REQUEST FOR BIDS

600 BUILDING BATHROOM REMODEL

600 ANDOVER PARK WEST TUKWILA, WA 98188

RELEASED BY:



CAPITAL CONSTRUCTION DEPARTMENT 700 ANDOVER PARK WEST, SUITE C TUKWILA, WA 98188

BID DATES

ISSUANCE DATE: OCTOBER 30, 2024

DUE DATE: NOVEMBER 20, 2024

TIME: 1:00 PM



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- **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
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- A.8 Section 3 (N/A)

a. Clause (N/A)

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- 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
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INVITATION FOR BID DUE DATE: NOVEMBER 20, 2024

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: 600 BUILDING BATHROOM REMODEL

King County Housing Authority's Central Office Building, located in the City of Tukwila, is a two-story concrete tilt-up building constructed in the 1980s. This project involves remodeling four bathrooms in the 600 building. While this project is going on, the building will be occupied. All bathrooms have a dropped ceiling with wiring, plumbing, insulation, and sprinkler lines possibly running through them. The floor consists of tiles over lightweight gypcrete. After the floor and wall tile removal, it will be up to the contractor to bring both areas back to their original conditions. The contractor will supply dust protection in each bathroom.

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:	November 06, 2024			
Time:	11:00 AM			
Jobsite Address:	600 Andover Park West, Tukwila WA 98188			
Notation:		Attendance of the Pre-Bid Site Visit is MANDATORY .		
Questions /	Direct Questions, 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:	November 13, 2024		
Website Posting:	https://www.kcha.org/	/business/construction/open		
	All responses shall be	in the form of Addenda		
	All Addenda(s) will p	ost As Occurs		
	Plan Holder's List pos	sts every Friday		
BIDS ARE DUE:				
Date:	November 20, 2024			
Time:	1:00 pm			
Address:	King County Housing Authority			
11001000		Authority		
	••••	•		
Submittal Procedure:	600 Andover Park We	est, Tukwila, WA 98188		
Submittal Procedure:	600 Andover Park We Envelope MUST BE	est, Tukwila, WA 98188		
Submittal Procedure:	600 Andover Park We Envelope MUST BE a. Sealed	est, Tukwila, WA 98188 :		
Submittal Procedure:	600 Andover Park We Envelope MUST BE a. Sealed b. List Name and	est, Tukwila, WA 98188 : d Address of your Firm/Company		
Submittal Procedure:	600 Andover Park WeEnvelope MUST BEa.Sealedb.List Name andc.List Due Date	est, Tukwila, WA 98188 d Address of your Firm/Company and Time		
Submittal Procedure:	 600 Andover Park We Envelope MUST BE a. Sealed b. List Name and c. List Due Date d. List Project N 	est, Tukwila, WA 98188 d Address of your Firm/Company and Time fame:		
Submittal Procedure:	 600 Andover Park We Envelope MUST BE a. Sealed b. List Name and c. List Due Date d. List Project N 600 BUILDING BAT 	est, Tukwila, WA 98188 d Address of your Firm/Company and Time fame: FHROOM REMODEL		
Submittal Procedure:	 600 Andover Park We Envelope MUST BE a. Sealed b. List Name and c. List Due Date d. List Project N 600 BUILDING BAT 	est, Tukwila, WA 98188 d Address of your Firm/Company and Time fame:		



KCHA Process:

All Bids MUST BE Time and Date Stamped at King County Housing Authority's Central Campus by the above Due Date and Time.

- a. No Bids will be accepted after that Date and Time.
- b. No Bids Faxed or Emailed will be accepted.
- c. A KCHA representative will be present at the front desk at
 600 Andover Park West, Tukwila, WA 98188 to time stamp bids.
- d. Bids will be accepted between **NOON 1:00PM ONLY**.
- e. At 1:00PM bidding will be closed and no further bids will be accepted.
- f. Bids received on or before 1:00 PM will be opened and read in the presence of one or more witnesses which includes KCHA staff (project manager and project specialist). Bidding Contractors are invited to attend the public opening.

g. Bids will be tabulated and bidders notified 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 thousand (\$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.				
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BONDS MUST BE ORIGINAL, NO PHOTOCOPIES OR SCANNED BONDS WILL BE ALLOWED

MASKING COMPLIANCE

Contractor's employees and all sub-contractors' employees will be required to wear a mask if they are asked to do so by a resident or property manager while in a building or a resident's unit.

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.

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.)



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	PLAN CENTER NW	
2607 Wetmore Ave.	P.O. Box 2486	
Everett, WA 98201	Clackamas, OR 97015	
www.bxwa.com	https://plancenternw.com/	
425-258-1303	503-650-0148	
DAILY JOURNAL OF COMMERCE	DODGE CONSTRUCTION NETWORK	ISQFT
www.djc.com	www.construction.com	www.isqft.com
206-622-8272	877-784-9556	800-364-2059 x7051

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



EXAMPLE OF <u>SEALED</u> 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: November 20, 2024 Time: 1:00 PM

PROJECT NAME: 600 BUILDING BATHROOM REMODEL

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

Previous edition is obsolete

FORM 5369

Instructions to Bidders for Contracts

Public and Indian Housing Programs

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1. Bid Preparation and Submission

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

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

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

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

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

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

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

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

HUD 5369-A is covered by other forms within this project Bid Document. See last page for listing.

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

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

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

Late Submissions, Modifications, and Withdrawal of Bids

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

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

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

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

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

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

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

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

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

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

6. Bid Opening

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

7. Service of Protest

(a) Definitions. As used in this provision:

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

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

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

Contracting Officer 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 PNA's/IHA's available funding for the proposed contract work, the PHA/INA 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 PHANHA shall continue this process until an evaluated low bid, if any, is which the PHA's/IHA's available funding. If upon the application of all deductibles, no bid is within the PHA's/IHA's available funding, or if the solicitation does not request separately priced deductibles, the PHA/IHA shall follow its written policy and procedures in making any award under this solicitation.

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

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

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

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

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

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

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

All bids must be accompanied by a regotiable 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 on 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.

11. Preconstruction Conference (applicable to construction contracts)

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

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

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

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

(2) Preference in the award of contracts or subcontracts in connection with the administration of contracts be given to Indian organizations and to Indian-owned economic enterprises, as defined in section 3 of the Indian Vinancing 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 (ncluding

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.

The following documents cover all sections in HUD form HUD-5369-A:

- Bid Form (Return Form B.1)
- Contractor Certification (Return Form B.3)
- Non-Collusive Affidavit (Return Form B.4)
- Equal Opportunity Form (Return Form B.5)
- WMBE (Return Form B.11)
- Certification of Payments to Influence Federal Transactions (Contract Form C.7)
- Disclosure of Lobbying Activities (Contract Form C.8)

(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. <u>SUBJECT:</u>

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. <u>PURPOSE:</u>

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. <u>NOTIFICATIONS:</u>

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. <u>TO READ THE FULL TEXT OF THE NOTICE:</u>

Go to <u>www.kcha.org/business/requirements</u> Scroll down to Fair Housing Laws and Read: <u>Fair Housing / Accessibility Notice</u>



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. ATTENDANCE OF THE PRE-BID CONFERENCE IS REQUIRED FOR ACCEPTANCE OF BID FROM THE CONTRACTOR.

PROJECT SITE ADDRESS:	600 Building Bathroom Remodel 600 Andover Park West Tukwila, WA 98188
CONFERENCE DATE:	November 06, 2024
TIME:	11:00 AM
CONTACT NAME:	Don Hatfield
EMAIL:	Donaldh@kcha.org



PROJECT WAGE RATES

A. WASHINGTON STATE PREVAILING WAGE

TYPE OF WAGE RATES:	COMMERCIAL RATES
WAGE DECISION DATE:	<u>November 20, 2024</u>
COUNTY:	<u>KING</u>
LINK TO LNI PREVAILING WAGE RATE LOOKUP:	https://secure.lni.wa.gov/wagelookup/

Lock-In Date: For contracts entered into pursuant to competitive bidding procedures, the bid opening date "locks-in" the wage decision provided that the contract is awarded within ninety (90) days. If the contract is awarded more than ninety (90) days after bid opening, the contract award date "locks-in" the wage decision.

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.



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.



(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.]



SECTION 3 - CLAUSE

- 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.
- B. 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



4. To low- and very low-income persons residing within the Puget Sound Region.

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.
- 3. "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:
 - 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 hring 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.
 Third Drivity A unbegative that is a UUD Northbuild economy.
 - 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 five percent (5%) higher than the total bid price for the lowest responsive bid from any responsible, bidder.

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.

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 <u>Section3@kcha.org</u> to obtain a list of local hiring resources.

	Income Limit 1 person		n		
Location	Extremely Low Income		Very Low Income		Low Income
Kitsap County (Bremerton, Silverdale)	\$25,150		\$41,900		\$67,050
King/ Snohomish Counties (Seattle, Bellevue, Everett)	\$31,650		\$52,700		\$77,700
Pierce County (Tacoma)	\$24,350		\$40,550		\$64,900
Skagit County (Sedro-Woolley)	\$21,050		\$35,050		\$56,150
Thurston County (Olympia, Tumwater)	\$23,700		\$39,450		\$63,100

SECTION 3 – 2024 INCOME GUIDELINES



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) (N/A)
- 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)



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.



(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



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.



[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 as the Secretary may require



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.



[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, <u>www.gpo.gov/fdsys/pkg/FR-2010-05-20/pdf/2010-11639.pdf</u>, 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:

- 1. 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.

<u>Statement of Intent to Pay Prevailing Wages</u> - 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. Washington State Prevailing Wage Commercial
 - 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.

2. HUD Non-Routine Maintenance (NA)

- 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.

<u>Certified Payroll</u> - 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.

<u>Affidavit of Wages Paid</u> - 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.



KCHA – 600 BUILDING BATHROOM REMODEL

CAPITAL CONSTRUCTION DEPARTMENT

SCREEN SHOTS OF INTENT

File Intent: Enter the Project Details						
STEP 1 STEP 2 STEP 3 Select Project Details Intent Details	STEP 4 Add WagesSTEP 5 Review IntentSTEP 6 Payment 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					
Awarding Agency Contract Number (required) 🛈						
Project Name <mark>(required</mark>)						
Is apprentice utilization required? (required)	◎ Yes ◎ No					
Is OMWBE utilization required? (required)	○ Yes ○ No					
Is this a Housing Act of 1937 project? (required)	Ves No					
Project Site Address or Directions 🚺						

0/1000



DAVIS BACON & RELATED ACTS PROVISIONS; CONTRACT WORK HOURS & SAFETY STANDARDS ACT; GENERAL INFORMATION

A. The Davis-Bacon Act (DBA)*

The DBA, enacted in 1931, applies to contracts in excess of \$2,000 for construction, alteration, and/or repair of public buildings or public works, including painting and decorating, to which the United States or the District of Columbia is a party. This type of applicability is referred to as direct Davis-Bacon Act or DBA coverage. An example of DBA coverage is when HUD contracts directly for repairs to HUD-owned properties. HUD's Office of the Chief Procurement Officer manages these types of contracts. The DBA requires that the advertised specifications for such contracts contain a provision stating that the minimum wages to be paid to various classes of laborers and mechanics must be based upon the wages found to be prevailing by the Secretary of Labor.

Most HUD construction work is not covered by the DBA since HUD does not usually contract directly for construction work. Rather, Davis-Bacon wage rates apply to HUD programs because of prevailing wage requirements expressed in HUD "Related Acts" such as the U. S. Housing Act of 1937 and the Housing and Community Development Act of 1974, as amended. The Related Acts (referred to throughout this Guide as the Davis-Bacon and Related Acts or DBRA) are discussed further in Section 5.9.

The DBA includes provisions that:

- 1. Require the contractor or subcontractor to pay all mechanics and laborers at least once per week;
- 2. Prohibit contractors or subcontractors from taking deductions or rebates from wages earned by laborers and mechanics;
- 3. Require the contractor or subcontractor to pay Davis-Bacon wages to all laborers and mechanics employed on the site of the work regardless of their skill level, and regardless of any contractual relationship alleged to exist between the laborers and mechanics and the contractor or subcontractor;
- 4. Require the contractor or subcontractor to post the scale of wages to be paid (i.e., the applicable Davis-Bacon wage decision) in a prominent and accessible place at the work site;
- 5. Define prevailing wages to include fringe benefits;
- 6. Permit the withholding of payments due to the contractor on account of wage restitution that may be found due to the laborers and mechanics;
- 7. Permit the payment of wage restitution from amounts withheld from contract payments;
- 8. Permit the termination of the contract where it is found that any laborer or mechanic is underpaid; and
- 9. Permit the debarment of persons or firms found to have disregarded their obligations to employees and subcontractors.

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

The CWHSSA applies to both direct federal contracts and to federally-assisted contracts where those contracts require or involve the employment of laborers and mechanics and where federal wage standards (e.g., Davis-Bacon or HUD-determined prevailing wage rates) are applicable.

CWHSSA provisions apply to all laborers and mechanics, including watchmen and guards, employed by any contractor or subcontractor. CWHSSA also applies to maintenance laborers and mechanics employed by contractors or subcontractors engaged in the operation of Public Housing Agencies (PHA), Tribally Designated Housing Entities (TDHE), and Indian Housing Agencies

(IHA) developments. CWHSSA O/T provisions do not apply to laborers and mechanics employed directly by PHAs or IHAs. However, O/T provisions generally apply to these workers under the Fair Labor Standards Act (FLSA). HUD does not have authority to enforce FLSA violations. Refer complaints of FLSA violations to DOL, Wage and Hour Division.

CWHSSA provides that all O/T hours (defined as hours worked in excess of 40 during any workweek on the CWHSSA-covered project site) must be compensated at a rate not less than one and one-half times the regular basic rate of pay. Where CWHSSA O/T provisions are applicable, compensatory time in lieu of premium pay for O/T hours is not permissible. In the event of O/T violations, the CWHSSA renders the contractor liable to the underpaid workers for wage restitution and to the United States Government for liquidated damages computed per person per day at a rate that DOL publishes annually. It is a federal criminal misdemeanor to intentionally violate CWHSSA standards.

Exemptions:

- 1. CWHSSA O/T provisions do not apply where the federal assistance is only in the nature of a loan guarantee or insurance.
- 2. CWHSSA O/T provisions do not apply to prime contracts of \$100,000 or less.

*The Davis Bacon provisions also apply to HUD-determined prevailing wage rates.

http://www.ecfr.gov/current/title-29

C. GENERAL INFORMATION

1. Employer Responsibilities

- a. All employers (contractors, subcontractors, and any lower-tier subcontractors) are required to pay all laborers and mechanics employed or working on the site of the work unconditionally and not less often than once per week the full amount of wages and bona fide fringe benefits computed at rates not less than those contained in the wage decision.
- b. Employers must prepare, certify, and submit weekly payroll reports reflecting all the laborers and mechanics (employees) engaged in construction on the site of the work.
- c. Employers may also be required to submit related documentation in order to demonstrate compliance.

2. Agency Responsibilities

- a. State, tribal, and local contracting agencies (LCAs) that administer HUD programs agree to administer and enforce Davis-Bacon requirements as a condition for receiving HUD program assistance.
- b. Conduct on-site inspections including interviews with laborers and mechanics employed on the construction project. Ensure that the applicable Davis-Bacon wage decision, DOL's Davis-Bacon poster (Form WH-1321), and additional classifications are displayed at the job site.
- c. Review certified payroll reports (CPRs) and related documentation. Identify any discrepancies and/or violations. Ensure that any needed corrections are made promptly, including the payment of wage restitution as needed, and the assessment and collection of liquidated damages, as appropriate.
- d. Comply with all HUD requirements concerning statutory, program, and/or other requirements.



3. **Definitions**

a. Employee

Every person who performs the work of a laborer or mechanic is "employed" regardless of any contractual relationship that may be alleged to exist between a contractor or subcontractor and such person.

b. Working subcontractors

Persons who perform the work of laborers or mechanics and who represent themselves to be owners of businesses, sole proprietors, or self-employed are not exempt from prevailing wage requirements. These laborers and mechanics are "employed" and are entitled to the prevailing wage for the type of work they perform, and must be reported on the payroll report for their craft, hours of work, and wages paid.

c. Apprentice

A person employed and individually registered in a bona fide apprenticeship program. Bona fide programs are those that have been registered with DOL, Employment and Training Administration, Office of Apprenticeship, or with a DOL-recognized State Apprenticeship Agency (SAA). (Note that an SAA must also partner with a State Apprenticeship Council (SAC). The SAC must consist of an equal number of representatives of employer and employee organizations.)

d. Prevailing wages or wage rates

Davis-Bacon prevailing wage rates generally appear as a basic hourly rate plus fringe benefits, if any. "Prevailing wage" is made up of two interchangeable components: the basic hourly wage, and fringe benefits. The total of the basic hourly wage and fringe benefits comprises the "prevailing wage" obligation. This obligation may be met by any combination of cash wages and creditable "bona fide" fringe benefits provided by the employer.

e. Overtime

Overtime (O/T) hours are defined as all hours worked in excess of 40 hours in any workweek. Where governed by Federal labor standards, O/T hours shall be compensated at not less than one and one-half times the regular rate of basic pay plus the straight-time (S/T) rate of any required fringe benefits.

f. Site of work

The "site of work" is limited to the physical place or places where the construction called for in the contract will remain when work on it has been completed. "Site of work" includes other adjacent or nearby properties used by the contractor/subcontractor in the construction of the project (e.g., fabrication sites) provided they are dedicated exclusively or nearly so to the performance of the contract or project, and are so located in proximity to the actual construction location that it would be reasonable to include them.

g. Proper designation of trade

Each laborer and mechanic shall be classified in accordance with the work classifications listed on the wage decision and the actual type of work they perform and shall be paid the appropriate wage rate and fringe benefits for the classification regardless of their level of skill. In other words, if someone is performing carpentry work on the project, they must be paid no less than the wage rate on the wage decision for carpenters even if they aren't considered by the employer to be fully trained as a carpenter. The only people who can be paid less than the rate for their craft are apprentices and trainees registered in approved programs.



h. Split classification

Laborers and mechanics that perform work in more than one classification may be compensated at the rate specified for each classification provided that the employer maintains time records that accurately set forth the time spent in each classification in which the work was performed. If accurate time records are not maintained, the employee shall be compensated at the highest of all wage rates for the classifications in which work was performed.



B - SECTION

600 BUILDING BATHROOM REMODEL

600 ANDOVER PARK WEST, TUKWILA WA 98188 DUE DATE: November 20, 2024 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** Bidder's Experience Record
- **B.3** Contractor Certification
- **B.4** Non-Collusive Affidavit
- **B.5** Equal Opportunity
- **B.6** Bid Security (Submit only for bids greater than \$150,000)
- **B.7** Debarment / Suspension Compliance Certification
- **B.8 Proposed Subcontractor List**
- B.9 Section 3 (N/A)
 - a. Business Certification
 - b. Subcontractor Work Plan
- **B.10** Harassment and Discrimination Policies
- **B.11** WMBE Survey (Form is not required to be responsive, but requested)
- B.12 <u>Preliminary</u> 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:

600 Building Bathroom Remodel 600 Andover Park West, Tukwila WA 98188

SCOPE OF WORK:

King County Housing Authority's Central Office Building, located in the City of Tukwila, is a two-story concrete tilt-up building constructed in the 1980s. This project involves remodeling four bathrooms in the 600 building. While this project is going on, the building will be occupied. All bathrooms have a dropped ceiling with wiring, plumbing, insulation, and sprinkler lines possibly running through them. The floor consists of tiles over lightweight gypcrete. After the floor and wall tile removal, it will be up to the contractor to bring both areas back to their original conditions. The contractor will supply dust protection in each bathroom.

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 current Washington State Prevailing Wage Commercial as the Minimum Wages and Fringe Benefits for the construction workers under this contract.

Bidding Contractor's Company Name:_



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.

BASE B	ID PRICE			
А.	Materials, including all applicable Taxes	\$		
В.	Labor	\$		
C.	O & P, including all applicable Fees	\$		
D.	Owner Allowance for added work contingency, as authorized by KCHA	\$22,000.00		
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 Six	xty-Six		

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.

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.

Bidding Contractor's Company Name:



Calendar Days: <u>SIXTY (60)</u>

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 acknowledged)

Addendum No.:	Date:	
Addendum No.:	Date:	
Addendum No.:	Date:	
Addendum No.:	Date:	
NO ADDENDA were received		

START TIME OF CONSTRUCTION:

Construction for the project must be started in accordance with the written Notice to Proceed Date issued by KCHA.

COMPLETION TIME OF CONSTRUCTION:

The undersigned hereby agrees to significantly complete the project within the construction period or duration (**Construction Period/Duration: NTP "construction start" to physical completion**) all the work required under the Contract and in accordance with the Contract Documents. Time allowed to complete the project (including punch list items) shall be the following number of Calendar Days from the Notice to Proceed Date issued by KCHA:

Calendar Days: <u>ONE HUNDRED TWENTY (120)*</u>

* This is total construction time and does not include any delays that may be caused by supply chain issues.

PRELIMINARY SCHEDULE:

MANDATORY: Contractor is to **provide** a preliminary Master Project Schedule in Microsoft Project, Primavera or similar and will include task durations and a project duration/completion date **at time of bid**.

METHOD OF PAYMENT:

Contract Amount shall be paid by KCHA to the Contractor monthly from the date of Contract, based on Contractor's Invoice of percentage of 'Completion'. Contractor shall use the AIA-G702 and G703 forms for Application and Certificate for Payment for Invoice Submittal.

CONTRACT RETENTION:

KCHA will withhold Contract Retention at the following Rate, pursuant to the General Conditions and will be released upon receipt of the Proper clearances from all pertinent state agencies. Release of Retention will not be made until All Requirements for Release, including clearances from State Agencies are received.

Retention Rate: <u>FIVE PERCENT (5%)</u>

Bidding Contractor's Company Name:____



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: <u>FIVE PERCENT (5%)</u>

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 or subsequent change order. 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 (or subsequent change order) 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 (or amended by a subsequent change order), 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: FIVE HUNDRED DOLLARS AND NO/100 (\$500.00)

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
 - 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

Bidding Contractor's Company Name:____

2.

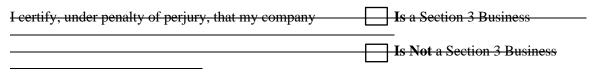


Contractor or its employees or agents. For purposes of this Indemnity, the Contractor waives its immunity under industrial insurance, Title 51 of the Revised Code of Washington, and acknowledges that the parties have negotiated this waiver for the purposes of this agreement.

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.



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

BID WITHDRAWAL AFTER BID OPENING:

- 1. A bidder who submits an erroneous low bid may withdraw the bid at the risk of forfeiting 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:
 - a. Whether the bidder acted in good faith;
 - b. Whether the bidder acted without gross negligence;
 - c. Whether the bidder gave prompt notice of the error;
 - d. Whether the bidder will suffer substantial detriment by forfeiture;
 - e. Whether KCHA's status has not greatly changed, and no substantial hardship will be caused.
- 3. Any low bidder who withdraws its bid is prohibited from bidding on the same project if it 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: <u>Fair Housing / Accessibility Notice</u>

Bidding Contractor's Company Name:____



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. That no person or company was employed or retained to solicit or obtain this contract and no payment of, or agreement to pay any person or company to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.
 - a. Should any misrepresentation of the bidder be found, KCHA will have the right to 1) terminate the contract; 2) at its discretion, deduct from the contract payment amounts the amount of any commission, percentage, brokerage, or other contingent fee; or 3) any other remedy pursuant to the contract.
- 5. And hereby agrees to complete the Work required under the terms of the Contract Documents by the Completion Dates enumerated therein, and
- 6. 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.



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: (<i>if Company is Awarded Contract</i>) Title of Person Authorized to Sign Contract: (<i>if Company is Awarded Contract</i>) 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:	
Public Works Training (RCW39.04.350):	 Exempt Not Exempt – signed Compliance Statement in Accordance with RCW 9A.72.085 is provided

Bidding Contractor's Company Name:

_____ Initials: _____

King County	KCHA – 600 BUILDING BATHROOM REMODEL
King County Housing Authority	CAPITAL CONSTRUCTION DEPARTMENT
Check Box if your company is a P parties below.	artnership and provide Full Name(s) and Address of all
Check Box if your company is also	o known as (aka) and list that name and address below.
NOTE: The penalty for making false statements in	n offer is prescribed in 18 U.S.C. 1001.
SUBMITTED ON: Day of	, 20
Signature of Bidder	Print Name and Title

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: BOND REGISTRATION NUMBER:	(Must be a valid WA Stat	e License)	EMPLOYM SECURITY L&I's WOR COMP. AC	NUMBER: _		
L&I PUBLIC WORKS TRAINING:	YES NO)				
BIDDER IS A(N):	INDIVIDUA	Ĺ	PAR	TNERSHIP		
CONTINUOUSLY TOTAL NUMBER OF F	JOINT VENTURI Y BEEN IN BUSINESS FROM YEAR	<u> </u>	-		IN STATE O LAR FULL TIN EMPLOYE	ME
NUMBER OF PROJEC	IS COMPLETED	/	AHEAD _	0	N-TIME	BEHIND
BIDDER HAS HAD EX AS FOLLOWS: AS P						S PROJECT
BIDDERS LIST THE FO	OLLOWING INFORM	ATION: PR	INT ALL	INFORMAT	ION	
NAME OF BONDING	COMPANY:					
	ADDRESS:					
PHON	E NUMBER:					
CONTAC	CT PERSON:					
BONDING	CAPACITY:					



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 OF SIMILAR NATURE & SIZE COMPLETED BY BIDDER WITHIN THE PAST 5 YEARS. INCLUDE A REFERENCE FOR EACH. IF NECESSARY, ATTACH A SEPARATE SHEET(S), USING THE FORMAT BELOW. **PRINT ALL INFORMATION**

PROJECT NAME:	
PROJECT NAME:	
OWNER/CONTACT NAME & NUMBER:	
TOTAL CONTRACT AMOUNT:	
PROJECT NAME:	
OWNER/CONTACT NAME & NUMBER:	
-	
PROJECT NAME:	
· ·	



IF ANY OF THE PROJECTS LISTED ABOVE WERE NOT COMPLETED WITHIN THEIR ORIGINALLY SCHEDULED PERIOD, EXPLAIN WHY: **PRINT ALL INFORMATION**

LIST ALL PROJECTS UNDERTAKEN IN THE LAST 5 YEARS WHICH HAVE RESULTED IN PARTIAL OR FINAL SETTLEMENT OF THE CONTRACT BY ARBITRATION OR LITIGATION IN THE COURTS: **PRINT ALL INFORMATION**

NAME OF CLIENT & PROJECT	CONTRACT AMT.	TOTAL CLAIM ARBITRATED / LITIGATED	AMT. OF SETTLEMENTS OF CLAIM

HAS BIDDER, OR ANY REPRESENTATIVE OR PARTNER THEREOF, EVER FAILED TO COMPLETE A CONTRACT? **PRINT ALL INFORMATION**

NO YES

IF YES, EXPLAIN

HAS THE BIDDER EVER HAD ANY PAYMENT / PERFORMANCE BOND CALLED AS A RESULT OF THIS WORK? **PRINT ALL INFORMATION**

NO YES IF YES, COMPLETE THE FOLLOWING:

PROJECT NAME		CONTRACTING PARTY		BOND AMOUNT				
		EEN FOUND GUILTY FORMATION	OF VI	OLATING A	NY STAT	E OR FEDE	RAL EMPLOYMENT	Γ
NO	YES	IF YES, EXP	LAIN _					
		FILED FOR PROTI DR STATE INSOLVEN						
NO	YES	IF YES, EXP	LAIN _					

_



VEC

NO

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

TE VEC EVELADI

NO	YES	IF YES, EXPLAIN		
S BIDD	DER OR A	ANY OF ITS EMPLOYEES FILED ANY	CLAIMS WITH WAS	HINGTON STATE
RKER'S	S COMPEN	NSATION OR OTHER INSURANCE COM	PANY FOR ACCIDENT	S RESULTING IN
TAL INJ	URY OR D	DISMEMBERMENT IN THE PAST 5 YEARS	PRINT ALL INFORM	IATION
NO	YES IF	F YES, COMPLETE THE FOLLOWING:		
DATE	Ξ	TYPE OF INJURY	AGENCY REC	EIVING CLAIM
IDDER'S	EXPERIEN	ICE MODIFICATION RATE (EMR): 2021	2022	2023
7 BIDDER	R IS SELF-I	INSURED, ATTACH PROOF OF EMR STAT	ED. SHOWING COMPL	ETE WORKSHEET

CALCULATIONS) **NOTES TO BIDDERS: SAFETY IS A PRIMARY CONCERN ON THIS PROJECT.** KCHA reserves the right to disqualify Bidders where either the current or three (3) year average of the Experience Modification Rate (EMR)

EXCEEDS 1.0. KCHA may require additional information from Bidders that have an EMR of more than 1.0.

DESCRIBE ALL VIOLATION CITATIONS ISSUED AGAINST BIDDER IN THE LAST 5 YEARS UNDER OSHA, WISHA OR OTHER APPLICABLE WORKPLACE SAFETY PROGRAMS. **PRINT ALL INFORMATION**

DATE OF INSPECTION / INCIDENT	OSHA ACTIVITY NO.	CLOSED / PENDING
	INSPECTION /	INSPECTION / ACTIVITY

ADDITIONAL INFORMATION:

BEFORE A BID IS CONSIDERED FOR AWARD, THE BIDDER MAY BE REQUESTED BY KCHA TO SUBMIT A STATEMENT OR OTHER DOCUMENTATION REGARDING ANY OF THE BASIC QUALIFICATIONS LISTED ABOVE. FAILURE BY THE BIDDER TO PROVIDE SUCH ADDITIONAL INFORMATION SHALL RENDER THE BIDDER NON-RESPONSIVE AND NON-RESPONSIBLE, AND INELIGIBLE FOR AWARD.

THE UNDERSIGNED WARRANTS UNDER PENALTY OF PERJURY THAT THE FOREGOING INFORMATION IS COMPLETE, TRUE AND ACCURATE TO THE BEST OF HIS / HER KNOWLEDGE. THE UNDERSIGNED AUTHORIZES THE KING COUNTY HOUSING AUTHORITY TO VERIFY ALL INFORMATION CONTAINED HEREIN. (IF THIS INFORMATION IS NOT COMPLETE AND ACCURATE THE BID MAY BE CONSIDERED NON-RESPONSIVE.)

BIDDER'S	SIGNATURE

BIDDER'S NAME (PLEASE PRINT)

BIDDER'S TITLE (PLEASE PRINT)



CONTRACTOR CERTIFICATION – RETURN EACH FORM SINGLE SIDED

PROJECT NAME: 600 BUILDING BATHROOM REMODEL

	ME OF COMPANY:	
РНУ	SICAL STREET ADDRESS:	
CIT	Y – STATE – ZIP:	
MA	ILING ADDRESS:	
CIT	Y – STATE – ZIP:	
PHC	DNE NUMBER:	
FED	DERAL TAX ID NO.:	WA STATE UBI NO.:
ГҮРЕ	OF BUSINESS: CORPORATION	LLC - PARTNERSHIP SOLE PROPRIETOR
OWN necess		n the inception of the Company. Use an additional sheet of paper if
	NAME OF OWNER(S)	DATE(S) OF OWNERSHIP (from – to)
UND	ER PENALTIES OF PERJURY,I /	_ We hereby certify that: (Check the appropriate responses)
1.		sabilities that would prevent the achievement of the various to the greatest extent feasible and with good faith efforts to
2.	I / We do not and will not maintai location where segregated facilities are mainta facilities, if necessary, to assure privacy between	n, nor permitMy /Our employees to work in a
	racinties, if necessary, to assure privacy betwee	
3.		en the sexes. projectIs / Is Not listed on the Environmental
3. 4.	Any facility used in the performance of this p Protection Agency list of violating facilities; an I / We will notify KCHA, PRIO	en the sexes. projectIs /Is Not listed on the Environmental id, R TO award, of the receipt of any communication from the lat any facility proposed to be used in the performance of this
	Any facility used in the performance of this p Protection Agency list of violating facilities; an I / We will notify KCHA, PRIO Environmental Protection Agency indicating th project is under consideration to be listed on the	en the sexes. projectIs /Is Not listed on the Environmental id, R TO award, of the receipt of any communication from the lat any facility proposed to be used in the performance of this
4. 5.	Any facility used in the performance of this p Protection Agency list of violating facilities; an I / We will notify KCHA, PRIO Environmental Protection Agency indicating th project is under consideration to be listed on th I / We will include a certification s contract.	en the sexes. projectIs /Is Not listed on the Environmental d, R TO award, of the receipt of any communication from the lat any facility proposed to be used in the performance of this e EPA List of Violating Facilities; and,
4.	Any facility used in the performance of this p Protection Agency list of violating facilities; an I / We will notify KCHA, PRIO Environmental Protection Agency indicating th project is under consideration to be listed on th I / We will include a certification s contract.	en the sexes. projectIs /Is Not listed on the Environmental id, R TO award, of the receipt of any communication from the lat any facility proposed to be used in the performance of this e EPA List of Violating Facilities; and, ubstantially the same as this certification in every non-exempt



7. The number shown on this form is the correct Taxpayer Identification Number OR if no Taxpayer Identification Number is listed, a notarized explanation as to why is attached to these Bid Documents and

8.	I /	We further certify that	I/	We are not subject to Backup Withholding because;

Exempt from Backup Withholding, or

No notification from the Internal Revenue Service (IRS) for failing to report all interest or dividends, or

- No long subject to Backup Withholding per notification from the IRS
 - (If you ARE subject to Backup Withholding, leave \$5 blank and go to #6)
- 9. <u>I</u> / <u>We</u> have been notified by the IRS that <u>I</u> Am / <u>We</u> Are currently subject to Backup Withholding because of under reporting interest or dividends.
 (If you filled out #5 you are *NOT* subject to Backup Withholding, leave #6 blank)

, who is by title the

of our firm/company and has been designated, as the responsible official to ensure required reports are submitted, and record keeping complies with all the applicable regulations.

AUTHORIZED OFFICIAL:

SIGNATURE

NAME (PLEASE PRINT)

TITLE (PLEASE PRINT)

DATE



NON-COLLUSIVE AFFIDAVIT – RETURN EACH FORM SINGLE SIDED

FOR CONTRACTS AND EQUIPMENT \$50,000 AND ABOVE

STATE OF WASHINGTON)) ss COUNTY OF KING)

_____, being first duly sworn, deposes and says:

That he / she is a Partner or Officer of the Firm of, etc.

The party making the forgoing proposal or bid, that such proposal or bid is genuine and not collusive or a sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against KING COUNTY HOUSING AUTHORITY or any person interested in the proposed contract; 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:_____



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; 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 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.
- 3. 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 (PLEAS	
SIGNATURE		NAME (FLEAS	E FRINT)
TITLE (PLEASE PRINT)		DATE	
Bidding Contractor's Company Name:			Initials:
Equal Opportunity Clause Return Form – B.5	Page 1 of 1		KCHA / 10-20-22



CAPITAL CONSTRUCTION DEPARTMENT

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 Author	ority (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:

600 BUILDING BATHROOM REMODEL

NOW THEREFORE:

- a. If Principal requests, in writing, to withdraw its Bid, prior to Bid Opening, or
- b. If the Proposal is rejected by Owner, or
- c. Owner in accordance with the terms of the Proposal and furnishes a bond for the faithful 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.



KCHA - 600 BUILDING BATHROOM REMODEL

CAPITAL CONSTRUCTION DEPARTMENT

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: _	

Surety Companies executing Bonds must appear on the current Authorized Insurance List in the State of Washington.

Bidding Contractor's Company Name:______ Initials: _____



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:
Debarment/Suspension Compliance Page 1 of 1 Return Form – B.7	KCHA / 10-20-22



CAPITAL CONSTRUCTION DEPARTMENT

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

NAME OF BIDDING COMPANY:	

PHY	SICAL STREET ADDRESS:				
CITY	/ STATE / ZIP:				
1.	List Approximate Percent (%) of Work	Your Company will actually Perform:			
2.	Do You Intend on using Subcontractor	(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 final subcontractor list will be submitted prior to Notice to Proceed. PRINT ALL INFORMATION SUBCONTRACTOR – FIRST TIER - LIST				
Bu	siness Name:	Trade:			
	Address:				
	UBI No.:				
Bu	siness Name:	Trade:			
	Address:				
	Phone:	Years of Experience:			

UBI No.:		
Business Name:	Trade:	
Address:	~	
Phone:		
UBI No.:		
Business Name:	Trade:	
Address:	Contact:	
Phone:	Years of Experience:	
UBI No.:		

The Bidder hereby certifies that the information contained in this Proposed Subcontractor List, including any attached sheets, is accurate, complete, and current:

Print Name of Authorized Official

Signature

Bidding Contractor's Company Name:_

Initials: _____

Title

Date

			RETURN FORM SINGLE SIDED
	\mathbf{n}	TH	HIS FORM MUST BE SIGNED AND RETURNED
	Project Name:		
C	Company Name:		
	Address:		
	Contact Name:	\sum	Contact Title:
	Contact Phone:		Contact Email:
Ту	ype of Trade or B	Busines	
•	•		ar, Full Time Employees (Puget Sound Region):
	VesIs 51% or more	by Sec No e of you	 attion 3 workers? If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). aur business owned and controlled by low- or very low-income persons (person
	VesIs 51% or more	by Sec No e of you	If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). In business owned and controlled by low- or very low-income persons (person s of the median income level for the past 12 months - see attached income
	Ves	by Sec No e of you or less	If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). In business owned and controlled by low- or very low-income persons (person s of the median income level for the past 12 months - see attached income
2.	been performed Yes Is 51% or more who earn 80% guidelines)? Yes	by Sect No e of you or less No mess pro	If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). In business owned and controlled by low- or very low-income persons (person s of the median income level for the past 12 months - see attached income If "yes" is checked, submit either the section 3 Individual Certification form(s) or the Section 3 Subcontractor Business Work Plan form.
2.	been performed Yes Is 51% or more who earn 80% guidelines)? Yes Yes Does your busin will take place?	by Sect No e of you or less No mess pro	If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). ur business owned and controlled by low- or very low-income persons (person s of the median income level for the past 12 months - see attached income If "yes" is checked, submit either the section 3 Individual Certification
2.	been performed Yes Is 51% or more who earn 80% guidelines)? Yes Does your busin will take place? Yes Does your busin Does your busin	by Sect No e of you or less No ness pro No ness pro	If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). Aur business owned and controlled by low- or very low-income persons (persor is of the median income level for the past 12 months - see attached income If "yes" is checked, submit either the section 3 Individual Certification form(s) or the Section 3 Subcontractor Business Work Plan form. Divide economic opportunities for KCNA residents at the site(s) where the work If "yes" is checked, please provide supporting documentation.
2.	been performed Yes Is 51% or more who earn 80% guidelines)? Yes Does your busin will take place? Yes Does your busin Does your busin	by Sect No e of you or less No mess pro No ness pro ed hous	 If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region). ar business owned and controlled by low- or very low-income persons (person s of the median income level for the past 12 months - see attached income If "yes" is checked, submit either the section 3 Individual Certification form(s) or the Section 3 Subcontractor Business Work Plan form. by de economic opportunities for KCNA residents at the site(s) where the work If "yes" is checked, please provide supporting documentation.



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

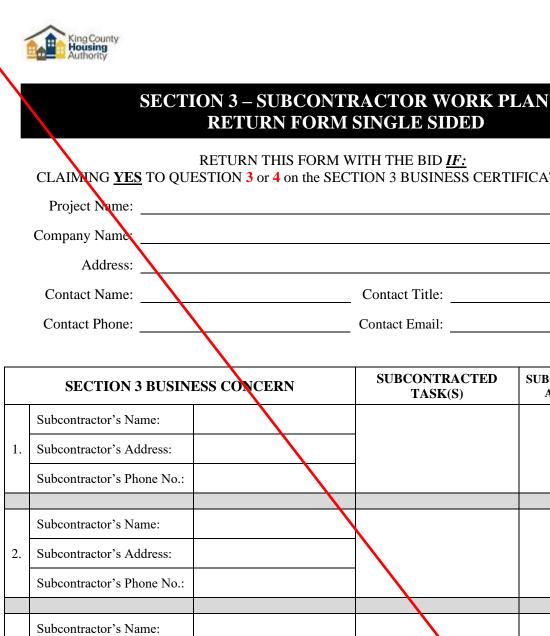
I further certify that, **if my company is awarded the bid, and needs to hire additional employees for the project**, we will carry out Section 3 hiring, training and subcontracting requirements to the best of our ability.

Signature	Name
Title	Date
Phone Number	Email Address

If you have more specific questions about Section 3 requirements, contact KCHA at section3@kcha.org.

SECTION 3 – 2024 INCOME GUIDELINES

	Income Limit 1 person				
Location	Extremely Low Income		Very Low Income		Low Income
Kitsap County (Bremerton, Silverdale)	\$25,150		\$41,900		\$67,050
King/ Snohomish Counties (Seattle, Bellevue, Everett)	\$31,650		\$52,700		\$77,700
Pierce County (Tacoma)	\$24,350		\$40,550		\$64,900
Skagit County (Sedro-Woolley)	\$21,050		\$35,050		\$56,150
Thurston County (Olympia, Tumwater)	\$23,700		\$39,430		\$63,100



RETURN FORM SINGLE SIDED

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

Project Name:				
Company Name				
Address:				
Contact Name:		Contact Title:		
Contact Phone:		Contact Email:		
SECTION 3	BUSINESS CONCERN	SUBCONTRACTED TASK(S)	SUBCONTRACT AMOUNT	% OF OVERAI CONTRA

	SECTION 5 DUSIN	TASK(S)	AMOUNT	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.:			

TOTAL CONTRACT VALUE: _____ TOTAL SUBCONTRACT VALUE:

PERCENTAGE OF TOTAL BID:

For a list of Section 3 Certified Businesses, please go to: https://portalapps.hud.gov/Sec3BusReg/BRegistry/SearchBusiness



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 Return Form – B.10	КСНА / 10-20-22



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 – Federal ID _Sole Proprietorship – SS#		
		Other – Describe:		
WMBE:		_YesN	lo	
Describe:		Disadvantage Owned (Dis	sabled – DBE	2)
		Women Owned (WBE)		
		Minority Owned (MBE or	r MWBE) (C	heck Applicable)
-	1.	White American	4.	Hispanic American
_	2.	Black American	5.	Asian – Pacific American
-	3.	Native American	б.	Hasidic Jew
Registered WMBE:	Yes	No		_ Registration in Progress
Authorized Signer		Print Name and Title		Date
FOR KCHA USE ONLY: IF 7	THIS COMPA	NY HAS BEEN AWARDED T	THE CONTRA	CT, FORWARD THIS FORM
TO: Tim Baker – KCHA S Phone: 206-574-1111				

Bidding Contractor's Company Name:_



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

Bidding Contractor's Company Name:



BB - SECTION

NO PARTICIPATION for Bid Package

BB.1 No Participation Form



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:	<u>November 20, 2024</u>			
PROJECT NAME:	600 Building Bathroom Remodel			
RETURN FORM TO:	Donaldh@kcha.org			
·	o mail in the No Participation Response Form, but this form must KCHA does not recommend mailing in this form due to possible ise with the mail delivery.			
If using the mail please 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 NOT BIDDING on this	Contract because: (check all response(s) that apply:			
Does not perform the requested type of work				
Has other work which would interf	ere with the proposed work schedule			

☐ Job is too big

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 on this Contract if:

COMPANY NAME:		
ADDRESS:		
CITY-STATE-ZIP		
SIGNATURE:	PRINCIPAL OR OFFICER	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) (N/A)
- 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 Section 3 Individual Certification Form and FAQ's (N/A)
- C.12 Section 3 Labor Hours Benchmark Status Report Sample Template (N/A)

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

RAFT 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 OF SITE

Street Address City, State Zip **PROJECT NAME:**

City, State Zip

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

NAME OF ARCHITECT OR ENGINEER Street Address

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
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 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.)*

- [« »] The date of this Agreement.
- [X] A date set forth in a notice to proceed issued by the Owner.
- [« »] Established as follows: (Insert a date or a means to determine the date of commencement of the Work.)
 - « »

§ 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**.

2

Portion of Work	Dates
Contract – Start Date	Month, Day, Year
Construction Period	Month, Day, Year to Month, Day, Year
Substantial Completion Date	Month, Day, Year
Physical Completion Date	Month, Day, Year (Liquidated Damages Start)
Contract – Final Completion Date	Month, Day, Year

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

CONTRACT SUM ARTICLE 4

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be «» (\$ «»), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Alternate Number and Description

§ 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 Acceptance
NA		
§ 4.3 Allowances, if any, included in the Contract Sum: <i>(Identify each allowance.)</i>		

Price

Price

Λ

Allowance Description

§ 4.4 Unit prices, if any:

Owner's Contingency

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.) 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:

 $\{426/612.052/02533546-2\}$

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«»	«»
\ //	~//

§ 4.6 Other:

(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.)

« NA »

§ 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

- .1 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.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 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.

Limit of liability or

Type of insurance or bond

		bond amount (\$0.00)
Certificate of Liability Insurance Requirements:	Limit	(Exhibit – C)
	Coverage	(Exhibit – C)
Builders Risk Insurance:	Completed Value of Project	(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 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, as defined at 24 CFR Part 75 per **Exhibit D.1-D.3** and as designated in AIA A201-2017, Section 18 of the General Conditions.

§ 8.6.2 Davis-Bacon / HUD Non-Routine Maintenance / State Prevailing Wage Certified Payroll

- § 8.6.2.1 The Contractor shall comply with requirements and regulations of the Davis-Bacon Act per E.0 & E.1.
 - .1 Payment of Wages to Workers shall be weekly.

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- .2 Certified Payroll Reports recording wages paid to each worker will be submitted to the Owner weekly.
- .3 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.
- .5 The Contractor is required and shall perform a complete review of all Certified Payroll Reports 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.
- .6 The Wage Decision for this project is: (Check one of the following boxes.) [«»] Davis-Bacon Construction Type «» Decision No. «» Modification No. «», Date «»

[«»] HUD Non-Routine Maintenance Date «»

[«»] WA State Prevailing Effective Date «» County «»

§ 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 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101TM–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A201TM–2017, General Conditions of the Contract for Construction

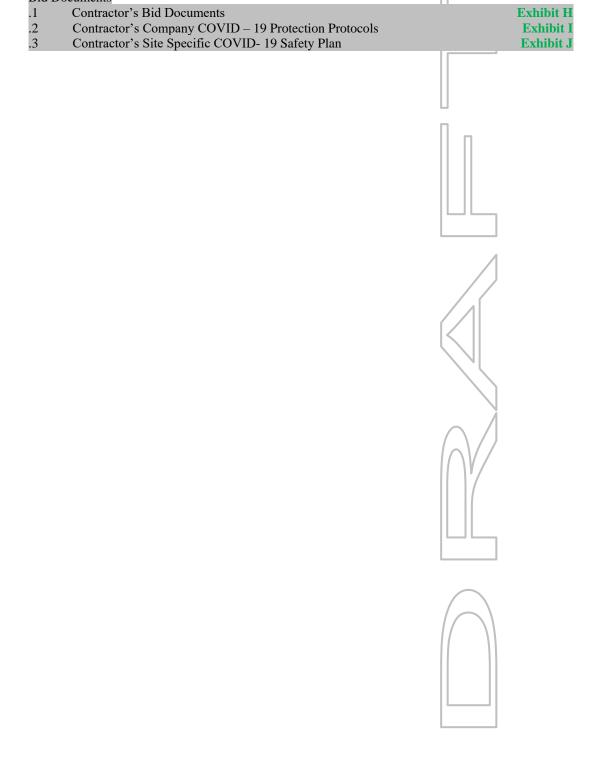
.3	Drawings Number	Title	Date
	Refer to Exhibit F	Drawings Table of Contents	
.4	Specifications		
	Section	Title	Date Pages
	Refer to Exhibit G	Specifications Table of Contents	
.5	Addenda, if any:		
	Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.



.6 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201TM_2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.) Bid Documents



This Agreement entered into as of the day and year first written above.

KING COUNTY HOUSING AUTHORITY

XXX CONSTRUCTION COMPANY

OWNER (Signa	ature)	CONTRACTOR (Signature)		
Name (Print)		Name (Print)		
Title (Print)		Title (Print)		
		Contractor's License No.: «»		
EXHIBIT OVER	RVIEW:			
DESCRIPTION		CROSS REFERENCE		
Exhibit – A Exhibit – B Exhibit – C Exhibit – D.1 Exhibit – D.2 Exhibit – D.3 Exhibit – E.0 Exhibit – E.1 Exhibit – E.2 Exhibit – F Exhibit – G Exhibit – H Exhibit – I Exhibit – J	Detailed Summary of Scope of Work Application for Payment Insurance Requirements Section 3 Documents Section 3 Documents Certified Payroll Certified Payroll Prevailing Wage Exemption Drawings Specifications Contractor's Bid Documents Contractor's Company COVID-19 Prote Contractor's Site Specific COVID-19 Sa		Article 2 5.1.6.3 8.5.1 8.5.1 8.6.1 8.6.1 8.6.2 8.6.2 8.6.2 8.6.3.1 9.1.3 9.1.4 9.1.6.1 9.1.6.2 9.1.6.3	

DRAFT AIA Document A201[™] - 2017

General Conditions of the Contract for Construction

CONTRACT NUMBER:

for the following PROJECT:

(Name and location or address)

NAME OF SITE

Street 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

nas 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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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 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.

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§ 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, Subsubcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. 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 lien 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.

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§ 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.

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§ 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 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.

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§ 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.

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§ 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,

- .1 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.

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§ 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 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

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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.

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§ 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 the Agreement.

§ 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.

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§ 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.

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§ 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 Subsubcontractors.

§ 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 .1 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.

ARTICLE 6 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 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

.1 The Owner anticipates that it will desire the Contractor to accomplish Work that was not able to 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

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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:

- .1 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 Section 9.5.1.

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§ 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 an 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 Contractor 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, 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

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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

- .1 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 Subcontractor, 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.

ARTICLE 11 INSURANCE AND BONDS

§ 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, 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 to the extent any loss to the Owner would have been 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, subsubcontractors, 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.

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§ 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 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 and to make a claim for breach of warranty. If the Contractor fails to correct in 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. 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.

§ 12.2.3 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.

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§ 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.

§ 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.

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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 Subcontractor, 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
- .4 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 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
 - .1 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
 - .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 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:

- .1 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
- .3 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.

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§ 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

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause 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

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 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.

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§ 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.

§ 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
- .2 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

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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 seq.

§ 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).

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§ 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

- The Contractor warrants that to the best of its knowledge and belief and except as otherwise disclosed, .1 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.
- In the event the Contractor was aware of an organizational conflict of interest before the award of this .3 Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.
- In the event the Contractor was aware of an organizational conflict of interest before the award of this .4 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.

- The Contractor shall maintain accounts and records in accordance with State Auditor's procedures, .1 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 .2 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 residents 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, as defined at 24 CFR Part 75 ("Section 3 Regulations") 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 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.

§ 18.2 The parties to this contract agree to comply with HUD's Section 3 Regulations. 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 Section 3 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 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 the 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 the Section 3 Regulations.

§ 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 Section 3 Regulations require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under Section 3 Regulations.

§ 18.6 Noncompliance with Section 3 Regulations 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, and an Individual Certification Form for each person that is assigned to the project, prior to the contract execution. The Contractor will submit to the Owner with each Application for Payment the Section 3 Labor Hours Benchmark Status Report and any Individual Certification Form(s) for persons not initially assigned to the project prior to the contract execution. Noncompliance, incorrect, or missing documents will result in progress payments being withheld until all issues are resolved to the satisfaction of the Owner.

§ 18.8 Section 3 Employment and Training. Without limiting Contractor's obligation to comply with Section 3 Regulations, 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
- .4 To low- and very low-income persons residing within the Puget Sound Area.

§ 18.8 Section 3 Contracting. Without limiting Contractor's obligation to comply with Section 3 Regulations,

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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 Area.

§ 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.



PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT, That we the Undersigned,

as PRINCIPAL, and _____

as.

SURETY are held and bound unto the **KING COUNTY HOUSING AUTHORITY** of Seattle, Washington, hereinafter called the Public Housing Authority in the penal sum of: **\$** and No/100

WHEREAS the Principal has entered into a certain Contract with the Public Housing Authority dated

_____, 20____, a copy of which is hereto attached and made a part hereof.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall in all respects fully perform the Contract and all duly authorized modifications thereof, during its original term and any extensions thereof that may be granted and during any guaranty period for which the Contract provides, and if the Principal shall fully satisfy all claims arising out of the prosecution of the Work under the contract and shall fully indemnify the Public Housing Authority for all expenses which it may incur by reason of such claims, including its attorney's fees and court costs, and if the Principal shall make full payment to all persons supplying labor, services, materials, or equipment in the prosecution of the Work under the contract, in default of which such persons shall have a direct right of action hereupon, and if the Principal shall pay or cause to be paid all sales and use taxes payable as a result of the performance of the Contract as well as payment of gasoline and special motor fuels taxes in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect. No modification of the Contract or extension of the term thereof, nor any forbearance on the part of the Public Housing Authority, shall in any way release the Principal or the Surety from liability hereunder. Notice to the Surety of any such modification, extension, or forbearance is hereby waived.

IN WITNESS WHEREOF, the aforesaid Principal and Surety have executed this instrument and affixed their seals hereto, this ______ day of ______ 20___.

WITNESS:		
	(Individual Principal)	(Seal)
	(Business Address)	(bear)
	(Individual Principal)	(Seal)
	(Business Address)	(Seal)
ATTEST:		
	(Corporate Principal)	
	(Business Address)	
	(B y)	(Corporate Seal)
	(Title)	· •
ATTEST:		
	(Surety)	
	(Business Address)	
	(By)	(Corporate Seal)
	(Title)	
The Pate of Promium on this Road is \$	per thousand	

The Rate of Premium on this Bond is \$_____ per thousand.

The Total Amount of Premium Charges is \$_____

(The above is to be filled in by Surety Company. * Power of Attorney of person signing for Surety Company must be attached.)



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 /, name	ed as the Principal in the aforegoing bond. The authorized
Official of the named bonding agent who signed	the said bond on behalf of the Principal, hereby certifies
that said bond was fully signed, sealed and atter	sted for and in behalf of said Entity by authority of its
Governing body.	
Named Bonding Agent:	

Affix Corporate Seal / Authorized Signature:



KING COUNTY HOUSING AUTHORITY INSURANCE REQUIREMENTS

INSTRUCTIONS / ENDORSEMENT INFORMATION FOR 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



- 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, 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:

- 1. The Authority, its successors and assigns, director, officers, officials, employees, agents, 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**¹ 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 nonpayment 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.

¹ "Equivalent" means that any endorsements provided must have the equivalent coverage of the listed endorsements. NOTE: This may cost the Contract extra money to get this coverage. Bidder's Insurance Requirements Page 4 of 5



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; 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.



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.

NOTE: In addition to the typical elements of a construction safety plan that addresses the contractor, KCHA requires that if a/the employee(s) of the Contractor or any sub-contractor is asked to put on a mask by either a resident or property manager when they are in a building or resident's unit, the employee(s) will do so; the Contractor should reflect this in their safety plan.

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.
- 13. Has provisions for "masking-up"



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): Individual	Partnership* Corporation** – in state of
* If Partnership, provide	e Full Name(s) and Address(es) of all parties
** If your company is "also known	n as (AKA)" or "doing business as (DBA) list all names
	CATION RATE (EMR): 2021; 2022; 2022; EMR stated, showing complete worksheet calculations).
Sub-Contractor is not presently debarred, suspended excluded from covered transactions by any federal of	d, proposed for debarment, declared ineligible, or voluntarily 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)

Certification of Payments to Influence Federal Transactions

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

CONTRACT DOCUMENTS C.7

OMB Approval No. 2577-0157 (Exp. 1/31/2027)

Public reporting burden for this information collection is estimated to average 30 minutes, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The information requested is required to obtain a benefit. This form is used to ensure federal funds are not used to influence members of Congress. There are no assurances of confidentiality. HUD may not conduct or sponsor, and an applicant is not required to respond to a collection of information unless it displays a currently valid OMB control number. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 17 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157.

Applicant Name

Program/Activity Receiving Federal Grant Funding

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions. (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Codr. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

I hereby certify that all the information stated herein, as well as any information provided in the accompaniment herewith, is true and accurate. **Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Name of Authorized Official	Title	
Signature		Date (mm/dd/yyyy)

DISCLOSURE OF LOBBYING ACTIVITIES

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

Approved by OMB 4040-0013

1 * Type of Federal Action:	2. * Status of Federal Action:	2 * Poport Tupo		
1. * Type 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	c. post-award			
d. loan				
e. loan guarantee				
f. loan insurance				
A Name and Address of Departing	Entity			
4. Name and Address of Reporting	Entity:			
Prime SubAwardee				
* Name				
* Street 1	Street 2			
* City	State	Zip		
Congressional District, if known:				
5. If Reporting Entity in No.4 is Suba	wardee, Enter Name and Address of P	nme:		
6. * Federal Department/Agency:	7. * Federal Prog	gram Name/Description:		
	CFDA Number, if applica	able:		
8. Federal Action Number, if known:	9. Award Amour	at if known:		
	\$			
10. a. Name and Address of Lobbyin	g Registrant:			
Prefix * First Name	Middle Name			
* Last Name	Suffix			
* Street 1	Street 2			
* City	State	Zip		
b. Individual Performing Services (incl	uding address if different from No. 10a)			
Prefix * First Name	Middle Name			
* Last Name	Suffix			
* Street 1	Street 2			
* City	State	Zip		
	I by title 31 U.S.C. section 1352. This disclosure of lobbying action was made or entered into. This disclosure is required pu			
the Congress semi-annually and will be available for	public inspection. Any person who fails to file the required disc			
\$10,000 and not more than \$100,000 for each such failure.				
* Signature:				
*Name: Prefix * First Nan	ne Middle N	lame		
*Name: Prefix * First Nam				
* Last Name	Su	ffix		
Title:	Telephone No.:	Date:		
Enders Liller Ont		Authorized for Local Reproduction		
Federal Use Only:		Standard Form - LLL (Rev. 7-97)		



CERTIFICATION OF COMPLIANCE WITH WASHINGTON STATE WAGE PAYMENT STATUTES

The Bidder hereby certifies that, within the three year period immediately preceding the bid solicitation date of _______, that the Bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48 or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the WA State Department of Labor & Industries of through a civil judgement entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the forgoing is true and correct.

Bidder		
Signature of Authorized Officia	*	
Printed name		
Title		
Date	City	State
Check one: Individual Partnership	Joint Venture 🗆 Cor	poration 🗆
State of Incorporation, or if not	a corporation, State wh	nere business entity was formed:

If a co-partnership, give company name under which 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.



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 □	Trust/Estate	Other (see instructior	ns)
C Corporation	Exempt Payee		
Limited Liability Company (LLC). Enter the tax classification (C= P=Partnerships)		ooration,	>>
	y, State, and Zip Code:	Telephone	::
Remit to address (if different from above): Cit	y, State, and Zip Code:	Email:	
Taxpayer Identification Number (TIN)		PROVIE	DE ONE ONLY
Enter your TIN in the appropriate box. The TIN provided must match the r	ame given on	SSN:	
the "Name" line to avoid backup withholding. For individuals, this is your a	social security number	EIN:	
(SSN). For other entities, it is your employer identification number (EIN).			
Terms of Payment I Net 30 Net 10th	of Month	Other	
Net 10 Due upor	receipt		
*Section-3: \bigcirc Yes \bigcirc No *Questions can be directed to KCHA Se	ction 3 Coordinator 206	5-826-5335	
WMBE: OMINORITY OWNED (MBE OR OWOMEN MWBE)	OWNED (WBE)	○ Not Applicable	
	ic American	NONE OF THE AB	OVE (NEC)
	acific American	Other	
☐ 3. Native American ☐ 6. Hasidic			
Certification			
Under the penalties of perjury, I certify that:			
1. The number shown on this form is my correct taxpayer identification number	or I am waiting for a number to	o be issued to me), and	
2. I am not subject to backup withholding because: a) I am exempt from backup			. ,
subject to backup withholding as a result of a failure to report all interest or di	vidends, or c) the IRS has notifi	ed me that I am no longer s	ubject to backup withholding, and
 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 IRS that you are currently s	subject to backup withholdir	ng because you have failed to
report all interest and dividends on your tax return. For real estate transactions, item 2 or cancellation of debt, contributions to an individual retirement arrangement (IRA), and go certification, but you must provide your correct TIN.	does not apply. For mortgage ir	nterest paid, acquisition of a	abandonment of secured property,
The IRS doe not require your consent to any provision of this document other than the c	ertification required to avoid b	ackup withholding.	
SIGN HERE Signature of U.S. Person:		Data	
SIGN HERE Signature of U.S. Person: Return completed form to King County Housing Authority, 600 A	ndovor Park Wost Tuk	Date:	
See instructions below or refer to the IRS instructions at www.irs.			
General Instructions:		ieting this form.	
Purpose of the Form: Establish or update a vendor account with the King County Housin number (TIN), request certain certifications and claims for exemption, as well as the Kir	• .	•	
Complete form if: 1. You are a U.S. person (including a resident alien);			
 You are a vendor that provides goods or services to KO You will receive payment from KCHA 	CHA; AND		



SECTION 3 – INDIVIDUAL CERTIFICATION FORM

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*

NAM	E:			/	
ADDI	RESS:				
EMA	L ADDRESS:		PHONE NUMBER:		
	DATE: bd by Company)		POSITION TITLE:		
EMPI	LOYER / COMPANY NA	ME:	/		
PROJ	ECT NAME:				
1. I	am a resident in a KCHA	Property.	- /	Yes	No
Prop	erty Name:				
2. I	am currently in KCHA's	Section 8 Program.	_	Yes	No
3. I	am currently a participant	in a HUD YouthBy	ild Program.	Yes	No
a. b.	I live in KITSAP COUN My TOTAL income for the Below or Equal to I live in KING or SNOP My TOTAL income for	he past 12 months w \$67,050 MISH COUNTY	Greater than	\$67,050	
	Below or Equal to	-	Greater than		
c.	I live in PIERCE COUN My TOTAL income for the Below or Equal to		vas: (<i>check appropriate</i>		
d.	I live in SKAGIT COUN My TOTAL income for t		vas: (check appropriate	box)	
	Below or Equal to	\$56,150	Greater than	\$56,150	
9 .	I live in THURSTON C My TOTAL income for t		vas: (check appropriate	box)	
	Below or Equal to	\$63,100	Greater than	\$63,100	



Date

No

- f. I live in COUNTY and My TOTAL income for the past 12 months was: \$
- 5. 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 _____ Yes _____
 YouthBuild participant.

I hereby certify under the **penalty of perjury** that the information above is true and correct.

Signature

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. For questions, please contact KCHA by email at section3@kcha.org.



SECTION 3 – INDIVIDUAL CERTIFICATION FORM FAQ's

Question: Answer:	What is this form? 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 engibility and for statistical purposes.
Question: Answer:	Who collects this form and where does it go? 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 at section3@kcha.org.



SECTION 3 – LABOR HOURS BENCHMARK REPORT - INSTRUCTIONS

Complete the Labor Hours Benchmark Status Report as indicated below and return the completed form *llong* with the pay application(s) for the same period. Return the Labor Hours Benchmark Status Report and pay application to:

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

Attn:

Email:

REPORT LINES:

- 1) Name of the project as it appears on the Contract
- 2) Company Name
- 3) Name of the person filling out the Labor Hours Benchmark Status Report
- 4) Phone number of the person filling out the Labor Hours Benchmark Status Report
- 5) Email address of the person filling out the Labor Hours Benchmark Status Report
- 6) Contract number as it appears on the Contract
- 7) Contract Award date (date of Letter of Award)
- 8) Reporting Period should be the same as the pay application period
- 9) Total hours worked by all workers on the project this will be everyone that is listed on the certified payrolls during Reporting Period.
- 10) Total hours worked on the project by Section 3 workers during the Reporting Period.

A Section 3 worker is identified as:

- a. The worker's income for the previous or annualized calendar year is below the income limit established by HUD; or
- b. Is employed by a Section 3 business concern; or
- c. Is a YouthBuild participant.

These will be the workers identified as Section 3 employees upon the submittal of their Section 3 Individual Certification Form at the beginning of the project OR when they were brought onto the project. A copy of these forms should be available from your company's payroll office. Copies can also be obtained by submitting a request to section3@kcha.org. Please include your company's name, project name and contact information.

11) Total hours worked on the project by Targeted Section 3 workers during the Reporting Period.

A Targeted Section 3 worker is identified as:

- a. Employed by a Section 3 business concern; or
- b. Is a resident of public housing or Section 8 assisted housing; or
- c. Resides within one mile of the project site.

These workers will be identified as Targeted Section 3 employees upon the submittal of their Section 3 Individual Certification Form at the beginning of the project OR when they were brought onto the project. Acopy of these forms should be available from your company's payroll office. Copies can also be obtained by submitting a request to <u>section3@kcha.org</u>. Please include your company's name, project name and contact information.

See sample scenarios on pgs. 3 & 4



SECTION 3 – LABOR HOURS BENCHMARK REPORT GENERAL INFORMATION 1) **PROJECT NAME**: 2) COMPANY NAME: 3) CONTACT PERSON: 4) CONTACT PHONE NO.: 5) CONTACT EMAIL ADDRESS: 7) CONTRACT AWARD DATE: CONTRACT NO.: 6) SECTION 3 LABOR HOUR BENCHMARKS TO: 8) **REPORTING PERIOD:** FROM: The totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT SITE. TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE 9) **REPORTING PERIOD** (*onsite work crew*): TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT 10) DURING THE REPORTING PERIOD (onsite work crew who self-certified as Section 3 Workers): TOTAL LABOR HOURS FOR ALL TARGETED SECTION 3 WORKERS ON THE 11) **PROJECT DURING THE REPORTING PERIOD** (onsite work crew who self-certified as Targeted Section 3 Workers): 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

	King County CONSTRUCTION Housing CAPITAL CONSTRUCTI	DOCUMENTS C.12 ON DEPARTMENT
A cre Repo	NARIO 1: ew of 5 <u>none</u> of whom self-certified as a Section 3 worker. orting period is from June 1 to June 30, 2022. total <u>hours</u> that the crew worked on the project site during the reporting period totaled 1,000.	
	SECTION 3 LABOR HOUR BENCHMARKS	
8)	REPORTING PERIOD: FROM: 6-1-22 TO: 6-30-22	
Th 9)	he totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE P TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew):	ROJECT SITE. <u>1000</u>
10)	TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Section 3 Workers):	0
11)	TOTAL LABOR HOURS FOR ALL <u>TARGETED</u> SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Targete Section 3 Workers):	d0
A cre Repo The t	NARIO 2: ew of 5, <u>two</u> of whom self-certified as Section 3 workers. orting period is from June 1 to June 30, 2022. total hours that the <u>crew</u> worked on the project site during the reporting period totaled 1,000. total hours of the <u>two that self-certified as Section 3 workers</u> during the reporting period tota SECTION 3 LABOR HOUR BENCHMARKS	
8)	REPORTING PERIOD: FROM: 61-22 TO: 6-30-22	
Th 9)	he totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE P TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew):	ROJECT SITE. <u>1000</u>
10)	TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Section 3 Workers):	80
11)	TOTAL LABOR HOURS FOR ALL <u>TARGETED</u> SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Targeter Section 3 Workers)	d
/		



SCENARIO 3:

A crew of 5, <u>one</u> of whom self-certified as a Section 3 worker and the other as a Targeted Section 3 worker	orker.
Reporting period is from June 1 to June 30.	
The total hours that the <u>crew</u> worked on the project site during the reporting period totaled 1,000.	
The total hours of the one that self-certified as a Section 3 worker during the reporting period totaled 4	0.
The total hours of the one that self-certified as a Targeted Section 3 worker during the reporting period	l totaled 40.

	SECTION 3 LABOR HOUR BENCHMARKS	
8)	REPORTING PERIOD: FROM: 6-1-22 TO: 6/30-22	
Th 9)	ne totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE	CT SITE.
7)	REPORTING PERIOD (onsite work crew):	1000
10)	TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Section 3 Workers):	40
11)	TOTAL LABOR HOURS FOR ALL <u>TARGETED</u> SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Targeted	
	Section 3 Workers):	40
A cre Repo	NARIO 4: ew of 5, (in this scenario, it does <u>not</u> matter if there are Section 3 workers or not) orting period is from June 1 to June 30, 2022. total hours that the <u>crew</u> worked on the project during the reporting period totaled <u>ZERO</u> . SECTION 5 LABOR HOUR BENCHMARKS	
8)	REPORTING PERIOD: FROM: 6-1-22 TO: 6-30-22	
	ne totals below are for YOUR COMPANY ONLY and JUST THOSE WORKERS WORKING ON THE PROJECT TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE	CT SITE.
9)	REPORTING PERIOD <i>consite work crew</i>):	0
10)	TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Section 3 Workers):	0
11)	TOTAL LABOR HOURS FOR ALL <u>TARGETED</u> SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD (onsite work crew who self-certified as Targeted	0
	Section 3 Workers):	0

YES, A LABOR HOUR BENCH MARK FORM HAS TO BE SUBMITTED EVEN IF NO WORK IS PERFORMED **BUT** THE GC/SUB (ALL TIERS) HAVE NOT FINISHED THE PROJECT.



D - SECTION

THIRD PARTY REPORTS

D.1 Limited Asbestos Survey Report January 2016



Engineering + Environmental

Limited Asbestos Survey Report

KCHA Central Office (600 Building) 600 Andover Park West Tukwila, Washington

Prepared for: King County Housing Authority 700 Andover Park West, Suite C Seattle, Washington 98118

> PBS Project No. 40573.109 January 8, 2016

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2517 Eastlake Avenue East, Suite 100, Seattle, WA 98102 206.233.9639 Main 866.727.0140 Fax www.pbsenv.com

Bend | Boise | Coos Bay | Eugene | Portland | Seattle | Tri-Cities | Vancouver

Limited Asbestos Survey Report King County Housing Authority	D.1	KCHA Central Office (600 Building) Table Of Contents
	TABLE OF CONTENTS	
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ASBESTOS BULK SAMPLE DATA		Tab 2
PLM Asbestos Sample Inventory PLM Laboratory Data Sheets Chain-of-Custody Documentation		
INSPECTOR CERTIFICATIONS		Tab 3

PBS

TAB 1 SUMMARY OF FINDINGS

BACKGROUND

PBS Engineering and Environmental, Inc. (PBS) performed a limited asbestos survey of the King County Housing Authority Central Office Building located at 600 Andover Park West, Tukwila, WA 98188. Accessible building areas included in the scope of work were inspected for the presence of asbestos-containing materials (ACMs).

King County Housing Authority Central Office Building is a commercial office building. Typical interior finishes within the Office Building include sheet vinyl flooring or vinyl floor tile in the restrooms, kitchen. Carpet is present in the remainder of the office building. Walls and ceilings throughout are textured gypsum wallboard and lay-in ceiling tiles. The exterior is masonry with metal framed windows and doors. According to the Assessor Property Detail report, the heating system provides warmed and cool air.

SURVEY PROCESS

PBS surveyed representative areas throughout the building. Per KCHA's request, the materials included in this investigation were limited to flooring, walls, ceilings, base molding and kitchen sinks. Accessible building areas included in the scope of work were inspected by AHERA Certified Building Inspector H. David Toy Jr. (Cert. #153695, Exp. 11/03/16) on December 17, 2015. Inaccessible spaces are those requiring selective demolition (such as chases), fall protection, or confined-space entry protocols to gain access.

When observed, suspect-ACMs were sampled, assigned a unique identification number, and transmitted for analysis to NVL Labs (NVLAP #102063-0) under chain-of-custody protocols. Samples were analyzed according to EPA Method 600R-93/116 using Polarized Light Microscopy (PLM), which has a reliable limit of quantification of 1% asbestos by volume.

While PBS has endeavored to identify or has presumed the presence and type of ACMs in concealed locations, additional unidentified ACMs may exist. Suspect ACMs that were not included in the scope of this investigation may exist.

FINDINGS

Asbestos-Containing Materials (ACM)

PBS collected and analyzed 20 samples of representative suspect materials for asbestos content. The following materials were determined to contain **greater than 1% asbestos**.

None of the sampled materials were found to contain asbestos.

Non-Asbestos Containing Materials

The following materials were sampled and **did not** contain detectable asbestos.

- Beige Cove Base and White Mastic
- Multi-color Speckle-Pattern Sheet Vinyl
- Gray and White Sink Undercoating
- 2' x 4' and 2' x 2' White Ceiling Tiles
- Yellow Carpet Mastic
- Gypsum Wallboard and Joint Compound

King County Housing Authority

See the PLM Asbestos Bulk Sample Inventory and laboratory report included in Tab 2 for additional information.

D.1

RECOMMENDATIONS

Asbestos-Containing Materials (ACM)

The possibility exist that concealed suspect ACM may be present in wall and ceiling cavities, equipment and select areas of the building. These may include, but are not limited to ACM pipe insulation and hard-mudded fittings, other mechanical insulation, vibration joint cloth or sealants on ductwork, glued ceiling tiles, construction adhesives and wall mastics, flooring sub-layers, and vapor barriers or weatherproofing. Any suspect ACMs that were not included in this survey should be considered asbestos-containing until properly sampled by an AHERA Certified Building Inspector.

Report prepared by:

To. D.D. ty JR.

H. David Toy Jr. AHERA Building Inspector Cert. #153695, Exp. 11/03/2016

Report reviewed by:

Mark a. Diley

Mark Hiley Senior Project Manager

TAB 2 ASBESTOS BULK SAMPLE DATA

KCHA - Cental Office (Building 600)

PLM ASBESTOS SAMPLE INVENTORY

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	<u>Lab</u>
40573.109 -01	Carpet Yellow mastic	Conference Room 109 - Southwest corner	Layer 1: Gray/blue woven fibrous material Layer 2: Gray foamy material Layer 3: Yellow mastic	NAD NAD NAD	NVL
40573.109 -02	Carpet Yellow mastic	1st floor Copy Room - North side of building	Layer 1: Gray/brown woven fibrous material Layer 2: Gray foamy material Layer 3: Yellow mastic	NAD NAD NAD	NVL
40573.109 -03	Carpet Yellow mastic	2nd floor Cubical area - South side of building	Layer 1: Gray/brown woven fibrous material Layer 2: Gray foamy material Layer 3: Yellow mastic	NAD NAD NAD	NVL
40573.109 -04	Carpet Yellow mastic	2nd floor File Cabinet Room - North side of building	Layer 1: Gray/brown woven fibrous material Layer 2: Gray foamy material Layer 3: Yellow mastic	NAD NAD NAD	NVL
40573.109 -05	Carpet Yellow mastic	Conference Room 109 - Northeast corner	Layer 1: Gray woven fibrous material Layer 2: Gray foamy material Layer 3: Yellow mastic	NAD NAD NAD	NVL
40573.109 -06	12"x12" vinyl tile w/gray streaks Yellow mastic	1st floor Supply Room - by East stairwell	Layer 1: White/gray tile Layer 2: Yellow mastic	NAD NAD	NVL
40573.109 -07	Multi colored vinyl flooring Grey leveling compound Yellow mastic	1st floor Kitchen - Northeast side of building	Layer 1: Multicolor vinyl Layer 2: Gray brittle material Layer 3: Yellow mastic	NAD NAD NAD	NVL
40573.109 -08	2'x4' Ceiling tile 2'x2' Lay-in random hole pattern	1st floor Copy Room - North side of the building	Layer 1: Yellow fibrous material Layer 2: Gray compressed fibrous material w/paint	NAD NAD	NVL
40573.109 -09	2'x4' Ceiling tile 2'x2' Lay-in random hole pattern	Conference Room 109 - Southeast corner	Layer 1: Gray compressed fibrous material w/paint	NAD	NVL
40573.109 -10	2'x4' Ceiling tile 2'x2' Lay-in random hole pattern	1st floor Storage Closet - by Conference Room 109	Layer 1: Gray compressed fibrous material w/paint	NAD	NVL
40573.109 -11	2'x4' Ceiling tile 2'x2' Lay-in random hole pattern	2nd floor File Cabinet Room - North side of building	Layer 1: Gray compressed fibrous material w/paint	NAD	NVL
40573.109 -12	Grey sink undercoat	1st floor Kitchen - Northeast corner of building	Layer 1: Gray flaky loose material	NAD	NVL

PLM ASBESTOS SAMPLE INVENTORY

PBS Sample #	Material Type	Sample Location	Lab Description	Lab Result	Lab
40573.109 -13	White sink undercoat	2nd floor First Aid Station	Layer 1: White flaky loose material	NAD	NVL
40573.109 -14	Gypsum wallboard	2nd floor File Cabinet Room - North side of building	Layer 1: White textured powdery material w/paint Layer 2: White chalky material w/paper	NAD NAD	NVL
40573.109 -15	Gypsum wallboard	Conference Room 109 - Southeast corner	Layer 1: White compacted powdery material w/paint Layer 2: White chalky material w/paper	NAD NAD	NVL
40573.109 -16	Gypsum wallboard	2nd floor cubical area - South side of building	Layer 1: White compacted powdery material w/paint Layer 2: White chalky material w/paper	NAD NAD	NVL
40573.109 -17	Gypsum wallboard	1st floor Copy Room - North side of building	Layer 1: White compacted powdery material w/paint Layer 2: White compacted powdery material w/paper Layer 3: White chalky material w/paper	NAD NAD NAD	NVL
40573.109 -18	Gypsum wallboard	1st floor Storage Closet - by Conference Room 109	Layer 1: White compacted powdery material w/paint Layer 2: Green woven fibrous material Layer 3: White chalky material w/paper	NAD NAD NAD	NVL
40573.109 -19	Beige cove base White mastic	1st floor Copy Room - North side of building	Layer 1: Beige rubbery material Layer 2: White mastic	NAD NAD	NVL
40573.109 -20	Beige cove base White mastic	2nd floor Cabinet Room - North side of building	Layer 1: Beige rubbery material Layer 3: White mastic w/paper	NAD NAD	NVL

December 28, 2015

L A B S INDUSTRIAL H Y G I E N E S E R V I C E S Laboratory | Management | Training

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

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1523421.00

Client Project: 40573.109 Location: KCHA-Bldg. 600

Dear Mr. Hiley,

Enclosed please find test results for the 20 sample(s) submitted to our laboratory for analysis on 12/23/2015.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Munaf Khan, Laboratory Director

1.888.NVL.LABS Enc.: Sample Results 1.888.(685.5227) www.nvllabs.com



Lab Code: 102063-0

page 1 of 13

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D.1



Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

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

Attention: Mr. Mark Hiley

p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Project Location: KCHA-Bldg. 600

Client Project #: 40573.109 Date Received: 12/23/2015 Samples Received: 20 Samples Analyzed: 20 Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Batch #: 1523421.00

Lab ID: 15140	060 Client Sample #: 40573.109-01		
Location: KCH	A-Bldg. 600		
Layer 1 of 3	Description: Gray/blue woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Synthetic fibers 83%	None Detected ND
Layer 2 of 3	Description: Gray foamy material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Synthetic foam	None Detected ND	None Detected ND
Layer 3 of 3	Description: Yellow mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Mastic/Binder	Cellulose 2%	None Detected ND
Lab ID: 15140	061 Client Sample #: 40573.109-02		
Location: KCH	A-Bldg. 600		
Layer 1 of 3	Description: Gray/brown woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Synthetic fibers 81%	None Detected ND
Layer 2 of 3	Description: Gray foamy material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Synthetic foam	None Detected ND	None Detected ND
Layer 3 of 3	Description: Yellow mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Mastic/Binder	Cellulose 3%	None Detected ND
	000 Oli - u t O - u - u t - 40572 100 02		

Lab ID: 15140062 Client Sample #: 40573.109-03

Location: KCHA-Bldg. 600

Sampled by: Client		H. S. M.
Analyzed by: Fiona Chui	Date: 12/23/2015	. and then
Reviewed by: Munaf Khan	Date: 12/28/2015	Munaf Khan, Laboratory Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Bulk Asbestos Fibers Analysis By Polarized Light Microscopy

	: PBS Environmental (Seattle) : 2517 Eastlake Ave E, Suite 100 Seattle, WA 98102		Batch #: 1523421.00 Client Project #: 40573.109 Date Received: 12/23/2015 Samples Received: 20
	Mr. Mark Hiley KCHA-Bldg. 600		Samples Analyzed: 20 Method: EPA/600/R-93/116 & EPA/600/M4-82-020
Layer 1 of 3	Description: Gray/brown woven fibrous mate	erial	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Synthetic fibers 82%	None Detected ND
Layer 2 of 3	Description: Gray foamy material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Synthetic foam	None Detected ND	None Detected ND
Layer 3 of 3	Description: Yellow mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Mastic/Binder	Cellulose 2%	None Detected ND
Location: KCHA Layer 1 of 3	A-Bldg. 600 Description: Gray/brown woven fibrous mate	erial	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Synthetic fibers 84%	None Detected ND
Layer 2 of 3	Description: Gray foamy material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Synthetic foam	None Detected ND	None Detected ND
Layer 3 of 3	Description: Yellow mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Mastic/Binder	Cellulose 1%	None Detected ND
Lab ID: 15140 Location: KCHA	•		
Layer 1 of 3	Description: Gray woven fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Synthetic fibers 83%	None Detected ND
Sampled by		12/22/2015	not than
		. 12/23/2013	an, Laboratory Director

limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

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Address:	PBS Environm 2517 Eastlake Seattle, WA 98	Ave E, Suite 100				Batch #: 1523421.00 Client Project #: 40573.109 Date Received: 12/23/2015 Samples Received: 20
Attention:	Mr. Mark Hile	ey .				Samples Analyzed: 20
Project Location:		-			I	Method: EPA/600/R-93/116
						& EPA/600/M4-82-020
Layer 2 of 3	Description:	Gray foamy material				
		Non-Fibrous Materials:	Other Fibro	ous Materials	:%	Asbestos Type: %
		Synthetic foam	None	Detected	ND	None Detected ND
Layer 3 of 3	Description:	Yellow mastic				
		Non-Fibrous Materials:	Other Fibro	ous Materials	:%	Asbestos Type: %
		Mastic/Binder		Cellulose 2	2%	None Detected ND
Lab ID: 151400	65 Clie	ent Sample #: 40573.109-00	6			
Location: KCHA	-Bldg. 600					
Layer 1 of 2	Description:	White/gray tile				
		Non-Fibrous Materials:	Other Fibre	ous Materials	:%	Asbestos Type: %
		Vinyl/Binder, Mineral grains		Cellulose 2	2%	None Detected ND
Layer 2 of 2	Description:	Yellow mastic				
		Non-Fibrous Materials:	Other Fibro	ous Materials	:%	Asbestos Type: %
		Mastic/Binder		Cellulose	1%	None Detected ND
Lab ID: 151400 Location: KCHA		ent Sample #: 40573.109-0	7			
Layer 1 of 3	Description:	Multicolor vinyl				
		Non-Fibrous Materials:	Other Fibro	ous Materials	:%	Asbestos Type: %
		Vinyl/Binder	None	Detected 1	ND	None Detected ND
Layer 2 of 3	Description:	Gray brittle material				
		Non-Fibrous Materials:	Other Fibro	ous Materials	:%	Asbestos Type: %
		Binder/Filler, Mineral grains		Cellulose 4	4%	None Detected ND
Layer 3 of 3	Description:	Yellow mastic				
		Non-Fibrous Materials:	Other Fibro	ous Materials	:%	Asbestos Type: %
		Mastic/Binder		Cellulose 2	2%	None Detected ND
Sampled by	: Client			•	0	
Analyzed by		Date	e: 12/23/2015	¥	lon	of them
	: Munaf Khan		e: 12/28/2015	Munaf	Khan,	Laboratory Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

page 4 of 13



D.1

Bulk Asbestos Fibers Analysis By Polarized Light Microscopy

=

Client: PBS Environmental (Seattle)

Client	: PBS Environmental (Seattle)		Batch #: 1523421.00
Address	: 2517 Eastlake Ave E, Suite 100		Client Project #: 40573.109
	Seattle, WA 98102		Date Received: 12/23/201
			Samples Received: 20
Attention:	: Mr. Mark Hiley		Samples Analyzed: 20
Project Location:	KCHA-Bldg. 600		Method: EPA/600/R-93/116
			& EPA/600/M4-82-020
Lab ID: 15140	067 Client Sample #: 40573.109-08		
Location: KCHA	A-Bldg. 600		
Layer 1 of 2	Description: Yellow fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Glass fibers 76%	None Detected ND
Layer 2 of 2	Description: Gray compressed fibrous mater	ial with paint	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Perlite, Glass beads	Cellulose 42%	None Detected ND
	Paint	Glass fibers 21%	
Lab ID: 15140	068 Client Sample #: 40573.109-09		
Location: KCHA	•		
Layer 1 of 1	Description: Gray compressed fibrous mater	ial with paint	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Perlite, Glass beads	Cellulose 43%	None Detected ND
	Paint	Glass fibers 20%	
Lab ID: 15140	069 Client Sample #: 40573.109-10		
Location: KCHA	A-Bldg. 600		
Layer 1 of 1	Description: Gray compressed fibrous mater	ial with paint	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Perlite, Glass beads	Cellulose 41%	None Detected ND
	Paint	Glass fibers 19%	
Lab ID: 15140	070 Client Sample #: 40573.109-11		
Location: KCHA	•		
Sampled by	y: Client		N M
Analyzed by	y: Fiona Chui Date:	:12/23/2015	not for
/		:12/28/2015 Munaf Kh	an, Laboratory Director

Bulk Asbestos Fibers Analysis By Polarized Light Microscopy

20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Batch #: 1523421.00

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

	: PBS Environmental (Seattle) : 2517 Eastlake Ave E, Suite 100 Seattle, WA 98102			Batch #: 1523421.00 Client Project #: 40573.109 Date Received: 12/23/2015 Samples Received: 20
	Mr. Mark Hiley KCHA-Bldg. 600			Samples Analyzed: 20 Method: EPA/600/R-93/116 & EPA/600/M4-82-020
1	Provinting O			
Layer 1 of 1	Description: Gray compressed fibrous mate Non-Fibrous Materials:	•	us Materials:	:% Asbestos Type: %
			cellulose 40	
	Binder/Filler, Perlite, Glass beads Paint		ss fibers 22	
Lab ID: 15140			33 110613 22	2 /0
Location: KCH/	•	2		
Layer 1 of 1	Description: Gray flaky loose material			
	Non-Fibrous Materials:	Other Fibro	us Materials:	.:% Asbestos Type: %
	Binder/Filler, Mineral grains			5%None Detected ND
Layer 1 of 1	Description: White flaky loose material Non-Fibrous Materials:		us Materials:	
	Binder/Filler, Mineral grains		Cellulose 4	1% None Detected ND
Lab ID: 15140 Location: KCH/	•	4		
Layer 1 of 2	Description: White textured powdery mater	rial with paint		
-	Non-Fibrous Materials:	•	us Materials:	Asbestos Type: %
	Calcareous particles, Paint	C	Cellulose 2	2% None Detected ND
Layer 2 of 2	Description: White chalky material with paper	ber		
	Non-Fibrous Materials:	Other Fibro	us Materials:	Asbestos Type: %
	Gypsum/Binder, Binder/Filler	C	Cellulose 34	4% None Detected ND
		Gla	ss fibers 3	3%
Sampled by	-		r (lund than
	-	e: 12/23/2015		0
Reviewed b	y: Munaf Khan Dat	e: 12/28/2015	iviunat l	Khan, Laboratory Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

		olarized Light Micros			
Address:	PBS Environmental (Seattle) 2517 Eastlake Ave E, Suite 100 Seattle, WA 98102 Mr. Mark Hiley KCHA-Bldg. 600				Batch #: 1523421.00 Client Project #: 40573.109 Date Received: 12/23/2015 Samples Received: 20 Samples Analyzed: 20 Method: EPA/600/R-93/116 & EPA/600/M4-82-020
Lab ID: 151400 Location: KCHA	•	573.109-15			
Layer 1 of 2	Description: White compacted por	wdery material with r	paint		
Layer 2 of 2	Non-Fibrous M Calcareous particle Description: White chalky materia	aterials: Oth es, Paint	er Fibrous Mater Cellulose		Asbestos Type: % None Detected ND
	Non-Fibrous M Gypsum/Binder, Bind	aterials: Oth	er Fibrous Mater Cellulose Glass fibers	35%	Asbestos Type: % None Detected ND
Lab ID: 151400 Location: KCHA- Layer 1 of 2	•		paint		
	Non-Fibrous M		er Fibrous Mate	rials:%	Asbestos Type: %
	Calcareous particle	es, Paint	Cellulose	2%	None Detected ND
Layer 2 of 2	Description : White chalky materia Non-Fibrous M Gypsum/Binder, Bind	aterials: Oth	er Fibrous Mater Cellulose Glass fibers	34%	Asbestos Type: % None Detected ND
Lab ID: 151400 Location: KCHA	•	73.109-17			
Layer 1 of 3	Description: White compacted por	wdery material with p	paint		
	Non-Fibrous M	aterials: Oth	er Fibrous Mate	rials:%	Asbestos Type: %
	Calcareous particle	es, Paint	Cellulose	2%	None Detected ND
Sampled by		Dete: 40/00/00	<u>ال</u>	lyn	of the
Analyzed by: Reviewed by:		Date: 12/23/20 Date: 12/28/20	-		n, Laboratory Director
<u> </u>	not homogeneous, then subsamples of the)

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government



Bulk Asbestos Fibers Analysis

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Bulk Asbestos Fibers Analysis By Polarized Light Microscopy

	PBS Environmental (Seattle) 2517 Eastlake Ave E, Suite 100 Seattle, WA 98102		Batch #: 1523421.00 Client Project #: 40573.109 Date Received: 12/23/2015 Samples Received: 20
	Mr. Mark Hiley KCHA-Bldg. 600		Samples Analyzed: 20 Method: EPA/600/R-93/116 & EPA/600/M4-82-020
Layer 2 of 3	Description: White compacted powdery materia	al with paper	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Calcareous particles, Binder/Filler	Cellulose 34%	None Detected ND
Layer 3 of 3	Description: White chalky material with paper		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Gypsum/Binder, Binder/Filler	Cellulose 34%	None Detected ND
		Glass fibers 3%	
Lab ID: 151400 Location: KCHA	•		
Layer 1 of 3	Description: White compacted powdery materia	al with paint	
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Calcareous particles, Paint	Cellulose 2%	None Detected NE
Layer 2 of 3	Description: Green woven fibrous material		
-	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	Glass fibers 24%	None Detected NE
Layer 3 of 3	Description: White chalky material with paper		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Gypsum/Binder, Binder/Filler	Cellulose 35%	None Detected ND
		Glass fibers 11%	
Lab ID: 151400 Location: KCHA	· · · · · · · · · · · · · · · · · · ·		
Layer 1 of 2	Description: Beige rubbery material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Rubber/Binder	None Detected ND	None Detected ND
Sampled by		2/22/2015	not than
Analyzed by		2/23/2015	0
			n, Laboratory Director
600/R-93/116 and 60 20%=10-30%, 50%=4 limited by the metho	not homogeneous, then subsamples of the components w 00/M4-82-020 Methods with the following measurement unce 40-60%). This report relates only to the items tested. If samp odology and acuity of the sample collector. This report s shall not be used to claim product endorsement by NVLAP or	ertainties for the reported % Asbestos (ble was not collected by NVL personnel shall not be reproduced except in full	1%=0-3%, 5%=1-9%, 10%=5-15%, , then the accuracy of the results is , without written approval of NVL

NVL Laboratories, Inc.

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Attention: Mr. Mark Hiley

Project Location: KCHA-Bldg. 600

Seattle, WA 98102

1200.054.1350 WWW.INHabs.com	
Bulk Asbestos Fibers Analysis	
By Polarized Light Microscopy	
Client: PBS Environmental (Seattle)	Batch #: 1523421.00
Address: 2517 Eastlake Ave E, Suite 100	Client Project #: 40573.109

Date Received: 12/23/2015 Samples Received: 20 Samples Analyzed: 20

Method: EPA/600/R-93/116

	-		& EPA/600/M4-82-020
Layer 2 of 2	Description: White mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Mastic/Binder	Cellulose 1%	None Detected ND
Lab ID: 15140 Location: KCH			
Layer 1 of 2	Description: Beige rubbery material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Rubber/Binder	None Detected ND	None Detected ND
Layer 2 of 2	Description: White mastic with paper		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Mastic/Binder, Binder/Filler	Cellulose 31%	None Detected ND

Sampled by: Client		Mund than
Analyzed by: Fiona Chui	Date: 12/23/2015	Mung Chan
Reviewed by: Munaf Khan	Date: 12/28/2015	Munaf Khan, Laboratory Director
Note: If samples are not homogeneous, then subsamples	of the components were analyzed separa	tely. All bulk samples are analyzed using both EPA

600/R-93/116 and 600/M4-82-020 Methods with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

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Rush Samples ____

Company	PBS Environmental (Seattle)	NVL Batch Number 1523421.00
Address	2517 Eastlake Ave E, Suite 100	TAT 1 Day AH No.
	Seattle, WA 98102	Rush TAT
Project Manager	Mr. Mark Hiley	Due Date 12/24/2015 Time 4:20 PM
Phone	(206) 233-9639	Email mark.hiley@pbsenv.com
Office:	(800) 628-9639	Fax (866) 727-0140

Project Name/Number: 40573.109

Project Location: KCHA-Bldg. 600

Subcategory PLM Bulk

Item Code ASB-02

EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 20

	Lab ID	Sample ID	Description	A/R
1	15140060	40573.109-01		Α
2	15140061	40573.109-02		Α
3	15140062	40573.109-03		Α
4	15140063	40573.109-04		Α
5	15140064	40573.109-05		Α
6	15140065	40573.109-06		Α
7	15140066	40573.109-07		Α
8	15140067	40573.109-08		Α
9	15140068	40573.109-09		Α
10	15140069	40573.109-10		Α
11	15140070	40573.109-11		Α
12	15140071	40573.109-12		Α
13	15140072	40573.109-13		Α
14	15140073	40573.109-14		Α
15	15140074	40573.109-15		Α
16	15140075	40573.109-16		Α
17	15140076	40573.109-17		Α
18	15140077	40573.109-18		Α

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				
Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Maxwell Raymond	_	NVL	12/23/15	1620
Analyzed by	Fiona Chui		NVL	12/23/15	9:39 AM
Results Called by					
Faxed Emailed					
Special Instructions:	N			· · · · · · · · · · · · · · · · · · ·	

Date: 12/23/2015 Time: 4:35 PM Entered By: Maxwell Raymond

ASBESTOS LABORATORY SERVICES

4708 Aurora Ave N, Seattle, WA 98103

NVL Laboratories, Inc.

p 206.547.0100 | f 206.634.1936 | www.nvllabs.com



Rush Samples _____

Company	PBS Environmental (Seattle)	NVL Batch Number 1523421.00
Address	2517 Eastlake Ave E, Suite 100	TAT 1 Day AH No
	Seattle, WA 98102	Rush TAT
Project Manager	Mr. Mark Hiley	Due Date 12/24/2015 Time 4:20 PM
Phone	(206) 233-9639	Email mark.hiley@pbsenv.com
Office:	(800) 628-9639	Fax (866) 727-0140

Project	Name/Number: 40573.109

Project Location: KCHA-Bldg. 600

Subcategory PLM Bulk

Item Code ASB-02

EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 20

		•	· · ·	
	Lab ID	Sample ID	Description	A/R
19	15140078	40573.109-19		Α
20	15140079	40573.109-20		Α

	Print Name	Signature	Company	Date	lime
Sampled by	Client				
Relinquished by	Client				
Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Maxwell Raymond	_	NVL	12/23/15	1620
Analyzed by	Fiona Chui	_	NVL	12/23/15	9:39 AM
Results Called by					
Faxed Emailed					
Special					
Instructions:					

<u></u>.

Date: 12/23/2015 Time: 4:35 PM Entered By: Maxwell Raymond

PB	S	Engineering + Environmental		D.1		523421
Project	:: <u>KCHA</u>	-Bldg 600			Project #:	40573.109
Analys	is reques	sted:P	LM		Date: <u>12/1</u>	7/15
Relinq'	d by/Sigi	nature: 701	t		Date/Time:_	12-73-15 16:24
Receive	ed by/Sig	nature: March	2	OZ M	Date/Time:_	12/23/~ 1600
Fax res	Brian Sta Brian Sta Willem M Gregg M Mark Hile Tim Ogd	lager iddaugh ey		Ferman Fletcher Prudy Stoudt-McRae Grant Baker Janet Murphy Harry Goren		David Toy Mike Smith Chuck Greeb Christine Rmah
TURN /	AROUND 1 Hour 2 Hours 4 Hours	TIME:	x D	24 Hours 48 Hours		3-5 Days Other

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SAMPLE DATA FORM					
Sample #	Material	Location	Lab		
01	Carpet/yellow mastic	Conference room 109 (S.W. corner)			
02	Carpet/yellow mastic	1 st floor Copy room (N. side of building)			
03	Carpet/yellow mastic	2 nd floor cubical area (S. side of bldg)			
04	Carpet/yellow mastic	2 nd floor file cabinet rm (N. side of bldg)			
05	Carpet/yellow mastic	Conference room 109 (N.E. corner)			
06	Vinyl tile 12"x12" white w/grey streaks/yellow mastic	1 st floor supply room (off E. stairwell)			
07	Vinyl flooring speckle multi-color/grey leveling compound/yellow mastic	1 st floor kitchen (N.E. corner of bldg)			
08	Ceiling tile 2'x4';2'x2' lay-in random hole pattern	1 st floor copy room (N. side of bldg)			
09	Ceiling tile 2'x4';2'x2' lay-in random hole pattern	Conference room 109 (S.E. corner)			
10	Ceiling tile 2'x4';2'x2' lay-in random hole pattern	1 st floor storage closet (off conf rm 109)			
11	Ceiling tile 2'x4';2'x2' lay-in random hole pattern	2 nd floor file cabinet rm (N. side of bldg)			
12	Sink undercoat grey	1 st floor kitchen (N.E. corner of bldg)			
13	Sink undercoat white	2 nd floor First Aid Station			
14	GWB	2 nd floor file cabinet rm (N. side of bldg)			
15	GWB	Conference room 109 (S.E. corner)			
16	GWB	2 nd floor cubical area (S. side of bldg)			
17	GWB	1 st floor copy room (N. side of bldg)			
18	GWB	1 st floor storage closet (off conf rm 109)			
19	Cove base beige/white mastic	1 st floor copy room (N. side of bldg)			

PB	S	Engineering + Environmental		D.1	1	523421
Projec	t: <u>KCH4</u>	-Bldg 600			Project #: <u>4</u>	0573.109
Analys	sis reque	sted: <u>PLM</u>			Date: 12/17/	
Relinq'd by/Signature: X Blt					Date/Time:_	12-2-3-15-16:24
Receiv	ved by/Si	gnature: Max	RE	scm	Date/Time:_	12/23/- 1122
Fax re	sults to: Brian Sf Willem I Gregg M Mark Hi Tim Og	Mager ⁄Iiddaugh Iey		Ferman Fletcher Prudy Stoudt-McRae Grant Baker Janet Murphy Harry Goren	жооо	David Toy Mike Smith Chuck Greeb Christine Rmah
TURN	AROUNI 1 Hour 2 Hours		, A	24 Hours 48 Hours		3-5 Days Other

Im

4 Hours

SAMPLE DATA FORM			
Sample #	Material	Location	Lab
20	Cove beige/white mastic	2 nd floor cabinet room (N. side of bldg)	

PBS

TAB 3 INSPECTOR CERTIFICATIONS

1900 W Nickerson St, # 315 Seattle, WA 98119 206.285.3373



This certifies that **H. David Toy, Jr.** has satisfactorily completed 24 hours of training as an

Asbestos Building Inspector complies with TSCA Title II / 40 CFR 763 (AHERA)

> Certificate # 153695 Class Date: Nov 2 - 4, 2015 Expires: Nov 3, 2016

Instructor EPA Provider Certificate # 1085

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- **1.0 Project Summary**
- 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 and Quality Control
 - **D.** Inspection of Work

E. Site Requirements

- 1. Work Hours
- 2. Restrictions
- 3. Contractor Responsibilities
- F. Project Phasing

4.0 Safety, Protection and Restoration

- A. Safety
- **B.** Protection
- C. Restoration
- **D.** Hazardous Material

5.0 Divisions (See Specification Sections for complete details)

Division 1 General Conditions

- A. Site Staging and Deliveries
- B. Temporary Facilities

Division 2 Site Construction

- A. Selective Demolition (Section 024100)
- B. Existing Utilities

Division 6 Wood and Plastics

А.	Rough Carpentry	(Section 061000)
В.	Architectural Wood Casework	(Section 064100)
Division 7 Thermal and Moisture Protection		
А.	Joint Sealants	(Section 079200)

(Section 068300)

Division 8 Openings

A. Mirrors



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 00 – PROCUREMENT & CONTRACTING REQUIREMENTS

00 01 10 Table of Contents

DIVISION 01 – GENERAL REQUIREMENTS

01 73 29 Cutting and Patching

DIVISION 02 – EXISTING CONDITIONS

02 41 00 Selective Demolition

DIVISION 06 – WOOD AND PLASTICS

- 06 10 00 Rough Carpentry
 - 06 41 00 Architectural Wood Casework

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 92 00 Joint Sealants

DIVISION 08 – OPENINGS

08 83 00 Mirrors

DIVISION 09 – FINISHES

- 09 21 16 Gypsum Board Assemblies
- 09 30 00 Tiling
- 09 51 00 Acoustical Ceilings
- 09 91 23 Interior Painting



DIVISION 10 – SPECIALTIES

10 21 13.16	P-LAM Toilet Compartments
10 26 01	Wall Corner Guards

10 28 00 Toilet Room Accessories

DIVISION 12 – FURNISHINGS

12 36 61.19 Quartz Agglomerate Countertops

DIVISION 20 – GENERAL MECHANICAL

20 02 00	Operation and Maintenance Manual
20 05 00	Common Work Results
20 05 03	Existing Systems Work
20 05 19	Piping Specialties

DIVISION 21 – FIRE SUPPRESSION

21 10 00 Water-Based Fire Suppression

DIVISION 22 – PLUMBING

22 11 00	Facility Water Distribution
22 13 00	Facility Sanitary Sewage
22 40 00	Plumbing Fixtures

DIVISION 23 - HEATING, VENTILATION, AND AIR-CONDITIONING (HVAC)

- 23 09 33 Electric and Electronic Control System for HVAC
- 23 31 00 HVAC Ducts and Casings
- 23 34 00 Fans
- 23 37 00 Air Outlets and Inlets

DIVISION 26 – ELECTRICAL

- 26 01 00 Electrical General Requirements
- 26 04 00 Existing Electrical Systems
- 26 05 00 Basic Materials & Methods
- 26 05 26 Grounding and Bonding
- 26 09 20 Lighting Controls
- 26 20 00 Electrical Distribution
- 26 50 00 Lighting Fixtures



LIST OF DRAWINGS

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A2-2	ENLARGED FLOOR PLANS
A2-3	ENLARGED REFLECTED CEILING PLANS
A3-1	INTERIOR ELEVATIONS
A3-2	FINISH SELECTIONS
A4-1	ENLARGED BUILDING SECTIONS
A5-1	INTERIOR DETAILS
M0-1	MECHANICAL LEGEND AND NOTES
M0-2	MECHANICAL SCHEDULES
M1-1	ENLARGED DEMOLITION PLANS
M3-1	ENLARGED PLUMBING PLANS
M4-1	ENLARGED HVAC PLANS
E0-1	ABBREVIATIONS, LEGEND, & NOTES
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E2-1	ELECTRICAL POWER AND LIGHTING PLANS
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S2	SECOND FLOOR FRAMING PLAN

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Division 7 Thermal and Moisture Protection		
А.	Joint Sealants	(Section 079200)

(Section 068300)

Division 8 Openings

A. Mirrors

Division 9 Finishes

DIVISIO	i / I mones	
A.	Gypsum Board Assemblies	(Section 092116)
В.	Tiling	(Section 093000)
C.	Acoustical Ceilings	(Section 095100)
D.	Interior Painting	(Section 099123)
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B.	Common Work Results	(Section 200500)
C.	Existing Systems Work	(Section 200503)
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E.	Testing, Adjusting, Balancing	(Section 200593)
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E.	Lighting Controls	(Section 260920)
F.	Electrical Distribution	(Section 262000)
G.	Lighting Fixtures	(Section 265000)

SECTION 001010 SCOPE OF WORK

1.0 PROJECT SUMMARY

King County Housing Authority's Central Office Building, located in the City of Tukwila, is a two-story concrete tilt-up building constructed in the 1980s. This project involves remodeling four bathrooms in the 600 building. While this project is going on, the building will be occupied. All bathrooms have a dropped ceiling with wiring, plumbing, insulation, and sprinkler lines possibly running through them. The floor consists of tile over lightweight gypcrete. After the floor and wall tile removal, it will be up to the contractor to bring both areas back to their original condition. The contractor will supply dust protection at each bathroom. This project will consist of (but not limited to) the following scope:

Demo in all four bathrooms (but not limited to):

- All tile on ceiling and walls
- Drywall removal on walls and ceilings
- Remove ceiling insulation
- Detach and reset of the toilets
- Urinals stay in place and will be protected
- Partition walls at toilet stalls, including all bracket hold-downs
- Lighting at ceilings/ walls
- Demo selective wiring
- Demo exhaust and supply grills in the ceilings
- Sinks/ faucets/ flush valves, drain and supply lines
- Soap dispenser, paper towel dispenser, trash can, toilet paper holder, grab bars, mirrors, counter-tops, cabinets, and back-splash
- Protect Entry Doors, Elevator Machine Door, and Electrical Room door
- Sprinkler head removal in 4 Bathrooms
- Remove and reinstall fire alarm equipment Wiring will stay in place
- Selective Wiring
- Any plumbing pipes and wiring in the ceiling area that may have to be relocated for new ceiling
- Move and relocate any plumbing, HVAC, conduit, or wiring in ceilings that may interfere with new ceiling framing
- Rooftop fans
- Provide Dumpster for Demo items
- Install floor protection on all floors at entry, hallways, and elevator
- Protect all doors during the construction

Install in all four Bathrooms (but not limited to):

- Reframe ceilings per plan
- The contractor will cut and patch the Gypcrete flooring in both upper bathrooms, which shows cracks in the tiles. The contractor will allow 40 square feet of gypcrete and subflooring repairs in each upper bathroom.
- New framing and backing for bath hardware

- New electrical wiring for new wall and ceiling lighting
- Provide new electrical plugs and cover plates
- Install alarm system at the original location
- Modify the existing sprinkler system to accommodate new coffered ceilings
- Add insulation to ceilings or walls
- New drywall
- Drywall texture will be a Smooth wall
- New Paint on walls and ceilings
- New Suspended Wood Ceilings
- Install new lighting on walls and ceilings
- Float floor and concrete walls, leveling them out to accept new tiles or wall paint
- New transition strips at doorways
- Seal substrate surface cracks with filler.
- Level existing substrate surfaces to acceptable flatness tolerances.
- New Floor Tile, Including floor Prep and Protection
- New Wall Tile
- New Cove Base Tile
- New grout
- Install existing toilets with new flush values
- Install new urinal flush valves
- New sink cabinet designed for ADA use
- New Corian Quartz countertops over ³/₄' marine plywood with sink and faucet cutouts
- New sinks
- New sink faucets
- New P traps/ Drain lines at sinks with ADA protection
- New Braided Supply Lines
- Wire and install new Emergency twin head fixture in every bathroom
- Relocate HVAC lines to line up in the middle of the new ceiling wood panels
- New Ceiling Finishes
- New Fan Grills at bathroom ceilings (New grills to be located in the center of new ceiling panels)
- New HVAC rooftop Fans
- New Sprinkler installation in 4 bathrooms
- New Urinal Partition Screens
- New Toilet Partitions
- New Toilet accessories: Recessed paper Towels/waste, soap dispensers, toilet paper dispensers, toilet seat cover dispensers, grab bars, and sanitary napkin vendors. Sanitary Napkin Disposal, Men's Mirror, Women's Mirror, All Signage
- Complete cleaning of all four bathrooms and flooring at entry and all hallways
- Install new exhaust fans on the rooftop. The Contractor must verify that the new fans will adapt to current conditions. If not, the Contractor must modify the curb to accept the new exhaust fan. The contractor will match the existing exhaust fans and motors.

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:

1) Contract start date (CS)	TBD
2) Notice to Proceed (NTP)	TBD
3) Construction Duration (CD) Start Date/Stop Date	TBD - TBD
4) Substantial Completion (SC)	TBD
5) Physical Completion (PC) and Warranty Start Date of Entire Project	t TBD
6) 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 and CC).

2. Schedule of Values (SOV)

- a. Each item must correlate to the project schedule.
- b. Schedule of Values to contain a 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:
 - 1) Overhead and Profit.
 - 2) General Conditions.
 - 3) 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 that the Contractor has ordered, has been invoiced, and has a suitable location to store materials. See Contract documents for requirements.)
 - 4) Mobilization.

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.
- b. Submittals will be processed with enough time for the Owner to reasonably provide feedback fourteen (14) calendar 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's employees and all sub-contractors' employees will be required to wear a mask if they are asked to do so by a resident or property manager while in a building or a resident's unit.

- **5. Phasing and Coordination Plan** including the following (*See section 3 item I, regarding Phasing*):
- 6. Subcontractor List with the names <u>all</u> 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 workforce, 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. Shutdowns: 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.
 - b. 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. The contractor is responsible for restoring or replacing all finishes that become damaged as a result of work being performed. The 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. State Prevailing/ Commercial Wage 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 mockups 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 as1) Name of installer with all contact information.

- 2) 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.** 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.
- 4. **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

- 1. 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 and utilities, prior to removal of work. KCHA's assumption is that all items are in good working order. The 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 that 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 <u>end of the day</u> 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. Contractors must submit an RFI if a conflict exists between the scope of work, specifications and plans.
- 8. 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.
- 9. The 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.

B. Staffing and Experience Requirements

- 1. The Contractor is expected to be on-site working each consecutive weekday unless directed otherwise by the 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. Mockups: 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.
- 5. Contractor responsible for subcontractor's quality of workmanship and materials, completion of scope, and scheduling on site.
- 6. 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.

E. Site Requirements

- 1. All communication and coordination will be with Owner representatives only.
- 2. Work shall be coordinated not to interrupt services (i.e. garbage, mail, EMS, etc.).

- 3. Emergency and tenant access must be maintained at all times.
- 4. The Contractor is required to maintain the cleanliness of the worksite; there will be daily inspections by the Owner to verify cleanliness, safety and tenant access. The Contractor will be responsible for cleanup and housekeeping of work limits, staging areas, and Contractor's parking areas by the end of each business day. The contractor secures all equipment, materials, and tools, ensures that unfinished work areas are protected and secure prior to leaving for the weekend.
- 5. No noise prior to 8:00am but layout and work setup can begin at 7:30am unless permission is granted by the Owner's Representative.
- 6. 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.
- 7. The Contractor must read and comply with all safety requirements as stated in Section 4 A.

F. General 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 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 the Owner). The owner does not pay overtime.
- 2. There will be no work on the 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. The contractor will be responsible for providing power for all the work described. The 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 Tukwila hauling route, plans, and street use permits.

I. Project Phasing

- 1. This project will directly impact on the office staff at KCHA. The upper management conducts business in this building, and there are many in-house office meetings during the day. The new bathrooms must run on a tight schedule until completion. The Contractor will only take down one floor at a time, leaving one men's and one women's restroom available. The phasing plan intends to get all bathrooms completed promptly.
- 2. The Contractor's phasing plan must meet Owner expectations of providing the least impact on the staff, which includes access to the building and parking closures.

4.0 SAFETY, PROTECTION & RESTORATION

A. Safety

- 1. The contractor shall provide and have on site at all times a site-specific safety plan.
- 2. Comply with all safety and health codes within Local, State and Federal jurisdictions.
- 3. All work must operate within OSHA and State-equivalent (WISHA) standards and requirements.
- 4. The Contractor shall conduct weekly safety meetings; the minutes from these meetings 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.
- 5. All workers on-site will wear high visibility vests or apparel with a company logo or name that clearly identifies the workers.
- 6. All workers must be equipped with proper personal protective equipment (PPE) and wear it when appropriate or required while they are on-site (i.e. hardhat, safety glasses, ear plugs and etc.).
- 7. Contractor to keep walkways free of debris, materials, tools and equipment at all times. Access must be maintained for residents at all times.
- 8. The Contractor will be diligent in ensuring that all safety measures are performed at all times for all aspects of work being performed.
- 9. Work Areas shall be cordoned off with safety fencing and/or caution tape while work is in progress.
- 10. The contractor is responsible for the safety and security of work areas affected by work and will provide temporary guardrails, temporary cover and/or locks for openings. The contractor's main focus is the safety of his workforce and the safety of KCHA's staff.
- 11. The Contractor is responsible to secure all materials and equipment to prevent damage and to also take precautions to prevent theft of their personal items.

B. Protection

1. 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.).

C. Hazardous Materials

- 1. 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. The 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. The Contractor agrees to indemnify, defend and hold the Owner harmless from any claims arising out of or relating to the improper handling of hazardous materials that may be present on site.
- 4. 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.

- 5. Traces of asbestos containing materials (ACM) may be present. These should be removed by properly trained and protected personnel using appropriate work practices and engineering controls. Workers potentially working with (ACM) are advised to confirm training requirements of WISHA and to ensure that proper worker protection and work practices are implemented.
- 6. 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 and Deliveries

- 1. Contractor will coordinate bulk material deliveries with Owner forty-eight (48) hours prior to deliveries where potential for parking access will be temporarily blocked no more than fifteen (15) minutes.
- 2. Contractors 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.
- 3. Contractor will work with KCHA to determine parking locations which will be designated for construction and construction workers.

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 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): tile, drywall, toilet partitions, mirrors, bath hardware and fixtures, wiring, insulation and all related components necessary to complete the scope of work per drawings and specifications.
- 2. 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.
- 2. 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.

- 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 the same day incident occurs.
- 5. The contractor is responsible to air seal and /or fire seal all penetrations, vents and appurtenances.
- 6. The contractor is responsible for carefully remove and protect all utility and communication services on structure to be reinstalled. Services shall be maintained and operational for the duration of project unless otherwise scheduled disruption is required to perform work.

DIVISION 6 WOOD & PLASTICS

A. Rough Carpentry

Refer to Specification Section 061000; and Section 099123 Painting.

- 1. The contractor is responsible for shimming, modify and repair minor irregularities in the assemblies in order to produce a finished product that is consistent in plane prior to cover. NOTE the existing structural sub floor may be compromised under certain areas in the upper tile flooring. 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. The contractor will be responsible for 100% blocking required for all GWB patching and repairs.
- 3. The Owner anticipates that there will be some compromised structural members, and these will be addressed on a Time and Material basis. Contractors must receive KCHA approval prior to any additional work being performed outside the contract scope of work. KCHA must also document damage prior to the Contractor removing compromised components. Failure to do this may result in the contractor burdening the cost of replacement
- 4. See A5-1/Details 2/4

DIVISION 7 THERMAL AND MOISTURE PROTECTION

A. Joint Sealants

Refer to Specification Section 079200

- 1. Provide joint sealants, joint fillers, and accessory joint material from a single manufacturer for each product required to ensure compatibility.
- 2. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work.
- 3. Clean and remove loose materials and foreign matter which might impair adhesion.
- 4. Sealant to be high quality and paintable. See specifications for acceptable products.
- 5. If sealant flashes once painted, the contractor will be responsible for sanding and repainting until corrected.
- 6. The contractor is responsible for fire caulking all joints and penetrations at fire-resistancerated and smoke-resistant assemblies. The contractor is to comply with manufacturer requirements and all applicable codes per jurisdiction.

DIVISION 9 FINISHES

A. Gypsum Board Assemblies Refer to Specification Section 092116

- 1. Install additional blocking for framed openings: wall-mounted cabinets, plumbing fixtures, toilet partitions, and toilet accessories.
- 2. The contractor will apply all new GWB, tape, mud, and texture on all interior walls.
- 3. Finish: Smooth wall finish Confirm texture with KCHA before applying it to walls and ceilings.
- 4. Install all square-type corner metal on all outside corners
- 5. Install metal corner on top of drywall edge at light cove. See sheet A5-1 detail 4
- 6. Fire Resistant Type: Complying with Type X requirements; UL or WH-rated
 - a. Application: Use for ceiling and walls
 - b. Thickness: 5/8 inch
 - c. Edges: Tapered
 - d. Finish: Level 5

B. Tiling

- Refer to Specification Section 093000 Tiling
 - 1. Comply with the manufacturer's written instructions for installing floor tiles.
 - 2. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of the room are equal in width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at the perimeter.
 - 3. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures, including built-in furniture, cabinets, pipes, outlets, and door frames.
 - 4. Lay tiles in the pattern indicated on drawings A2-3.
 - 5. Fill cracks, holes, and depressions in substrates with trowel-able leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
 - 6. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to the center of door openings.
 - 7. Adhere floor tiles to flooring substrates using a full spread of thin set adhesive applied to the substrate to produce a completed installation without open cracks, voids, or raising.
 - 8. Grout all joints 1/8" or larger with sanded grout and unsanded grout for joints less than 1/8" wide. Wipe and clean the floor, leaving no film after installation.
- 9. See Sheet A2-2 Detail 3 for floor layout
- 10. See Sheet A3-1 Details 1-10 for wall layout

C. Wall and Flooring

- 1. 12" X 24" Daltile
- 2. Collection: Stone Attache Colorbody Porcelain
- 3. Series: Dignitary
- 4. Selection: Superior Taupe DR08

D. Bullnose

- 1. 3" X 24" Daltile
- 2. Collection: Stone Attache Colorbody Porcelain
- 3. Series: Dignitary
- 4. Selection: Superior Taupe DR08

E. Cove Base

- 1. 6" x 12" Daltile
- 2. Collection: Stone Attache Colorbody Porcelain
- 3. Series: Haute Monde
- 4. Selection: Glitterati Granite HM03
- 5. Grout Color: Laticrete Permacolor High-Performance #97 Iron

F. Acoustical Ceilings

Refer to Specification Section 095100

- 1. Installation per manufacturer recommendation. See A5-1 detail 2 for installation
- 2. Install after all major above-ceiling work is completed. Locate the system on the room axis according to the reflective ceiling plan.
- 3. Install all ceiling exhaust vents in the center of the ceiling panel.
- 4. Color: Natural Variations Maple

G. Interior Painting

Refer to Specification Section 099123

- 1. The contractor will provide labor and materials to paint a one (1) color interior paint scheme. The paint finish will vary with the surface painted. The walls and ceiling will have an eggshell finish.
- 2. Paint color per paint schedule provided by the Owner. This work shall include all labor and materials to prepare surfaces, fill, sand, prime, and paint interior walls and trim.
- 3. Upon completion of all prep, sanding, and priming, two (2) coats of specified interior paint shall be applied.
- 4. One coat of a PVA primer will be added before the final paint is applied.
- 5. The contractor will clean and replace any damaged items not receiving paints and coatings.
- 6. Color Sherwin Williams High Gloss Acrylic Latex Paint: Elder White 7014

DIVISION 10 SPECIALTIES

Refer to Specification Section 102113.16 and 102800

A. Plastic Laminate-Clad Toilet Compartments

- 1. Contractor to supply and install all necessary backing for partitions
- 2. All hardware and brackets will be Satin stainless steel.
- 3. Install all partitions secure, rigid, plumb, and level per the manufacturer's instructions.
- 4. All damaged or scratched finishes will not be permitted. No field touch-up of scratches will be permitted. Replace damaged or scratched materials with new materials.
- 5. Color Wilsonart Daintree 8235K-05

B. Toilet and Bath, Accessories

Refer to Specification Section 102800/ 224000

- 1. Contractor to reinstall toilets and replace all existing supply lines, fittings, and wax rings.
- 2. The contractor will supply and install all bath hardware backing and frame openings to accept new bathroom accessories.

GOJO ES10

Bobrick B-301

Bobrick B-2888

Bobrick B-3644

Bobrick B- 6806

Georgia Pacific 59462

Bobrick B-165 Custom order

Bobrick B-47064C

- 3. All toilets to be caulked to tile flooring.
- 4. Refer to A3-1 for locations and dimensions.
 - a. Sanitary Napkin Disposal Bobrick B-354
 - b. Soap Dispenser
 - c. Recessed Toilet Seat Cover
 - d. Toilet Paper Dispenser
 - e. Sanitary Napkin Dispenser
 - f. Waste Receptacle
 - g. Grab Rail
 - h. Paper Towel Dispenser
 - i. Mirrors
 - j. Undercounter Sink Kohler Caxton Oval K-2210

DIVISION 12 FURNISHINGS

Refer to Specification Section 123661.19

- A. Quartz Agglomerate Countertops Color: Venetia Cream
- 1. Coordinate sizes and locations of framing, blocking, furring, and reinforcements to support and accept new sink and faucet.
- 2. Solid surfacing countertops to be installed over continuous ³/₄" marine plywood substrate.
- 3. The back and end splashes are to be made of the same Quartz material, have a square top, and be at least 4 inches high.
- 4. Provide framing as called out on A5-1 details 10/15.

DIVISION 20 GENERAL MECHANICAL

Refer to Specification Sections 200200 200500 200503 200519 200593

- 1. Furnish all labor materials, tools, equipment, and services for all mechanical work.
- 2. Existing items not being demolished shall be protected against damage.
- 3. All existing items that remain during construction and are affected by the construction shall be cleaned to like new condition.

DIVISION 21 FIRE SUPPRESSION

Refer to Specification Sections 211000

- 1. The contractor shall provide all system design, material, labor, equipment, and services necessary to provide full coverage for the space.
- 2. The sprinkler system is an existing wet system. Confirm the shut-off location and coordinate shut-downs with others.
- 3. Remove and relocate existing sprinkler heads to accommodate new lighting and ceiling tiles.
- 4. Extend existing piping to accommodate new drop ceilings.
- 5. All work shall be coordinated with other trades so that unnecessary offsets and revisions to the approved drawings are avoided.
- 6. Any shutdowns of existing water distribution systems, fire sprinkler systems, domestic water systems, or fire alarm systems require advance written notice to the owner

DIVISION 22 PLUMBING

Refer to Specification Sections 224000

- 1. Provide all piping as indicated and required to allow supply connections to each fixture and equipment item requiring water supply.
- 2. Install ¹/₄ valves at all plumbing fixtures. Installation to ensure valves are easily accessible and orientated to permit ease of operation.
- 3. Provide and install new braided supply lines to each toilet and sink.
- 4. Any shutdowns of existing water distribution systems, fire sprinkler systems, domestic water systems, or fire alarm systems require advance written notice to the owner

DIVISION 23 HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

Refer to Specification Sections 230933, 233100,233400,233700

- 1. The control system is a design/build type; the contractor does all the design work, and the system provides the features and sequences specified. The entire control system shall be designed and installed by skilled control system designers, electricians, and mechanics who are properly trained and qualified for the work.
- 2. Install ductwork with all accessories and connections according to plans and specifications to provide complete and operable duct systems.
- 3. The contractor will install new fans in existing locations and make necessary adjustments to ensure fans are installed securely onto existing curbs. Any penetrations made by the contractor will be treated to assure a weather-tight application.

- 4. Extend the HVAC lines to land in the middle of the new ceiling panels in both bathrooms. The existing grill by the entry doors will remain in the same place. Install new grills in all bathrooms.
- 5. Provide and install new rooftop fans as called out on sheet M0-2 Fan Schedule.

DIVISION 26 ELECTRICAL

Refer to Specification Sections 260100, 262000, 260400, 260500, 260526, 260920, 265000

- 1. Provide all equipment, materials, devices, appurtenances, and accessories to provide complete operating systems.
- 2. Contractor to maintain fire alarm system during construction.
- 3. Contractor responsible for repairing all wires, cables, etc. damaged by construction activities on the same day the incident occurs. Terminations and caps will be marked on-site and recorded in the project record drawings (i.e. red line drawings or as built) with clear and accurate dimensions.
- 4. Contractor to verify any existing equipment, devices, fixtures, cabling, wires, and conduit is in operational order before relocating, replacing, or rerouting.
- 5. All new wiring will be enclosed in a metal conduit.
- 6. All wall switches to be a passive infrared occupancy sensor with automatic OFF, manual ON/OFF, continuous self-adapting sensitivity and time delay, LED motion indicator, compatible with magnetic ballast, electronic ballast, and motor loads.
- 7. Provide and install new lighting as called out on sheet E2-1 Luminaire Schedule

END OF SECTION

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:
 - 1. Work covered by the Contract Documents.
 - 2. Phased construction.
 - 3. Work under other contracts.
 - 4. Owner-furnished products.
 - 5. Owner's occupancy requirements.
 - 6. Applicable Codes.
 - 7. Reference standards.
 - 8. Use of premises and work restrictions.
 - 9. Specification formats and conventions.
 - 10. Execution, correlation and intent Contract Documents.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification:
 - 1. Project Name: **600 Building Bathroom Remodel**
 - 2. Project Location: 600 Andover Park West, Tukwila WA 98188
- B. Owner/Developer: King County Housing Authority
 - 1. Owner's Representative: Amy Kurtz
 - 2. Contact Phone: **206-574-1283**

C. Architects / Engineer:

- 1.
 Representative:
 Lawhead Architects, P.S.
- 2. Contact Phone: **425-556-1220**
- 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.
 - 1) 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.
 - a. 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 Safety Plan Evaluation

Yes	No	N/A		
[]	[]	[]	1.	Will your company have a written, established, supervised and enforced site
				safety plan for the project? (The site safety plan must be presented before
				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.

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 re-inspecting, 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 qualityassurance 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 qualitycontrol 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 Sum.
 - 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.
 - 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.
 - 1. 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.
 - 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

1.

- 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 nonhazardous solid waste resulting from construction, remodeling, renovation, repair or landclearing 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" <u>https://kingcounty.gov/~/media/depts/dnrp/solid-waste/construction-recycling/documents/ConGuide.ashx?la=en</u>
- 8. "Seattle/King County Construction Recycling Directory." <u>https://kingcounty.gov/depts/dnrp/solid-waste/programs/green-building/county-green-building.aspx</u>
- 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.

KING COUNTY HOUSING AUTHORITY Waste DBS BOSS BATHER ROCKEM OP SLD at a 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:	600 Building Bathroom Remodel
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Project Address: 600 Andover Park West, Tukwila WA 98188

Work Order No.: 1402

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?						

Job No.: 360.7

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.
- Terminate and remove temporary facilities from Project site, along with 10. mockups, construction tools and similar elements.
- Advise Owner of changeover in heat and other utilities. 11.
- 12. Submit changeover information related to Owner's occupancy, use, operation and maintenance.
- Complete final cleaning requirements, including touchup painting. 13.
- Touch up and otherwise repair and restore marred exposed finishes to eliminate 14. 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.
- Β. 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.
 - Re-inspection: Request re-inspection when the Work identified in previous 1. inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

CONTRACT COMPLETION (Refer to Article 9.10 in AIA A201-2017) 1.4

- A. Preliminary Procedures: Before requesting final inspection for determining date of Contract Completion, complete the following:
 - Submit a final Application for Payment according to the Owner-Contractor 1. 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.
 - Instruct Owner's personnel in operation, adjustment and maintenance of products, 4. 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.
 - Re-inspection: Request re-inspection when the Work identified in previous 1. 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 anti-pollution 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.

END OF SECTION 01 7700

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.
 - 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.

END OF SECTION 01 7823

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.

END OF SECTION 01 7839

	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	
٨	В	С	D	Е	F	G		Н	Т
A	В	C	WORK CON		MATERIALS	TOTAL		п	1
ITEM		SCHEDULED	FROM PREVIOUS		PRESENTLY	COMPLETED &	%	BALANCE TO	RETAINAGE
NO.	DESCRIPTION OF WORK	VALUE	APPLICATION(S)	THIS PERIOD	STORED	STORED TO DATE	(G÷C)	FINISH	(AGGREGATE
			(G)	1110121402	(NOT IN D OR E)	(D + E + F)	()	(C - G)	TO DATE)
	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	.000.00	0.00	0.00	19,000.00	100.00%	0.00	950.00
	Deck Coatings	15,50 00	,500.00	0.00	0.00	15,500.00	100.00%	0.00	775.00
	Deck Railings	23,50 70	21,150.00	2,350.00	0.00	23,500.00	100.00%	0.00	1,175.00
	Roofing incl Ladders and Hatches	57,300.	28,650	28,650.00	0.00	57,300.00	100.00%	0.00	2,865.00
	Roof Framing/Backing/Blocking	11,600.00	0.00.0	1,000.00	0.00	11,600.00	100.00%	0.00	580.00
	Siding and Flashing Materials	43,000.00	45, 700 5	0.00	0.00	43,000.00	100.00%	0.00	2,150.00
	Siding Labor	47,000.00	45,0 00	00.00	0.00	47,000.00	100.00%	0.00	2,350.00
	Window Materials	16,000.00	16,0′ .00	0.00	0.00	16,000.00	100.00%	0.00	800.00
	Window Labor	15,000.00	15,6 0.01	0.00	0.00	15,000.00	100.00%	0.00	750.00
	Patio Door Materials	9,600.00	9,6000		0.00	9,600.00	100.00%	0.00	480.00
	Patio Door Labor	9,800.00	9,800.00	0ر ک	0.00	9,800.00	100.00%	0.00	490.00
	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	0.00	10,625.00	100.00%	0.00	531.25
	Door Hardware Materials	2,200.00	2,200.00	.00	0.00	2,200.00	100.00%	0.00	110.00
	Gutters	4,200.00	0.00	4,200.00	.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
	Flameblock Materials	14,000.00	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	12,800.00	0.00	0.00	12,800.00	100.00%	0.00	640.00
	Exterior Painting	18,000.00	17,000.00	1,000.00	0	1,000.00	100.00%	0.00	900.00
	Indirect Costs/Overhead/Profit	103,569.63	90,210.00	13,359.63	00	103,569.63	100.00%	0.00	5,178.48
	CO 1 - Contingency	(8,218.97)		(8,218.97)	0	(8,218.97)	100.00%	0.00	(410.95)
	TOTALS	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)							1	28,777.45
	NET CHANGE ORDERS THIS PERIOD: NET C/O ADDITIONS (THIS PERIOD):		CHANGE ORDERS A		RIOD (LIST C/O #s) (8,218.97)	1		l	
	TOTAL CHANGE ORDERS TO DATE:	(8,218.97)	l						

Form G702

Total approved this month. (CO numbers listed below)

1

NET CHANGES by Change Order

#s:

Application and Certificate for Payment

TO OWNER:	King County Housing Author	•	SITE NAME		APPLICATION NO:	06 FINAL	Distribution to:
	Attn: Capital Construction Dept 700 Andover Park W. Suite C	. NAME / SCOPE OF WORK:	PROJECT NAME		PERIOD TO: CONTRACT NO:	04.19.21 CCxxxxx65	OWNER: X ARCHITECT:
	Tukwila, WA 98188		110		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	7. SUITE 200	PROJECT NO:	215.1B	:
	CITY, STATE, ZIP		SEATTLE, WA	98104-2579	WORK ORDER NO:	1243	
CONTRACTO	CONTRACTOR'S APPLICATION FOR PAYMENT The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and the best of						
			4	belief the Work covered by			
	for payment, as shown below, in conn Form G703, is attached.	lection with the Contra	act.	Contract Documents, that all Certificates for Payment we			
	ACT SUM		\$583,767.96	shown herein is now due.	te issued and payments	received from the Owner,	, and that current payment
	CHANGE ORDERS		(\$8,218.97)	CONTRACTOR:			
	O DATE (Line 1 +/- 2)		\$575,548.99	By:		Date:	
	ED & STORED TO DATE (Column G on		\$575,548.99				
5. RETAINAGE:			· · · · ·	State of:			
a. 5 % of Completed Work				County of:			
(Column D + E on G703: \$575,548.99) = \$28,777.45				Subscribed and sworn to bef	ore		
	Stored Material			me this	day of		
(Column F on C	+ • • • • •		-	Notary Public:			
Total Retainage (Line	Total Retainage (Lines 5a + 5b or Total in Column I of G703) \$28,777.45 My Commission expires:						
6. TOTAL EARNED L	6. TOTAL EARNED LESS RETAINAGE				SENTATIVE CER	RTIFICATE FOR P	AYMENT
(Line 4 Less Li	ne 5 Total)	•	. ,	In accordance with the Cor	ntract Documents, based	d on on-site observations	and the data comprising
7. LESS PREVIOUS C	7. LESS PREVIOUS CERTIFICATES FOR PAYMENT \$488,582.85			this application, the Owner's Representative certifies to the Owner that to the best of the			
(Line 6 from prior Certificate)			Representative's knowledge				
8. CURRENT PAYMENT DUE			of the Work is in accordanc the AMOUNT CERTIFIED		cuments, and the Contrac	t is entitled to payment of	
9. BALANCE TO FINISH, INCLUDING RETAINAGE							
(Line 3 Less Line 6) \$28,777.45			AMOUNT CERTIFIED				
	(Attach explanation if amount certified differs from the amount applied. Initial all figures on Application and on the Continuation Sheet that are changed to conform with the amount certified.)						
CHANGE ORDER SU	UMMARY	ADDITIONS	DEDUCTIONS	OWNER'S REPRESENTATIVE	E		
Total changes approved in previous months by Owner \$0.00			\$0.00	By:		Date:	

\$0.00

\$0.00

TOTALS

(\$8,218.97)

(\$8,218.97)

(\$8,218.97)

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.



GENERAL CONTRACTOR CERTIFICATION UPON APPLICATION FOR PAYMENT

OWNER: King County Housing Authority		PAY REQUEST NUMBER:	06		
GENERAL CONTRACTOR: CONTRACTOR		CONTRACTOR NAME	DATE: PERIOD FROM:	04.01.21	
PROJECT NAME:		SITE NAME	THROUGH:	04.19.21	
SCOPE OF WORK:		PROJECT NAME	CONTRACT NUMBER:	CCxxxxx65	
1. ORIGINAL CONTRACT AMOUNT:		\$	583,76	67.96	
2. APPROVED CHANGE ORDER(S):		\$	(8,22	18.97)	
3. CURRENT CONTRACT AMOUNT:		\$	575,54	48.99	
4. AMOUNT OF PREVIOUS CERTIFICATES FOR PAYMENT:		\$	488,58	32.85	
5.	AMOUNT OF CUP	RRENT CERTIFICATE FOR PAYMENT F	REQUEST: \$	58,18	88.69

By submitting the accompanying 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 Owner, except as noted below or on an attachment hereto.
- 3. In consideration of payments made by 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.

EXCEPTION(S) - DESCRIPTION:

GENERAL CONTRACTOR NAME:	CONTRACTOR NAME				
BY AUTHORIZED SIGNER:	PRINT NAME	TITLE	DATE		
State of Washington County of King					
I certify that I know or have satisfact and said person acknowledged that uses and purposes mentioned in the	(he/she) signed this instrument and acknow		appeared before me, nd voluntary act for the		
Signed before me on this	Day of		SEAL		
Notary Public in and for th	e State of Washington				
Residing at:					
My Commission Expires:					

AMOUNT:

KingCounty Housing Author<u>RYNG COUNTY HOUSING AUTHORITY</u>

-

SUBSTITUTION REQUEST

Project:	Sub. Request #:			
	From:			
То:	Date:			
	A/E Project #:			
Re:	Contract For:			
Specification Title:	Description:			
Section: Page: _	Article / Paragraph:			
Proposed Substitution:				
Manufacturer:				
Addross:	Phone:			
Trade Name:	Model No.:			
Installer:				
Address:	Phone:			
History: 🗌 New Product 🗌 2 - 5	years old 🛛 5 - 10 years old 🗍 More than 10 years old			
Differences between proposed substitution an	d specified product:			
Point-by-point comparative data attached	- REQUIRED BY A/E			
Reason for not providing specified item:				
Similar Installation:				
Project:	Architect:			
Address:	Owner:			
	Data Installed:			
Proposed substitution affects other parts of W				
Sovings to Owner for accepting substitution:	/¢			
Savings to Owner for accepting substitution:(\$				
*If Contract time is to be extended, a Chang				
Supporting Data Attached: Drawings	Product Data Samples Tests Reports			

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, 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.

Submitted by:	
Signed by:	
Firm:	
Address:	
Telephone:	
Attachments:	

A/E's Review and Action:

Substitution approved - Make submittals in accordance with Specification Section

Substitution approved as noted - Make submittals in accordance with Specification Section

Substitution rejected - Use specified materials.

Substitution Request received too late - Use specified materials.

Signed by:

Date:

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END OF SECTION

SECTION 01 73 29 CUTTING & PATCHING

PART 1 - GENERAL

1.01 SUMMARY:

- A. Contractor shall be responsible for cutting, fitting, and patching required to complete the Work or to:
 - 1. Make its parts fit together properly.
 - 2. Uncover portions of the Work to provide for installation of ill-timed Work.
 - 3. Remove and replace defective Work.
 - 4. Remove and replace Work not conforming to requirements of Contract Documents.
- B. Upon written instructions:
 - 1. Uncover designated portions of the Work for observation of covered Work.
 - 2. Remove Work to provide for alteration of fully or partially completed construction previously installed.

1.02 SUBMITTALS:

- A. Submit a written request to Owner prior to cutting, or alteration. Include:
 - 1. Identification of the project.
 - 2. Description of the affected construction.
 - 3. The necessity for doing the cutting, or alteration.
 - 4. The effect on fully or partially completed construction on structural integrity of the project.
 - 5. Description of the Proposed Work:
 - a. The scope of cutting, patching, or alteration.
 - b. Contractor and trades who will execute the Work.
 - c. Product proposed to be used.
 - 6. Alternatives to cutting, patching or alteration.
 - 7. Designation of the responsibility for the cost of cutting and patching.
- B. Should conditions of the Work or the schedule indicate a change of products or methods from the original installation, the Contractor shall submit a request for substitution as specified general conditions.

01 73 29 - 1 / 2

C. Contractor shall submit a written notice to Owner designating the date and the time the Work will be uncovered.

PART 2 - PRODUCTS

201 MATERIALS:

A. Comply with Specifications and Standards for each specific product involved.

PART 3 - EXECUTION

3.01 INSPECTION:

- A. Inspect existing conditions of the project, including elements subject to damage or to movement during:
 - 1. Cutting and patching.
- B. After uncovering fully or partially completed construction, inspect conditions affecting installation of products or performance of the Work.
- C. Report unsatisfactory or dubious conditions to the Owner in writing; proceed with the Work only after the Owner has provided further instructions.

3.02 PREPARATION:

- A. Provide shoring, bracing and other support as necessary to assure the structural safety of that portion of the Work.
- B. Provide devices and methods to protect other portions of the project from damage.

3.03 PERFORMANCE:

- A. Execute cutting and demolition by methods that will assure safety, will prevent damage to other fully or partially completed construction, and will provide proper surfaces to receive repairs.
- B. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes.
- C. Restore Work that has been cut or removed; install new products to provide completed Work in accordance with requirements of Contract Documents.
- D. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish the entire unit.

END OF SECTION

01 73 29 - 2 / 2

SECTION 02 41 00 DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of building elements for alteration purposes.
- B. Provide demolition activities as required to accommodate restroom renovation.
 - 1. The scope of work as designated in the Construction Documents.
 - 2. WARNING It is not anticipated that materials considered at hazardous levels, or materials containing asbestos, and other environmental or public health hazards will be encountered in existing construction. If discovered, do not touch or attempt to remove such material without further direction. Should hazardous materials be encountered, the Contractor shall stop work and immediately notify the Owner's Authorized Representative.

1.02 REFERENCE STANDARDS

A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

1.03 SUBMITTALS

- A. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.

1.04 QUALITY ASSURANCE

A. Codes and Regulations: Comply with governing codes and regulations. Use only experienced workers.

1.05 PROJECT CONDITIONS

- A. Occupancy: The building and the immediate areas of work will be occupied during selective demolition. Coordinate demolition schedule with Owner activities.
- B. Occupied Spaces: Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner's representative. Owner's representative requires a minimum seventy-two (72) hour notice of any utility shutoffs affecting living units or common spaces. E-mail notice to Owner's representative is acceptable as official "written notice".
- C. Traffic:
 - 1. Conduct operations and removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- D. Protection:

- 1. Provide suitable protection where existing work is to be demolished or removed, and where work is to be done, connections made, materials handled or equipment moved and relocated.
- E. Utility Services:
 - 1. Maintain existing utilities, keep in service, and protect against damage during demolition operations.
- F. Contractor Acknowledge Conditions:
 - 1. Contractor represents that he or she has visited the site to become familiar with the quantity and character of all materials to be demolished. Contractor agrees that the premises were made available prior to deadline for submission of bids for whatever inspection and tests the Contractor deemed appropriate. Contractor assumes full responsibility for the proper disposal of all demolition materials.
- G. Salvage:
 - 1. Contractor: All salvage not specified to be reused as part of the work or indicated for the Owner's use becomes the property of the Contractor. Remove salvage from site and dispose of legally. Do not allow this material to accumulate on the site.

PART 2 PRODUCTS

201 MATERIALS

A. Materials that are necessary to accomplish, or to be incorporated into, the work of this section shall be as selected by the Contractor, subject to approval by the Owner's representative.

PART 3 EXECUTION

3.01 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. 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.
 - 3. Provide, erect, and maintain temporary barriers and security devices, including warning signs and lights, and similar measures, for protection of the public, Owner, Contractor's employees and existing improvements to remain. Ensure safe passage of persons around area of demolition.
 - 4. Conduct operations to minimize effects on and interference with adjacent structures and occupants

- 5. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements that are not to be removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.

3.02 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as indicated.
 - 2. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Demolish and remove existing work as indicated and where new work is shown. Take care to prevent damage to areas to remain.
- C. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Clean adjacent areas of dust, dirt, and debris caused by demolition. Return adjacent areas to condition existing prior to start of work.
 - 5. Patch as specified for patching new work.
 - 6. Limit scattering of dust and dirt in air to lowest practical level.
 - 7. Secure project work areas after work hours.

3.03 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Continuously clean up and remove demolished materials from site. Do not allow materials to accumulate on the site.
- C. The debris disposal site shall be approved for receiving the debris in accordance with local and regional regulations.

SECTION 06 10 00 ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Structural dimension lumber framing
- B. Non-structural dimension lumber framing.
- C. Preservative treated wood materials.

1.02 RELATED REQUIREMENTS

A. Section 09 21 16 - Gypsum Board Assemblies: Gypsum-based sheathing.

1.03 REFERENCE STANDARDS

- A. AWC (WFCM) Wood Frame Construction Manual for One- and Two-Family Dwellings; 2024, with Errata.
- B. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2023.
- C. AWPA U1 Use Category System: User Specification for Treated Wood; 2024.
- D. ICC (IBC) International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- E. PS 1 Structural Plywood; 2023.
- F. PS 2 Performance Standard for Wood Structural Panels; 2018.
- G. PS 20 American Softwood Lumber Standard; 2021.
- H. WWPA G-5 Western Lumber Grading Rules; 2021.

1.04 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

PART 2 PRODUCTS

201 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. Species: Varies. See Structural General Notes for species and minimum rating per application.
 - 2. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the

specified requirements.

3. Grading Agency: West Coast Lumber Inspection Bureau (WCLIB); Western Wood Products Association (WWPA); or other agency credited by the American Lumber Standard Committee (ALSC), and who provides grading service for the species and grade specified.

202 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Sizes: Nominal sizes as indicated on drawings, S4S.
- B. Moisture Content: Kiln-dry or MC15.

203 CONSTRUCTION PANELS

- A. Wall Sheathing: Rated structural plywood only conforming to PS 1-09 / PS 2-10. All panels shall bear the stamp of an approved grading agency.
 - 1. Bond Classification: Exposure 1.
 - 2. Span Rating: 48/24.
 - 3. Performance Category: 1/2 PERF CAT (Field verify existing sheathing thickness).

204 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
- B. Die-Stamped Connectors: Hot dipped galvanized steel, sized to suit framing conditions.
- C. Joist Hangers: Hot dipped galvanized steel, sized to suit framing conditions.

205 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
 - 1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.
- B. Preservative Treatment:
 - 1. Preservative Pressure Treatment of Lumber Above Grade: AWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
 - a. Kiln dry lumber after treatment to maximum moisture content of 15 percent.

PART 3 EXECUTION

3.01 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.02 FRAMING INSTALLATION

- A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength.
- B. Install structural members full length without splices unless otherwise specifically detailed.
- C. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes and AWC (WFCM) Wood Frame Construction Manual.

3.03 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.

3.04 INSTALLATION OF CONSTRUCTION PANELS

A. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails, screws, or staples.

3.05 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.06 CLEANING

- A. Do not leave any wood, shavings, sawdust, etc. on the ground.
- B. Control airborne particulates from spreading to other occupied areas of the building.

END OF SECTION

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SECTION 06 41 00 ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Specially fabricated cabinet units.
- B. Countertops.
- C. Hardware.
- D. Factory finishing.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry: Support framing, grounds, and concealed blocking.
- B. Section 12 36 61.19 Quartz Agglomerate Countertops.

1.03 REFERENCE STANDARDS

- A. AWMAC/WI (NAAWS) North American Architectural Woodwork Standards; 2021, with Errata.
- B. BHMA A156.9 Cabinet Hardware; 2020.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
- C. Product Data: Provide data for hardware accessories.

1.05 QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect units from moisture damage.
- B. Protect during transit, delivery, storage and handling to prevent damage, soiling and deterioration.

1.07 FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

- B. Advise Contractor of temperature and humidity requirements for woodwork installation areas. Do not install woodwork until the required temperature and relative humidity have been stabilized in installation areas.
- C. Maintain temperature and relative humidity as required for a tolerance of ± 1% of the specified optimum moisture content until woodwork receives specified finishes. Maintain temperature and humidity conditions until acceptance of the Work by the Owner.

PART 2 PRODUCTS

2.01 CABINETS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Decorative melamine-faced composite panel material for surfaces exposed to view.
 - 1. Color: Black.

2.02 COUNTERTOPS

- A. Quartz agglomerate countertops: See Section 12 36 61.19.
- B. APA Marine A-A EXT plywood used as substrate in wet areas:
 - 1. Minimum 5-ply.
 - 2. Minimum 3/4 inch (19 mm) thick.
 - 3. Join lengths using metal splines.

2.03 ACCESSORIES

- A. Adhesive: Type recommended by fabricator to suit application.
- B. Fasteners: Size and type to suit application.

2.04 HARDWARE

- A. Provide the following casework hardware; with other hardware required for proper cabinet construction and operation. Include fastenings and accessories as required. Apply in the shop and remove before finishing. Reinstall hardware after final finishing.
 - 1. Häfele Front-Mounting Bracket Plus, Centerline Countertop Support (Item No. 287.75.316)
 - a. Material: Steel.
 - b. Size: 20 inch x 14 inch x 2-1/2 inch x 3/8 inch thick.
 - c. Finish / Color: Powder Coated colored black.

2.05 FABRICATION

- A. Assembly: Shop assemble for delivery to site in units easily handled and to permit passage through building openings.
- B. Edging: Fit exposed edges with specified edging. Do not use more than one piece for any single length.
- C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- D. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Seal cut edges.
- E. Cut openings in tops for equipment and fixtures which are to be installed under other Sections of these Specifications. Verify size of opening with actual size of equipment to be used, prior to making openings. Form inside corners to a radius of not less than 1/8 inch. After sawing, rout and file cutouts to ensure smooth, crack-free edges.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify location and sizes of utility rough-in associated with work of this section.

3.02 INSTALLATION

- A. Install work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.
- B. Set and secure countertops in place, assuring that they are rigid, plumb, and level.
- C. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

3.03 ADJUSTING

A. Adjust installed work.

3.04 CLEANING

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION

SECTION 07 92 00 JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Work of this section includes sealant and caulking systems to exclude water at penetrations, gaps, or other openings, using proven detail and installation.
- B. Nonsag gunnable joint sealants.
- C. Self-leveling pourable joint sealants.
- D. Joint backings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C661 Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2015.
- B. ASTM C834 Standard Specification for Latex Sealants; 2017.
- C. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2018.
- D. ASTM C1193 Standard Guide for Use of Joint Sealants; 2016.
- E. ASTM C1330 Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants; 2002 (Reapproved 2013).
- F. SCAQMD 1168 Adhesive and Sealant Applications; 1989 (Amended 2017).

1.03 SUBMITTALS

- A. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following:
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
 - 5. Installation instructions, including precautions, limitations, and recommended backing materials and tools.

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- B. Installer Qualifications: Company specializing in performing the work of this section and with at least three (3) years of experience.
- C. Field Quality Control Plan:
 - 1. Visual inspection of entire length of sealant joints.

PART 2 PRODUCTS

201 JOINT SEALANT APPLICATIONS

- A. Scope:
- B. Interior Joints: Use non-sag polyurethane sealant, unless otherwise indicated.
 - 1. Wall and Ceiling Joints in Non-Wet Areas: Acrylic emulsion latex sealant.

202 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

203 NONSAG JOINT SEALANTS

- A. Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
 - 1. Color: Clear.
- B. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 25 percent, minimum.
 - 2. Color: Match adjacent finished surfaces.
 - 3. Products:
 - a. Sherwin-Williams Company; Stampede-1/-TX Polyurethane Sealant: www.sherwinwilliams.com/#sle.
 - b. Sika Corporation; Sikaflex-1a: www.usa-sika.com/#sle.
 - c. Substitutions: See Section 01 60 00 Product Requirements.

204 ACCESSORIES

- A. Sealant Backing Rod, Closed-Cell Type:
 - 1. Cylindrical flexible sealant backings complying with ASTM C1330 Type C.
- B. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Verify that backer rods are of the correct size.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

- A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Install bond breaker backing tape where backer rod cannot be used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- E. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- F. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.
 - 1. Comply with caulking/sealant manufacturer's instructions for tooling.

3.04 FIELD QUALITY CONTROL

A. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

END OF SECTION

SECTION 08 83 00 MIRRORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Glass mirrors.

1.02 REFERENCE STANDARDS

- A. ASTM C1036 Standard Specification for Flat Glass; 2011.
- B. ASTM C1503 Standard Specification for Silvered Flat Glass Mirror; 2008 (Reapproved 2013).
- C. GANA (TIPS) Mirrors: Handle with Extreme Care (Tips for the Professional on the Care and Handling of Mirrors); 2011.

1.03 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Provide five year manufacturer warranty for reflective coating on mirrors and replacement of same.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Mirror Design Criteria: Select materials and/or provide supports as required to limit mirror material deflection to 1/200, or to the flexure limit of glass, with full recovery of glazing materials, whichever is less.
- B. Mirror Glass: ASTM C1036, Type 1 Transparent Flat, Class 1 Clear, Quality Q1 (highquality mirrors); silvering, protective coating, and quality requirements in compliance with ASTM C1503.
 - 1. Thickness: 1/4 inch (6 mm).
 - 2. Size: As noted on drawings.
 - 3. Provide polished edges where exposed.

2.02 ACCESSORIES

A. Mirror Attachment Accessories: Stainless steel clips.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces of mirror frames or recesses are clean, free of obstructions, and ready for installation of mirrors.

3.02 INSTALLATION

- A. Install mirrors in accordance with GANA (TIPS) and manufacturers recommendations.
- B. Set mirrors plumb and level, and free of optical distortion.

- C. Set mirrors with edge clearance free of surrounding construction including countertops or backsplashes.
- D. Frameless Mirrors: Set mirrors with clips, and anchor rigidly to wall construction.

3.03 CLEANING

- A. Remove labels after work is complete.
- B. Clean mirrors and adjacent surfaces.

END OF SECTION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:1. Gypsum wallboard

1.02 RELATED SECTIONS

- A. Section 061000 Rough Carpentry
- B. Section 099123 Interior Painting

1.03 REFERENCE STANDARDS

- A. Reference Standards: Most current edition at date of Bid.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM C 475/C 475M Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board
 - 2. ASTM C 840 Standard Specification for Application and Finishing of Gypsum Board
 - 3. ASTM C 1396/C1396M Standard Specification for Gypsum Board
 - 4. ASTM E72 Standard Test Methods of Conducting Strength Tests of Panels for Building Construction
 - 5. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- C. Gypsum Association (GA):
 - 1. GA-216 Application and Finishing of Gypsum Board
 - 2. GA-600 Fire Resistance Design Manual
- D. Underwriters Laboratories (UL):
 - 1. Fire Resistance Directory

1.04 SUBMITTALS

- A. Submit in accordance with Section 013300 Submittal Procedures.
- B. Submit:
 - 1. Product Data: Provide manufacturer's product data for each proposed product sufficient to show compliance with each product specified.

1.05 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

1.01 GYPSUM BOARD MATERIALS

- A. Manufacturers:
 - 1. CertainTeed Corporation,
 - 2. Georgia-Pacific Gypsum,
 - 3. National Gypsum Company,
 - 4. USG Corporation or approved equal.
- B. Interior Gypsum Wallboard (GWB): Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place.
 - 1. Application: replace/repair interior window wrap.
 - 2. Thickness: 1/2" or to match existing adjacent surfaces.
 - 3. Edges: Tapered.

1.02 ACCESSORIES

A. Nails and screws of type and size to suit application, to rigidly secure materials in place.

PART 3 EXECUTION

1.01 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.

1.02 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.

1.03 INSTALLATION OF TRIM AND ACCESSORIES

A. Corner Beads: Install at external corners, using longest practical lengths.

1.04 JOINT TREATMENT

- A. Finish gypsum board in accordance with levels defined in ASTM C 840.
- B. Tape, fill and sand exposed joints, edges and corners to produce smooth surface ready to receive finishes.
- C. Feather coats of joint compound so that camber is maximum 1/32".
- D. Walls, sills, and ceilings to receive paint finish or wall coverings to match existing, unless otherwise indicated.

1.05 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8" in 10' in any direction.

1.06 CLEANING AND PROTECTION

- A. Clean soiled surfaces with cleaning solution.
- B. Touch-up, repair or replace damaged products / materials / connections before Substantial Completion.
- C. Protect installed products until completion of project.

END OF SECTION

SECTION 09 30 00 TILING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Tile for floor applications.
- B. Tile for wall applications.
- C. Ceramic accessories.
- D. Ceramic trim.

1.02 REFERENCE STANDARDS

- A. ANSI A108/A118/A136.1 Specifications for the Installation of Ceramic Tile; 2020.
- B. ANSI A108.1a American National Standard Specifications for Installation of Ceramic Tile in the Wet-Set Method, with Portland Cement Mortar; 2023.
- C. ANSI A108.1b Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set, Modified Dry-Set, or Improved Modified Dry-Set Cement Mortar; 2023.
- D. ANSI A108.1c Contractor's Option: Installation of Ceramic Tile in the Wet-Set Method with Portland Cement Mortar or Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set, Modified Dry-Set, or Improved Modified Dry-Set Cement Mortar; 2023.
- E. ANSI A108.4 American National Standard Specifications for Installation of Ceramic Tile with Organic Adhesive or Water Cleanable Tile-Setting Epoxy Adhesive; 2023.
- F. ANSI A108.5 Setting of Ceramic Tile with Dry-Set Cement Mortar, Modified Dry-Set Cement Mortar, EGP (Exterior Glue Plywood) Modified Dry-Set Cement Mortar, or Improved Modified Dry-Set Cement Mortar; 2023.
- G. ANSI A108.6 American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant, Water Cleanable Tile-Setting and -Grout Epoxy; 2023.
- H. ANSI A108.8 American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant Furan Resin Mortar and Grout; 1999 (Reaffirmed 2019).
- I. ANSI A108.9 American National Standard Specifications for Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout; 2023.
- J. ANSI A108.10 American National Standard Specifications for Installation of Grout in Tilework; 2017 (Reaffirmed 2022).
- K. ANSI A108.12 Installation of Ceramic Tile with EGP (Exterior Glue Plywood) Modified Dry-Set Mortar; 2023.

- L. ANSI A108.13 American National Standard for Installation of Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone; 2005 (Reaffirmed 2021).
- M. ANSI A118.7 American National Standard Specifications for High Performance Cement Grouts for Tile Installation; 2019.
- N. ANSI A118.12 American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation; 2014 (Reaffirmed 2019).
- O. ANSI A118.15 American National Standard Specifications for Improved Modified Dry-Set Cement Mortar; 2023.
- P. ANSI A137.1 American National Standard Specifications for Ceramic Tile; 2022.
- Q. ASTM C373 Standard Test Methods for Determination of Water Absorption and Associated Properties by Vacuum Method for Pressed Ceramic Tiles and Glass Tiles and Boil Method for Extruded Ceramic Tiles and Non-tile Fired Ceramic Whiteware Products; 2018 (Reapproved 2023).
- R. TCNA (HB) Handbook for Ceramic, Glass, and Stone Tile Installation; 2024.

1.03 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements for submittal procedures.
- B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- C. Maintenance Data: Include recommended cleaning methods, cleaning materials, and stain removal methods.

1.04 QUALITY ASSURANCE

- A. Maintain one copy of and ANSI A108/A118/A136.1 and TCNA (HB) on site.
- B. Installer Qualifications: Company specializing in performing tile installation, with minimum of five years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 TILE

- A. Manufacturers: All products by the same manufacturer.
 - 1. Dal-Tile Corporation: www.daltile.com/#sle.
 - 2. Or approved equal.

- 3. Substitutions: See Section 01 60 00 Product Requirements.
- B. Porcelain Tile: : Floor & Wall Tile at Restrooms.
 - 1. Moisture Absorption: 0 to 0.5 percent as tested in accordance with ASTM C373.
 - 2. Size:
 - a. Floor Tile: 12 inch x 24 inch (305 mm x 610 mm), nominal.
 - b. Wall Tile: 12 inch x 24 inch (305 mm x 610 mm), nominal.
 - 3. Thickness: 3/8 inch.
 - 4. Edges: Rectified.
 - 5. Surface Finish: Unpolished.
 - 6. Color(s): To be selected by Architect or Owner's Representative from manufacturer's standard range.
 - 7. Trim Units: Matching bullnose, cove base, and cove base outcorner shapes in sizes coordinated with field tile.
 - 8. Products:
 - a. Basis of Design: Daltile Colorbody Porcelain with Reveal Imaging. Stone Attaché Collection
 - b. Or approved equal.
 - c. Substitutions: See Section 01 60 00 Product Requirements.

2.02 TRIM AND ACCESSORIES

- A. Ceramic Accessories: Glazed finish, same color and finish as adjacent field tile; same manufacturer as tile.
- B. Ceramic Trim: Matching bullnose, double bullnose, cove base, and cove ceramic shapes in sizes coordinated with field tile.
 - 1. Manufacturers: Same as for tile.
 - 2. Size:
 - a. Bullnose Trim: 12 inch x 3 inch (305 mm x 76 mm), nominal. Cut to size.
 - b. Cove Base: 12 inch x 6 inch (305 mm x 152 mm), nominal.

2.03 SETTING MATERIALS

A. Manufacturers:

- 1. ARDEX Engineered Cements: www.ardexamericas.com/#sle.
- 2. LATICRETE International, Inc: www.laticrete.com/sle.
- 3. TEC, an H.B. Fuller Construction Products Brand: www.tecspecialty.com/#sle.
- 4. Or approved equal.
- 5. Substitutions: See Section 01 60 00 Product Requirements.
- B. Improved Latex-Portland Cement Mortar Bond Coat: ANSI A118.15.
 - 1. Products:
 - a. ARDEX Engineered Cements; S 28: www.ardexamericas.com/#sle.
 - b. LATICRETE International, Inc; LATICRETE 254 Platinum: www.laticrete.com/#sle.
 - c. Or approved equal.
 - d. Substitutions: See Section 01 60 00 Product Requirements.

2.04 GROUTS

- A. Manufacturers:
 - 1. ARDEX Engineered Cements: www.ardexamericas.com/#sle.
 - 2. LATICRETE International, Inc; LATICRETE PERMACOLOR Grout: www.laticrete.com/#sle.
 - 3. Or approved equal.
 - 4. Substitutions: See Section 01 60 00 Product Requirements.
- B. High Performance Polymer Modified Grout: ANSI A118.7 polymer modified cement grout.
 - 1. Applications: Use this type of grout where indicated and where no other type of grout is indicated.
 - 2. Use sanded grout for joints 1/8 inch wide and larger; use unsanded grout for joints less than 1/8 inch wide.
 - 3. Products:
 - a. ARDEX Engineered Cements; ARDEX FL: www.ardexamericas.com/#sle.
 - b. LATICRETE International, Inc; LATICRETE PERMACOLOR Grout: www.laticrete.com/#sle.
 - c. Or approved equal.
 - d. Substitutions: See Section 01 60 00 Product Requirements.

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2.05 ACCESSORY MATERIALS

- A. Concrete Floor Slab Crack Isolation Membrane: Material complying with ANSI A118.12; not intended as waterproofing. Full coverage.
 - 1. Type: Peel-and-stick sheet.
 - 2. Thickness: 40 mils, maximum.
 - 3. Crack Resistance: No failure at 1/8 inch gap, minimum.
 - 4. Products:
 - a. Custom Building Products; Crack Buster Pro. Crack Prevention Mat Underlayment; www.custombuildingproducts.com
 - b. Or approved equal.
 - c. Substitutions: See Section 01 60 00 Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that wall and floor surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile. Coordinate with Owner to assess quality of the substrate after demolition.

3.02 PREPARATION

- A. Protect surrounding work from damage.
- B. Vacuum clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- D. Provide additional substrate surface preparation as required to receive new tile.

3.03 INSTALLATION - GENERAL

- A. Install tile and grout in accordance with applicable requirements of ANSI A108.1a through ANSI A108.13, manufacturer's instructions, and TCNA (HB) recommendations.
- B. Match original finish floor elevations.
- C. Lay tile to pattern indicated. Do not interrupt tile pattern through openings.
- D. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.

- E. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.
- F. Form internal angles square and external angles bullnosed.
- G. Install ceramic accessories rigidly in prepared openings.
- H. Sound tile after setting. Replace hollow sounding units.
- I. Keep control and expansion joints free of mortar, grout, and adhesive.
- J. Prior to grouting, allow installation to completely cure; minimum of 48 hours.
- K. Grout tile joints unless otherwise indicated.
- L. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.

3.04 INSTALLATION - FLOORS - THIN-SET METHODS

- A. Over interior concrete substrates, install in accordance with TCNA (HB) Method F113, dry-set or latex-Portland cement bond coat, with standard grout, unless otherwise indicated.
 - 1. Use uncoupling membrane under all tile unless other underlayment is indicated.

3.05 INSTALLATION - WALL TILE

A. Over gypsum wallboard on wood or metal studs install in accordance with TCNA (HB) Method W243, thin-set with dry-set or latex-Portland cement bond coat, unless otherwise indicated.

3.06 CLEANING

A. Clean tile and grout surfaces.

3.07 PROTECTION

A. Do not permit traffic over finished floor surface for 4 days after installation.

SECTION 09 51 00 ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical units.
- C. Perimeter trim at suspended ceiling clouds.
- D. Wood ceiling panels.

1.02 REFERENCE STANDARDS

- A. ASTM C635/C635M Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2022.
- B. ASTM C636/C636M Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2019.
- C. ASTM E580/E580M Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2022.
- D. ASTM E1264 Standard Classification for Acoustical Ceiling Products; 2023.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Do not install acoustical units until after interior wet work is dry.

1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on suspension system components.
- C. Manufacturer's Installation Instructions: Indicate special procedures.
- D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 60 00 Product Requirements, for additional provisions.
 - 2. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.05 FIELD CONDITIONS

A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

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PART 2 PRODUCTS

201 MANUFACTURERS

- A. Acoustic Tiles/Panels Basis of Design:
 - 1. Armstrong World Industries, Inc: www.armstrong.com.
 - 2. Substitutions: See Section 01 60 00 Product Requirements.
- B. Wood Veneer Acoustic Panels:
 - 1. Basis of Design: [Armstrong World Industries, Inc <> : www.armstrong.com.].
 - 2. Substitutions: See Section 01 60 00 Product Requirements.
- C. Suspension Systems:
 - 1. Basis of Design: Armstrong World Industries, Inc: www.armstrong.com.
 - 2. USG; Donn: www.usg.com.
 - 3. Chicago Metallic. www.rockfon.com
 - 4. Substitutions: See Section 01 60 00 Product Requirements.
- D. Other Manufacturers: Submit Substitution Request demonstrating that the proposed product substitution is equal or superior in function, quality, and appearance, in all respects, to the specified products.

202 ACOUSTICAL UNITS

- A. Wood Veneer Perforated Ceiling Panels
 - 1. Manufacturer: Armstrong World Industries.
 - 2. VECTOR WOODWORKS Tegular Perforated Panels No substitutions.
 - a. Panel Size: 24 by 24 inch.
 - b. Thickness: 3/4"
 - c. Perforation Style: W2 Round Straight Rg 6066 Standard
 - d. Color: Bamboo Patina
 - e. Location: Areas shown or scheduled as PWP (perforated wood panel).

203 SUSPENSION SYSTEM(S)

A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with stabilizer bars, clips, splices, perimeter moldings, and hold down clips as required.

- B. Wood Veneer Acoustic Ceiling:
 - 1. Manufacturer: Armstrong World Industries. No Substitutions.
 - 2. 15/16" Vector 1/4" Reveal 5401W2 BL Tech Black
 - a. Color: BL Tech Black
 - b. Location: Areas shown or scheduled as PWP (perforated wood panel).

204 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Perimeter Moldings: Same material and finish as grid.
 - 1. Edge Molding: Shadow molding shape with 3/4" x 3/4" edge reveal, with 7/8" exposed flange width, factory painted low sheen satin white finish.
 - 2. Provide Armstrong Ceiling System Berc 2 Clip in lieu of 2 inch molding and stabilizer bars. (Per ICBO evaluation Report No. 5173.).

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.

3.02 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as supplemented in this section.
- B. Design and construct acoustical ceilings to resist lateral forces for IBC classifications as indicated in the Structural Notes. Comply with IBC Chapter 16 and ASCE 7-05, Section 12.8, and install under permit in accordance with such design. Include loads contributed by partitions terminating at ceiling and light fixtures. Provide bracing above ceiling as required; compute and brace for each direction separately.
- C. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- D. Locate system on room axis according to reflected plan.
- E. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.
- F. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.

- G. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- H. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- I. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.
- J. Do not eccentrically load system or induce rotation of runners.
- K. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
 - 1. Use longest practical lengths.
 - 2. Miter corners.

3.03 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install units after above-ceiling work is complete.
- E. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- F. Cutting Acoustical Units:
 - 1. Make field cut edges of same profile as factory edges.

3.04 TOLERANCES

- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

SECTION 09 91 23 INTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish exposed conduit, patch & repaired gypsum wallboard, and other existing interior surfaces affected during construction.

1.02 REFERENCE STANDARDS

- A. ASTM D4442 Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials; 2007.
- B. MPI (APSM) Master Painters Institute Architectural Painting Specification Manual; Current Edition, www.paintinfo.com.
- C. SSPC-SP 1 Solvent Cleaning; 2015.
- D. SSPC-SP 2 Hand Tool Cleaning; 1982 (Ed. 2004).
- E. SSPC-SP 6 Commercial Blast Cleaning; 2007.

1.03 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
 - 2. MPI product number (e.g., MPI #47).
 - 3. Cross-reference to specified paint system products to be used in project; include description of each system.
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.
 - 2. Where sheen is not specified, discuss sheen options with Architect or Owner's Representative before preparing samples, to eliminate sheens not required.

- 3. Allow 30 days for approval process, after receipt of complete samples by Architect or Owner's Representative.
- D. Manufacturer's Instructions: Indicate special surface preparation procedures.
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 60 00 Product Requirements, for additional provisions.
 - 2. Extra Paint and Finish Materials: 1 gal of each color; from the same product run, store where directed.
 - 3. Label each container with color in addition to the manufacturer's label.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.05 FIELD CONDITIONS

A. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.
- B. Paints: Provide paint from the following manufacturers or approved equal
 - 1. Behr Process Corporation: www.behr.com/#sle.
 - 2. Benjamin Moore & Co: www.benjaminmoore.com.
 - 3. Cloverdale Paint, Brand Products of Rodda Paint Company: www.cloverdalepaint.com/#sle.
 - 4. PPG Paints: www.ppgpaints.com/#sle.
 - 5. Pratt & Lambert Paints: www.prattandlambert.com/#sle.
 - 6. Rodda Paint Co: www.roddapaint.com/#sle.

- 7. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
- 8. Tnemec Company Inc.; TNW, Inc.: www.tnemec.com/tnw.

2.02 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

2.03 PAINT SYSTEMS - INTERIOR

- A. Refer to schedule for paint systems.
- B. Interior Surfaces to be Painted, Unless Otherwise Indicated:
 - 1. Two (2) top coats and one (1) coat primer.
 - 2. Top Coat(s): Interior Latex.
 - a. Products:
 - 1) Behr Pro i300 Interior Eggshell Paint [No.330]. (MPI #44)
 - 2) Pratt & Lambert Pro-Hide Gold Interior Latex, Eggshell.
 - 3) Rodda Master Painter Ultra Low VOC Satin, 523601.
 - 4) Sherwin-Williams ProMar 200 Zero VOC Interior Latex, Eg-Shel. (MPI #52)
 - 5) Or approved equal.

2.04 PRIMERS

- A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
 - 1. Interior Drywall Primer Sealer.
 - a. Products:
 - 1) Behr Premium Plus Interior Drywall Primer and Sealer [No. 73].
 - 2) Pratt & Lambert Drywall Primer.

- 3) Rodda Vapor Block Interior Perm Rated Latex Primer/Sealer, 507901.
- 4) Or approved equal.

2.05 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been adequately prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.
- F. Galvanized Surfaces:
 - 1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
 - 2. Prepare surface according to SSPC-SP 2.
- G. Ferrous Metal:
 - 1. Solvent clean according to SSPC-SP 1.
 - 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.

- 3. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 Commercial Blast Cleaning. Protect from corrosion until coated.
- H. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

3.03 APPLICATION

- A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- D. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply as many coats as necessary for complete hide.
- E. Sand wood and metal surfaces lightly between coats to achieve required finish.
- F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.
- B. Remove spilled, splashed or spattered paint. Do not mar surface finish of item being cleaned.
- C. Produce a satisfactory finish by painting or repainting, as directed, surfaces from which paint spatters cannot satisfactorily be removed.

3.05 PROTECTION

A. Protect finishes until completion of project.

3.06 SCHEDULE - PAINT SYSTEMS

- A. Interior Surfaces, Including Gypsum Wallboard Walls and Ceilings.
 - 1. First Coat: White pigmented Primer/Sealer compatible with finish products.
 - 2. Second and Third Coats: Interior High Performance Latex Enamel; eggshell.
 - a. Colors: To Be Selected by Owner's Representative.

- b. Minimum (6) colors.
- B. Interior Ferrous Metal:
 - 1. Surface Preparation:
 - a. Unprimed Steel: SSPC SP11 Power Tool Cleaning to Level SP-6.
 - b. Primed Steel:
 - 1) Step One SSPC-SP1 Solvent Cleaning.
 - 2) Step Two SSPC SP3 Power Tool Cleaning of welds.
 - 2. Prime Coat: Tnemec Series 394.
 - a. One coat at 2.5 to 3.5 mils dry film thickness.
 - 3. First Coat: Tnemec Series 115 Uni-Bond, at 2.0 to 4.0 mils dry.
 - a. Tinted half tone of finish coat.
 - 4. Second Coat: Tnemec Series 1029 Enduratone, at 2.0 to 3.0 mils dry. Advanced acrylic finish coat; HDP acrylic polymer.Semi-Gloss Finish.
 - a. Colors: To Be Selected by Owner's representative. Minimum four (4) colors.
 - 5. Work includes, but is not limited to the following:
 - a. Interior metal door frames.

SECTION 10 21 13.16 PLASTIC-LAMINATE-CLAD TOILET COMPARTMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Plastic laminate toilet compartments.

1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry: Blocking and supports.
- B. Section 10 28 00 Toilet, Bath, and Laundry Accessories.

1.03 REFERENCE STANDARDS

- A. ANSI A208.1 American National Standard for Particleboard; 2022.
- B. ASTM A666 Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.
- C. NEMA LD 3 High-Pressure Decorative Laminates; 2005.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate the work with placement of support framing and anchors in walls and ceilings.

1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate partition plan, elevation views, dimensions, details of wall and floor supports, door swings.
- C. Product Data: Provide data on panel construction, hardware, and accessories.
- D. Manufacturer's Installation Instructions: Indicate special procedures.

PART 2 PRODUCTS

201 MANUFACTURERS

- A. Plastic Laminate Toilet Compartments:
 - 1. Basis of Design: Ironwood Manufacturing, Co., 1102 Bonneville Ave., Snohomish, WA 98290 ; http://www.ironwood-mfg.com .
 - a. European Style Partitions and Screens. Panels and doors 71" high.
 - 2. Substitutions: Section 01 60 00 Product Requirements.

3. Other Manufacturers: Submit Substitution Request demonstrating that the proposed product substitution is equal or superior in function, quality, and appearance, in all respects, to the specified products.

202 MATERIALS

- A. Particleboard for Core: ANSI A208.1 composed of wood chips, sawdust or flakes, made with waterproof resin binder; of grade to suit application; sanded faces.
- B. Plastic Laminate: NEMA LD 3, HGS from Wilsonart

203 COMPONENTS

- A. Toilet Compartments: Plastic laminate finished, floor-mounted headrail-braced.
- B. Doors, Panels, and Pilasters: Plastic laminate adhesive and pressure bonded to faces and edges of particleboard core, with beveled corners and edges; edges of cut-outs sealed.
 - 1. Plastic Laminate Colors: Color as selected for doors, color as selected for panels, textured, low gloss finish.
 - 2. Manufacturer's Zero Sightline: Door and pilaster edges shall be engineered to overlap, eliminating visual gaps, or "sightlines".
- C. Door and Panel Dimensions:
 - 1. Thickness: 7/8" inch.
 - 2. Door Width: Match Existing
 - 3. Door Width for larger stall: Match Existing
 - 4. Height: 71 inch.
 - 5. Thickness of Pilasters: 1-1/4 inch.
- D. Pilasters:
 - 1. Adjustable support pedestals affixed to the bottom of the pilasters.
 - 2. Headrail attached to the pilaster tops and walls to provide partition stability.
 - 3. Shoes 22 gauge ASTM A-167 stainless steel with satin finish, not less than 3" in height.

204 ACCESSORIES

- A. Pilaster Shoes: Formed ASTM A666 Type 304 stainless steel with No. 4 finish, 3 inches high, concealing floor fastenings.
- B. Wall and Pilaster Brackets: Satin stainless steel.
- C. Hardware: Satin stainless steel:

- 1. Pivot hinges, gravity type, adjustable for door close positioning; two per door.
- 2. Thumb turn door latch with exterior emergency access feature.
- 3. Door strike and keeper with rubber bumper; mounted on pilaster in alignment with door latch.
- 4. Coat hook with rubber bumper; one per compartment, mounted on door.
- 5. Provide door pull for out swinging doors.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated on shop drawings.
- B. Verify correct location of built-in framing, anchorage, and bracing.

3.02 INSTALLATION

- A. Install partitions secure, rigid, plumb, and level in accordance with manufacturer's instructions.
- B. Maintain 3/8 to 1/2 inch space between wall and panels and between wall and end pilasters.
- C. Attach panel brackets securely to walls using anchor devices.
- D. Attach panels and pilasters to brackets.
- E. Field touch-up of scratches or damaged finish will not be permitted. Replace damaged or scratched materials with new materials.

3.03 TOLERANCES

- A. Maximum Variation From True Position: 1/4 inch.
- B. Maximum Variation From Plumb: 1/8 inch.

3.04 ADJUSTING

- A. Adjust and align hardware to uniform clearance at vertical edge of doors, not exceeding 3/16 inch.
- B. Adjust hinges to position doors in partial opening position when unlatched. Return out-swinging doors to closed position.
- C. Adjust adjacent components for consistency of line or plane.

SECTION 10 26 01 WALL CORNER GUARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Bumper-Chair rails.
- B. Corner guards.
- B. Corridor handrails.

1.02 RELATED SECTIONS

A. Section 06100 - Rough Carpentry: Blocking for wall and corner guard anchors.

1.03 REFERANCE STANDARDS

- A. ANSI/ICC A117.1 American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 2009.
- B. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2012.
- C. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials; 2012.

1.04 SUBMITTALS

- A. See Project Administration for submittal requirements and procedures. Refer to BID PACKAGE for these GENERAL REQUIREMENTS.
- B. Product Data: Indicate physical dimensions, features, wall mounting brackets with mounted measurements, anchorage details, and rough-in measurements.

PART 2 PRODUCTS

2.01 COMPONENTS

- A. MDF Bumper-Chair Rails: Factory- or shop-fabricated
 - 1. Material: Painted MDF, ends painted to match chair rail, dimensions to match drawings.
 - 2. Mounting: Surface.
- B. Corridor Handrails: Factory- or shop-fabricated, with preformed end caps and internal and external corners:
 - 1. Performance of Installed Assembly:
 - a. Support vertical live load of 100 lb/lineal ft with deflection not to exceed 1/50 of span between supports.
 - 2. Material: Wood, oak species, finish as selected from manufacturer's standard finishes. (match existing)
 - 3. Mounting: Surface.
 - 4. Return rail to wall.
- C. Corner Guard Surface Mounted: High impact vinyl full height retainer and integral impact absorbing device.
 - 1. Performance: Resist lateral impact force of 100 lbs at any point without damage or permanent set.
 - 2. Size: 2 inches.
 - 3. Corner: Square.
 - 4. Color: As selected from manufacturer's standard colors.
 - 5. Length: One piece.
 - 6. Preformed end caps.

2.02 FABRICATION

- A. Fabricate components with tight joints, corners and seams.
- B. Pre-drill holes for attachment.
- C. Form end trim closure by capping and finishing smooth.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that rough openings, concealed blocking, and anchors are correctly sized and located.
- B. Verify that field measurements are as indicated on Drawings.

3.02 INSTALLATION

- A. Install components in accordance with manufacturer's instructions, level and plumb, secured rigidly in position to wall framing members only.
- B. Position top of bumper rail as indicated on drawings.
- C. Position top of corridor hand rail 36 inches from finished floor.
- D. Position corner guard at all corners of corridors as indicated on drawings.

SECTION 10 28 00 TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Commercial toilet accessories.
- B. Under-lavatory pipe supply covers.
- C. Utility room accessories.

1.02 RELATED REQUIREMENTS

- A. Section 08 83 00 Mirrors: Other mirrors.
- B. Section 10 21 13.13 Metal Toilet Compartments.

1.03 REFERENCE STANDARDS

- A. ADA Standards Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- B. ASME A112.18.9 Protectors/Insulators for Exposed Waste and Supplies on Accessible Fixtures; 2011 (Reaffirmed 2022).
- C. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- D. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- E. ASTM A666 Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2023.
- F. ASTM B456 Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium; 2017 (Reapproved 2022).

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with the placement of internal wall reinforcement and reinforcement of toilet partitions to receive anchor attachments.

1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.
- C. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention.

PART 2 PRODUCTS

201 MANUFACTURERS

- A. Commercial Toilet, Shower, and Bath Accessories:
 - 1. Basis of Design: Bobrick; www.bobrick.com
 - 2. Georgia-Pacific Professional; : www.blue-connect.com/#sle.
 - 3. Substitutions: Section 01 60 00 Product Requirements.
- B. Under-Lavatory Pipe Supply Covers:
 - 1. Plumberex Specialty Products, Inc; Pro-Extreme: www.plumberex.com/#sle.
 - 2. Or approved equal.

202 MATERIALS

- A. Accessories General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
- B. Stainless Steel Sheet: ASTM A666, Type 304. No. 4 satin finish.
- C. Galvanized Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating.
- D. Fasteners, Screws, and Bolts: Hot dip galvanized.

203 FINISHES

- A. Stainless Steel: Satin finish, unless otherwise noted.
- B. Chrome/Nickel Plating: ASTM B456, SC 2, satin finish, unless otherwise noted.
- C. Galvanizing for Items Other than Sheet: Comply with ASTM A123/A123M; galvanize ferrous metal and fastening devices.

204 COMMERCIAL TOILET ACCESSORIES

A. Provide toilet accessories as indicated on drawings, interior elevations, and as scheduled in Part 3 of this section.

205 UNDER-LAVATORY PIPE AND SUPPLY COVERS

- A. Under-Lavatory Pipe and Supply Covers:
 - 1. Insulate exposed drainage piping including hot, cold, and tempered water supplies under lavatories or sinks to comply with ADA Standards.
 - 2. Exterior Surfaces: Smooth non-absorbent, non-abrasive surfaces.
 - 3. Construction: 1/8 inch flexible PVC.

- 4. Color: White.
- 5. Fasteners: Reusable, snap-locking fasteners with no sharp or abrasive external surfaces.
- 6. Products:
 - a. Plumberex Specialty Products, Inc; Plumberex Pro-Extreme: www.plumberex.com/#sle.
 - b. Or approved equal.
 - c. Substitutions: Section 01 60 00 Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify exact location of accessories for installation.

3.02 PREPARATION

- A. Deliver inserts and rough-in frames to site for timely installation.
- B. Provide templates and rough-in measurements as required.

3.03 INSTALLATION

- A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings.
- B. Install plumb and level, securely and rigidly anchored to substrate.
- C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.

3.04 PROTECTION

A. Protect installed accessories from damage due to subsequent construction operations.

3.05 SCHEDULE OF TOILET ACCESSORIES

- A. Provide the following equipment:
 - 1. Surface-Mounted Automatic Paper Towel Dispenser Georgia-Pacific enMotion 59462A
 - a. One (1) each in Men's & Women's restrooms.
 - 2. Surface-Mounted Automatic Soap Dispenser GOJO ES10
 - a. One (1) at each lavatory sink in Men's & Women's restrooms.
 - 3. Waste Receptacle Recessed Bobrick B-3644

- a. One (1) each in Men's & Women's restrooms.
- 4. Toilet Seat Cover Dispenser Recessed Bobrick B-301
 - a. One (1) at each water closet.
- 5. Toilet Tissue Dispenser Surface-Mounted Bobrick B-2888
 - a. One (1) at each water closet.
- 6. Sanitary Napkin Vendor Semi-Recessed Bobrick B-47064C
 - a. One (1) each in Women's restrooms.
- 7. Sanitary Napkin Disposal Surface-Mounted Bobrick B-354
 - a. One (1) at shared partition wall in Women's restrooms.
- 8. Stainless Steel Grab Bars Bobrick B-6806 x 18; B-6806 x 36; B6806 x 48
 - a. One (1) combination each in Men's & Women's restrooms.

SECTION 12 36 61.19 QUARTZ AGGLOMERATE (NATURAL QUARTZ AND RESIN COMPOSITE) COUNTERTOPS

PART 1 GENERAL

1.01 SUMMARY

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 THIS SECTION INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING HORIZONTAL AND TRIM QUARTZ SURFACING PRODUCT TYPES:

1. Countertops with undermount sinks and lavatory bowls

1.03 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry
- B. Section 06 41 00 Architectural Wood Casework
- C. Section 07 92 00 Joint Sealants
- D. Section 12 36 61.19 Quartz Agglomerate Countertops
- E. Section 22 00 00 Plumbing

1.04 REFERENCES

- A. ASTM C170 Standard Test Method for Compressive Strength of Dimension Stone.
- B. ASTM C370 Standard Test Method for Moisture Expansion of Fired Whiteware Products.
- C. ASTM C373 Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles.
- D. ASTM C501 Standard Test Method for Relative Resistance to Wear of Unglazed Ceramic Tile by the Taber Abraser.
- E. ASTM C1026 Standard Test Method for Measuring the Resistance of Ceramic Tile to Freeze-Thaw Cycling.
- F. ASTM C1028 Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.
- G. ASTM D570 Standard Test Method for Water Absorption of Plastics.
- H. ASTM D696 Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer.
- I. ASTM D790 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- J. ASTM D792 Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- K. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- L. ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
- M. ASTM G22 Standard Practice for Determining Resistance of Plastics to Bacteria.
- N. CSA B45.5-11/IAPMO Z124-2011 Plastic Plumbing Fixtures.
- O. NEMA LD 3 High Pressure Decorative Laminates.
 - 1. NEMA LD 3-3.3 Light Resistance.
 - 2. NEMA LD 3-3.5 Boiling Water Resistance.
 - 3. NEMA LD 3-3.6 High Temperature Resistance.
 - 4. NEMA LD 3-3.8 Ball Impact Resistance.

- P. NFPA (National Fire Protection Association) NFPA 101®, Life Safety Code[®].
- Q. NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials.
- R. ISO (International Organization for Standardization) ISO 14001 Environmental Management Systems.
- S. UL (Underwriters Laboratories) UL 723 Standard Test Method for Surface Burning Characteristics of Building Materials.
- T. ULC (Underwriters Laboratories of Canada) ULC/CAN-S102 Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
- U. NSF (NSF International) NSF/ANSI Standard 51 Food Equipment Materials.
- V. UL Environment/GREENGUARD UL 2818 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings, Section 7.1 and 7.2.
- W. UL 2824 GREENGUARD Certification Program, Method For Measuring Microbial Resistance From Various Sources Using Static Environmental Chambers.
- X. SCAQMD (South Coast Air Quality Management District) VOC (Volatile Organic Content) Rule 1168 for Adhesive and Sealant Applications

1.05 SUBMITTALS

- A. Submit product data for each type of product indicated.
 - 1. Submit manufacturer's product data on material characteristics, performance properties, fabrication instructions, installation instructions and maintenance instructions.
- B. Shop drawings:
 - 1. Show location of each item; provide complete detailed and dimensioned plans and elevations, large-scale details, attachment devices and other components.
 - a. Show the following:
 - 1) Full-size details, edge details, attachments, etc.
 - 2) Locations and sizes of furring, blocking, including concealed blocking and reinforcement specified elsewhere in the Construction Documents.
 - 3) Fabrication details for brackets.
 - 4) Locations and sizes of cutouts and holes for plumbing fixtures, faucets, and other items installed in quartz surface.
 - 5) Locations and sizes of cutouts for sink installation and lavatory installation.
 - 6) Type of sealant.
 - 7) Type of adhesive.
 - 8) Seam locations.
- C. Samples:
 - 1. For each type of product indicated:
 - a. Submit minimum 2-inch-by-2-inch sample in specified color. For viewing pattern or veining, submit minimum 4-inch-by-4-inch samples.
 - b. Cut sample and seam together for representation of seaming techniques.
 - c. Indicate full range of color and pattern variation.
 - d. Approved samples will be retained as a standard for work.
- D. Product data:
 - 1. Indicate product description, fabrication information and compliance with specified performance requirements.
- E. Fabricator/installer qualifications:

1. Provide copy of certification number.

- F. Certificates: Certify that products meet or exceed requirements.
 - 1. UL Environment– GREENGUARD and GREENGUARD Gold, current low emitting VOC certification of quartz surface and solid surface products.
 - 2. UL Environment– GREENGUARD and GREENGUARD Gold, current low emitting VOC certification for manufacturer's recommended adhesive and/or sealant.
 - 3. UL Environment Mold Resistance Certification in accordance with UL 2824.

- G. Fire test response characteristics:
 - 1. United States Provide Class A surface burning characteristics as determined by testing products per UL 723 (ASTM E 84, NFPA 255) or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - a. Flame Spread Index: 25 or less.
 - b. Smoke Developed Index: 450 or less.
- H. Maintenance data:
 - 1. Submit manufacturer's care and maintenance data.
 - 2. Include in project closeout documents.

1.06 QUALITY ASSURANCE

- A. Qualifications:
 - a. Shop employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance.
- B. Fabricator/installer qualifications:
 - 1. Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer or designated representative.
- C. Allowable tolerances:
 - 1. Variation in component size: $\pm 1/8$ inch (3 mm) over a 10 foot length.
 - 2. Location of openings: ±1/8 inch (3 mm) from indicated location.
 - 3. Minimum of 1/16 inch and a maximum of 1/8 inch (3 mm) clearance between quartz surfaces and each wall.
- D. Coordination drawings: Coordination drawings are required for the benefit of contractor's fabricators/installers as an aid to coordination of their work to eliminate or reduce conflicts that may arise during the installation of their work.
 - 1. Shall be prepared indicating:
 - a. Plumbing work.
 - b. Electrical work.
 - c. Miscellaneous steel for the general work.
 - d. Indicate location of all walls (rated and non-rated), blocking locations and recessed wall items, etc.
 - 2. Content:
 - a. Project-specific information, drawn accurately to scale.
 - b. Do not base coordination drawings on reproductions of the contract documents or standard printed data.
 - c. Indicate dimensions shown on the contract drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements.
 - d. Provide alternate sketches to designer for resolution of such conflicts.
 - 1) Minor dimension changes and difficult installations will not be considered changes to the contract.
 - 3. Drawings shall:
 - a. Be produced in 1/2 inch scale for all fabricated items.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors in clean and dry areas prior to installation.
- C. Handle materials to prevent damage to finished surfaces.
- D. Follow manufacturer's safe handling and storage recommendations.
- E. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.08 WARRANTY

- A. Provide manufacturer's 10-year warranty.
- B. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted.

1.09 MAINTENANCE

A. Provide maintenance requirements as specified by the manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- Contract Documents are based on products manufactured by DuPont (E. I. du Pont de Nemours and Α. Company). Provide Corian® Quartz, formerly known as Zodiag® (basis of design) subject to compliance with the requirements.
 - Address: Corian® Design, Corian® Quartz, Chestnut Run Plaza 735, 974 Centre Road, а P.O. Box 2915, Wilmington, DE 19805.
 - Phone: (800) 426-7426. b.
 - Website: www.surfaces.dupont.com; www.corianquartz.com. c.
 - Subject to compliance with the requirements, provide the following product: quartz surface d. from Corian® Design (basis of design).
- B. Substitutions: Not permitted.

2.02 MATERIALS

- A. Material:
 - Corian[®] Quartz material composed of ~93 % natural quartz with pigments and resin. 1
 - Corian®Quartz Terra Collection product composed of pre-consumer and/or post-consumer 2. glass, natural guartz, pigments and resin.
 - 3. Material shall have minimum physical and performance properties as specified.
- Thickness: Β.
 - 3 cm (1-1/8 inch). 1.
- C. Edge treatment:
 - Exposed Edge 1.
 - Finished. a.
 - 2. Appliance Edge.
 - Finished. a.
- D. Seam width:
 - 1. 1/16 inch nominal unless otherwise specified.
- E. Sink mounting:
 - 1. Undermount.
- F. Backsplash:
 - Applied. 1.
- Corian® Quartz Performance Properties (TYPICAL RESULTS): G.
 - Flexural Strength > 5,300 psi 1.
 - Flexural Modulus 5.3-5.7 X 106 psi 2.
 - Compression Strength (Dry) 27,300 psi 3. 4.
 - Compression Strength (Wet) 24,400 psi 7
 - Hardness 5.
 - 1.45 x 10-5 meter/meter deg C 6. Thermal Expansion
 - Thermal Expansion 2.61 x 10-5 inch/inch deg F 7.
 - Colorfastness 8. 9.
 - Passes Gloss (60° Gardner) 45-50

ASTM D790 ASTM D790 ASTM C170 ASTM C170 Mohs Hardness Scale ASTM D696 ASTM D696 **NEMA LD 3-3.3** ANSI Z124

10.	Wear and Cleanability Passes	CSA B45.5-11/I	APMO Z124-2011	
	Stain Resistance		5.5-11/IAPMO Z124-2011	
12.	Fungal Resistance	No observed growth on product	ASTM G 21	
13.	Bacterial Resistance	No observed growth on product	ASTM G 22	
14.	High Temperature Resistance	None to slight effect	NEMA LD 3-3.6	
	a. Temperature, 356 deg F	-		
15.	Boiling Water Resistance	None to slight effect	NEMA LD 3-3.5	
16.	Freeze-Thaw Cycling	Unaffected	ASTM C1026	
17.	Point Impact	Passes	ANSI Z124.6.4.2	
18.	Ball Impact Resistance	No failure at 164 inches	NEMA LD 3-3.8	
 a. Slabs, No fracture, 1/2 lb. ball – 2cm and 3 cm 				
19.	Static Coefficient of Friction	0.89 (Dry), 0.61 (Wet)	ASTM C1028	
20.	Abrasion Resistance	139	ASTM C501	
21.	Density	2.4 g/cm3	ASTM D792	
22.	Water Absorption, Long-term	0.12%	ASTM C373	
23.	Water Absorption, Short	< 0.04%	ASTM C373	
24.	Moisture Expansion	< 0.01% average	ASTM C370	
25.	Flammability	Class A, all colors	NFPA 101® Life Safety Code	
26.	Flame Spread Index	FSI 0 for 3 cm	UL 723	
27.	Flame Spread Index	FSI \leq 5 for 2 cm	UL 723	
	Smoke Developed Index	SDI ≤ 40 for 3 cm	UL 723	
29.	Smoke Developed Index	SDI ≤ 75 for 2 cm	UL 723	
30.	Nominal Thickness	2 cm and 3 cm		
	Nominal Weight per square foot for 2cm thickness is 10 pounds			
32.	Nominal Weight per square foot for 3cm thickness is 15 pounds			

32. Nominal Weight per square foot for 3cm thickness is 15 pounds

H. CORIAN[®] QUARTZ (ZODIAQ[®]) CERTIFICATIONS and APPROVALS:

- 1. NSF/ANSI Standard 51, Listed by NSF.
- 2. UL Environment/GREENGUARD Certified.
- 3. UL Environment/GREENGUARD Gold Certified.
- 4. UL 2824 Mold Resistant.

2.03 ACCESSORY PRODUCTS

- A. Mounting Adhesives:
 - 1. 100 percent Silicone Sealant.
- B. Seam Adhesive:
 - 1. Corian® Joint Adhesive to create color-coordinated seam.
- C. Sink/bowl mounting hardware:
 - 1. Manufacturer's approved sink setters, bowl clips and fasteners for attachment of undermount sinks/bowls.

2.04 FABRICATION

- A. Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer's printed instructions and technical bulletins.
- B. Form joints between components using manufacturer's standard joint adhesive.
 - a. Reinforce as required.
 - 2. Provide factory cutouts for plumbing fittings and bath accessories as indicated on the drawings.
 - 3. Rout and finish component edges with clean, sharp returns.
 - 4. Rout cutouts, radii and contours to template.
- C. Smooth edges.

2.05 FINISHES

A. Color: Venetia Cream

PART 3 EXECUTION

3.01 INSTALLATION

- A. General
 - 1. Install countertop materials in accordance with manufacturer's instructions.
 - 2. Additional weight from attached sink or lavatory will affect maneuverability of tops during transportation and installation.
 - 3. Carefully plan work to avoid damaging finished tops during transportation and installation.
- B. Install components plumb and level, in accordance with approved shop drawings and product installation details.
 - 1. Tops:
 - a. Flat and true to within 1/8 inch (3 mm) of a flat surface over a 10-foot length.
 - b. Allow a minimum of 1/16 inch to a maximum of 1/8 inch (3 mm) clearance between surface and each wall.
 - c. Form field joints using manufacturer's recommended adhesive (Corian® Joint Adhesive), with joint widths no greater than 1/8 inch (3 mm) in finished work.
 - d. Keep components and hands clean when making joints.
- C. Sinks/Lavatory Bowls:
 - 1. Adhere undermount sinks/lavatory bowls to countertops using manufacturer's recommended adhesive and mounting hardware.
 - 2. Adhere drop-in sinks/bowls to countertops using silicone sealant and manufacturerrecommended adhesives.
- D. Provide backsplashes and endsplashes as indicated on the drawings.
 - 1. Adhere to countertops using silicone sealant.
 - a. Keep components and hands clean when working with silicone sealant.

3.02 CONNECTIONS:

- A. Make plumbing connections in accordance with Division 22.
- B. Make electrical connections in accordance with Division 26.

3.03 CLEANING AND PROTECTION

- A. Keep components and hands clean during installation.
- B. Remove adhesives, sealants and other stains in accordance with manufacturer's instructions.
 - 1. Clean exposed surfaces in accordance with manufacturer's instructions.
 - 2. Components shall be clean on date of substantial completion.
 - a. Protect surfaces from damage until date of substantial completion.
 - 3. Replace or repair damaged work in a satisfactory manner.

CTION 20 02 00 OPERATION AND MAINTENANCE MANUAL FOR MECHANICAL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

A. Operation and Maintenance Manual.

1.03 SUBMITTALS

- A. General: Comply with Section 20 05 00 and Division 01.
- B. Preliminary O&M: Submit preliminary review O&M manual for review.
- C. Final O&M: Submit Final O&M manuals per Division 01.

PART 2 PRODUCTS

2.01 GENERAL

A. General Contents: A maintenance manual shall be compiled containing maintenance and operating information and maintenance schedules for all project mechanical systems. See Division 01 for quantities, organization, format, and other requirements; meet additional requirements as specified herein.

2.02 SUBMITTAL DATA AND TECHNICAL O&M DATA

- A. Submittal Data:
 - 1. General: Provide a copy the submittal data (clearly identified and marked to suit each item). Note: The submittals are not retained by the Owner and a copy is therefore required in the O&M.
 - 2. Product Data: Manufacturer's technical product data, with manufacturer's model number, description of the equipment, equipment capacities, equipment options, electrical power voltage/phase, special features, and accessories. Label data sheets with same designation as used on contract documents. Provide for all items requiring maintenance and for items that may require replacement over a 30-year period or be revised due to an Owner building improvement. This includes plumbing fixtures, valves, plumbing specialties, equipment, equipment, air outlets/inlets, dampers, etc.

- B. Technical O&M Data: Provide for each equipment or item requiring maintenance. Label O&M data to clearly indicate which equipment on the project it applies to (use same designation as used in the Contract Documents). Data to include:
 - 1. Manufacturer's operating and maintenance manuals and instructions.
 - 2. Itemized list of maintenance activities and their scheduled frequency.
 - 3. Maintenance instructions for each maintenance activity.
 - 4. Manufacturer's parts list.
 - 5. Manufacturer's recommended lubricants.
 - 6. Size, quantity and type of fuses (as applicable).
- C. Sources: Provide names, addresses, and phone numbers for local manufacturer's representative, service companies, and parts sources for mechanical system components.
- D. Start-Up Reports: Include copies of all equipment and system start-up reports.
- E. Balancing Report: Include a full copy of the balancing report under a dividing tab for the specification section (or building system) where this work is specified. Where balancing is provided by others, obtain from the balancer a copy of the report to insert in the O&M's.

2.03 MAINTENANCE SCHEDULES

- A. General: Provide Maintenance schedules with an itemized list of maintenance activities and their scheduled frequency (i.e., weekly, monthly, semi-annually, etc.) for item requiring maintenance.
- B. Special Maintenance: List any critical maintenance items or areas requiring special attention.
- C. Start-Up/Shut-Down: Provide normal start-up, operating, and shut-down procedures; emergency shut-down procedures; and (where applicable) seasonal shut-downprocedures.

PART 3 EXECUTION

NOT USED

SECTION 20 05 00 COMMON WORK RESULTS FOR MECHANICAL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Division 21 Fire Suppression.
- C. Division 22 Plumbing Systems.
- D. Division 23 Heating, Ventilation, and Air Conditioning (HVAC) Systems.

1.02 WORK INCLUDED

- A. General Mechanical System Requirements.
- B. Mechanical System Motors.
- C. Identification and Labeling.

1.03 DEFINITIONS

- A. Abbreviations, Terms and Symbols: Where not defined elsewhere in the Contract Documents, shall be as defined in RS Means Illustrated Construction Dictionary, Fourth Addition and in the ASHRAE Handbook of Fundamentals, latest edition.
- B. "As required" means "as necessary to form a safe, neat, and complete working installation (or product), fulfilling all the requirements of the specifications and drawings and in compliance with all codes."
- C. "Concealed" means "hidden from view" as determined when areas are in their final finished condition, from the point of view of a person located in the finished area. Items located in areas above suspended ceilings, in plumbing chases, and in similar areas are considered "concealed." Items located in cabinet spaces (e.g. below sinks) are not considered concealed.
- D. "Coordinate" means "to accomplish the work with all others that are involved in the work by: directly discussing the work with them, arranging and participating in special meetings with them to discuss and plan the work being done by each, obtaining and completing any necessary forms and documentation required for the work to proceed, reaching agreement on how parts of the work performed by each trade will be installed relative to each other both in physical location and in time sequence, exchanging all necessary information so as to allow the work to be accomplished with a united effort in accordance with the project requirements".
- E. "Finished Areas" means "areas receiving a finish coat of paint on one or more wall surface."

- F. "Mechanical", where applied to the scope of work, includes all project plumbing systems, HVAC systems, and controls for these systems and all work covered by specification Divisions 20, 21, 22, and 23. Such work is shown on multiple drawings and is not limited to a particular set of sheets, or sheets prefaced with a particular letter.
- G. The term "related documents" (as used at the beginning of each specification section), and the Specification Divisions and Sections listed with it, is only an indication of some of the specification sections which the work of that section may be strongly related to. Since all items of work relate to one another and require full coordination, all specification sections, as listed in the Table of Contents, shall be considered as being "related documents", and shall be considered (by this reference) in the same manner as if they had all been listed under the term "related documents" in each specification section.
- H. "Work included" (as used at the beginning of each specification section), and the items listed with it, is only an indication of some of the items specified in that Section and is in no way limiting the work of that Section. See complete drawings and specifications for all required work.
- I. "Verify" means "Contractor shall obtain, by methods independent of the project Architect/Engineer and Owner, the information noted, and the information needed to properly perform the work". Where used as "verify existing" the reference is to all existing items related to the work (i.e. piping systems, duct systems, electrical power, controls, structural conditions, space available, building construction type, etc.); the "verify" definition shall include "Confirm by means independent of any existing field labeling and independent of the Architect/ Engineer and Owner what the existing piping (or duct) system contains, sizes, what the flow direction is, what normal pressures/temperatures are, what other systems and areas the piping (or duct) is interconnected to; what the existing control voltages/signal types are by direct measurement; what the existing electrical power voltages and phases are by direct measurement; and additional field verification and coordination to ensure that compatible products are provided, correct connections made, and all work performed to allow for fully functioning systems." "Means independent of existing field labeling" shall include methods such as: the use of exterior pressurized sources to pressurize piping system lines, use of flow tests with dyes, physical tracing of piping and all connections to, electronic detection methods, electronic/electric line tracing, electrical measurements, physical disassembling of system, excavation or uncovering of concealed systems, use of insertion cameras and similar efforts.
- J. "Substitution": As applied to equipment means "equipment that is different than the 'Basis of Design' equipment scheduled on the drawings (or otherwise indicated in the contract documents)".

1.04 GENERAL REQUIREMENTS

A. Scope: Furnish all labor, materials, tools, equipment, and services for all mechanical work. This section applies to all Division 20, 21, 22, 23 specifications and to all project mechanical work. B. General: All work shall comply with Division 00, General Conditions, Supplementary Conditions, Division 01, and all other provisions of the Contract Documents.

C. Code:

- 1. Compliance: All work shall be done in accordance with all applicable codes and ordinances. Throughout the Project Documents, items are shown or specified in excess of code requirements; in all such cases, the work shall be done so that code requirements are exceeded as indicated. Comply with code accessibility requirements.
- 2. Documentation: Maintain documentation of all permits and code inspections for the mechanical work; submit documentation showing systems have satisfactorily passed all AHJ inspections and requirements.
- 3. Code Knowledge: Contractor and workers assigned to this project shall be familiar and knowledgeable of all applicable codes and ordinances. Code requirements are typically not repeated in the Contract Documents. By submitting a bid, the Contractor is acknowledging that the Contractor and workers to be utilized on this project have such knowledge.
- 4. Proof of Code Compliance: Prior to final completion, satisfactory evidence shall be furnished to show that all work has been installed in accordance with all codes and that all inspections required have been successfully passed. Satisfactory evidence includes signed inspections by the local code authority, test lab results, qualified and witnessed field tests, and related acceptance certificates by local code authorities, and field notes by the Contractor as to when all inspections and tests occurred.
- D. Complete Systems: Furnish and install all materials, appurtenances, devices, and miscellaneous items not specifically mentioned herein or noted on the drawings, but which are necessary to make a complete working installation of all mechanical systems. Not all accessories or devices are shown or specified that are necessary to form complete and functional systems.
- E. Review and Coordination:
 - 1. General: To eliminate all possible errors and interferences, thoroughly examine all the Drawings and Specifications before work is started and consult and coordinate with each of the various trades regarding the work. Such coordination shall begin prior to any work starting and continue throughout the project.
 - 2. Suppliers: Suppliers of products shall review the documents to confirm that their products are suitable for the application and that all manufacturers' requirements and recommendations have been satisfactorily addressed in the Contract Documents. Where not addressed the supplier shall notify bidders and the Engineer prior to bidding to resolve any issue or include in their bid an adequate amount to resolve the issue.
- F. Conflicts and Discrepancies: Notify the Architect/Engineer of any discrepancies or conflicts before proceeding with any work or the purchasing of any materials for the area(s) of conflict

until requesting and obtaining written instructions from the Architect/Engineer on how to proceed. Where conflicts occur, the most expensive and stringent requirement (as judged by the Architect/Engineer) shall prevail. Any work done after discovery of such discrepancies or conflicts and prior to obtaining the Architect/Engineer's instructions on how to proceed shall be done at the Contractor's expense.

- G. Drawings and Specifications: Drawings and specifications are complementary and what is called for in either is binding as if called for in both. The drawings are diagrammatic and show the general arrangement of the construction and therefore do not show all offsets, fittings and accessories which are required to form a complete and operating installation. Mechanical work is shown on multiple drawings and is not limited to a particular set of sheets, or sheets prefaced with a particular letter.
- H. Offsets/Fittings:
 - Piping Systems: Include in bid all necessary fittings and offset to completely connect up all systems, maintain clear access paths to equipment, and comply with all project requirements. Offsets are required to route piping around building structural elements, roof slopes, mechanical systems, electrical systems, and numerous other items. Due to the schematic nature of the plans such offsets are typically not shown. The contractor is responsible to determine the quantity of offsets and fittings required, and the labor involved. No added payment or "extras" will be granted for the Contractor's failure to correctly estimate the number of offsets and fittings, and labor required. Contractor is advised that equipment and fixture connections may require more than 20 elbows per plumbing fixture and coil per pipeline.
 - 2. Duct Systems: Include in bid all necessary fittings, offsets, and transitions to completely connect all systems, maintain clear access paths, and comply with all project requirements. Offsets are required to route ducts around building structural elements, roof slopes, mechanical systems, electrical systems, and numerous other items. Due to the schematic nature of the plans such offsets are typically not shown. The contractor is responsible to determine the quantity of offsets and fittings required, and the labor involved. No added payments or "extras" will be granted for the Contractor's failure to correctly estimate number of offsets, fittings, transitions and labor required. Contractor is advised that transitions are required at connections to all equipment, to all air inlets/outlets, crossing of beam lines, at crossing with piping, and similar locations.
- I. Design: The level of design presented in the documents represents the extent of the design being furnished to the Contractor; any additional design needed shall be provided by the Contractor. All designs by the Contractor shall be performed by individuals skilled and experienced in such work, and where required by local code (or elsewhere in the documents) shall be performed by engineers licensed in the State where the project is located. Include in bid the costs of all such project design, including engineering, drafting, coordination, and all related activities and work. Such designs services are required for many building systems; including but not limited to ductwork at equipment, piping at fixtures and equipment, hanger/support systems, attachment methods to mechanical systems/components, attachment

methods to building, temporary duct/piping systems, mechanical offsets/adjustments to suit other system, seismic anchors, and for methods/means of accomplishing the work. Where design or performance criteria to be met is not stated (or is unclear), develop proposed criteria (based on code, similar projects, and related data) and submit the proposed criteria for review prior to performing full design work.

- J. Special Tools: Furnish to the Owner one complete set of any and all special tools such as odd size wrenches, keys, etc. (Allen wrenches are considered odd), which are necessary to gain access to, service, or adjust any piece of equipment installed under this contract. Each tool shall be marked or tagged to identify its use. Submit a written record listing the special tools provided, date, and signed by the Owner's representative receiving the tools.
- K. Standards and References: Shall be latest edition unless a specific edition, year, or version is cited.
- L. Warranties:
 - General: Products and workmanship shall be warranted to be free from all defects, capable of providing satisfactory system operation, and conforming to the requirements of the Contract Documents. Include in the project bid all costs associated with project warranties to ensure that the warranty extends for the required period; possible project delays and failure by others to complete their work may cause the start of the warranty period to be delayed. The Contractor shall be responsible for increasing the warranty dates by corresponding amounts to provide the required warranty periods.
 - Basic Project Warranty: As described in the General Conditions, Supplementary Conditions, and Division 01. See individual specification sections for specific warranty requirements. Start date and duration are as indicated in General Conditions, Supplementary Conditions, and Division 01. Where not indicated otherwise, the basic project warranty shall start at project substantial completion and be for one year.

1.05 SUBSTITUTIONS

- A. General: See Division 00 and 01 for information and requirements regarding substitutions. Manufacturers not scheduled on the plans or listed as "Acceptable Manufacturers" require prior approval and shall submit a substitution request form (see Division 01 for requirements and limitations). See Paragraph 2.01 this specification section regarding "Acceptable Manufacturers".
- B. Redesign:
 - 1. The Contract Documents show design configurations based on particular manufacturers. Use of other manufacturers' products (i.e. substitutions) from what is shown (or specified) may require redesign of mechanical, plumbing, controls, fire protection, electrical, structural, and general building construction to accommodate the substitution.
 - 2. Review the installation requirements for substitutions and provide redesign of all affected construction. The redesign shall be equal or superior in all respects to the

Architect/Engineer's design (as judged by the Architect/Engineer), including such aspects as equipment access, ease of maintenance, utility connection locations, unit electrical requirements, noise considerations, unit performance, and similar concerns.

- 3. Redesign shall be done by the Contractor and shall meet the requirements and have the approval of the Architect/Engineer prior to beginning work.
- C. Construction Modifications: Provide all required construction modifications to accommodate the substituted products; this includes all mechanical, plumbing, controls, fire protection, electrical, structural, and general building construction. Construction modification shall comply with code, specifications, and be equal to designed construction.
- D. Costs: Cost of redesign, construction costs, and all additional costs incurred to accommodate substituted equipment shall be borne by the Contractor.
- E. Submittals: In addition to other required submittals, submit shop drawings showing the redesign for substituted equipment; submittal shall include installation plans and sections, connecting services (i.e. ducts, piping, electrical) locations and routing, required service clearances, and related installation details. Submit data required by other disciplines to allow review of the impact of the substitution (i.e. weights, electrical).

1.06 QUALITY ASSURANCE

- A. Experience: All work shall be performed by individuals experienced and knowledgeable in the work they are performing and experienced with the same type of systems and building type as this project. By virtue of submitting a bid, the Contractor is acknowledging that workers to be utilized on this project have such experience and knowledge. Upon request of the Engineer, submit resumes showing the work history, training, and types of projects worked on, for individuals assigned to this project.
- B. Code: Utilize workers experienced and knowledgeable with codes pertaining to their work; verify code compliance throughout the project.
- C. ASME: All pressure vessels, pressure vessel safety devices, and pressure vessel appurtenances shall comply with the standards of and bear the stamp of ASME.
- D. Quality Assurance Checks: Prior to ordering products and making submittals, confirm the following for each:
 - 1. General: Product is suitable for the intended purpose and complies with the Contract Documents.
 - 2. Manufacturer: Product's manufacturer is listed as an acceptable manufacturer in the Contract Document's, or a substitution request (where allowed) has been submitted and the manufacturer has been listed as acceptable.
 - 3. Electrical (for products requiring electrical power):

- 4. Product is for use with the voltage/phase as indicated on the electrical plans (or for the electrical circuit the item will be connected to).
- 5. The product's ampacity requirements (MCA) do not exceed that indicated on the electrical plans (or for the electrical circuit the item will be connected to).
- 6. Where a product is a replacement for an existing product, and is to be re-connected to an existing circuit, the existing voltage/phase has been field verified and product matches voltage/phase available.
- 7. Weight: Product's weight is no greater than that indicated.
- 8. Space Verification: Product will fit in the space available, and along the path available to install the item, will have adequate service clearances, and will not impede on any clearances required for other items in the space the item will be located.
- 9. Installation: A suitable method for installing the product has been selected which meets the project schedule and other requirements.
- 10. Anchorage/Support: The manufacturers recommended method of anchorage and support is consistent with the method indicated in the Contract Documents, and the item has provisions suitable for such anchorage/support.
- 11. Lead Time: The product's fabrication, shipping, and delivery period meets the project schedule requirements.
- 12. Substituted Equipment: Where equipment is not the basis of design confirm all requirements for substituted equipment have been met and shop drawings of construction revisions have been (or are being) prepared.
- 13. Controls: Item is compatible with the controls it will be connected to and has been coordinated with the firm providing the project control work to provide the specified (or required) sequence of operation.
- 14. Listing: Item is Listed when required to be as such. And if the item is to be installed as part of a Listed system or assembly, it is compliant with the Listing of the overall system or assembly.
- 15. Existing Buildings/Systems: Product size, weight, connecting services (i.e. electrical, controls, power, plumbing, etc.) are configured and suitable for existing items they connect to or interface with.

1.07 SUBMITTALS

- A. General:
 - 1. See Division 00 and 01 for submittal requirements.

- 2. By making a submittal (of shop drawings or product data) the Contractor represents that they have reviewed them for compliance with the Contract Documents, including detailed connection and installation features and requirements, and that the submitted item is their proposed method of compliance with the Contract Documents.
- 3. Perform no portion of the work for which the Contract Documents require a submittal until the respective submittal has been made, the review completed by the Architect/Engineer, and all issues resolved.
- 4. The Owner and Architect/Engineer are depending on the submittal process as a final review and confirmation of materials and various aspects of the work, and may make changes in the project due to information contained in the submittals and with the understanding that the opportunity to make changes exist until submittals are made and the review is completed. The Contractor is responsible for added costs which may be incurred if work is performed which limits the Owner the opportunity to make such changes (e.g. work done prior to a submittal being made or the submittal review being completed).
- 5. Submittals shall be logically organized, neat and legible. Submittals to include:
 - a. Name of project.
 - b. Owner's name.
 - c. Specification section reference and paragraph (or drawing number or detail) submittal is for.
 - d. Contractor name and contact information.
 - e. Subcontractor name and contact information.
 - f. Date of submittal.
- 6. Electronic Files: Submittals that are sent electronically shall have a separate .pdf file corresponding to each specification section. Files shall be named with the specification number and title.
- 7. Architect/Engineer's actions on items submitted for review:
 - a. Authorizing purchasing, fabrication, delivery, and installation:
 - 1) "No Exceptions Taken"
 - 2) "Make Corrections Noted, No Resubmittal Required". At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
 - b. Not authorizing purchasing, fabrication, delivery, and installation:

- 1) "Make Corrections Noted; Revise and Resubmit". Resubmit revised item, with review notations acknowledged and incorporated. Non-responsive resubmittals may be rejected.
- 2) "Rejected". Submit item complying with requirements of Contract Documents.
- B. Quality Assurance: By submitting an item for review, the Contractor is claiming that all "Quality Assurance Checks" (see paragraph 1.06 this specification Section) have been performed and satisfactorily passed and no further comment from the submittal reviewer is required for the "Quality Assurance Checks".
- C. Variations: Only variations that are specifically identified as described herein will be considered. Provide with the submittal (in addition to other information required): description of the proposed variation, entity who is proposing the variation, why the variation is being proposed, any cost changes associated with the variation, and any other pertinent data to allow for review. Failure to submit information on the variation as described will result in the submittal review being conducted without considering the variation.
- D. Product Submittals Information Required:
 - 1. Manufacturer's professionally developed documents, containing product description, model number, and illustrations. Mark clearly to identify pertinent information and exact model and configuration being submitted.
 - 2. List of accessories and options provided with product.
 - 3. Product dimensions and clearances required.
 - 4. Product weight.
 - 5. Submittal identified with product name and symbol (as shown on the drawings or written in the specifications) and specification Section and paragraph reference.
 - 6. Performance capacity and characteristics showing compliance with the Contract Documents.
 - 7. Manufacturer's and local manufacturer's representative names, addresses, and phone numbers.
 - 8. For equipment requiring piping or duct connections:
 - a. Type of connections required.
 - b. Size and locations of connections.
 - 9. For electrically operated equipment:
 - a. Number and locations of electrical service connections required.

- b. voltage required.
- c. Fuse or circuit breaker protection requirements.
- d. Motor starter requirements; if motor starter is furnished with the equipment, submit product information on motor starter.
- 10. For equipment requiring control connections:
 - a. Type of control signals required.
 - b. Control communication protocol.
 - c. Information on control devices furnished with equipment.
 - d. Location of control connections.
- 11. Manufacturer's installation instructions.
- 12. See each specification Section for additional submittal requirements.
- 13. Edited Content: Submittals shall indicate the equipment and options that are to be provided. Copies of an unedited catalog will be rejected. Pages/items that are not applicable shall be deleted prior to submittal to the Engineer.
- E. Re-Submittals: If submittals are marked 'Rejected' or 'Revise and Resubmit', the Contractor shall revise the submittal to satisfy the comments or conform to project requirements, and submit to the Engineer for review. Only those items that were rejected or required a resubmittal will be reviewed by the Engineer; All other items will not be reviewed. All re-submittals shall be at least one of the following:
 - 1. Provide a 'Re-Submittal Summary Sheet' which indicates how each comment was addressed (it is acceptable to add the responses to a copy of the original submittal review comments).
 - 2. Cloud (or otherwise clearly identify) the revised portions to indicate what is different from the original submittal.

1.08 RECORD DOCUMENTS

A. Field Record Drawings: Maintain a set of full size contract plans at the project site upon which all changes from the as-bid plans are noted. Plans shall be maintained clean, dry and legible; with information recorded concurrent with construction progress. These plans shall also include actual locations (with dimensions) of all underground and concealed mechanical systems. Connection points to outside utilities shall be located by field measurements and so noted on these record drawings. All addenda, change order, field orders, design clarifications, request for information, and all other clarifications and revisions to the plans shall also be made a part of these record drawings.

Label drawing "As-Builts" with date, name of Contractor, and name of individual overseeing the work.

1.09 PRODUCT HANDLING, PROTECTION AND MAINTENANCE

- A. Protection:
 - 1. Protect all products from contamination, becoming unclean, and from damage of any kind and whatever cause; when being handled, in storage, and while installed, until final project acceptance.
 - 2. Completely cover fixtures, motors, control panels, equipment, and similar items to protect from becoming unclean and damage of any kind.
 - 3. Protect premises and work of other trades from damage due to Mechanical work.
- B. Openings: Cap all openings in pipe, ductwork and equipment to protect against entry of foreign matter until all work that could cause unclean conditions or damage is complete (including work that has dust or fumes associated with it). Caps shall be of sufficient strength and seal integrity to prevent entry of water or fumes for the most extreme conditions they may be exposed to (i.e. high velocity water spray, high winds, concrete splash, etc.)
- C. Storage: Provide properly conditioned and sheltered storage facilities for products to prevent damage of any kind and to maintain new condition. Provide adequate venting arrangements to avoid condensation damage.
- D. Operation and Maintenance:
 - General: Inspect products periodically to confirm conditions and maintenance needs. Keep records of inspections and (upon request) forward to the Architect/Engineer prior to project final acceptance. Operation and Maintenance shall be in accordance with manufacturer's written procedures and recognized best maintenance practices. Keep records of maintenance and (upon request) forward to the Architect/Engineer prior to project final acceptance.
 - 2. Stored Products: Provide maintenance (i.e. equipment rotation, lubrication, flush, cleaning, etc.) and inspection on products while stored to maintain new condition.
 - 3. Installed Products: Provide maintenance and inspection of products and operate mechanical systems until project final acceptance or specified Owner Instruction has been provided (whichever is later). Maintenance shall include all labor and materials and all manufacturers' recommended maintenance (i.e. strainer cleaning, filter changes, bearing lubrication, belt tensioning, etc.). In addition to scheduled maintenance, review all equipment periodically to allow detection of improper operation or any special

maintenance needs; review shall be consistent with best practices for the product but in no case less than a site visit every two weeks. Document all maintenance activities.

E. Damaged Products: Damaged products shall be replaced with new. Where damage is limited to paint (or similar finish), the product may remain if the finish is restored to a new condition (as judged by the Architect/Engineer).

1.10 JOB CONDITIONS

- A. Special Requirements:
 - 1. Maintain emergency and service entrance usable to pedestrian and vehicle traffic at all times. Where trenches are cut, provide adequate bridging for traffic.
 - 2. Coordinate startup and shutdown of all mechanical systems and utilities with related trades and the Owner's representative.
 - 3. Coordinate all construction activities with the Owner's Representative and cooperate fully so as to minimize conflicts and to facilitate Owner usage of the premises during construction.
 - 4. Provide temporary services to occupied areas to accommodate Owner's use during construction. All temporary work shall comply with same specifications as for new work and be of same quality.
- B. Downtime Restrictions:
 - 1. Contractor shall notify the Owner at least 72 hours in advance of any intended shut-down of any building services or systems and obtain Owner approval prior to proceeding.
 - 2. Electrical power to the building shall not be interrupted at any one time for more than 15 minutes.
- C. Schedule of Work: Arrange work to comply with schedule of construction, and so as not to violate any downtime restrictions, and to accommodate the Owner's scheduled use of the premises during construction.

1.11 REFERENCES

A. ASME A13.1: Scheme for the Identification of Piping Systems.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. General: Any reference in the Specifications or on the Drawings to any article, device, product, material, fixture, form or type of construction by manufacturer, name, make, model number, or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition. The manufacturers listed as Acceptable Manufacturers may

bid the project for the items indicated without submitting a substitution request; however that does not relieve the products from having to comply with the Contract Documents.

- B. Substitutions: Products by manufacturers listed as "Acceptable Manufacturers" (other than those listed as the "Basis of Design") are considered substitutions and shall comply with the requirements for substitutions. See Paragraph titled "Substitutions" in Part 1 of this specification section.
- C. Considerations: In reviewing a manufacturer for acceptance, factors considered (as compared to the specified item) include: engineering data showing item's capacity, performance, proper local representation of manufacturer, likelihood of manufacturer's future local support of product, service availability, previous installations, previous use by Owner/Engineer/Architect, product quality, availability/quality of maintenance and operation data, electrical requirements, capacity/performance, acoustics, physical dimensions, weight, items geometry and access requirements, utility needs, and similar concerns.
- D. Limitations of the Term "Acceptable Manufacturer": The listing of a manufacturer as an Acceptable Manufacturer does not necessarily mean that the products of that manufacturer are equal to those specified. The listing is only an indication of those manufacturers which have represented themselves as being capable of manufacturing, or have in the past manufactured, items equal to those specified. The burden to review products to confirm equivalency with the specified products is on the Contractor. The Architect/Engineer shall be the final judge as to whether an item is equal to that specified.
- E. Quality: Products provided by Acceptable Manufacturers shall be equal to or superior to the specified manufacturer's item in function, appearance, and quality, and shall fulfill all requirements of the Contract Documents. The Architect/Engineer shall be the judge as to whether an item meets these requirements or not.
- F. Manufacturer: To be considered as being made by a particular manufacturer, the product must be made directly by the manufacturer and have the manufacturer's name (or nameplate with name) affixed to the product (or on the product container where direct labeling is not possible). Example: manufacture "A" is listed as an acceptable manufacture; manufacturer "B" is not listed as an acceptable manufacturer; manufacturer "A" owns "B"; products from "B" do not qualify as being made by an acceptable manufacturer by virtue of ownership.

2.02 PRODUCTS - GENERAL

A. Standard Products: Products shall be standard products of a manufacturer regularly engaged in the manufacture of such products. The standard products shall have been in satisfactory commercial or industrial use for two years prior to bid opening. The two year use shall include applications of equipment and materials under similar circumstances and of similar size. The two years' experience must be satisfactorily completed by a product which has been sold or is offered for sale on the commercial market through advertisements, manufacturers' catalogs, or brochures. Except that equipment changes are made solely to satisfy code requirements, to improve unit efficiency, or to comply with unique project requirements are not required to have two year prior operation.

- B. Latest Design: Products shall be the latest design and version available from the manufacturer, including software. Discontinued products shall not be used.
- C. Service Support: Qualified permanent service organizations for support of the equipment shall be located convenient to the equipment installation and able to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.
- D. Manufacturer's Nameplate: Equipment shall have a manufacturer's nameplate bearing the manufacturer's name, address, model number, serial number, and additional information as required by code. Nameplate shall be securely affixed in a conspicuous place. The nameplate of the distributing agent will not be acceptable. Nameplate shall be of durable construction, easily read, with lettering minimum size 12 font.
- E. Compatibility: All components and materials used shall be compatible to the conditions and materials the items will be exposed to. All items exposed to the weather shall be galvanized, or be of stainless steel or similar corrosion resistant material.
- F. Sizes: Sizes indicated for products manufactured to standardized sizes (e.g. pipe, pipe fittings, valves, material gauges, etc.) are minimums. During bidding confirm that the sizes are available and meet project requirements. Where indicated sizes are not available provide the next larger available size; confirm this larger size will suit the construction and meet Contract Document requirements prior to ordering. Such size revisions are subject to Engineer's review; indicate size revisions on the product submittal and why the size is being revised.
- G. Non-Specified Items: Materials shown on the drawings but not specified shall be provided as shown and as required to suit the application illustrated and intended and shall be of commercial quality, consistent with the quality of similar type items provided on the project. Not all items shown on the drawings necessarily have a corresponding specification; such items shall be provided per this paragraph and so as to provide complete, finished, fully functioning mechanical systems.
- H. Weights: Do not exceed the weights shown unless added structural supports are provided. Such supports shall meet the requirements of the project Structural Engineer. The Contractor shall bear all costs for all redesign and added supports to accommodate heavier equipment. The Contractor shall reimburse the Engineer for all time associated with all review and analyses regarding the use of equipment heavier than that indicated.
- I. Temperature/Pressure Rating: All materials and components furnished shall be suitable for the temperature and pressures they will be exposed to. Contractor shall consider possible operating modes to ensure proper material ratings.
- J. Standardization: All products of the same type shall be by the same manufacturer and have the same characteristics and features to allow for Owner's standardization.
- K. Model Numbers: Any reference to a manufacturer's "model number" is a reference to a manufacturer's series number or type of product, and is not a complete "model number" in

having all the necessary numbers/letters to convey all of the features, accessories, and options that are required. These series numbers are only meant to convey a type of product that may meet the project requirements. Where conflicts or discrepancies occur regarding a listed manufacturer's series or "model" number and specified capacities or features, the more stringent and expensive shall prevail.

L. Application and Suitability: Products shall be designed and intended for: commercial application, for the use indicated, and be suitable for the operating conditions they will be exposed to. Firms supplying the products shall review the documents and related site and environmental data to confirm compliance. By making product submittals and using products they are being represented as appropriate for the project and application shown.

2.03 ELECTRICAL

- A. General: All electrical devices, wiring, products, and work shall comply with the Division 26 specifications and code. See drawings for building occupancy type, types of construction, and areas which may require special wiring methods or other electrical work. Electrical disconnects shall be accessible as required by code, and shall not require removal of screens, equipment, or other items to access.
- B. Equipment: All equipment requiring power shall be factory wired to an equipment mounted junction box (or an accessible compartment with power terminals or electrical device) arranged to allow for connection of electrical power.
- C. Overcurrent protection: Circuit breakers, circuit breaker disconnects, fuses, and other current limiting devices indicated to be provided, shall be rated to suit the maximum overcurrent rating of the item served, and have other ratings, as required by code. Circuit breakers for HVAC and refrigeration unit equipment shall be UL listed by HACR type.
- D. Product Certification (Listing): Products which require connection to electrical power shall be certified (i.e. listed) by a Nationally Recognized Testing Laboratory (NRTL) and be labeled (in a conspicuous place) with such certification (or certification mark). Certification shall comply with code, OSHA Standards, and Authority Having Jurisdiction (AHJ) requirements. NRTL's shall be recognized as such by OSHA and the AHJ. Certification shall be for the complete assembly (approval of individual components is not acceptable). Field evaluations to obtain certification shall be performed by accredited product testing laboratories acceptable to the AHJ and Engineer, be performed in accordance with code, NFPA 791, recognized practices, and be labeled to identify the certification.

2.04 MOTORS

A. General: Where a piece of equipment specified includes an electric motor, the motor shall be factory installed and mounted. Motor starters and motor electrical disconnect switches shall be provided by the Contractor doing the work of the Section where the item was specified, unless specifically shown to be provided by Division 26 (or another Division). Wiring from the motor-to-motor starters and to electrical disconnects shall be by the Contractor doing the work of the Section where the item was specified, unless specifically shown to be provided by Division 26 (or another Division). Wiring from the motor-to-motor starters and to electrical disconnects shall be by the Contractor doing the work of the Section where the item was specified, unless specifically shown to be provided by Division 26.

- B. Acceptable Manufacturers: General Electric, TECO-Westinghouse, Reliance, Gould, Century, Baldor, U.S. Motors, Marathon, and acceptable manufacturers for the equipment (see individual specification sections).
- C. Type: Motor type shall comply with code and applicable standard requirements and be configured to suit the application. Motors located indoors shall be open frame, drip-proof type, unless indicated otherwise. Motors located outdoors exposed to weather shall have corrosion resistant finish and shall be totally enclosed fan cooled (TEFC) or totally enclosed non-ventilated (TENV) type, unless indicated otherwise.
- D. Listing: All motors shall be UL listed.
- E. Efficiency: Motor efficiencies shall comply with code. Fractional horsepower motors shall be the electronically commutated (EC) type with speed control where noted and where non-EC motors are not available which comply with code efficiency requirements. Motor power factor shall comply with code, local utility requirements, and as indicated. Provide added power factor correction devices as necessary to comply.
- F. Sizing: Motors shall not be smaller than indicated and of adequate size to start and drive the respective equipment when handling the quantities specified without exceeding the nameplate full load current at the conditions indicated and for the expected operating conditions. If it becomes evident that a motor furnished is too small to meet these requirements as a result of the Contractor using substituted equipment or having revised the system arrangement, the Contractor shall replace it with a motor of adequate size at no additional cost to the Owner. Contractor shall also arrange with the Electrical Contractor to increase the size of the wiring, motor starter and other accessories as required to serve the larger motor at no additional cost to the Owner.
- G. Service Factor: Minimum 1.15.
- H. Variable Frequency Drive (VFD) Applications: Motors used with Variable Frequency Drives (VFD's) shall be rated for such use per IEEE standards and have shaft grounding protection.
- I. EC Motors (ECM):
 - General: Electronically commutated type with integral inverter to convert AC power (of voltage/phase indicated) to DC power, and solid state circuitry to vary output power and speed of motor. Motor shall have permanently lubricated bearings with an L10 life of 100,000 hours at expected operating conditions. Motor shall have rotor position and rotation detection as required for operation.
 - 2. Speed Range: Motor speed shall be controllable down to 25% of full speed.
 - 3. Manual Speed Control: Provide manual speed adjustment dial for motor speed control. Dial shall be motor mounted unless indicated otherwise, operable by a screwdriver or by hand. Motor mounted controls shall be factory wired. Remote mount dials shall be hand operable (i.e. no tools required), shall be for mounting on a standard 2 x 4 electrical junction box, and be able to be located up to 100 feet remote from the motor.

Motor control wiring for remote mount dials shall be factory wired from the motor to an equipment mounted junction box (with field supplied wiring from this J-box to the remote dial).

4. Control Power: Provide with integral transformer, factory wired, as needed to power motor controls. Locate transformer at motor or equipment.

2.05 IDENTIFICATION AND LABELS

- A. General: All piping, valves, and mechanical equipment shall be labeled. Labels in concealed accessible spaces shall be reviewed and verified by Architect/Engineer prior to being concealed.
- B. Valves:
 - Labels: Laminated plastic or phenolic material, at least 1/16-inch thick, with black surface layer and white (unless other color indicated) sub-layer for letter engraving to expose sublayer. Labels shall not be less than 3" x 1" in size. Label shall be pre-drilled at one end for attachment to valve. Attach to valve with No. 6 polished nickel-steel jack chain of sufficient length to allow label to hang free.
 - 2. Lettering: Engrave label with valve size, name of system served (cold water, heating water supply, chilled water supply, etc.) and purpose of valve. Lettering size 3/16-inch, except where needed to be smaller to fit label size.
 - 3. Application: Labels shall be installed on all valves except valves at hydronic system coils and equipment where the valve purpose is readily obvious.
- C. Equipment:
 - Labels: Laminated plastic (or phenolic) material, 1/16-inch thick, with black surface layer and white (unless other color indicated) sub-layer, with engraving through to expose white sub-layer. Minimum 2-inch height (unless indicated otherwise or required due to equipment size) with length to contain required lettering. Label shall be pre-drilled and be mechanically fastened to the equipment. Prior to making labels, submit a list of all proposed labels.
 - 2. Lettering: All caps, engraved on label, with equipment designation (same designation as used on Contract Drawings, e.g. HVAC-101, EF-22, CP-1A). Air handling equipment (i.e. VAV terminal units, fans, etc.) labels shall include the room names and numbers or area of building served (use final installed room designations). Where systems serve portions of the building (i.e. wings or floors), include on the label the area served. Lettering shall be in multiple rows, with equipment label on top row. Equipment lettering to be 5/8-inch high; area served lettering to be 3/8-inch high (except that smaller lettering may be used if necessary to fit label size).
 - 3. Application: All scheduled mechanical equipment shall be labeled. The label shall be located on a side of the equipment so as to be easily read, with the marking visible to a

person standing at the access level near the equipment (assuming any necessary access

to a concealed unit has been made).

- D. Electrical Devices:
 - Labels: Minimum 1/4-inch high (unless indicated otherwise) lettering, all caps, engraved on laminated plastic or phenolic material, at least 1/16-inch thick. Laminated plastic (or phenolic) shall have black surface layer and white (unless other color indicated) sub-layer, with engraving through to expose white sub-layer. Label shall be pre-drilled and be mechanically fastened to the item; where mechanical fastening is not possible use 3M VHB double sided specialty tape No. 4945. Prior to making labels, submit a list of all proposed labels.
 - 2. Lettering: Label shall identify the item served (using the same designation as indicated on the Contract Drawings), the source of power (by panel and circuit breaker), and comply with code.
 - Application: Variable frequency drives, motor starters, disconnects, contactors, relays and similar items which control power to equipment and system components shall be labeled. The label shall be located so as to be easily read. See Section 23 09 33 for labeling of low voltage control components.

PART 3 EXECUTION

3.01 GENERAL

- A. Workmanship: Furnish and install products to provide complete and functioning systems with a neat and finished appearance. If, in the judgment of the Architect/Engineer, any portion of the work has not been installed in accordance with the Contract Documents and in a neat workmanlike manner, or has been left in a rough, unfinished manner, the Contractor shall be required to revise the work so that it complies with the Contract Documents, at no increase in cost to the Owner.
- B. Coordination: Coordinate the work with all trades that may be affected by the work to avoid conflicts, allow proper maintenance access, provide required clearances, and to allow for an organized and efficient installation of all systems.
- C. Submittals: Perform no portion of the work for which the Contract Documents require a submittal until the respective submittal has been made, the review completed by the Architect/Engineer, and all issues resolved.
- D. Examination and Preparation: Examine installation conditions and verify they are proper and ready for the work to proceed. Verify compatibility of materials in contact with other materials, and suitability for conditions they will be exposed to. Do not proceed with the work until unsatisfactory conditions have been corrected. Prepare area to accept the work and prepare products for the installation.

- E. Field Conditions: Check field conditions and verify all measurements and relationships indicated on the drawings before proceeding with any work. In verifying existing conditions, the Contractor shall verify by direct physical inspection, complete tracing out of systems, by applying test pressures, by excavation and inspection, use of pipeline cameras, and other suitable absolute certain methods to confirm the actual physical conditions that exist.
- F. Openings and Cutting and Patching in New Construction:
 - 1. Openings General: The General Contractor shall provide all required spaces and provisions in structures of new construction for the installation of work of all other contractors or subcontractors.
 - 2. Coordination: The Contractors doing work subject to Division 20 shall furnish to the General Contractor (in a timely manner) all needed dimensions and locations of openings to allow for these openings to be provided as the construction adjacent to the opening is being done.
 - 3. Cutting and Patching: Cutting and patching of structures in place made necessary to admit work, repair defective work, or by neglect of contractors and subcontractors to properly anticipate their requirements, shall be done by the General Contractor at the expense of the contractors or subcontractors responsible. Work shall be done in a fashion to duplicate the results that would have been obtained had the work been properly sequenced.
 - 4. Patching Materials: Patching shall be with materials of like kind and quality of the adjoining surface by skilled labor experienced in that particular trade.
- G. Openings and Cutting and Patching in Existing Construction:
 - Openings--General: Provide all openings and cutting as needed to accommodate all work. Provide patching to restore all damaged and disturbed areas to pre-construction conditions (or better). The Contractor or subcontractor requiring the opening shall be responsible for making that opening. The opening shall be made by skilled labor experienced in providing openings in the material being penetrated.
 - 2. Areas To Be Cut and Patched: Wherever floors, walls, ceilings, plates, firestops and framing members are cut, these openings shall be substantially reinforced and sealed so as to maintain the strength and sealing ability of the element equal to that as if it had not been cut. All reinforcement/sealing shall satisfy the Architect/Engineer and comply with the governing codes. Such cut areas shall be patched and restored to a finished condition, equal to adjacent final finished areas that have not been cut.
 - Cutting of Structural Features: Make no cuts or alterations to any structural framing members without explicit consent of the Engineer, and then only under his direction. Locate cuttings so they will not weaken structural components. Cut carefully and only the minimum amount necessary. All required cutting to install material shall be accomplished with the use of saw cutting equipment.

- 4. Patching Materials: Patching shall be with materials of like kind and quality of the adjoining surface by skilled labor experienced in that particular trade.
- H. Cleaning: Clean all products (whether exposed to view or not) of all construction debris, and other materials; grease and oil spots shall be removed with appropriate cleaning agents and surfaces carefully wiped clean. Where cleaning cannot restore items to new conditions, the item shall be replaced with new.

3.02 INSTALLATION

- A. General: Work shall be in accordance with manufacturer's written installation instructions, code, applicable standards, and best construction practices.
- B. Space Verification: Prior to ordering materials verify that adequate space exists to accept the products, along the installation path, and to allow for proper maintenance access. Select products that will fit the space available; some optional materials (i.e. valve types, fitting types, substitutes manufacturer's etc.) may not be suitable. Verification shall be by direct field measurement of the actual space available and use of manufacturer's final submittal dimensions. Where the project involves new construction and long lead items and a time schedule not allowing for such direct field measurements, confirm in writing with all trades associated with building the space that adequate room is available. Review maintenance and service access space required and confirm requirements will be met. No submittals shall be made until such space verification work has been performed, and confirmed that adequate space is available. By virtue of making a submittal that Contractor affirms he has completed this verification.
- C. Installation Locations:
 - General: Unless dimensioned locations for items are shown, select the precise location of the item in accordance with the Contract Documents, coordinated with other trades and item connection locations, and subject to the Architect/Engineer's review. No allowances will be granted for failure to obtain the Architect/Engineer's review, failure to coordinate the work, and failure to comply with Contract Document requirements.
 - 2. Manually Operated Components: Valves, damper operators, on/off switches, keypads, controls, and other devices which are manually adjustable or operated shall be located so as to be easily accessible by a person standing on the floor adjacent to the item. Any such items which are not in the open shall be made accessible through access doors in the building construction. See individual specification sections for additional requirements.
 - 3. Monitoring Components: Gauges, thermometers, instrumentation, and other components which display visual information (i.e. operating conditions, alarms, etc.), shall be located and oriented so as to be easily read by a person standing on the floor. Provide necessary brackets, hangers, remote read devices and accessories as needed. Equipment control panels and graphic displays furnished with equipment (or integral to equipment) shall be located to be easily accessible by a person standing on the floor adjacent to the equipment, and be located between 4-feet and 6-feet above the finished floor.

- 4. Installation Issues: If circumstances at a particular location make the accessible installation of an item difficult or inconvenient, the situation shall be discussed with the Architect/Engineer before installing the item in a location that will result in poor access.
- D. Replacement and Maintenance: Install mechanical equipment to permit easy access for normal maintenance, and so that parts requiring periodic replacement or maintenance (e.g. coils, heat exchanger bundles, sheaves, filters, bearings, etc.) can be removed. Relocate items which interfere with access or revise item installation location, orientation, or means of access.
- E. Building Access Doors:
 - Access doors are typically not shown on the drawings; provide where indicated and where needed to provide access to valves, drains, duct access doors, equipment, control devices, dampers, and similar items requiring service or access that would otherwise be inaccessible. Provide access doors to allow for the future removal of items that would require the removal of permanent building construction (i.e. GWB ceilings, GWB walls, concrete construction, etc.)
 - 2. Select size, quantity, and locations of access doors. Review all drawings, construction materials, and work of other trades in determining access door requirements.
 - 3. Developed dimensioned locations where needed for use by other trades or for coordination purposes.
 - 4. Coordinate access door locations, size, and details with other trades.
- F. Rotating Parts: Belts, pulleys, couplings, projecting setscrews, keys and other rotating parts which may pose a danger to personnel shall be fully enclosed or guarded in accordance with Code, and so as not to present a safety hazard.
- G. Dissimilar Metals: Provide separations between all dissimilar metals. Where not specified in another way, use 10 mil plastic tape wrapped at point of contact or plastic centering inserts.
- H. Equipment Access: Access to equipment is of utmost importance. Contractor shall apply extra attention to the location of pipe and duct routings and in coordinating all work so that equipment access and a clear maintenance pathway to equipment is maintained. Poor maintenance access will not be accepted. Contractor shall note that in essentially all areas piping and ducts need to run with slopes parallel to the roof (or floor above), in necessitating elbows/fittings/transitions at crosses of ducts/pipes and at all connections to mains and branches; and requiring added fittings to maintain a clear walking path.
- I. Pressure Tests: Maintain documentation of all pressure (and leakage) tests performed on systems

3.03 PENETRATION PROTECTION

- A. Exterior and Watertight Penetrations: Where any work pierces the building exterior (or construction intended to be watertight) the penetration shall be made watertight and weatherproof. Provide all necessary products (e.g. caulking, flashing, screens, gaskets, backing materials, siding, roofing, trim, etc.). Where not detailed or indicated how to install submit shop drawings of the proposed methods. Flashing arrangements shall be per SMACNA Architectural Sheet Metal Manual unless noted otherwise. Caulking alone is not an acceptable means of sealing penetrations.
- B. Equipment: Equipment or products located outdoors shall be watertight (except for provisions designed to intentionally accept water and having drain provisions) and shall be designed and intended by the manufacturer to be used outdoors at the project location. Where any work pierces the unit casing exposed to the outdoors the penetration shall be made watertight and weatherproof; provide all necessary products (e.g. caulking, flashing, gaskets, backing materials, etc.).
- C. Animal Protection: Mechanical system openings, overhangs, shrouds, coverings, gaps below units, and other elements where animals could enter or occupy shall be protected with screens to prevent animal entry or occupation. Screening shall be installed in a neat professional manner, square to the adjacent construction, and be securely attached with removable fasteners.

3.04 START-UP

- A. General: Provide inspections, start-up and operational checks of all mechanical systems and equipment. Maintain documentation of all start-up work and submit with project closeout documents. See individual specification Sections for additional requirements.
- B. Personnel: Inspection and start-up services shall be done by individuals trained in the operation, and knowledgeable with, the systems being started-up. Equipment start-up shall be by the manufacturer's authorized service representative where indicated (see individual specification Sections).
- C. Scheduling and Agenda: Submit a proposed detailed start-up schedule with proposed dates and times at least 30 days prior to the earliest proposed system start-up. Revise dates and times as mutually agreed upon with trades involved, and witnesses, before submitting a final start-up schedule.
- D. Witnessing: Start-up may be witnessed by the Engineer and Owner's representative (at their option). Notify the Engineer and Owner 7 days prior to the proposed start-up time.

3.05 OWNER INSTRUCTION

- A. General: Provide instruction to the Owner on the operation and maintenance of all installed mechanical systems.
- B. Personnel: Instruction on the operation and maintenance of products shall be by individuals trained and experienced in the installation, operation and maintenance of these products. Instruction shall be by the product manufacturer's authorized service representative where indicated (see individual specification Sections).
- C. Scheduling and Agenda: Submit a proposed instruction schedule (with proposed dates and times) and an instruction agenda at least 30 days prior to the earliest proposed instruction period. Coordinate Owner and Architect/Engineer review and arrange mutually agreed upon instruction schedule and the instruction agenda and submit a final instruction schedule and agenda. Organize instruction by sub-systems corresponding to the project specifications (or similar logical grouping).
- D. Instruction: Demonstrate and explain normal start-up, normal shut-down, normal operation, normal settings, adjustments, signs of abnormal operation, emergency shut-down, safety concerns, and related information. Demonstrate and explain system maintenance requirements with references to the O&M Manual. Show how maintenance is performed, including how items are accessed, maintenance procedures, tools and parts required, and related information. Review typical repairs and explain how they were performed.

END OF SECTION

SECTION 20 05 03 EXISTING SYSTEMS WORK FOR MECHANICAL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Protection of Items from Damage.
- B. Maintaining Utilities and Building Services.
- C. Cleaning.
- D. Review of Existing Conditions.
- E. Utility Locate.
- F. Cutting and Patching.
- G. Deactivation and Cap-off of Systems.
- H. Mechanical Demolition and Disposal.

1.03 DEFINITIONS

A. "Remove", "demo", and "demolish" mean "Remove and legally dispose of item and item accessories; except where indicated to be reinstalled, salvaged, or some other required work is indicated."

PART 2 PRODUCTS

2.01 GENERAL

A. Materials: All materials used for capping, temporary piping, repairs, reconnecting, reinstalling, and related work shall be same as specified for new systems.

PART 3 EXECUTION

3.01 GENERAL

A. Protection: Existing items not being demolished shall be protected against damage. Where necessary to prevent damage or necessary to accomplish other work, items shall be

disconnected and moved to a suitable protective storage location during the project and then reinstalled to their original location.

- B. Utilities and Building Systems: Maintain existing utilities and building systems in service (unless indicated otherwise) and protect from damage during project. Where utilities or building systems must be shut-off to accomplish the work, see drawing notes, Section 20 05 00, and Division 01 for downtime limitations and Owner coordination and notification requirements; coordinate interruptions with other trades.
- C. Cleaning: All existing items that remain during construction and were affected by the construction shall be cleaned to a like new condition.
- D. Equipment and System Contents: Equipment and systems contain fluids that are typical for such items (e.g. HVAC units contain refrigerant, oils; hydronic systems contain ethylene glycol, corrosion control chemicals, etc.) and require special removal methods and disposal.
- E. Existing Items:
 - Information and Field Verification: Routing, locations, and identification of existing items on plans are approximate and are limited. The relative location of systems shown on plans has not been verified, and is schematic only. Field verify locations, contents, and flow direction of all piping and ducts prior to performing any work associated with such systems (see also Section 20 05 00). Do not rely on existing labeling of systems; such labeling shall be considered wrong until verified by other physical evidence.
 - 2. Work Around: Existing building cavities (ceiling spaces, walls, etc.) contain a multitude of systems (e.g. conduit, wiring, fire suppression, light fixtures, low voltage system components, piping, ducts, etc.) typical for buildings of the type of this project. Added effort is required to identify and locate these systems, to work around such systems, and to temporarily disconnect and reconnect (and possibly remove and store) various building components to accommodate the work. Existing building elements will also require the work to be installed in smaller sections (i.e. shorter pipe or duct lengths) than normally possible, and to make system connections in awkward or cramped locations.
 - 3. Revisions: Revise existing systems as needed to accommodate project work and new finishes. Work shall include adjusting locations of items to suit new ceiling heights, revisions to building element locations, revisions to finishes, and other changes.
 - 4. Electrical: Verify voltage, phase, horsepower, panel circuits, and other electrical parameters of existing items prior to beginning work and ordering replacement products. Electrical data listed on the drawings for such items has not been field verified.
 - 5. Controls: Verify existing communication protocol, existing component manufacturers, and model numbers, LAN type(s), software, location of devices, quantity of system points, methods used in terminating communication wiring, overall system performance, and sequences.

- 6. Existing items to remain or to be relocated are assumed to be in acceptable condition at the start of the project.
- F. Cutting: Provide all cutting and openings as necessary to accomplish the work indicated. No structural members shall be cut unless Structural Engineer's approval is obtained first. Assume all building members are "structural" unless clearly evident otherwise. See Section 20 05 00 and Division 01 for additional requirements.
- G. Patching: Patch all wall/floor/ceiling/roof openings left by removal of existing items where wall/floor/ceiling/roof is to remain. Patch with materials and workmanship so as to match finish of adjacent undisturbed area, and to provide conditions equivalent to the original new construction.
- H. Owner's Salvage: Owner has first right to all items shown to be demolished. All items not wanted by Owner, and not indicated to be salvaged for reuse, shall be removed by the Contractor.

3.02 REVIEW OF EXISTING CONDITIONS

- A. General: Provide field investigation of all systems and existing conditions to confirm extent of demolition, routing of existing systems, condition of items to be relocated, existing building materials of construction, mechanical system types and materials involved, areas where cutting and patching is required, site access, sizes of existing system components, and all other aspects of existing building and systems and their relationship to the Work.
- B. Review Timing: Review existing conditions prior to bidding, again prior to commencing any work or ordering materials, and continually throughout the project.
- C. Review for Space and Routing:
 - 1. Review existing conditions (including dimensions) where equipment must be moved through to confirm adequate space and path.
 - 2. Review existing conditions (including dimensions and locations of existing systems) where work will occur to determine impact on the locations and routing of new systems; include time to develop shop drawings and revisions to routing shown on the design drawings to accommodate existing conditions.
- D. Existing Record Drawings: Existing record drawings located at the Owner's facilities office are available for review.

3.03 EXISTING CONSTRUCTION

- Ceiling Construction: All ceiling construction shall be assumed to be two layers of 5/8" type X GWB installed over 2 x 6 20 gauge steel stud framing on 16" centers (unless noted otherwise).
- B. Wall Construction: All walls shall be assumed to be constructed of 2x wood framing unless otherwise noted.

3.04 DEMOLITION

- A. General: Review site conditions and identify all demolition work; include in bid all costs for demolition and disposal. Coordinate all demolition work with other trades. Confirm items to be salvaged or reused, and overall demolition scope.
- B. Scope: Not all items to be demolished are necessarily shown on the drawings but are covered by notes and specifications. In addition to demolishing items indicated, demolish all associated items (unless indicated otherwise); this includes such items as supports, insulation, piping, drains, control wiring/conduit, power wiring/conduit, unions, valves, and similar accessories. Demolish all utilities serving demolished items completely or back to active mains where mains are to remain active; assume such utilities extend at least forty feet from the demolished items (unless indicated otherwise). Demolish all mechanical items located in building elements which are being demolished (i.e. located in walls, chases, roof assemblies, etc.). Demolish items as required to accomplish the work.
- C. Prevent Damage: Where existing building systems are to be reused to serve new items, carefully execute the demolition work to prevent damage to items to be reused and to prevent the demolition of items that are intended for reuse.
- D. Depth: Abandoned items, anchors, inserts, and other projections embedded in existing construction and not being concealed by new construction shall be removed to 1" below the adjacent finished surface, and the disturbed area patched.
- E. Cap-Offs and Terminations:
 - Permanent: Provide cap-off of all existing utilities and systems that are cut or served demolished items. All cap-offs shall occur in concealed locations (unless indicated otherwise). Cap-off's shall be of equivalent material as the item being capped and be insulated where the connected system was insulated or where doing so will reduce energy consumption or prevent condensation.
 - 2. Temporary: Provide temporary cap-off of all existing utilities and systems to allow continued use of all systems until the final system components are installed and connected.
 - 3. Wiring Terminations: Terminate all control wiring and electrical power connections in a manner that complies with code and allows remaining items to function as intended.
- F. Disposal: Dispose of all demolished items and all waste materials off site in accordance with code and legal requirements. See Division 01 for waste management requirements.

END OF SECTION

SECTION 20 05 19 PIPING SPECIALTIES FOR MECHANICAL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Unions.
- B. Access Doors.
- C. Escutcheons.

1.03 SUBMITTALS

- A. General: Comply with Section 20 05 00.
- B. Product Data: Submit product information data for all items to be used.

1.04 REFERENCES

- A. ASME B16.18: Cast Copper Alloy Solder Joint Pressure Fittings.
- B. ASME B16.39: Malleable Iron Threaded Pipe Unions: Classes 150, 250, and 300.
- C. IMC: International Mechanical Code.
- D. UPC: Uniform Plumbing Code.

1.05 GENERAL REQUIREMENTS

- A. Domestic (Potable) Water Systems: All items in contact with potable water shall be lead free in accordance with ANSI/NSF 61. Plastic piping system components shall comply with ANSI/NSF 14.
- B. System Requirements: Products shall comply with additional requirements cited for the specific systems the products are being installed in; see specific system specification sections.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Products shall comply with Section 20 05 00, Paragraph 2.01, Acceptable Manufacturers.

- B. Unions: Anvil, Nibco, Watts, Epco, Victaulic, Ward, Jefferson Union.
- C. Dielectric Connecters: Victaulic Precision Plumbing Products, Elster Perfection.
- D. Access Doors: J. R. Smith, Zurn, Josam, Acudor, Elmdoor, Kees, J.C. Industries.
- E. Escutcheons: Selected by Contractor.

2.02 UNIONS

- A. Dielectric Unions: Shall not be used. Provide "dielectric connector" with standard union where union is required at connection point of dissimilar materials.
- B. Unions on Copper Pipe:
 - 1. General: Pressure and temperature ratings to match (or exceed) piping system being installed in; minimum Class 125.
 - 2. 2-Inch Pipe and Smaller: Wrought copper solder joint copper to copper union, complying with ASTM B16.18.
 - 3. 2-1/2-Inch Pipe and Larger: Brass flange unions.
- C. Unions on Steel Pipe:
 - 1. General: Pressure and temperature ratings to match (or exceed) piping system being installed in; minimum Class 150.
 - 2. Threaded: Malleable iron union, threaded connections, with ground joints, complying with ASME B16.39. Provide with brass-to-iron seat (except provide iron-to-iron seat where the conveyed material is detrimental to brass).
 - 3. Welded and Flanged: Flange unions; see individual system specification sections.
- D. Dielectric Connector: Schedule 40 steel pipe nipple, zinc electroplated, with internal thermoplastic lining which is NSF/FDA listed and meeting all code requirements for potable water applications. Suitable for continuous use up to 225 deg F and 300 psi. "Clearflow" dielectric waterway (or approved). For systems operating at temperatures greater than 225 deg F provide flanged connections with insulating gaskets.

2.03 ACCESS DOORS

A. Hinged lockable steel access door, for mounting on face of wall, with minimum 16 gauge frame and 16 gauge door, concealed hinge, cam and cylinder lock, and anchor straps or anchor frame with mounting holes. Provide Type 304 stainless steel construction with No. 4 finish where used in restrooms, locker rooms, kitchens, and similar "wet" areas. Provide steel construction with prime coated finish in other areas. Door shall have rounded corners, and concealed pivoting rod hinge. Size shall be 12" x 12" (unless indicated otherwise) but shall be large enough to allow necessary access to item being served and sized to allow removal of the item (where access door is the only means of removal without disturbing fixed construction).

- B. Fire Rating: Door shall maintain fire rating of element installed in; reference drawings for required rating.
- C. Access doors shall all be keyed alike. Provide two (2) keys for each door.

2.04 ESCUTCHEONS

- A. Type: Circular metal collar to seal pipe penetrations at building elements (i.e. walls, floors, cabinets, and ceilings); one-piece type except that split hinge type may be used for applications on existing piping.
- B. Construction: Constructed of chrome plated brass or polished stainless steel, sized to tightly fit pipe exterior surface (or pipe insulation where insulated) and to fully cover the building element penetration.
- C. Projection: Shallow face type with maximum projection from wall not to exceed 1.2 times inner diameter of escutcheon.
- D. Special Applications: For sprinkler heads and similar special applications see items' specification Section.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Unions: Install unions in pipe connections to control valves, coils, regulators, reducers, all equipment, and where it may be necessary to disconnect the equipment or piping for repairs or maintenance; and as indicated. Where flanged connections occur at equipment additional unions are not required unless indicated otherwise. Dielectric unions shall not be used.
- B. Dielectric Connectors: Install connectors between all connections of copper and steel piping (or equipment), and other dissimilar metals. Where flanged connections occur use insulating type flanges. Dielectric unions shall no be used.
- C. Access Doors: Provide access doors where indicated on the drawings and where needed to provide access to trap primers, water hammer arresters, cleanouts, valves, coils, controls, mechanical spaces, and similar items requiring service or access that would otherwise be inaccessible. Size and locate access door to provide best access to items served. Consult architectural drawings and coordinate location and installation of access doors with trades which are affected by the installation. Access doors are typically not shown in the plans. Review ceiling and wall types and locations of items requiring access to determine quantity and sizes of access doors required.

D. Escutcheons: Provide pipe penetrations through building elements, except where penetration is concealed (unless specifically noted otherwise). Items located in accessible cabinet spaces (e.g. below sinks) are not considered concealed.

END OF SECTION

SECTION 21 10 00 WATER-BASED FIRE SUPRESSION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Sprinkler System Design.
- B. Piping.
- C. Sprinkler Heads

1.03 SUBMITTALS

- A. General: Comply with Section 20 05 00.
- B. Listing: All materials and equipment shall be UL listed and FM approved for the application.
- C. Latest Design: Products shall be of the manufacturer's latest design.
- D. Code and AHJ Compliance: Products and installation shall comply with code and Authority Having Jurisdiction (AHJ) requirements. Contractor is responsible to review and be familiar with applicable codes, specific AHJ requirements, and to contact the AHJ prior to bidding to confirm requirements. Products submitted are represented by the Contractor as complying with code and AHJ requirements.

1.04 SUBMITTALS

- A. General: Comply with Section 20 05 00.
- B. Shop Drawings: Submit shop drawings of entire sprinkler system as required by AHJ.
- C. Product Data: Submit information on all products to be used; include evidence of product UL listing and FM approval. Submit proposed labeling and signage.
- D. Calculations: Provide information as provided by AHJ.

1.05 GENERAL REQUIREMENTS

A. Experience: Project's fire sprinkler systems are bidder designed. All design shall be performed by a Contractor and individuals thoroughly familiar with and knowledgeable of NFPA 13, NFPA

24, local AHJ requirements, and fire sprinkler system design and installation. By virtue of submitting a bid, the Contractor is acknowledging that he does in fact have such knowledge; that specific requirements have been confirmed with the AHJ, and all work provided will fully comply with all the requirements of these specifications.

1.06 REFERENCES

- A. FM-AG: FM Global Approval Guide.
- B. NFPA 13: Standard for the Installation of Sprinkler Systems.
- C. UL-FPD: Underwriters Laboratories Fire Protection Equipment Directory.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. General: All products shall comply with Section 20 05 00, Paragraph 2.01, Acceptable Manufacturers.
- B. Pipe and Fittings: Domestic manufacturers only.
- C. Sprinkler System Components: Reliable, Viking, Potter-Roemer, Gem, Star, Victaulic, Tyco.

2.02 PIPE AND PIPE FITTINGS

A. Aboveground Pipe and Fittings: Pipe shall be steel or copper; in accordance with NFPA 13. Fittings shall be suitable for 175 psi working pressure, and shall be cast iron or malleable iron screwed, grooved, welded, or soldered: in accordance with NFPA 13. Pipe and fittings shall have a CRR of 1.0 or better. Pipe and fittings run outside and exposed to the outdoors shall be galvanized type. Flexible braided steel piping serving individual heads may be used where acceptable to the AHJ, and such piping is FM approved and UL listed for the application.

2.03 SPRINKLER HEADS

- A. Wet Type:
 - 1. Pendant: Shall be low profile, glass bulb type, with temperature rating to suit application and factory chrome plated finish. Where installed through ceiling, provide with escutcheons, two-piece adjustable recessed type, with factory chrome plated finish to match sprinkler heads. Quick response type.
 - 2. Upright: Shall be glass bulb type, with temperature rating to suit application, and factory chrome plated finish. Quick response type.
 - 3. Sidewall: Shall be glass bulb or fusible solder type, with temperature rating to suit application, and factory chrome plated finish. Quick response type.
- B. Configuration: Sprinkler heads shall be upright, pendant or sidewall type as required to suit application. Extend coverage heads as necessary to cover all required areas.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: Installation of all equipment shall be performed by a Contractor specializing in this work and subject to Owner and AHJ approval. Install all items in accordance with code, manufacturers' recommendations, and best construction practices. Provide all system design, system features, fire sprinkler coverage, system support/anchorage, and documentation as specified herein and required by the AHJ.
- B. Pipe Routing:
 - Select pipe routing that maintains full personnel access to building equipment and systems, without requiring stepping over or bending down to cross sprinkler piping.
 Follow specific pipe routing requirements of the Contract Documents as indicated. Piping shall run parallel to building structure in a neat, workmanlike manner.
 - 2. All piping shall be run concealed.
 - 3. Provide all necessary drilling of beams, trusses, etc; reference Section 20 05 00 for cutting requirements; structural Engineers approval is required prior to any such cutting or drilling.
- C. Escutcheons: Provide chrome plated escutcheon plates at exposed pipe penetrations of all ceilings, floors and walls.
- D. Conflict Prevention:
 - 1. Review all building and system plans carefully and arrange the fire sprinkler work to avoid interferences and conflicts with other trades. Discuss and coordinate proposed sprinkler routing with other trades. The fire sprinkler system has the lowest priority of all building systems and is required to accommodate the space requirements of other systems.
 - 2. If piping routes are not properly coordinated with other trades and structures, rerouting and possible re-sizing will be required as directed by the Architect/Engineer. Offset, crossover and otherwise route piping to install system in available space.
- E. System Drainage: Special care shall be taken to ensure that entire sprinkler system is drainable in accordance with code. Provide drain valves as required (with labels) to allow for drainage; valves shall be concealed (with access doors) where possible; provide valves with provisions (male pipe nipple) for attaching temporary drain lines (where needed). Extend main drain(s) and 1 inch inspector's test connections to outside for drainage.
- F. Sprinkler Heads: Location of heads shall be no closer than 6 inches to any ceiling T-bar and shall (to the greatest extent possible) be centered in the ceiling panels but shall line up on at least the centerline of one side of the panels.
- G. Hangers and Supports: Shall comply with NFPA 13.

3.02 SYSTEM DESIGN

A. General: System shall be Contractor designed in accordance with NFPA 13, AHJ requirements, and additional requirements as cited in the Contract Documents. Design shall be based on designated occupancy, storage configurations, commodity types, and related parameters.

END OF SECTION

SECTION 22 11 00 FACILTIY WATER DISTRIBUTION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Domestic Water Piping.
- B. Valves.
- C. Testing and Inspection.

1.03 DEFINITIONS

A. "Lead-Free" means not containing more than 0.2% lead in solder and flux; and not more than a weighted average of 0.25% lead in wetted surfaces of pipes, pipe and plumbing fittings and fixtures.

1.04 SUBMITTALS

- A. General: Submittals shall comply with Section 20 05 00.
- B. Product Data: Submit manufacturer's product information on all items to be used.
- C. System Tests and Inspections: Submit documentation showing systems have satisfactorily passed all pressure tests and code inspections.
- D. Cleaning and Disinfection: Submit documentation regarding completion of flushing, disinfection, bacteriological tests, and Health Department's acceptance of tests and system.

1.05 GENERAL REQUIREMENTS

- A. ANSI/NSF Compliance: All items in contact with potable water shall be lead free in accordance with ANSI/NSF 61. Plastic piping system components shall comply with ANSI/NSF 14. Only lead-free solder shall be used.
- B. Valves: Shall be dezincification resistant and shall not contain more than 15% zinc in their chemical composition.

1.06 REFERENCES

- A. ASME B16.3: Malleable Iron Threaded Fittings.
- B. ASME B16.15: Cast Bronze Threaded Fittings: Classes 125 and 250.

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- C. ASME B16.18: Cast Copper Alloy Solder Joint Pressure Fittings.
- D. ASME B16.22: Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
- E. ASME B16.24: Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 400, 600, 900, 1500, and 2500.
- F. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
- G. ASTM A530: General Requirements for Specialized Carbon and Alloy Steel Pipe.
- H. ASTM B16.18: Seamless Copper Water Tube.
- I. ASTM B32: Solder Metal.
- J. AWS A5.8: Filler Metals for Brazing and Braze Welding.
- K. AWWA B300: Hypochlorites.
- L. AWWA B301: Liquid Chlorine.
- M. AWWA M20: Water Chlorination and Chlorination Practices and Principles, 2nd edition.
- N. ANSI/NSF Standard 14 Plastics Piping System Components and Related Materials.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Products shall comply with Section 20 05 00, 2.01, Acceptable Manufacturers.
- B. Pipe and Fittings: Domestic Manufacturers only.
- C. Valves: Conbraco/Apollo, Nibco, Stockham, Walworth, Milwaukee, Kitz, Red-White, Watts, Hammond, ThermOmega Tech.

2.02 PIPE AND FITTINGS

- A. Pipe: Seamless copper water tube, hard temper (unless noted otherwise), type K or L as indicated, per ASTM B88.
- B. Fittings:
 - 1. Solder-Joint: Wrought copper and bronze fittings per ASME B 16.22 and cast copper alloy fittings per ASME B16.18, cast bronze threaded fittings per ASME B16.15.
 - 2. Flanged: Cast bronze fittings per ASME B16.24.

- 3. Solder Material: 95/5 tin-antimony solder per ASTM B32 or "Silvabrite 100" (95.5 tin/4 copper/0.5 silver) solder; lead free.
- 4. Brazing Material: AWS A5.8, BCuP-5.

PART 3 EXECUTION

3.01 GENERAL

- A. Workmanship:
 - 1. Installation of all items shall comply with code, best professional practices, manufacturers written installation instructions, and to allow for proper functioning of items being connected to.
 - 2. Install all piping parallel to the closest wall and in a neat, workmanlike manner. Horizontal exposed straight runs of piping shall not deviate from straight by more than 1/4-inch in ten feet. Vertical piping shall not deviate from plumb by more than 1/8-inch in ten feet.
 - 3. Do not run any piping above electrical panels (and similar electrical equipment). Provide offsets around such panels as necessary.
- B. Complete System: Provide all piping as indicated and as required to allow supply connections to each fixture and equipment item requiring water supply. Provide offsets as required to accommodate building construction and access requirements per Section 20 05 00. For multistory buildings includes costs to offset vertical piping at each floor level since structural member locations will not be the same on each floor.
- C. Coordination: Coordinate installation of items with all trades that are affected by the work to avoid conflicts.
- D. Hot Water Adjustment: Adjust the existing hot water circulation system for uniform circulation throughout the system; provide balancing of system where hot water circulation system has multiple branches with balancing valves (see balancing specification Section). Install, set, and adjust and all system components for proper operation.

3.02 PIPE AND FITTINGS

- A. Drawing Review: Consult all drawings for location of pipe spaces, ducts, electrical equipment, ceiling heights, door openings, window openings, and other details and report discrepancies or conflicts to Architect/Engineer before installing pipe.
- B. Insulation: Allow sufficient clearances for installation of pipe insulation in thickness specified. If interferences occur, reroute piping to accommodate insulation.
- C. Preparation for Joining: Prior to the joining of any section of pipe to a pipe run, the section shall be thoroughly cleaned inside and out, the ends shall be reamed to remove any cutting burrs and piping prepared as recommended by piping and fitting manufacturer.
- D. Threaded Connections: Cut piping carefully, ream, thread and work into place without springing. Use TFE tape or lead and graphite lubricant (on male threads only).
- E. Soldered Connections: Polish contact surfaces of fittings and pipes with emery cloth before

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fluxing male and female surfaces of joints. Steel wool and sandpaper not permitted for polishing.

- F. Unions: Install unions in pipe connections to valves, coils, and any other equipment where it may be necessary to disconnect the equipment or piping for repairs or maintenance; and as indicated. Where flanged connections occur at equipment additional unions are not required unless indicated otherwise.
- G. Insulating Unions: Install dielectric insulating connectors between all connections of copper piping and steel piping of steel equipment. Where flanged connections occur use insulating type flanges.

3.03 VALVES

- A. General: Provide isolation valves as shown on the drawings. In addition to those shown, provide added valves to allow for the isolation of each group of fixtures, all water heaters, and all individual equipment items.
- B. Installation: Install valves so as to be easily accessible and oriented to permit ease of operation. Valve stem shall be directed toward operator in either the vertical or horizontal direction. Provide access doors for valves not otherwise accessible.

END OF SECTION

SECTION 22 13 00 FACILITY SANITARY SEWERAGE

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

A. Soil, Waste and Vent Piping.

1.03 SUBMITTALS

- A. General: Submittals shall comply with Section 20 05 00.
- B. Product Data: Submit product information on all items to be used.

1.04 REFERENCES

- A. ASME B 16.4: Gray Iron Threaded Fittings.
- B. ASME B 16.12: Cast Iron Threaded Drainage Fittings.
- C. ASME B 16.15: Cast Bronze Threaded Fitting Classes 125 and 250.
- D. ASME B 16.18: Cast Copper Alloy Solder Joint Pressure Fittings.
- E. ASME B 16.22: Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
- F. ASME B 16.23: Cast Copper Alloy Solder Drainage Fittings.
- G. ASME B 16.29: Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings (DWV).
- H. ASTM A 53: Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- I. ASTM A 74: Cast Iron Soil Pipe and Fittings.
- J. ASTM A 888: Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications.
- K. ASTM B 32: Solder Metal.
- L. ASTM B 88: Seamless Copper Water Tube.

- M. ASTM B 306: Copper Drainage Tube (DWV).
- N. ASTM C 564: Rubber Gaskets for Cast Iron Soil Pipe and Fittings.
- O. ASTM C 1277: Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings.
- P. CISPI 301: Hubless Iron Soil Pipe and Fittings for Sanitary and Drain, Waste, and Vent Piping Applications.
- Q. CISPI 310: Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and for Sanitary and Storm Drain, Waste, and Vent Piping Applications.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Products shall comply with Section 20 05 00, 2.01, Acceptable Manufacturers.
- B. Pipe and Fittings: Domestic Manufacturers only; Mueller, Cerro, Tyler, Charlotte Pipe and Foundry, AB & I Foundry, Spears Manufacturing, Cresline Northwest.
- C. No Hub Couplings: ANACO, Mission Rubber, Tyler, MG Coupling, Fernco, Clamp-All, Mifab. Ideal-Tridon.

2.02 PIPE AND FITTINGS

- A. No-Hub Cast Iron Pipe and Fittings:
 - 1. Pipe and Fittings: Service weight no-hub cast iron pipe and cast iron fittings, per CISPI 301 and ASTM A 888, for use with mechanical no-hub couplings.
 - 2. Couplings: Per CISPI 310 or ASTM C 1277, with a cast iron or stainless shield, and neoprene gasket per ASTM C 564.
- B. Hub and Spigot Cast Iron Pipe and Fittings: Service weight hub and spigot cast iron pipe and cast iron fittings per ASTM A 74, for use with compression gaskets. Gaskets shall conform to ASTM C 564.

PART 3 EXECUTION

3.01 GENERAL

- A. Installation of all items shall comply with code, best professional practices, manufacturers written installation instructions, and to allow for proper functioning of items being connected to.
- B. Provide all piping as indicated and as required to allow complete and proper waste, drain, and vent connections to each fixture and equipment item requiring connection. Provide offsets as required to accommodate building construction and access requirements per Section 20 05 00. For multistory buildings include costs to offset vertical piping through each floor level since structural member locations will not be the same on each floor.

- C. Coordinate installation of items with all trades that are affected by the work to avoid conflicts.
- D. The work of this section shall include all waste (sanitary sewer), drain, and vent lines inside of the building and 5-feet outside of the building (unless indicated otherwise), to the point of and including connections to outside sanitary sewer lines or sanitary sewer manholes.
- E. Consult manufacturers data and architectural drawings for information on plumbing fixtures before beginning rough-in.
- F. Verify points of connection, invert elevations, and grade requirements before beginning installation or ordering materials.
- G. Stub all piping for all items requiring connections through wall or floor; cap and protect until connection to items is complete.
- H. Trap all fixtures and equipment items as required by governing code; provide proper venting for each trap.
- I. Provide piping connections to equipment furnished by others in accordance with Section 20 05 00.

3.02 PIPE AND FITTINGS

- A. All piping in finished areas shall be installed concealed unless specifically noted otherwise.
- B. Install piping so as not to obstruct access to any items requiring routine service, maintenance, or inspection. Offset or reroute piping as required to clear any interferences which may occur. Prior to running any piping, confirm with Architect/Engineer (unless is clearly noted to be ran exposed). Install exposed piping so as not to obstruct any portion of windows, doors, doorways, passageways, or items requiring service or access.
- C. Consult all drawings for location of pipe spaces, ducts, electrical equipment, structural elements, ceiling heights, door items requiring access, openings, window openings, and other details and report discrepancies or possible conflicts to Architect/Engineer before installing pipe.
- D. Install all horizontal soil or waste lines with a slope of 1/4-inch per foot unless noted otherwise. Coordinate with AHJ if written approval is required for exceptions to 1/4-inch per foot slope.
- E. Make all changes of direction and junctions with Y fittings and 1/8 bends; use sanitary tee fittings in vertical pipe only.
- F. Provide escutcheons where exposed pipe passes through walls, floors, or ceilings.
- G. Install all piping parallel to the closest wall and in a neat, workmanlike manner. Horizontal straight runs of piping shall not deviate from straight by more than 1/4-inch in ten feet. Vertical piping shall not deviate from plumb by more than 1/8-inch in ten feet.

- H. Do not run any piping above electrical panels (and similar electrical equipment). Provide offsets around such panels as necessary. Such offsets are typically not shown on the plans, but are required per this paragraph.
- I. Prior to the joining of any section of pipe to a pipe run, the section shall be thoroughly cleaned inside and out, the ends shall be reamed to remove any cutting burrs and piping prepared as recommended by piping and fitting manufacturer.
- J. Threaded Connections: Cut piping carefully, ream, thread and work into place without springing. Use TFE tape or lead and graphite lubricant (on male threads only).
- K. Soldered Connections: Polish contact surfaces of fittings and pipes with emery cloth before fluxing male and female surfaces of joints. Steel wool and sandpaper not permitted for polishing.

SECTION 22 40 00 PLUMBING FIXTURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Plumbing Fixtures and Trim.
- B. Installation/Connection of Equipment Specified Elsewhere.
- C. Adjustment and Cleaning.

1.03 DEFINITIONS

- A. "Plumbing Brass" means "P-traps, stops, strainers, tailpieces, flanges, and other brass fittings and accessories NOT including faucets or stops."
- B. "Trim" includes all plumbing brass items, faucets, and any fixture accessories.
- C. "Accessible" refers to the American's with Disabilities Act, and infers that these fixtures will meet Federal and local code requirements.
- D. "Lead-Free" means not containing more than 0.2% lead in solder and flux; and not more than a weighted average of 0.25% lead in wetted surfaces of pipes, pipe and plumbing fittings and fixtures.

1.04 REFERENCES

A. UPC: Uniform Plumbing Code.

1.05 SUBMITTALS

- A. General: All submittals shall comply with Section 20 05 00.
- B. Product Data: Submit product data for all plumbing fixtures, plumbing trim, and water heaters.

1.06 GENERAL REQUIREMENTS

A. Fixture Quality: Provide new fixtures and fittings, approved, free from flaws and blemishes with finished surfaces clear, smooth and bright. Visible parts of fixture brass and accessories, and all items located in accessible cabinet spaces, shall be heavily chrome plated. All stops, Ptraps and items exposed to view shall be chrome plated (except where specifically noted otherwise). B. Code Compliance: All products and connections shall be in compliance with code, local Utilities Department standards, and Health Department requirements.

1.07 QUALITY ASSURANCE

- A. General: Provide quality assurance checks specified in Section 20 05 00 prior to submitting product data. By submitting products for Engineer's review, the Contractor is confirming that such checks have been performed and that the products are suitable for the intended installation and use.
- B. Fixtures:
 - Types: Verify specified fixture types with the Architectural and Plumbing drawings to confirm the requirements are consistent (e.g. fixtures are wall mounted versus floor mounted type, locations of ADA fixtures match, etc.). Where conflicts occur clearly identify the issue on the fixture submittal along with a proposed resolution; or resolve prior to making the submittal by the project RFI process.
 - 2. Space Verification: Prior to ordering any fixtures or making submittals, Contractor shall check the drawings and verify that all fixtures will fit the space available (i.e. fixtures fit any cabinets fixtures are to be installed in; fixtures have adequate access clearances for proper use; etc.).
- C. Lead-Free Requirement: All items in contact with potable water shall be lead free. Fixtures used to dispense potable water for drinking shall meet the requirements of NSF/ANSI 61.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Products shall comply with Section 20 05 00, Paragraph 2.01, Acceptable Manufacturers.
- B. Water Closets: Kohler, American Standard, Eljer, Mansfield.
- C. Vitreous china (other than water closets) and enameled cast iron fixtures: American Standard; Kohler, Eljer, Mansfield.
- D. Water Closet Seats: Church; Beneke; Olsonite; Kohler; Bemis.
- E. Plumbing Brass: McGuire; American Standard; Brasscraft; Dearborn Brass; Chicago Faucet; Crane; Eljer; Frost; Kohler; Speakman; Symmons; T & S Brass; Elkay; ProFlo.
- F. Faucets: Sloan; Chicago Faucet; T&S Brass; Speakman; Kohler; American Standard; Delta; Grohe; Moen.
- G. Stops: McGuire; Brasscraft; ProFlo; Chicago Faucet.
- H. Flush Valves: Sloan, Zurn.
- I. Hot Water Temperature Limiting Valve: Symmons, Watts, Chicago Faucet, Acorn Controls, Leonard, Cash Acme.

2.02 PLUMBING FIXTURES

- A. General:
 - 1. Plumbing Fixtures are listed below by reference numbers, corresponding to the reference number adjoining these items on the drawings.
 - 2. All vitreous China and enameled cast iron fixtures shall be finished white unless specifically noted otherwise.
 - 3. In the interests of Owner's Standardization, fixtures of similar type shall be product of one manufacturer; trim of similar type shall be product of one manufacturer.
- B. Water Closets:

P-1A Water Closet - Floor Mount - ADA:

Water Closet: Kohler "Highcliff", No. K-96057, vitreous china, elongated bowl, floor mounted, siphon jet action bowl with 1-1/2" top spud, and 1.28 gallon flush.

Flush Valve: Sloan "SOLIS" DF 8111-1.6/1.1 GPF Water Closet Flushometer, Exposed, Solar Powered, Sensor Activated, chrome-plated low consumption battery-powered sensor operated flush valve with vacuum breaker, quiet-action, and screw driver stop.

Seat: Kohler "Lustra", No. K-4670-SC, white plastic elongated seat, open-front and stainless steel self-sustaining check hinge.

C. Urinals:

P-2A Urinal - Floor Mount:

Urinal: Existing to remain.

Flush Valve: Zurn ZTR6203-EWS .05 GPF chrome plated sensor operated flush valve, with vacuum breaker, and screw driver stop. Sensor Operated Urinal Flush Valve, Battery Powered

D. Lavatories:

P-3A Lavatory - Counter Undermount - ADA:

Lavatory: Kohler "Caxton", No. K-2210, 17" x 14" bowl area, vitreous china lavatory with overflow drain.

Plumbing Brass: Kohler No. K-7129 lavatory drain with perforated grate and 1-1/4" tailpiece; Kohler No. 9000 1-1/4" cast brass "P" trap with cleanout; stops and risers per "Specialties" in this specification section.

Faucet: Sloan EAF-250-ISM, polished chrome finish sensor faucet, 0.5gpm, Battery Powered, Sensor Activated Touch-Free Faucet, Commercial Grade With Mounting Hardware, Provide with thermostatic mixing valve, complying with UPC and ASSE 1070.

2.03 SPECIALTIES

A. General: Unless indicated otherwise, the following fittings and materials (i.e. specialties) shall be used. 22 40 00 - 7 / 5

- B. Fixture Traps: 17 gage seamless chrome plated cast brass tubing, with 2 inch minimum seal, cast brass slip nuts, size as required by Uniform Plumbing Code (unless a larger size is indicated), and configured to suit the application. Provide with cleanout where indicated or required by code.
- C. Exposed Piping and Fittings: In finished areas and in accessible cabinets, provide piping with chrome plating or sleeved with chromed sleeves or of stainless steel construction/finish; all chrome to have a bright polished finish. No exposed copper allowed (includes accessible cabinet areas).
- D. Stops: Quarter turn ball valve type, chrome plated, UPC compliant, with low lead brass body, rated for minimum 125 psi operating pressure and temperature of water used with plus 20 deg F. Size and configuration to suit application. Provide with loose key where installed in areas with public access.
- E. Risers: Flexible braided steel type; rated for 125 psig.
- F. Escutcheons: See Section 20 05 19.
- G. Sealant: See Section 20 05 30. Sealant at fixtures shall be the silicone type, color to match fixture.

PART 3 EXECUTION

3.01 INSTALLATION OF FIXTURES

- A. General: All fixtures shall be completely connected to piping as needed to make a complete and operable installation.
- B. Fixture Locations: Mounting heights and locations of fixtures shall be as shown on the Architectural drawings and in accordance with Contract Document requirements. Locations shall be verified and coordinated with the various trades affected by the installation of these fixtures. When none indicated or shown, obtain mounting location and heights from the Architect prior to installation. Floor drains shall be installed in proper locations and coordinated with floor slopes so that drains are set at low points to allow for floor drainage. Floor receptors (or floor sinks) shall be set flush with floors to allow drains to serve as both

indirect drain receptors and as floor drains (unless noted otherwise or required to be elevated by code).

- C. Rough-In: Determine rough-in location of fixture utilities to suit fixture location, fixture dimensions, elements of construction (i.e. beams, studs, electrical, ducts, etc.), access requirements, casework dimensions, items which may drain/connect to fixture, use of fixture, and related considerations. The fixture rough-in locations indicated on the plans is schematic and is not to be used for final rough-in purposes. Coordinate fixture locations with other systems so that either conflicting items are relocated, or fixture locations are adjusted to suit.
- D. Offsets: Provide offsets in piping to fixtures to accommodate building systems. Such offsets shall include off-setting waste piping into cabinet bases (in kick space where possible) to accommodate beams located directly below walls behind fixtures.
- E. Fixture Sealant: Where fixtures abut to walls, floors, and cabinets seal all joints with a uniform fillet bead of sealant. Provide at other locations as recommended by fixture manufacturer.
- F. Protection: Protect fixtures against use and damage until project substantial completion; provide guards and/or boxing to protect.

3.02 INSTALLATION OF SPECIALTIES

- A. Escutcheons: Provide escutcheons at each point where an exposed pipe or other fitting passes through walls, floors, backs of cabinets, or ceilings.
- B. Stops: Provide stops in water connections to all fixtures/equipment, except where a stop valve is integral to the fixture (e.g. flush valves) and in water connections to all items not served by another valve.

3.03 ADJUSTMENT AND CLEANING

- A. Cleaning: After completion of installation remove all labels and thoroughly clean all fixtures, trim and fittings.
- B. Adjustment: Adjust all flush valves, fixture stops, faucets, valves, and associated plumbing items as necessary for the proper operation of all fixtures and equipment.

SECTION 23 09 33 ELECTRIC AND ELECTRONIC CONTROL SYSTEM FOR HVAC

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Control System Design.
- B. Control System for Building Heating, Ventilation, Air Conditioning, Exhaust.
- C. Control Devices, Components, and Wiring.

1.03 SUBMITTALS

- A. General: Shall comply with Section 20 05 00.
- B. Product Data: Submit product information on all items to be used.
- C. Shop Drawings: Submit a complete set of shop drawings prior to installation containing the following information: interconnect drawings showing all wiring and control connections; control panel details; arrangement of devices in panels; schedule of dampers with sizes and where used; sequence of operation for all equipment; location of all control devices on scaled building plans; and list of actuators with sizes and where used.
- D. Labeling: Submit list of proposed component labeling.
- E. Operation and Maintenance Manuals: See Section 20 02 00.

1.04 GENERAL REQUIREMENTS

- A. Design and Installation: The control system is design/build type; all design is by the contractor with the system providing the features and sequences specified. The entire control system shall be designed and installed by skilled control system designers, electricians and mechanics, all of whom are properly trained and qualified for the work they perform.
- B. Sole Responsibility: One single Contractor shall be responsible to design, furnish and install the complete Section 23 09 33 control system.

- C. Sequence: System shall have same sequence of operation as existing.
- D. Code Compliance: Devices shall have features and control capabilities as required to comply with code.

1.05 WARRANTY

A. Warranty: After completion of the installation of the control system and acceptance by the Owner, the system shall be warranted as free against defects in manufacturing, workmanship and materials for a period of two years from date of substantial completion. In addition, the system shall be warranted to provide the sequence of operation and basic features specified, with the accuracy and flexibility also specified. The system shall be repaired or replaced, including materials and labor, if in Owner's and Engineer's reasonable opinion, system is other than as warranted.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Products shall comply with Section 20 05 00, Acceptable Manufacturers.
- B. Thermostats and Time Clocks (Non DDC): Honeywell, Paragon.
- C. Control Accessories: Idec, Hoffman, McDonnell, Tridelta, Edwards, Mamac, Penn, Belimo, Honeywell, Johnson Controls, Leviton, Arrow-Hart, Alerton.

2.02 SYSTEM

A. System Type: Existing to remain; connect controls to allow time schedule control of exhaust fans.

2.03 ACCESSORIES

- A. Wiring and Conduit: Shall comply with Division 26 specifications and with code. Wiring that performs code required life safety shutdown of equipment or fire alarm interface shall comply with NFPA standards and local codes for fire alarm system wiring.
- B. Relays: Shall be rated for the application, with a minimum of two sets of Form C contacts, enclosed in a dust-proof enclosure. Relays shall have Hand-Off-Auto switch, and LED's (or pilot lights) to indicate the energized mode. Relays shall be rated for a minimum life of one million cycles. Operating time shall be 20 milliseconds or less, with release time of 10 milliseconds or less. Relays should be equipped with coil transient suppression devices to limit transients to 150% of rated coil voltage. Contact rating, and configuration selected to suit application.
- C. Miscellaneous Components/Sensors/Transmitters/Transformers: Shall be manufacturer's standard, designed for application in commercial building HVAC control systems, compatible with other components so as to provide sequence of operation specified.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: Provide all devices, relays, switches, tubing, wiring, motor starters and all other devices required to provide a complete integrated control system with the sequence of operation and features as specified. It is the Contractor's responsibility to coordinate with other trades for the installation of control devices in systems installed by others.
- B. Installation: Install all control components in accordance with manufacturer's instructions and recommendations and best professional practices.
- C. Coordination: Coordinate work with other trades to ensure that all trades have the information necessary so that they may properly install any necessary control components, interconnect with control components, and install their work to accommodate controls. Identify all items requiring ceiling or wall access doors (or other special requirements) to trade installing access doors or performing related work.
- D. Space Requirements and Locations: Carefully check space requirements and coordinate with other trades to ensure that items can be installed in the allotted spaces, including above finished suspended ceilings. Adjust locations of panels, equipment, devices, and the like, to accommodate work and prevent interferences. Determine the exact route and location of wiring, conduit and other control devices prior to beginning work.
- E. Mounting: Mount controls adjacent to associated equipment on vibration free elements on free standing fabricated supports; mount and locate for best access.
- F. Power: It shall be the responsibility of this Contractor to provide power for all control devices requiring power. Coordinate with the Division 26 Contractor to arrange for necessary power circuits. All control devices shall obtain power from circuits dedicated to control power.
- G. Wiring, Conduit and Electrical:
 - 1. General: Provide all electrical wiring and devices in accordance with applicable codes and Division 26 requirements.
 - Conduit: All wiring shall be installed in conduit and in accordance with Division 26 specifications, except that low voltage wiring within ceiling plenum spaces, mechanical mezzanines, and attics may be installed without conduit. Wiring in walls shall be in conduit.
 - 3. Wire Labeling: Label or code wiring at each end to show location of the opposite end. Each point of all field terminal strips shall be permanently labeled or coded to show the instrument of item served. Color coded cable with cable diagrams may be used to accomplish cable identification and terminal strip.

4. Service Loop: Provide minimum of 6" extra wiring at all wiring terminations for ease of future maintenance/servicing. Such extra wiring shall be neatly coiled/bundled to allow for uncoiling when the connected equipment is serviced.

SECTION 23 31 00 HVAC DUCTS AND CASINGS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Ductwork.
- B. Preparation of Duct for Service.

1.03 DEFINITIONS

A. Duct Sizes: All duct dimensions shown are inside clear dimensions. Where inside duct lining is specified or indicated, duct dimensions are to the inside face of lining.

1.04 QUALITY ASSURANCE

A. All work and materials shall comply with SMACNA-DCS, NAIMA-DLS, ASHRAE-F, IBC, IMC, NFPA-90A, NFPA-90B, and code. The most restrictive criteria governs.

1.05 DUCT PRESSURE CLASS

A. Constant Volume Systems: Ductwork shall be constructed to the pressure class corresponding to the static pressure indicated for the fan which serves the duct system or 1-inch pressure class (plus or minus as appropriate), whichever is higher; unless noted otherwise.

1.06 REFERENCES

- A. ASHRAE-F: ASHRAE Handbook of Fundamentals.
- B. ASTM A 653: Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot Dip Process.
- C. ASTM C 916: Standard Specification for Adhesives for Duct Thermal Insulation.
- D. ASTM A 924: General Requirements for Steel Sheet Metallic-Coated by the Hot-Dip Process.
- E. ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials.
- F. IMC: International Mechanical Code.
- G. NFPA 90A: Standard for the Installation of Air Conditioning and Ventilating Systems.
- H. NFPA 90B: Standard for the Installation of Warm Air Heating and Air Conditioning Systems.

- I. SMACNA-DCS: SMACNA HVAC Duct Construction Standards, 3rd Edition.
- J. UL 181: Underwriter Laboratories Factory-Made Air Ducts and Air Connectors.
- K. UL 181A: Underwriter Laboratories Closure Systems for Use with Rigid Air Ducts.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Products shall comply with Section 20 05 00, Paragraph 2.01, Acceptable Manufacturers.
- B. Sheet Metal: All domestic manufacturers.
- C. Spin-in Fittings and ATTO: Sheet Metal Connectors Inc., United McGill, Royal Metal Products, Airflow Products Inc.
- D. Gasketing: Preson, Insulfab, Duraco.
- E. Duct Sealant and Tape: Carlisle (Hardcast), Ductmate, Benjamin Foster, Grace Construction Products, United McGill, Polymer Adhesives Sealant Systems, RCD Corporation, Nashua, 3M.

2.02 GENERAL MATERIALS

- A. Ducts: Construct of galvanized sheet steel, suitable for lock forming without flaking or cracking, conforming to ASTM A653 and A924, having a zinc coating of 0.90 ounces total per square foot for both sides of a sheet, corresponding to coating G90.
- B. Fasteners: Steel construction, electroplated zinc coated, having strength properties adequate for the application, compatible with materials being joined, and in accordance with SMACNA-DCS. Where exposed to corrosive conditions shall be of Type 304 or 316 stainless steel. Type to meet duct pressure class and duct leakage requirements. Where used for the support and anchorage of ducts shall comply with Section 20 05 29, with independent test reports regarding strength.
- C. Spin-in Fittings: Factory fabricated of galvanized steel with die-formed mounting groove and damper with raised damper quadrant where ducts are to be insulated. Collar length for flexible duct attachment shall be at least 2" long.
- D. Air-Tight Take-Off Fittings (ATTO): Factory fabricated branch duct connector, of galvanized steel. Flange shall be 1-1/2" wide with 1/8" self-adhesive gasket and pre-drilled fastener holes. Collar length for flexible duct attachment shall be at least 2" long. Where used on round duct

- E. Draw Bands:
 - 1. Metal: Worm gear type clamp, constructed of galvanized steel, stainless steel, or aluminum; minimum 1/2-inch wide band; suitable for 200 pound loading.
 - 2. Non-Metal: Nylon "zip-tie" with self-locking ability, designed for flexible duct usage, minimum 1/4 inch wide, rated for 175 pound load, suitable for temperatures from 0 to 185 deg F; listed per UL181B and labeled "UL181B-C".
- F. Gasketing: Vinyl nitrile, vinyl neoprene, or neoprene nitrile PVC blend; designed for HVAC use with size to suit the application having minimum 1.5-inch width at equipment roof curb applications. Fire hazard rating not to exceed 25 for flame spread and 50 for smoke development per ASTM E 84.
- G. Duct Sealant/Mastic: Water based duct sealant, listed per UL 181B-M and UL 181A-M, suitable for indoor and outdoor use. Fire resistant with a flame spread rating of 5 or less, and a smoke developed rating of 0. Sealant shall be resistant to ultraviolet radiation and ozone. Fiberglass mesh shall be minimum 0.006-inches thick, with minimum 9 x 9 weaves per inch, and 2-inch width; for use with mastic in sealing ductwork. Sealant system shall be suitable for duct system pressure class and materials used with. Carlisle Hardcast "Versa-Grip 181".
- H. Foil Tape: Foil back adhesive tape, listed per UL181A-P and UL181B-FX, with listing labeled on tape outer foil face. Minimum 3-inch width for metal-to-metal applications; minimum 2-inch width for flexible duct applications. 3M No. 3340 or Nashua No. 324A.

2.03 DUCT FABRICATION

- A. Duct Gauge and Reinforcement: Shall be as shown in SMACNA-DCS according to the pressure classification of the system and the duct dimensions; with heavier gauge duct used as required to minimize duct reinforcement to suit space available and other project constraints. In no case shall ducts be constructed of less than 26 gauge material.
- B. Joints and Seams: Construct in accordance with SMACNA -DCS, code requirements, and these specifications (more stringent governs). Ducts shall be constructed and sealed so that the leakage criteria is not exceeded. Round ducts shall be the spiral seam type; except that branch ducts to individual air inlets/outlets less than 16" diameter may be of other types as allowed by SMACNA-DCS. Coordinate joint spacing with duct reinforcement requirements so that transverse joints having the required stiffness may be incorporated in the reinforcement spacing schedule. Round duct transverse joints shall be made with beaded sleeve joints or flanged connections in accordance with SMACNA-DCS; except that branch ducts to individual air inlets/outlets less than 16" diameter may use other joining methods as are allowed by SMACNA-DCS.
- C. Elbows and Tees: Shall be long-radius type with a center-line radius not less than 1-1/2 times the width or diameter of the duct. Where space does not permit the use of long-radius elbows, short-radius or square elbows with turning vanes may be used. Elbows in round duct systems

with duct pressure class above 2-inches shall be stamped type, welded segmented type, or standing seam segmented type.

- D. Transitions: Increase duct sizes gradually. Transitions for diverging air flow shall be made with each side pitched out not more than 22.5 degrees. Transitions for converging air flow shall be made with each side pitched in not more than 30 degrees. Except that eccentric transitions for round to flat oval may have up to a 45 degree pitch.
- E. Branch Connections: Shall comply with SMACNA-DCS.

PART 3 EXECUTION

3.01 DUCTWORK INSTALLATION

- A. General: Install all ductwork with all accessories and connections to provide complete and operable duct systems, in accordance with plans and specifications. See Section 20 05 29 for hangers and supports. Provide quality assurance review of all drawings prior to beginning work (see paragraph titled Quality Assurance, this specification Section and see Section 20 05 00). Provide duct and plenum sizes and locations as shown on the drawings; except as adjusted for field conditions and work of other trades, and with prior approval of the Engineer. See Section 20 05 00 for offsets and transitions to be included in project.
- B. Coordination: The Contractor shall fully coordinate the work of all trades to avoid interferences and conflicts. Due to the extremely tight spaces in portions of the building, the Contractor shall coordinate duct reinforcement spacing and supports with other trades as necessary to avoid interferences. In addition, the Contractor shall select duct gauge and reinforcement types to avoid interferences. Changes required due to lack of coordination between trades, improper spacing or selection of hangers, or improper duct gauge and reinforcement selection, shall be done at no additional cost to the owner.
- C. Field Measurements: Prior to fabricating any duct materials, the Contractor shall field measure all areas where ducts will be installed to verify room available and all offsets and fittings required. Field verify duct connection sizes and locations to equipment, louvers, and similar items.
- D. Workmanship: All work shall comply with code, SMACNA-DCS, and other applicable standards. Ducts shall be installed level (unless noted otherwise) and in neat lines with the building construction using best professional practices.
- E. Exposed Ducts: All ducts are to be installed concealed.
- F. Spin-in Fittings/ATTO's: May be used for branch ducts to individual outlets only. Apply a bead of duct sealant to all spin-in fittings where fitting seals against sheet metal duct.
- G. Sealing:

- General: Use materials listed and approved for the specific application. Foil tape may only be used at duct connections to air inlets/outlets (unless specifically noted otherwise). Clean surfaces to be sealed of moisture and all contaminants. Seal joints in accordance with SMACNA-DCS, sealant manufacturer's instructions, and UL 181.
- 2. Ductwork: Seal to meet duct leakage criteria as follows: Seal Class B; except on duct system with pressure class greater than 2" shall be Seal Class A.
- 3. Flexible Duct: Coat connection of flexible duct to metal duct with duct sealant prior to installing the flexible duct.
- 4. Air Inlets/Outlets: Seal duct connections (including "cans" or plenums) at air inlets and air outlets with duct sealant or foil tape; except at louvers and exposed ducts only sealant shall be used.
- H. Protective Caps: Provide temporary sheetmetal caps or heavy visqueen covers over all open portions of ductwork to prevent debris, dirt, and dust from entering the ductwork. Such covers shall be installed at the end of each work shift, and shall remain in place until all work activities or events that may cause duct contamination will no longer occur.

3.02 PREPARATION FOR SERVICE

- A. Cleaning: All ducts shall be wiped or blown clean of all dust and debris prior to the installation of grilles or diffusers. Notify the Engineer to allow for an inspection prior to installing grilles or diffusers.
- B. Contaminated Ducts: Where ducts have been contaminated by dirt or debris during the construction process, the affected duct systems shall be cleaned by an independent firm specializing in the vacuum cleaning of ductwork. All costs associated with such cleaning shall be the responsibility of the Contractor.

SECTION 23 34 00 FANS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

- A. Rooftop Exhaust Fans.
- B. Fan Accessories.

1.03 SUBMITTALS

- A. General: Comply with Section 20 05 00.
- B. Product Data: Submit manufacturer's product data for all items to be used. Submit fan curves showing SP vs. CFM and BHP vs. CFM with system operating point clearly marked.

1.04 QUALITY ASSURANCE

A. AMCA: Fans shall bear the AMCA certified seal unless indicated otherwise.

1.05 REFERENCES

- A. AMCA 99-0401: Classification of Spark Resistant Construction.
- B. AMCA 210: Laboratory Methods of Testing Fans for Ratings.
- C. IMC: International Mechanical Code.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. General: Products shall comply with Section 20 05 00. See Section 20 05 00, paragraph 2.01 for Acceptable Manufacturer requirements.
- B. Exhaust Fans: Greenheck, Twin City, Penn Barry, Cook, Carnes.
- C. Accessories: Fan manufacturers listed, NCA, Ruskin, Thybar, RPS.

2.02 GENERAL

- A. Drives: Shall be sized for not less than 150% of the rated motor horsepower.
- B. Motors: Comply with Section 20 05 00. Shall be the electronically commutated (EC) type with speed control. Unless noted otherwise, provide with manual speed control mounted at the motor for air balancers use. Motors shall be specifically designed for fan applications, have permanently lubricated ball bearings, speed controllable down to 20%, and have internal thermal overload protection.
- C. Performance: Fan capacity shall not be less than the values listed on the drawings. Fan performance shall be based on laboratory tests conducted in accordance with AMCA 210.
- D. Fan Arrangement and Drive: Shall be as indicated. Select motor and drive access side to allow best access and to suit available space.
- E. Electrical: Fan disconnects and motor starters shall comply with Division 26 specifications. Disconnects furnished with fan shall come factory wired to motor or shall be field wired by Division 23.
- F. Finish: All fans shall have factory applied enamel finish (manufacturer's standard color, unless noted otherwise) over a rust inhibiting primer base coat; except a painted finish is not required on rooftop type fans of aluminum or equivalent corrosion resistant construction.
- G. Backdraft Dampers:
 - 1. General: Provide all exhaust fans with backdraft dampers.
 - 2. Rooftop Fans: Multi-blade backdraft damper, to close automatically to prevent airflow in the opposite direction than intended when fan is off, aluminum or galvanized steel construction (except shall be of stainless steel construction where duct system served is constructed of stainless steel). Frame shall be minimum 0.090-inches thick, with minimum 0.025-inch thick blades, synthetic bearings, concealed linkage connecting all blades, vinyl or felt blade edge seals, rated for 2500 feet per minute velocity, counterbalanced with adjustable weights to allow for proper operation. Leakage less than 10 cfm at 0.5-inch w.g. pressure differential for a 36-inch square damper. For installation in fan roof curb (unless indicated otherwise).
- H. Weatherproof: Where installed exposed to weather, fans shall have weatherproof enclosure, preventing any wind driven water entry into unit or drive assembly.

2.03 ROOFTOP FANS

- A. Type: Centrifugal fan, for rooftop curb mounting, with down-blast discharge. Cook Model ACE (or approved).
- B. Housing: Windband shall be constructed of minimum 16 gauge aluminum. Entire drive assembly and wheel, as a unit, shall be removable through the support structure without dismantling the housing. Provide birdscreen in fan discharge.

- C. Fan Wheels: Shall be aluminum, backward inclined, non-overloading centrifugal type; dynamically and statically balanced.
- D. Drive: Entire drive assembly shall be mounted on rubber vibration isolators. Motor and drives shall be isolated from the exhaust airstream. Air for motor cooling shall be taken into motor compartments by means of an air tube from an area free of contaminated exhaust fumes.
- E. Motors: Shall be per Section 20 05 00. Motors shall be the EC type unless indicated otherwise.
- F. Curb Adapter: Constructed of minimum 18 gauge galvanized steel or 0.064-inch thick aluminum, all-welded construction. Curb adapter shall be sized as needed to allow for the existing curb with a custom transition to match the fan.
- G. Electrical Disconnect Switch: NEC rated; factory mounted in motor compartment (unless indicated to be mounted at another location).

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: Comply with Section 20 05 00. Install in accordance with manufacturer's written installation instructions, code, applicable standards and best construction practices.
- B. Locations: Install fans at locations indicated and in accordance with the Contract Documents.
- C. Rooftop Type Fans: Rooftop type fans shall be mounted on roof curbs, secured to curb on all sides, and sealed watertight.
- D. Operation and Maintenance: See Section 20 05 00.
- E. Start-Up: Prior to start-up inspect fans and installation to confirm proper installation and system is ready for start-up. Arrange other trades to be present as needed (i.e. balancer, electrician, etc.). Check fans for correct rotation, tighten belts to proper tension, adjust fan speeds to provide required performance, verify proper electrical and control connections, check vibration isolation (as applicable) for correct operation, and lubricate bearings per manufacturer's recommendations.

SECTION 23 37 00 AIR OUTLETS AND INLETS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Requirements of Section 20 05 00 apply to this Section.

1.02 WORK INCLUDED

A. GRD Inlets.

1.03 DEFINITIONS

A. GRD's: Grilles, Registers, and Diffusers.

1.04 REFERENCES

- A. AHRI 885: Procedure for Estimating Occupied Space Sound Levels in the Application of Air Terminals and Air Outlets.
- B. AMCA 500: Laboratory Methods of Testing Louvers for Rating.
- C. ASHRAE 70: Method of Testing the Performance of Air Outlets and Air Inlets.
- D. ASHRAE-F: ASHRAE Handbook of Fundamentals.
- E. SMACNA-DCS: HVAC Duct Construction Standards, 3rd Edition.

1.05 SUBMITTALS

- A. General: Comply with Section 20 05 00.
- B. Product Data: Submit product information for all items to be used.
- C. Operation and Maintenance: Submit operation and maintenance data and submittal data for inclusion in project O&M Manuals.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Products shall comply with Section 20 05 00, Paragraph 2.01, Acceptable Manufacturers.
- B. Grilles, Registers and Diffusers: Titus, MetalAire, Krueger, Price, Tuttle & Bailey, Kees, Carnes.

2.02 GENERAL REQUIREMENTS

- A. Type: Air inlets shall be of the size, type, and with number of throws as shown on the drawings; and shall match the appearance and performance of the manufacturers' models specified and scheduled on the drawings.
- B. Performance: Air inlet performance shall be based on tests conducted in accordance with ASHRAE 70.
- C. Finish: Grilles, Registers and Diffusers shall have factory applied finish, color as selected by Architect/Engineer, except where indicated to have a brushed aluminum finish (or other finish type). Finish shall be an anodic acrylic paint, baked on, with a pencil hardness HB to H. Pint shall pass a 90 hour ASTM B117 salt spray test, 250 hour ASTM D870 water immersion test, and an ASTM D2794 reverse impact test with at least a 50 inch-pound force applied.
- D. Frame Style: Provide air inlets with frame style to match ceiling or wall construction installed in. Where supply air outlets or inlets are installed in T-bar ceiling systems, they shall be factory installed in 2' x 2' or 2' x 4' metal panel to match ceiling layout. Where installed against gypsum board surface, brick or similar hard surface, or where exposed, provide with 1-1/4-inch wide outer border. Where space does not permit installing 2' x 2' metal panel, provide outlets or inlets with 1-1/4-inch wide outer border. Where air outlets are installed adjacent to surface mounted light fixtures, outlets shall have 4-inch deep drop frames. (See reflected ceiling plan and/or electrical lighting plan for ceiling and lighting types).
- E. Transfer Grilles: Ceiling transfer grilles shall be same as ceiling exhaust grilles (CEG) unless noted otherwise.
- F. Construction: Air inlets shall be of steel or aluminum construction except that:
 - 1. Where noted to be constructed of a specific material, shall be as noted.
 - 2. In assemblies with a required fire rating and required to have fire dampers shall be of steel construction.
 - 3. In wet areas or subject to condensation (i.e., locker rooms, restrooms, kitchens, exterior soffits, etc.), where not used in fire rated assemblies, shall be of aluminum construction.
 - 4. Air outlets and inlets in the same room, area, or within common view shall be constructed of the same material.

2.03 EXHAUST AIR INLETS

A. Ceiling Exhaust Grille (CEG): Aluminum construction, "cube-core" or "egg-crate" type, with 0.025-inch thick x 1/2-inch deep strips mechanically joined to form 1/2" x 1/2" x 1/2" cubes. Krueger Series EGC5.

2.04 MISCELLANEOU

A. Screen: 1/2-inch mesh, constructed of either 0.051-inch aluminum wire or 19 gauge galvanized steel wire.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: Install air inlets in locations indicated and so as to conform with building features and coordinated with other work. See hangers and supports specification Section for supports and additional requirements.
- B. Location Verification: Verify all air inlet locations with building features and other trades prior to installing any duct systems that will connect to the air outlets/inlets. For locations where air inlet/outlet location is noted to be verified, or location is not clear, develop shop drawings showing the proposed location, or the location that best suits field conditions, and submit for review.
- C. Connections: Furnish all necessary screws, clips, duct collars, and transitions required to allow for the installation and connection of ductwork to all air outlets/inlets and for the attachment of air inlets/outlets to the building and to supports. Connect all ductwork to air inlets and outlets with fasteners, minimum one each side and in compliance with SMACNA-DCS. See ductwork specification Section for sealing and additional requirements.

SECTION 26 01 00 ELECTRICAL GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

A. General requirements specifically applicable to Division 26.

1.03 SCOPE OF ELECTRICAL WORK

- A. Provide electrical systems and Work described, identified, specified, referenced, and shown in the Project Documents that are covered under Divisions 26, 27, and 28 of the Construction Specifications Institute (CSI) and/or as otherwise regulated by national, state, and local electrical codes. Electrical Work includes providing all equipment, materials, devices, appurtenances, and accessories necessary to provide complete and operating systems according to the intent of Project Documents.
- B. Electrical work is not limited to Division 26, 27 and 28 specifications and what is shown on the electrical drawings. The Contractor is responsible to review all Project Documents for additional Electrical Work and requirements and to include this work as part of their scope under the Contract.

1.04 REGULATORY REQUIREMENTS

A. Comply with requirements of the following codes as adopted and supplemented by authority having jurisdiction:

ANSI/NFPA 70 - National Electric Code (NEC) NFPA 101 - Life Safety Code International Building Code (IBC) International Mechanical Code (IMC) WAC 296-46B - Washington State Electrical Safety Standards, Administration, and Installation Washington State Energy Code (WSEC)

- B. Comply with additional codes and regulations referenced in other sections.
- C. Comply with additional codes and regulations required by authority having jurisdiction.
- D. Obtain and pay for permits, and inspections from authorities having jurisdiction over work included under applicable Division Sections.
- E. Include all testing, shop drawings, and documentation required by the inspection authorities for permitting and final approval.

1.05 SUBMITTALS

- A. Comply with requirements of Division 01. Unless otherwise specified, furnish product data and shop drawings to Architect/Engineer within 30 calendar days from date of contract signing as follows:
 - 1. Product information sheets shall be neat, readable, 8.5 x 11 inch, submitted in PDF format. Generic product sheets with multiple products or product descriptions shall clearly highlight or otherwise indicate which product is being furnished. Product sheets shall be reasonably limited to not include entire catalog sections.
 - 2. Furnish product submittals with a cover sheet and table of contents. Furnish a separate submittal and number for each section of the specifications. Cover sheet shall indicate name of the Project, Owner, Architect, Engineer, Contractor, and Date of Submittal. Product table of contents shall list each item submitted. Bookmark each submittal to facilitate browsing according to the type of products.
 - 3. Furnish systems design shop drawings in PDF format. Title block shall include Project, Owner, Contractor, and Date of Submittal.
 - 4. Furnish product data and shop drawings specifically indicating any conflict or deviation from requirements of contract documents.
 - 5. Edited Content: Submittals shall indicate the equipment and options that are to be provided. Copies of an unedited catalog will be Rejected. Pages/items that are not applicable shall be deleted prior to submittal to the Engineer.
- B. Confirm dimensions, ratings, and specifications of electrical materials, devices, fixtures, and equipment conform to project requirements prior to furnishing submittals. Coordinate electrical requirements with utilization equipment submitted under other sections and verify that voltage, phase, and rating are compatible with work shown in the electrical project documents.
- C. Provide shop drawings showing proposed feeder and branch circuit wiring plan required under Section 26 05 00.
- D. Do not order materials or commence Work until applicable submittal has been reviewed and the Architect/Engineer has accepted.
- E. Re-Submittals: If submittals are marked 'Rejected' or 'Revise and Resubmit', the Contractor shall revise the submittal to satisfy the comments or conform to project requirements, and submit to the Engineer for review. Only those items that were rejected or required a resubmittal will be reviewed by the Engineer; All other items will not be reviewed. All re-submittals shall be at least one of the following:
 - 1. Provide a 'Re-Submittal Summary Sheet' which indicates how each comment was addressed (it is acceptable to add the responses to a copy of the original submittal review comments).

2. Cloud (or otherwise clearly identify) the revised portions to indicate what is different from the original submittal.

1.06 SUBSTITUTIONS

- A. Comply with requirements of Division 01. Products specified by naming one or more manufacturers establishes a basis for quality, styling, capacity, and function. Unless otherwise specified, written requests for substitution must be received at least 14 days prior to Bid Opening by Architect/Engineer who will determine acceptability of proposed substitution. Written acceptance must be obtained from Architect/Engineer prior to Bid Opening.
- B. Substitution requests may be
- C.
- D. KING COUNY HOUSING AUTHORITY 26 01 00
- E. 600 BUILDING BATHROOM REMODEL ELECTRICAL GENERAL REQUIREMENTS
- F. submitted for any manufacturer or named productunless specified as "no substitute".
- G. Substitution approval does not relieve the Contractor of complying with the work requirements or the concept and intent of the project documents. Pay for any and all additional project costs that may be caused by Contractor requested substitutions, regardless of whether or not additional costs are overlooked, missed, or unforeseen, and regardless of when substitutions may be approved.

1.07 QUALITY ASSURANCE

- A. Experience: All work shall be performed by individuals experienced and knowledgeable in the work they are performing and experienced with the same type of systems and building type as this project. By virtue of submitting a bid, the Contractor is acknowledging that workers to be utilized on this project have such experience and knowledge. Upon request of the Engineer, submit resumes showing the work history, training, and types of projects worked on, for individuals assigned to this project.
- B. Code: Utilize workers experienced and knowledgeable with codes pertaining to their work; verify code compliance throughout the project.
- C. Quality Assurance Checks: Prior to ordering products and making submittals, confirm the following for each:
 - 1. General: Product is suitable for the intended purpose and complies with the Contract Documents.
 - 2. Manufacturer: Product's manufacturer is listed as an acceptable manufacturer in the Contract Document's, or a substitution request (where allowed) has been submitted and the manufacturer has been listed as acceptable.
 - 3. Electrical (for products requiring electrical power):

- a. Product is for use with the voltage/phase as indicated on the electrical plans (or for the electrical circuit the item will be connected to).
- b. Product's ampacity requirements (MCA) do not exceed that indicated on the electrical plans (or for the electrical circuit the item will be connected to.
- 4. Weight: Product's weight is no greater than that indicated.
- 5. Space Verification: Product will fit in the space available, and along the path available to install the item, will have adequate service clearances, and will not impede on any clearances required for other items in the space the item will be located.
- 6. Installation: A suitable method for installing the product has been selected which meets the project schedule and other requirements.
- 7. Anchorage/Support: The manufacturers recommended method of anchorage and support is consistent with the method indicated in the Contract Documents, and the item has provisions suitable for such anchorage/support.
- 8. Lead Time: The product's fabrication, shipping, and delivery period meets the project schedule requirements.
- 9. Substituted Equipment: Where equipment is not the basis of design confirm all requirements for substituted equipment have been met and shop drawings of construction revisions have been (or are being) prepared.
- 10. Controls: Item is compatible with the controls it will be connected to and has been coordinated with the firm providing the project control work to provide the specified (or required) sequence of operation.
- 11. Listing: Item is Listed when required to be as such. And if the item is to be installed as part of a Listed system or assembly, it is compliant with the Listing of the overall system or assembly.
- 12. Existing Buildings/Systems: Product size, weight, connecting services (i.e. electrical, controls, power, plumbing, etc.) are configured and suitable for existing items they connect to or interface with.
- D. Check-Out: The Contractor shall be responsible to verify that proper installation and proper connections have been provided for all mechanical work. Contractor shall provide installation checkout, start-up services, and perform a thorough check of all mechanical systems to verify proper installation and operation. Contractor shall operate all items multiple times under varying conditions to confirm proper operation. Contractor shall submit a checklist listing all equipment, fixtures, and similar items furnished on this project, with a date and initials indicating when the item was checked, a list of what was checked, and by whom. Such check shall, as a minimum utilize documents provided by the equipment manufacturer. Such a check-out is in addition to any commissioning activities specified (unless noted otherwise).

- A. Comply with requirements of Division 01. Maintain at project site one set of clean, dry, and legible, red-lined record drawings for submittal at Contract Close-out. Record information concurrently with construction progress.
- B. Indicate electrical changes in the contract documents. Include change orders, revised branch circuit and feeder wiring layouts, revised circuit identification, pull & junction boxes added during construction, and actual dimensioned location and routing of each underground conduit on record drawings.

1.09 LABELING

A. Where labeling that includes room names and numbers is required for any system to identify devices or for programming purposes, use final room names and numbers determined during construction. Verify room names and numbers with Architect prior to manufacturing labels or programming software.

1.10 OPERATION AND MAINTENANCE MANUALS

- A. Comply with requirements of Division 01. Unless otherwise specified, furnish one labeled CD in PDF format and two duplicate hard copy printed sets of Operation and Maintenance Manuals prior to completion of contract. Submit hard copy manuals in labeled and indexed 3-ring binder(s).
- B. Include the following information as applicable:
 - 1. Names, addresses, and telephone numbers of the contractor, the installing sub-contractor, and the local representative for each system or equipment.
 - 2. All approved product data and shop drawings.
 - 3. Identify all manufacturer warranties which exceed one year.
 - 4. Model number and serial number of each piece of equipment provided.
 - 5. Data from test results performed under the Contract.
- C. Operation and maintenance data shall include complete parts lists, installation and maintenance instructions, safety precautions, operation sequence describing start- up, operation, and shut-down, internal and interconnecting wiring and control diagrams with data to explain detailed operation and control, and testing methods for each system and item of equipment.

1.11 WARRANTY

- A. In addition to requirements covered under General Conditions or Division 01, include manufacturer product warranties that exceed one year. Assemble or list warranties that exceed one year in Operation and Maintenance Manuals indicating start date. Certificates of extended warranty shall identify the Owner as the beneficiary.
- B. If the Electrical Contractor does not have offices located within 150 miles of the project, provide a service/warranty work agreement with a local electrical subcontractor approved by the Owner. The service/warranty work agreement shall extend for the contract warranty period, and a copy shall be included in the Operation and Maintenance Manuals.

1.12 INTENT OF PROJECT DOCUMENTS

- A. Drawings and specifications are complementary and what is called for in either is binding as if called for in both.
- B. The drawings are diagrammatic and show the general arrangement of the construction and do not attempt to show all features of work, exact construction details, or actual routing of conduit and cable. Provide all necessary supports, off-sets, bends, risers, fittings, boxes, wiring, and accessories which are required for a complete and operating installation. Determine locations for required electrical outlets and connections prior to rough-in base on equipment product and installation submittal data and/or review of equipment on site.
- C. The level of design presented in the documents represents the extent of the design being furnished to the Contractor; any additional design needed to perform the Work shall be provided by the Contractor. All design by the Contractor shall be performed by individuals skilled and experienced in such work, and where required by local code (or elsewhere in the documents) shall be performed by engineers licensed in the State where the project is located. Include in bid the costs of all such project design; including engineering, drafting, coordination, and all related activities and work. Contractor provided design services shall be included for but not limited to bidder design specifications, temporary electrical systems, layout routing to install the Work and share project space with other building systems, hanger and support systems, seismic bracing, preparation of shop drawings, locating and identifying requirements for equipment and fixture terminations, and methods/means of accomplishing the work.

1.13 COORDINATION

- A. Examine architectural, civil, structural, and mechanical drawings and specifications and consult with other trades, as required to coordinate use of Project space and sequence of installation.
- B. Arrange wiring and equipment to avoid interference with other work and to maximize accessibility for maintenance and repairs.
- C. Coordinate with suppliers and installers to obtain product electrical data, shop drawings, and installation requirements for systems, equipment, and products furnished by Owner and/or other trades as required perform electrical work.

- D. Contractor is responsible ensure that equipment, fixtures, and devices being furnished and installed shall fit the space available, taking into account connections, service access, and clearances required by product manufacturer and/or Code. Contractor shall make the necessary field measurements to ascertain the space requirements for proper installation, and shall furnish and/or install equipment so that final installation meets the intent of the Project Documents. If approval is received by Addendum or Change Order to use other than the originally specified items, Contractor shall be responsible for specified capacities and for ensuring that items to be furnished will fit the space available.
- E. Contractor is responsible to review all the Project Documents and approved shop drawings provide under other divisions to identify and resolve conflicts between electrical systems and building construction, equipment, cabinets, counters, trim, and special finishes, prior to rough-in.
- F. Facilitate coordination between low voltage system sub-contractors during construction. Include time for a minimum of one meeting with all sub-contractors prior to building rough-in to review requirements for each system per Section 26 05 30. Include a second meeting with all sub-contractors to review requirements for all systems utilizing IP structured cabling prior to cover.

1.14 REQUIREMENTS FOR EQUIPMENT FURNISHED UNDER OTHER SECTIONS OR BY OWNER

- A. Provide power wiring, disconnect switches, electrical connection of equipment, installation of furnished electrical controllers, parts, and accessories, and field wiring for systems, equipment, and products furnished under other divisions or by Owner. Install controllers, operator stations, and control devices such as limit and temperature switches furnished with equipment.
- B. Review equipment submittals prior to electrical rough-in and installation. Verify location, rating, size, type of connections, and required space requirements. Coordinate field wiring requirements and details with supplier and installer. Notify Architect/Engineer of conflicts between requirements for actual equipment being furnished and equipment indicated in contract documents prior to commencing Work.
- C. Provide motor controllers and operator stations unless otherwise indicated on the project drawings.
- D. Make final connections to equipment. Provide cord and plug where required for plug-in connection.
- E. Integrated automation systems covered under Division 25 are not included as part of electrical work.

1.15 DEFINITIONS

- A. Electrical terms used in these specifications are as defined in NEC Art. 100 unless otherwise noted.
- B. Abbreviations: Where not defined elsewhere in the Contract Documents, shall be as defined in RS Means Illustrated Construction Dictionary.

- C. Accessible Ceiling: Signifies access that requires the removal of an access panel or similar removable obstruction.
- D. As Required: As necessary to form a safe, neat, and complete working installation (or product), fulfilling all the requirements of the specifications and drawings and in compliance with all codes.
- E. Concealed: Hidden from view as in walls, trenches, chases, furred spaces, crawl spaces, unfinished attics, and above suspended ceilings.
- F. Conduit: Includes conduit and tubing raceways.
- G. Coordinate: Accomplish the work with all others that are involved in the work by directly discussing the work with them, arranging and participating in special meetings with them to discuss and plan the work being done by each, obtaining and completing any necessary forms and documentation required for the work to proceed, reaching agreement on how parts of the work performed by each trade will be installed relative to each other both in physical location and in time sequence, exchanging all necessary information so as to allow the work to be accomplished with a united effort in accordance with the project requirements.
- H. Equipment Connection: Make branch circuit connection, mount and connect control devices as required. Provide disconnect and overcurrent protection when required by NEC and IMC, if not otherwise indicated or furnished with equipment.
- I. Exposed: Exposed to view in any room, hallway, passageway or outdoors.
- J. Finished Areas or Spaces: Areas and/or spaces receiving a finish coat of paint on one or more wall surface.
- K. Furnish: Obtain and/or prepare and deliver to the project.
- L. Indicated: Shown, scheduled, noted, or otherwise called out on the drawings.
- M. Install: Enter permanently into the project complete and ready for service.
- N. Open Cable or Wiring: Conductors above grade not installed in conduit or raceway.
- O. Panel: Distribution panelboard, lighting and appliance panelboard, load center, and/or low voltage cabinet.
- P. Provide: Furnish and install complete and ready for service.
- Q. Wiring: The assembly of conductors, raceways, an approved cable assembly, outlets, junction boxes, conduit bodies, fittings, and associated accessories.
- R. Verify: Obtain, by a means independent of the project Architect/Engineer and Owner, the information noted and the information needed to properly perform the work.

PART 2 - PRODUCTS

2.01 MATERIALS, EQUIPMENT

- A. General: Furnish only products that are new and free from defects with a manufacture date that is less than six months from date of installation. Where product and applicable software updates or upgrades are available from the manufacturer, furnish the latest version unless otherwise specified. Furnishing discontinued products and/or products of manufacturers who are no longer in business is not permitted.
- B. Listing and Labeling: Furnish and install only products that are listed and labeled by one or more of the following testing laboratories as approved by the Authority Having Jurisdiction:

Underwriter's Laboratories, Inc.	(UL)
ETL Testing Laboratories, Inc.	(ETL)
Factory Mutual	(FM)

- C. Each specified product and system to be furnished shall be from a single approved manufacturer. Providing multiple product brands or manufacturers for each type or category, or for multiple units of the same specified product and/or system, is not permitted.
- D. Products shall be delivered, handled, and stored per manufacturer recommendations. Protect fixtures, materials, and equipment from rain, water, dust, dirt, snow, and damage. Do not install products that have marred, scratched, deformed, or otherwise damaged. Do not install products that have been wet or exposed to the weather prior to assembly and/or installation.

PART 3 - EXECUTION

3.01 WORKMANSHIP

A. Electrical work shall conform to requirements of ANSI/NECA 1-2015, Standard Practice of Good Workmanship in Electrical Construction. Quantity of materials and layout of the Work shall be provided based on field measurement of the actual project conditions and shall not be based on plan dimensions.

3.02 CUTTING AND PATCHING

- A. Provide cutting and patching to complete electrical work and to provide openings in elements of Work for electrical penetrations. Comply with requirements of Division 01.
- B. Locate and execute cuts so as not to damage other work or weaken structural components. Core drill or saw cut rigid materials.
- C. Patch to restore to original condition. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit

SECTION 26 04 00 EXISTING ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

- A. Demolition of systems applicable to Division 26.
- B. Requirements for remodeling applicable to Division 26.

1.03 EXISTING CONDITIONS

- A. The drawings show portions of existing electrical systems which are to remain, be removed, or be modified under the Contract. Concealed features of existing systems are based on field observation and existing record drawings. No guarantee is made as to their correctness.
- B. Contractors shall visit the project site prior to bidding and become familiar with the existing conditions and all other factors which may affect the execution of the work. Include all costs related to existing site conditions in the initial bid proposal. Many systems may not comply with NETA or other maintenance standards and may require special precautions and procedures.
- C. Failure to visit the project site prior to bid does not relieve the Contractor of the responsibility to provide all required work and a complete installation within the intent of the Contract Documents.

1.04 POWER AND SIGNAL OUTAGES

- A. The facility will continue normal operations during the construction work. The Contractor shall schedule power outages with the Architect/Engineer in accordance with requirements of Division 01. Include coordination, identification of affected areas, work schedule, and re-energizing of electrical systems with minimal disruption to facility operations.
- B. Unscheduled power or signal outages to Owner occupied areas and systems essential to facility operation or life safety shall not be permitted at any time. In the event that the Contractor's work causes or contributes to a power outage or other system fault, the Contractor is responsible for immediately correcting the problem.

1.05 FIRE ALARM SYSTEM

A. Maintain and operate the existing fire alarm system during construction. Comply with alarm, incident response, and fire watch requirements of the Authorities Having Jurisdiction for all areas served by the system. Plan and provide fire watch and/or temporary wiring where new construction interrupts required system operation.

- B. Provide dust protection for installed smoke detectors located within the work area. Clean detectors after work is completed and dust protection is removed.
- C. Coordinate all planned shutdowns and tests of the fire alarm system with the Fire Department and Alarm Reporting Center. Notify the Alarm Reporting Center of false alarms that occur during construction as required to mitigate Fire Department response.
- D. Provide investigation, correction, and required repairs to the alarm system for false alarms and system trouble that occur during the project and for system failures cause by the Work. Fines and penalties for excessive false alarms that occur during the Project shall be the responsibility of the Contractor.
- E. The Owner shall provide reimbursement for expenses associated with false alarms, system trouble, and system failure if the contractor can satisfactorily demonstrate that the incidents are not related to the Project.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. New and Replacement Materials and Equipment: As specified in applicable sections, except product manufacture shall match existing for minor construction and for accessories to equipment that remains.
- B. Materials and Equipment for Patching: Match existing products.
- C. In finished spaces provide surface metal raceway systems as specified in other sections where existing construction does not permit concealed installation.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Field verify wiring and cabling for existing power and signal systems back to source of supply as required to perform Work.
- B. Provide temporary wiring and connections to maintain existing systems interrupted by new construction.

3.02 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Electrical demolition includes the disconnecting, removal, and disposal of fixtures, devices and equipment where indicated, along with associated wiring.
- B. The following shall be considered as abandoned unless otherwise indicated:
 - 1. Wiring to fixtures, devices, and equipment being removed or disconnected.
 - 2. Conduit containing conductors or cable that have been disconnected from a source of supply or left empty by the removal of conductors.

KING COUNY HOUSING AUTHORITY 600 BUILDING BATHROOM REMODEL

26 04 00 EXISTING ELECTRICAL SYSTEMS

- 3. Open conductors or cable that have been disconnected from a source of supply.
- 4. Fixtures, devices, equipment, and outlets located in walls, ceilings, and floors indicated to be removed.
- 5. Fixtures, devices, and equipment identified as being replaced.
- C. Disconnect and remove abandoned light fixtures, including brackets, stems, hangers, pole base and other accessories.
- D. Repair adjacent construction and finishes damaged during demolition and extension work.
- E. Provide new supports for existing conduit and open cable accessed during construction and which is to remain or be reused, as required to comply with current Code. Comply with requirements of applicable signal system specifications for support of signal cables.

3.03 DISPOSITION OF MATERIALS

- A. Prior to start of demolition, coordinate with Owner to identify materials and equipment for salvage. Disconnect and remove items to be salvaged and deliver to an area on site designated by the Owner. Disconnect, remove, and handle salvage material and equipment in a manner so as not to damage or otherwise render unusable.
- B. Materials and equipment removed and not reused or salvaged to the Owner shall become the property of the Contractor unless otherwise indicated. Remove such material and equipment from the Owner's property and dispose legally off site.
- C. Transformers, ballasts, fluorescent lamps, capacitors, oil switches, and other removed materials and equipment which may contain Polychlorinated Biphenyls (PCB's) or mercury shall be considered hazardous waste. Handle, transport, and dispose of these materials and equipment in accordance applicable state and federal laws. Provide to the Owner a certificate of disposal within the one year contract warranty period.

SECTION 26 05 00 BASIC MATERIALS AND METHODS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Excavation and Backfill for Underground Conduit: Comply with Division 02 Site Work Division 31 Earthwork.
- C. Section 26 01 00 Electrical General Requirements.

1.02 SECTION INCLUDES

- A. Conduit and Fittings.
- B. Surface Metal Raceway.
- C. Building Wire and Cable.
- D. Wiring Connections and Terminations.
- E. Boxes.
- F. Wiring Devices.
- G. Supporting Devices.
- H. Requirements for Fire Rated Construction.
- I. Earthwork for Underground Electrical.

1.03 SUBMITTALS

A. Submit product data for conduit, conduit fittings, wire and cable, watertight connectors, and wiring devices.

1.04 OPERATION AND MAINTENANCE DATA

A. Include data for wiring devices in Operation and Maintenance Manuals.

PART 2 - PRODUCTS

2.01 CONDUIT

- A. Rigid Steel Conduit (RGS): ANSI C80.1; hot dipped galvanized.
- B. Intermediate Metal Conduit (IMC): Hot dipped galvanized..

- C. Electric Metallic Tubing (EMT): ANSI C80.3; galvanized tubing.
- D. Flexible Metal Conduit: Galvanized steel. Heavy wall except reduced wall may be used where concealed in building construction.
- E. Liquid Tight Flexible Metal Conduit: Galvanized steel, PVC jacket.

2.02 FITTINGS

- A. RGS and IMC Conduit: ANSI/NEMA FB 1; threaded type. Provide bushings, hubs and connectors with insulated throat, for conduit terminations.
- B. EMT Conduit: ANSI/NEMA FB 1; steel, compression type. Crimp-on, drive-on, indenter, and set screw type prohibited. Provide connectors with insulated throat for conduit larger than 3/4-inch diameter. Provide raintight fittings for conduit installed outdoors.
- C. Flexible Conduit: ANSI/NEMA FB 1; steel, single screw squeeze type.
- D. Liquid Tight Flexible Conduit: ANSI C33.84, steel. Provide PVC coated fitting where installed outdoors.
- E. Water and Vapor Conduit Sealants: Hydra-Seal S-50 conduit sealing putty or approved; Tyco/Rachem/TE blank duct plug or approved; Polywater FST conduit sealing foam system or approved.
- F. Corrosion Protection: Zinc plated minimum indoors and hot dipped galvanized minimum outdoors and indoor wet locations for all metal fittings and accessories.

2.03 WIRE AND CABLE

- A. Copper Building Wire, Interior: Type THWN-2, 600 volt insulation; conductors 8 AWG and larger shall be stranded. Type XHHW-2 may be substituted for conductor sizes 4 AWG and larger. XHHW-2 shall be used for circuits on the load side of GFCI (RCD) devices.
- B. Copper Building Wire, Outdoors: Type RHW/USE-2, 600 volt insulation; conductor 8 AWG and larger shall be stranded.

2.04 WIRE CONNECTORS

A. Connectors for Wire Size 10 AWG and Smaller: Insulated steel spring twist-on pressure connector with plastic cap. Outdoors use watertight type with prefilled sealant gel.

2.05 BOXES

- A. Outlet Boxes: ANSI/NEMA OS 1; galvanized sheet steel, with 1/2-inch male fixture studs or plaster rings as required.
- B. Junction and Pull Boxes: Outlet box with blank cover except boxes larger than 4 inch square shall be screw cover type, galvanized steel with grey enamel finish, NEMA 1 indoors and NEMA 3R outdoors, unless otherwise indicated.

- C. Fire Rated Construction: Recessed outlet boxes and rough-in cans that are installed in 2 hour rated area separation walls shall be UL listed with 1-1/2 hour rating label.
- D. Sound Attenuation Wrap: UL listed, 0 VOC, sound attenuating wrap for sealing around outlet boxes. SpecSeal SSP Putty Pad or approved.

2.06 WIRING DEVICES

- A. Duplex Receptacles: Specification grade 5362 series, NEMA 5-20R, groundingtype, as manufactured by Hubbell, Leviton, Pass & Seymour, Cooper. Color: White
- B. Ground Fault Circuit Interrupter (GFCI) Receptacles: Same manufacture, rating, and color as duplex receptacles except devices shall comply with UL 943, Class A, with self test.

2.07 SUPPORTING DEVICES

- A. Metal Conduit Clamps and Straps: Steel, screw type; zinc or cadmium plated minimum indoors, hot dipped galvanized minimum outdoors.
- B. Support Channel: Slotted 12-gauge steel channel with fittings, fasteners, brackets, clamps, floor plates, and accessories required; Pre-galvanized zinc coated (G90) indoors, ASTM123 hot dipped galvanized outdoors.
- C. Fasteners: Expansion anchors in concrete and solid masonry; toggle bolts in hollow masonry, plaster, or gypsum board wall construction; sheet metal screws in metal construction; wood screws in wood construction; set screw type beam clamps on steel columns and beams; U.L. listed clips for metal studs. Metal parts and accessories to be zinc or cadmium plated minimum indoors and hot dipped galvanized minimum outdoors.

2.08 ACCESSORIES

- A. Air-Vapor Barriers:
 - 1. Pre-molded polyethylene box installed in all exterior framing walls (thermal envelope) around recessed outlet boxes.
 - 2. Foam electrical outlet gaskets for installation between device plate and finished outlet. Conceal behind device plate.
- B. Pulling Wire:
 - 1. Interior; continuous fiber pulling line, 190# tensile strength.

2.09 FIRE RATED CONSTRUCTION

A. Products for Fire Stopping to Seal Around Enclosures and Annular Space between Conduit and Building Construction at Conduit Penetrations: ANSI/UL 1479; Comply with requirements of Division 07.

PART 3 - EXECUTION

3.01 WIRING METHODS

- A. General:
 - 1. Fixed wiring shall be conductors installed in conduit.
 - 2. Conceal all wiring within construction unless otherwise noted on drawings or specifically authorized by the Architect/Engineer.
 - 3. Where contractor wiring methods require the application of conductor ampacity adjustment or correction factors under NEC 310.15, the contractor shall submit calculations that show Code compliance, except the adjusted ampacity of the conductors installed shall not be less than the circuit overcurrent device rating shown or specified.
 - 4. Conduit sizes shall not be reduced to smaller size than shown or otherwise noted on plans.
 - 5. Feeders shown or otherwise noted on plans shall not be combined to share a common conduit homerun. Branch circuit homeruns shown or otherwise noted on plans shall not be combined to share a common conduit with other circuits.
 - 6. Device Plates: It is the electrical contractor's responsibility to ensure that all line voltage and low voltage system faceplates and visible trim pieces are the same color. Exception: Where stainless steel device plates are used for line voltage systems, low voltage systems may use non-metallic plates of the same color.
- B. Conduit Requirements:
 - 1. Rigid Steel Conduit (RGS): May be used in all areas. Required at penetrations thru fire rated construction rated greater than 1 hour.
 - 2. Intermediate Metal Conduit (IMC): May be used in all areas except where RGS is required or indicated.
 - 3. Electrical Metallic Tubing (EMT): May be used in dry and damp locations where not subject to damage. May not be used in concrete, where in contact with earth, or where RGS is required or indicated. May not be used for service entrance conductors inside a building. Maximum trade size 2 inches.
 - 4. Flexible Conduit: May be used concealed in casework and where concealed in construction, up to 1 inch maximum trade size. Required for final equipment connections (maximum length 36 inches), to recessed lighting fixtures from an outlet box (maximum length 72 inches), and where raceway passes thru seismic joints. Use liquid tight in damp or wet locations.
- C. Wire and Cable Requirements:
 - 1. Use copper conductors.

3.02 SUPPORT - GENERAL

- A. Support wiring, conduit, raceways, boxes, equipment, and fixtures from building structural members. Provide additional framing, channel, or listed support attachments as required to span or support between structural members and to avoid interference from pipes, ducts, and other equipment.
- B. Do not install support anchors to penetrate thru roof deck.
- C. Do not violate the integrity or exceed the capacity of the building structure used for support. Provide/fabricate additional support elements to transmit loads to the floor or other parts of the building structure that can carry the load as approved by the Architect/Engineer.

3.03 CONDUIT SIZING, ARRANGEMENT, AND SUPPORT

- A. Minimum conduit trade size 1/2-inch diameter except all homeruns and where installed below grade outdoors conduits shall be 3/4-inch minimum diameter. Prewired 3/8 inch diameter flexible conduit not to exceed 72 inches in length may be used for fixture whips from an outlet box to recessed light fixture.
- B. Arrange conduit to maintain headroom and present a neat appearance.
- C. Route conduit parallel and perpendicular to walls and adjacent piping.
- D. Maintain 12-inch clearance between conduit and heat sources such as flues, steam pipes, and heating appliances.
- E. Locate holes in joists within center third of member depth measured from the edge and at least 24 inches from load bearing points. Maximum hole diameter one inch.
- F. Support conduits from building structure with conduit straps or rods and hangers. #8 solid wire and CADDY clips may be used to hang 3/4-inch diameter conduit and smaller above accessible ceiling spaces.
- G. Group conduit in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps. Provide space for 25 percent additional conduit.
- H. Do not support conduit with perforated pipe straps or tie wraps. Remove all wire used for temporary conduit support during construction, before conductors are pulled.
- I. Do not bore holes in truss members or notch structural members.
- J. Steel conduit installed as part of a 2 hour fire rated wiring assembly shall be supported 5 feet on center where required by the cable system installation requirements.

3.04 CONDUIT INSTALLATION

- A. Use conduit hubs or sealing locknuts for fastening conduit to cast boxes and for fastening conduit to sheet metal boxes in damp locations.
- B. Use conduit bodies to make sharp changes in direction, as around beams.
- C. Install insulated bushings on each end of conduit larger than 1 inch

- D. Use suitable conduit caps to protect installed conduit against entrance of dirt and moisture.
- E. Install pull wire in empty conduits.
- F. Conduits at Roof Decks: Conduit installed within 1.5 inches of the nearest surface of metal corrugated roof decks and conduit concealed within roofing systems on top of roof decks shall be RGS or IMC conduit.
- G. Install flexible conduit thru oversized bushed sleeve or cored opening where conduit crosses building wall expansion or seismic joints. Provide up to 54 inches of flexible wiring with 6 inches minimum of conduit slack each side of the wall assembly to allow for free movement across the joint.
- H. Do not install conduit in concrete slab on grade.
- I. Do not install conduit in direct contact with underside of roof deck.

3.05 CONDUIT PENETRATIONS

- A. Exterior Walls: Core drill or cast sleeve for each conduit one size larger than conduit diameter. Seal all openings at each penetration with acrylic weatherproof caulking suitable for painting. Below grade seal with "Chase-Foam" silicone sealant or other approved method acceptable to Architect/Engineer.
- B. Interior Walls and Partitions: Cut one size larger than conduit diameter. Seal all openings at each penetration with low VOC level general purpose interior sealant as specified in Division 07.
- C. Fire Rated Construction: Comply with requirements of paragraph, FIRE RATED CONSTRUCTION, this specification.

3.06 CONDUCTOR INSTALLATION

- A. Minimum Conductor Size: #12 AWG, except #10 AWG minimum for outdoor and exterior building lighting circuits and #14 AWG minimum for control circuits and for lighting fixture taps not to exceed 72 inches.
- B. Splice conductors only in junction or outlet boxes.
- C. Arrange conductors neatly at termination such that a clamp-on ammeter may be used.
- D. Clean conduit free of debris before conductor installation; install conductors using pulling lubricant.

3.07 CONDUCTOR IDENTIFICATION

- A. Provide non-metallic wire markers on each conductor in panelboards and in junction boxes having more than 6 conductors. Identify branch circuit or feeder number for power and lighting circuits.
- B. Color Coding of Insulated Equipment Ground: Solid green.

C. Provide color tracers on neutrals to differentiate circuits on multi-wire branch circuits with separate neutrals.

3.08 BOX LOCATIONS

- A. Provide electrical boxes for outlets, junctions and equipment connections as shown and as required for splices, taps, wire pulling, and code compliance.
- B. Electrical box locations shown are approximate unless dimensioned. Obtain equipment outlet locations from equipment manufacturer prior to rough-in. Coordinate outlet and wall switch locations with casework and finish elements shown on Architectural drawings. Install to fit conditions or as directed.
- C. Change location of wall outlets, wall switches, and lighting outlets up to fifteen feet without charge when requested by Architect/Engineer prior to installation.
- D. Height of outlets unless otherwise directed: See Drawings.

3.09 BOX INSTALLATION

- A. Set wall outlet and wall switch boxes vertically.
- B. Support boxes independently of conduit, piping, and ductwork; securely fasten in place.
- C. Provide recessed outlet boxes in finished areas. Flush front edge of box or plaster ring even with finished surface.
- D. Provide blank cover plate over all boxes that do not contain devices or are not covered by equipment.
- E. Do not install flush boxes on opposite sides of a wall within the same stud space. Maintain 24 inch minimum box separation in fire rated wall assemblies.

3.10 FIRE RATED CONSTRUCTION

- A. Verify location of fire rated walls and ceilings with Architectural plans prior to rough-in.
- B. Installation of boxes, rough-in cans, conduits, and sleeves that result in membrane or through penetrations shall comply with IBC 712.1 through 712.4 as required to maintain fire rating of construction assembly. Coordinate locations and construction requirements with General Contractor.
- C. Provide approved conduit and/or pathway sleeve kits for installation of open cable through fire rated construction.

SECTION 26 05 26 GROUNDING AND BONDING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

A. Electrical Equipment and Raceway Grounding.

PART 2 - PRODUCTS

201 MATERIALS

- A. Mechanical Connectors at Ground Connections: Heavy duty, solderless, bolted pressure or compression type connectors or clamps labeled as being suitable for the purpose. Manufacturer's standard grounding lug when furnished as part of panelboards and other equipment.
- B. Ground & Bonding Conductors: Bare, soft drawn copper; stranded for 8 AWG and larger, unless otherwise indicated or specified. Equipment grounding conductors may be insulated with green color identification per Code.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Equipment Grounding Conductor: Provide separate insulated green equipment grounding conductor in feeders and in branch circuits to plug-in outlets. Provide equipment grounding conductor in non-metallic conduits and flexible conduits. Size equipment grounding conductors per NEC 250.122 unless larger size where shown or specified.
- B. Ground exposed non-current carrying metal parts of equipment fastened in place or connected by permanent wiring and likely to become energized per Code. In MDF and in IDF rooms, bond cable trays and equipment racks to terminal board ground bus using #6 minimum AWG conductor.

3.07 TESTS

A. Maximum Acceptable Resistance to Ground: 25 ohms

SECTION 26 09 20 LIGHTING CONTROLS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Section 26 50 00 Lighting Fixtures.

1.02 SECTION INCLUDES

A. Occupancy Sensors

1.03 SUBMITTALS

A. Submit product data for all products and associated components specified under Part 2 of this section.

1.04 OPERATION AND MAINTENANCE DATA

A. Include submittal data, shop drawings, installation and operating instructions, commissioning and test reports, and warranties that exceed one year in Operations and Maintenance Manuals.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Occupancy Sensors: Greengate, Sensor Switch, WattStopper.

2.02 OCCUPANCY SENSOR

- A. Wall Switch Sensors:
 - Passive infrared occupancy sensor, automatic OFF, manual ON/OFF, continuous self adapting sensitivity and time delay, LED motion indicator, compatible with magnetic ballast, electronic ballast, and motor loads, 170 degree minimum field of view. Minimum load rating shall be 600 VA and 1/6 HP at 120 volts and 1000 VA and 1/3 HP at 277 volts. Minimum rated area coverage shall be 900 square feet.
 - 2. Provide low temperature sensors (-4 degree F/-20 degree C) where installed outdoors, in unheated spaces, and in refrigerated spaces. Provide high humidity sensors where installed in damp locations, refrigerated spaces, and adjacent to shower stalls.
 - 3. Two Level Switching: Where indicated, provide wall switch sensor with independent dual switching control, user selectable for control of one or two switch legs to provide two levels of room illumination.
 - 4. Finish: Match wiring devices and plates specified under Section 26 05 00.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Install lighting controls in accordance with manufacturer's instructions and approved shop drawings. Provide programming, setup, and calibration for complete operation of each control system.

3.02 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of system to Owner's personnel prior to contract closeout. Allow one site visit and one hours of total instruction scheduled at convenience of Owner.
- B. Use operation and maintenance manuals as basis of instruction, reviewing contents of manual with personnel in detail.

SECTION 26 20 00 ELECTRICAL DISTRIBUTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.

1.02 SECTION INCLUDES

- A. Disconnect Switches.
- C. Nameplates.

1.03 SUBMITTALS

- A. Submit product data for switchboards, panelboards, circuit breakers, motor controllers, contactors, dry type transformers, busway, and enclosed circuit breakers.
- B. Coordinate dimensions of equipment with site and project space dimensions to verify equipment will fit, conform to indicated layout, and meet NEC and manufacturer clearance requirements.

1.04 OPERATION AND MAINTENANCE DATA

A. Include data for disconnect switches in Operation & Maintenance Manuals.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Motor Controllers and Contactors: Allen-Bradley, Square 'D', General Electric - ABB, Furnas, Cutler-Hammer.

2.02 DISCONNECT SWITCHES

- A. Toggle Switches for Small Motors and Appliances: NEMA WD 1; horsepower rated 20 ampere general use snap switch with lock-out attachment.
- B. Switch Enclosures: NEMA ICS 6; Type 1 for dry locations, Type 3R for damp or outdoor locations.

2.03 NAMEPLATES AND LABELS

- A. Nameplates: Engraved three-layer laminated plastic, white letters on black background, affixed with stainless steel screws, adhesive acceptable in dry locations. Use black letters on yellow background for series combination rating identification.
- B. Letter Height: 1/2 inch for series combination rating identification. 1/4 inch for switchboards, panelboards, motor control centers, circuit breakers, switches, and disconnecting means; 1/8 inch for motor starters, contactors, time switches, and equipment served.

PART 3 - EXECUTION

3.01 DISCONNECTS

A. Provide a disconnect in addition to the controller disconnecting means at installed motor loads that are not in sight of motor controller as required by NEC 430.102(B).

3.02 NAMEPLATES AND LABELS

- A. Equipment Served: Provide nameplate to identify equipment designation corresponding with nameplate of serving overcurrent device, disconnect switch, or controller when there is more than one of same type of equipment being served, e.g. Air Handler No. 2. Coordinate with Architect/Engineer to assign numbers when not designated in equipment schedules.
- B. Nameplate and Label Location: Secure to equipment fronts, except recessed panelboards in finished locations secure nameplates and labels to inside face of door.

3.03 **TESTS**

A. Motors and Compressors: Record all nameplate data. Measure actual voltage and running amperes for each phase. Record manufacturer and catalog number of overload thermal units installed.

SECTION 26 50 00 LIGHTING FIXTURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to this Section.
- B. Section 26 01 00 Electrical General Requirements.
- C. Section 26 05 00 Basic Materials and Methods.
- D. Section 26 09 20 Lighting Controls.

1.02 SECTION INCLUDES

- A. Interior Luminaires and Accessories.
- B. Ballasts and LED Drivers.

1.03 COORDINATION

- A. Confirm luminaire type, mounting, and recessed depth is compatible with ceiling system prior to ordering. Coordinate with architectural reflected ceiling plans, sections, and details.
- B. Determine final luminaire locations according to architectural reflected ceiling plans and elevations. In spaces open to structure, coordinate final luminaire locations and mounting heights with ductwork, piping, and structural members and submit final plan to Architect/Engineer for approval.
- C. Coordinate dimensions and mounting of under-cabinet and other casework lighting with the cabinet and/or casework product vendor(s) prior to ordering light fixtures.
- D. Coordinate control protocol for all drivers and low voltage transformers with Section 260920 control products.

1.04 SUBMITTALS

- A. Submit product data for all items specified under Part 2 of this section and scheduled on the drawings. Include in submittal and in Operations and Maintenance Manual a coversheet listing each fixture type with corresponding LED/lamp and driver/ballast data.
- B. Submit shop drawings for low voltage lighting systems.

1.05 OPERATION AND MAINTENANCE DATA AND TRAINING

- A. Submit all data in Operation and Maintenance Manuals.
- B. Provide onsite training on driver and LED board replacement for each type of luminaire installed.

- C. Lighting Inverter: Include instructions for normal operation, routine maintenance requirements, service manuals and testing procedures in Operation and Maintenance Manual. Provide onsite Owner training.
- D. Include documentation from system start up.

1.06 WARRANTY

A. LED Luminaires and Fixture Ballasts: Provide minimum five year comprehensive warranty.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Luminaires and Accessories: Identified in Fixture Schedule.

2.02 LED LUMINAIRES

- A. Indoor luminaires shall comply with following requirements unless otherwise scheduled on the drawings: UL listed, Reduction of Hazardous Substance (ROHS) compliant, 3500K color temperature, 80 CRI minimum, listed for 25 degree C minimum ambient operation, integral driver, integral surge, open circuit, short circuit, and overload protection, L70 at 50,000 hours or better per IESNA LM-80. Provide dimmable driver for low voltage 0-10 volt control to 10% of lumen output except dimming drivers that have daylight responsive control shall dim to completely OFF.
- B. Recessed LED luminaires shall have drivers, modules, and reflectors accessible, serviceable, and replaceable from below the ceiling.

2.03 FIXTURE WHIPS

- A. 3/8 inch flexible conduit or approved MC cable assembly with circuit and equipment ground conductors; 72 inch maximum length.
- B. Where fixtures are provided with pre-installed whips, verify wiring arrangement, termination location, and installation clearances prior to ordering.

2.04 FIXTURE ACCESSORIES

- A. Provide necessary hangers, brackets, plates, anchors, and other mounting accessories required by construction features and ceiling conditions. Comply with requirements of Section 260500 - Basic Materials and Methods.
- B. Low Voltage Luminaires: Provide transformers, power supplies, cabling and mounting hardware as required for complete operating system. Verify cabling lengths prior to ordering.

2.05 LIGHTING FIXTURE SCHEDULE

A. See Drawings.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Provide LED modules/lamps in luminaires provided under this Section.
- B. Provide wiring, installation, and lamps for lighting fixtures furnished under other Sections or by Owner, including fixtures furnished as part of hoods and equipment (e.g. range hoods, kitchen hoods, fume hoods, and walk-in HVAC equipment). Incandescent lamps shall be maximum listed wattage of fixture except when smaller wattage is indicated.
- C. Set lighting fixtures plumb, square, and level; measure mounting heights to center of fixture for wall mounted and to bottom of fixture for pendant hung.
- D. Support lighting fixtures from building structural members; provide metal channels or additional blocking and framing as required for fixture support between structural members or to avoid interference from mechanical pipes and ducts. Conceal supports within building construction in finished spaces.
- E. Recessed and surface mounted lighting fixtures weighing less than 56 lbs (25.4 kg) may be supported from metal ceiling suspension systems when auxiliary support from structural members using two #12 AWG wire hangers at diagonal corners are provided (hangers may be slack). Fixtures weighing 56 lbs or more must be supported directly from the structure by approved hangers.
- F. Securely fasten recessed and surface fixtures in place; provide seismic clips (one each corner) for lay-in fixtures; attach surface fixtures tight to ceilings and walls, and secure fluorescent fixtures within 12 inches of each end.
- G. Mounting height for wall mounted fixtures and for hanging fixtures supported by pendants, cable, chain, conduit, rods, or other means shall be determined by the architect/engineer during construction unless otherwise indicated in the construction documents.
- H. Coordinate display and specialty lighting installation with Architectural drawings. Verify location for transformers, power supplies and exposed cabling.

3.02 FIXTURE FAILURES

A. Replace luminaires which have failed drivers or LED boards at completion of work.

3.03 ADJUSTING AND CLEANING

- A. Align and tighten luminaires and clean reflectors, lenses and diffusers at completion of work. Clean paint splatters, dirt, and debris from installed luminaires.
- B. Make final aiming adjustment of directional luminaires as directed by Architect/Engineer at completion of work.

3.04 EMERGENCY LIGHTING EQUIPMENT

A. Exit, Self-Contained Emergency, Night lights: Connect ahead of switch control on local lighting circuit.

3.05 TRAINING

A. Coordinate with Architect to arrange onsite training for luminaire and lighting inverters. Allow 20 minutes per each type of installed luminaire to review driver and LED board replacement.