and all connections. Provide raceway and conductors as shown for remote control, or interlock connections. Coordinate other control wiring with Division 23 of the Specifications. Provide overload elements in controllers sized to match motor nameplate full load amperes. Space within controllers shall not be used as a junction box.
- B. Mechanical contractor shall arrange and pay for the power and control wiring for HP-1.

END OF SECTION

1.1 WORK INCLUDED

A. Work includes insulation for piping.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with all applicable City, County, and State codes and ordinances. In case of conflict with drawings or specifications, the codes and ordinances govern.
- B. Basis: International Building Code; Uniform Plumbing Code; International Mechanical Code; Washington State Energy Code.
- C. Applicable industry Standards. Refer to Section 230500.

1.3 SUBMITTALS

- A. General: Submit in accordance with Section 013300.
- B. Product Data: Insulation, Insulation Covers, Inserts.

1.4 APPLICABLE PUBLICATIONS (MOST RECENT EDITIONS)

- A. American Society for Testing and Materials (ASTM) Standards:
 - 1. E84 Surface Burning Characteristics of Building Materials
 - 2. E96 Test for Water Vapor Transmission of Materials
- B. National Fire Protection Association (NFPA) Standards:
 - 1. 90A Air Conditioning and Ventilating Systems
 - 2. 255 Building Materials, Tests of Surface Burning Characteristics
- C. Underwriters' Laboratories, Inc. (UL) Publications:
 - 1. 723 Surface Burning Characteristics of Building Materials

1.5 DEFINITIONS AND ABBREVIATIONS USED IN THIS SECTION

A. Definitions:

- 1. "Exposed" is work exposed to the view of occupants in normally occupied areas and in equipment rooms.
- 2. "Concealed" is work located in ceiling spaces, chases and other locations not exposed to view.
- 3. "Cold Piping" includes the piping to 70 degrees F:
- 4. "Hot Piping" includes the piping from to 71 to 250 degrees F

B. Abbreviations:

ASJ All-Service Jacket FSK Foil-Scrim-Kraft Jacket

K Thermal Conductivity, BTU per hour per square foot per degree F for each inch of

thickness

PCF Pound per cubic foot density

Perm Water vapor transmission rate (permeability)

SSL Self-Sealing Lap

1.6 SURFACE BURNING CHARACTERISTICS

- A. Provide composite or component ratings per NFPA 255, ASTM E84, or UL 723, as follows: Fiberglass Insulation, flame spread 25, smoke developed 50.
- B. Composite includes insulation, jacketing and adhesive used to secure jacketing or facing.
- C. Components include PVC jacketing and fittings, adhesive, mastic, cement, tape and cloth.

1.7 MINIMUM INSULATION THICKNESS:

- A. Thickness of insulation is defined as the thickness of the basic insulating medium not including finishing materials.
- B. Mechanical Pipe Insulation, Fiberglass ASJ, Flexible Elastomeric: Thickness shall conform to the following table.

MINIMUM PIPE INSULATION								
		Fluid Temp.		1" &	1-1/4"	2-1/2"	>4" to	
Service	Notes	Max °F	Runouts	Less	- 2"	-4 "	6"	
a. Refrigerant Suction (RS)	(1)	40	NA	1.0	1.0	NA	NA	
Notes:								

(1) Closed cell neoprene insulation as specified below.

PART 2 PRODUCTS

2.1 **GENERAL**

A. Comply with "Quality Assurance" provisions, Specifications, and manufacturers' data. Where these may be in conflict, the more stringent requirements govern.

2.2 ACCEPTABLE MANUFACTURERS

- A. Fiberglass: Owens-Corning; Knauf; Certainteed; Johns Manville.
- B. Flexible Elastomeric: Armstrong, Rubatex.

2.3 PIPING INSULATION

A. Refrigerant Piping Insulation: Closed cell neoprene pipe insulation. Armaflex, Rubatex or accepted equal.

2.4 INSERTS (LOAD-BEARING INSULATION) BETWEEN PIPES AND PIPE HANGERS/SUPPORTS

- A. General: Coordinate with the work of Division 23.
- B. Provide rigid insulation inserts with thickness equal to the adjoining insulation with vapor barrier.
- C. Provide insulation protection shields between inserts and pipe hangers/supports, minimum 12" long, 18-gauge galvanized steel; Grinnell, Fee & Mason, Elcen, or accepted.

2.5 ADHESIVES, CEMENTS AND FINISHES

- A. Insulation Cement: Manville No. 460, or accepted equal, mineral wool based insulating cement with good adhesion to cold surfaces and rated to 1800oF.
- B. Vapor Barrier coating: Non-flammable, fire-resistant, polymeric resin, compatible with insulation.
- C. Spray Mastic: Insulcoustic 551, Foster 35-01, or accepted equal.
- D. Glass Cloth: Twinberg-Miller "Glasfab" No. 2020-X, Foster "Mast-a-Fab", or accepted equal.
- E. Bonding Adhesive: Foster 85-17 or accepted equal.
- F. Insulation Weather Cover for Piping Installed Outdoors and/or exposed to weather: Embossed soft aluminum sheet, .016" minimum thickness.

PART 3 EXECUTION

3.1 INSPECTION

A. Verify installation conditions as satisfactory to receive work of this Section. Do not install until unsatisfactory conditions are corrected. Install insulation and related equipment in accordance with the manufacturers written instructions. Beginning work constitutes acceptance of conditions as satisfactory.

3.2 PREPARATION

- A. Field Measurements: Field-verify locations of new and existing work prior to commencing work of this Section.
- B. Protect surrounding areas and surfaces to preclude damage from work of this Section.

3.3 INSTALLATION, APPLICATION, ERECTION AND PERFORMANCE

A. Install, apply, erect, and perform the work in accordance with "Quality Assurance" provisions, Specifications, and manufacturers' installation instructions and directions. Where these may be in conflict, the more stringent requirements govern.

3.4 TIME OF APPLICATION

A. Apply insulation only after piping systems have been tested and certified by the KCHA Project Manager as ready for insulation. If insulation is applied prior to testing, necessary removals, repairs and modifications to insulation due to leaks that may occur in piping systems shall be made without additional cost to the Owner.

3.5 EXTENT OF INSULATION

- A. Insulate all piping completely, except as indicated.
- B. Do not insulate the following:
 - 1. Piping: Valve stems, handwheels and operators and unions.
 - 2. Equipment: Items with factory-applied insulation meeting the requirements of this Section. Do not apply insulation over coil and damper access panels.

3.6 INSTALLATION, GENERAL

- A. Apply in a workmanlike manner, by skilled craftsmen regularly engaged in this type of work.
- B. Apply to clean and dry surfaces.
- C. On cold surfaces, apply with continuous, unbroken moisture and vapor seal. Insulate and vapor seal all hangers, supports, anchors, and other projections that are secured to cold surfaces, to prevent condensation.
- D. Extend all surface finishes to protect all raw edges, ends, and surfaces of insulation.
- E. Install all piping insulation continuous through walls, ceilings, and floor openings and sleeves, except where firestop or firesafing materials are required.
- F. Install with all joints tightly butted.
- G. Tuck and tuft all edges of insulation.
- H. Install insulation to allow easy access to equipment for inspection and repairs.
- I. Carefully bevel and seal insulation around equipment nameplates.

3.7 PIPING INSULATION

A. Install pipe insulation per the manufacturer's written instructions.

3.8 FINISHES

A. Vapor Barrier: Cold water piping insulation shall be continuously covered with an accepted vapor barrier. Apply two coats of the vapor barrier coating over all surfaces and lagging not covered with continuous vapor barrier jackets. Fill all joints, cracks, seams and depressions, and apply additional lagging as necessary to form smooth continuous surfaces.

1.1 USE OF DOCUMENTS

 All information contained in Section 230500, Basic Mechanical Requirements, is considered a part of this section.

1.2 DESCRIPTION

A. General:

1. Work includes all refrigerant products, material, equipment and installation. Provide all refrigerant pipe and pipe fitting as required by the mechanical system design, the specifications and/or the contract documents. Provide a complete and operable system. Comply with the requirements of Division 23.

B. Work Included:

1. Refrigerant pipe, fittings, connections, procedures and testing. The Contractor shall coordinate the refrigeration piping needs with the actual condensing unit and air handler furnished, and include in with their costs all hardware, tubing, piping and accessories required.

C. Code:

1. All work shall be installed in accordance with International Mechanical Code, International Building Code and all local codes. Refer to Specification Section 230500.

1.3 SUBMITTALS

A. Comply with the requirements of Section 013300. Provide submittals for the equipment and materials listed in Part 2.

1.4 QUALITY ASSURANCE

A. Brazing, Soldering and Welding Materials and Procedures: Conform to ASME Code and applicable State regulations.

1.5 QUALIFICATIONS

A. All piping, start-up and testing shall be performed by a licensed refrigeration mechanic.

PART 2 PRODUCTS

2.1 PIPE AND TUBE

A. Refrigerant Piping:

 Dimensional requirements for pipe, pipe fittings and components shall conform to ANSI 15 and ANSI B31.5. Tubing used for refrigerant service shall be cleaned, sealed, capped or plugged prior to being shipped from the manufacturer's plant.

B. Pipe and Fittings:

- 1. Type L Copper
- ASTM B 20, straight length except that coil length may be used for connection to equipment but shall not exceed 6-feet in length. Fittings shall be ANSI B16.18, cast bronze or ANSI B16.22, wrought copper with brazing or solder joints, and ANSI B16.24 bronze flanges and flanged fittings.

C. Pipe Sleeves:

1. Pipe sleeves through outside walls, floors or roof slabs shall be zinc-coated steel pipe conforming to ASTM A120. Sleeves through inside partitions shall be zinc-coated sheet steel not less than 0.0217 inches thick conforming to ASTM A 525.

D. Brazing Metal:

1. AWS A5.8 15 percent silver-base alloy, minimum melting point 452 degrees F for pressure up to 150 psi.

E. Solder Metal:

1. ASTM B 32, Grade 95TA, tin-antimony alloy, minimum melting point 452 degrees F for pressure up to 150 psi.

2.2 FILTER DRYERS

A. Sporlan or approved equal.

2.3 SIGHT GLASSES

A. Sporlan or approved equal.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify conditions, including defects or errors which would cause defective installation/ application or products or cause latent defects in workmanship or function.

3.2 REFRIGERATION PIPING

- A. Fabrication and Assembly of Piping and Components: Fabrication of piping and components shall conform to ANSI 15 and ANSI B31.5 and as specified herein. Piping shall be cleaned, sealed, plugged, or capped for delivery to the site.
- B. Refrigerant piping shall slope in the direction of refrigerant flow. Trapping of lines shall not be permitted except as indicated or required by the manufacturer's written installation instructions. Sleeves of suitable size shall be provided for lines passing through building walls as specified herein.
- C. Returning Oil From Refrigeration System: Refrigerant lines shall be installed so that the gas velocity in the evaporator suction line is sufficient to move the oil along with the gas to the compressor.
- D. Except as indicated otherwise where equipment location requires a vertical riser, the line size shall be such as to allow sufficient velocity to lift the oil at minimum system loading pressure and velocity and pressure drop. The larger riser shall have a trap, of minimum volume, obtained by use of 90 degree ells. The smaller riser shall be arranged with inlet close to end lower horizontal line, and the larger riser shall connect from end of lower horizontal line to the top of upper horizontal line. Valves shall not be installed in risers.

3.3 BRAZING AND SOLDERING

- A. Brazing and soldering procedures qualifications shall conform with the CDA Copper Tube Handbook and ANSI B31.5. Braze all joints on buried copper lines. Cut lines. Solder or braze above ground copper lines. Cut tubing ends square and remove all fins and burrs, do not use dented or otherwise damaged tubing.
- B. Clean outside of tubing ends and recessed area inside of fittings by burnishing until all dirt, oxide and other foreign substances are removed. Use either fine crocus cloth or a wire fitting brush made especially for this type of work.
- C. During brazing operation, protect the tubing from forming an oxide film on the inside of tubing by slowly flowing dry nitrogen to expel the air. Apply a light coating of flux to burnished tubing and fitting joint brazing or soldering temperature until brazing alloy or solder metal has penetrated full depth of fittings and has expelled all flux. Before making joints to valves remove stems and washers.

3.4 HANGERS AND SUPPORTS

A. MSS-SP-58 and SP-69 for the intended temperature ranges, except that spacing of the hangers and supports shall comply with Table 1 below.

TABLE 1
MAXIMUM SPAN FOR COPPER TUBING

Diameter (Inches)	<u>Span</u>
1/2	3' - 6"
3/4	4' - 3"
1	4' - 9"
1-1/2	5' - 6"

3.5 CLEANING OF THE REFRIGERATION PIPING SYSTEM

A. When installations of the various components of the piping system are completed, they shall be cleaned before final closing. All piping and components shall be cleaned free of scale and thoroughly flushed of all foreign matter. Thoroughly clean all strainers and valves. Equipment shall be wiped clean, with all traces of oil, dust, dirt, or paint spots removed. The Contractor shall maintain the system in this clean condition until final approval.

3.6 FIELD INSPECTION

A. General:

1. Prior to initial operation, conduct tests on the piping system. Materials and equipment required for tests shall be furnished by the Contractor. Defects disclosed by the test shall be corrected by the installation and prior to acceptance shall be performed in the presence of the Owner and shall be subject to his approval.

B. Preparation for Tests:

1. Before tests are made, controls and equipment that may be damaged by the test pressure employed shall be temporarily removed.

C. Charging the System for Test:

- 1. The low and high pressure sides of the system shall be charged with a dry, inert gas, such as nitrogen (N2) or anhydrous carbon dioxide (CO2) using a small amount of the refrigerant gas to act as a tracer.
- 2. Use pressure limiting or reducing valve with pressure gage on the high-pressure gas tank to limit the pressure in the system to the specified test pressure for the respective refrigerant.

D. Leakage Test:

- 1. With the system charged to the desired pressure, the gas supply shall be tightly shut off and the system held for 30 minutes, during which time there shall be no loss of pressure. If a pressure drop, not attributable to temperature changes, occurs during this period the entire system shall be checked with a halied torch of an electronic leak detector.
- 2. If any leak is found, the leak shall be repaired and the system tested for another 30 minute period at the test pressure. Testing and repair shall continue until there is no loss of pressure.

E. Evacuation:

- 1. After completion of testing of refrigerant system for leaks remove all air and moisture from the system by using a vacuum pump. The pump shall be capable of reducing the absolute pressure in the system to a point where any water present in the lines will vaporize at a temperature appreciable below the ambient temperature and will be withdrawn from the system.
- 2. Before conducting the evacuation test, inspect the vacuum pump oil for purity and provide new oil charge if existing charge is contaminated. Conform with the following requirements.

F. Extent of Evacuation:

1. Evacuate the system to a maximum absolute pressure of 0.020 inches of mercury (500 microns) or lower. During the evacuation the ambient temperature shall not be below 35 degrees F. Use pressure gages for measurement of pressure.

G. Criteria of Dryness:

- 1. Upon achieving specified evacuation of system valve off the vacuum pump from the system for a period of at least 12 hours. The system shall be considered tight and dry and free of air if the absolute pressure has not increased by more than .002 inches of mercury (50 microns) at the expiration of this period.
- Repeat the pressure test if the pressure rise exceeds 0.02 inches of mercury which indicates a leak in the system or presence of moisture. If no leaks are found, resume the evacuation test and continue until dryness of system is achieved.

H. Sealing Off the System:

1. When a satisfactory vacuum has been obtained it shall be broken with the introduction of vapor (no liquid) and subsequent sealing off of the system.

I. Charging of Refrigerant for the Piping System:

- The Contractor shall furnish the initial charge of refrigerant which shall be charged by connecting
 the drums of refrigeration into the low side of the system where it will be evaporated. The gross
 and net weights of the drum shall be noted. Place the drum on a scale so that it may be
 determined when it has been emptied.
- 2. The charging connection shall be loosely connected to the system connection, so that the initial flow of refrigerant will expel air from the connection, following which the loose joint shall be started and operated while charging continues.
- 3. Unless otherwise recommended by the manufacturer, the following procedures shall be exercised during the charging operation:
 - a. Place the refrigerant condensing system in operation.
 - Place the fluid circulation system, of water coolers or evaporator fans of a directexpansion system in operation.

J. Startup and Operational Tests:

The refrigeration piping system shall be started up and initially operated. During this time the
various strainers shall be periodically cleaned until no further accumulation of foreign material
occurs. Care shall be exercised so that minimum loss of refrigeration occurs when the strainers
are cleaned. Safety and automatic control instruments shall be adjusted as necessary to place them
in operation and sequence as indicated.

END OF SECTION

1.1 USE OF DOCUMENTS

A. All information contained in Section 230500, Basic Mechanical Requirements, is considered a part of this section.

1.2 DESCRIPTION

A. Work includes all machine room air conditioning equipment, including temperature controls, all products, material, equipment, and installation. Provide all equipment as required by the system design, the specifications, and/or the contract documents. Provide a complete and operable system. Coordinate electrical requirements of all equipment furnished hereunder with Division 26, and the Electrical Contractor.

1.3 WORK INCLUDED

A. HP-1: Split System Heat Pump.

1.4 CODE

A. All work shall be installed in accordance with Uniform Mechanical Code, Uniform Building Code, Washington State Energy Code and all local codes. Refer to Specification Section 230500 & 230502. All assemblies shall be UL listed.

1.5 STANDARDS

A. AMCA Testing Standard 210.

1.6 ABBREVIATIONS

- A. AMCA Air Moving and Conditioning Association
- B. ADC Air Diffusion Council
- C. ASHRAE American Society of Heating, Refrigeration and Air Conditioning Engineers
- D. UL Underwriters Laboratories

1.7 SUBMITTALS

- A. Provide submittal information in accordance with Section 013300. Provide submittal information for all equipment items specified including the following:
 - 1. Air conditioner layout, sections, hardware,
 - 2. Performance information,
 - 3. Condensing unit characteristics.

1.8 QUALITY ASSURANCE

A. Comply with the requirements of Section 230500 & Division 1.

PART 2 PRODUCTS

2.1 Split system AIR CONDITIONER, HP-1:

A. General

1. The room air conditioner shall be split system, air cooled, wall mounted with integral grilles. Cooling and heating capacities as scheduled. The unit shall include a non-automatic disconnect switch mounted in the high voltage section of the electric panel. Furnish air conditioner with controls, thermostat, refrigerant line set and all necessary accessories for a complete installation.

B. Air Cooled Refrigeration Circuit

1. Indoor Evaporator Unit:

a. The evaporator coil shall be copper tube with maximum 12 fins per inch of corrugated aluminum. Expansion valve shall be of adjustable thermostatic type.

2. Outdoor Air-Cooled Condenser Unit:

a. The system shall have a direct drive propeller fan type air cooled condenser. The condenser shall be constructed of galvanized steel and contain a copper tube aluminum fin. All components shall be factory assembled, charged with refrigerant, sealed and be capable of being connected to the evaporator section using pre-charged refrigerant line sets. Condenser shall be capable of operations to -20°F. All controls shall be factory mounted in the air cooled condenser. Compressor shall be hermetic type with complete overload protection anti-slug device, crankcase heater, sight glass, short cycle timer, and low override pressure timer. Filter drier shall be high capacity flare fitting type for nontorch servicing. The circuit shall contain high and low pressure switches and suction line accumulator. The air cooled condenser shall be manufactured by the manufacturer of the indoor unit.

C. Piping:

1. The mechanical contractor shall verify refrigerant line size with the manufacturer before ordering or installing piping. The Contractor shall submit factory line sizing information to the Owner for review before installation.

D. Temperature Controls

1. Furnished by the equipment manufacturer, for installation by the control contractor. As manufactured by Mitsubishi, Sanyo, Liebert, or an accepted equivalent.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify conditions, including defects or errors which would cause defective installation/application of products or cause latent defects in workmanship or function.

3.2 INSTALLATION

A. Install in accordance with manufacturer's written recommendations and as specified. Furnish all required materials, accessories, appurtenances and work required to support or suspend equipment. Install equipment with associated ductwork and piping to permit access to doors and panels as required for periodic maintenance.

3.3 LOCATION AND SIZE

A. The equipment scheduled on the drawings is selected and configured to fit in the mechanical space available. Insure that substitute equipment will fit without change in function or quality. Cost of all materials and work to accommodate substitute equipment is the sole responsibility of the Contractor.

3.4 Heat Pump

- A. Equipment shall be wiped clean, with all traces of oil, dust, dirt or paint spots removed. Temporary filters shall be provided for all fans that are operated during construction, and after construction dirt has been removed from the building, new filters shall be installed.
- B. All controls and other miscellaneous equipment requiring adjustment shall be adjusted to setting indicated or directed. Fans shall be adjusted to the speed indicated by the manufacturer to meet specified conditions.
- C. Furnish and install complete all pipe, refrigerant piping, and control connections required.

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

PART 1 GENERAL

1.1 GENERAL

A. Conform to the General Conditions, Supplementary Conditions, and related work in other Divisions for all work in Division 26.

1.2 WORK INCLUDED

- A. It is the intention of this division of the specifications and the accompanying drawings to describe and provide for the furnishing, installing, testing and placing in satisfactory and successful operation all equipment, materials, devices and necessary appurtenances to provide a complete electrical system, together with such other miscellaneous installations and equipment hereinafter specified and/or shown in the plans. The work shall include all materials, appliances and apparatus not specifically mentioned herein or noted on the plans, but which are necessary to make a complete working installation of all electrical systems shown on the plans or described herein. Equipment and devices furnished and installed under other divisions of this specification (or by the Owner) shall be connected under this division. The drawings and specifications are complementary and what is called for in either is binding as if called for in both.
- B. By submitting a bid, the Contractor is acknowledging that he has made a thorough examination of the Contract Documents, existing site and building conditions, and has determined that these documents do sufficiently describe the scope of construction work required under this Contract.

1.3 SCOPE OF BASIC BID

A. Included in Division 26 work is all work and related items necessary to provide all electrical installations except as specifically excluded. In general, this includes all labor, equipment, tools, etc., to complete the electrical work.

1.4 RELATED WORK

- A. Temporary Power and Lighting See Division 1
- B. Mechanical Control Wiring See Division 23
- C. Cutting and Patching See Division 1

1.5 STANDARDS AND REGULATIONS

A. The work shall comply with the latest edition of the applicable Standards and Codes of the following:

ASTM American Society for Testing and Materials

NBFU National Board of Fire Underwriters

NEC National Electrical Code
--- State Electrical Code

NESC National Electrical Safety Code

NEMA National Electrical Manufacturers Association

NFPA National Fire Protection Association U.L. Underwriters Laboratories Inc.

IPCEA Insulated Power Cable Engineers Associated

CBM Certified Ballasts Manufacturers

--- Federal, State and Local Building Codes

ETL Electrical Testing Laboratories

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

B. If any conflict occurs between Government adopted Code Rules and this specification, the codes are to govern. Nothing in these drawings and specifications shall be construed to permit work not conforming with governing codes. Also, this shall not be construed as relieving the Contractor from complying with any requirements of the plans and specifications which may be in excess of, but not in conflict with, requirements of the Governing Codes.

1.6 PERMITS & FEES

- A. The Contractor shall obtain and pay for all licenses, permits and inspections required by laws, ordinances and rules governing work specified herein. The Contractor shall arrange for inspection of work by the inspectors and shall give the inspectors all necessary assistance in their work of inspection.
- B. The Contractor shall consult with and follow the requirements of the local fire, power, telephone, and television utilities serving the area and shall coordinate his work with them.
- C. Utility connection and hook-up charges for power, telephone and television shall be paid by the Owner directly to the utility. The Electrical Contractor is required to provide any and all coordination necessary to support the utility connection, file for application of service (or assist the Owner in filing for application of service) and coordinate dates for service with the utilities.

1.7 DEFINITIONS

- A. When "Provide" is used, it shall be interpreted as "furnishing and installing complete in operating condition".
- B. When "Drawings" is used, it shall be interpreted as "all Contract Drawings for all Disciplines".
- C. When "Contractors" is used, it shall be interpreted as the Electrical Contractor.
- D. Owner shall mean King County Housing Authority.

1.8 INTENT OF DRAWINGS

- A. The electrical drawings are intended to serve as working drawings for general layout. The equipment layout is diagrammatic and unless specifically dimensioned or detailed, does not indicate all fittings, hardware or appurtenances required for a complete operating installation.
- B. Anything shown on the drawings but not covered in the specifications, or anything covered in the specifications but not shown on the drawings, shall be as if covered in both. In case of conflict between the drawings and specifications, the Owner will select the method to be used. The Contractor shall be responsible for verifying all measurements before proceeding with the work.
- C. Wiring diagrams are not intended to indicate the exact course of raceways or exact location of outlets. Raceway and outlet locations are approximately correct and are subject to revision as may be necessary or desirable at the time of installation. Precise location in every case shall be subject to the Owner's approval.

1.9 PROTECTION

A. The Contractor shall store and guard all equipment before installation and shall protect same, and replace any equipment that has been damaged prior to final acceptance. See Division 1 for detailed requirements.

1.10 HOUSEKEEPING

- A. All electrical materials shall be kept stored in an orderly fashion protected from heat, cold, and the weather.
- B. All marred surfaces shall be refinished and painted after installation.
- C. All debris shall be removed from premises during work, as directed, and at completion of job.

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

1.11 TEMPORARY USE

- A. Temporary or interim use of any and all portions of the electrical system shall be under the supervision of the Electrical Contractor.
- B. Temporary power and lighting for use during construction shall be provided per the requirements of the Division 1 specifications.

1.12 AS-BUILT DRAWINGS

- A. The Contractor shall maintain, in addition to any reference drawings, an as-built set of prints, on which all deviations from the original design shall be drafted in a neat, legible manner with red colored pencil. This red lined set shall identify all drawing revisions including addenda items, change orders, and Contractor revisions. The Contractor is responsible to revise panel schedules and load calculations as required.
- B. Drawings shall show locations of all concealed raceway runs larger than 1", giving the number of conductors and size of raceway. Underground ducts shall be shown with cross section elevations. All pipe, raceway, manholes or lines of other trades shall be included.
- C. The Contractor shall update all references to specific products to indicate products actually installed on project. This shall include, but not be limited to, lighting fixtures, baseboard heaters, etc.
- D. Upon completion of the Division 26 Work, the Contractor shall deliver as-builts drawings per Division 1 requirements.

1.13 WARRANTY

A. Provide a written warranty that the Division 26 work is free from mechanical and electrical defects. Contractor shall replace and repair, to the satisfaction of the Owner, any parts of the installation which may fail within a period of 12 months after the certificate of final acceptance, provided that such failure is due to defects in material or workmanship, or failure to follow the specifications and drawings.

1.14 INSTRUCTIONS AND MANUALS

- A. Operation and maintenance data shall be submitted in accordance with Division 1.
- B. Manuals shall contain shop drawings, wiring diagrams, operating and maintenance instructions, replacement parts lists, and equipment nameplate data for all equipment and systems installed under the project. Signal equipment submittals shall contain step-by-step circuit description information designed to acquaint maintenance personnel with equipment operation in each mode of operation. Manuals shall contain original brochures supplied by manufacturers. Xerox copies of originals will not be accepted.
- C. Each type of device provided shall be identified in the O & M Manual using the same identification as shown on the drawings and specifications. The information included must be the exact equipment installed not the complete "line" of the Manufacturer. Where sheets show the equipment installed and other equipment, the installed equipment shall be neatly and clearly identified on such sheets. Parts lists shall give full ordering information assigned by the original parts manufacturer. Relabeled and/or renumbered parts information as reassigned by equipment supplier is not acceptable. The following information shall be provided for each device:
 - 1. Manufacturer's name, address and phone number.
 - 2. Local supplier's name, address and phone number.
 - 3. Complete parts lists including quantities and manufacturer's part numbers.
 - 4. Installation instructions.
 - 5. Recommended maintenance items including maintenance procedure and recommended interval of maintenance listed in hours of operation, calendar unity or other similar time unit.
- D. The O & M Manual shall be assembled as detailed in Division 1. As a minimum, the following sections shall be broken out:

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

- 1. Motor Controllers
- 2. Disconnect and Fused Switches
- 3. Fuses
- E. Wiring Diagrams for each system shall be complete for the specific system installed under the Contract. "Typical" Line Diagrams will not be acceptable unless properly marked to indicate the exact field installation.

1.15 WORK NOT INCLUDED

- A. Indicated motors, controls, and equipment as described in other divisions shall be furnished by other trades, but shall be moved, set and wired to electrical controls and power supply by the Electrical Contractor.
- B. Work to be included under this Contract shall be defined on drawings and in these specifications. Any details beyond these limits are meant only to give installation clarity to that portion which is a part of this Contract.

1.16 COMPLETION OF WORK

- A. Upon completion of the Division 26 work, the Contractor shall comply with requirements of Division 1 for project closeout.
- B. Arrange for and obtain all required inspections and certificates pertaining to the Division 26 work and deliver the certificates to the Owner in triplicate.
- C. Prior to or at the time of final inspection, the Contractor shall, as outlined in detail in the specifications, complete the delivery of all the following items:
 - 1. Completion Letter
 - 2. Certificate of Final Inspection, in triplicate form.

Electrical Inspector COMPLETION OF WORK Fire Department 260000 – 1.17

3. Warranty to Owner SUPPLEMENTARY GENERAL CONDITIONS

260000- 1.13

 Marked Set, Electronic Media Set on flash drive in AutoCAD R-2012 Format of "As GENERAL AS-BUILT DRAWINGS 260000–1.12

drive in AutoCAD R-2012 Format of "As-Built" Electrical Drawings 260000–1.1

Motor Current Readings
 GENERAL, TESTS
 260519 – 3.03(D)
 Phase Current Readings
 GENERAL, TESTS

260519 – 3.03 (E)

7. Panelboard and Special Equipment Shop MATERIALS, GENERAL

Drawings and Final Approved List of 260000–2.03 Materials Installed

8. Certified of Feeders Torque Results WIRES AND CABLES 260519

9. Receipt from person to whom delivered the following: Spare Elements for receptacles

switches, plugs, etc.

10. Wiring diagrams, Maintenance Manuals,

GENERAL, INSTRUCTIONS & MANUALS—

Operation Instructions, and Brochures (5 sets 260000–1.14 minimum)

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

1.17 SHOP DRAWING SUBMITTALS

- A. See Division 1 Project Administration for submittal procedures and requirements. Refer to BID PACKAGE for these GENERAL REQUIREMENTS.
- B. Shop drawings shall be submitted complete, at one time and each item indexed with dividers and separated per specification section and shall be, but not limited to the items of equipment listed below:
 - Motor starters and controls designating where items are intended to be used and equipment being controlled.
 - 2. Wiring Devices
 - 3. Back Boxes
 - 4. Coverplates
 - 5. Raceways and Connectors
 - 6. Fire Wall Penetration Seals
 - 7. Copper Wire
 - 8. Any other items requested by Owner.
- C. The acceptance of a manufacturer's name or product by the Owner does not relieve the Contractor of the responsibility for providing materials and equipment which comply in all details with the requirements of the Contract Documents. The Contractor shall be solely responsible for submitting materials at such a time to allow a minimum of two weeks for Owner's review.

PART 2 PRODUCTS

2.1 COMPETITIVE PRODUCTS

- A. Except for material and equipment specifically named on the drawings, any reference in the specifications to any article, device, product, material, fixture, form or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition. The Contractor, in such cases, may at his option use any article, device, product, material, fixture, form or type of construction which in the judgment of the Owner, expressed in writing, is equal to that specified. However, any manufacturer not listed as an accepted Bidder for a specific item must be submitted for acceptance in writing with descriptive data verifying equal quality and performance to the Owner.
 - 1. Light fixtures, material and equipment specifically specified on the drawing shall be supplied as specified, no substitutions.

2.2 MANUFACTURER/EQUIPMENT PRIOR APPROVALS

- A. Any manufacturer/equipment not listed as an approved substitute for a specified item must be submitted for acceptance in accordance with Division 1, in writing, with detailed information to include:
 - 1. Manufacturer's Catalog Data
 - 2. Complete Physical and Technical Data
 - 3. Wiring Diagrams
 - 4. Detailed reference (written or highlighted) noting compliance with the appropriate Specification Section and all applicable Specification item numbers within that Section
 - 5. Complete type written index cross referencing all proposed substitutes and specified items
 - 6. Detailed reference to specified items (written or highlighted) noting equal quality and performance of proposed substitute equipment
 - 7. Other descriptive data, as required by the Owner
- B. If substitute material is determined to be acceptable by the Owner, it will be included in a subsequent Addendum prior to bidding. The acceptance of a manufacturer's name or product by the Owner does not relieve the Contractor of the responsibility for providing materials and equipment which comply in all details with the requirements of the Contract Documents.
- C. Only materials which are specified or published in addenda as acceptable shall be used.

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

2.3 MATERIALS

- A. All materials must be of the quality herein specified. All materials shall be new, of the best quality and free from defects. They shall be designed to ensure satisfactory operation and operational life in the environmental conditions which will prevail where they are being installed.
- B. Each type of material shall be of the same make and quality. The materials furnished shall be standard products of the manufacturers regularly engaged in the production of such equipment and shall be the manufacturer's latest standard design.
- C. All materials shall be U.L. or E.T.L. listed for the purpose for which they are used.
- D. Equipment in compliance with U.L. standards but not bearing their label is not acceptable. If the manufacturer cannot arrange for labeling of an assembled unit at the factory the unit shall be field evaluated per the Washington State Administrative Code (WAC) and the electrical inspector's requirements.

2.4 COMPLETE SYSTEM

A. All the systems mentioned shall be complete and operational in every detail except where specifically noted otherwise. Mention of certain materials in these specifications shall not be construed as releasing the Contractor from furnishing such additional materials and performing all labor required to provide a complete and operable system.

2.5 NAMEPLATES

- A. Provide nameplates constructed of plastic (black on white) laminated material engraved through black surface material to white sublayer (attach with screws on NEMA 1 enclosures).
 - 1. Switch and Receptacle Labels: Refer to Section 262726.
 - 2. Special Equipment/Outlet Labels: Refer to Appropriate Sections.
 - 3. Under 600 Volt Feeder Tags: Refer to Section 260519.

PART 3 EXECUTION

3.1 GENERAL

A. Careful consideration shall be given to clearances under and over beams, pipes and ducts, to provide proper headroom in all cases. Check drawings to determine heights of all suspended ceilings and size of pipe shafts where raceway and wire-ways shall run. Coordinate installation of Division 26 wiring and equipment with Division 23 and other trades. Where insufficient room for proper installation appears, obtain clarification from Owner before any installation is begun.

B. Cutting and Patching:

- Obtain permission from the Owner's Representative prior to cutting. Locate cuttings so they will
 not weaken structural components. Cut carefully and only the minimum amount necessary. Cut
 concrete with diamond core drills except where space limitations prevent the use of such drills.
- All construction materials damaged or cut into during the installation of this work must be repaired or replaced with materials of like kind and quality as original materials by skilled labor experienced in that particular building trade.

3.2 COORDINATION

- A. The Contractor is responsible for accomplishing Division 26. The work shall coordinate with that of the other Contractors and/or other trades doing work in the building and shall examine all Drawings, including the several Divisions of Mechanical, Structural, Civil and Architectural, for Construction Details and necessary coordination. Specific locations of construction features and equipment shall be obtained from the Contract Documents, field measurements, and/or from the trade providing the material or equipment. No extra costs will be allowed for failure to obtain this information.
- B. All conflicts shall be reported to the Owner in writing before installation for decision and correction. Special attention is called to the following items:

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

- 1. Door swings to the end that switches will be located on "Strike" side of the door.
- 2. Location of grilles, pipes, sprinkler heads, ducts and other mechanical equipment so that all electrical outlets, lighting fixtures and other electrical outlets and equipment are clear from and in proper relation to these items.
- 3. Location of the cabinets, counters, and doors so that electrical outlets, lighting fixtures and equipment are clear from and in proper relation to these items.
- 4. Type and height of ceiling.
- 5. All device measurements referenced on drawings or specifications are to be centered of device unless noted otherwise.
- C. The Contractor will not be paid for work requiring reinstallation due to lack of coordination or interference with other Contractors or trades. This includes, but is not limited to, removing, replacing, relocating, cutting, patching, and finishing.

3.3 REQUESTS FOR INFORMATION (RFI)

A. It is the Owner's intent to provide a timely response for RFIs regarding Division 26 Work. To further expedite this process, where a <u>suggestion</u> can be determined or derived at by the initiator of the RFI, it is required this suggestion be supplied with the submitted RFI. If no suggestion is given where one is possible, the RFI will be returned as incomplete.

3.4 CLEANING AND PAINTING

- A. All equipment, whether exposed to the weather or stored indoors shall be covered to protect it from water, dust and dirt.
- B. After installing, all metal finishes shall be cleaned and polished, cleaned of all dirt, rust, cement, plaster, grease and paint.
- C. All equipment with a primer coat of paint shall be given two (2) or more coats of a finish enamel and scratched surfaces be refinished to look like new. Markings, identification and nameplates shall be replaced.

3.5 EQUIPMENT IDENTIFICATION

- A. Provide identifying engraved bakelite nameplate on all equipment, including pull boxes, to clearly indicate its use, area served, circuit identification, voltage, and any other useful data.
- B. Each auxiliary system, including communications, shall be clearly labeled to indicate its function.

3.6 DEVIATION

A. Deviation from the shop drawings in construction or installation of equipment shall not be made unless Shop Drawings showing proposed deviations are submitted to and approved by the Owner. If any equipment is furnished under this or other divisions with current, voltage or phase ratings that differ from those shown on the drawings, the Contractor shall notify the Owner in writing immediately and shall not connect said equipment until instructed as to required changes by the Owner. No extension of time will be granted as a result of such changes.

3.7 EXCAVATIONS

- A. All excavations are to be so conducted so that no walls or footings shall be disturbed in any way.
- B. Remove all surplus earth not needed for backfilling and dispose of same as directed.

3.8 WIRING METHODS

- A. All low voltage wiring shall be in Raceway with Junction Boxes and Fittings where concealed in walls and in inaccessible ceiling space.
- B. Provide access panels as needed for pull boxes and equipment located above ceiling or behind walls.

SECTION 260000 ELECTRICAL GENERAL CONDITIONS

- C. Multiple feeder runs shall be rod hung, using a strut type channel with individual one-hole clamps, back plates and machine screws.
- D. Any low voltage cables that are not terminated at both ends shall be tagged and labeled per code.

3.9 PENETRATIONS OF FIRE RATED ELEMENTS

A. Must be made such as to retain that rating.

3.10 HANGERS AND SUPPORTS

- A. Provide hangers, brackets, and suspension rods and supplementary steel to support equipment.
- B. Hangers provided under other divisions shall not be used for support of Division 26 equipment unless permitted by Owner.

3.11 CHASES AND OPENINGS

A. Provide to the masonry and concrete trades all templates and details of chases, openings in floors and walls as required for Division 26 equipment installation.

3.12 PAINTING

A. Painting in general will be covered under another division of this specification, except items furnished under Division 26 that are scratched, marred in shipment or installation, shall be refinished by the Division 26 Contractor.

3.13 WORKMANSHIP AND OBSERVATION

- A. Workmanship shall be of the best quality and none but competent workers shall be employed under the supervision of a competent foreman. All completed work shall represent a neat and workmanship like appearance.
- B. All work and materials shall be subject to observation at any and all times by representatives of the Owner.

3.14 MISCELLANEOUS

- A. Provide complete seismic anchorage and bracing for the lateral and vertical support of conduit and electrical equipment, as required by the International Building Code.
- B. Conduits that cross seismic separations shall be installed with flexible connection suitable to accommodate conditions. Secure raceways on each side of a separation and provide a minimum of 36" length of flexible conduit to span separation.

3.15 CABLE AND WIRING ROUTED UNDERGROUND OR UNDERSLAB

A. All cables and conductors, both line voltage and low voltage, routed underground or underslab shall be U.L. listed for installation in wet locations per NEC and WAC codes.

END OF SECTION

1.1 WORK INCLUDED

A. Portions of the existing electrical lighting, power and signal systems are to be removed as detailed on the drawings.

PART 2 PRODUCTS

2.1 EXISTING MATERIALS

A. Existing materials which are a part of the building shall remain the property of the Owner.

2.2 EXISTING MATERIALS RE-INSTALLED

A. Existing materials and equipment that are removed as a part of the work or stored in surplus may be reinstalled as a part of the new system subject to approval of condition suitability by the Owner. The requirements of the specifications (i.e. installation, warranty, testing, etc.) shall apply as if the materials were new, supplied by the Contractor.

2.3 EXISTING MATERIALS NOT TO BE RE-INSTALLED

- A. In coordination with the Owner, these materials shall be made available for his inspection and decision as to whether the Owner will retain possession. Items selected for retention shall be delivered to a location on the premises selected by the Owner and turned over to him. Take reasonable care to avoid damage to this material. If the Contractor fails to conform to this requirement, he shall purchase and turn over to the Owner replacement materials of like kind and quality.
- B. All material not selected for retention by the Owner and debris shall be disposed of by the Contractor. This shall include, but not be limited to, removal of PCB type ballasts and fluorescent lamps which shall be disposed of in accordance with EPA requirements.

PART 3 EXECUTION

3.1 EXISTING CONDITIONS

- A. Examine the structure, building, and conditions under which Division 26 work is to be installed for conditions detrimental to proper and timely completion of the work. Do not proceed with work until deficiencies encountered in installation have been corrected. Report any delay or difficulties encountered in installation of Division 26 work which might be unsuitable to connect with work by other divisions of this specification. Failure to report conditions shall constitute acceptance of other work as being fit and proper for the installation of Division 26 work.
- B. Maintain continuity of existing circuits of equipment to remain. Existing circuits of equipment shall remain energized. Circuits which are to remain but were disturbed during demolition shall have circuits, wiring, and power restored back to original condition.

3.2 DEMOLITION

A. Switchboards, panelboards, signaling systems, other electrical equipment free standing (or surface mounted), raceway (exposed) and conductors no longer in service as a result of this Contract shall be removed. Unused raceways or sleeves shall be cut flush at ceiling, floor or wall and filled with grout.

3.3 NEW DEVICES IN REMODEL AREAS

A. Provide surface mounting for devices on existing walls. Where existing boxes are indicated to be reused, extend box as necessary and provide new devices and plates.

SECTION 260005 ELECTRICAL-EXISTING SYSTEMS

3.4 EXISTING PANELBOARD

- A. Any modifications made to existing panels must be incorporated into the existing circuit index on the panel. If more than three circuits are modified a new typewritten index incorporating the changes to the existing index shall be installed in the existing panel.
- B. Listing shall match circuit breaker arrangements, typically with odd numbers on the left and even numbers on the right. Room numbers used shall be final room numbers used in the building as verified with the Owner.

END OF SECTION

1.1 WORK INCLUDED

A. Provide all wire, cable, and terminations complete.

1.2 RELATED SECTIONS

A. Section 260534 – Metal Clad Cable (Type MC) and Fittings.

PART 2 PRODUCTS

2.1 WIRE AND CABLE (Copper, 600-Volt)

- A. Interior and Above Grade: All wires to be Type THW or RHW. Type THWN/THHN or XHHW wire may be utilized at Contractors option, subject to code requirements. Wire and cables shall be brought to project in original containers bearing the underwriters label. Provide Type AVA wire where conductors are subject to temperature above 167 Degrees F.
- B. Underground: All conductors to be type USE. Increase Raceway size when necessary to accommodate conductors per code. Exception: Underground conductors completely contained in code recognized Raceway and boxes may be Type THW, THWN or XHHW.
- C. Metal Clad (Type MC) Cable may be used at the Contractor's option subject to all code requirements, the local AHJ and specifications contained herein.
- D. Non-metallic sheathed cable (Romex) may be used at the Contractor's option subject to all code requirements and the local AHJ.

2.2 SPLICES

- A. Above Grade: Solderless type only. Preinsulated "twist-on" type (limited to size #10 and smaller). Bolt on compression type with application of preformed insulated cover, heat shrinkable tubing or plastic insulated tape acceptable for all sizes.
- B. Below Grade: Splices below grade shall be in handholes and shall be made watertight with epoxy resin type splicing kits similar to Scotchcast.

2.3 TERMINATIONS

- A. Compression set, bolted or screw terminal.
- B. Conductors #12 and smaller shall utilize eye or forked tongue type compression set terminator when termination is to a bolted or screw set type terminal block or terminal cabinet.

2.4 PLASTIC CABLE TIES

A. Nylon or Equivalent, locking type.

PART 3 EXECUTION

3.1 GENERAL

A. Install all wiring in Raceway unless shown or specifically authorized otherwise.

3.2 WIRE SIZE

- A. No. 12 AWG minimum for power and lighting circuits.
- B. Provide solid wire for No. 10 AWG and smaller, and stranded conductors for No. 8 AWG and larger (600) volts.

3.3 TESTS

- A. In addition to the factory testing of all equipment and cable, the Contractor shall test all wiring connections for continuity and ground before any fixtures or other loads are connected. Tests shall be made with a 500V. Minimum DC "Megger" type tester. If tests indicate faulty insulation (less that 2 megohms), such defects shall be corrected and tested again. Contractor shall provide all apparatus to make tests and shall bear all expenses of required testing. Routine operation tests shall be made on all pieces of equipment to demonstrate that working parts are in operating condition. Results of all tests shall be recorded and submitted to the Architect. The Contractor shall immediately replace all parts, which fail to pass the test.
- B. All circuits both in and out of the building shall test out free of grounds, short circuits and other defects.
- C. Check and record catalog number and ampere size of controller overload heaters installed, nameplate full-load amperes, and actual operating amperes of each motor. IMPORTANT: Submit recorded data in triplicate to the Owner. Check proper load balance on the electrical system, direction of rotation, lubrication, and overload protection of all motors before placing in operation.
- D. Provide a log of ampere reading for all panels from phase to neutral for 4 wire panels and from phase to phase for 3 wire panels. These readings shall be taken with all loads activated.
- E. The final test of all equipment shall be made on dates designated by the Owner and all readings shall be made in their presence.
- F. Feeders shall be checked to ensure all phases are energized before connecting to their respective motors. Each motor shall rotate in the proper direction for its respective load. Prior to rotation test, all bearings shall be inspected for proper lubrication.
- G. Minimum megger test for equipment shall be as follows:

Equipment Maximum Minimum Test
Voltage Rating Resistance

1,000-Volts or less 2 Megohms

H. Provide certification of torque values for feeder and service entrance conductors per equipment manufacturer's recommendation.

3.4 CONDUCTOR SIZES, REFERENCED ON PLANS

A. Copper, type THW or RHW unless noted.

3.5 PULLING

A. Use no mechanical means for pulling No. 8 AWG conductors and smaller. Powdered soap stone or approved spray cream shall be the only lubricant used.

3.6 STRIPPING INSULATION

A. Do not ring the cable, always pare or pencil.

3.7 TAPING

A. If used shall be half lapped synthetic tape.

3.8 CONDUCTORS IN PANELS AND SWITCHBOARDS

A. Conductors in panels, switchboards, and terminal cabinets shall be neatly grouped and formed in a manner to "Fan" into terminals with regular spacing.

3.9 CABLE SUPPORTS

A. Provide conductor support devices as required by code in vertical cable runs.

SECTION 260519 WIRES AND CABLES

3.10 RACEWAY SIZES REFERENCED ON DRAWINGS

A. Raceways are sized for copper, type THW, unless otherwise noted. Size all Raceways per code unless specifically noted to be larger on the drawings.

3.11 NON-METALLIC SHEATHED CABLE PROTECTION

- A. Install non-metallic sheathed cable in at least a 2 3/4" deep chase as measured from the finished wall surface per WAC requirements.
- B. Provide a steel plate recessed in the cavity, covered with plaster, adobe or similar finish between the finished wall surface and the cable if the cable cannot be recessed at least 2 3/4" deep.

END OF SECTION

1.1 WORK INCLUDED

A. A grounding system shall be provided for neutral ground and equipment ground as required by code.

PART 2 PRODUCTS

2.1 GROUNDING CONDUCTORS

A. Copper, code size, with physical protection where subject to damage. Bare or green insulated.

PART 3 EXECUTION

3.1 GENERAL

A. Provide all grounding for electrical systems and equipment as required by codes and as specified herein.

3.2 SIZE OF GROUND WIRE

A. As required by code. Where ground wire is exposed to physical damage or is used outside of building or underground, protect with rigid non-metallic conduit.

3.3 GROUND CONNECTION OF WATER PIPING

A. Metal internal piping shall be grounded, as part of this Contract. This includes jumpers for dielectric fittings.

3.4 CONNECTION TO THE GROUND BUS

A. Provide connections in accordance with the codes; including but not limited to conduit system, switchboard frame, service neutral and electrically operated equipment and devices. No device or equipment shall be connected for electrical service which has a neutral conductor connected to a grounding conductor or to the frame within the device or equipment.

3.5 METHOD OF CONNECTION

A. Make all ground connections and ground cable splices by thermal welding. Grounding lugs, where provided as standard Manufacturer's items on equipment furnished, may be used.

3.6 FLEXIBLE RACEWAY

A. Shall not be used for grounding. Install separate ground conductor in all flexible raceway.

3.7 PVC RACEWAY

A. Install separate ground conductor in all PVC raceway as required per code.

END OF SECTION

May 20, 2021 260526-1

1.1 WORK INCLUDED

A. Provide outlet and pull boxes to enclose devices, permit the pulling of conductors and for wire splices and branches.

PART 2 PRODUCTS

2.1 INTERIOR WIRING

- A. General: Outlet and pull boxes shall be pressed drawn steel, zinc coated with plaster ring where applicable. Welded boxes not allowed. Four-inch size minimum. Large pull boxes shall be fabricated sheet steel, zinc coated or baked enamel finish, with return flange and screw retained cover. Non-metallic boxes may be used within dwelling units as permitted by code.
- B. Surface Metal Raceway: Boxes of same Manufacture and to match Raceway. Boxes to accommodate standard devices and device plate.
- C. Concrete and Masonry: Boxes for casting in concrete or mounting in masonry walls shall be the type specifically designed for that purpose.
- D. Install pull boxes so as to be accessible after completion of building construction.
- E. Ceiling outlet boxes shall be galvanized octagonal 4 inch, 1-1/2 inch deep (without fixture stud), 2-1/8 inches deep (with fixture stud).

2.2 EXTERIOR WIRING

- A. Above Grade: Outlet and junction boxes shall be cast or malleable iron or shall be cast of corrosion resistant alloy compatible with Raceway to which it is connected. Pull boxes shall be fabricated of heavy gauge steel and hot dipped galvanized. All boxes shall have gasketed covers.
- B. Below Grade: Where exposed to earth, boxes (handholes) shall be constructed of precast concrete with size, configuration, cover, grates and reinforcing as required by the particular installation. 1.
 - 1. Manufacturer: Similar to Utility Vault 3030LA with base or Fogtite J11 Type 2 with base. Lid shall be H-20 rated where installed in traffic areas. Where not exposed to earth shall comply with Paragraph 2.02A above.
- C. Exterior outlet boxes shall be weather resistant and rain tight, with appropriate covers, gaskets and screws.

PART 3 EXECUTION

3.1 ANCHORING

A. All boxes shall be firmly anchored directly or with concealed bracing to building studs or joints. Boxes must be so attached so that they will not "Rock" or "Shift" when devices are operated.

3.2 FLUSH MOUNTING

A. Except for surface mounted boxes or boxes above accessible ceilings, all boxes shall have front edge (box or plaster ring) even with the finished surface of the wall or ceiling.

3.3 ELECTRICAL OUTLETS

A. General: Coordinate the work of this section with the work of other sections and trades. Study all Drawings that form a part of this Contract and confer with various trades involved to eliminate conflicts between the work of this section and the work of other trades. Check and verify outlet locations indicated on Architectural Drawings, door swings, installation details, layouts of suspended ceilings and locations of all plumbing, heating and ventilating equipment.

SECTION 260532 OUTLET AND PULL BOXES

- B. Centered on Built-In Work: In the case of doors, cabinets, recessed or similar features, or where outlets are centered between such features, such as between a door jamb and a cabinet, make these outlet locations exact. Relocate any outlets which are located off center.
- C. Vertical and Horizontal Relationships: Where more than one outlet is shown or specified to be at the same elevation or one above the other, align them exactly on centerlines horizontally or vertically. Relocate as directed all such outlets (including lighting, receptacle, power signal and thermostat outlets) which are not so installed, at no additional cost to Owner.
- D. Device Outlet Height: Measure from the finished floor to the top of the rough-in box, unless otherwise noted.

Switches 4 Feet to top of rough-in box, Set Vertically Receptacles & Telephone 18 Inches to center, Set Vertically or as Indicated

Other As Noted or as Directed by Owner

- E. Ceiling Location: For acoustical material locate outlet either at the corner joint or in the center of a panel, whichever is closer to the normal spacing. Locate all outlets in the same room in the same panel location.
- F. Installed In Sound Walls: Boxes installed in sound walls shall not be installed back to back. All boxes shall be separated by one stud space and shall be interconnected with flex conduit with a 90° loop.

3.4 ELECTRICAL WORK IN COUNTERBACKS, MILLWORK AND CASEWORK

A. Provide as shown and/or specified. Provide templates, where required, to other trades for drilling and cutting to insure accurate location of electrical fixtures (outlets and devices) as verified with the Owner. Provide all wiring, devices, plates and connections required by said fixture.

3.5 CONNECTION TO EQUIPMENT

A. For equipment furnished under this or other Divisions of the Specifications, or by others. Provide outlet boxes of sizes and at locations necessary to serve such equipment. An outlet box is required if the equipment has pigtail wires for external connection, does not have space to accommodate circuit wiring used. Study equipment details to assure proper coordination.

3.6 BLANK COVERS

A. Provide blank covers or plates over all boxes not covered by equipment.

3.7 JUNCTION OR PULL BOXES

- A. Pull and junction boxes shall be installed as shown, and to facilitate pulling of wire and to limit the number of bends within code requirements. Boxes shall be permanently accessible and shall be placed only at locations approved by the Owner.
- B. In suspended ceiling spaces, boxes shall be supported from the structure independently from ceiling suspension system.
- C. The Drawings do not necessarily show every pull or Junction Box required. The Contractor is permitted to provide boxes deemed necessary by him for his work when installed in accordance with these Specifications.

3.8 BOXES CONTAINING MULTIPLE DEVICES

- A. Boxes containing emergency and normal devices are permitted only with steel barriers manufactured especially for the purpose of dividing the box into two completely separate compartments.
- B. Device boxes containing multiple devices and wiring rated over 150 volts to ground and over 300 volts between conductors are permitted only with steel barrier manufactured especially for the purpose of dividing the box into separate compartments for each device having exposed live parts.

SECTION 260532 OUTLET AND PULL BOXES

3.9 BOXES IN EARTH

A. Provide for all wire splices and as required to pull conductors. Boxes (handholes) shall be set in place on a 3" sand bed. Coverplates shall be flush to, and match the slope of, the final surface grade.

END OF SECTION

1.1 WORK INCLUDED

A. Provide Raceway System complete.

PART 2 PRODUCTS

2.1 GALVANIZED RIGID STEEL CONDUIT (GRS)

- A. General: Hot dipped galvanized.
- B. Fittings: Galvanized malleable iron or noncorrosive alloy compatible with galvanized conduit. Erickson couplings, watertight split couplings (O.Z. type or equivalent) permitted. Running thread or set screw type fittings not approved.

2.2 INTERMEDIATE METAL CONDUIT (IMC)

- A. General: Hot Dipped galvanized.
- B. Fittings: Galvanized malleable iron or noncorrosive alloy compatible with galvanized conduit. Erickson couplings, watertight split couplings (O.Z. type or equivalent) permitted. Running thread or set screw type fittings not approved.

2.3 ELECTRICAL METALLIC TUBING (EMT)

- A. General: Hot dipped galvanized.
- B. Fittings: Raintight; steel or malleable iron type using a split corrugated compression ring and tightening nut or stainless steel locking disc. Steel set screw fittings are acceptable. Indenter, drive-on and pressure cast or die cast type set screw are not acceptable.

2.4 FLEXIBLE METAL CONDUIT

- A. Dry Locations:
 - 1. General: Galvanized flexible steel for dry locations.
 - 2. Fittings: Malleable iron or steel, Thomas and Betts "squeeze" type or equal.
- B. Damp and Wet Locations:
 - 1. Liquid Tight: Polyvinyl chloride (PVC) weatherproof cover over flexible steel conduit.
 - 2. Fittings: Thomas and Betts "Super-Tite" or equal.

2.5 SURFACE METAL RACEWAY

A. Formed steel or aluminum type. Standard factory finish. Where color choice is available, consult Owner for selection prior to ordering.

2.6 RIGID NON-METALLIC CONDUIT (PVC)

A. Schedule 40 rigid polyvinyl chloride type unless otherwise noted.

PART 3 EXECUTION

3.1 GENERAL

- A. Install Raceway concealed in construction unless noted otherwise on the Drawings or specifically approved in writing by the Owner.
- B. Cut Raceway ends square, ream and extend maximum distance into all couplings and connectors.
- C. Provide and install manufactured end caps on all Raceway ends during construction to prevent the entrance of water or dirt. Tape, as a cover, not permitted.

- D. Swab out all Raceways before pulling wires.
- E. All elbows for GRS and PVC Raceway shall be factory elbows. For all other Raceway, use factory ells for bends of 1-1/4" and larger diameter.
- F. Raceway shall not penetrate sheet metal ducts unless permission is granted by Owner. All sleeves shall be provided for Raceway installation.
- G. Provide 2 3/4" C.O. stub into accessible ceiling space from all recessed panelboards or systems terminal boxes.

3.2 GALVANIZED RIGID STEEL CONDUIT

A. All Connections shall be watertight. Install for all Raceways in concrete or where subject to damage.

3.3 INTERMEDIATE METAL CONDUIT

A. Intermediate metal conduit is permitted as a substitute for galvanized rigid steel conduit except where GRS is required by code.

3.4 ELECTRICAL METALLIC TUBING

A. Install for wiring in masonry, frame construction, furred ceilings and above suspended ceilings. May be used for exposed work in unfinished areas where not subject to damage. Where construction involves masonry work, surface cut masonry units wherever such masonry units are to remain unplastered or uncovered in complete construction.

3.5 RACEWAYS UNDERGROUND

- A. Galvanized rigid steel conduit painted with two coats of bitumastic paint or galvanized rigid steel conduit with 15 mil. polyvinyl chloride (PVC) jacket (repair abrasions with PVC base paint or PVC)
- B. PVC Raceways may be used for underground runs when permitted by code. Field bends, when necessary, shall be formed only with factory recommended heater. Penetrations through floor and walls shall be galvanized rigid steel conduit. PVC, if used, shall be increased in size from that shown to include code required ground wire. Bends in excess of 10 degrees shall be GRS.
- C. Arrange and slope Raceways entering building to drain away from building.
- D. Ground wires shall be provided in all PVC Raceway.

3.6 INSERTS, SHIELDS AND SLEEVES

- A. Furnish and set in place, in advance of pouring slabs and walls, all inserts and sleeves needed to execute Division 26 equipment installation.
- B. Where supports in slabs are required after wall has been poured, use a drilled-in threaded insert, installed as recommended by Manufacturer.
- C. Sleeves shall be provided for all wall penetrations.

3.7 RACEWAYS THAT STUB UP THROUGH FLOOR

- A. Install at such depth that the exposed Raceway is vertical and no curved section of the elbow is visible.
- B. PVC Raceway shall not be stubbed through floors.

3.8 SEALING OF RACEWAY PENETRATIONS

- A. Exterior Wall Surfaces Above Grade: Seal around all penetrations with caulking approved by Owner. For concrete construction above ground level, cast Raceway in wall or core drill wall and hard pack with a mixture of equal parts of sand and cement.
- B. Exterior Surfaces Below Grade: Cast Raceway into wall (or floor) or use manufactured seal assembly (such as O.Z. type "FSK") cast in place.

- C. Roofs: Provide mopped, lead, roof jack where Raceway penetrates roof membrane.
- D. Fire Rated Floors, Walls, Ceilings/Roofs: Concrete or masonry, seal around Raceway penetration with Dow Corning 3-6548 silicone RTV foam or approved equal. Plaster or gypsum wallboard, seal around Raceway penetration with plaster, fire tape per local Fire Marshal's requirements.

3.9 SEALING OF RACEWAYS

A. Seal interior of all Raceways which pass through buildings roofs or through outside walls of the building, above or below grade. Seal on the end inside the building using duct sealing mastic, non-hardening compound type, specially designed for such service. Pack around the wires in the Raceways.

3.10 HANGARS FOR RACEWAYS

- A. In suspended ceiling spaces Contractor may, at his option, attach 1/2" or 3/4" EMT Raceways to the ceiling suspension system where such system is structurally suitable; in which case, provide clips manufactured for the purpose.
- B. When more than two Raceways will use the same routing, group together on a patented channel support system (such as Unistrut).

3.11 SURFACE METAL RACEWAY

A. Install parallel to building surface (i.e., wall, ceiling, floor). Fasten to surface as recommended by Manufacturer. Mount so Raceway is in the least obvious location.

3.12 FLEXIBLE CONDUIT

A. Flexible conduit shall be used **only** for connection to motors and equipment subject to vibration with 90 degrees loop minimum to allow for isolation and for lay-in fluorescent fixtures above T-Bar ceilings. For fixture installations, one end of flex must terminate in rough-in junction box. Flex conduit shall not be installed over 6' long or used to connect from fixture to fixture. Use liquid tight for pumps, equipment which is regularly washed down, and equipment in damp locations. Provide ground wire when required by code.

3.13 PULL CORDS

A. Nylon type shall be included in all installed empty Raceway.

END OF SECTION

1.1 WORK INCLUDED

- A. Provide Metal Clad (Type MC) Cable for power, control and lighting systems.
- B. Provide wiring connections and terminations.

1.2 REGULATORY REQUIREMENTS

A. UL 1569. Products shall be tested, approved and labeled/listed by Underwriters Laboratories, Inc.

1.3 USES PERMITTED

- A. MC Cable is permitted to be used for 20amp lighting and power circuits where routing is above grade, concealed and the installation meets the requirements of NEC 330.
- B. MC Cable shall NOT be used for HVAC equipment.

PART 2 PRODUCTS

2.1 CABLE ASSEMBLY

- A. Metal clad cable assemblies shall consist of 2, 3 or 4 current carrying conductors and an equipment ground conductor.
- B. Conductors: Solid Copper conductor, No. 12 AWG minimum or No. 10 AWG maximum. Installation methods shall be as specified under Part 3 Execution.
- C. Insulation: Conductor insulation shall be rated 600-volt, Type THHN, 90°C dry.
- D. Fillers: Fillers shall be non-hygroscopic and non-wicking.
- E. Binder: Core binder shall be corrugated polyester.
- F. Sheath: The metal sheath shall be galvanized steel or aluminum. The metal sheath shall be extruded onto the cable or applied longitudinally, then wrapped and welded. The sheath shall then be corrugated for greater flexibility.
- G. Jacketing: When PVC jacketing is required, the jacket shall be flame-retardant PVC with a temperature range of -40° C to 90° C.
- H. Equipment Grounding Conductor: The equipment ground wire shall be of the same construction as specified in 2.02.A and 2.02.B and be at a minimum the same size as the current carrying conductors. The insulation color shall be green.

2.2 FITTINGS

- A. Fittings shall be UL listed and identified for such use with metal clad continuous corrugated sheath cable, with or without PVC jacketing, as is appropriate for the installation.
- B. Connectors shall be of steel or malleable iron and shall be a squeeze type clamp connector with a locknut for non-jacketed metal clad cable. Compression gland type connectors shall be used for jacketed metal clad cable.

PART 3 EXECUTION

3.1 INSTALLATION – POWER AND LIGHTING SYSTEMS WIRING

- A. All wiring shall be installed in compliance with the latest version of the National Electrical Code and all other applicable codes and standards as indicated elsewhere in these specifications.
- B. Use of metal clad cable shall be permitted only for lighting, equipment and receptacle branch circuits. Metal clad cable shall not be permitted in locations designated to be hazardous Class I, II or III.

SECTION 260534 METAL CLAD CABLE (TYPE MC) AND FITTINGS

- C. Metal clad cable shall be permitted only for motor circuits where the motor being served is less than ½ HP and rated for 120V, single phase. Metal clad cable is not permitted for HVAC equipment and controls.
- D. Metal clad cable shall only be installed concealed within walls and above ceiling interstitial spaces. Where there is no ceiling interstitial space, metal clad cable may not be used.
- E. Bends in corrugated sheath metal clad cable shall be made so that the cable will not be damaged. The radius of the curve of the inner edge of any bend shall not be less than seven (7) times the diameter of the metallic sheath.
- F. Metal clad cable is not permitted to connect branch circuits to fumehoods, gas storage cabinets, or chemical storage cabinets.
- G. No metal clad cable shall be installed in ventilation ducts or plenums.
- H. Conductors in Enclosures: Provide neat and workmanlike installation with conductors tied with T&B Ty-Rap, Virginia Plastics, or equal, nylon wire ties in terminal cabinets, gutters and similar locations.

3.2 FITTINGS

- A. Fittings used for connecting metal clad cable to boxes, light fixtures or other equipment shall be UL listed and identified for such use.
- B. Cable preparation for installation of fittings shall follow manufacturer's instructions. The manufacturer's specialized tools shall be used for preparing cable ends for installation of fittings.
- C. The cable end shall be cut square to ensure flush seating of the cable into the fitting. Fitting securement screws shall be properly torqued. Cable ends shall be fitted with insulating bushings intended for the type of metal clad cable being installed.
- D. For jacketed metal clad cable, the outer jacket shall be removed to the length specified by the fitting manufacturer's instructions. Remove oils or solvent by-products from the outer jacket of the cable. The cable end shall be cut square to ensure flush seating of the cable into the fitting. The fitting gland nut shall be properly torqued to the manufacturer's specifications.

3.3 ARRANGEMENT AND SUPPORT

- A. Metal clad cables shall be run parallel with walls or structural elements. Vertical runs shall be plumb; horizontal runs level and parallel with structure, as appropriate. Groups shall be racked together neatly with both straight runs and bends parallel and uniformly spaced.
- B. Metal clad cables shall be securely fastened in place at intervals of not more than six feet, with suitable clamps or fasteners of approved type, and all vertical conduits shall be properly supported to present a mechanically rigid and secure installation.
- C. Metal clad cable installed parallel to framing members, such as studs, joist, or rafters, shall be supported so that the nearest outside surface of the cable is not less than 1-1/4 inches from the nearest edge of the framing member. Where this distance cannot be maintained, the cable shall be protected by a steel plate, sleeve, or equivalent that is at least 1/16-inch thick.
- D. Maintain at least 6-inch clearance between metal clad cables and other piping systems. Maintain 12-inch clearance between metal clad cables and heat sources such as flues, steam pipes, and heating appliances.
- E. No metal clad cable shall be fastened to other conduits or pipes or installed so as to prevent the ready removal of other pipes or ducts for repairs.
- F. Individual metal clad cables hung from roof structure or structural ceiling shall be supported by split-ring hangers and wrought-iron hanger rods. Where three (3) or more metal clad cables are suspended from the ceiling in parallel runs, use steel channels, Kindorf, Unistrut or equal, hung from 1/2-inch rods to support the conduits. The conduit on these channels shall be held in place with metal clad cable clamps designed for the particular channel that is used.

SECTION 260534 METAL CLAD CABLE (TYPE MC) AND FITTINGS

- G. Secure metal clad cable support racks to concrete walls and ceilings by means of cast-in-place anchors; die-cast, rustproof alloy expansion shields; or cast flush anchors. Wooden plugs, plastic inserts, or gunpowder driven inserts shall not be used as a base to secure conduit supports.
- H. Metal clad cable shall be supported immediately on each side of a bend and not more that one (1) foot from an enclosure where a run of metal clad cable ends.
- I. Use of Cable Tray:
 - 1. The sum of the cross-sectional areas of all cables shall not exceed the maximum allowable cable fill area allowed by NEC Tables 392.9, 392.9(E) and 392.9(F).
 - 2. Cables shall be installed in a single layer with a maintained spacing of not less than one cable diameter between cables.
 - 3. Ampacity of cables installed in cable tray shall meet the requirements of NEC 392.11.

3.4 INSPECTION AND TESTS

- A. General: The electrical installation shall be inspected and tested to ensure safety to building occupants and operating personnel and conformity to Code.
- B. Measure and record insulation resistance of all power and control wiring including insulation resistance of all equipment:
 - 1. The insulation resistance of each circuit phase-to-phase and phase-to-ground shall be measured. For circuits rated less than 600 volts, the resistance shall not be less than 2 megohms.
 - Systems rated above 240 volts shall be tested with a 1000-volt Megohmeter. Circuits rated 240
 volts and below shall be tested with a 500-volt Megohmeter. The D.C. potential shall be applied
 for thirty (30) seconds.
- C. The Contractor shall record test readings and submit certified test to the Owner for review and acceptance approval before energizing respective circuits.

END OF SECTION

1.1 GENERAL

A. Conform to the General Conditions, Supplementary Conditions, and related work in other Divisions for all work in Division 26.

1.2 RELATED SECTIONS

- A. Section 260000 Electrical General Conditions
- B. Section 262416 Panelboards
- C. Section 262419 Motor Controllers
- D. Section 262813 Fuses
- E. Section 262816 Disconnects and Fused Switches

1.3 SECTION INCLUDES

- A. This section includes the requirements for the contractor to perform electrical system studies based on the selected electrical equipment.
- B. The required studies include but are not limited to a Coordination Study and an Arc Flash Assessment Study.
- C. Each of the studies performed shall be based on the actual equipment to be installed. Any revisions of the selected equipment shall result in an updated study with the revised equipment submitted for review and approval prior to ordering equipment.
- D. If the Contractor installs different equipment than was included in the approved electrical system studies, the Owner reserves the right to require the Contractor to replace the non-approved electrical equipment at no additional cost to the Owner.
- E. The Contractor shall provide all studies in agreement with all applicable codes and standards. If a specific code is applicable to the electrical system being modeled, the code shall be referenced and the portion of the electrical system impacted shall be noted.

1.4 SUBMITTAL REQUIREMENTS OF THIS SECTION

- A. During the Shop Drawing process and prior to ordering electrical equipment, the Contractor shall submit an <u>Electrical System Overcurrent Protective Device Coordination Study</u>. The Coordination study shall be submitted with the product data for all devices included in the coordination study and shall be formatted as indicated in Paragraph 2.01.
- B. After the electrical system has been installed and is ready for energization, the Contractor shall provide an **Arc Flash Assessment Study**. The Arc Flash Assessment shall be submitted for approval prior to substantial completion. Once the Arc Flash Assessment Study is approved, the Contractor shall print and install the approved Arc Flash notification labels on all equipment containing overcurrent protective devices. Labels installed outdoors shall be suitable for outdoor installation. The Arc Flash Assessment Study shall be assembled as outlined in Paragraph 2.02.

1.5 OUALIFICATIONS

A. All Studies shall be prepared by a qualified professional electrical engineer.

1.6 DEFINITIONS

- A. For the purposes of this section, overcurrent device coordination shall be defined in two levels as follows:
 - 1. Coordinated = Full coordination outside of the instantaneous region of the overcurrent devices.

Selectively Coordinated = Full coordination including the instantaneous region of the overcurrent devices.

1.7 OPERATION AND MAINTENANCE REQUIREMENTS OF THIS SECTION

- A. The contractor shall provide to the owner the following information to be included in the Operation and Maintenance Manual:
 - 1. Final Arc Flash Assessment Study submitted in accordance with the requirements outlined in Specification 26 00 00 Electrical General Conditions.
 - 2. The electronic copy shall also include a sub-folder with the software model used to perform the calculations. The model shall include all files necessary to access and review the model electronically. The Contractor shall include a Text File in the directory labeled "MODEL INFORMATION.TXT" which includes the following:
 - a. Project Name
 - b. Electrical Contractor Name
 - c. Software used to model the system including version
 - d. Date the model was last updated
 - e. Contact information for the individual/organization who prepared the model.

PART 2 PRODUCTS

2.1 PROTECTIVE DEVICE COORDINATION STUDY

- A. The contractor shall submit an <u>Electrical System Overcurrent Protective Device Coordination</u>
 <u>Study</u> during the Shop Drawing submittal phase of the project prior to ordering equipment with overcurrent protective devices. The Coordination study shall be submitted with the product data for all devices included in the coordination study.
- B. All overcurrent protection devices shall be provided as a coordinated system by the manufacturer. Any cases where the selected manufacturer is unable to coordinate two overcurrent devices in series due to the sizes indicated in the design, the Owner shall be notified and a recommended coordination solution provided by the manufacturer prior to or during the submittal phase. For overcurrent protection devices 400A and larger where the manufacturer is unable to provide a coordinated system, the overcurrent protection devices shall include Long-Time/Short-Time/Instantaneous (LSI) time delay and ampacity settings minimum.
- C. Unless noted otherwise, when a main service overcurrent device with adjustable Ground Fault trip has been specified, the next level feeder overcurrent devices shall also include adjustable Ground Fault trip. The Coordination Study shall also provide recommended settings for all adjustable Ground Fault trip devices.
- D. All emergency system overcurrent protection devices shall be selectively coordinated as defined by applicable codes and standards (2017 NEC 700.32). The scope of the selectively coordinated system shall be as defined by applicable local, state, and federal codes.
- E. For modifications/additions to existing electrical systems, at a minimum the Coordination Study shall include:
 - 1. All new electrical equipment containing overcurrent devices.
 - 2. The existing overcurrent protective devices immediately downstream of the new electrical equipment.
 - 3. All existing overcurrent protective devices upstream of the new electrical equipment to the main electrical utility service entrance.
- F. The Protective Device Coordination Study shall present the following information in an organized report:
 - 1. Coordination Study Title Page shall include:
 - a. Project Name
 - b. Electrical Contractor name
 - c. Date Study was performed

SECTION 260573 ELECTRICAL SYSTEM STUDIES

- d. Study Type (ie Overcurrent Device Coordination Study)
- e. Name/Company/Contact information for organization performing the study
- f. Analysis software used to perform the study including version
- 2. Coordination Study Executive Summary shall include a brief project description, an overall description of the electrical system, and a listing of any items that may need resolution. If specific Code requirements exist for any portion of the electrical system, they shall be noted in addition to how the requirement was implemented.
- 3. Coordination Study Analysis shall include a detailed outline of the overcurrent device coordination analysis. Time Current Curves shall be provided for each unique coordination path in the electrical system from the Main service protective device to the largest branch circuit breaker. Each Time Current Curve shall be uniquely labeled. The report shall include a list of the overcurrent devices included in each Time Current Curve and a description of any potential uncoordinated devices with the potential impact on the electrical system due to the lack of coordination.
- 4. Conclusion shall include a summary of overall protective device coordination for the electrical system being modeled. The Conclusion shall also include a table listing all devices with adjustable settings and the recommended settings based on the coordination study. Any uncoordinated electrical devices that include recommended revisions shall be listed with the proposed system revision.
- 5. As an Appendix, the Coordination Study shall include a one-line diagram of the modeled system with each bus and overcurrent device identified. The naming of the devices in the one-line diagram shall exactly match the device names in the report and time-current curves.

2.2 ARC FLASH ASSESSMENT STUDY

- A. After the electrical system has been installed and is ready for energization, the Contractor shall provide an Arc Flash Assessment Study. The Arc Flash Assessment Study shall be submitted for approval prior to substantial completion. Once the Arc Flash Assessment Study is approved, the Contractor shall print and install the approved Arc Flash notification labels on all equipment containing overcurrent protective devices.
- B. The Arc Flash Assessment Study shall include the following at a minimum:
 - 1. Study Title Page shall include the following information
 - a. Project Name
 - b. Date Study was performed
 - c. Name/Company/Contact information for organization performing the study
 - d. Analysis software used to perform the study including version
 - 2. An Index shall be provided listing each Section included in the Arc Flash Assessment Report.
 - 3. Study Executive Summary shall a brief overview of each section of the Study including any recommended revisions to the electrical system based on the results of the Study. The overview shall include at a minimum, any pieces of equipment with a calculated fault current that exceeds the equipment rating, a listing of any overcurrent devices with revised settings, a brief listing of un-coordinated equipment that necessitate revisions, and a listing of each piece of equipment with a Dangerous level of Arc Flash energy.
- C. Each of the following sections and appendices shall include a dedicated Cover Page outlining the contents of the Section.
- D. Section #1 Fault Analysis shall include an updated Fault Current Analysis of the entire electrical system. The Fault Analysis shall include as a minimum the following information:
 - 1. The available fault current at the Utility for the fault analysis shall be based on the actual Utility fault current and not an assumption. For electrical distribution systems that are primary metered, the study shall include the primary electrical system back to the point of service including but not limited to actual cable lengths/sizes/types and any overcurrent protective devices. The study shall include correspondence from the utility showing the available fault current at the utility service point in the appendices.
 - 2. Updated cable size/type/length shall be included in the report based on the installed conditions.

SECTION 260573 ELECTRICAL SYSTEM STUDIES

- 3. Updated transformer information based on the installed transformer nameplates
- 4. Current limiting fuses shall be indicated where applicable based on the actual equipment installed.
- 5. Large motors (>50hp) shall be included in the analysis. Smaller motors shall be grouped together at each panel/switchboard.
- 6. A Table shall be provided with a comparison of calculated fault current to equipment fault rating for each piece of equipment containing overcurrent protective devices. The calculated fault current shall be adjusted as necessary based on the calculated X/R ratio.
- 7. Any equipment that is found to have a rating less than the calculated/adjusted fault current shall be specifically indicated along with recommended corrective action.
- The Fault Analysis shall include the system model one-line diagram with the following information indicated:
 - a. Utility connection point with available fault current and X/R ratio.
 - b. Cables with conductor size, length, parallel count, raceway type.
 - c. Transformers with impedance, kva, X/R ratio.
 - d. Large motors (>50hp). Smaller motors shall be grouped together at each panel/switchboard.
 - e. Electrical equipment with overcurrent protective devices showing calculated fault current.
- E. Section #2 Protective Device Coordination Study shall include an updated Coordination Study for the entire distribution system as outlined in Paragraph 2.01. The updated coordination study shall optimize settings to provide coordination while reducing the Arc Flash energy present.
- F. Section #3 Arc Flash Assessment shall include a description of the method used to calculate the Arc Flash energy present and the assumptions of the study. The following additional items shall be included in the study as a minimum:
 - 1. Table summarizing the Arc flash energy present at each pieces of equipment and the conditions under which the incident energy occurred. The table shall also include the arcing time, fault current, upstream overcurrent device, and any notes for different conditions present.
 - 2. A template Arc Flash label with each piece of information included on the label explained.
 - Sample Arc Flash Labels for each piece of equipment in the model showing the code required information.
- G. Appendix A shall include that correspondence from the electric utility providing the available fault current used in the analysis.
- H. Appendix B shall include cut sheets for all electrical equipment included in the Arc Flash Assessment study.

PART 3 EXECUTION

3.1 TESTING/VERIFICATION

- A. The Contractor shall provide testing of each piece of electrical equipment with adjustable overcurrent protective devices to verify proper operation in accordance with the manufacturer's recommendations. The test reports shall indicate the following at a minimum:
 - 1. Equipment name.
 - 2. Date of the test.
 - 3. Name and organization of the individual performing the testing.
 - 4. Test results. Any equipment failing the testing shall be replaced at no additional cost to the Owner.
 - 5. As-Left settings. These settings shall be as indicated in the Arc Flash Assessment Study. Any settings that vary from the Study shall be either updated in the Study including a revised submittal package or shall be corrected in the field and an updated test report provided.

3.2 FIELD APPLIED ARC FLASH LABELS

- A. After the Arc Flash Assessment Study is approved and the electrical equipment has been successfully tested, the Contractor shall provide Arc Flash and Shock Hazard warning labels on all electrical devices containing overcurrent protection stating the following information at a minimum:
 - 1. PPE level of protection
 - 2. Incident energy (cal/cm²) at 24" from the equipment unless specified otherwise by the Owner

SECTION 260573 ELECTRICAL SYSTEM STUDIES

- 3. Flash hazard boundary
- 4. Glove class
- 5. Limited approach distance
- 6. Restricted approach distance
- 7. Prohibited approach distance
- B. Labels shall be permanently affixed to the equipment or wiring method and shall not be hand written.
- C. The label shall be of sufficient durability to withstand the installed environment. Labels installed outdoors shall be suitable for outdoor installation with no degradation due to sun light or precipitation.
- D. The label shall meet ANSI Z535 guidelines and requirements.

1.1 RELATED DOCUMENTS

A. Section 260000 – Electrical General Conditions

1.2 WORK INCLUDED

A. Provide all panelboard equipment, complete; dead front type.

PART 2 PRODUCTS

2.1 PANELBOARD TYPE

- A. Panelboards shall be rated at proper voltage and current for intended use with busbars of copper or aluminum. Panels shall be 3-phase, 4-wire, 100% neutral, unless noted otherwise. Where aluminum is utilized, all lugs shall be of an approved compression type. Provide multiple lugs where conductors in parallel or "feed through" are shown on the Drawings.
- B. Conductor Connectors shall be bolted to busbars using Grade 5 bolts and Belleville washers. Feeder conductor connectors shall be rated for 75 Degree C. wire when 75 Degree C. wire is indicated. Where aluminum conductors are utilized for feeders or branch circuits the connectors shall conform with Section 260519.
- C. Panelboards shall have a separate ground bus bonded to the panelboard frame.
- D. Where 120-Volt, 15- or 20-Amp breakers are intended for switching loads they shall be of type rated for switching duty labeled "SWD."

2.2 ACCEPTABLE MANUFACTURERS

- A. General Electric
- B. Square-D
- C. Siemens
- D. Cutler-Hammer

2.3 CIRCUIT BREAKERS

- A. The following interrupting capacity, 10,000 AIC Symmetrical shall be considered minimum. Other ratings shall be as specified on panel schedules shown on the Drawings. Series rating of breakers is not allowed.
- B. Mount breakers in all panelboards so that breaker handles operate in a horizontal plane. Provide common trip on all multiple pole breakers.
- C. Where noted, provide spare breakers, complete for future connection of wiring circuits. Where "Space" is indicated for breakers, provide all bussing and breaker mounting hardware in the panelboard, provide steel knockouts in dead front metal closure of unused part of panel. If any steel knockouts are removed, provide breakers in such spaces or approved cover plates. Open spaces are not permitted.
- D. For multi-wire branch circuits, provide approved breaker handle ties where required by NEC 210.4.

2.4 CABINET FOR EACH PANELBOARD

- A. Flush or surface, as indicated; tight closing doors without play, when latched. Where two cabinets are located adjacent to each other in finished areas, provide matching trim of the same height. Where flush mounted, provide two (2) 3/4" conduits to accessible ceiling space for future expansion.
- B. All conduits for future expansion shall stub into a junction box, where located above grade, and shall be sealed in the panel.

- C. Provide cabinets of sufficient dimensions to allow for future expansion and addition of circuit breakers within the panelboards as indicated on panel schedules.
- D. Provide lock for each cabinet door. All Electrical Distribution Equipment Locks shall be keyed identically. Key system shall match existing. Supply Owner with minimum six keys.
- E. Fasten panelboard front with machine screws with oval counter-sunk heads, finish hardware quality, with escutcheons or approved trim clamps. Clamps accessible only when dead front door is open are acceptable. Surface mounted panelboards with fronts greater than 48 inches vertical dimension shall be hinged at right side in addition to hinged door over dead front.
- F. Finish: Provide factory prime coat for cabinets to be located in finished areas. Where cabinets are located in unfinished areas, standard lacquer or enamel finish, gray or blue-gray color, shall be substituted for factory prime coat.

2.5 SYSTEM OF NUMBERING AND BUS ARRANGEMENT

A. Shall be as shown on the Panel Schedules on the Drawings.

2.6 PANELBOARD NAMEPLATE

- A. For Main Switchboards, Distribution and "House" panels only, provide engraved and filled (or color layer engraved through outer layer) plastic nameplate with ½-inch high characters (for panel name); attached with screws to each NEMA 1 panelboard front. White on black, include voltage, phases, wires and minimum A.I.C. Rating in 3/8-inch characters.
- B. Nameplate color shall be:

1. Normal System: White letters on black

PART 3 EXECUTION

3.1 MOUNTING

A. Secure in place with top of cabinet at 6'-0", unless otherwise noted. Top of cabinet and trim shall be level. Firmly anchor cabinets directly or with concealed bracing to Building Structure. When panels are not located in or directly on a wall, provide a support frame of formed steel channel which is anchored to the floor and Ceiling Structure. Interiors shall not be installed until Structure is totally enclosed. Where panels are mounted adjacent to each other, the top edges shall be at the same height.

3.2 CIRCUIT INDEX

A. For each branch circuit panelboard provide a typewritten index listing each circuit in the panelboard by number with its proper load designation. Mount with a transparent protective cover inside cabinet door. Listing shall match circuit breaker arrangements, typically with odd numbers on the left and even numbers on the right. Room numbers used shall be final room numbers used in the building as verified with the Owner, and not room number assigned on Plans.

3.3 SPACE

A. Verify space available with equipment sizes and Code Required Working Clearances prior to Submittal of Shop Drawings.

3.4 FEED THROUGH AND DOUBLE LUGS

A. Provide feed through or double lugs with amperage equal to the incoming feeder amperage unless shown as larger.

1.1 RELATED DOCUMENTS

A. Section 260000 – Electrical General Conditions

1.2 WORK INCLUDED

- A. Work under this section includes all requirements for motor controls to be furnished under the electrical portion of the work on all electrical motor driven equipment. Individually mounted starters shall be provided by Division 26 Contractor. Motor controls shall conform to NEMA Standards for each specific purpose.
- B. The Division 26 Contractor shall furnish all motor controllers not included with equipment furnished under other divisions of these specifications or by Owner. The Division 26 Contractor shall install all motor controllers including all controllers not factory assembled into equipment furnished under other divisions of these specifications or by Owner.

1.3 MOTOR VOLTAGE INFORMATION

- A. Voltages available are 208 Volt, 3 Phase, and 115 Volt Single Phase.
- B. Circuits are designed (in general) for motors as follows:
 - 1. Smaller than 1/2 H.P. 115 Volts, Single Phase 1/2 H.P. and larger 200 Volts, 3 Phase
- C. Verify motor sizes and voltages provided under other divisions and notify General Contractor immediately if any discrepancies are noted.

1.4 REGULATORY REQUIREMENTS

A. Provide motor protection switches of the appropriate NEMA size. For units not using NEMA rating, use equivalent NEMA size.

PART 2 PRODUCTS

2.1 MOTOR STARTERS

- A. Magnetic Motor Starters: Unless noted otherwise, shall be full voltage non-reversing with three overloads sized to suit nameplate amperes of motor served, motor "On" and "Off" pilot lights, "Hands-Off-Auto" switch, and auxiliary contacts for interlocking.
- B. Combination Motor Starter/Disconnect: Shall be fused switch type with all features of Paragraph A above. In addition, provide disconnect switch auxiliary contacts for disconnection of externally powered control circuits where applicable. Fuses shall be sized in accordance with motor manufacturer's requirements.
- C. Manual Starters: Shall be toggle switch or push-button type, lockable in the "Off" position, with overload relays, pilot light and enclosure pursuant to Paragraph D below. Manual starters shall only be used where specifically shown or called out on the drawings and only for single phase, fractional horsepower motors.
- D. Enclosures: All motor controllers shall be contained in an enclosure suitable for the environment in which the controller is mounted, and shall be weatherproof when exposed to weather.
- E. Overload Devices: Shall be melting alloy or bimetallic type. One overload shall be provided for each phase. Provisions shall be made for resetting the overload devices from outside the starter enclosure. Provide ambient compensated overload devices only when the motor is at a constant temperature and the controller is subject to a separate, varying temperature. Automatic reset overload devices are not permitted.

SECTION 262419 MOTOR CONTROLLERS

2.2 ACCEPTABLE MANUFACTURERS

- A. Square D
- B. Allen Bradley
- C. General Electric
- D. Cutler-Hammer
- E. Siemens

2.3 MOTOR CONTROL CENTERS

A. Motor Control Centers shall consist of one or more enclosed vertical sections jointed together to form a rigid, free standing assembly. The construction of the Motor Control Center shall meet the requirements set forth by U.L. 845, NEMA number ECS-2-322 and the N.E.C. The enclosure shall in accordance with NEMA standards type 12. Wiring shall be Class II Type B. Terminal blocks shall be conventional track mounted.

2.4 NAMEPLATES

A. Pursuant to Section 260000, Paragraph 2.05, provide nameplates permanently attach (with screws on NEMA 1 enclosures) on each controller, nameplates with the following information: Load served, voltage, phase, short circuit rating, panel/circuit number and where applicable fuse size and type.

2.5 FAN SHUTDOWN RELAYS

A. Contractor shall provide relay(s) with sufficient contacts to shutdown all fans over 2000 cfm upon receipt of Fire Alarm.

PART 3 EXECUTION

3.1 FINISHED AREAS

A. In finished areas, mount motor protection switches flush and install suitable coverplates.

3.2 HEATERS

A. Install heaters co-related with full-load current of motors provided.

3.3 OVERLOADS

A. Set overload devices to suit motors provided.

3.4 SUPPORTS

A. Securely mount to equipment, wall or acceptable mounting frame.

3.5 FAN SHUTDOWN WIRING

A. Provide wiring interlock connections for all (over 2000 cfm) fan starter control circuits via Division 23 furnished fan shutdown relay to shutdown fans upon receipt of Fire Alarm.

3.6 FAN SHUTDOWN WIRING

A. Provide wiring interlock connections for all (over 2000 cfm) fan starter control circuits via a relay to shutdown fans upon receipt of Fire Alarm.

3.7 CONNECTION TO MECHANICAL EQUIPMENT ON ROOFS

A. The Contractor shall coordinate all roofing penetrations with the general contractor and roofing contractor to assure that the roofing warranty is maintained.

SECTION 262419 MOTOR CONTROLLERS

- B. Attachment of conduits to the roof to serve mechanical equipment and devices shall comply with Section 260533.
- 3.8 Mechanical equipment nameplate ratings
 - A. The Division 260000 Contractor shall verify that the nameplate ratings of the mechanical equipment, when they arrive on site, are consistent with the ampacity called out on the drawings. The Contractor shall bring any discrepancies to the Owner's attention prior to installation of conduit and wiring.

1.1 WORK INCLUDED

- A. Provide all wiring devices and plates.
- B. No push-in terminals allowed.
- C. All devices color shall be white, unless otherwise noted.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Hubbell
- B. Pass & Seymour
- C. Leviton
- D. Cooper
- E. Or approved equal

2.2 SWITCHES

- A. "Specification Grade", quiet type, rated 277-volt, 20 amp, unless noted, with plastic handle. Single pole, double pole, 3-way, or locking type as required. Meets Fed. Spec. WS-896 Provide matching styles and colors in other devices as required for the conditions of installation. Hubbell CSB120, Eaton CSB120, Leviton 1221, and P&S 20AC1
- B. Interchangeable type shall be rated same as above.
- C. Motor rated switches: Switches serving as motor disconnecting means shall be horsepower rated with overload relays and meet requirements as stated above. See manual starters in Section 26 24 19, 'Manual Starters'.
- D. Combination AFCI/Switch: 15 amp rated, 20-amp feed-through, 125 Volt outlet branch circuit combination AFCI/Switch; back and side wired. Leviton AFSW1.
- E. Device plates shall be Hubbell, Leviton, or Cooper; nylon, white or color to match device.

2.3 RECEPTACLES

- A. In All Non-occupiable spaces: Provide "Specification Grade", Duplex NEMA 5-20R configuration (20-Amp, 120-Volt) unless shown otherwise. Must have "rivetless ground" contact manufactured as an integral component of the external ground screw terminal. Meets Fed Spec. WC-596 Hubbell HBL5362, Cooper 5362, P&S 5362A, and Leviton 5362.
- B. Tamper resistant, Duplex NEMA 5-20R configuration. Hubbell BR20ITR, Leviton 5362-SGI, and Cooper TR8300.
- C. Tamper resistant, Self-Testing Ground-Fault Circuit-Interrupter Duplex Receptacles: 20A. 125V AC; 2-pole, 3 wire grounding; 10,000 amps current interrupting; green light indicator when power is 'on'; red light indicator when device is in the tripped position; Red "EOL" (end of life) indicator with rapid flash when the unit has reached end of life and/or cannot provide GFCI protection. Provide GFI receptacles where required by code.
- D. AFCI Tamper-Resistant Duplex Receptacles: 15 Amp. 125 volt; 20-amp feed-through, tamper resistant, AFCI; back and side wired. Leviton AFTR1.
- E. Switched Receptacles: Switched receptacles shall match as specified elsewhere, nylon face with one controlled face split circuit hot tab, permanently marked for use with control systems, back and side wired.

SECTION 262726 SWITCHES AND RECEPTACLES

- F. Tamper Resistant, Weather Resistant (WR) / Ground Fault Circuit-Interrupter (GFCI) Outdoor Duplex Receptacles: NEMA 5-20R. Leviton GFWT2 or equal, for 20 Amp, 125-Volt AC.
- G. Special Purpose Receptacles: For special purpose receptacles, see drawings for voltage, amperage, and phase. Provide with matching plug delivered to the Owner.

2.4 DEVICE PLATES

- A. Interior: Plates for recessed boxes shall be Hubbell, Cooper or Leviton; nylon, white, or color to match device. Attachment screws shall match finish of plate. Plates for surface mounted boxes shall be of ivory nylon with size to fit exactly the box used.
 - 1. Where a duplex receptacle is indicated next to a USB receptacle, provide a dual-gang faceplate and mount both devices in the same backbox under the same faceplate.
- B. Exterior: Intermatic # WP1010MC, for vertical mount and # WP1010HMC for horizontal mount, or equivalent for receptacles. Metal cover shall be raintight while-in-use.

2.5 LABELING

A. For receptacles other than NEMA 5-20R, the coverplate shall have ampere rating, voltage and phase engraved on a phenolic label and attached to the cover plate.

2.6 MULTIOUTLET ASSEMBLY (When Shown)

A. Provide assemblies complete, including necessary fittings and hardware with circuits as indicated on Plans and outlet spacing as indicated. All assemblies shall contain ground wire. Wiremold or equal.

PART 3 EXECUTION

3.1 MOUNTING

A. Rigidly fasten each device to the outlet box at proper position with the wall to bring receptacle flush with plate or switch handle the proper distance through the plate.

3.2 ORIENTATION

- A. Set switches vertical with handle operating vertically, up position "ON" at +48" above finished floor.
- B. Set Receptacles vertical with ground slot down at +18" above finished floor.
- C. Set Exterior Receptacles horizontal at +18" above finished grade.

3.3 DEVICE PLATES

- A. Shall be installed for each new wiring device and for each telephone and signal equipment outlet, except where equipment mounted thereon covers the outlet box completely.
- B. Provide new covers on existing outlet boxes being reused.

3.4 DIMMER SWITCHES

- A. Provide a separate neutral for each phase.
- B. Fluorescent dimmer switches require a 4 square backbox per switch.

3.5 RECEPTACLE GROUNDING

- A. Provide bare bonding wire between receptacle grounding terminal and box. Plaster ear screws connecting frame to the box will not be acceptable for grounding.
- B. Provide green insulated grounding conductor in all branch circuits supplying ground-fault circuit-interrupter type receptacles.

SECTION 262726 SWITCHES AND RECEPTACLES

- 3.6 HANDICAPPED ACCESS
 - A. Comply with requirements of Washington State Handicapped Access Code.

1.1 RELATED DOCUMENTS

A. Section 260000 – Electrical General Conditions

1.2 WORK INCLUDED

A. Provide all fuses as required. Provide three (3) spare of each size and type required. Fuses shall not be installed until equipment is ready to be energized. This measure prevents fuse damage during shipment of the equipment from the manufacturer to the jobsite or from water that may contact the fuse before the equipment is installed. Final tests and inspections shall be made prior to energization of the equipment. This shall include a thorough cleaning, tightening, and review of all electrical connections and inspection of all grounding conductors. All fuses shall be furnished by the Electrical Contractor. All fuses shall be of the same manufacturer.

PART 2 PRODUCTS

2.1 MAINS, FEEDERS, AND BRANCH CIRCUITS

- A. Circuits 601 to 6000 amperes shall be protected by current limiting BUSSMANN Low-Peak Time-Delay Fuses KRP-C. Fuse links shall be pure silver links (99.9% pure), delay and must hold 500% of rated current for a minimum of 4 seconds, clear 20 times rated current in .01 seconds or less and be listed by Underwriters Laboratories Inc., with an interrupting rating of 200,000 amperes r.m.s.
- B. Circuits 0 to 600 amperes shall be protected by current limiting BUSSMANN LOW-PEAK Dual-Element Fuses LPN-RK (250 volts) or LPS-RK (600 volts). All dual-element fuses shall have separate overload and short-circuit elements. Fuse shall incorporate a spring activated thermal overload element having a 284°F. melting point alloy and shall be independent of the short-circuit clearing chamber. The fuse must hold 500% of rated current for a minimum of 10 seconds and be listed by Underwriters Laboratories, Inc., with an interrupting rating of 200,000 amperes r.m.s. symmetrical. The fuses shall be UL Class RK1 to maintain the engineered protection of the system components.
- C. Motor Circuits: All individual motor circuits with full load amperes ratings (FLA) of 480 amperes or less shall be protected by BUSSMANN LOW-PEAK Dual-Element Fuses LPN-RK (250 volts) or LPS-RK (600 volts). Larger H.P. motors shall be protected by BUSSMANN Type KRP-C Low-Peak Time-Delay Fuses of the ratings shown on the drawings. All other motors, (such as 1.0 service factor motors) shall be protected by BUSSMANN LOW-PEAK Dual-Element Fuses LPN-RK (250 volts) or LPS-RK (600 volts) installed in ratings of approximately 115% of the motor full load current except as noted above. The fuses shall be UL Class RK1 Dual Element Time Delay or Class L.

2.2 SPARE FUSES

A. Spare fuses shall be provided with a minimum of three of each ampere rating.

2.3 ACCEPTABLE MANUFACTURERS

- A. Bussman
- B. Little Fuse

PART 3 EXECUTION

3.1 FUSES

A. Install in all fusible devices provided under this Contract.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 262816 ISSAQUAH, WASHINGTON DISCONNECTS AND FUSED SWITCHES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Section 260000 – Electrical General Conditions

1.2 WORK INCLUDED

A. Provided all disconnects, fused and unfused, required by code for equipment furnished under this and other divisions of these specifications and as shown on the drawings.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. General Electric
- B. Square-D
- C. Siemens
- D. Cutler-Hammer

2.2 DISCONNECTS

- A. Switch shall be heavy-duty type, shall be quick-break and shall be horsepower rated. Switch shall have blades as required to open all ungrounded conductors and shall be single throw unless noted.
- B. Enclosure shall have interlocking cover to prevent opening door when switch is closed. Door interlock shall include a defeating scheme, shall be padlockable in the "Off" position.
- C. Enclosure shall be suitable for environment in which mounted. All exterior enclosures shall have a minimum raintight rating.

2.3 FUSED SWITCHES (OR FUSED DISCONNECTS)

- A. Shall be as above with addition of fuse space and clips to accept only fuses as noted in Section 262813.
- B. Fuses shall be provided in all fused disconnects.
- C. Fuses shall be sized in accordance with manufacturer's requirements of protected equipment.

2.4 ELEVATOR POWER MODULE SWITCH

- A. Provide Elevator Control Switch in a single NEMA enclosure with all necessary relay(s), control transformer and other options (as listed below), and as shown on drawings. The Elevator Control Switch shall have an ampere rating to accommodate the inrush current associated with the rated horsepower and include a fusible switch with shunt trip capabilities. The switch shall utilize Class J Fuses (provided separately under division 262813). The following shall be included in the switch:
 - 1. 100 VA control power transformer with primary and secondary fuses.
 - Isolation relay (3PDT, 10 amp, and 120V). The coil of the isolation relay shall be 120 Vac or 24 Vdc.
 - 3. Normally open dry contact shall be provided for the Fire Alarm Safety System to energize the isolation relay and activate the shunt trip solenoid (140 VA inrush at 120V).
 - 4. The switch shall include a 120-volt key to test switch and a 1-NO/1-NC mechanically interlocked auxiliary contact rated 5A, 120 Vac as standard.
 - 5. "ON" Pilot Light (Green, Red or White).
 - 6. Isolated Full Capacity Neutral Lug.
 - 7. Fire Alarm Voltage Monitoring Relay (Needed to comply with NFPA 72).
 - 8. Main Switch Auxiliary Contacts (1 NO/1 NC).
- B. The module shall have been successfully tested to a short circuit rating with Bussmann® Low-Peak® Class J fuses at 200,000 amps RMS Symmetrical.

KCHA EASTRIDGE HOUSE – ELEVATOR MODERNIZATION SECTION 262816 ISSAQUAH, WASHINGTON DISCONNECTS AND FUSED SWITCHES

- C. All switches shall have shunt trip capabilities at 120 Vac from remote fire safety signal.
- D. Branch feeders shall be selectively coordinated and fed with an upstream supply over-current protective device at a minimum of 2:1 size ratio utilizing LOW-PEAK® (Class J, RK1, or L) fuses.
- E. Approved Manufacturers: Cooper Bussman; Eaton

2.5 NAMEPLATES

A. Provide nameplates on all enclosures and include the following information: Load served, voltage, phase, panel and circuit number. Construct and attach in accordance with Section 260000, Paragraph 2.05.

PART 3 EXECUTION

3.1 SUPPORTS

A. Secure solidly to wall or approved mounting frame. Disconnects supported only by Raceway are not acceptable.

3.2 SPLICES

A. Wiring space within enclosure shall not be used as a junction box.

3.3 INSTALLATION

- A. All material installation shall be in accordance with manufacturers' recommendations and the provisions of applicable codes.
- B. Fuses shall not be installed until equipment is ready to be energized.

1.1 WORK INCLUDED

- A. Provide the lighting system complete and operational.
- B. Recessed fixtures installed in fire-resistive ceiling construction shall have the same fire rating as the ceiling or shall be provided with fireproofing boxes having materials of the same fire rating as the ceiling.

1.2 RELATED DOCUMENTS

A. Section 260000 - Electrical General Conditions

1.3 FIXTURE SCHEDULE MANUFACTURER'S SERIES NUMBERS

A. The design series reference does not necessarily represent the number, size, wattage, lumen output or special requirements as specified hereinafter.

1.4 SUBMITTALS

- A. Shall be neatly and clearly marked to indicate the fixtures, performance, efficiency, mounting methods comply with contract documents.
- B. When substitute fixtures are submitted (if permitted) the data shall clearly cross reference (written or highlighted) that the substitute fixture complies with every detail of the specified fixture. The substitute fixture must be supplied with an IES file for verification of the fixture performance and lumen output.
- C. The manufacturer's representative will be required to provide the photometric reports for various areas with the substituted fixture to prove the foot-candle level is adequate and meets the design intent.
- D. The Owner has the right to request a working sample of the substituted light fixture to verify quality and style meet the design intent.
- E. Fixtures not fully complying with the intent of the contract documents and design criteria will be rejected.

PART 2 PRODUCTS

2.1 METAL PARTS

- A. Interior Fixtures: Steel or aluminum with manufacturer's standard color and finish as indicated on the Lighting Fixture Schedule, unless specified otherwise.
- B. Exterior Fixtures: Corrosion resisting metal, a (non-ferrous, stainless steel or special finish) and in all cases suitable for outdoor service without tarnishing or other damage due to exposure; manufacturer's standard colors unless specified otherwise; cadmium plate all metal parts concealed by canopies, including screws, plates and brackets. All exposed fasteners shall be tamperproof.

2.2 LIGHT TRANSMITTING COMPONENTS

A. When not otherwise independently secured by other means the lens of any fixture shall be contained in a captive metal frame that remains attached to the fixture when door is in open position.

2.3 SPECIAL PARTS

- A. Adapters, Plates, Brackets and Anchors: Provide where required by construction features of the building to suitably mount lighting fixture. All such appurtenances and mounting methods shall be approved by the Owner prior to fabrication and installation.
- B. Low Voltage Transformers: Provide and install where required to power individual or linear runs of low voltage light fixtures.

2.4 LAMPS

A. Solid-State Lighting: Fixtures shall have a lumen maintenance life expectancy (L70) of > 50,000 hours, a CRI of > 80, and a CCT of 3500K or as shown on the panel schedule. Each solid-state fixture model shall be tested in accordance with IES LM-79 & LM-80 requirements.

2.5 LED DRIVERS/POWER SUPPLIES

- A. The LED drivers/power supplies shall meet the following criteria:
 - 1. Drive mode: Constant Current or Constant Voltage depending on the LED configuration for the light fixture.
 - 2. Output currents: 250 mA 1000 mA
 - 3. Output voltages: 6VDC 48VDC
 - 4. Input voltages: 110 to 277 VAC; 50/60 Hz.
 - 5. Power factor at >0.90 @ full load
 - 6. Line regulation accuracy: +/- 2%
 - 7. Load regulation accuracy: +/- 3%
 - 8. Greater than 85% efficient
 - 9. Output over-voltage, output over-current and output short circuit protection with auto recovery
 - 10. Provide each driver with onboard transient voltage suppression (TVS)
 - 11. Limited power source output to allow for class 2 wiring
 - 12. Flicker Free 0-10V Dimmable to 10% light output
 - 13. 5 Year Warranty

2.6 EMERGENCY BATTERY BACK-UP IN FIXTURES

- A. Emergency lighting shall be provided by using a LED fixture equipped with a Bodine BSL17C emergency driver. This emergency driver shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 12" x 2 3/8" x 1 1/2" metal case.
- B. Provide with an illuminated test switch (ITS) to monitor charger and battery and installation hardware.
- C. The unit shall be suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations.
- D. The emergency driver shall be capable of delivering up to 7.5 Watts to an LED load (30-130VDC) for a minimum of 90 minutes. The unit shall have a 15.0 Watt-hour battery capacity and shall comply with emergency standards set forth by the current NEC.
- E. The emergency driver shall be UL Listed for field or factory installation.
- F. Provide with 5-year manufacturer warranty.

2.7 HANGING FOR PENDANT FIXTURES

- A. Rigid type, with not less than 5 thread engagement at each end, consisting of iron pipe, with brass or aluminum tubing casing, or painted tubing not less than 0.040 inches thick.
- B. Aircraft cable, stainless steel, sized appropriately by manufacturer for weight and seismic zone.
- C. Provide a canopy for each fixture hanger except where fixture conceals the outlet box directly without a canopy.
- D. Provide a safety chain for all glass pendant fixtures and for all fixtures mounted in gymnasiums.
- E. Provide Unistrut and mounting hardware above the ceiling to bridge structure, piping, and ductwork in order to mount the fixture centered in the space per the drawings.

2.8 EXIT SIGNS

- A. The signs shall be thermoplastic impact-resistant or as indicated on the panel schedule, scratch resist and corrosion proof. Faceplate and back cover shall be interchangeable on the housing.
- B. Battery shall have a low-voltage disconnect to prevent excessively deep discharge.

C. LED – less than one watt of power consumption. The fixture shall operate in normal (AC mode) and emergency (DC input) modes.

2.9 INTEGRAL PHOTOCELLS

A. Where daylight harvesting photocells are mounted integral to light fixtures, the manufacturer shall provide a diode (or similar means) on the low voltage dimming control bus to ensure that the photocell dimming signal does not propagate to other light fixtures. If the manufacturer does not provide a means to keep the photocell dimming signal from propagating outside of the fixture, it is the responsibility of the Electrical Contractor to install the required diodes in a junction box outside of the fixture at no additional cost to the Owner.

PART 3 EXECUTION

3.1 LIGHTING FIXTURES - GENERAL

- A. Size and mounting height from finished floor to bottom of fixture as indicated on the drawings. Verify mounting provisions prior to the ordering of fixtures. Fixtures shall be UL listed for the location, and application in which they are installed.
- B. Ceiling fixtures shall be coordinated with and suitable for installation in, on or from the ceiling as shown. Installation and support of fixtures shall be in accordance with NFPA 70 and manufacturer's recommendations.
- C. Recessed fixtures installed in seismic areas shall be installed utilizing specially designed seismic clips.
- D. Suspended fixtures installed in seismic areas shall have 45° swivel hangers and shall be located with no obstructions within the 45° range in all directions. The stem, canopy and fixture shall be capable of 45° swing.

3.2 DIFFUSERS AND ENCLOSURES

A. Install lighting fixture diffusers only after construction work, painting and clean up are completed. Prior to final acceptance, remove all lamps, reflectors and diffusers, wash, rinse and reinstall.

3.3 ADJUSTMENT OF FIXTURES

- A. Make all final spotlight and adjustable light settings under the direction of the Owner during a scheduled period of time prior to the completion of the project. Include costs for all equipment and personnel expenses required for adjustment.
- B. For fixtures with indirect lighting, notify Owner prior to installation of any circumstance where the fixture lamp source will be within 12" of ceiling.

3.4 SUPPORT OF FIXTURES

- A. Recessed Troffer Type: For fixtures supported by the ceiling suspension system, provide integral tabs, which rotate into position after fixture is lifted into the ceiling cavity. Provide two safety chains secured to structural members above suspended ceiling. Circuit connection shall be through use of 60-inch flexible conduit from a rigidly supported junction box. For plaster or GWB ceilings, provide a plaster frame compatible with light fixture.
- B. Recessed Downlight Type: Mount in frames suitable for the ceiling, with the recessed portion of the fixture securely supported from the ceiling framing. For fixtures supported by a ceiling suspension system, provide two safety chains secured to structural members above suspended ceiling.
- C. Surface and Pendant Mounted Type:
 - 1. Where mounted on accessible ceilings, hang from structural members by means of hanger rods through ceiling or as approved.
 - Where ceiling is of insufficient strength to support weight of lighting fixture, provide additional framing to support as required. Fixtures shall be supported from structure with seismic bracing independent of ceiling.

- 3. For Pendant Mount Type: Provide a unistrut channel for mounting fixtures entire fixture length unless light fixture is designed specifically for supporting itself. Provide 3/8-inch thread rod secured to structural members for support of unistrut channel.
- 4. Continuous Runs of Fixtures: Straight when sighting from end to end, regardless of irregularities in the ceiling. Where fixtures are so installed, omit ornamental ends between sections.
- 5. Provide Unistrut and mounting hardware above the ceiling to bridge structure, piping and mechanical ductwork in order to mount the fixture per the Contract Documents.
- D. Drivers/Power Supplies shall be accessible.

3.5 LOCATION

- A. Mount to the dimensions shown on the drawings. Mount at quarter points where no dimensions appear. Owner shall specify mounting locations where no dimensions appear and quarter point mounting is impractical or not indicated on the drawings.
- B. Refer to details, structural drawings, mechanical drawings, and coordinate with mechanical Contractor for equipment and ductwork mounted in ceilings to prevent conflict with light fixtures prior to installation. If conflicts cannot be resolved with the Mechanical Contractor, notify Owner.

3.6 FIXTURE TENTING

- A. Contractor shall coordinate ceiling types with architectural drawings and specifications and provide equivalent fire rated enclosures above all light fixtures which penetrate rated ceilings.
- B. Light fixtures that are not IC rated and are to be installed within 3" of insulation shall be provided with an EZ Barrier #EZB 16-24-9 protective cover designed for recessed light fixtures.