

CATHERINE MORRILL DAY NURSERY TODDLER ROOM RENOVATION

96 Danforth Street
Portland, Maine 04101

PROJECT MANUAL

Architect Project No.: 17017



Bild Architecture

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Issue Date: 2/16/18



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Legal Advertisement

Catherine Morrill Day Nursery (CMDN) located on Danforth Street in Portland is accepting bids for the labor and material for interior renovations to an existing cafeteria and meeting room into a new conference room and classroom equipped with a single occupancy, ADA accessible restroom. The scope of work consists of (but is not limited to): selective demolition, rough carpentry, gypsum wallboard partitions, transom windows, interior doors, a new dumbwaiter, interior finishes, and modification to the existing HVAC/electrical systems. A mandatory prebid conference will be held at CMDN on Friday, 2/23/2018 at 2:30pm, local time.

Interested bidders may obtain online procurement and contracting documents after 2/16/2018 by contacting Audra Wrigley via phone at (207) 703-5578 or email at audra@bildarchitecture.com, or Lori Moses via phone at (207) 874-1115 or email at catherinemorrill.director@gmail.com.

Bid questions should be sent in writing to Audra Wrigley at audra@bildarchitecture.com by Monday, 2/26/18 at 5:00pm at the latest. An addendum will be issued no later Thursday 3/1/2018 at 5:00pm.

Submit bids to the attention of Lori Moses, Catherine Morrill Day Nursery, 96 Danforth St, Portland, ME. Deadline for bids is Friday, 3/9/18 at 4:30pm. Late bids will not be accepted. Proof of insurance and bonding required. This project is funded with the City of Portland Community Block Grant Funding. Federal wage rates apply.

DOCUMENT 001116 - INVITATION TO BID

1.1 PROJECT INFORMATION

- A. Notice to Bidders: Qualified bidders are invited to submit bids for Project as described in this Document according to the Instructions to Bidders.
- B. Project Identification: Catherine Morrill Day Nursery Toddler Room Renovation.
 - 1. Project Location: 96 Danforth St, Portland, ME 04101.
- C. Owner: Catherine Morrill Day Nursery, 96 Danforth St, Portland, ME 04101.
- D. Architect: Bild Architecture, PO Box 8235, Portland, ME 04104.
- E. Project Description: The project consists of interior renovation work in support of converting an existing cafeteria space into a toddler classroom and meeting room.
- F. Construction Contract: Bids will be received for the following Work:
 - 1. General Contract (all trades).

1.2 BID SUBMITTAL AND OPENING

- A. Owner will receive sealed bids until the bid time and date at the location indicated below. Owner will consider bids prepared in compliance with the Instructions to Bidders issued by Owner, and delivered as follows:
 - 1. Bid Date: March 9, 2018.
 - 2. Bid Time: 4:30 p.m., local time.
 - 3. Location: Catherine Morrill Day Nursery, 96 Danforth St, Portland, ME 04101.
- B. Bids will be thereafter privately opened.

1.3 BID SECURITY

- A. The Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

1.4 PREBID CONFERENCE

- A. A mandatory prebid conference for all bidders will be held at Catherine Morrill Day Nursery on Friday, February 23, 2018 at 2:30pm, local time. Prospective bidders are required to attend.

1.5 DOCUMENTS

- A. Online Procurement and Contracting Documents: Obtain access after February 16, 2018 by contacting Audra Wrigley via phone at 207-703-5578 or email at audra@bildarchitecture.com.

1.6 BID QUESTIONS

- A. Bid questions should be sent in writing to Audra Wrigley at audra@bildarchitecture.com. An addendum will be issued no later Thursday, March 1, 2018 at 5:00pm. Bid questions should be submitted by Monday, February 26, 2018 at 5:00pm at the latest.

1.7 TIME OF COMPLETION

- A. Bidders shall begin the Work on receipt of the Notice to Proceed and shall complete the Work within the Contract Time.

1.8 BIDDER'S QUALIFICATIONS

- A. Bidders must be properly licensed under the laws governing their respective trades and be able to obtain insurance and bonds required for the Work. A Performance Bond, a separate Labor and Material Payment Bond, and Insurance in a form acceptable to Owner will be required of the successful Bidder.

1.9 ADDITIONAL BID REQUIREMENTS

- A. This project is funded with the City of Portland Community Block Grant Funding. Federal wage rates apply.

1.10 SELECTION OF BIDDER

- A. As stated in the Administrative Regulation No. 10 Purchasing Policy provided in the Project Manual, Contractor selections may not be based on price alone. Purchases may also be awarded based also on availability, quality, experience, reputation and performance capability of the vendor.

END OF DOCUMENT 001116

DOCUMENT 004113 - BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

1.1 BID INFORMATION

- A. Project Name: Catherine Morrill Day Nursery Toddler Room Renovation.
- B. Project Location: 96 Danforth St, Portland, ME 04101.
- C. Owner: Catherine Morrill Day Nursery, 96 Danforth St, Portland, ME 04101.
- D. Architect: Bild Architecture, PO Box 8235, Portland, ME 04104.
- E. Architect Project Number: 17017.

1.2 CERTIFICATIONS AND BASE BID

- A. Base Bid, Single-Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Bild Architecture and Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

1. _____ Dollars (\$_____).
(Catherine Morrill Day Nursery is of Tax Exempt Status)

2. The above amount may be modified by amounts indicated by the Bidder as described on Section 012300 "Alternates".

a. Initial:_____.

3. The above amount may be modified by amounts indicated by the Bidder as described on Section 012100 "Allowances".

a. Initial:_____.

1.3 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 60 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as

liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:

1. _____ Dollars (\$_____).

- B. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.4 TIME OF COMPLETION

- A. The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Architect, and shall fully complete the Work within _____ calendar days.

1.5 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated March 1, 2018.

a. Initial:_____.

1.6 CERTIFICATIONS FOR PRIME BIDDER

- A. The undersigned Bidder has included the following Housing and Community Development Block Grant Program certifications with this Bid Form:

1. Certification of Contractor Regarding Equal Employment Opportunity.

a. Initial:_____.

2. Certification of Contractor Regarding Segregated Facilities.

a. Initial:_____.

3. Section 3 Affirmative Action Plan (Prime Contractor).

a. Initial:_____.

4. Contractor's DBE/Subcontractor Utilization Form.

a. Initial:_____.

1.7 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: Dumbwaiter.
 - 1. ADD_____ DEDUCT_____ NO CHANGE_____ NOT APPLICABLE_____.
 - 2. _____ Dollars (\$_____).
 - 3. ADD_____ DEDUCT_____ NO CHANGE_____ calendar days to adjust the Contract Time for this alternate.

- B. Alternate No. 2: Mini-split Heat Pump Unit.
 - 1. ADD_____ DEDUCT_____ NO CHANGE_____ NOT APPLICABLE_____.
 - 2. _____ Dollars (\$_____).
 - 3. ADD_____ DEDUCT_____ NO CHANGE_____ calendar days to adjust the Contract Time for this alternate.

- C. Alternate No. 3: Ceiling Finish.
 - 1. ADD_____ DEDUCT_____ NO CHANGE_____ NOT APPLICABLE_____.
 - 2. _____ Dollars (\$_____).
 - 3. ADD_____ DEDUCT_____ NO CHANGE_____ calendar days to adjust the Contract Time for this alternate.

- D. Alternate No. 4: LVT in Classroom and Meeting Room.
 - 1. Alternate No. 4: ADD_____ DEDUCT_____ NO CHANGE_____ NOT APPLICABLE_____.
 - 2. _____ Dollars (\$_____).
 - 3. ADD_____ DEDUCT_____ NO CHANGE_____ calendar days to adjust the Contract Time for this alternate.

1.8 BID SUPPLEMENTS

- A. The following supplements are a part of this Bid Form and are attached hereto.
 - 1. Bid Form Supplement - Alternates.
 - 2. Bid Form Supplement - Allowances.

1.9 SUBMISSION OF BID

- A. Respectfully submitted this ____ day of _____, 2018.
- B. Submitted By _____(Name of bidding firm or corporation).
- C. Authorized Signature: _____(Handwritten signature).
- D. Signed By: _____(Type or print name).
- E. Title: _____(Owner/Partner/President/Vice President).
- F. Witness By: _____(Handwritten signature).

- G. Attest: _____ (Handwritten signature).
- H. By: _____ (Type or print name).
- I. Title: _____ (Corporate Secretary or Assistant Secretary).
- J. Street Address: _____.
- K. City, State, Zip _____.
- L. Phone: _____.

END OF DOCUMENT 004113

**CONSTRUCTION AGREEMENT
FOR THE FAÇADE IMPROVEMENT PROGRAM**

THIS AGREEMENT made this _____ day of _____, 2017 is between _____ having its principal place of business at _____ (hereinafter called "**CONTRACTOR**"), and (**NAME of Non-Profit Organization**) with a mailing address of (Street, Portland ME, Zip) (hereinafter called "**OWNER/RECIPIENT**").

WHEREAS the **OWNER/RECIPIENT** intends to rehabilitate their property located at (Work site location), Portland ME through the Community Development Block Grant Program, and **CONTRACTOR** has submitted a proposal for such rehabilitation; and

WHEREAS partial funding for this contract will be provided by federal Community Development Block Grant (CDBG) funds;

NOW, THEREFORE, the **CONTRACTOR** and the **OWNER/RECIPIENT**, for consideration hereinafter named, agree as follows:

1.) This Agreement shall consist of the general conditions and references contained herein, and:

- The Addendum To Agreement
- The PROPOSAL (Scope, budget, timeline) attached as Exhibit A
- Federal Contract Provisions attached as Exhibit B – Separate 24 page document
- Escrow Agreement attached as Exhibit C
- Federal Labor Standards Provisions as Exhibit D
- Specifications (including drawings, plans, bid documents attached as Exhibit E

1. WORK TO BE PERFORMED.

The work to be performed shall be in accordance with the provisions of the Proposal attached as Exhibit A, the general conditions contained herein, and the drawings, if any.

Furthermore, the **CONTRACTOR** hereby guarantees and warrants that all work performed under this Agreement shall be free from defects arising from the workmanship of the undersigned contractor or any sub-contractor, or the quality of material used therein for a **ONE (1) YEAR PERIOD**, or for such longer period as may be included in any warranty given by the manufacturer of any material used in the work performed under said Agreement.

2. NOTICE TO PROCEED.

This Agreement, when fully executed shall constitute a Notice To Proceed with the specified work within thirty (30) days from the date of execution of the Agreement.

3. **COMMENCEMENT OF WORK.**

CONTRACTOR estimates that he shall commence the work within _____ days of receipt of the Notice To Proceed and shall thereafter diligently pursue and execute the work, subject to weather conditions and circumstances beyond the control of the CONTRACTOR. It is further agreed that failure of CONTRACTOR to perform any work under this Agreement for a period of twenty (20) consecutive working days at any time after commencement of the work, without written consent of OWNER/RECIPIENT, shall constitute a breach of the Agreement and OWNER/RECIPIENT may, by written notice, terminate their obligations hereunder and contract for or otherwise effect the completion of any of the work then uncompleted by the CONTRACTOR and OWNER/RECIPIENT may set-off against the contract price the cost and expenses of completing such work. In the event OWNER/RECIPIENT has at the time of the breach and termination paid to CONTRACTOR an amount in excess of the fair value of the work then completed, CONTRACTOR shall refund to OWNER/RECIPIENT promptly upon demand an apportioned amount of the total sum paid by OWNER/RECIPIENT.

4. **PAYMENTS.**

The Housing and Community Development Division of the City of Portland is the designated escrow agent holding the CDBG funds for the performance of this Agreement. CONTRACTOR agrees to comply with the terms of the Escrow Agreement between the City of Portland and the OWNER/RECIPIENT, a copy of which is attached hereto as Exhibit C. CONTRACTOR shall be compensated for his/her services in accordance with said Escrow Agreement.

- **Advance Payment:** No CDBG or private funds may be paid in advance of work being performed.
- **Invoice Review and Approval:** Prior to payment of any invoice for completed work, whether with private funds or grant funds, the invoice must be provided to the Façade Program Committee for review and signed approval that work was completed. Certified Payroll must be submitted with each invoice for work completed for each contractor onsite. Without this prior approval, CDBG funds will not be made available for a project. The final invoice will be paid after a Program Committee member has conducted a final inspection and signed off that all work has been satisfactorily completed.
- **Payment of Private Match:** Each grant recipient's private funding match must be used in its entirety in payment of project invoices before CDBG funding is made available. Payment of invoices with CDBG funds will be done by check made out to the OWNER/RECIPIENT or CONTRACTOR, as applicable.

5. **ACCESS TO CONTRACTOR'S RECORDS.**

OWNER/RECIPIENT and Representatives of the City of Portland, Maine, and representatives of the U.S. Department of Housing and Urban Development shall be afforded access at all times to inspect the work and they may at all times inspect CONTRACTOR's books, records, correspondence, construction drawings, receipts, vouchers, payrolls, and agreements with sub-contractors relating to this Agreement and

CONTRACTOR shall preserve all such records for a period of two (2) years after final payment hereunder.

6. LIENS.

As a condition to receiving final payment hereunder, CONTRACTOR shall deliver to OWNER/RECIPIENT a complete release of all liens arising out of this Agreement. In addition, before making any payment whatsoever hereunder, OWNER/RECIPIENT may require CONTRACTOR to furnish lien waivers, releases or receipts from any and all persons performing work or supplying materials or services to CONTRACTOR or to any sub-contractor for the work. In the event that CONTRACTOR is unable or unwilling, for any reason whatsoever, to furnish such releases or receipts, OWNER/RECIPIENT may withhold any payment in whole or in part and if a lien or liens have been recorded against the property the OWNER/RECIPIENT may apply any retainage, in whole or in part, to the satisfaction of mechanic's lien or liens claimed against the property. OWNER/RECIPIENT's obligations to CONTRACTOR under this contract shall be reduced by the amount of any such payment or payments to such lien holders.

7. PERMITS AND FEES.

CONTRACTOR shall give all notices required by and comply with all applicable laws, ordinances and codes of the City of Portland and State of Maine. A copy of the permit will be provided to the Façade Program Manager for the file.

8. INDEMNIFICATION AND INSURANCE.

The CONTRACTOR shall indemnify, defend, and hold harmless the OWNER/RECIPIENT from and against all claims and actions, and all expenses incidental to such claims or actions, based upon or arising out of damage to property, to injuries to persons, or other fortuitous acts caused or contributed to by the CONTRACTOR or anyone acting under its direction or control of or in its behalf in the course of its performance under this Agreement, provided the CONTRACTOR'S aforesaid and hold harmless agreement shall not be applicable to any liability based upon the sole negligence of the OWNER/RECIPIENT.

The CONTRACTOR hereby expressly agrees that they will defend, indemnify, and hold the City of Portland from any and all claims made or asserted by the Contractor's agents, servants, or employees arising out of the CONTRACTOR'S activities under this Contract. For this purpose, the CONTRACTOR hereby expressly waives any and all immunity it may have under Maine's Workers Compensation Act in regard to such claims made or asserted by the CONTRACTOR'S agents, servants, or employees. The indemnification provided under this paragraph shall extend to and include any and all cost incurred by the City of Portland to answer, investigate, defend, and settle all such claims, including but not limited to the City of Portland's costs for attorneys' fees, expert and other witness fees, the cost of investigators, and payment in full of any and all judgments rendered in favor of the CONTRACTOR'S agents, servants, or employees against the City of Portland in regard to claims made or asserted by such agents, servants or employees.

The CONTRACTOR shall carry and require that there shall be carried by any subcontractor, full and complete Workmen's Compensation Insurance for all of his employees and those of his subcontractors engaged in work on the premises, in accordance with the laws of the State of Maine governing the same. The amounts and limits of the public liability and other insurance referred to herein, shall be subject to approval of the OWNER/RECIPIENT. That the CONTRACTOR shall furnish evidence of a comprehensive general liability insurance coverage protecting the OWNER/RECIPIENT for not less than \$1,000,000 in the event of bodily injury, including death, and \$400,000 in professional liability in the event of property damage arising out of the

work performed by the CONTRACTOR.

10. ASSIGNMENTS.

CONTRACTOR shall not assign the benefits of the Agreement nor delegate its duties thereunder without the written consent of the OWNER/RECIPIENT and of the Director of the Housing and Community Development Division of the City of Portland.

11. INTEREST OF CERTAIN FEDERAL OFFICIALS.

No member of or Delegate to the Congress of the United States and no resident Commissioner, shall be admitted to any share or part of this Agreement or to any benefit to arise from the same.

12. INTEREST OF MEMBERS, OFFICERS, OR EMPLOYEES OF GRANTEE MEMBERS OF LOCAL GOVERNING BODY, OR OTHER PUBLIC OFFICIAL

No member, officer, or employee of the City of Portland, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercise any functions or responsibilities with respect to the program during their tenure or for one year thereafter, shall have any interest, direct or indirect, in any contract or sub-contract, or the proceeds thereof, for the work. CONTRACTOR shall incorporate, or cause to incorporate in all such contracts or sub-contracts a provision prohibiting such interest pursuant to the purpose of this section.

13. ROLE OF THE CITY OF PORTLAND

OWNER/RECIPIENT and CONTRACTOR recognize and acknowledge that this Agreement is a legal and binding contract between the OWNER/RECIPIENT and the CONTRACTOR. The City of Portland, its officers, agents and employees, including, but not limited to, the staff of the City of Portland, are not parties to this Agreement. CONTRACTOR and OWNER/RECIPIENT shall have no claim against the City of Portland, nor any person acting on its behalf for any action taken pursuant to this Agreement.

It is further understood between the parties hereto that the OWNER/RECIPIENT has selected the CONTRACTOR, and the City of Portland has, and shall have no responsibility whatsoever for the quality of their workmanship. The City of Portland's function is that of lender, escrow agent, construction management, and certification of compliance with federal regulations relative to the funds used under this Agreement.

14. PROHIBITION AGAINST PAYMENTS OF BONUS OR COMMISSION.

The assistance provided under the Agreement shall not be used in the payment of any bonus or commission for the purpose of obtaining HUD approval of the application for such assistance, or HUD approval of applications for additional assistance, or any other approval of concurrence of HUD required under the Agreement, Title I of the Housing and Community Development Act of 1974 or HUD regulations with respect thereto; provided, however, that reasonable fees or bona fide technical, consultant, managerial or other such services other than actual solicitation, are not hereby prohibited if otherwise eligible as program costs.

This Agreement, shall be construed under the laws of the State of Maine, and may be modified or amended only by a written instrument executed by both the OWNER/RECIPIENT and the CONTRACTOR, provided that it is consistent with the terms governing this Agreement.

IN WITNESS WHEREOF, OWNER/RECIPIENT and CONTRACTOR have executed this Agreement at Portland, County of Cumberland and State of Maine as of the date first written above

CONTRACTOR

Witness

OWNER/RECIPIENT

Witness

EXHIBIT A

CONTRACTOR PROPOSAL

- Detailed Scope of Work
- Itemized Budget
- Timeline/Schedule

**CITY OF PORTLAND MAINE
CONSTRUCTION ESCROW AGREEMENT**

Re: Property Address: (Street), Portland, Maine

This agreement is made this _____ day of _____, 2017 by and between the **CITY OF PORTLAND**, a body politic and corporate, located at 389 Congress Street, Portland, Maine (hereinafter "**AGENT**") and (**Name of Non-profit organization**) (hereinafter "**OWNER/RECIPIENT**"). This Escrow Agreement is being signed contemporaneously with grant/loan documents for the project referenced above. This grant is subject to the following terms and conditions:

1. AGENT is authorized and directed to disburse the funds deposited hereunder to pay costs of construction for improvements to be done on the above-described premises.
2. The General Contractor for the construction work is _____ (hereinafter referred to as "**CONTRACTOR**") as specified in the Construction Agreement dated XXX, 2017 between the **OWNER/RECIPIENT** and the **CONTRACTOR**.
3. The Escrow AGENT shall receive no compensation for said escrow services.
4. No interest will be paid to the **OWNER/RECIPIENT** on funds escrowed under this Agreement.
5. The HCD Program Manager for the Escrow Agent is to be assigned by the City of Portland (hereinafter referred to as the "**HCD PROGRAM MANAGER**").
6. The escrow disbursements will be made in accordance with the terms and conditions of this escrow, as stated below:
 - a. Prior to the first payout of funds, the **CONTRACTOR** will provide the Escrow AGENT and **OWNER/RECIPIENT** with a Contractor's Invoice, setting forth in detail all contractors and material suppliers with whom he/she has contracted, their addresses, and work to be performed or materials furnished.
 - b. Prior to each and every payout, the **CONTRACTOR** shall furnish the Escrow AGENT with the following:
 1. an updated Contractor's Invoice stating all contractors and material suppliers with whom he/she have contracted, amounts paid to date, and balance due; and
 2. lien waivers from all subcontractors and suppliers who have performed work on the project to date.
 - c. The Escrow AGENT'S **HCD PROGRAM MANAGER** will not authorize any grant funded work to be done that will cost more money than is on deposit with the Escrow AGENT at the time of the request by the **OWNER/RECIPIENT** and/or **GENERAL CONTRACTOR**.
 - d. If the construction work being performed by the **CONTRACTOR** or his/her subcontractors,

requires building permits, no payout will be made until the GENERAL CONTRACTOR has furnished copies of the required permits to the Escrow AGENT.

- e. If building permits are required for the work being performed, the final payout will not be made until the CONTRACTOR has supplied the Escrow AGENT with a Certificate of Occupancy, where applicable, or until the HCD PROGRAM MANAGER has conducted a final inspection of the work and certifies that it is complete, and the AGENT has received all Lien Waivers.
- f. No liability is assumed by the City of Portland for mechanic's liens claims made against the subject property.
- g. The Escrow AGENT will not pay for any work beyond that called for in the Construction Agreement and as detailed in the Proposal unless a written Change Order has been approved and signed by the Escrow AGENT or its HCD PROGRAM MANAGER, the CONTRACTOR and the OWNER/RECIPIENT prior to the CONTRACTOR'S performing any additional work.

Invoices for work performed may be submitted to the HCD PROGRAM MANAGER at a minimum of every two (2) weeks, pending approval of work in accordance with this Agreement. Payments on invoices will be made to the OWNER/RECIPIENT or CONTRACTOR, as applicable, within nor more than 30 days of receipt of an Invoice.

- h. Upon completion of the work by CONTRACTOR, as called for in the Specifications and any Change Orders, if issued, the CONTRACTOR, OWNER/RECIPIENT and Escrow AGENT shall agree as to any items that are unsatisfactory and require correction by the CONTRACTOR. The items shall be contained in a Punch List.

After the CONTRACTOR has completed the Punch List to the satisfaction of the OWNER/RECIPIENT and the Escrow AGENT'S HCD PROGRAM MANAGER, a Certificate of Occupancy, if needed, will be issued, or a final inspection report.

The Escrow AGENT shall make the final payment after the receipt of all other documents specified in this Agreement.

DATE: _____, 2017

OWNER/RECIPIENT

DATE: _____, 2017

CITY OF PORTLAND



**CITY OF PORTLAND, MAINE
FEDERAL CONSTRUCTION CONTRACT PROVISIONS**



**"Strengthening a Remarkable City
Building a Community for Life"**

**Planning and Urban Development Department
Housing and Community Development
389 Congress Street
Portland, Maine 04101
(207) 874-8731**

**INFORMATION FOR BIDDERS
PLEASE READ CAREFULLY!**



**TO BE CONSIDERED A RESPONSIVE BIDDER
YOUR BID SUBMISSION MUST CONTAIN A BID GUARANTEE EQUIVALENT TO FIVE
PERCENT OF THE BID PRICE AND THE FOLLOWING SIGNED AND COMPLETED
CERTIFICATIONS:**

For All Contracts

1. CERTIFICATION OF CONTRACTOR REGARDING SEGREGATED FACILITIES
2. CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY
3. SECTION 3 AFFIRMATIVE ACTION PLAN
4. CONTRACTOR'S DBE/SUBCONTRACTOR UTILIZATION FORM
5. CONTRACTOR/ SUBCONTRACTOR MBE UTILIZATION FORM

Additional certifications by subcontractors prior to the start of work date

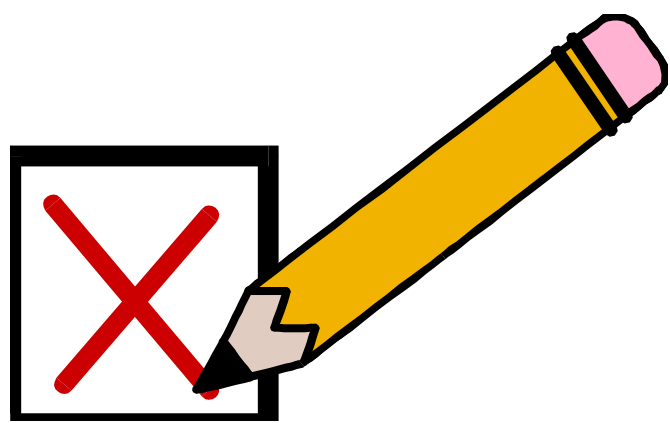
1. For all subcontracts; Certification of Subcontractor Regarding Segregated Facilities and Certification of Subcontractor Regarding Equal Employment Opportunity
2. For all subcontracts; Section 3 Affirmative Action Plan, Contractor's DBE/Subcontractor Utilization Form, and Contractor's MBE Utilization Form

Submission of Section 3 Utilization Report for Contracts

Prime Contractors must submit a Section 3 Utilization Report to the CDBG grantee or their designee prior to final payment of CDBG funds for the project. This Report must include all Section 3 Employees of both the Contractor and all Subcontractors according to the terms of the Section 3 Affirmative Action Plan.

CERTIFICATIONS FOR PRIME BIDDER

Must be submitted with Bid





**HOUSING & COMMUNITY DEVELOPMENT DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CERTIFICATION OF CONTRACTOR REGARDING
EQUAL EMPLOYMENT OPPORTUNITY**

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any other of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause, and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven (7) calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

Name and address of bidder

1. Bidder has participated in a previous contract or subcontract subject to the EEO Clause.
 Yes No
2. Compliance reports were required to be filed in connection with such contract or subcontract.
 Yes No
3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
 Yes No
4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?
 Yes No

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date



**HOUSING & COMMUNITY DEVELOPMENT DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CERTIFICATION OF CONTRACTOR REGARDING
SEGREGATED FACILITIES**

Name of Prime Contractor: _____

Project Name and Number: _____

The undersigned hereby certifies that:

- (a) **No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.**

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date

HOUSING & COMMUNITY DEVELOPMENT DIVISION COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM SECTION 3 REQUIREMENTS

Each year the U.S. Department of Housing and Urban Development (HUD) invests billions of federal dollars into distressed communities for projects designed to build and rehabilitate housing, improve roads, develop community centers, and otherwise assist families achieve the American Dream.

The Section 3 regulation recognizes that HUD funding typically results in projects/activities that generate new employment, training and contracting opportunities. These economic opportunities can also positively impact the lives of local residents who live in the neighborhoods being redeveloped.

Section 3 of the Housing and Urban Development Act of 1968 [12 U.S.C. 1701u and 24 CFR Part 135] is HUD's legislative directive for providing preference to low- and very low-income residents of the local community (regardless of race or gender), and the businesses that substantially employ these persons, for new employment, training, and contracting opportunities resulting from HUD-funded projects.

As a condition of receiving HUD assistance recipients certify that they will comply with the requirements of Section 3 annually pursuant to 24 CFR 570.607(b).

Applicability of Section 3 to Community Planning & Development Assistance

Contractors or subcontractors that receive contracts for Section 3 covered projects/activities are **required to comply** with the Section 3. Accordingly, the recipient must attempt to reach the **Section 3 minimum numerical goals** found at 24 CFR Part 135.30 by:

- 1) Awarding 10 percent of the total dollar amount of all covered construction contracts to Section 3 businesses; and
- 2) Offering 30 percent of new employment opportunities to Section 3 businesses.

Recipients that fail to meet the minimum numerical goals above bear the burden of demonstrating why it was not possible to do so. Such justifications should describe the efforts that were taken, barriers encountered, and other relevant information that will enable the Department to make a compliance determination.

Triggering the Requirements of Section 3

Section 3 is triggered when the normal completion of construction and rehabilitation projects creates the need for **new** employment, contracting, or training opportunities.

The Section 3 regulations should not be construed to mean that recipients are required to hire Section 3 residents or award contracts to Section 3 businesses other than what is needed to complete covered projects/activities.

If the expenditure of covered funding does not result in new employment, contracting, or training opportunities, the requirements of Section 3 have not been triggered. However, each agency must still submit Section 3 annual reports indicating this information.

Recipient Responsibilities Pursuant to Section 3

Each recipient (and their covered contractors, subcontractors, or subrecipients) are required to comply with the requirements of Section 3 for employment, training, or contracting opportunities resulting from the expenditure of covered funding. This responsibility includes:

1. Implementing procedures to notify Section 3 residents and business concerns about training, employment, and contracting opportunities generated by Section 3 covered assistance;
2. Notifying potential contractors working on Section 3 covered projects of their responsibilities;
3. Incorporating the Section 3 Clause into all covered solicitations and contracts [see 24 CFR Part 135.38];
4. Facilitating the training and employment of Section 3 residents and the award of contracts to Section 3 business concerns;
5. Assisting and actively cooperating with the Department in making contractors and subcontractors comply;
6. Refraining from entering into contracts with contractors that are in violation of Section 3 regulations;
7. Documenting actions taken to comply with Section 3.

Section 3 Residents and Business Concerns

Section 3 Residents Are:

1. Residents of Public and Indian Housing; or
2. Individuals that reside in the metropolitan area or nonmetropolitan county in which the Section 3 covered assistance is expended and whose income do not exceed the local HUD income limits set forth for low- or very low-income households.

Section 3 Business Concerns Are One of the Following:

1. Businesses that are 51 percent or more owned by Section 3 residents; the business meets the definition of a resident-owned business, as set forth in HUD's regulations at 24 CFR 963.5.

2. The business demonstrates that at least 20 percent of its permanent full-time employees are Section 3 residents and the business either: (i) sponsored a minimum of 10 percent of its current Section 3 employees to attend a DOL or DOL-recognized, State Apprenticeship Agency-approved, registered apprenticeship or pre-apprenticeship training program that meets the requirements outlined in DOL's Employment Training Administration (ETA) Training and Employment Notice 13-12¹; or (ii) 10 percent of the employees of the business are participants or graduates of a DOL YouthBuild program.² In accordance with the regulation, residents and businesses concerns seeking Section 3 preference shall certify, or submit evidence to the recipient, contractor, subcontractor or subrecipient (if requested) verifying that they meet the definitions provided above.

Some examples include: proof of residency in a public housing authority; proof of federal subsidies for housing, food stamps, or unemployment benefits; and payroll data or other relevant business information.

For additional information, please visit the Section 3 website at: www.hud.gov/section3.

¹ See http://wdr.doleta.gov/directives/corr_doc.cfm?DOCN=5842.

² See http://www.doleta.gov/youth_services/youthbuild.cfm.

Section 3 Clause

A. The work to be performed under this contract, subcontract, memorandum of understanding, cooperative agreement or similar legally binding agreement, is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968 (Section 3). The purpose of Section 3 is to ensure, to the greatest extent feasible, that training, employment, contracting, and other economic opportunities generated by Section 3 covered financial assistance shall be directed to low- and very low-income residents of the neighborhood where the financial assistance is spent, particularly to those who are recipients of government assistance for housing, and to businesses that are either owned by low- or very low-income residents of the neighborhood where the financial assistance is spent, or substantially employ these persons.

B. The parties to this contract, subcontract, memorandum of understanding, cooperative agreement, or similar legally binding agreement agree to comply with HUD's regulations in 24 CFR part 135, which implement Section 3. As evidenced by their execution of this contract or subcontract memorandum of understanding, cooperative agreement or similar legally binding agreement the parties certify that they are under no contractual or other impediment that would prevent them from complying with the requirements of 24 CFR part 135.

C. The contractor agrees to identify current employees on its payroll when the contract or subcontract was awarded who will be working on the Section 3 covered project or activity and certify that any vacant employment opportunities, including training positions, that are filled:

1. After the contractor is selected; and
2. With persons other than those that meet the definition of a Section 3 resident, were not filled to circumvent the contractor's Section 3 obligations.

D. The contractor agrees to maintain records documenting Section 3 residents that were hired to work on previous Section 3 covered projects or activities that were retained by the contractor for subsequent Section 3 covered projects or activities.

E. The contractor agrees to post signs advertising new employment, training, or Sub-contracting opportunities that will be available as a result of the Section 3 covered projects and activities in conspicuous places at the work site where potential applicants can review them.

F. The contractor agrees to hire, to the greatest extent feasible, Section 3 residents as 30 percent of new hires, or provide written justification to the recipient that is consistent with § 135.7(b)(4), describing why it was unable to meet minimum numerical hiring goals, despite its efforts to comply with the provisions of this clause.

G. The contractor agrees that in order for a Section 3 resident to be counted as a new hire, the resident must work a minimum of 50 percent of the average staff hours worked for the category of work for which they were hired throughout the duration of time that the category of work is performed on the covered project.

H. The contractor agrees to award, to the greatest extent feasible, 10 percent of the total dollar amount of subsequent subcontracts awarded in connection with the Section 3 covered project or activity to Section 3 businesses, or provide written justification that is consistent with § 135.7(b)(4) describing why it was unable to meet that goal, despite their efforts to comply with the provisions of this clause.

I. The contractor agrees to notify Section 3 residents and businesses about the availability of new employment, training, or contracting opportunities created as a result of the receipt of Section 3 covered financial assistance, as stipulated by the awarding agency.

J. The contractor agrees to verify the eligibility of prospective Section 3 residents and businesses for employment, training, or subcontracting opportunities, in accordance with the recipient's policies and procedures.

K. The contractor agrees to provide priority consideration to eligible residents and businesses in accordance with 24 CFR 135.37 or 24 CFR 135.57, as applicable.

L. The contractor agrees to notify potential bidders on subcontracts that are associated with Section 3 covered projects and activities about the requirements of Section 3, and include this Section 3 clause in its entirety into every subcontract awarded.

M. The contractor agrees to impose sanctions upon any subcontractor that has violated the requirements of this clause in accordance with the awarding agency's Section 3 policies and procedures.

N. The contractor agrees to comply with all monitoring, reporting, recordkeeping, and other procedures specified by the awarding agency.

O. If applicable, the contractor agrees to notify each labor organization or representative of workers with which the recipient, sub-recipient, or contractor has a collective bargaining or similar labor agreement or other understanding, if any, about its obligation to comply with the requirements of Section 3 and ensure that new collective bargaining or similar labor agreements provide employment, registered apprenticeship, training, subcontracting, or other economic opportunities to Section 3 residents and businesses, and to post notices in conspicuous places at the work site advising the labor union, organization, or workers' representative of the contractor's commitments under this part.

P. Failure to comply with this clause shall result in the imposition of sanctions. Appropriate sanctions for noncompliance may include: Requiring additional certifications or assurances of compliance; termination or cancelation of the contract, subcontract, memorandum of understanding, cooperative agreement, or similar legally binding arrangement for default; refraining from entering into subsequent contracts, subcontracts, memoranda of understanding, cooperative agreements, or similar legally binding arrangement; repayment of funds, and withholding a portion of contract awards, subcontracts, memoranda of understanding, cooperative agreements, or similar legally binding arrangements.



**HOUSING & COMMUNITY DEVELOPMENT DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
SECTION 3 AFFIRMATIVE ACTION PLAN
(Prime Contractor)**

_____, Contractor, agrees to implement the following specific affirmative action steps directed at increasing the utilization of Section 3 Residents' and Section 3 Business Concerns within the Town/City/County of _____.

- A.** To ascertain from the locality's CDBG Program official the exact boundaries of the Section 3 Covered Project Area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.
- B.** To attempt to recruit from within the Town/City/County the necessary individuals to fill employment opportunities generated by Section 3 covered assistance through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U.S. Employment Service and providing preference for these opportunities in the following order:
 - (i) Section 3 Residents residing in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Participants in HLJD Youthbuild Programs, and
 - (iii) Other Section 3 Residents.
- C.** To maintain a list of all lower income area residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and a vacancy exists.
- D.** To insert this Section 3 Affirmative Action Plan in all bid documents for contracts over \$100,000, and to require all bidders on subcontracts over \$100,000 to submit a Section 3 Affirmative Action Plan, including utilization goals and the specific steps planned to accomplish these goals.
- E.** To insure that subcontracts over \$100,000 which are typically let on a negotiated rather than bid basis in areas other than Section 3 covered project areas, are also let on a negotiated basis, whenever feasible, when let in a Section 3 covered project area.
- F.** To formally contact unions, subcontractors and trade associations to secure their cooperation for this program.
- G.** To notify Section 3 residents and Section 3 business concerns about economic opportunities generated by Section 3 covered assistance and to award Section 3 covered contracts, to the greatest extent feasible, to Section 3 business concerns in the following order of preference:
 - (i) Section 3 business concerns that provide economic opportunities for Section 3 residents in the service area or neighborhood in which the Section 3 covered project is located;

- (ii) Applicants selected to carry out HUD Youthbuild projects;
 - (iii) Other Section 3 business concerns.
- H.** To notify potential contractors about Section 3 requirements of this part, and incorporating the Section 3 clause in all solicitations and contracts.
 - I.** To facilitate the training and employment of Section 3 residents and the award of contracts to Section 3 business concerns undertaking activities to reach the numerical goal established by HLJD.
 - J.** To cooperate in obtaining the compliance of contractors and subcontractors with the requirements of Section 3.
 - K.** To submit reports to DECD and HUD on the results of actions taken to provide training, jobs and contracts to Section 3 residents and Section 3 business concerns.
 - L.** To appoint an executive official of the company or agency as Equal Employment Opportunity Officer to coordinate the implementation of this Section 3 Affirmative Action Plan.
 - M.** To document utilization of Section 3 Employees on the covered project by having new employees, (including those of all subcontractors) from the Section 3 Area, complete the Section 3 Income Worksheet as provided by DECD
 - N.** To complete a Section 3 Utilization Report and submit said report to DECD, HUD, or their designee prior to final payment for the covered project; This report will list all Section 3 Employees documented on the Section 3 Income Worksheets and be in the format provided by DECD.
 - O.** To maintain records, including copies of correspondence, income verification memoranda, etc., which document that all levels of the above affirmative action steps have been taken.

CONTRACTOR CERTIFICATION

As officers and representative of: _____
 (Name of Contractor)

On behalf of the Company, I have read and fully agree to the Section 3 Affirmative Action Plan, and become a party to the full implementation of this program.

 Name and Title of the Authorized Representative (print or type)

 Signature of Authorized Representative Date

CERTIFICATION FOR BUSINESS CONCERNS SEEKING SECTION 3 PREFERENCE IN CONTRACTING AND DEMONSTRATION OF CAPABILITY

Name of Business _____

Address of Business _____

Type of Business: Corporation Partnership
 Sole Proprietorship Joint Venture

Attached is the following documentation as evidence of status:

For Business claiming status as a Section 3 resident-owned enterprise:

- Copy of resident lease
- Copy of receipt of public assistance
- Copy of evidence of participation in a public assistance program
- Other evidence

For business entity as applicable:

- Copy of Articles of Incorporation
- Assumed Business Name Certificate
- List of owners/stockholders and % ownership of each
- Organization chart with names and titles and brief function statement
- Certificate of Good Standing
- Partnership Agreement
- Corporation Annual Report
- Latest Board minutes appointing officers
- Additional documentation

For business claiming Section 3 status by subcontracting 25 percent of the dollar awarded to qualified Section 3 business:

- List of subcontracted Section 3 business(es) and subcontract amount

For business claiming Section 3 status, claiming at least 30 percent of their workforce are currently Section 3 residents or were Section 3 eligible residents within 3 years of date of first employment with the business:

- List of all current full-time employees
- PHA/IHA Residential lease less than 3 years from day of employment
- List of employees claiming Section 3 status
- Other evidence of Section 3 status less than 3 years from date of employment

Evidence of ability to perform successfully under the terms and conditions of the proposed contract:

- Current financial statement
- Statement of ability to comply with public policy
- List of owned equipment
- List of all contracts for the past two years

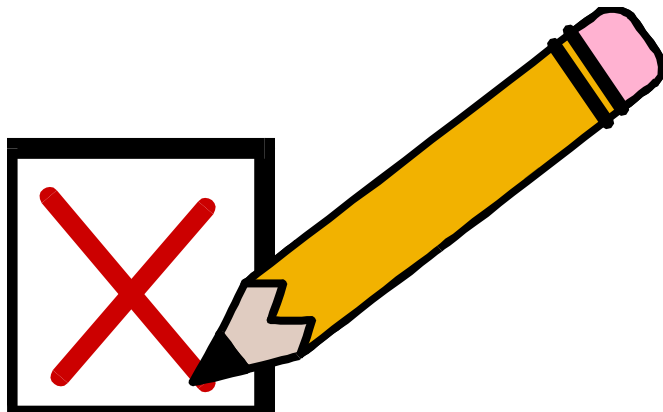
Authorizing Name and Signature

(Corporate Seal)

Attested by: _____

SECTION 3 UTILIZATION REPORT

**Must be submitted by Prime Contractor
Prior to receiving final payment of CDBG funds**





HOUSING & COMMUNITY DEVELOPMENT DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
SECTION 3 UTILIZATION REPORT

A. SECTION 3 EMPLOYEE INFORMATION

Name of CDBG Grantee: _____

Name of Project: _____

CDBG Project Number: _____ Wage Decision Number: _____

Number of Section 3 Employees Utilized on Project by Prime Contractor: _____

Number of Section 3 Employees Utilized on Project by Subcontractors: _____

Total Number of Section 3 Employees Utilized on Project: _____

B. CERTIFICATION OF PRIME CONTRACTOR

As officer and representative of: _____
Name of Prime Contractor

Address: _____

Telephone Number: _____

On behalf of the Company, I hereby certify that the above information is true and accurate and is reported fully as required by the Section 3 Affirmative Action Plan as part of the contract for this CDBG assisted construction project. It is further understood that final payment from the State of Maine CDBG Program for this project cannot be made until this Report is submitted to the CDBG Grantee or authorized designee.

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date

**HOUSING & COMMUNITY DEVELOPMENT DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM**

**DIRECTIONS FOR COMPLETION OF
SECTION 3 UTILIZATION REPORT**

1. Determine if there has been Section 3 participation in the construction project.
 - a. If you hire new employees who reside in the county where the construction is taking place to work on the CDBG project, have them complete the one page Section 3 Income Worksheet and return it to you. Compare the Worksheet to the Section 3 Income Schedule provided you at the pre-construction conference to determine if they are Section 3 eligible.
 - b. Distribute copies of the Section 3 Income Worksheet to all subcontractors you engage for the project. Instruct them to have any new employees they hire who reside in the county where the construction is taking place complete the worksheet and have the subcontractors return the forms to you. Compare as in (a.), above to determine Section 3 eligibility.
2. Retain all Section 3 Income Worksheets with your project records.
3. Complete (A) Section 3 Employee Information area of the report.
 - a. Enter name of the community where the project is located.
 - b. Enter project name.
 - c. Enter CDBG Project Number & Federal Wage Decision Number. (located in wage decision documents)
 - d. Enter number of Section 3 Employees you utilized on project.
 - e. Enter number of Section 3 Employees utilized by subcontractors on project
 - f. Enter total number (d + e) of Section 3 Employees utilized on project
4. Complete (B) Certification by Prime Contractor area of Report
 - a. List your name, address and telephone number of your company.
 - b. Print or type name and title of authorized company representative.
 - c. Have authorized representative sign and date Report.

IMPORTANT REMINDER!

Final payment of CDBG funds will not be made until Section 3 Utilization Report is submitted to CDBG grantee or designee.

**CITY OF PORTLAND
HOUSING AND COMMUNITY DEVELOPMENT
DIVISION FEDERAL FUNDING REQUIREMENTS
SECTION 3 INCOME WORKSHEET**

To be completed by all new employees residing in the county where the construction work is taking place. Completion of this worksheet is solely to determine if there is utilization of Section 3 employees on this construction project and should not be considered as a condition of employment.

Please place an "X" in the appropriate spaces pertaining to your family's size, annual income and makeup.

FAMILY

SIZE	INCOME		
1	\$46,000	Above _____	Below _____
2	\$52,600	Above _____	Below _____
3	\$59,150	Above _____	Below _____
4	\$65,700	Above _____	Below _____
5	\$71,000	Above _____	Below _____
6	\$76,250	Above _____	Below _____
7	\$81,500	Above _____	Below _____
8	\$86,750	Above _____	Below _____

***Read This Carefully**

In determining total family income use your Total Adjusted Gross income for your household as reported on your most recent Federal Income Tax form.

If you use Form 1040 - Use line 33

If you use Form 1040EZ – Use line 4

FOR USE BY PRIME CONTRACTOR ONLY

Name of Prime Contractor: _____

Project Name: _____

Is new employee Section 3 eligible? ___ Yes ___ No

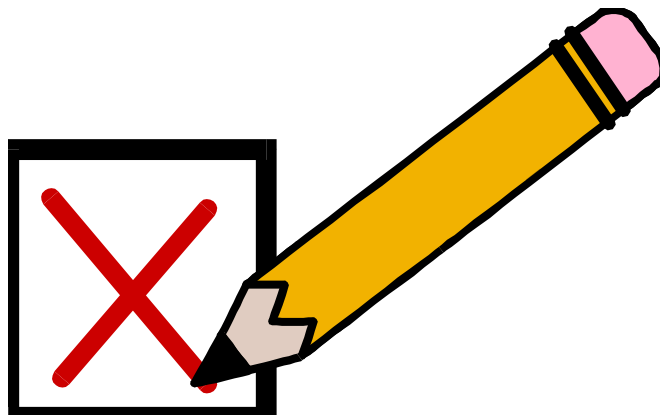
If yes, must be included in SECTION 3 UTILIZATION REPORT.

Job Title or Construction Trade that new Employee is hired for _____

Effective 6/5/17

CERTIFICATIONS FOR SUBCONTRACTORS

**Must be submitted by Prime Contractor
For each applicable Subcontractor prior to start of work**





**HOUSING & COMMUNITY DEVELOPMENT DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CERTIFICATION OF SUBCONTRACTOR REGARDING
EQUAL EMPLOYMENT OPPORTUNITY
(For ALL Subcontracts)**

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any other of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause, and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven (7) calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY SUBCONTRACTOR

Name and address of subcontractor

1. Bidder has participated in a previous contract or subcontract subject to the EEO Clause.
 Yes No

2. Compliance reports were required to be filed in connection with such contract or subcontract.
 Yes No

3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
 Yes No

4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?
 Yes No

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date



**HOUSING & NEIGHBORHOOD SERVICES DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CERTIFICATION OF SUBCONTRACTOR REGARDING
SEGREGATED FACILITIES
(For ALL Subcontracts)**

Name of Subcontractor: _____

Project Name and Number: _____

The undersigned hereby certifies that:

- (a) No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date



**HOUSING & NEIGHBORHOOD SERVICES DIVISION
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
SECTION 3 AFFIRMATIVE ACTION PLAN**

**(Subcontractor)
[For ALL Subcontracts]**

_____, Subcontractor, agrees to implement the following specific affirmative action steps directed at increasing the utilization of Section 3 Residents' and Section 3 Business Concerns within the Town/City/County of _____.

- A.** To ascertain from the locality's CDBG Program official the exact boundaries of the Section 3 Covered Project Area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.
- B.** To attempt to recruit from within the Town/City/County the necessary individuals to fill employment opportunities generated by Section 3 covered assistance through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U.S. Employment Service and providing preference for these opportunities in the following order:
 - (i) Section 3 Residents residing in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Participants in HLJD Youthbuild Programs, and
 - (iii) Other Section 3 Residents.
- C.** To maintain a list of all lower income area residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and a vacancy exists.
- D.** To insert this Section 3 Affirmative Action Plan in all bid documents for contracts over \$100,000, and to require all bidders on subcontracts over \$100,000 to submit a Section 3 Affirmative Action Plan, including utilization goals and the specific steps planned to accomplish these goals.
- E.** To insure that subcontracts over \$100,000 which are typically let on a negotiated rather than bid basis in areas other than Section 3 covered project areas, are also let on a negotiated basis, whenever feasible, when let in a Section 3 covered project area.
- F.** To formally contact unions, subcontractors and trade associations to secure their cooperation for this program.
- G.** To notify Section 3 residents and Section 3 business concerns about economic opportunities generated by Section 3 covered assistance and to award Section 3 covered contracts, to the greatest extent feasible, to Section 3 business concerns in the following order of preference:

- (i) Section 3 business concerns that provide economic opportunities for Section 3 residents in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Applicants selected to carry out HUD Youthbuild projects;
 - (iii) Other Section 3 business concerns.
- H.** To notify potential contractors about Section 3 requirements of this part, and incorporating the Section 3 clause in all solicitations and contracts.
 - I.** To facilitate the training and employment of Section 3 residents and the award of contracts to Section 3 business concerns undertaking activities to reach the numerical goal established by HLJD.
 - J.** To cooperate in obtaining the compliance of contractors and subcontractors with the requirements of Section 3.
 - K.** To submit reports to DECD and HUD on the results of actions taken to provide training, jobs and contracts to Section 3 residents and Section 3 business concerns.
 - L.** To appoint an executive official of the company or agency as Equal Employment Opportunity Officer to coordinate the implementation of this Section 3 Affirmative Action Plan.
 - M.** To document utilization of Section 3 Employees on the covered project by obtaining income information from new project area employees on the Section 3 Income Worksheet.
 - N.** To provide all Section 3 Income Worksheets to the prime contractor for inclusion in the Section 3 Utilization Report prior to receipt of final payment of CDBG funds.
 - O.** To maintain records, including copies of correspondence, income verification memoranda, etc., which document that all levels of the above affirmative action steps have been taken.

SUBCONTRACTOR CERTIFICATION

As officers and representative of: _____
 (Name of Subcontractor)

On behalf of the Company, I have read and fully agree to the Section 3 Affirmative Action Plan, and become a party to the full implementation of this program.

 Name and Title of the Authorized Representative (print or type)

 Signature of Authorized Representative

 Date

FEDERAL REQUIREMENTS

1. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

(P.L. 88-352), as amended, (42 USC 2000d) and the requirements imposed by the Regulations of the Department of Commerce (15 CFR Part 8) issued pursuant to that Title. In accordance therewith no person in the United States shall, on the grounds of race, handicap, color, sex, national origin or familial status be excluded from participation in, be denied the benefits or be otherwise subjected to discrimination under any program or activity which is paid for with federal funds. The Owner further adds that there shall not be any form of discrimination by any party in any CDBG contract on the basis of familial status, sexual orientation or sex.

2. REHABILITATION ACT OF 1973

29 USC 794, Executive Order 11914, Section 504. No otherwise qualified handicapped individual shall, solely by reason of his/her handicap, be denied the benefits of, be excluded from participation in, or be subjected to discrimination under any program or activity receiving federal financial assistance.

3. SECTION 202 OF EXECUTIVE ORDER 11246

A. Activities and contracts not subject to Section 202

(Applicable to Federally assisted construction contracts and related subcontracts of \$10,000 and under.)

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

1. The contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants for employment 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.

2. The contractor shall 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 non-discrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

3. Contractors shall incorporate foregoing requirements in all subcontracts.

B. Activities and contracts subject to Section 202

Applicable to Federally assisted construction contracts and related subcontracts exceeding \$10,000.

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

1. (a) 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 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 setting forth the provisions of this nondiscrimination clause.

(b) 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 without regard to race, color, religion, sex, or national origin.

(c) 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 Contract Compliance Officer advising the said labor union or workers' representative of the contractor's commitment under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) 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.

(e) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the contractor's noncompliance with the non-discrimination clauses of this contract or with any of the said 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 rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (g) The contractor will include the provisions of the sentence immediately preceding paragraph (1) and 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 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 Department may direct as a means of enforcing such provision, including sanctions for non-compliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department the contractor may request the United States to enter into such litigation to protect the interest of the United States.

2. The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is 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 a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

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

- (a) 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 setting forth the provisions of this nondiscrimination clause.
- (b) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor; state that all qualified applicants WM receive

considerations for employment without regard to race, color, religion, sex, or national origin.

- (c) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and- applicants for employment.
- (d) The contractor will comply with all provisions of Executive, Order 11246 of September 24, 1965, and the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (f) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said 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 or federally assisted construction 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 rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (g) The contractor will include the portion of the sentence immediately preceding paragraph (1) and 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 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 administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into -such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that the applicant so participating

is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract. Or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of labor pursuant to Part IL Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply within these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

4. CERTIFICATION OF NONSEGREGATED FACILITIES AS REQUIRED BY THE MAY 19, 1967, ORDER (32 F.R. 74390 ON ELIMINATION OF SEGREGATED FACILITIES, BY THE SECRETARY OF LABOR.

Prior to the award of any construction contract or subcontract exceeding \$10,000, the Contractor shall submit signed Certification of Nonsegregated Facilities Forms for him/herself and all subcontractors.

5. THE AGE DISCRIMINATION ACT OF 1975

No person in the United States shall, on the basis of age, be excluded from participation or be denied the benefits of, or be subjected to discrimination under, any program or activity undertaken with federal funds.

6. SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974

No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under Title I of the Housing and Community Development Act of 1974.

7. SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968

In connection with the planning and carrying out of any project assisted with CDBG funds, and to the greatest extent feasible, opportunities for training and employment should be given to lower-income persons residing within the unit of local government in which the project is located, and contracts for work in connection with the project should be awarded to eligible business concerns which are located in, or owned in substantial part by persons residing in, the same unit of local government in which the project is located. And that this contract, or any subcontracts, must adhere to and contain what is referred to as the Section 3 Clause, and which follows in its entirety:

Section 3 Clause:

- a. The work to be performed under this contracts subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low-and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- b. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- c. The contract agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

- d. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
- e. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- f. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default and debarment or suspension from future HUD assisted contracts.
- g. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education assistance Act (25 U.S.C 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of sections 3 and 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with sec 7(b).

8. LABOR STANDARDS

- A. Davis-Bacon Act as amended (40 U.S.C 276a - 276a-5.) All laborers and mechanics employed by contractors or subcontractors, including employees of other governments, on construction work assisted under this contract, and subject to the provisions of the federal acts and regulations listed in this paragraph, shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act.
- B. Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333). All laborers and mechanics employed by contractors or subcontractors shall receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours and Safety Standards Act, and the

contractors and subcontractors shall comply with all regulations issued pursuant to these acts and with other applicable Federal laws and regulations pertaining to labor standards.

C. Copeland Anti-Kickback Act requires that workers be paid at least once a week, and without any deductions or rebates except permissible deductions.

9. TITLE IV OF THE LEAD BASED PAINT POISONING PREVENTION ACT

LEAD-BASED PAINT HAZARDS -The use of lead-based paint, that is any paint containing more than 1%- lead by weight, is strictly prohibited from use on any interior surface or exterior surface in any building being rehabilitated with funding from the Community Development program. Additionally, any evidence of a health hazard, which is, defined as cracking, scaling, peeling and loose lead-based paint must be treated to prevent the ingestion of the contaminated paint. It is further necessary to assume that any of the above conditions constitute an immediate or potential hazard and must be corrected using appropriate methods.

10. THE UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970

(P.L. 91-646 as amended), 15 CFR Part 916 including amendments thereto and regulations there under, as provided by 1. M.R.SA 901 et seq. The Contractor and Grantee will ensure that all work performed under this Agreement will be done in accordance with this act.

11. THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (P.I. 90-190); THE NATIONAL HISTORIC PRESERVATION ACT OF 1966 (80 Stat 915, 16 USC 470); AND EXECUTIVE ORDER NO. 11593 OF MAY 31, 1971.

The chief executive officer of the Grantee consents to assume the status of a responsible Federal official under the National Environmental Policy Act of 1969 (NEPA) and other provisions of Federal law, as specified in 24 CTR 58, which further the purposes of NEPA in the areas of historic preservation, noise control floodplains, coastal zones and wetlands, air quality, water quality, wildlife, endangered species, solid waste disposal, and environmental effects abroad.

The chief executive officer is authorized and consents on behalf of the Grantee and himself to accept the jurisdiction of the federal courts for the purpose of enforcement of his responsibilities as such an official.

12. THE FLOOD DISASTER PROTECTION ACT OF 1963 (P.L 93-234), AS AMENDED.

The Grantee will fulfill any flood insurance requirements under this Act and any regulations issued there under which NOAA may issue.

- 13. ARCHITECTURAL BARRIERS ACT (P.L 90-480), 42 USC 4151, AS AMENDED, and the regulations issued or to be issued there under, prescribing standards for the design and construction of any building or facility intended to be accessible to the public or which may result in the employment of handicapped persons therein.**
- 14. THE CLEAN AIR ACT AS AMENDED, 42 USC 1857 ED SEQ.9 THE FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED, 33 USC 1251 et seq. and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.**

In no event shall any amount of the assistance provided under this Agreement be utilized with respect to a facility, which has given rise to a conviction under section 113(c) (1) of the Clean Air **Act** or section 309(c) of the Federal Water Pollution Control Act.

15. MINORITY BUSINESS ENTERPRISES

Referenced in Executive Order #11625, OMEB Circular A-102 Attachment 0 Procurement Standards. Grantees are to give priority to Minority Business Enterprises in purchase of supplies, equipment, construction, and services.

16. CDBG CERTIFICATION

Grantee shall provide any certification required under Sections 104(b), 106(d)(5) or under any other provision of Title I of the Housing and Community Development Act of 1974 as amended through 1983, including Amendments made by the Housing and Urban Rural Recovery Act of 1983, and shall comply with the terms of such certifications.

17. SECTION 319 OF PUBLIC LAW 101-121

The grantee shall comply with the requirements of Section 319 of Public Law 101-121 regarding government wide restrictions on lobbying.

SPECIAL CONDITIONS PERTAINING TO HAZARDS, SAFETY STANDARDS AND ACCIDENT PREVENTION

A. Lead-Based Paint Hazards

(Applicable to contracts for construction or rehabilitation of residential structures) The construction or rehabilitation of residential structures is subject to the HUD Lead-Based Paint regulations, 24 CFR Part 35. The contractor and Subcontractors shall comply with the provisions for the elimination of lead-based paint hazards under subpart B of said regulations. The Owner will be responsible for the inspections and certifications required under Section 35.14(f) thereof.

B. Use of Explosives

When the use of explosives is necessary for the prosecution of the work, the Contractor shall observe all local, state and federal laws in purchasing and handling explosives. The Contractor shall take all necessary precautions to protect completed work, neighboring property, water lines, or other underground structures. Where there is danger to structures or property from blasting, the charges shall be reduced and the material shall be covered with suitable timber, steel or rope mats. The Contractor shall notify all owners of public utility property of intention to use explosives at least eight hours before blasting is done, close to such property. Any supervision or direction of use of explosives by the Engineer does not in any way reduce the responsibility of the Contractor or his Surety for damages that may be caused by such use.

C. Danger Signals and Safely Devices

The Contractor shall make all necessary precautions to guard against damages to property and injury to persons. He shall put up and maintain in good condition, sufficient red or warning lights at night, suitable barricades and other devices necessary to protect the public. In case the Contractor fails or neglects to take such precautions, the Owner may have such lights and barricades installed and charge the cost of this work to the Contractor. Such action by the Owner does not relieve the Contractor of any liability incurred under these specifications or contract.

**Federal Labor Standards Provisions
U.S. Department of Housing and Urban Development**

Applicability

The Project of Program to which the Construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A.1. (i) Minimum Wages. All laborers and mechanics employed or working up on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project) will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than

weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification or work actually performed, without regard to skill, excepts as provided in 29 CFR Part 5.5 (a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFT part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt

and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1) (b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized

representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much that the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract. HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic record relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the

work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b) (2) (B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonable anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) or the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each in which any

contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own

records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a property executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph AA.3. (ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor of subcontractor shall make the records required under paragraph A.3. (i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4. (i) Apprentices and Trainees. Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprentice program, who is not individually

registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full

amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the even the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division

determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirement of Executive Order 11246, s amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontract the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the

subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all contract clauses in 29 CFR Part 5.5

7. Contracts termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor as provided in 29 CFR 5.12

8. Compliance with Davis-Bacon and Related Act Requirements. All ruling and interpretations of the Davis-Bacon and Related Act contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering in to this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act of 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty to making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transaction", provides in part: "Whoever, for the purpose of ...influencing in any way the action of such Administration...makes, utter or publishes any statement, knowing the same to be false...shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

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

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment

of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) or this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages for liquidated damages. HUD or its designees shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold of cause to be withheld from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the

same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

(1) No laborer or mechanic shall be required to work in surrounding or under working conditions that are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly Part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96). 40 USC 3701 et seq.

(3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The

Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Date: Dec. 7, 2015

**Administrative Regulation
No. 10
Purchasing Policy**

I. Purpose

The purpose of this Administrative Regulation is to establish a uniform purchasing procedure for the city. This policy is to be used in conjunction with the Purchasing Ordinance, Section 2-301 of the Portland City Code.

II. Policy

A purchasing system cannot function properly without the cooperation and assistance of all city departments. It is the policy of the city to promote a harmonious relationship between Purchasing and other departments. Purchasing has the duty and authority to request reconsideration of specifications or quantity of material. The final determination of quality and quantity will be made in cooperation with the requisitioning department, within budget constraints.

III. Procedures

A. General Procurement Procedure

The policy of the city is to maintain a responsible purchasing process with the Finance Department. This process will be administered by the Purchasing Manager, under direction of the Finance Director or their designee. The Purchasing Manager's responsibilities include administering purchasing policies, maintaining files containing all information regarding city purchasing performance, negotiating and approving purchases requested by departments, consolidating purchases of like or common items, and continually evaluating the purchasing process. Procurement commitments will be stated by contract or purchase order. All contracts must be signed by the City Manager; all purchase orders must be signed by the Purchasing Manager. As stated in the Purchasing Ordinance, selections may not be based on price alone. Purchases may also be awarded based also on availability, quality, experience, reputation and performance capability of the vendor.

During the bid or RFP process, departments should be particularly careful not to discuss any elements of the outstanding bid/RFP with any potential vendors.

1. \$25,000 or More

Any expenditure of \$25,000 or more must be procured by a formal competitive process, as outlined in the Procurement Ordinance, unless the expenditure is a product of an open-end bid for commodities or is included as one of the *Exceptions to the required competitive process* as outlined in Section 2-302(e) of the City Code¹. The only exceptions are a declared emergency, sole source item, and brand specific items, all of which must be approved by the City Manager.

An emergency situation must be supported by written explanation. An emergency is usually easily identifiable, but can include situations involving safety of the public or city employees, and repair or replacement of essential equipment. No services or goods shall be purchased prior to the City Manager's declaration of emergency.

A sole source determination must be supported by a written finding that the supplier, contractor or consultant is the only one that can supply the city with these goods or services. Such determinations are subject to verification by the Purchasing Manager and will be reviewed periodically.

Unless otherwise prohibited by applicable state or federal law nothing in this policy shall prevent or prohibit the City from soliciting bids for supplies and materials on the basis of brand names so long as approval is provided by the Finance Director, solicitation is in furtherance of a policy of standardization of materials, and the City Manager determines that there is a sufficient number of brand name supplies or materials in the area of solicitation to provide a reasonable expectation of competition for the bid.

To initiate a formal competitive process, an electronic requisition should be submitted and specifications should be sent to Purchasing, where a review of the requirements with the department will take place and bid or RFP materials will be developed (see *B. Requests for Proposals*). An advertisement may be placed in the local newspaper, and other publications if appropriate, including the Internet. The proposal due date will be a minimum of two weeks after the advertisement.

Requisitions will be electronically routed, after department approval, to the Finance Director, or their designee, for approval. If the purchase involves HCD funding, the requisition will first be routed to the HCD Administrator for approval. Purchases of computer hardware or software require consultation with the IT Department. Once approved, the requisition will be routed to buyer processing. Encumbrance of funds will happen with the electronic requisition process.

Purchasing is responsible for receiving each proposal and enforcing the submittal deadline. If a proposal is sent to a department it should not be opened and Purchasing should be contacted immediately. Purchasing will

¹ Attachment A to this policy includes excerpts from Chapter 2 of the City Code pertaining to Procurement and Contracting Procedures

accept proposals up to the precisely specified date and time. Any proposals received after the deadline will be returned to the applicant unopened.

Vendors requesting clarification of bid specifications must submit questions in writing to Purchasing within the timeline indicated in the solicitation. Questions can be mailed, faxed, or e-mailed, and responses which alter the specifications will be issued through an addendum by Purchasing; departments should not respond directly to vendor questions. The city must insure that any substantive information given to a single potential applicant be given to all potential applicants.

All recommended awards of \$25,000 or more must be approved by the City Manager.

Once a decision has been made, Purchasing will work with Legal to draft a contract, where applicable, and send a purchase order to the vendor. The department will receive notification of the purchase order and a copy of the executed contract. In cases of construction projects, contracts that are included in the bid books will be used. Encumbrance of funds will happen with the electronic requisition process.

2. Purchases of used vehicles and equipment
 - a. By exception to the Ordinance, used vehicles and equipment do not require a formal bid/RFP. The following rules govern procurement for these types of items.
 - b. Departments wishing to purchase used equipment will first contact the Purchasing office to determine compliance with the exception. A requisition must be entered and must be approved by the Finance Director, or their designee. Purchasing will use industry resources and contact internal staff with particular expertise to discuss possible sources, and work with that staff and the Department to evaluate equipment, the condition, and relative value of specific equipment. Purchasing will lead any negotiation on price. This relates to non-fleet items.
 - c. Departments wishing to purchase used fleet items, such as heavy equipment or vehicles, will first need to contact the Fleet Manager to determine if an existing City owned vehicle is available. In the event no suitable vehicle from the fleet is available the Fleet Manager will notify the Purchasing of the request to purchase a used vehicle and will provide cost estimates to both Finance and the requesting department. A requisition must be entered and must be approved by the Finance Director, or their designee. Once the requisition is approved the Fleet Manager will work with the requesting department and Purchasing to identify sources, evaluate condition of items, and

negotiate price.

- d. Once a decision has been made, Purchasing will work with Legal to draft a contract, where applicable, and send a purchase order or purchasing agreement to the vendor. The department will receive notification of the purchase order/agreement and executed contract. Encumbrance of funds will happen with the electronic requisition process. Fleet Services will be the procuring department for all vehicles purchased and will be responsible for keeping vehicle purchases and upfit costs within estimates. Any potential cost overruns will be communicated to the requesting department and Finance.

3. \$5,000 to \$24,999

Expenditures of \$5,000 or more and less than \$25,000 can, but do not need, to be formally bid. They do need to be priced, departments are required to obtain a minimum of three (3) written quotes, unless the expenditure is a product of an open-end bid. The purchase should be handled in one of two ways:

- a. Requisitions will be electronically routed, after department approval, to the Finance Director, or their designee, for approval. If the purchase involves HCD funding, the requisition will first be routed to the HCD Administrator for approval. Purchases of computer hardware or software will be reviewed with the IT Department for approval. The department can obtain quotations from at least three vendors, which must be in writing from. The quotes should be forwarded to Purchasing with the requisition number. Once approved, the requisition will be routed to buyer processing.

If the Purchasing Manager believes there are other vendors who should be solicited, or that the information is incomplete, follow-up will be done. The final decision will be made in collaboration with the ordering department. Also, Purchasing can provide departments with names of possible vendors to contact, if desired.

Once a decision has been made, Purchasing will work with Legal to draft a contract, where applicable, and send a purchase order or purchasing agreement to the vendor. The department will receive notification of the purchase order/agreement and executed contract. Encumbrance of funds will happen with the electronic requisition process.

- b. The same procedure can be followed as with formal bidding, but without advertising. The department can send only a requisition to Purchasing. The requisition should detail the items or services

required, and specifications should be attached if available. The department can also indicate possible vendors. Purchasing will contact vendors and obtain pricing, and then contact the department to determine the best purchase.

Once a decision has been made, Purchasing will work with Legal to draft a contract, where applicable, and send a purchase order or purchasing agreement to the vendor. The department will receive the appropriate copies of these documents.

c. Between \$1,000 and \$5,000

Expenditures of between \$1,000 and \$5,000 can be made on field Purchase Orders (FPOs) or with the use of a purchasing card with an approved increase in transaction limit². Although not required, Departments are strongly encouraged to obtain a minimum of three (3) written quotes to ensure the best price is secured for the City (unless the expenditure is a product of an open-end bid). The quotes should be sent to the Department Financial Officer at the time of procurement. Finance along with the Department Financial Officer will perform periodic review of transactions between \$1,000 and 5,000 to ensure best prices are being obtained.

NOTE: All purchases of **computer hardware or software** may not be made using a field purchase order or purchasing card. Such purchases require consultation with IT to get appropriate specifications and quotes. Requisitions must be entered by the requesting department after quotes are received from IT.

Attached as an exhibit to this policy is a copy of the Purchasing Card User Agreement that all cardholders must sign before accepting the card.

FPO's or purchasing card transactions:

- Cannot be split to exceed limitations;
- Cannot be used for personal purchases.

d. Less than \$1,000

Expenditures of less than \$1,000 can be made on field Purchase Orders (FPOs) or with the use of a purchasing card. Attached as an exhibit to this policy is a copy of the Purchasing Card User Agreement that all cardholders must sign before accepting the card.

² Purchasing card limits have been set at \$1,000. Requests for increases in the per transaction limit must be made in writing to the Department Head with a copy to the Department Financial Office. Details on why the increase is required must be included in the request. Department Head approval, followed by Finance Director approval must be obtained before any increase in card limit will be granted.

- FPO's or purchasing card transactions:
- Cannot be split to exceed the \$1,000 limit;
- Cannot be used for personal purchases.

B. Requests for Proposals

All contracts for professional or consulting services, unless exempted by City Ordinance, must be negotiated through a request for proposals, as long as the City Council has already appropriated sufficient funds for the services. The only exception to the RFP process would be for the contract to be authorized by the City Council.

A request for proposals (RFP) is primarily solicited for professional services, such as engineering, legal or consultant work. An RFP can also be solicited for equipment, such as a fire engine or mowers, or design/installation type jobs, such as an alarm system. All RFP's for an anticipated cost of \$25,000 or greater must be formally competitively bid, unless a case can be made for an emergency or sole source, as in Section I above. To initiate an RFP, the department should initiate an electronic requisition and send written project information and/or specifications to Purchasing. Purchasing will work with the department to develop a proposal package and advertise. Purchasing may also have other experience with a similar RFP type and may be able to assist the department in writing specifications.

1. Elements of an RFP

RFP specifications should include the following information:

- a. Purpose of the RFP.
- b. Performance specifications, such as deadlines.
- c. Minimum qualifications, if any.
- d. Notice of pre-proposal conference, if any.

Weighted selection criteria to be used in evaluating proposals, developed with the Purchasing staff.

Example:

Price	30%
Project Approach	40%
Qualifications of personnel	20%
Experience on similar projects	10%

2. Addenda to an RFP

Vendors requesting clarification of specifications must submit questions in

writing to Purchasing within the timeline indicated in the solicitation. Responses which alter the specifications will be issued through an addendum by Purchasing; departments should not respond directly to vendor questions. The city must insure that any substantive information given to a single potential applicant be given to all potential applicants. An RFP may be advertised by Purchasing in the local newspaper or other media that the Purchasing Manager determines to be the best method of soliciting the request.

An RFP selection committee should be used by the department to choose a vendor. A representative from Purchasing must participate with that committee. The committee should involve Legal to resolve questions during the selection and finally to draft the contract. The City Manager must approve all RFP recommendations. The role of the Purchasing representative is to ensure the integrity of the process. This person will not score the proposals.

Contracts for professional services awarded through the RFP process can have a term of no longer than three years, unless waived by the Finance Director.

C. Changes to Contracts and Purchase Orders

After a purchase is awarded, there may be desired changes to the original cost and/or terms. A change to a purchase order must be communicated to Purchasing, who will contact the vendor and issue an amendment to the original order. These occurrences should be rare, as products should be bid as desired.

A change to a contract can be in one of two forms:

1. A change to a contract can be made with an amendment, drafted by Legal. Purchasing should be informed of any amendments to be made. The Budget Office and the City Manager must endorse all contract amendments. Also, those that involve HCD funding need approval of the HCD Administrator.
2. A change to a construction contract can be made with a change order. All change orders also must be endorsed by the Budget Office and the City Manager. Also, those that involve HCD funding need approval of the HCD Administrator.

Approvals should be obtained BEFORE work is actually done. In instances of public or employee safety, written approvals can be obtained after the fact. For any other instances where prior approvals may not be possible, communications must be made with the Budget Office, and appropriate approvals must be obtained immediately after the fact.

In both cases of change, Purchasing will encumber the funds by either changing

the current purchase order or creating a new one.

D. *Non-Performance by Vendor or Contractor*

Departments experiencing problems with any vendor or contractor should notify Purchasing in writing of those problems. Purchasing will keep track of such issues to aid in researching qualifications on future bids/RFPs. Purchasing will also help to resolve problems between vendors/contractors and departments. The time to notify Purchasing about the unsatisfactory performance of a vendor/contractor is during the contract period; waiting until the same party is a successful bidder on a subsequent project does not guarantee the city's ability to reject that company. The rejection of a bid or RFP under these circumstances requires a documented history of poor service or performance.

E. *Lease or Rental of Equipment and Software, and Maintenance Agreements*

Any agreement for the lease or rental of equipment, including software, must be reviewed by Finance and Legal, and signed by the City Manager. Such agreements should be forwarded to the Finance Department for review in conjunction with the Legal Department. They should not be signed by employees unless authorized by the Legal Department.

Maintenance agreements must be reviewed by the Finance Department and, in some instances, by the Legal Department.

E. *Violations of Purchasing Policy*

Any violations of this purchasing policy will be communicated to the Department Head, Department Financial Officer, and the violating employee. Repeat offenses by any employee will be subject to temporary suspension of purchasing privileges. Purchasing privileges will only be restored upon completion of a Purchasing Policy training session performed by the Finance Department.

Continued repeat violations of the Purchasing Policy will be formally communicated by the Finance Department in writing to the Department Head, Department Financial Office, the violating employee, and Human Resources. Such violations will be subject to permanent revocation of all purchasing procedures.

Purchasing Card User Agreement

I agree to the following terms regarding use of the City of Portland Purchasing Card:

1. I understand that I am making financial commitments on behalf of the City of Portland, and will strive to obtain the best value for the city;
2. I fully understand that I may not, for any reason, allow anyone else to use my purchasing card;
3. I fully understand the \$1,000 per transaction limit and that splitting transactions is unacceptable. I understand that I will be warned the first and second time and lose the purchasing card permanently should it happen again.
4. Under no circumstances will I use the Purchasing Card to make personal purchases, either for myself or for others. There will be two warnings; the third time I will lose Purchase Card for 60 days. Should it happen again, I will lose the purchasing card permanently.
5. I understand that this Purchasing Card has restricted purchases on travel expenses such as hotels, food, auto rentals or airline tickets.
6. I understand that there are other restricted/blocked purchases such as gasoline, fuel, vehicle repairs, restaurants & bars, cash advances, alcoholic beverages, telecommunications equipment, personal items and services, utilities, etc;
7. I have been provided a copy of the Purchasing Card Cardholder Guide, and understand the Purchasing Card Program. I agree to surrender my card upon termination or change of employment or transfer to another department; and
8. I agree to follow the established procedures for use of the Purchasing Card and understand that failure to do so will result in either loss of privileges or other disciplinary actions, which may include employment termination. I agree that should I willfully violate the terms of this agreement, I will be subject to disciplinary action including potential employment termination and/or criminal charges.

I certify that I have received a JPMorgan Chase Purchasing card and that I understand the terms and conditions explained to me. In addition, I have been given an opportunity to ask questions to clarify my understanding of the program;

Cardholder Name (printed)

Dept/Division – Default Code

Cardholder Signature

/_____
Date

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.
7. Miscellaneous provisions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

A. Project Identification: Catherine Morrill Day Nursery (CMDN) Toddler Room.

1. Project Location: 96 Danforth Street; Portland, Maine 04101.

B. Owner: Lori Moses; Catherine Morrill Day Nursery; 96 Danforth Street; Portland, Maine 04101.

C. Architect: Evan Carroll, Bild Architecture.

1. Physical Address: 30 Danforth Street, Suite #213; Portland, Maine 04101.
2. Mailing Address: PO Box 8235; Portland, Maine 04104.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

1. This project involves interior renovations to an existing cafeteria and meeting room into a new conference room and classroom equipped with a single occupancy, ADA accessible restroom. Scope includes, but is not limited to: selective demolition, rough carpentry, gypsum wallboard partitions, fire-rated transom windows and doors, and interior finishes.

- B. Type of Contract.
 - 1. Project will be constructed under a single prime contract.
- C. The project scope shall include the following:
 - 1. All required trade permits.
 - 2. Means/process for badging and monitoring all workers with photo ID must be included and managed throughout the construction process.
 - 3. Snow removal for access to and from the entry for deliveries and disposals.
 - a. The Contractor shall be responsible for snow removal at existing door E104 as indicated on the drawings.
 - 4. Temporary power & lighting for construction activities may be fed from CMDNs main panel; however, if the existing service is not adequate for construction activities, contractor to provide generator or other means to supply temp power for construction activities.
 - 5. Potable water for drinking and construction activities.
 - 6. Dedicated toilet facilities for employees and subcontractor's employees. Location to be approved by CMDN.
 - 7. Heating as necessary for construction activities.
 - 8. Davis Bacon Wages and all required reporting per the City of Portland's purchasing ordinance.
 - 9. Costs for security during non-working hours, as needed to keep CMDN operational and as approved by CMDN.
 - 10. Temporary partitions to contain work activity and control dust and noise.
 - 11. The General Contractor shall have a representative providing site supervision on site at all times during construction.
- D. The following shall be excluded from the project scope:
 - 1. Costs for Builder's Risk Insurance Policy.
 - 2. Costs to provide 100% Payment & Performance Bonds.
 - 3. Maine State Sales Tax. CMDN Tax Exempt # and certificate will be available upon award.
 - 4. General Building Permit costs (trade permits by Contractor).
 - 5. Abatement costs.
 - 6. Costs for conducting Quality Control Testing or any IBC Special Inspections.
 - 7. Window treatments, interior signage, and fixtures, furniture and equipment shall be furnished by the Owner. Unless noted otherwise in documents.

1.4 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.

- B. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
1. Laydown space is limited to the existing Cafeteria /new Toddler classroom only. All deliveries must be 'live-loaded' and all trash and disposal must also be 'live loaded'.
 2. Parking spaces for employees, subcontractors, and vendors will not be provided by CMDN.
 3. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
 - c. All deliveries must be coordinated with CMDN 48 hours in advance in writing.
 - d. All deliveries must be made to existing door E104 as noted on the drawings.
 4. Existing door E106 (as indicated on the drawings) shall be off limits during the course of construction.
 5. Access to other rooms shall be permitted off-hours only.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- D. Security Measures: Mandatory background checks are required for all contractors, sub-contractors, and tradesmen at the cost of the General Contractor. The General Contractor shall coordinate background check procedures and requirements with CMDN prior to construction.

1.5 COORDINATION WITH OCCUPANTS

- A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.6 WORK RESTRICTIONS

- A. 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.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise indicated.
 - 1. Quiet hours are from 12:15-3:30pm; and no drilling, hammering, or other machine operated or excessive noise may occur during this time.
 - 2. The Contractor shall identify the project duration and identify any activates required outside of normal daylight hours prior to construction
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than 48 hours in advance of proposed utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than 48 hours in advance of proposed disruptive operations.
- E. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.
- F. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A. 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. Imperative mood and streamlined language are generally used in the Specifications. 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.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Testing and inspecting allowances.
- C. Related Requirements:
 - 1. Section 014000 "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.

1.2 SELECTION AND PURCHASE

- A. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

1.3 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.4 TESTING AND INSPECTING ALLOWANCES

- A. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.
- B. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure. The cost for incidental labor to assist the testing agency shall be included in the Contract Sum.
- C. Costs of services not required by the Contract Documents are not included in the allowance.
- D. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to Owner by Change Order.

1.5 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.2 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Testing and Inspecting Allowance: Include the sum of \$2,500.00: Include asbestos survey, lead-based paint screening, and report as specified in Section 024119 – Selective Demolition ".
 - 1. This allowance includes Contractor overhead and profit.

END OF SECTION 012100

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1: Dumbwaiter.

1. Base Bid: Construct a shaft and Install a new dumbwaiter and track assembly as indicated on Sheet A1.0 and specified in Section 141000 - Dumbwaiters. Modify existing sprinkler system as required.
2. Deduct Alternate: Dumbwaiter, shaft, and track assembly not in scope.

B. Alternate No. 2: Mini-split Heat Pump Unit.

1. Base Bid: Provide a new mini-split heat pump unit mounted to the rear wall of the new classroom. The outdoor condensing unit shall be field located with the Owner as specified in "Section 230000 - General HVAC".
2. Deduct Alternate: Mini-split heat pumps not in scope.

C. Alternate No. 3: Ceiling Finish.

1. Base Bid: Replace existing cementitious wood fiber plank ceiling as indicated on Sheet A1.0 and as specified in Section 095100 – Cementitious Wood Fiber Plank.
2. Deduct Alternate: Existing cementitious wood fiber plank ceiling to remain.

D. Alternate No. 4: LVT in Classroom and Meeting Room.

1. Base Bid: Remove existing vinyl composite tile in Classroom and Meeting Room. Prep subfloor for new LVT. Install LVT flooring as specified in Section 096519 – Resilient Tile Flooring. Provide new ADA rated door thresholds.
2. Deduct Alternate: Existing vinyl composition floor tile to remain in Classroom and Meeting room.

END OF SECTION 012300

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit copies of each request for consideration to Owner. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Requirements:
 - 1. Section 017823 "Operation and Maintenance Data" for submitting operation and maintenance manuals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Owner's responsive action.

1.3 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
 - 1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings.
 - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
 - b. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Architect.
- 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 time for submittal review, including time for resubmittals, as follows. 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.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. 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.
- E. Options: Identify options requiring selection by Owner/Architect.
- F. Deviations: Identify deviations from the Contract Documents on submittals.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals via email as PDF electronic files.
 - a. Owner will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
- B. 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 based on Architect's digital data drawing files is otherwise permitted.
- C. Samples: Submit 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.

- D. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures."
- E. Maintenance Data: Comply with requirements specified in Section 017823 "Operation and Maintenance Data."

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: 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. Mark with approval stamp before submitting to Owner.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 OWNERS ACTION

- A. Action Submittals: Owner will review each submittal, make marks to indicate corrections or revisions required, and return it.
- B. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

SECTION 013516 - ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes special procedures for alteration work.

1.2 DEFINITIONS

- A. Alteration Work: This term includes remodeling, renovation, repair, and maintenance work performed within existing spaces or on existing surfaces as part of the Project.
- B. Consolidate: To strengthen loose or deteriorated materials in place.
- C. Design Reference Sample: A sample that represents the Architect's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.
- D. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.
- F. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- G. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- H. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- I. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- J. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- K. Retain: To keep existing items that are not to be removed or dismantled.
- L. Strip: To remove existing finish down to base material unless otherwise indicated.

1.3 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain Owner's property.

1.4 QUALITY ASSURANCE

- A. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- B. Safety and Health Standard: Comply with ANSI/ASSE A10.6.

1.5 STORAGE AND HANDLING OF SALVAGED MATERIALS

- A. Salvaged Materials:
 - 1. Clean loose dirt and debris from salvaged items unless more extensive cleaning is indicated.
 - 2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
 - 3. Transport items to Owner's storage area designated by Owner.
 - 4. Protect items from damage during transport and storage.
- B. Salvaged Materials for Reinstallation:
 - 1. Repair and clean items for reuse as indicated.
 - 2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.
- C. Existing Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after alteration and other construction work in the vicinity is complete.
- D. Storage: Catalog and store items within a weathertight enclosure where they are protected from moisture, weather, condensation, and freezing temperatures.
 - 1. Secure stored materials to protect from theft.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.
 - 1. Use only proven protection methods, appropriate to each area and surface being protected.
 - 2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
 - 3. Erect temporary barriers to form and maintain fire-egress routes.
 - 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during alteration work.
 - 5. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
 - 6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
 - 7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
 - 8. Provide supplemental sound-control treatment to isolate demolition work from other areas of the building.

- B. Temporary Protection of Materials to Remain:
 - 1. Protect existing materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
 - 2. Do not attach temporary protection to existing surfaces except as indicated as part of the alteration work program.

- C. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.

- D. Utility and Communications Services:
 - 1. Notify Owner, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.
 - 2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for alteration work.
 - 3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.

- E. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Owner immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.
 - 1. Prevent solids such as adhesive or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from alteration work.
 - 2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

3.2 PROTECTION FROM FIRE

- A. General: Follow fire-prevention plan and the following:
 - 1. Comply with NFPA 241 requirements unless otherwise indicated.
 - 2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.
 - a. If combustible material cannot be removed, provide fire blankets to cover such materials.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:
 - 1. Obtain Owner's approval for operations involving use of welding or other high-heat equipment. Use of open-flame equipment is not permitted. Notify Owner at least 72 hours before each occurrence, indicating location of such work.
- C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire-extinguisher and blanket use.
- D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.
 - 1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is complete.

3.3 GENERAL ALTERATION WORK

- A. Perform surveys of Project site as the Work progresses to detect hazards resulting from alterations.

- B. Notify Owner of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.
 - 1. Do not proceed with the work in question until directed by Owner/Architect.

END OF SECTION 013516

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

1.2 USE CHARGES

- A. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- B. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
 - 1. Temporary power & lighting for construction activities may be fed from CMDN's main panel; however, if the existing service is not adequate for construction activities, the Contractor to provide a generator or other means to supply temporary power for construction activities.

1.3 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 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 qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 017700 "Closeout Procedures".

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. 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: Connect to existing services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
- C. 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.
 - 1. Use of the existing hose bibb on the exterior of the building will be permitted for construction purposes by the Contractor.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - 1. The location of dedicated toilet facilities for employees and subcontractors shall be approved by CMDN prior to construction.

- E. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
- F. 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. Parking: Parking spaces for employees, subcontractors, and vendors will not be provided by CMDN.
- B. Existing Stair Usage: Use of Owner's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use.
 - 1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If stairs become damaged, restore damaged areas so no evidence remains of correction work.

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. Building Security: The Contractor is responsible for all costs associated with security during non-working hours as needed to keep CMDN operational and as approved by CMDN.
 - 1. Means and processes for badging and monitoring all workers with photo ID must be included and managed throughout the construction process. Contractor shall coordinate these means and processes with Owner prior to construction.
- C. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- D. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.

- E. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- F. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- G. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
 - 1. Insulate partitions to control noise transmission to occupied areas.
 - 2. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
 - 3. Protect air-handling equipment.
 - 4. Provide walk-off mats at each entrance through temporary partition.
- 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; manage fire prevention program.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

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.

END OF SECTION 015000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. 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; and comparable products.
- B. Related Requirements:
 - 1. Section 012500 "Substitution Procedures" for requests for substitutions.

1.2 DEFINITIONS

- A. Products: Items obtained 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. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process 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. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," 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 additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. 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. All deliveries must be coordinated with CMDN 24 hours in advance.
3. 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.
4. 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.
5. Inspect products on delivery to determine compliance with the Contract Documents and to determine 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. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
5. Protect stored products from damage and liquids from freezing.

1.6 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: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, 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/Architect will make selection.
 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 3. Manufacturers:
 - a. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.

4. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

- C. Visual Selection Specification: Where Specifications include the phrase "as selected by Owner/Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Owner/Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Owner/Architect will consider Contractor's request for comparable product when the following conditions are satisfied.
 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 2. Evidence that proposed product provides specified warranty.
 3. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Installation of the Work.
3. Cutting and patching
4. Progress cleaning.
5. Starting and adjusting.
6. Protection of installed construction.

- B. Related Requirements:

1. Section 011000 "Summary" for limits on use of Project site.
2. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.2 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
2. 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.
3. Other Construction Elements: Do not cut and patch other construction elements or 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.
4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's

aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- B. Proceed with installation only after unsatisfactory conditions have been corrected. 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 caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to existing benchmarks. If discrepancies are discovered, notify Architect promptly.

3.4 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.
- 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. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. 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.
- H. Attachment: Provide blocking and attachment plates and 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 Architect.
 - 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.

- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.5 CUTTING AND PATCHING

A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

C. Temporary Support: Provide temporary support of work to be cut.

D. 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.

E. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

G. 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. 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 neatly to minimum 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. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 4. Proceed with patching after construction operations requiring cutting are complete.
- H. 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 practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical 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 minimize 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.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- 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:** Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- 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 retest.
- B. **Adjust equipment for proper operation.** Adjust operating components for proper operation without binding.
- C. **Test each piece of equipment to verify proper operation.** Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

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.**

END OF SECTION 017300

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.2 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.5 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.

- B. Submittals Prior to Substantial Completion: List items below that are incomplete at time of request.
1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Owner. Label with manufacturer's name and model number where applicable.
 5. Submit test/adjust/balance records.
 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: List items below that are incomplete at time of request.
1. Advise Owner of pending insurance changeover requirements.
 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 3. Complete startup and testing of systems and equipment.
 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 5. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 7. Complete final cleaning requirements, including touchup painting.
 8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.6 FINAL COMPLETION PROCEDURES

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
1. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

1.7 SUBMITTAL OF PROJECT WARRANTIES

- A. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- B. 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: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - b. Remove snow and ice to provide safe access to building.
 - c. 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.
 - d. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.

- e. 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.
- f. Remove labels that are not permanent.
- g. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- h. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- i. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- j. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
- k. Leave Project clean and ready for occupancy.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
 4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 017700

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Operation manuals for systems, subsystems, and equipment.
 - 3. Product maintenance manuals.
 - 4. Systems and equipment maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Owner.

PART 2 - PRODUCTS

2.1 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 - 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 - 2. Performance and design criteria if Contractor is delegated design responsibility.
 - 3. Operating standards.
 - 4. Operating procedures.
 - 5. Operating logs.
 - 6. Wiring diagrams.
 - 7. Control diagrams.
 - 8. Piped system diagrams.

9. Precautions against improper use.
10. License requirements including inspection and renewal dates.

B. Descriptions: Include the following:

1. Product name and model number. Use designations for products indicated on Contract Documents.
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 the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

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.

2.2 PRODUCT MAINTENANCE MANUALS

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, identified by product name and arranged 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. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. List of cleaning agents and methods of cleaning detrimental to product.
4. Schedule for routine cleaning and maintenance.
5. 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.

2.3 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

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, identified by product name and arranged 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 the following information for each component part or piece of equipment:

1. Standard maintenance instructions and bulletins.
2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
3. Identification and nomenclature of parts and components.
4. List of items recommended to be stocked as spare parts.

D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

1. Test and inspection instructions.
2. Troubleshooting guide.
3. Precautions against improper maintenance.

4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 5. Aligning, adjusting, and checking instructions.
 6. Demonstration and training video recording, if available.
- 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 include more than one 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. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Salvage of existing items to be reused or recycled.
3. Testing and inspection of hazardous materials.

1.2 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.3 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is expected that hazardous materials may be encountered in the Work. An allowance for hazardous materials testing has been provided in Section 012100 – Allowances.
1. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1. Maintain fire-protection facilities in service during selective demolition operations.

G. Arrange selective demolition schedule so as not to interfere with Owner's operations.

1.4 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.

3.3 PROTECTION

A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

C. Remove temporary barricades and protections where hazards no longer exist.

3.4 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Remove all walls, ceiling and flooring finishes not scheduled to remain. Patch with similar materials as necessary for new floor, wall and ceiling layout and any modification needed for new work.
 2. Provide shoring as necessary for floor penetrations, as well as all required safety items.
 3. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 4. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 5. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 6. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 7. Dispose of demolished items and materials promptly.
- B. All holes created for purposes of this construction project shall be patched, taped and painted. Where holes are created in flooring or non-drywall surfaces, patched to be completed with matching materials.
- C. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- D. Removed and Salvaged Items:
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 storage area designated by Owner.
 5. Protect items from damage during transport and storage.
- E. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

- F. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 HAZARDOUS MATERIALS TESTING

A. Limited inspections for asbestos-containing materials:

1. The survey shall be conducted by a U.S. EPA-accredited and MEDEP-certified asbestos inspector.
2. The asbestos survey shall include observations and sampling of both friable (easily crumbled, crushed, or pulverized) and non-friable suspect asbestos-containing materials (ACM) including:
 - a. Thermal system insulation, such as pipe, boiler, tank, and duct insulation;
 - b. Surfacing materials, such as fireproofing, acoustical and decorative plasters, or other coatings applied by spray or trowel; and
 - c. Miscellaneous materials, such as floor and ceiling tiles, mastics, and window glazing.
3. Bulk samples shall be analyzed by a laboratory licensed in Maine and accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) in accordance with the U.S. EPA's Recommended Method for the Determination of Asbestos in Bulk Samples by the PLM-EPA 600/R-93/116 visual estimation method (1993). Non-friable organically bound (NOB) materials such as floor tile, caulk, and roof materials will be analyzed using PLM NOB-EPA 600/R-93/116 with gravimetric preparation method.

B. Limited inspections for lead-based paint:

1. The Contractor shall perform lead paint testing using an X-ray fluorescence (XRF) analyzer throughout the designated work areas as indicated on the drawings.
2. Standard for lead-based paint testing:
 - a. Testing shall be conducted using an XRF analyzer, of 1.0 milligram per square centimeter (mg/cm²).
3. Lead waste, including lead-based paint waste, with the exception of typical household waste, may be subject to the hazardous waste requirements of U.S. EPA's *Resource Conservation and Recovery Act* (RCRA). The generator of the waste (or the owner of the facility, for construction waste) is responsible for determining whether or not the solid waste is hazardous, and the proper disposal method.

C. Hazardous Materials Report Preparation:

1. The Contractor shall include the following in their hazardous materials report:

- a. A tabular listing of ACM identified, including locations and approximate quantities;
- b. A tabular listing of LBP identified, including locations and approximate quantities;
- c. Approximate costs for proper abatement and disposal of identified hazardous building materials;
- d. Copies of analytical reports;
- e. Figures including locations of samples testing positive for asbestos; and
- f. A photograph log of identified ACM, as appropriate.

3.6 CLEANING

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
 1. Do not allow demolished materials to accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Framing with dimension lumber.
2. Wood blocking, cants, and nailers.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal thickness or less; 19 percent for more than 2-inch nominal thickness unless otherwise indicated.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2 for interior construction not in contact with ground, Use Category UC3b for exterior construction not in contact with ground, and Use Category UC4a for items in contact with ground.
1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
- C. Application: Treat items indicated on Drawings, and the following:
1. Wood sills, blocking, and similar concealed members in contact with masonry or concrete.
 2. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
 3. Wood floor plates that are installed over concrete slabs-on-grade.

2.3 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Where fire-retardant-treated materials are indicated, materials shall comply with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- B. Kiln-dry lumber after treatment to maximum moisture content of 19 percent.
- C. Application: Treat items indicated on Drawings, and the following:
 - 1. Concealed blocking.
 - 2. Framing for non-load-bearing partitions.

2.4 DIMENSION LUMBER FRAMING

- A. Non-Load-Bearing Interior Partitions: Construction or No. 2 grade.
 - 1. Application: All interior partitions.
 - 2. Species:
 - a. Southern pine or mixed southern pine; SPIB.
 - b. Northern species; NLGA.
 - c. Eastern softwoods; NeLMA.
 - d. Western woods; WCLIB or WWPA.
- B. Exposed Framing: Hand-select material for uniformity of appearance and freedom from characteristics, on exposed surfaces and edges, that would impair finish appearance, including decay, honeycomb, knot-holes, shake, splits, torn grain, and wane.
 - 1. Species and Grade: As indicated above for load-bearing construction of same type.

2.5 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
- B. Dimension Lumber Items: Construction or No. 2 grade lumber of any species.

2.6 FASTENERS

- A. General: Fasteners shall be of size and type indicated and shall comply with requirements specified in this article for material and manufacture.

1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- C. Post-Installed Anchors: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC01, ICC-ES AC58, ICC-ES AC193, or ICC-ES AC308 as appropriate for the substrate.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- C. Do not splice structural members between supports unless otherwise indicated.
- D. Comply with AWWA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- E. Where wood-preservative-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
- F. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code (IBC).
 2. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.
 3. ICC-ES evaluation report for fastener.
- G. Provide framing and blocking for all new walls and partitions as indicated on drawings.
- H. Provide blocking for accessories, fixtures, shelving and/or media as required.

3.2 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet enough that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061000

SECTION 062023 - INTERIOR FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Interior trim.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Hardboard: AHA A135.4.

2.2 INTERIOR TRIM

- A. Moldings for Opaque Finish (Painted Finish): Made to patterns included in WMMPA WM 12.
 - 1. Hardwood Moldings: WMMPA HWM 2, P-grade.
 - a. Species: Yellow poplar.
 - b. Maximum Moisture Content: 9 percent.
- B. Molding Patterns:
 - 1. Casing Pattern: WM 327, 11/16-by-2-1/4-inch clamshell casing.
 - 2. Mull-Casing Pattern: WM 957, 3/8-by-1-3/4-inch beaded-edge casing.
- C. Window Casing: WMMPA HWM 2, P-grade.
 - 1. Species: Yellow poplar.
 - 2. Maximum Moisture Content: 9 percent.
 - 3. Size: See drawings for casing sizes.

2.3 MISCELLANEOUS MATERIALS

- A. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer for general carpentry use.
 - 1. Wood glue shall have a VOC content of 30 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours.

3.2 INSTALLATION, GENERAL

- A. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
 - 1. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
 - 2. Countersink fasteners, fill surface flush, and sand unless otherwise indicated.
 - 3. Install to tolerance of 1/8 inch in 96 inches for level and plumb. Install adjoining interior finish carpentry with 1/32-inch maximum offset for flush installation and 1/16-inch maximum offset for reveal installation.

3.3 STANDING AND RUNNING TRIM INSTALLATION

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Cope at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints.

END OF SECTION 062023

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes hollow-metal work.

1.2 DEFINITIONS

- A. Minimum Thickness: Minimum thickness of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include elevations, door edge details, frame profiles, metal thicknesses, preparations for hardware, and other details.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Manufacturer: Trudoor, 4655 W McDowell Rd, Ste 107 Phoenix, AZ 85035; <http://www.trudoor.com/> or Owner/Architect approved substitution.

2.2 INTERIOR DOORS AND FRAMES

- A. Heavy-Duty Doors and Frames: SDI A250.8, Level 2.
 - 1. Physical Performance: Level B according to SDI A250.4.
 - 2. Doors:
 - a. Type: As indicated in the Door and Frame Schedule.
 - b. Thickness: 1-3/4 inches.
 - c. Face: Uncoated, cold-rolled steel sheet, minimum thickness of 0.042 inch.
 - d. Edge Construction: Model 1, Full Flush.
 - e. Core: Manufacturer's standard.
 - 3. Frames:
 - a. Materials: Uncoated, steel sheet, minimum thickness of 0.053 inch.

b. Construction: Full profile welded.

4. Exposed Finish: Prime.

2.3 FRAME ANCHORS

A. Jamb Anchors:

1. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.
2. Compression Type for Drywall Slip-on Frames: Adjustable compression anchors.

B. Floor Anchors: Formed from same material as frames, minimum thickness of 0.042 inch, and as follows:

1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
2. Separate Topping Concrete Slabs: Adjustable-type anchors with extension clips, allowing not less than 2-inch height adjustment. Terminate bottom of frames at finish floor surface.

2.4 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Frame Anchors: ASTM A 879/A 879M, Commercial Steel (CS), 04Z coating designation; mill phosphatized.
- C. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.
- D. Power-Actuated Fasteners in Concrete: From corrosion-resistant materials.
- E. Grout: ASTM C 476, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.
- F. Mineral-Fiber Insulation: ASTM C 665, Type I (blankets without membrane facing).

2.5 FABRICATION

- A. Fabricate hollow-metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

- B. Hollow-Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 1. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
 - 2. Floor Anchors: Weld anchors to bottoms of jambs with at least four spot welds per anchor; however, for slip-on drywall frames, provide anchor clips or countersunk holes at bottoms of jambs.
 - 3. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Stud-Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - b. Compression Type: Not less than two anchors in each frame.
 - 4. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers.
 - a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.
- C. Hardware Preparation: Factory prepare hollow-metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule, and templates.
 - 1. Reinforce doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.
 - 2. Comply with applicable requirements in SDI A250.6 and BHMA A156.115 for preparation of hollow-metal work for hardware.
- D. Stops and Moldings: Provide stops and moldings around glazed openings where indicated. Form corners of stops and moldings with mitered hairline joints.
 - 1. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
 - 2. Provide loose stops and moldings on inside of hollow-metal work.
 - 3. Coordinate rabbet width between fixed and removable stops with glazing and installation types indicated.

2.6 STEEL FINISHES

- A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.
 - 1. Shop Primer: SDI A250.10.

2.7 ACCESSORIES

- A. Grout Guards: Formed from same material as frames, not less than 0.016 inch thick.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Hollow-Metal Frames: Install hollow-metal frames for doors of size and profile indicated. Comply with SDI A250.11 or NAAMM-HMMA 840 as required by standards specified.
 - 1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - b. Install frames with removable stops located on secure side of opening.
 - c. Install door silencers in frames before grouting.
 - d. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - e. Check plumb, square, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
 - 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.
 - a. Floor anchors may be set with power-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.
 - 3. In-Place Metal or Wood-Stud Partitions: Secure slip-on drywall frames in place according to manufacturer's written instructions.
 - 4. Installation Tolerances: Adjust hollow-metal door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - a. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
 - c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - d. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.
- B. Hollow-Metal Doors: Fit hollow-metal doors accurately in frames, within clearances specified below. Shim as necessary.

1. Non-Fire-Rated Steel Doors:

- a. Between Door and Frame Jambs and Head: 1/8 inch plus or minus 1/32 inch.
- b. At Bottom of Door: 3/4 inch plus or minus 1/32 inch.
- c. Between Door Face and Stop: 1/16 inch to 1/8 inch plus or minus 1/32 inch.

3.2 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow-metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow-metal work immediately after installation.
- C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
- D. Touchup Painting: Cleaning and touchup painting of abraded areas of paint are specified in painting Sections.

END OF SECTION 081113

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Mechanical door hardware for the following:
 - a. Swinging doors.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

1.3 QUALITY ASSURANCE

- A. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.
- B. Accessibility Requirements: Comply with applicable provisions in the DOJ's 2010 ADA Standards for Accessible Design for door hardware on doors in an accessible route.
1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
 2. Comply with the following maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf applied perpendicular to door.
 3. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
 4. Closers: Adjust door and gate closer sweep periods so that, from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.
 5. Spring Hinges: Adjust door and gate spring hinges so that, from an open position of 70 degrees, the time required to move the door to the closed position is 1.5 seconds minimum.

1.4 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.
 - a. Exit Devices: Two years from date of Substantial Completion.
 - b. Manual Closers: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. Provide door hardware for each door as scheduled on Drawings to comply with requirements in this Section.
 1. Hardware shall match existing in manufacturer and finish, keyed as necessary to integrate with existing system.

2.2 HINGES

- A. Hinges: BHMA A156.1. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

2.3 SELF-CLOSING HINGES AND PIVOTS

- A. Self-Closing Hinges and Pivots: BHMA A156.17.

2.4 CENTER-HUNG AND OFFSET PIVOTS

- A. Center-Hung and Offset Pivots: BHMA A156.4.

2.5 MECHANICAL LOCKS AND LATCHES

- A. Strikes: Provide manufacturer's standard strike for each lock bolt or latchbolt complying with requirements indicated for applicable lock or latch and with strike box and curved lip extended to protect frame; finished to match lock or latch.
 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
 3. Aluminum-Frame Strike Box: Manufacturer's special strike box fabricated for aluminum framing.
 4. Rabbet Front and Strike: Provide on locksets for rabbeted meeting stiles.
- B. Bored Locks: BHMA A156.2; Grade 1; Series 4000.

- C. Mortise Locks: BHMA A156.13; Operational Grade 1; stamped steel case with steel or brass parts; Series 1000.

2.6 AUXILIARY LOCKS

- A. Bored Auxiliary Locks: BHMA A156.5; Grade 1; with strike that suits frame.
- B. Mortise Auxiliary Locks: BHMA A156.5; Grade 2; with strike that suits frame.

2.7 EXIT LOCKS AND EXIT ALARMS

- A. Exit Locks and Alarms: BHMA A156.29, Grade 1.

2.8 EXIT DEVICES AND AUXILIARY ITEMS

- A. Exit Devices and Auxiliary Items: BHMA A156.3.

2.9 LOCK CYLINDERS

- A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.
 - 1. Manufacturer: Same manufacturer as for locking devices.
- B. Construction Cores: Provide construction cores that are replaceable by permanent cores. Provide 10 construction master keys.

2.10 KEYING

- A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, Appendix A.
 - 1. Existing System:
 - a. Master key or grand master key locks to Owner's existing system.

2.11 SURFACE CLOSERS

- A. Surface Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

2.12 MECHANICAL STOPS AND HOLDERS

- A. Wall- and Floor-Mounted Stops: BHMA A156.16; polished cast brass, bronze, or aluminum base metal.

2.13 OVERHEAD STOPS AND HOLDERS

- A. Overhead Stops and Holders: BHMA A156.8.

2.14 DOOR GASKETING

- A. Door Gasketing: BHMA A156.22; air leakage not to exceed 0.50 cfm per foot of crack length for gasketing other than for smoke control, as tested according to ASTM E 283; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.

2.15 THRESHOLDS

- A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.

2.16 AUXILIARY DOOR HARDWARE

- A. Auxiliary Hardware: BHMA A156.16.

2.17 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates prepared for machine, wood, and sheet metal screws. Provide screws that comply with commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.
 1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
 2. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
 3. Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

2.18 FINISHES

- A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.
- B. Door hardware finishes shall match existing door hardware standards for CMDN.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
- B. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
- C. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.
 - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- D. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- E. Intermediate Offset Pivots: Where offset pivots are indicated, provide intermediate offset pivots in quantities indicated in door hardware schedule but not fewer than one intermediate offset pivot per door and one additional intermediate offset pivot for every 30 inches of door height greater than 90 inches.
- F. Lock Cylinders: Install construction cores to secure building and areas during construction period.
 - 1. Replace construction cores with permanent cores as directed by Owner.

- G. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."
- H. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- I. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- J. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.
- K. Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

END OF SECTION 087100

SECTION 088000 - GLAZING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Glass for interior windows and doors.
 - 2. Glazing sealants and accessories.

1.2 COORDINATION

- A. Coordinate glazing channel dimensions to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.

1.4 WARRANTY

- A. Manufacturer's Special Warranty for Laminated Glass: Manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
 - 1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Guardian Industries Corp. or Owner/Architect approved substitution.

2.2 PERFORMANCE REQUIREMENTS

- A. Safety Glazing: Where safety glazing is indicated, provide glazing that complies with 16 CFR 1201, Category II.

2.3 GLASS PRODUCTS, GENERAL

- A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below unless more stringent requirements are indicated. See these publications for glazing terms not otherwise defined in this Section or in referenced standards.

- 1. GANA Publications: "Laminated Glazing Reference Manual" and "Glazing Manual."

- B. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass that complies with performance requirements and is not less than the thickness indicated.

2.4 GLASS PRODUCTS

- A. Fully Tempered Float Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear) or Class 2 (tinted) as indicated, Quality-Q3.

2.5 LAMINATED GLASS

- A. Laminated Glass: ASTM C 1172. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.

- 1. Construction: Laminate glass with polyvinyl butyral interlayer, ionomeric polymer interlayer, or cast-in-place and cured-transparent-resin interlayer to comply with interlayer manufacturer's written instructions.

- 2. Interlayer Thickness: Provide thickness not less than that indicated and as needed to comply with requirements.

- 3. Interlayer Color: Clear unless otherwise indicated.

2.6 GLAZING SEALANTS

- A. General:

- 1. Compatibility: Compatible with one another and with other materials they contact, including glass products, seals of insulating-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
3. Colors of Exposed Glazing Sealants: As selected by Owner/Architect from manufacturer's full range.

2.7 GLAZING TAPES

- A. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; and complying with AAMA 800 for the following types:
 1. AAMA 810.1, Type 1, for glazing applications in which tape acts as the primary sealant.
 2. AAMA 810.1, Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.8 MISCELLANEOUS GLAZING MATERIALS

- A. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- B. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
- C. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- D. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
- E. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.
- F. Glazing Gasket: Standard compression types; replaceable, extruded EPDM rubber.

PART 3 - EXECUTION

3.1 GLAZING, GENERAL

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass includes

glass with edge damage or other imperfections that, when installed, could weaken glass, impair performance, or impair appearance.

- C. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- D. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- E. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

3.2 TAPE GLAZING

- A. Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.
- B. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.
- C. Cover vertical framing joints by applying tapes to heads and sills first, then to jambs. Cover horizontal framing joints by applying tapes to jambs, then to heads and sills.
- D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
- E. Apply heel bead of elastomeric sealant.
- F. Center glass lites in openings on setting blocks, and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.
- G. Apply cap bead of elastomeric sealant over exposed edge of tape.

3.3 GASKET GLAZING (DRY)

- A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
- B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
- C. Install gaskets so they protrude past face of glazing stops.

3.4 CLEANING AND PROTECTION

- A. Immediately after installation remove nonpermanent labels and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains.
 - 1. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer. Remove and replace glass that cannot be cleaned without damage to coatings.
- C. Remove and replace glass that is damaged during construction period.

3.5 LAMINATED GLASS SCHEDULE

- A. Glass Type: Clear laminated glass with two plies of fully tempered float glass.
 - 1. Basis-of-Design Product: Guardian Industries Corp., DiamondGuard Scratch-Resistant Glass.
 - 2. Minimum Thickness of Each Glass Ply: 3 mm.
 - 3. Interlayer Thickness: 0.030 inch.
 - 4. Safety glazing required.

END OF SECTION 088000

SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Interior gypsum board.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Design framing systems to accommodate deflection of primary building structure and construction tolerances and to withstand design loads.

2.2 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.3 INTERIOR GYPSUM BOARD

- A. Gypsum Wallboard: ASTM C 1396/C 1396M.
 - 1. Approved Manufacturers:
 - a. CertainTeed Corporation.
 - b. Georgia-Pacific Gypsum.
 - c. USG Corporation.
 - d. Owner Approved Substitution.
- B. Mold-Resistant Gypsum Board: ASTM C 1396/C 1396M. With moisture- and mold-resistant core and paper surfaces.
 - 1. Core: 5/8 inch, Type X.
 - 2. Long Edges: Tapered.
 - 3. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

2.4 TRIM ACCESSORIES

A. Interior Trim: ASTM C 1047.

1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized-steel sheet.
2. Shapes:
 - a. Cornerbead.
 - b. Bullnose bead.
 - c. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - d. L-Bead: L-shaped; exposed long flange receives joint compound.
 - e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
 - f. Expansion (control) joint.
 - g. Curved-Edge Cornerbead: With notched or flexible flanges.

2.5 JOINT TREATMENT MATERIALS

A. General: Comply with ASTM C 475/C 475M.

B. Joint Tape:

1. Interior Gypsum Board: Paper.
2. Glass-Mat Gypsum Sheathing Board: 10-by-10 glass mesh.

C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
 - a. Use setting-type compound for installing paper-faced metal trim accessories.
3. Fill Coat: For second coat, use setting-type, sandable topping compound.
4. Finish Coat: For third coat, use setting-type, sandable topping compound.

2.6 AUXILIARY MATERIALS

A. General: Provide auxiliary materials that comply with referenced installation standards.

1. Fasteners for Steel Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.

- C. Steel Drill Screws: ASTM C 1002 unless otherwise indicated.
 - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
- D. Sound-Attenuation Blankets: ASTM C 665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.
 - 1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
- E. Acoustical Joint Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
 - 1. Approved Manufacturers:
 - a. Hilti, Inc.
 - b. Pecora Corporation.
 - c. Tremco Incorporated.
 - d. USG Corporation.
 - e. Architect approved substitution.
- F. Thermal Insulation: As specified in Section 072100 "Thermal Insulation."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Installation Standard: ASTM C 754.
 - 1. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.
- B. Install framing and accessories plumb, square, and true to line, with connections securely fastened.

- C. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.
- D. Install bracing at terminations in assemblies.
- E. Do not bridge building control and expansion joints with non-load-bearing steel framing members. Frame both sides of joints independently.

3.3 INSTALLING FRAMED ASSEMBLIES

- A. Install framing system components according to spacing indicated, but not greater than spacing required by referenced installation standards for assembly types.
- B. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.
- C. Sound-Rated Partitions: Install framing to comply with sound-rated assembly indicated.
- D. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch from the plane formed by faces of adjacent framing.

3.4 APPLYING AND FINISHING PANELS

- A. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- B. Comply with ASTM C 840.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch- wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- E. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- F. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- G. All holes created for purposes of this construction project shall be patched, taped and painted.
- H. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
 - 1. All new walls shall be taped and receive a level 4 finish.

3.5 PROTECTION

- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet, moisture damaged, and mold damaged.

END OF SECTION 092900

SECTION 095100 - CEMENTITIOUS WOOD FIBER CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cementitious wood fiber plank acoustical ceiling system.

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A 1008 Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
2. ASTM A 641 Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
3. ASTM A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
4. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
5. ASTM C 635 Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
6. ASTM C 636 Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
7. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
8. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
9. ASTM E 580 Installation of Metal Suspension Systems in Areas Requiring Moderate Seismic Restraint.
10. ASTM E 1111 Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems.
11. ASTM E 1414 Standard Test Method for Airborne Sound Attenuation between Rooms Sharing a Common Ceiling Plenum.
12. ASTM E 1264 Classification for Acoustical Ceiling Products.

B. International Building Code – 2015 Edition.

C. ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality.

- D. NFPA 70 National Electrical Code
- E. ASCE 7 American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures
- F. International Code Council-Evaluation Services - AC 156 Acceptance Criteria for Seismic Qualification Testing of Non-structural Components
- G. International Code Council-Evaluation Services Report - Seismic Engineer Report
 - 1. ICC-ES Evaluation Report ESR-1112.

1.3 SYSTEM DESCRIPTION

- A. Discontinuous/Open Plenum.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for each type of acoustical ceiling unit and suspension system required.
- B. Shop Drawings: Layout and details of acoustical ceilings show locations of items that are to be coordinated with, or supported by the ceilings.

1.5 QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.
- B. Fire Performance Characteristics: Identify acoustical ceiling components with appropriate markings of applicable testing and inspecting organization.
 - 1. Surface Burning Characteristics: As follows, tested per ASTM E 84 and complying with ASTM E 1264 Classification.
- C. Acoustical panels, as with other architectural features located at the ceiling, may obstruct or skew the planned fire sprinkler water distribution pattern through possibly delay or accelerate the activation of the sprinkler or fire detection systems by channeling heat from a fire either toward or away from the device. Designers and installers are advised to consult a fire protection engineer, NFPA 13, or their local codes for guidance where automatic fire detection and suppression systems are present.
- D. Coordination of Work: Coordinate acoustical ceiling work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver acoustical ceiling units to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
- B. Provide labels indicating brand name, style, size and thickness.
- C. Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.
- D. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.7 PROJECT CONDITIONS

- A. Environmental Requirements:
 - 1. Do not install ceiling panels until building is closed in and HVAC system is operational.
 - 2. Locate materials onsite at least 24 hours before beginning installation to allow materials to reach temperature and moisture content equilibrium.
 - 3. Maintain the following conditions in areas where acoustical materials are to be installed 24 hours before, during and after installation:
 - a. Relative Humidity: 65 - 75%.
 - b. Uniform Temperature: 55 - 70 degrees F (13 - 21 degrees C).

1.8 WARRANTY

- A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace panels that fail within the warranty period. Failures include, but are not limited to the following:
 - 1. Acoustical Panels: Sagging and warping.
 - 2. Grid System: Rusting and manufacturer's defects.
- B. Acoustical panels and suspension systems one source manufacturer is Thirty (30) years from date of substantial completion.
- C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run

concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.9 MAINTENANCE

- A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.
 - 1. Acoustical Ceiling Units: Furnish quality of full-size units equal to 5.0 percent of amount installed.
 - 2. Suspension System Components: Furnish quantity of each exposed suspension component equal to 2.0 percent of amount installed.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Ceiling Panels:
 - 1. Tectum® by Armstrong World Industries, Inc. or Owner approved substitution.
- B. Suspension Systems:
 - 1. Armstrong World Industries, Inc. or Owner approved substitution.

2.2 ACOUSTICAL CEILING UNITS

- A. Acoustical Panels:
 - 1. Surface Texture: Coarse.
 - 2. Composition: Aspen wood fibers bonded with inorganic hydraulic cement.
 - 3. Color: Tectum White.
 - 4. Size: 24 in x 48 in.
 - 5. Thickness: 1 in.
 - 6. Edge Profile: Square Tegular 15/16 in.
 - 7. Noise Reduction Coefficient (NRC): ASTM C 423 (E400); 0.40.
 - 8. Flame Spread: ASTM E 1264; Class A.
 - 9. Light Reflectance (LR) White Panel: ASTM E 1477; 0.75.
 - 10. Dimensional Stability: HumiGuard Plus.
 - 11. Acceptable Product: Tectum® 8185 as manufactured by Armstrong World Industries or Owner approved substitution.

2.3 METAL SUSPENSION SYSTEMS

- A. Components: Main beams and cross tees, base metal and end detail, fabricated from commercial quality hot dipped galvanized steel complying with ASTM A653. Main beams and cross tees are double-web steel construction with 15/16" type exposed flange design. Exposed surfaces chemically cleansed, capping prefinished galvanized steel in baked polyester paint. Main beams and cross tees shall have rotary stitching.
 - 1. Structural Classification: ASTM C 635 duty.
 - 2. Color: White and selected to coordinate with ceiling tile, unless noted otherwise.
 - 3. Acceptable Product: Prelude XL 15/16" as manufactured by Armstrong World Industries or Owner approved substitution.
- B. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.
- C. Wire for Hangers and Ties: ASTM A641, Class 1 zinc coating, soft annealed, with a yield stress load of at least time three-design load, but not less than 12 gauge.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed recommendations.

3.2 PREPARATION

- A. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less than half width units at borders, and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.
- B. Coordination: Furnish layouts for preset inserts, clips, and other ceiling anchors whose installation is specified in other sections.
 - 1. Furnish concrete inserts and similar devices to other trades for installation well in advance of time needed for coordination of other work.

3.3 INSTALLATION

- A. Install suspension system and panels in accordance manufacturer's installation instructions. Follow the requirements of the International Building Code, ASCE 7 and ASTM E580 and in install in accordance with the authorities having jurisdiction.

3.4 ADJUSTING AND CLEANING

- A. Replace damaged and broken panels.

- B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members. Comply with manufacturer's instructions for cleaning and touch up of minor finish damage. Remove any ceiling products that cannot be successfully cleaned and or repaired. Replace with attic stock or new product to eliminate evidence of damage.

END OF SECTION 095100

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Resilient base.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. FloorScore Compliance: Resilient base shall comply with requirements of FloorScore certification.

2.2 THERMOSET-RUBBER BASE

A. Manufacturers:

1. Johnsonite.
2. Armstrong Flooring.
3. Roppe.
4. Owner approved substitution.

- B. Product Standard: ASTM F 1861, Type TS (rubber, vulcanized thermoset), Group I (solid, homogeneous).

1. Style and Location:
 - a. Style B, Cove: Provide in areas with resilient flooring.

- C. Thickness: 0.125 inches.

- D. Height: Shall match existing building standard.

- E. Lengths: Coils in manufacturer's standard length.

- F. Outside Corners: Job formed or preformed.
- G. Inside Corners: Job formed or preformed.
- H. Colors: As selected by Owner from full range of industry colors.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by resilient-product manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by resilient-product manufacturer for resilient products and substrate conditions indicated.
 - 1. Adhesives shall have a VOC content of 50 g/L or less.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- C. Do not install resilient products until they are the same temperature as the space where they are to be installed.
- D. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

3.2 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.

- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Preformed Corners: Install preformed corners before installing straight pieces.
- H. Job-Formed Corners:
 - 1. Outside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
 - a. Form without producing discoloration (whitening) at bends.
 - 2. Inside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
 - a. Miter or cope corners to minimize open joints.

3.3 RESILIENT ACCESSORY INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient accessories.

3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.
- B. Cover resilient products subject to wear and foot traffic until Substantial Completion.

END OF SECTION 096513

SECTION 096516 - RESILIENT SHEET FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes rubber sheet flooring.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified in manufacturer's standard size.

1.3 CLOSEOUT SUBMITTALS

- A. Maintenance data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: For resilient sheet flooring, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
 - 1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.
- B. FloorScore Compliance: Resilient sheet flooring shall comply with requirements of FloorScore certification.

2.2 UNBACKED RUBBER SHEET FLOORING

- A. Basis of Design Product: Arcade Homogeneous Rubber Sheet Flooring as manufactured by Tarkett or Owner approved substitution.
- B. Product Standard: ASTM F 1859.
 - 1. Type: Type I (homogeneous rubber sheet).
 - 2. Thickness: As standard with manufacturer.
 - 3. Hardness: Manufacturer's standard hardness, measured using Shore, Type A durometer per ASTM D 2240.

- C. Wearing Surface: Smooth.
- D. Sheet Width: As standard with manufacturer.
- E. Seamless-Installation Method: Heat welded.
- F. Colors and Patterns: As selected by Architect from full range of industry colors.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by resilient sheet flooring manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by flooring and adhesive manufacturers to suit resilient sheet flooring and substrate conditions indicated.
 - 1. Adhesives shall have a VOC content of 50 g/L or less.
- C. Seamless-Installation Accessories:
 - 1. Heat-Welding Bead: Manufacturer's solid-strand product for heat welding seams.
 - a. Color: Match flooring.
- D. Integral-Flash-Cove-Base Accessories:
 - 1. Cove Strip: 1-inch radius provided or approved by resilient sheet flooring manufacturer.
 - 2. Cap Strip: Square metal, vinyl, or rubber cap provided or approved by resilient sheet flooring manufacturer.
 - 3. Corners: Metal inside and outside corners and end stops provided or approved by resilient sheet flooring manufacturer.
- E. Floor Polish: Provide protective, liquid floor-polish products recommended by resilient sheet flooring manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare substrates according to resilient sheet flooring manufacturer's written instructions to ensure adhesion of resilient sheet flooring.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.

- C. Do not install resilient sheet flooring until it is the same temperature as the space where it is to be installed.
- D. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient sheet flooring.

3.2 RESILIENT SHEET FLOORING INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient sheet flooring.
- B. Unroll resilient sheet flooring and allow it to stabilize before cutting and fitting.
- C. Lay out resilient sheet flooring as follows:
 - 1. Maintain uniformity of flooring direction.
 - 2. Minimize number of seams; place seams in inconspicuous and low-traffic areas, at least 6 inches away from parallel joints in flooring substrates.
 - 3. Match edges of flooring for color shading at seams.
 - 4. Avoid cross seams.
- D. Scribe and cut resilient sheet flooring to butt neatly and tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, and door frames.
- E. Extend resilient sheet flooring into toe spaces, door reveals, closets, and similar openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on resilient sheet flooring as marked on substrates. Use chalk or other nonpermanent marking device.
- G. Install resilient sheet flooring on covers for telephone and electrical ducts and similar items in installation areas. Maintain overall continuity of color and pattern between pieces of flooring installed on covers and adjoining flooring. Tightly adhere flooring edges to substrates that abut covers and to cover perimeters.
- H. Adhere resilient sheet flooring to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- I. Seamless Installation:
 - 1. Heat-Welded Seams: Comply with ASTM F 1516. Rout joints and heat weld with welding bead to permanently fuse sections into a seamless flooring. Prepare, weld, and finish seams to produce surfaces flush with adjoining flooring surfaces.

- J. Integral-Flash-Cove Base: Cove resilient sheet flooring 6 inches up vertical surfaces. Support flooring at horizontal and vertical junction with cove strip. Butt at top against cap strip.

3.3 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient sheet flooring.
- B. Floor Polish: Remove soil, adhesive, and blemishes from flooring surfaces before applying liquid floor polish.
 - 1. Apply two coat(s).
- C. Cover resilient sheet flooring until Substantial Completion.

END OF SECTION 096516

SECTION 096519 - RESILIENT TILE FLOORING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Luxury vinyl floor tile with attached cork underlayment.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: Units of each color and pattern of floor tile required.

1.3 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.4 MAINTENANCE

- A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.
1. Resilient Tile Flooring: Furnish quality of full-size units equal to 5.0 percent of amount installed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: For resilient tile flooring, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.
- B. FloorScore Compliance: Resilient tile flooring shall comply with requirements of FloorScore certification.

2.2 LUXURY VINYL FLOOR TILE WITH ATTACHED CORK UNDERLAYMENT

- A. Basis of Design Product: COREtec Plus as manufactured by US Floors or Owner approved substitution.
- B. Tile Standard: ASTM F 1700.
 - 1. Class: As indicated by product designations.
 - 2. Type: A, smooth surface.
- C. Construction:
 - 1. 1.5 mm virgin PVC (0.5 mm/20 mil wear surface).
 - 2. 5.0 mm core (Limestone, virgin PVC, wood and bamboo dust).
 - 3. 1.5 mm cork underlayment.
- D. Size: 18.5 by 24 inches.
- E. Colors and Patterns: As selected by Owner/Architect from full range of industry colors.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by floor tile manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- C. Do not install floor tiles until they are the same temperature as the space where they are to be installed.
- D. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

3.2 FLOOR TILE INSTALLATION

- A. Comply with manufacturer's written instructions for installing floor tile.
- B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
 - 1. Lay tiles square with room axis.
- C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.
 - 1. Lay tiles with grain direction alternating in adjacent tiles (basket-weave pattern).
- D. 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.
- E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.
- G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in finished floor areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.
- H. Adhere floor tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.3 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.
- B. Cover floor tile until Substantial Completion.

END OF SECTION 096519

SECTION 097720 – DECORATIVE FIBERGLASS REINFORCED WALL PANELS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Prefinished polyester glass reinforced plastic sheets and adhered to unfinished gypsum wallboard.
 - 1. PVC trim.
 - 2. Wall base.
- B. Products Not Furnished or Installed under This Section:
 - 1. Gypsum Cementitious substrate board.
 - 2. Resilient Base.

1.2 REFERENCES

- A. American Society for Testing and Materials: Standard Specifications (ASTM)
 - 1. ASTM D 256 - Izod Impact Strengths (ft #/in)
 - 2. ASTM D 570 - Water Absorption (%)
 - 3. ASTM D 638 - Tensile Strengths (psi) & Tensile Modulus (psi)
 - 4. ASTM D 790 - Flexural Strengths (psi) & Flexural Modulus (psi)
 - 5. ASTM D 2583- Barcol Hardness
 - 6. ASTM D 5319 - Standard Specification for Glass-Fiber Reinforced Polyester Wall and Ceiling Panels.
 - 7. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

- A. Product Data: Submit sufficient manufacturer's data to indicate compliance with these specifications, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings: Submit elevations of each wall showing location of paneling and trim members with respect to all discontinuities in the wall elevation.

- C. Selection Samples: Submit manufacturer's standard color pattern selection samples representing manufacturer's full range of available colors and patterns.

1.4 QUALITY ASSURANCE

- A. Conform to building code requirements for interior finish for smoke and flame spread requirements as tested in accordance with:
 - 1. ASTM E 84 (Method of test for surface burning characteristics of building Materials).

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials factory packaged on strong pallets.
- B. Store panels and trim lying flat, under cover and protected from the elements. Allow panels to acclimate to room temperature (range of 60 to 75°F) for 48 hours prior to installation.

1.6 PROJECT CONDITIONS

- A. During installation and for not less than 48 hours before, maintain an ambient temperature and relative humidity within limits required by type of adhesive used and recommendation of adhesive manufacturer.
 - 1. Provide ventilation to disperse fumes during application of adhesive as recommended by the adhesive manufacturer.

1.7 WARRANTY

- A. Furnish one year guarantee against defects in material and workmanship.

PART 2 - PRODUCTS

2.1 BASIS OF DESIGN MANUFACTURER

- A. Marlite; 1 Marlite Drive, Dover, OH 44622. 800-377-1221 FAX (330) 343-4668 Email: info@marlite.com www.marlite.com; or Owner approved substitution.
- B. Product:
 - 1. Standard FRP.

2.2 PANELS

- A. Fiberglass reinforced thermosetting polyester resin panel sheets complying with ASTM D 5319.
 - 1. Coating: Multi-layer print, primer and finish coats or applied over-layer.
 - 2. Dimensions:
 - a. Thickness – 0.090 “ nominal
 - b. Width - 4'-0” nominal
 - c. Length – As indicated on the drawings.
 - 3. Tolerance:
 - a. Length and Width: +/-1/8”.
 - b. Square - Not to exceed 1/8” for 8 foot panels or 5/32” for 10 foot panels.
- B. Properties: Resistant to rot, corrosion, staining, denting, peeling, and splintering.
 - 1. Flexural Strength - 1.0×10^4 psi per ASTM D 790.
 - 2. Flexural Modulus - 3.1×10^5 psi per ASTM D 790.
 - 3. Tensile Strength - 7.0×10^3 psi per ASTM D 638.
 - 4. Tensile Modulus - 1.6×10^5 psi per ASTM D 638.
 - 5. Water Absorption - 0.72% per ASTM D 570.
 - 6. Barcol Hardness (scratch resistance) of 35 55 as per ASTM D 2583.
 - 7. Izod Impact Strength of 72 ft. lbs./in ASTM D 256.
- C. Back Surface: Smooth. Imperfections which do not affect functional properties are not cause for rejection.
- D. Front Finish:
 - a. Color: To be selected by Owner from Manufacturer's full range.
 - b. Surface: To be selected by Owner from Manufacturer's full range.

2.3 BASE

- A. Marlite Cove Base Molding for .090” thick FRP Panels
 - 1. Color: White.
 - 2. Profile: V65 Base Cove.

2.4 MOLDINGS

- A. PVC Trim: Thin-wall semi-rigid extruded PVC.
 - 1. Color: White.
- B. Outside Corner Guard:

1. M 961 PVC Outside Corner Guard
 - a. Color: White, 8' length.

2.5 ACCESSORIES

- A. Fasteners: Non-staining nylon drive rivets.
 1. Match panel colors.
 2. Length to suit project conditions.
- B. Adhesive: Either of the following construction adhesives complying with ASTM C 557.
 1. Marlite C-551 FRP Adhesive - Water- resistant, non-flammable adhesive.
 2. Marlite C-915 Construction Adhesive - Flexible, water-resistant, solvent based adhesive, formulated for fast, easy application.
 3. Titebond Advanced Polymer Panel Adhesive – VOC compliant, non-flammable, environmentally safe adhesive.
- C. Sealant:
 1. Marlite Brand - Color Match Sealant.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Examine backup surfaces to determine that corners are plumb and straight, surfaces are smooth, uniform, clean and free from foreign matter, nails countersunk, joints and cracks filled flush and smooth with the adjoining surface.
 1. Verify that stud spacing does not exceed 24" on-center.
- B. Repair defects prior to installation.
 1. Level wall surfaces to panel manufacturer's requirements. Remove protrusions and fill indentations.

3.2 INSTALLATION

- A. FRP shall be installed up to 48-inches at walls behind toilets and sinks.
- B. Comply with manufacturer's recommended procedures and installation sequence.
- C. Cut sheets to meet supports allowing 1/8" clearance for every 8 foot of panel.

1. Cut and drill with carbide tipped saw blades or drill bits, or cut with shears.
 2. Pre-drill fastener holes 1/8" oversize with high speed drill bit.
 - a. Space at 8" maximum on center at perimeter, approximately 1" from panel edge.
 - b. Space at in field in rows 16' on center, with fasteners spaced at 12" maximum on center.
- D. Apply panels to board substrate, above base, vertically oriented with seams plumb and pattern aligned with adjoining panels.
1. Install panels with manufacturer's recommended gap for panel field and corner joints.
 - a. Adhesive trowel and application method to conform to adhesive manufacturer's recommendations.
 - b. Drive fasteners for snug fit. Do not over-tighten.
- E. Apply panel moldings to all panel edges using silicone sealant providing for required clearances.
1. All moldings must provide for a minimum 1/8" of panel expansion at joints and edges, to insure proper installation.
 2. Apply sealant to all moldings, channels and joints between the system and different materials to assure watertight installation.

3.3 CLEANING

- A. Remove excess sealant from panels and moldings. Wipe panel down using a damp cloth and mild soap solution or cleaner.
- B. Refer to manufacturer's specific cleaning recommendations Do not use abrasive cleaners.

END OF SECTION 097720

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.

1.2 DEFINITIONS

- A. MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. MPI Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Manufacturers:
 - 1. Benjamin Moore.
 - 2. Sherwin Williams.
 - 3. Owner approved substitution.

2.2 PAINT, GENERAL

A. Material Compatibility:

1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

B. Colors: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 1. Fiber-Cement Board: 12 percent.
 2. Concrete: 12 percent.
 3. Masonry (Clay and CMUs) 12 percent.
 4. Wood: 15 percent.
 5. Gypsum Board: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- C. Existing walls to be prepped for paint, including patching holes, cracks and blemishes.

3.4 INTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Nontraffic Surfaces:
 1. Latex System:
 - a. Prime Coat: Latex, interior, matching topcoat.
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior (MPI Gloss Level 3).
- B. Cement Board Substrates:
 1. Latex System:
 - a. Prime Coat: Primer, alkali resistant, water based.
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior (MPI Gloss Level 3).
- C. Wood Substrates: Wood trim and architectural woodwork.
 1. Latex over Latex Primer System:
 - a. Prime Coat: Primer, latex, for interior wood.
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5).
- D. Gypsum Board Substrates:
 1. Latex over Latex Sealer System:

- a. Prime Coat: Primer sealer, latex, interior.
- b. Intermediate Coat: Latex, interior, matching topcoat.
- c. Topcoat: Latex, interior (MPI Gloss Level 3).

END OF SECTION 099123

SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Public-use washroom accessories.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.3 CLOSEOUT SUBMITTALS

- A. Maintenance data.

PART 2 - PRODUCTS

2.1 PUBLIC-USE WASHROOM ACCESSORIES

- A. Toilet Tissue (Roll) Dispenser:
 - 1. Basis of Design Manufacturer: Georgia Pacific Compact Owner approved substitution.
 - 2. Description: Double-roll dispenser.
 - 3. Mounting: Surface mounted.
 - 4. Operation: Coordinate operation with CMDN standard.
 - 5. Capacity: Designed for CMDN's standard diameter tissue rolls.
 - 6. Material and Finish: Stainless steel, No. 4 finish (satin).
- B. Paper Towel (Roll) Dispenser:
 - 1. Basis of Design Product: Push Paddle Roll Dispenser model #54338 as manufactured by Georgia Pacific or Owner approved substitution.
 - 2. Description: Lever-actuated mechanism permitting controlled delivery of paper rolls in preset lengths per stroke.
 - 3. Mounting: Surface mounted.
 - 4. Minimum Capacity: 8-inch- wide, 800-foot- long roll.
 - 5. Material and Finish: Manufacturer's standard.
 - 6. Lockset: Tumbler type.

C. Soap Dispenser:

1. Basis of Design Manufacturer: Monogram foaming soap dispenser or Owner approved substitution.

D. Grab Bar:

1. Basis of Design Manufacturer: Bobrick or Owner approved substitution.
2. Mounting: Flanges with concealed fasteners.
3. Material: Stainless steel, 0.05 inch thick.
 - a. Finish: Smooth, No. 4 finish (satin) on ends and slip-resistant texture in grip area.
4. Outside Diameter: 1-1/4 inches.
5. Configuration and Length: As indicated on Drawings.

2.2 FABRICATION

- A. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
- B. Grab Bars: Install to withstand a downward load of at least 250 lbf, when tested according to ASTM F 446.

END OF SECTION 102800

SECTION 141000 - DUMBWAITERS

PART 1 - GENERAL

1.1 SUMMARY

- A. The lift contractor is required to perform the work of this section as specified herein. The work shall include:
 - 1. Vertical reciprocating conveyor.
 - 2. Safety landing enclosures with electro-mechanical interlock gates.
 - 3. Conveyor controls, safety devices, signage and training.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 QUALITY ASSURANCE

- A. Equipment shall be designed, installed and guarded in accordance with ASME/ANSI B20.1 Safety Code for Conveyors and Related Equipment (current edition), National Electric Code, OSHA codes, and State & Local Codes where applicable.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For dumbwaiters.
 - 1. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 2. Include diagrams for power, signal, and control wiring.

1.5 INFORMATIONAL SUBMITTALS

- A. Sample warranty.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.

1.7 WARRANTY

- A. The lift contractor in conjunction with the manufacturer shall warrant the equipment against defects and workmanship for a period of one year from the date of successful completion.
- B. The lift contractor must make available to the owner a comprehensive safety maintenance program at additional cost to facilitate optimal safe performance and proper function of the equipment.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. Regulatory Requirements: Comply with ASME A17.1.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 PERFORMANCE REQUIREMENTS

- A. Fire-Rated Door and Frame Assemblies: Units complying with NFPA 80 that are listed and labeled by UL or another testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 252 or UL 10B.

2.3 DUMBWAITERS

- A. Power Dumbwaiter: Manufacturer's standard preengineered, electric-driving-machine dumbwaiter system.
 - 1. Basis of Design Manufacturer: Vertical Reciprocating Conveyor shall be Model RJS as manufactured by Giant Lift Equipment Manufacturing Company, Inc, 185 Lafayette Road, North Hampton, NH 03862 (phone 800-52-GIANT, fax 603-964-9263) or approved equal by a manufacturer with not less than ten (10) years successful experience and qualified in the design and fabrication of Vertical Reciprocating Conveyor model quoted. Bidders quoting alternate manufacturers must submit complete manufacturers literature and specifications not less than 10 days prior to bid date. Owner or the architect as an agent of the owner reserves the right to reject any bid using alternate manufacturers.
 - 2. Drive: Electric hydraulic.
 - 3. Car Platform Size: As indicated on the drawings.
 - 4. Car Inside Height: Manufacturer's standard, clear inside dimension to lowest point.
 - 5. Rated Load: 500 lb.

6. Rated Speed: 14 fpm.
 7. Electric Power Supply: 230 V, 60 Hz, 3 phase.
 8. Car: Manufacturer's standard construction.

 9. Car Entrance: Power operated, vertically sliding door or vertically sliding gate.
 - a. Automatic Hoistway-Door Operation: Equip car entrance with connecting linkages to operate hoistway doors at each landing when car is present.
 - b. Car-Door Vision Panel: Glazed port through car door aligning with vision panel in hoistway door.
 - c. Material and Finish: Match car-enclosure walls.

 10. Hoistway Doors and Frames: Manually operated, single-swing door equipped with linkages to operate only when car is present at landing.
 - a. Construction: Manufacturer's standard construction except as indicated on Drawings.
 - b. Hardware: As selected by Architect from manufacturer's full range. Equip fire-rated doors with fire-rated hardware and closers.
 - c. Vision Panel: Glazed port through door, sufficient for observation that car is at landing and aligning with vision panel in car door.

 11. Steel Finish: Factory-applied baked-enamel or powder-coat finish.
 - a. Color: As selected by Owner/Architect from manufacturer's full range.
- B. All final engineering shall be of computer aided engineering design. The Vertical Reciprocating Conveyor framework and carriage platform shall consist of ASTM structural steel only. No formed steel shall be used.

2.4 OTHER COMPONENTS

- A. Access Door and Frame: Manufacturer's standard swing door.
 1. Hardware: As selected by Owner/Architect from manufacturer's full range. Equip fire-rated doors with fire-rated hardware and closers.

- B. Framework: The main framework shall consist of a structural steel back frame and integral mast uprights with a base frame to form a self-supporting rigid structure requiring sway bracing only. Framework shall be engineered proportionate to capacity and resistance to twist and deflection. Manufacturer shall engineer the frame in sections to facilitate shipment and installation by including pre-aligned precision splice joints. Frame sections shall be fully assembled at the factory to ensure intended joint quality and broken down for shipment as needed. No straddle design using a single beam per platform side shall be accepted.

- C. Carriage: Carriage deck shall be supported underneath with structural steel support arms sized by the manufacturer to be structurally sound and resist permanent deflection. The

platform deck shall be a minimum of 1/4" thick hot rolled plate electrically welded to support arms.

- D. Guides: Carriage support arms with computer designed wheel center dimensions utilize machined cold rolled steel axles and four hard alloy flanged guide wheels equipped with press fit sealed roller bearings for precision unified guidance within framework upright channels. Platform also to be equipped with a side thrust roller device for unbalanced loads consisting of four anti-friction bearing load rollers installed behind the carriage backplate perpendicular to the guide wheels to transmit unbalanced forces to the rails and keep the carriage level.
- E. Drive:
1. Raising and lowering of the carriage shall be provided by one solid heavy duty single acting positive displacement type turned ground and polished steel ram. Ram shall be manufactured by the Vertical Reciprocating Conveyor manufacturer, not a third party sub and shall include both stabilizing and stop rings. The ram casing shall be cold drawn seamless type of uniform thickness with an externally fitted bronze gland nut. Packing type to be inverted V-type stacked in a stuffing box to accommodate pressure surges. The stuffing box shall be so designed to allow gland nut to be adjusted and the packing to be replaced externally without removing the ram from the cylinder. Flow valve coupled to piston to provide positive limited controlled flow under lowering or failure in the hydraulic system.
 2. Lifting force shall be through two single strand, hardened alloy, ANSI roller chains. Chains attached at one end at outer edges of lifting platform to provide extra loading stability and are mounted over sealed ball bearing chain load rollers carried in an equalizing ram cross head. Chains are attached at the other end to the piston utilizing adjustable chain anchor bolts through solid steel anchor blocks.
- F. Power Unit: The power unit shall consist of panelized motor, pump, reservoir tank and shall be mounted inside the back of the lower frame unless otherwise specified as remote.
1. Electric motor shall be unidirectional totally enclosed fan cooled squirrel cage induction type which operates only to lift the loads.
 2. Pump shall be specially designed gear or vane type powered by the electric motor transmitted by heavy duty transmission belt and keyed pulleys
 3. Hydraulic reservoir shall be all seam welded sized to a capacity allowing heat dissipation and baffled to prevent splashing. Tank cap to include mushroom type breather filter.
 4. Normally closed solenoid prevents platform from falling in the event of power failure.
 5. Power unit must also include Y-strainer, overload pressure relief valve, check valve, and manual lowering valve which in the event of power failure can be opened to lower the platform.
- G. Signal Equipment for Power Dumbwaiters: Manufacturer's standard signal equipment at each landing push-button station; include call button, send button for each landing served, and illuminated "car-in-use" light that flashes when car arrives at landing until door

is opened. Station recessed, set in wall adjacent to dumbwaiter, with surface-mounted, stainless-steel faceplate.

H. Falling Platform Safety Device:

1. Carriage platform to be equipped with a Falling Platform Safety Device mounted on lifting platform, self-generating type cams with machined, hardened serrated teeth which rapidly engage the frame uprights holding the platform carriage should the lifting chains become slack for any reason. Each lifting chain shall have a falling platform safety cam independent from each other. Vertical Reciprocating Conveyor manufacturers quoting models without a Falling Platform Safety Device will be rejected.

I. Controls:

1. Control panel to be designed, assembled and bench tested by an employee of the Vertical Reciprocating Conveyor manufacturer - no third party subcontract. Control panel to be internally pre-wired to a terminal strip which corresponds with the diagram provided. Control panel to be shipped loose and to be field installed near customers disconnect per NEC code and shall be enclosed in a continuous hinged NEMA 12 UL labeled cabinet. Panel to include motor starter with auxiliary contact and adjustable thermal overload relay. Overload to have test, automatic reset and manual reset settings. Control panel to include step down transformer for secondary control circuit.
2. Controls shall be self-maintained and include push-button stations, one per landing to provide full call and send capability. Push-button stations shall be shipped loose to be field installed outside of the landing enclosure guarding in a location so they can not be actuated by a person on the platform. Push-button stations shall include red emergency stop mushroom cap operators that must be manually reset at the location where the stop was initiated in order to resume operation.

J. Safety Signage:

1. Vinyl self-adhesive signs shall be provided which read "Riding the conveyor is dangerous & strictly forbidden to all personnel". The signs shall be safety yellow background and be printed in red ink for high visibility. A minimum of one sign on the carriage platform and one at each point of access shall be provided. It shall be the Owner's responsibility to maintain proper signage throughout the life of the equipment.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with ASME A17.1 and manufacturer's written instructions.

- B. Installation shall be professionally performed by an installer approved by the manufacturer having not less than 5 years of experience installing Vertical Reciprocating Conveyors and similar equipment. Installer shall have visited the job site prior to commencing work to check job conditions. Installer shall follow the Manufacturer's instructions for proper installation of the equipment and safety enclosures and shall verify that the equipment is properly installed and guarded per ANSI/ASME B20.1 code to ensure safe efficient operation. Installer shall functionally test the operation of Vertical Reciprocating Conveyor and gate interlocks upon completion.
- C. Alignment: Coordinate hoistway doors with dumbwaiter travel and car positioning for accurate alignment and required clearances between dumbwaiter components including car, hoistway doors, sills, and door frame at each landing.
- D. Set sills flush with finished surface of landings. Fill space under sills solidly with nonshrink, nonmetallic grout.
- E. Adjust car stops for accurate stopping at each landing, within required tolerances.
- F. Lubricate operating parts of dumbwaiter, including wire ropes, guide rails, door tracks, and hardware.

3.2 FIELD QUALITY CONTROL

- A. Acceptance Testing: On completion of installation and before permitting use of dumbwaiters, perform acceptance inspections and tests as required by ASME A17.1 and authorities having jurisdiction.
- B. Operating Test: Load dumbwaiters to rated load and operate continuously for 30 minutes between lowest and highest landings served. Readjust stops, signal equipment, and other devices for accurate stopping and operation of system.
- C. Dumbwaiters will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports.

3.3 DEMONSTRATION

- A. Only trained personnel shall be permitted to operate the conveyor. Installer shall provide one brief, but comprehensive training session for the owner and/or the Owner's representatives. It is the responsibility of the owner to provide similar training to any potential operators of the equipment.

3.4 MAINTENANCE

- A. It is the responsibility of the owner to put in place an established maintenance program to ensure safe operation of the equipment and the protection of personnel. All maintenance

must be performed by qualified personnel. Maintenance safety check list is to be supplied by a qualified installer at the time of completed installation.

END OF SECTION 141000

SECTION 224200 - COMMERCIAL PLUMBING FIXTURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Water closets.
2. Flushometer Valves.
3. Lavatories.
4. Faucets.

1.2 APPLICABLE CODES AND STANDARDS

- A. All work shall be in accordance with the laws, rules, codes, and regulations set forth by Local, State, and Federal authorities having jurisdiction. All products and materials shall be manufactured, installed and tested as specified, but not limited to the latest accepted edition of the following codes, standards and regulations:

NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Act
NEC	National Electrical Code (NFPA 70)
UL	Underwriters Laboratory
NESC	National Electrical Safety Code
FM	Factory Mutual Association
MUBEC	Maine Uniform Building Code
Local AHJ	Local and State building, electrical, fire and health department and public safety codes agencies.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Proposed plumbing layout drawing.
- C. A Construction Management plan as related to plumbing modifications in areas outside of the work area.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For all products to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 FLOOR-MOUNTED, BOTTOM-OUTLET WATER CLOSETS

- A. Water Closets: Floor mounted, bottom outlet, top spud.
 - 1. Basis of Design Product: Baby Devoro as manufactured by American Standard or Owner approved substitution.
 - 2. Bowl:
 - a. Standards: ASME A112.19.2/CSA B45.1 and ASME A112.19.5.
 - b. Material: Vitreous china.
 - c. Type: Siphon jet.
 - d. Height: Child.
 - e. Rim Contour: Rounded.
 - f. Water Consumption: 1.28 gal. per flush.
 - g. Color: White.
 - 3. Bowl-to-Drain Connecting Fitting: ASTM A 1045 or ASME A112.4.3.

2.2 FLUSHOMETER VALVES

- A. Lever-Handle, Piston Flushometer Valves:
 - 1. Basis of Design Product: Manual FloWise Toilet Flush Valve as manufactured by American Standard or Owner approved substitution.
 - 2. Standard: ASSE 1037.
 - 3. Minimum Pressure Rating: 125 psig.
 - 4. Features: Include integral check stop and backflow-prevention device.
 - 5. Material: Brass body with corrosion-resistant components.
 - 6. Exposed Flushometer-Valve Finish: Chrome plated.
 - 7. Style: Exposed.
 - 8. Consumption: 1.28 gal. per flush.
 - 9. Minimum Inlet: NPS 1.
 - 10. Minimum Outlet: NPS 1-1/4.

2.3 VITREOUS-CHINA, WALL-MOUNTED LAVATORIES

- A. Lavatory: Wheelchair, vitreous china, wall mounted.

1. Basis of Design Product: Lucerne Wall Mounted Sink as manufactured by American Standards or Owner approved substitution.
2. Fixture:
 - a. Standard: ASME A112.19.2/CSA B45.1.
 - b. Type: Slab or wheelchair.
 - c. Nominal Size: Rectangular, 20-1/2 by 18-1/4 inches.
 - d. Faucet-Hole Punching: 4" center set faucet holes.
 - e. Faucet-Hole Location: Top.
 - f. Color: White.
 - g. Mounting: For concealed-arm carrier.
3. Support: ASME A112.6.1M, Type II, concealed-arm lavatory carrier with rectangular, steel uprights.

2.4 SOLID-BRASS, MANUALLY OPERATED FAUCETS

- A. NSF Standard: Comply with NSF/ANSI 61 Annex G, "Drinking Water System Components - Health Effects," for faucet materials that will be in contact with potable water.
- B. Lavatory Faucets: Electronic, single-control mixing, commercial, solid-brass valve.
 1. Basis of Design Product: Innsbrook Selectronic as manufactured by American Standard or Owner approved substitution.
 2. Standard: ASME A112.18.1/CSA B125.1.
 3. Body Type: Centerset.
 4. Body Material: Commercial, solid brass.
 5. Finish: Polished chrome plate.
 6. Maximum Flow Rate: 0.5 gpm.
 7. Mounting Type: Deck, exposed.
 8. Spout: Rigid type.
 9. Spout Outlet: Laminar flow.
 10. Power: Hard-wired AC, including Class 2 UL certified universal hardwired AC transformer.
 11. Drain: Not part of faucet.

2.5 SUPPLY FITTINGS

- A. NSF Standard: Comply with NSF/ANSI 61 Annex G, "Drinking Water System Components - Health Effects," for supply-fitting materials that will be in contact with potable water.
- B. Standard: ASME A112.18.1/CSA B125.1.
- C. Supply Piping: Copper tube matching water-supply piping size. Include chrome-plated-brass or stainless-steel wall flange.
 1. New cold and hot water piping to be insulated.

- D. Supply Stops: Chrome-plated-brass, one-quarter-turn, ball-type or compression valve with inlet connection matching supply piping.
- E. Risers:
 - 1. NPS 1/2 (DN 15).
 - 2. Chrome-plated, soft-copper flexible tube or ASME A112.18.6, braided- or corrugated-stainless-steel, flexible hose riser.

2.6 WASTE FITTINGS

- A. All new waste and venting systems shall be schedule 40 cast iron.
- B. Drain: Grid type with NPS 1-1/4 offset and straight tailpiece.

2.7 ACCESSORIES

- A. Include all required plumbing connections, insulating, ADA wraps, etc. for a code compliant and operational system.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in of water supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before lavatory installation.
- B. Examine walls for suitable conditions where lavatories will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Tie into existing systems as required including all access, repair, and rework as necessary.
- B. Water-Closet Installation:
 - 1. Install level and plumb according to roughing-in drawings.
 - 2. Install floor-mounted water closets on bowl-to-drain connecting fitting attachments to piping or building substrate.
- C. Flushometer-Valve Installation:
 - 1. Install flushometer-valve, water-supply fitting on each supply to each water closet.

2. Attach supply piping to supports or substrate within pipe spaces behind fixtures.
3. Install lever-handle flushometer valves for accessible water closets with handle mounted on open side of water closet.
4. Install actuators in locations that are easy for people with disabilities to reach.

D. Wall Flange and Escutcheon Installation:

1. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations and within cabinets and millwork.
2. Install deep-pattern escutcheons if required to conceal protruding fittings.

E. Joint Sealing:

1. Seal joints between water closets and walls and floors using sanitary-type, one-part, mildew-resistant silicone sealant.
2. Match sealant color to water-closet color.

F. Lavatories:

1. Install lavatories level and plumb according to roughing-in drawings.
2. Install supports, affixed to building substrate, for wall-mounted lavatories.
3. Install accessible wall-mounted lavatories at handicapped/elderly mounting height for people with disabilities or the elderly, according to ICC/ANSI A117.1.
4. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings.
5. Seal joints between lavatories and counters and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Indicate on Drawings those lavatories that are required to be accessible.
6. Install protective shielding pipe covers and enclosures on exposed supplies and waste piping of accessible lavatories.

3.3 CONNECTIONS

- A. Connect water closets with water supplies and soil, waste, and vent piping. Use size fittings required to match water closets.
- B. Where installing piping adjacent to water closets, allow space for service and maintenance.
- C. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.

3.4 ADJUSTING

- A. Operate and adjust water closets and controls. Replace damaged and malfunctioning water closets, fittings, and controls.
- B. Adjust water pressure at faucets to produce proper flow.

- C. Install fresh batteries in battery-powered, electronic-sensor mechanisms.

3.5 CLEANING AND PROTECTION

- A. After completing installation of lavatories, inspect and repair damaged finishes.
- B. Clean water closets, lavatories, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
- C. Install protective covering for installed water closets, lavatories, and fittings.
- D. Do not allow use of water closets and lavatories for temporary facilities unless approved in writing by Owner.

END OF SECTION 224213.13

SECTION 230000 – GENERAL HVAC

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Heating and Cooling Systems.
2. Ventilation Systems.
3. Fire Suppression Systems.

1.2 APPLICABLE CODES AND STANDARDS

- A. All work shall be in accordance with the laws, rules, codes, and regulations set forth by Local, State, and Federal authorities having jurisdiction. All products and materials shall be manufactured, installed and tested as specified, but not limited to the latest accepted edition of the following codes, standards and regulations:

NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Act
NEC	National Electrical Code (NFPA 70)
UL	Underwriters Laboratory
NESC	National Electrical Safety Code
FM	Factory Mutual Association
MUBEC	Maine Uniform Building Code
Local AHJ	Local and State building, electrical, fire and health department and public safety codes agencies.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Proposed HVAC layout drawing.
- C. A Construction Management plan as related to HVAC modifications in areas outside of the work area.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For all new systems and equipment to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 HEATING AND COOLING SYSTEMS

- A. Maintain existing heating and cooling systems through construction. Modify existing system as required for removals and new work.
- B. Mini-Split Heat Pump:
 - 1. Basis of Design Manufacturer: Mitsubishi or Owner approved substitution.
 - a. Design Capacity: To be determined by HVAC contractor.
 - 2. Structural support of outdoor wall-mounted compressor unit by contractor.

2.2 VENTILATION SYSTEMS

- A. Maintain existing ventilation systems through construction. Modify existing system as required for removals and new work.
- B. Provide new toilet exhaust fan ducted to exterior with weather tight seal, hood, and bird screen.
 - 1. Manufacturer: Coordinate with Owner.

2.3 FIRE SUPPRESSION SYSTEMS

- A. Maintain existing fire suppression systems through construction. Modify existing system as required for removals and new work.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Tie-in and test new devices and components for a fully operational and inspected systems.
- B. Provide required penetration with weathertight seal at masonry exterior wall for new toilet exhaust fan.
- C. Locate exterior mini-split heat pump wall-mount condensing unit in field with Owner.
- D. All refrigerant and condensate lines shall be concealed within walls and/or ceiling assemblies.

END OF SECTION 230000

SECTION 260000 – GENERAL ELECTRICAL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Lighting Systems.
2. Door Access Control Systems.
3. Fire Alarm Systems.
4. Security Systems.

1.2 APPLICABLE CODES AND STANDARDS

A. WORK

All work shall be in accordance with the laws, rules, codes, and regulations set forth by Local, State, and Federal authorities having jurisdiction. All products and materials shall be manufactured, installed and tested as specified, but not limited to the latest accepted edition of the following codes, standards and regulations:

NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Act
NEC	National Electrical Code (NFPA 70)
UL	Underwriters Laboratory
NESC	National Electrical Safety Code
FM	Factory Mutual Association
MUBEC	Maine Uniform Building Code
Local AHJ	Local and State building, electrical, fire and health department and public safety codes agencies.

B. CODE CONFLICTS

When requirements cited in this paragraph conflict with each other or with Contract Documents, the most stringent requirements shall govern conduct of work.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Proposed electrical shop drawings.

- C. A Construction Management plan as related to electrical modifications in areas outside of the work area.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For all new systems and equipment to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 LIGHTING SYSTEMS

- A. Recessed Downlights:
 - 1. Basis of Design Product: Model IC1LED, 4" IC 900 Lumen LED Downlight as manufactured by Juno or Owner/Architect approved substitution.
 - 2. LED Light Engine:
 - a. LED array attached to aluminum inner housing.
 - b. Replaceable light engine mounted directly to inner housing assembly.
 - c. LEDs are binned within a 3-step MacAdam Ellipse exceeding ENERGY STARR requirements for superior fixture to fixture color uniformity.
 - d. Color Temperature: 2700K.
 - e. 90 CRI minimum.
 - 3. Optical System:
 - a. Computer-optimized reflector design with high reflectance finish.
 - b. High transmission diffusing lens producing a uniform aperture luminance.
 - 4. Aesthetic Trim Selection:
 - a. Shadow free, knife edge design.
 - 5. LED Driver:
 - a. Dedicated 120 volt (120) driver or universal voltage (MVOLT) drivers that accommodate input voltages from 120-277 volts AC at 50/60Hz.
 - b. Power factor > 0.9 at 120V input.
 - 6. Life:
 - a. Rated for 50,000 hours at 70% lumen maintenance.
 - 7. Labels:
 - a. ENERGY STARR Certified.
 - b. UL rated.
 - 8. Housing Features:
 - a. Housing:
 - 1) Aluminum housing sealed for Air-LocR compliance.

- 2) Housing is vertically adjustable to accommodate up to a 1-1/2" ceiling thickness.
- b. Junction Box:
 - 1) Pre-wired junction box provided with (6) 1/2" and (1) 3/4" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire.
 - 2) UL listed and cUL listed for through-branch wiring, maximum 4 #12 branch circuit conductors.
 - 3) Junction box provided with removable access plates.
- c. Mounting Frame:
 - 1) 22-gauge die-formed galvanized steel mounting frame.

B. Surface Mounted Uplighting:

1. Basis of Design Product: Model #SL2AC-WM, Slim Line LED 2" diameter, AC, wall mount, indirect as manufactured by Atlantic Lighting or Owner/Architect approved substitution.
2. Distribution: Indirect.
3. Shielding: Frosted Lense.
4. Output: 500 nominal lumens/foot.
5. Color Temperature: 3,000K.
6. Length: 2 feet.
7. Mounting: Stem, 3-inches.
8. Finish: To be selected by Owner from Manufacturer's full range.

2.2 DOOR ACCESS CONTROL SYSTEMS.

- A. Maintain existing door access control system and/or components/wiring of same.

2.3 FIRE ALARM SYSTEMS

- A. Any code required additions and modifications to the existing exit and emergency systems shall be included in the project scope.
1. Fire alarm system modifications will be made in accordance with state and local code requirements.

2.4 SECURITY SYSTEMS

- A. Install audio/visual equipment/aids and their support systems as provided by Owner in Meeting Room.

- B. Provide any modifications to the existing security system as required for new layout, including, but not limited to cameras, etc.
- C. Coordinate all security system updates with Owner.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Maintain existing electrical and fire alarm systems through construction such that there are no interruptions of the operation and the facility. Modify existing systems for demolition, rework, relocation and new components. Tie in and test new devices and/or components for a fully operational and inspected system.

END OF SECTION 260000