

**CONTRACT DOCUMENTS AND SPECIFICATIONS**

**for**

**Central Fire Station Bathrooms and Kitchen Renovations**

**BID #14-21**

**Karen S. Conard, City Manager**

**City of Portsmouth, New Hampshire**

Prepared by:

City of Portsmouth Department of Public Works  
680 Peverly Hill Road  
Portsmouth, NH

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**City of Portsmouth**  
**Bid# 14-21**  
**Central Fire Station Bathrooms and Kitchen Renovations**

**INVITATION TO BID**

**Sealed** bid proposals, **plainly marked**, “**Central Fire Station Bathrooms and Kitchen Renovations BID #14-21**” **on the outside of the mailing envelope as well as the sealed bid envelope**, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801, will be accepted until **January 6, 2021 at 2:00 p.m.** at which time all bids will be publicly opened and read aloud.

A **mandatory pre-bid meeting** will be held **December 16 at 11:00 a.m.** at the Central Fire Station, 170 Court Street, Portsmouth, N.H.

This project consists of upgrading the kitchen and restrooms at the Central Fire Station on Court Street in Portsmouth, NH.

Specifications may be obtained from the City’s website:  
<https://www.cityofportsmouth.com/finance/purchasing-bids-and-proposals>. Questions may be addressed by calling the Purchasing Coordinator at (603) 610-7227 or by email [purchasing@cityofportsmouth.com](mailto:purchasing@cityofportsmouth.com). Addenda to this bid document, if any, including written answers to questions, will be posted on the City of Portsmouth website under the project heading.

Bidders must determine the quantities of work required and the conditions under which the work will be performed.

The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, to re-bid, and to accept any bid that it may deem to be in the best interest of the City.

Each Bidder shall furnish a bid security in the amount of ten percent (10%) of the bid. The Bid Security may be in the form of a certified check drawn upon a bank within the State of New Hampshire or a bid bond executed by a surety company authorized to do business in the State of New Hampshire, made payable to the City of Portsmouth, N.H.

## **INSTRUCTIONS TO BIDDERS**

### **BIDDING REQUIREMENTS AND CONDITIONS**

#### **COVID-19 – PANDEMIC SPECIAL ATTENTION**

**Attendees of any pre-bid meeting, bid opening or other meeting will be required to wear masks and socially distance themselves while in any municipal building. Bidders are requested to send only a single representative to any public bid opening.**

#### **1. Special Notice to Bidders and Addenda**

Appended to these instructions is a complete set of bidding and general contract forms. These forms may be detached and executed for the submittal of bids. The plans, specifications, and other documents designated in the proposal form will be considered as part of the proposal, whether attached or not.

The bidders must submit a statement of bidder's qualifications, if requested, subsequent to bid opening but prior to award.

**Addenda to this bid document, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Contractors submitting a bid should check the website daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification.**

#### **2. Interpretation of Quantities in Bid Schedules**

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for actual work performed and accepted in accordance with the contract. Any scheduled item of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided, and no claim for loss, anticipated profits or costs incurred in anticipation of work not ultimately performed will be allowed due to such increase or decrease.

#### **3. Examination of Plans, Specifications and Site Work**

The bidder is expected to examine carefully the site of the proposed work, the plans, technical specifications, supplemental specifications, special provisions and contract forms before submitting a proposal. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract. It will be conclusive evidence that the bidder has also investigated and is satisfied with the sources of supply for all materials.

Plans, surveys, measurements, dimensions, calculations, estimates and statements as to the condition under which the work is to be performed are believed to be correct, but the contractors must examine for themselves, as no allowance will be made for any errors or inaccuracies that may be found therein.

#### **4. Familiarity with Laws**

The bidder is assumed to have made himself or herself familiar with all federal and state laws and all local by-laws, ordinances and regulations which in any manner affect those engaged or employed on the

work or affect the materials or equipment used in the work or affect the conduct of the work, and the bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations notwithstanding its ignorance thereof. If the bidder shall discover any provision in the plans or specifications which is in conflict with any such law, by-law, ordinance or regulation the bidder shall forthwith report it to the engineer in writing.

5. Preparation of Proposal

- a) The bidder shall submit its proposal upon the forms furnished by the Owner. The bidder shall specify a lump sum price in figures, for each pay item for which a quantity is given and shall also show the products of the respective prices and quantities written in figures in the column provided for that purpose and the total amount of the proposal obtained by adding the amount of the several items. All words and figures shall be in ink or typed. If a unit price or a lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the bidder, also with ink.
- b) The bidder's proposal must be signed with ink by the individual, by one or more general partners of a partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, by one or more members (if member-managed) or managers (if manager-managed) of a limited liability company, or by an agent of the contractor legally qualified and acceptable to the Owner. If the proposal is made by an individual, his or her name and post office address must be shown; by a partnership the name and post office address of each general and limited partner must be shown; as a joint venture, the name and post office address of each venturer must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles and business addresses of the president, secretary and treasurer.

6. Nonconforming Proposals

Proposals will be considered nonconforming and may be rejected in the Owner's sole discretion for any of the following reasons:

- If the proposal is on a form other than that furnished by the Owner, or if the form is altered or any portion thereof is detached;
- If there are unauthorized additions, conditional or altered bids, or irregularities of any kind which may tend to make the proposal or any portion thereof incomplete, indefinite or ambiguous as to its meaning; or
- If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

7. Proposal Guaranty

No proposal will be considered unless accompanied by a bid bond, surety, or similar guaranty of the types and in an amount not less than the amount indicated in the Invitation to Bid. All sureties shall be made payable to the "City of Portsmouth." If a bid bond is used by the bidder it shall be:

- In a form satisfactory to the Owner;
- With a surety company licensed, authorized to do business in, and subject to the jurisdiction of the courts of the State of New Hampshire; and
- Conditioned upon the faithful performance by the principal of the agreements contained in the sub-bid or the general bid.

In the event any irregularities are contained in the proposal guaranty, the bidder will have four business days (not counting the day of opening) to correct any irregularities. The corrected guaranty must be received by 4:00 p.m. If irregularities are not corrected to the satisfaction of the Owner, the Owner, in its sole discretion, may reject the bid.

8. Delivery of Proposals

When sent by mail, the sealed proposal shall be addressed to the Owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened.

9. Withdrawal of Proposals

A bidder will be permitted to withdraw his or her proposal unopened after it has been submitted if the Owner receives a request for withdrawal in writing prior to the time specified for opening the proposals.

10. Public Opening of Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

11. Disqualification of Bidders

Any or all of the following reasons may be deemed by the Owner in its sole discretion as being sufficient for the disqualification of a bidder and the rejection of his proposal:

- More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- Evidence of collusion among bidders;
- Failure to submit all required information requested in the bid specifications;
- Unqualified to complete the work as demonstrated by previous project experience and reference checks;
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidders qualification or otherwise;
- Uncompleted work which, in the judgment of the Owner, might hinder or prevent the prompt completion of additional work if awarded;
- Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts;
- Default or unsatisfactory performance on previous contracts;
- Failure to be licensed by the State of New Hampshire to work on elevators; or
- Such disqualification would be in the best interests of the Owner.

12. Material Guaranty and Samples

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the work, and the Owner may, in its sole discretion, reject the bid based on the contents of the statement or as a result of the failure of the bidder to submit the statement.

**AWARD AND EXECUTION OF CONTRACT**

1. Consideration of Proposals

- a) After the proposals are opened and read, they will be compared on the basis of the total price for all sections of work to be charged to perform the work and any such additional considerations as may be identified in the bid documents. The results of such comparisons will be immediately available to the public. In case of a discrepancy between the prices written in words and those written in figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.
- b) The Owner reserves the right to reject any or all proposals, to waive technicalities or to advertise for new proposals, if, in the sole discretion of the Owner, the best interest of the City of Portsmouth will be promoted thereby.

2. Award of Contract

Within 30 calendar days after the opening of proposals, if a contract is to be awarded, the award will be made to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified, in writing, emailed to the email address on his or her proposal, that his or her bid has been accepted and that the bidder has been awarded the contract.

The award shall not be considered official until such time that a Purchase Order, fully executed contract or an award letter has been issued by the Finance Director. No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

**Determination of the lowest bidder will be based on the Base bid, which the City deems to be in its best interest, for the work described on the bid proposal form.**

**Contract award is dependent upon available funds.**

3. Cancellation of Award

The Owner reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability of the Owner.

4. Return of Proposal Guaranty

All proposal guaranties, except those of the three lowest bidders, will be returned upon request following the opening and checking of the proposals. The proposal guaranties of the three lowest bidders will be returned within ten days following the award of the contract, if requested.

5. Contract Bond

At the time of the execution of the contract, the successful bidder shall furnish:

- Labor and Materials Payment Bond in the sum equal to 100 percent of the contract amount.

At the time of project completion, the Owner may, in its sole discretion, permit the Contractor to substitute a maintenance bond in lieu of holding retainage for the entire guaranty period. If a bond is furnished it shall meet the following criteria:

- The bond shall be in an amount equal to 20 percent of the contract amount. Such bond shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the contractor. The guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

Each bond shall be: (1) in a form satisfactory to the Owner; (2) with a surety company licensed and authorized to do business and with a resident agent designated for services of process in the State of New Hampshire; and (3) conditioned upon the faithful performance by the principal of the agreements contained in the original bid. All premiums for the contract bonds are to be paid by the contractor.

6. Execution and Approval of Contract

The successful bidder is required to present all contract bonds, to provide proof of insurance, and to execute the contract within 10 days following receipt of the City's notification of acceptance of the bid. No contract shall be considered in effect until it has been fully executed by all parties.

7. Failure to Execute Contract

Failure to execute the contract and file an acceptable bond within 10 days after notification of acceptance of bid shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised as the Owner may determine at its sole discretion.



**PROPOSAL FORM**

**Central Fire Station Bathrooms and Kitchen Renovations**

**CITY OF PORTSMOUTH, N.H.**

To the City of Portsmouth, New Hampshire, herein called the Owner.

The undersigned, as Bidder, herein referred to as singular and masculine declares as follows:

1. All interested in the Bid as Principals are named herein;
2. This bid is not made jointly, or in conjunction, cooperation or collusion with any other person, firm, corporation, or other legal entity;
3. No officer, agent or employee of the Owner is directly or indirectly interested in this Bid;
4. The bidder has carefully examined the sites of the proposed work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this Bid, and the bidder has carefully read and examined the Drawings, Agreement, Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
5. The bidder understands that the quantities of work calculated in the Bid or indicated on the Drawings or in the Specifications or other Contract Documents are approximate and are subject to increase or decrease or deletion as deemed necessary by the Portsmouth Engineer. Any such changes will not result in or be justification for any penalty or increase in contract prices; and agrees that, if the Bid is accepted the bidder will contract with the Owner, as provided in the Contract Documents, this Bid Form being part of said Contract Documents, and that the bidder will supply or perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other activities required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefore the following item prices; and

This project is to be bid by the lump sum of items 1 through 14 below. Bidder shall enter values for all work items as well as the total (basis of award).

	Work Item	Value
1.	DEMOLITION	\$
2.	CARPENTRY	\$
3.	ROOFING	\$
4.	DOORS and DOOR HARDWARE	\$
5.	GYPSON BOARD ASSEMBLIES	\$
6.	CERAMIC TILE	\$
7.	FLOORING, BASE and ACCESSORIES	\$
8.	TOILET and LAUNDRY ACCESSORIES	\$

9.	APPLIANCES	\$
10.	KITCHEN CASEWORK	\$
11.	COUNTERTOPS	\$
12.	PLUMBING	\$
13.	MECHANICAL	\$
14.	ELECTRICAL	\$

**TOTAL 1 through 14 (BASIS OF AWARD)**

In Figures \$ \_\_\_\_\_

In Words \_\_\_\_\_ Dollars

To Bidder: It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item.

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the Contract Documents, the bidder will accept compensation as stipulated therein.

\_\_\_\_\_  
NAME

\_\_\_\_\_  
DATE

\_\_\_\_\_  
COMPANY

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
STREET ADDRESS, CITY, STATE, ZIP CODE, TELEPHONE NUMBER

\_\_\_\_\_  
EMAIL ADDRESS

The Bidder has received and acknowledged Addenda No. \_\_\_\_\_ through \_\_\_\_\_

All Bids are to be submitted on this form and in a **sealed envelope**, plainly marked on the outside with the Bidder's name and address and the Project name as it appears at the top of the Proposal Form.

**BID SECURITY BOND**

(This format provided for convenience, actual Bid Bond is acceptable in lieu of, if compatible.)

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned

\_\_\_\_\_, as Principal, and

\_\_\_\_\_, as Surety, are hereby

Held and firmly bound unto \_\_\_\_\_

IN THE SUM OF \_\_\_\_\_

as liquidated damages for payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted to the

\_\_\_\_\_

\_\_\_\_\_ A CERTAIN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" and or "CONTRACT", for

\_\_\_\_\_

NOW THEREFORE,

- (a) If said Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached Hereto or, in the alternative,
- (b) If said Bid shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto and shall furnish the specified bonds for the faithful performance of the AGREEMENT and/or CONTRACT and for the payment for labor and materials furnished for the performance of the AGREEMENT and/or CONTRACT, then this obligation shall be void, otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation.

The Surety, for value received, hereby agrees that the obligation of said surety and its bond shall be in no way impaired or affected by any extensions of the time within such BID may be accepted, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the parties hereto have duly executed this bond on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_ L.S. (Name of Principal)

(SEAL)

BY \_\_\_\_\_

\_\_\_\_\_ BY \_\_\_\_\_

(Name of Surety)

**STATEMENT OF BIDDER'S QUALIFICATIONS**

**Note: This is a required submittal, fill out completely.**

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Add separate sheets if necessary.

1. Name of Bidder
2. Permanent Main Office Address
3. Form of Entity
4. When Organized
5. Where Organized
6. How many years have you been engaged in the contracting business under your present name; also state names and dates of previous firm names, if any.
7. Contracts on hand (schedule these, showing gross amount of each contract and the approximate anticipated dates of completion).
8. General character of work performed by your company.
9. Have you ever failed to complete any work awarded to you? \_\_\_\_\_ (no) \_\_\_\_\_ (yes). If so, where and why?
10. Have you ever defaulted on a contract? \_\_\_\_\_ (no) \_\_\_\_\_ (yes) If so, where and why?
11. Have you ever failed to complete a project in the time allotment according to the Contract Documents? \_\_\_\_\_ (no) \_\_\_\_\_ (yes) If so, where and why?
12. List the most important contracts recently executed by your company, stating approximate cost for each, and the month and year completed.
13. List your major equipment available for this contract.
14. List your key personnel such as project superintendent and foreman available for this contract.
15. List the names, locations and contact information for previous generator installations or replacements.
16. List any subcontractors whom you will use for the following (unless this work is to be done by your own organization, if so please state).
  - a. Electric \_\_\_\_\_
  - b. Crane Operation & Equipment Hoisting \_\_\_\_\_
  - c. Testing \_\_\_\_\_
  - d. Cleaning \_\_\_\_\_(The City reserves the right to approve subcontractors for this project)

17. With what banks do you do business?

- a. Do you grant the Owner permission to contact this/these institutions? \_\_\_\_\_ (no) \_\_\_\_\_ (yes)
- b. Latest Financial Statements, certified audited if available, prepared by an independent certified public accountant, may be requested by Owner. If requested, such statements must be provided within five (5) business days or the bid proposal will be rejected. Certified Audited Statements are preferred. Internal statements may be attached only if independent statements were not prepared.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Name of Bidder

BY \_\_\_\_\_

TITLE \_\_\_\_\_

State of \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_ being duly sworn, deposes and

says that the bidder is \_\_\_\_\_ of \_\_\_\_\_  
(Name of Organization)

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

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

**CONTRACT AGREEMENT**

**Central Fire Station Bathrooms and Kitchen Renovations**

THIS AGREEMENT made as of the \_\_\_\_\_ of \_\_\_\_\_ in the year 20\_\_\_\_, by and between the City of Portsmouth, New Hampshire (hereinafter called the Owner) and \_\_\_\_\_ (hereinafter called the Contractor),

WITNESSETH; that the Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

**ARTICLE I - Work** - The Contractor shall perform all work as specified or indicated in the Contract Documents. The Contractor shall provide, at his expense, all labor, materials, equipment and incidentals as may be necessary for the expeditious and proper execution of the Project.

**ARTICLE II - ENGINEER** - The Director of Public Works or his authorized representative will act as Engineer in connection with completion of the Project in accordance with the Contract Documents.

**ARTICLE III - CONTRACT TIME** - Work will begin in accordance with the Notice to Proceed and work shall be completed within 90 days.

**ARTICLE IV - CONTRACT PRICE** - Owner shall pay Contractor for performance of the work in accordance with the Contract Documents.

**ARTICLE V - PAYMENT** - Partial payments will be made in accordance with the Contract Documents. Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor the unpaid balance of the Contract Price, subject to additions and deductions provided for in the Contract Documents.

**ARTICLE VI - RETAINAGE** - To insure the proper performance of this Contract, the Owner shall retain certain amounts in the percentage of the Contract Price and for the time specified as provided in the Contract Documents.

**ARTICLE VII - LIQUIDATED DAMAGES** - In event the Contractor fails to successfully execute the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of **one hundred dollars (\$100)** for each calendar day beyond the specified completion date for each section of work. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

**CONTRACT AGREEMENT** (continued)

**ARTICLE VIII – CONTRACT DOCUMENTS** – The Contract Documents which comprise the contract between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Contractor's Bid and Bonds
- 8.3 Notice of Intent to Award, Notice to Proceed
- 8.4 Instruction to Bidders
- 8.5 General Requirements, Control of Work, Temporary Facilities, Measurement and Payment, Technical Specifications
- 8.6 Insurance Requirements
- 8.7 Technical Specifications
- 8.8 Drawings
- 8.9 Special Provisions
- 8.10 Any modifications, including change orders, duly delivered after execution of this Agreement.

**ARTICLE IX – TERMINATION FOR DEFAULT** – Should contractor at any time refuse, neglect, or otherwise fail to supply a sufficient number or amount of properly skilled workers, materials, or equipment, or fail in any respect to prosecute the work with promptness and diligence, or fail to perform any of its obligations set forth in the Contract, Owner may, at its election, terminate the employment of Contractor, giving notice to Contractor in writing of such election, and enter on the premises and take possession, for the purpose of completing the work included under this Agreement, of all the materials, tools and appliances purchased by Contractor for the work, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

**ARTICLE X – INDEMNIFICATION OF OWNER** – Contractor will indemnify Owner against all suits, claims, judgments, awards, loss, cost or expense (including without limitation attorney fees) arising in any way out of the Contractor's negligent performance or non-performance of its obligations under this Contract. Contractor will defend all such actions with counsel satisfactory to Owner at its own expense, including attorney's fees, and will satisfy any judgment rendered against Owner in such action.

**ARTICLE XI – PERMITS** – The Contractor will secure at its own expense, all permits and consents required by law as necessary to perform the work and will give all notices and pay all fees and otherwise comply with all applicable City, State, and Federal laws, ordinances, rules and regulations.

**ARTICLE XII – INSURANCE** – The Contractor shall secure and maintain, until acceptance of the work, insurance with limits not less than those specified in the Contract.

**ARTICLE XIII – MISCELLANEOUS** –

- A. Neither Owner nor Contractor shall, without the prior written consent of the other, assign, sublet or delegate, in whole or in part, any of its rights or obligations under any of the Contract Documents; and, specifically not assign any monies due, or to become due, without the prior written consent of Owner.
- B. Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives, to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents.
- C. The Contract Documents constitute the entire Agreement between Owner and Contractor and may only be altered amended or repealed by a duly executed written instrument.

- D. The laws of the State of New Hampshire shall govern this Contract without reference to the conflict of law principles thereof.
- E. Venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

IN WITNESS WHEREOF, the parties hereunto executed this  
AGREEMENT the day and year first above written.

**BIDDER:**

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

**CITY OF PORTSMOUTH, N.H.**

BY: \_\_\_\_\_  
Karen Conard

TITLE: City Manager



**NOTICE OF INTENT TO AWARD**

Date:

TO:

IN AS MUCH as you were the low responsible bidder for work entitled:

**Bid #14-21  
Central Fire Station Bathrooms and Kitchen Renovations**

You are hereby notified that the City intends to award the aforesaid project to you for the base bid amount of \_\_\_\_\_

Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within ten (10) calendar days from the date of this Notice.

The City reserves the right to revoke this Notice if you fail to take the necessary steps to execute this Contract.

City of Portsmouth  
Portsmouth, New Hampshire

Judie Belanger,  
Finance Director

**NOTICE TO PROCEED**

DATE: \_\_\_\_\_

PROJECT: **Central Fire Station Bathrooms and Kitchen Renovations**

TO: \_\_\_\_\_

YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE

WITH THE AGREEMENT DATED, ON: \_\_\_\_\_  
WORK SHALL BE COMPLETED within 90 days of this Notice to Proceed.

CITY OF PORTSMOUTH, N.H.

BY: \_\_\_\_\_  
Peter H. Rice, PE

TITLE: Public Works Director

**ACCEPTANCE OF NOTICE**

RECEIPT OF THE ABOVE NOTICE TO  
PROCEED IS HEREBY ACKNOWLEDGED BY

\_\_\_\_\_

This the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**CHANGE ORDER**

Change Order # 1

Date of Issuance:

Owner: CITY OF PORTSMOUTH, N.H

Contractor:

You are directed to make the following changes in the Contract Documents:

Description:

Purpose of Change Order:

Attachments:

CHANGE IN CONTRACT PRICE

CHANGE IN CONTRACT TIME

Original Contract Price:  
\$

Original Completion Date:

Contract Price prior to this Change Order:  
\$

Contract Time prior to this Change Order:

Net Increase or Decrease of this Change Order:  
\$

Net Increase or Decrease of this Change Order:

Contract Price with all approved Change Orders:  
\$

Contract Time with all approved Change Orders:

RECOMMENDED:

APPROVED:

APPROVED:

by \_\_\_\_\_

by \_\_\_\_\_

by \_\_\_\_\_

by \_\_\_\_\_

Public Works Director City Finance

City Manager

Contractor

**LABOR AND MATERIAL PAYMENT BOND**

(This format provided for convenience, actual Labor and Material Bond is acceptable in lieu, if compatible)

Bond Number \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS:

that \_\_\_\_\_

as Principal, hereinafter called Contractor, and \_\_\_\_\_ (Surety Company) a corporation organized and existing under the laws of the State of

\_\_\_\_\_ and authorized to do business in the State of New Hampshire hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, for the use and benefit of claimants as herein below defined, in the

amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ entered into a

contract with Owner for \_\_\_\_\_ in accordance with drawings and specifications prepared by the Public Works Department, 680 Peverly Hill Road, Portsmouth, N.H. 03801 and the Community Development, 1 Junkins Avenue, Portsmouth, NH 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and for the hire of all equipment, tools, and all other things contracted for or used in connection therewith, then this obligation shall be void, otherwise it shall remain in full force and effect, subject however, to the following conditions:

- (1) A claimant is defined as one having a direct contract with the Principal or, with a subcontractor of the Principal for labor, material, equipment, or other things used or reasonably required for use in the performance of the Contract. "Labor and material" shall include but not be limited to that part of water, gas, power, light, heat, oil and gasoline, telephone service or rental of equipment applicable to the Contract.
- (2) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such a claimant, may sue on this bond for the use of such claimant, prosecute the suit by final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any such suit or any costs or expenses of any such suit, and principal and surety shall jointly and severally indemnify, defend and hold the Owner harmless for any such suit, costs or expenses.

**LABOR AND MATERIAL PAYMENT BOND** (continued)

(3) No suit or action shall be commenced hereunder by any claimant:

(a) Unless Claimant, other than one having a direct contract with the Principal, shall have given notice to all the following:

The Principal, the Owner and the Surety above named, within six (6) calendar months after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of New Hampshire save that such service need not be made by a public officer.

(b) After the expiration of one (1) year following the date on which Principal ceased all work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

(c) Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.

(4) The amount of this bond may be reduced by and to the extent of any payment of payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed on record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. In the presence of:

\_\_\_\_\_  
(Witness) BY: \_\_\_\_\_  
(Principal) (Seal)

\_\_\_\_\_  
(Surety Company)

\_\_\_\_\_  
(Witness) BY: \_\_\_\_\_  
(Title) (Seal)

**LABOR AND MATERIAL PAYMENT BOND** (continued)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

**MAINTENANCE BOND**

At the Owner's election, a maintenance bond *may* be substituted for retainage at the completion of the project. If the Owner permits a maintenance bond, it shall be in the amount of Twenty **Percent (20%)** of the contract price with a corporate surety approved by the Owner. Such bond shall be provided at the time of Contract completion and shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the Contractor. This guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

**CONTRACTOR'S AFFIDAVIT**

STATE OF \_\_\_\_\_:

COUNTY OF \_\_\_\_\_:

Before me, the undersigned, a \_\_\_\_\_  
(Notary Public, Justice of the Peace)

in and for said County and State personally appeared, \_\_\_\_\_  
(Individual, Partner, or duly authorized representative of Corporate)

who, being duly sworn, according to law deposes and says that the cost of labor, material, and equipment and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract between

CITY OF PORTSMOUTH, NEW HAMPSHIRE

and \_\_\_\_\_  
(Contractor)

of \_\_\_\_\_

Dated: \_\_\_\_\_

has been paid in full for Construction of: **Central Fire Station Bathrooms and Kitchen Renovations**

\_\_\_\_\_  
(Individual, Partner, or  
duly authorized representative of  
Corporate Contractor)

Sworn to and subscribed  
before me this \_\_\_\_\_ day  
of \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_



**CONTRACTOR'S RELEASE**

KNOW ALL MEN BY THESE PRESENTS that

\_\_\_\_\_ (Contractor) of \_\_\_\_\_,

County of \_\_\_\_\_ and State of

\_\_\_\_\_ does hereby acknowledge

that \_\_\_\_\_ (Contractor)

has on this day had, and received from the CITY OF PORTSMOUTH NEW HAMPSHIRE, final and completed payment for the Construction of:

**Central Fire Station Bathrooms and Kitchen Renovations**

NOW THEREFORE, the said \_\_\_\_\_  
(Contractor)

for myself, my heirs, executors, and administrators) (for itself, its successors and assigns) do/does by these presents remise, release, quit-claim and forever discharge the City of Portsmouth, New Hampshire, its successors and assigns, of and from all claims and demands arising from or in connection with the said Contract dated \_\_\_\_\_, and of and from all, and all manners of action and actions, cause and causes of action and actions, suits, debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specifications, covenants, contracts, agreements, promises, variances, damages, judgments, extents, executions, claims and demand, whatsoever in law of equity, or otherwise, against the City of Portsmouth, New Hampshire, its successors and assigns, which (I, my heirs, executors, or administrators) (it, its successors and assigns) ever had, now have or which (I, my heirs, executors, or administrators) (it, its successors and assigns) hereafter can shall or may have, for, upon or by reason of any matter, cause, or thing whatsoever; from the beginning of record time to the date of these presents.

IN WITNESS WHEREOF,

Contractor:

\_\_\_\_\_  
print name of witness: \_\_\_\_\_

By: \_\_\_\_\_  
Its Duly Authorized \_\_\_\_\_

Dated: \_\_\_\_\_

**INSURANCE REQUIREMENTS**

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

**AMOUNT OF INSURANCE**

- A) Commercial General Liability:  
Bodily injury or Property Damage - \$2,000,000  
Per occurrence and general aggregate
- B) Automobile and Truck Liability:  
Bodily Injury or Property Damage - \$2,000,000  
Per occurrence and general aggregate

Additionally, the Contractor shall purchase and maintain the following types of insurance:

- A) Full Workers Comprehensive Insurance coverage for all people employed by the Contractor to perform work on this project. This insurance shall at a minimum meet the requirements of the most current laws of the State of New Hampshire.
- B) Contractual Liability Insurance coverage in the amounts specified above under Comprehensive General Liability.
- C) Product and Completed Operations coverage to be included in the amounts specified above under Comprehensive General Liability.

**ADDITIONAL INSURED**

All liability policies (including any excess policies used to meet coverage requirements) shall include the City of Portsmouth, New Hampshire as named Additional Insured.

- 1) The contractor's insurance shall be primary in the event of a loss.
- 2) The Additional Insured endorsement must include language specifically stating that the entity is to be covered for all activities performed by, or on behalf of, the contractor, including the City of Portsmouth's general supervision of the contractor.
- 3) City of Portsmouth shall be listed as a Certificate Holder. The City shall be identified as follows:

City of Portsmouth  
Attn: Legal Department  
1 Junkins Avenue  
Portsmouth, NH 03801

## **GENERAL REQUIREMENTS**

### **SCOPE OF WORK**

#### **1. INTENT OF CONTRACT**

The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the terms of the Contract. The Contractor shall be required to conform to the intent of the plans and specifications. No extra claims shall be allowed for portions of the work not specifically addressed in the plans and specifications but required to produce a whole and complete project, such work will be considered subsidiary to the bid items.

#### **2. INCIDENTAL WORK**

Unless specifically excepted in the Bid or Technical Specifications, incidental work items for which separate payment is not measured includes, but is not limited to, the following items:

- a. Cleaning mechanical/machine room
- b. Daily clean up after job
- c. Signs
- d. Mobilization/Demobilization
- e. Restoration of property
- f. Cooperation with other contractors and utility companies
- g. Steel and/or wood sheeting as required
- h. Accessories and fasteners or components required to make items paid for under unit prices or lump sum items complete and functional

#### **3. ALTERATION OF PLANS OR OF CHARACTER OF WORK**

The Owner reserves the right, without notice to Surety, to make such alterations of the plans or of the character of the work as may be necessary or desirable to complete fully and acceptably the proposed construction; provided that such alterations do not increase or decrease the contract cost. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond and such increases or decreases of the quantities as a result from these alterations or deletions of certain items, shall not be the basis of claim for loss or for anticipated profits by the contractor. The contractor shall perform the work as altered at the contract unit price or prices.

#### **4. EXTRA WORK ITEMS**

Extra work shall be performed by the Contractor in accordance with the specifications and as directed, and will be paid for at a price as provided in the Contract documents or if such pay items are not applicable then at a price negotiated between the contractor and the Owner or at the unit bid price. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead & profit). Costs shall be substantiated by invoices and certified payroll. If the Owner determines that extra work is to be performed, a change order will be issued.

#### **5. CHANGE ORDERS**

The Owner reserves the right to issue a formal change order for any increase, decrease, deletion, or addition of work or any increase in contract time or price. The contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

6. FINAL CLEANING UP

Before acceptance of the work, the contractor shall remove from the site all machinery, equipment, surplus materials, rubbish, temporary utility connections, temporary structures, barricades and signs. All parts of the work shall be left in a neat and presentable condition. On all areas used or occupied by the contractor, regardless of the contract limits, the bidder shall clean-up all sites and storage grounds.

The items prescribed herein will not be paid for separately, but shall be paid for as part of the total contract price.

7. ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

Any provisions in any of the Contract Documents that may be in conflict with the paragraphs in these General Requirements shall be subject to the following order of precedence for interpretation.

1. Technical Specifications will govern General Requirements.
2. Plans and/or Shop Drawings will govern Technical Specifications, and General Requirements.

## CONTROL OF WORK

### 1. AUTHORITY OF ENGINEER

- (a) All work shall be done under supervision of the Engineer and to his satisfaction. The Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.
- (b) The Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary due to the failure of the Contractor to correct conditions unsafe for workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest. The Contractor shall not be entitled to any additional payments arising out of any such suspensions.
- (c) The Owner reserves the right to demand a certificate of compliance for a material or product used on the project. When the certificate of compliance is determined to be unacceptable to the Engineer, the Contractor may be required to provide engineering and testing services to guarantee that the material or product is suitable for use in the project, at its expense (see Sample of Certificate of Compliance).

### 2. PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

- (a) The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.
- (b) When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or as a result of the failure to perform work by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing rebuilding, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.
- (c) If the Contractor fails to repair, rebuild or otherwise restore such property as may be deemed necessary, the Owner, after 48 hours notice, may proceed to do so, and the cost thereof may be deducted from any money due or which may become due the Contractor under the contract.
- (d) The Contractor shall use every precaution to prevent injury or damage to wires, poles, or other property of public utilities; trees, shrubbery, vegetation, and fences along and adjacent to the right-of-way, all underground structures such as pipes and conduits, within or outside of the right-of-way; and the Contractor shall protect and carefully preserve all property marks until an authorized agent has witnessed or otherwise referenced their location.

### 3. MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and workers to ensure that the structure is kept in satisfactory conditions at all times.

**CONTROL OF WORK** (continued)

4. **SAFETY PRECAUTIONS**

Upon commencement of work, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions necessary to ensure the safety of employees on the site, other persons who may be affected thereby, including the public, and other property at the site or adjacent thereto.

<p><b>NOTE: Workers are required to wear Covid specific Personal Protective Equipment masks while in the building.</b></p>
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5. **PERMITS**

It will be the responsibility of the Contractor to obtain all permits required for this project, and for the operation of equipment in, or on, all city streets and public ways associated with this project. Municipal permit fees will be waived.

6. **BARRICADES, WARNING SIGNS AND TRAFFIC OFFICERS**

- (a) The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of Building Occupants and the public. Work Areas shall be protected by effective barricades and signage. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic in a proper manner, as approved by the engineer.
- (b) The Contractor will be held responsible for all damage to the work due to lack of adequate controlling devices.

The work prescribed herein will not be paid for separately but will be paid for as part of the Contract Price unless specifically appearing as a bid item.

**TEMPORARY FACILITIES**

1. **STORAGE FACILITIES**

- (a) The Contractor shall not store materials or equipment in a public right-of-way beyond the needs of one working day. Equipment and materials shall be stored in an approved location.
- (b) The Contractor shall protect all stored materials from damage by weather or accident and shall insure adequate drainage at and about the storage location.
- (c) Prior to final acceptance of the work all temporary storage facilities and surplus stored materials shall be removed from the site.

2. **SANITARY FACILITIES**

The Contractor shall provide temporary toilet facilities for the use of the workers employed on the work.

3. **WATER FACILITIES**

The Owner shall provide the Contractor with reasonable access to water facilities for construction operations.

4. **TEMPORARY ELECTRICITY**

The Owner shall provide the Contractor with reasonable access to electrical power necessary for construction operation at the site.

## MEASUREMENT AND PAYMENT

### 1. MEASUREMENT OF QUANTITIES

- (a) All work completed under the contract will be measured according to the United States standard measure.
- (b) The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Unless otherwise stated all quantities measured for payment shall be computed or adjusted for "in place" conditions.
- (c) Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the dimensions shown on the plans or ordered in writing.
- (d) Structures will be measured according to lines shown on the plans or as ordered unless otherwise provided for elsewhere in the specifications.
- (e) In computing volumes of excavation, embankment, and borrow, the average end area method will be used. Where it is impracticable to measure by the cross-section method, acceptable methods involving three-dimensional measurement may be used. When measurement of borrow in vehicles is permitted, the quantity will be determined as 80 percent of the loose volume.
- (f) In computing volumes of concrete, stone and masonry, the prismatic method will be used. The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois.
- (g) When material is specified to be measured by the cubic yard but measurement by weight is approved, such material may be weighed and the weight converted to cubic yards for payment purposes. Necessary conversion factors will be determined by the Owner.
- (h) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.
- (i) When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories, so as to provide the item complete and functional. Except as may be otherwise provided, partial payments for lump sum items will be made approximately in proportion to the amount of the work completed on those items.
- (j) Material wasted without authority will not be included in the final estimate.

### 2. SCOPE OF PAYMENT

- (a) The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all work under the contract in a complete and acceptable manner and for all risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.
- (b) The Contractor shall be liable to the Owner for failure to repair, correct, renew or replace, at his own expense, all damage due or attributable to defects or imperfections in the construction which defects or imperfections may be discovered before or at the time of the final inspection and acceptance of the work.



- (c) No monies, payable under the contract or any part thereof, shall become due or payable if the Owner so elects, until the Contractor shall satisfy the Owner that the Contractor has fully settled or paid all labor performed or furnished for all equipment hired, including trucks, for all materials used, and for fuels, lubricants, power tools, hardware and supplies purchased by the Contractor and used in carrying out said contract and for labor and parts furnished upon the order of said Contractor for the repair of equipment used in carrying out said contract; and the Owner, if he so elects, may pay any and all such bills, in whole or in part.

### 3. PAYMENT PROCEDURES

Submit Application for Payment after completion of Project closeout procedures with release of liens and supporting documentation. Include consent of surety to final payment and insurance certificates.

### 4. COMPENSATION FOR ALTERED QUANTITIES

- (a) Except as provided for under the particular contract item, when the accepted quantities of work vary from the quantities in the bid schedule the Contractor shall accept as payment in full, so far as contract items are concerned, at the original contract unit prices for the accepted quantities of work done. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the Bidder and subsequent loss of expected reimbursements therefore or from any other cause.
- (b) Extra work performed will be paid for at the contract bid prices or at the price negotiated between the Owner and the Contractor if the item was not bid upon. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead and profit). Costs shall be substantiated by invoices and certified payroll.

### 5. PARTIAL PAYMENTS AND RETAINAGE

Partial payments will be made on a monthly basis during the contract period based on the percentage of work completed. From the total amount ascertained as payable, an amount equivalent to ten percent (10%) of the whole will be deducted and retained by the Owner until such time as the work is 50% complete. Provided that the Contractor has satisfied Owner regarding the quality and timeliness of the work and provided further that there is no specific cause for withholding additional retainage, no further amount will be withheld. Upon substantial completion of the work, the amount of retainage shall be reduced to 2% of the total contract value plus any additional retainage amounts required by the Owner based on the Owner's estimate of the fair value of any remaining punch list items. Any additional retainage held for punch list items shall be held until such time as all items on the punch list are repaired or completed and Owner has accepted the work. The final 2% of retainage shall be held until the warranty period has expired or a maintenance bond is supplied in accord with the Contract Documents.

### 6. FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire project, the Owner or City Engineer will make an inspection. If all construction provided for and contemplated by the contract is found complete to his satisfaction, this inspection shall constitute the final inspection and the Owner or City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

If, however, the City Engineer's inspection discloses any work in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of such

work, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

7. ACCEPTANCE AND FINAL PAYMENT

- (a) When the project has been accepted and upon submission by the Contractor of all required reports, completed forms and certifications, the Owner will review the final estimate of the quantities of the various classes of work performed. The Contractor may be required to certify that all bills for labor and material used under this contract have been paid.
- (b) The Contractor shall file with the Owner any claim that the Contractor may have regarding the final estimate at the same time the Contractor submits the final estimate. Failure to do so shall be a waiver of all such claims and shall be considered as acceptance of the final estimate. From the total amount ascertained as payable, an amount equal to two percent (2%) of the whole will be deducted and retained by the Owner for the guaranty period as described above in paragraph 5. After approval of the final estimate by the Owner, the Contractor will be paid the entire sum found to be due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract.
- (c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

8. GENERAL GUARANTY AND WARRANTY OF TITLE

- (a) Neither the final certification of payment nor any provision in the contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express or implied warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.
- (b) No material, supplies or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the Seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have the right to a lien upon any improvements or appurtenances thereon.

Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontractors and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

- (c) At completion of the project, the Contractor to provide to the Owner written guarantee of one (1) year Workmanship warranty and a ten (10) year Manufacturer's warranty.

9. NO WAIVER OF LEGAL RIGHTS

- (a) Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or be stopped from recovering from the Contractor or his Surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.
- (b) The Contractor, without prejudice to the Contract shall be liable to the terms of the Contract, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, and as regards the Owner's right under any warranty or guaranty.

10. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

The termination of the contractor's responsibility shall occur whenever the improvement provided for by the Contract shall have been completely performed on the part of the Contractor and all parts of the work have been released from further obligations except as set forth in his bond and as provided in Section 8 above.

**SHOP DRAWINGS**

Shop Drawings for this project shall be submitted under the following conditions:

1. The Contractor shall submit working and detail drawings, well in advance of the work, to the Engineer for review.
2. The Contractor's drawings shall consist of shop detail, erection and other working plans showing dimensions, sizes and quality of material, details and other information necessary for the complete fabrication and erection of the pertinent work.
3. The Contractor shall submit three (3) sets of drawings to the Engineer.
4. Prior to the approval of the drawings, any work done or materials ordered for the work involved shall be at the Contractor's risk.
5. One (1) set of the drawings will be returned to the Contractor approved or marked with corrections to be made. After approval has been given, the Contractor shall supply the Engineer with two sets of the revised detail working drawings.
6. The Engineer's approval of the Contractor's working drawings will not relieve the Contractor from responsibility for errors in dimensions or for incorrect fabrication processes, or from responsibility to complete the contract work.

**TECHNICAL SPECIFICATIONS**

SECTION 011000 - SUMMARY

SECTION 013000 - ADMINISTRATIVE REQUIREMENTS

SECTION 016000 - PRODUCT REQUIREMENTS

SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION

SECTION 062000 - FINISH CARPENTRY

SECTION 075323 - ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING

SECTION 081416 - FLUSH WOOD DOORS

SECTION 087100 - DOOR HARDWARE

SECTION 092116 - GYPSUM BOARD ASSEMBLIES

SECTION 093013 - CERAMIC TILING

SECTION 096500 - RESILIENT FLOORING

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

SECTION 102800 -TOILET, BATH, AND LAUNDRY ACCESSORIES

SECTION 113100 - KITCHEN APPLIANCES

SECTION 123560 - KITCHEN CASEWORK

SECTION 123661 - SIMULATED STONE COUNTERTOPS

SECTION 221116 - DOMESTIC WATER PIPING

SECTION 224000 - PLUMBING FIXTURES

SECTION 238380 - MECHANICAL FANS

SECTION 260500 - COMMON WORK RESULTS FOR ELECTRICAL

SECTION 262726 - WIRING DEVICES

SECTION 283111 - FIRE-ALARM SYSTEM

**SECTION 011000 – SUMMARY**

**PART 1 – GENERAL**

**1.1 SUMMARY OF WORK**

- A. This project consists of:
  - 1. Upgrading the kitchen and restrooms
  - 2. Maintenance repairs to the roof and roof access
- B. At the Central Fire Station on Court Street in Portsmouth, NH.

**1.2 WORK RESTRICTIONS**

- A. Owner will occupy premises during construction. Clean up work areas and return to a useable condition at the end of each work period.
- B. During construction, Contractor will have limited use of area indicated as follows:
  - 1. All work will be done between 7:00 a.m. and 6:00 p.m., Monday to Friday. Weekend work must be formally requested, authorized by Owner in advance of any work.
  - 2. All work shall create minimal disruptions, if any, to city employees working in the building during time of construction.
- C. Welding and torch cutting within building only allowed with prior Owner approval, and properly implemented exhaust and ventilation.
- D. Provide proper Federal, State, and local safety measures during installation of all mechanical components and handling of material.

**1.3 WORK IN OTHER DIVISIONS AND BY OTHER CONTRACTORS**

- A. The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement.
- B. If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Owner apparent discrepancies or defects in such construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the Owner's or separate contractors completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discovered.

END OF SECTION

## **SECTION 013000 – ADMINISTRATIVE REQUIREMENTS**

### **PART 1 – GENERAL**

#### **1.1 PROJECT MANAGEMENT AND COORDINATION**

- A. Conduct preconstruction meeting onsite, prior to commencement of Project.
- B. Provide Contractor Safety plan to Owner, including **Covid specific mask and distancing** components.
- C. Schedule and conduct progress meetings with Owner at Project site as needed, or as requested by Owner. Required attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.

#### **1.2 SUBMITTAL PROCEDURES**

- A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 1. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
  - 2. Identify deviations from the Contract Documents.
  - 3. Submit three (3) copies of each submittal.
- B. Include the following information on each submittal:
  - 1. Project name.
  - 2. Date.
  - 3. Name and address of Contractor.
  - 4. Name and address of subcontractor or supplier.
- C. Owner will review each action submittal, mark as appropriate to indicate action taken, and return copies less those retained. Compliance with specified requirements remains Contractor's responsibility.

### **PART 2 – PRODUCTS**

#### **2.1 ACTION SUBMITTALS**

- A. Product Data: Mark each copy to show applicable choices and options. Include the following:
  - 1. Manufacturer's written recommendations, product specifications & installation instructions, indicating compliance with specified standards and requirements.
  - 2. Notation of coordination requirements.
  - 3. For equipment data, include rated capacities, dimensions, weights, required clearances, and furnished specialties and accessories.
- B. Samples: Submit Samples for review of kind, color, pattern, and texture and for a comparison of these characteristics between submittal and actual component as delivered and installed. Include name of manufacturer and product name on label.

#### **2.2 INFORMATION SUBMITTALS**

Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.

END OF SECTION

## **SECTION 016000 – PRODUCT REQUIREMENTS**

### **PART 1 – GENERAL**

#### **1.1 SECTION REQUIREMENTS**

- A. Provide products of same kind from a single source. The term “product” includes the terms “material,” “equipment,” “system,” and similar terms.
- B. Product Substitutions: Substitutions include products and methods of construction differing from that required by the Contract Documents and proposed by Contractor after award of the Contract.
  - 1. Submit three (3) copies of each request for product substitution.
  - 2. Submit requests within 10 days after signing the Contract.
  - 3. Submit requests in time to permit processing of request and subsequent submittals, if any, sufficiently in advance of when materials are required in the Work. Do not submit unapproved substitutions on Shop Drawings or other submittals.
  - 4. Identify product to be replaced and provide complete documentation showing compliance of proposed substitution with applicable requirements. Include a full comparison with the specified product, a list of changes to other Work required to accommodate the substitution, and any proposed changes in the Contract Sum or the Contract Time should the substitution be accepted.
- C. Comparable Product Submittal:
  - 1. Submit three (3) copies of each request for approval of products as comparable to basis-of-design products. Submit requests in time to permit processing of request and subsequent submittals, if any, sufficiently in advance of when materials are required in the Work. Do not submit unapproved products on Shop Drawings or other submittals.
  - 2. Identify product to be replaced and provide complete documentation showing compliance of proposed product with applicable requirements. Include a full comparison with the specified product.
- D. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer’s written instructions.
  - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  - 2. Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
  - 4. Store materials in a manner that will not endanger Project structure.
  - 5. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

### **PART 2 – PRODUCTS**

#### **2.1 PRODUCT OPTIONS**

- A. Provide products that comply with the Contract Documents, are undamaged, and are new at the time of installation.
- B. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
- C. Unless otherwise indicated, Owner will select color, pattern, and texture of each product from manufacturer's full range of options that includes both standard and premium items.

### **PART 3 – EXECUTION (Not Applicable)**

**END OF SECTION**



## **SECTION 017000 – EXECUTION AND CLOSEOUT REQUIREMENTS**

### **PART 1 – GENERAL**

#### **1.1 CLOSEOUT SUBMITTALS**

- A. Record Drawings:
  - 1. Maintain a set of shop drawing prints of the as Record Drawings. Mark to show actual installation where installation varies from that shown originally.
  - 2. Identify and date each Record Drawing; include the designation “PROJECT RECORD DRAWING” in a prominent location.
- B. Operation and Maintenance Data: Submit two (2) copies of manual. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:
  - 1. Manufacturer’s operation and maintenance documentation.
  - 2. Maintenance and service schedules.
  - 3. Maintenance service contracts.
  - 4. Emergency instructions.
  - 5. Spare parts list.
  - 6. Wiring diagrams.
  - 7. Copies of warranties.

### **PART 2 – PRODUCTS (Not Applicable)**

### **PART 3 – EXECUTION**

#### **3.1 EXAMINATION AND PREPARATION**

- A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, plumb, smooth, clean, and free of deleterious substances; substrates within installation tolerances; and application conditions within environmental limits. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Take field measurements as required to fit the Work properly. Where fabricated products are to be fitted to other construction, verify dimensions by field measurement before fabrication and, when possible, allow for fitting and trimming during installation.

#### **3.2 CUTTING AND PATCHING**

- A. Do not cut structural members or operational elements without prior written approval of Owner.
- B. Fabricate and assemble structural steel in shop to greatest extent possible.
- C. Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- D. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

#### **3.3 INSTALLATION**

- A. Comply with manufacturer’s written instructions for installation. Anchor each product securely in place, accurately located and aligned with other portions of the Work. Clean exposed surfaces and protect from damage.
- B. Clean Project site and work areas daily, including common areas.

3.4 FINAL CLEANING

Complete the following cleaning operations before requesting inspection for certification of Final Acceptance:

- A. Remove labels that are not permanent.
- B. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances.
- C. Vacuum carpeted surfaces and wax resilient flooring.
- D. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication.
- E. Clean plumbing & light fixtures.
- F. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits.

3.5 CLOSEOUT PROCEDURES

- A. Final Acceptance: Before requesting Final Acceptance inspection, complete the following:
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, maintenance service agreements, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 5. Submit Record Drawings, operation and maintenance manuals, and similar final record information.
  - 6. Deliver tools, spare parts, extra materials, and similar items.
  - 7. Make final changeover of permanent locks and deliver keys to Owner.
  - 8. Complete startup testing of systems.
  - 9. Remove temporary facilities and controls.
  - 10. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  - 11. Complete final cleaning requirements, including touchup painting.
  - 12. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Submit a written request for inspection for Final Acceptance. On receipt of request, Owner will proceed with inspection or advise Contractor of unfulfilled requirements. Owner will prepare a certificate of Final Acceptance after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.
- C. Submit request for re-inspection when the Work identified in previous inspections as incomplete is completed or corrected. On receipt of request, Owner will proceed with inspection or advise Contractor of unfulfilled requirements that must be completed or corrected before final invoice will be processed.

3.6 DEMONSTRATION AND TRAINING

Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system. Include a detailed review of the following: Include instruction for basis of system design and operational requirements, review of documentation, emergency procedures, operations, adjustments, troubleshooting, maintenance, and repairs.

END OF SECTION

## **SECTION 024119 – SELECTIVE STRUCTURE DEMOLITION**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Remove and dispose of flooring, wall sections and fixtures per drawing. Widen door openings.

#### **1.2 SECTION REQUIREMENTS**

- A. Items indicated to be removed and salvaged remain Owner's property. Remove, clean, and deliver to Owner's designated storage area.
- B. Comply with EPA regulations and hauling and disposal regulations of authorities having jurisdiction.
- C. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- D. It is not expected that hazardous materials will be encountered in the Work. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.

### **PART 2 – PRODUCTS (Not Applicable)**

### **PART 3 – EXECUTION**

#### **3.1 DEMOLITION**

- A. Disposal will be accomplished by a chute through the bathroom window to contractors truck in the alley below. Upon completion of debris removal, the truck will be moved from the alley.
- B. Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Before proceeding with demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of the building.
- C. Locate, identify, shut off, disconnect, and cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
- D. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- E. 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 or construction being demolished.
- F. Protect walls, ceilings, floors, and other existing finish work that are to remain. Erect and maintain dustproof partitions. Cover and protect furniture, furnishings, and equipment that have not been removed.
- G. 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.

**END OF SECTION**

**SECTION 062000 – FINISH CARPENTRY**

**PART 1 – GENERAL**

**1.1 SECTION INCLUDES**

- A. Repair attic access to be safely functional.
- B. Custom woodwork items including but not limited to door and window trim.
- C. Hardware and attachment accessories.
- D. Concealed wood blocking.

**1.2 REFERENCE STANDARDS**

- A. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. AWI/AWMAC/WI – Architectural Woodwork Standards; 2009.

**1.3 ADMINISTRATIVE REQUIREMENTS**

- A. Coordinate the work with installation of associated and adjacent components.

**1.4 SUBMITTALS**

- A. See Section 013000 – Administrative Requirements for submittal procedures.
- B. Product Data: Provide manufacturer’s technical information for all fabricated products, and accessories specified herein.
- C. Shop Drawings: Indicate materials, elevations, construction, clearances, component profiles, fastening methods, jointing details, finishes, hardware locations and accessories.
- D. Samples:
  - 1. Submit confirmation samples and color chips for selected solid surfacing.

**1.5 QUALITY ASSURANCE**

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

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Protect woodwork and millwork during transit, delivery, storage and handling to prevent moisture and other damage, soiling and deterioration.
- B. Do not deliver millwork until environmental conditions are suitable (enclosed, dry, with operating HVAC system), and painting and similar operations that could damage woodwork and millwork are complete.

**1.7 PROJECT CONDITIONS**

- A. Field Dimensions: The woodwork fabricator shall be responsible for coordinating the dimensions of all his work with actual field conditions. The Contractor and fabricator shall cooperate to establish and maintain dimensions as required for a proper fit, without field modifications. Verify locations of concealed framing, blocking, reinforcements, and furring that support woodwork by accurate measurements before being enclosed.

**1.8 FIELD CONDITIONS**

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

PART 2 – PRODUCTS

2.1 FINISH CARPENTRY & ARCHITECTURAL MILLWORK ITEMS

- A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI/AWMAC/WI Architectural Woodwork Standards for Custom Grade for plastic laminate faced items, and Premium Grade for hardwood items.
- B. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by applicable code.
  - 1. In general, finishes shall be Class C except Class B minimum shall be provided in exits, lobbies and corridors.

2.2 FASTENINGS AND ACCESSORIES

- A. Adhesives: Suitable for the purpose; no urea formaldehyde or volatile organic compounds.
- B. Fasteners: Nails, screws and other anchoring devices of size, material, finish and type to suit application to provide secure attachment, concealed where possible; stainless steel or hot dipped galvanized finish, complying with ASTM A153 in exposed locations of high humidity and at all exterior locations.
- C. Concealed Joint Fasteners: Threaded steel.
- D. Lumber for Shimming, Cleats, Blocking, and Furring: Softwood or hardwood lumber, kiln dried to less than 15% moisture content.
- E. Joint Sealant: Mildew-resistant silicone sealant, clear.

2.3 FABRICATION – GENERAL

- A. The millwork details represented on the Drawings are not intended to indicate all of the framing, blocking and panel support required for the proper installation of millwork. It shall be the Contractor's responsibility to properly detail such work for lasting strength and stability, and to accurately represent it on shop drawings.
  - 1. Note: There shall be no unfinished wood products. If not covered with laminate products or otherwise finished, all wood surfaces shall be receive a minimum of one coat of sealer in concealed or semi-concealed areas.
- B. In general, woodwork shall be assembled and installed using concealed fasteners, unless otherwise approved by the Architect. Fasteners shall be concealed, blind nailed, or countersunk with matching plugs. Secure woodwork to anchors or blocking built-in or directly attached to substrates.
- C. Joints in all work shall be tight and formed to conceal shrinkage.
- D. Complete fabrication in the shop, including assembly, finishing, and hardware application, to the maximum extent possible, before shipment to the site. Disassemble components only as necessary for shipment and installation.
- E. Fit exposed sheet material edges with edging as indicated on the Drawings. Use one piece for full length only.
- F. Condition woodwork to average prevailing humidity conditions in installation areas before installation. Install woodwork level, plumb, true and straight to a tolerance of 1/8" to 96 inches. Shim as required with concealed shims. Scribe and cut woodwork to fit, and refinish cut surfaces and repair damaged finish at plastic trim.
- G. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting. Closure panels/strips, end panels and trim shall be provided as required for a complete, finished installation.

H. Solid Surfacing Fabrication Tolerances:

1. Variation in component size: 1/8"
2. Location of openings: 1/8" from indicated location.

PART 3 – EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Verify adequacy of backing and support framing. Verify type of support framing for determination of proper fastener type.
- B. Section 061054 – Wood Blocking and Curbing, for installation of concealed wood blocking.
- C. Acclimate millwork items to temperature and relative humidity of the installation site for at least 24 hours prior to installation.

3.2 INSTALLATION

- A. Install work in accordance with AWI/AWMAC/WI (AWS) requirements for grade indicated.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.

3.3 SITE APPLIED WOOD TREATMENT

- A. All millwork which will be in contact with concrete or masonry surfaces after setting, shall be back primed by the painting subcontractor, who shall be notified that the millwork is ready for back priming in ample time to permit application and drying of the required paint or finish before installation is scheduled to start.

3.4 WINDOW SILL INSTALLATION

- A. Securely attach window sills to blocking using concealed fasteners and with contact surfaces set in waterproof glue. Verify that window sill top surfaces are level. Shim where required.

3.5 TOLERANCES

- A. Maximum Variation from True Position: 1/16 inch.
- B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.
- C. Variation from Horizontal: 1/8 inch in 10 feet, maximum.
- D. Offset from Wall, Countertops: 1/8 inch maximum, 1/16 inch minimum.
- E. Countertop Field Joints: 1/8 inch wide, maximum.

3.6 CLEANING AND PROTECTION OF WORK

- A. Erect and maintain temporary protective barriers until such time as permanent construction is in place and all danger of damage or defacement is past.
- B. Repair damaged and defective woodwork, where possible to eliminate functional and visual defects. Where not possible to repair, replace woodwork. Clean woodwork on exposed and semi-exposed surfaces. Touch up shop applied finishes to restore damaged or soiled areas.

3.7 ADJUSTING

- A. Adjust moving or operating parts to function smoothly and correctly. Touch-up finishes to restore damaged or soiled areas.

END OF SECTION

## **SECTION 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Repair all seams on EPDM roof as needed.

### **PART 2 – PRODUCTS**

#### **2.1 PERFORMANCE REQUIREMENTS**

- A. Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
- B. Solar Reflectance Index: Not less than 78 when calculated according to ASTM E 1980.
- C. Exterior Fire – Test Exposure: ASTM E 108, **Class A**.

#### **2.2 ROOFING MATERIAL**

- A. Class A exterior fire-test rating for either an adhered or a mechanically fastened EPDM roofing system may require a specially formulated fire-retardant sheet; consult manufacturer.
- B. EPDM Sheet: ASTM D 4637, Type I, non-reinforced **60 mils** thick; black.
- C. Auxiliary Materials: Recommended by roofing system manufacturer for intended use and as follows:
  - 1. Sheet Flashing: **60 mils** thick EPDM.
  - 2. Seaming Material: Synthetic-rubber-polymer primer and **3 inch** wide minimum, butyl splice tape with release film.
  - 3. Coating: Hypalon, specifically formulated for coating EPDM membrane roofing.
- D. Substrate Board: ASTM C 1177/C 1177M, glass-mat, water-resistant gypsum substrate, Type X, **5/8 inch (16mm)** thick.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Install EPDM sheet according to roofing system manufacturer's written instructions and as follows:
- B. Seams: Clean and prime splices areas, applying splice tape, and firmly roll side and end laps of overlapping sheets. Seal exposed edges of sheet terminations.
- C. Install sheet flashing and preformed flashing accessories and adhere to substrates.
- D. Apply coatings to base flashings, according to manufacturer's written recommendations, by spray, roller, or other suitable application method.

**END OF SECTION**

## **SECTION 081416 – FLUSH WOOD DOORS**

### **PART 1 – GENERAL**

#### **1.1 SECTION REQUIREMENTS**

- A. Submittals: Provide manufacturers product information.
- B. Quality Standard: WDMA I.S.1-A.
- C. Fire-Rated Wood Doors: Labeled by a testing and inspecting agency acceptable to authorities having jurisdiction.

### **PART 2 – PRODUCTS**

#### **2.1 DOOR CONSTRUCTION, GENERAL**

- A. WDMA I.S.1-A Performance Grade:
  - 1. Heavy Duty unless otherwise indicated.
  - 2. Extra Heavy Duty: Public toilets, janitor’s closets, assembly spaces, exits.
  - 3. Standard Duty: Closets not including janitor’s closets.
- B. Particleboard-Core Doors: Provide blocking in particleboard cores or provide structural composite lumber cores instead of particleboard cores for doors with exit device or protection plates.
- C. Fire-Protection-Rated Doors: Provide core specified or mineral core as needed to provide fire-protection rating indicated. Provide the following for mineral-core doors:
  - 1. Composite blocking where required to eliminate through-bolting hardware.
  - 2. Laminated-edge construction.
  - 3. Formed-steel edges and astragals for pairs of doors.

#### **2.2 FLUSH WOOD DOORS**

- A. Doors for Transparent Finish:
  - 1. Interior Solid-Core Doors: Custom grade, five-ply, particleboard or structural composite lumber cores.
  - 2. Interior Hollow-Core Doors: Custom grade, seven-ply, institutional hollow cores with lock blocks both sides.
- B. Doors for Opaque Finish:
  - 1. Interior Solid-Core Doors:  
Faces: Medium-density overlay.
  - 2. Interior Hollow-Core Doors: Custom grade, seven-ply, institutional hollow cores with lock blocks both sides.  
Faces: Medium-density overlay.

#### **2.3 LOUVERS AND LIGHT FRAMES**

- A. Louvers: Wood louvers of species compatible with door faces.
- B. Light Frames: Wood beads of same species as door faces.
  - 1. At fire-rated doors provide wood-veneered beads approved for use in doors of fire-protection rating indicated.

#### **2.4 FABRICATION AND FINISHING**

- A. Factory fit doors to suit frame-opening sizes indicated and to comply with clearances specified.
- B. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3.



- C. Cut and trim openings to comply with referenced standards.
  - 1. Trim light openings with moldings indicated.
  - 2. Factory install glazing in doors indicated to be factory finished.
  - 3. Factory install louvers in prepared openings.
- D. Factory finish doors indicated for transparent finish with manufacturer's standard finish complying with WDMA System TR-4, conversion varnish or WDMA System TR-6, catalyzed polyurethane for grade specified for doors.

### PART 3 – EXECUTION

#### 3.1 INSTALLATION

- A. Install doors to comply with manufacturer's written instructions, WDMA I.S.1-A and as indicated.
  - 1. Install fire-rated doors to comply with NFPA 80.
- B. Align and fit doors in frames with uniform clearances and bevels. Machine doors for hardware. Seal cut surfaces after fitting and machining.
- C. Clearances: As follows, unless otherwise indicated:
  - 1. **1/8 inch (3.2 mm)** at heads, jambs, and between pairs of doors.
  - 2. **1/8 inch (3.2 mm)** from bottom of door to top of decorative floor finish or covering.
  - 3. **1/4 inch (6.4 mm)** from bottom of door to top of threshold.
  - 4. Comply with NFPA 80 for fire-rated doors.
- D. Repair, refinish, or replace factory-finished doors damaged during installation, as directed by Architect.

END OF SECTION

## **SECTION 087100 – DOOR HARDWARE**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Provide privacy door hardware for bathrooms.

#### **1.2 SECTION REQUIREMENTS**

- A. Allowances: Door hardware is included in Hardware Allowance.
- B. Submittals: Hardware schedule.

### **PART 2 – PRODUCTS**

#### **2.1 HARDWARE**

- A. Fire-Resistance-Rated Assemblies: Provide products that comply with NFPA 80 and are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction for applications indicated. On exit devices provide label indicating "Fire Exit Hardware."
- B. Hinges:
  - 1. Ball-bearing hinges for doors with closers and entry doors.
  - 2. Two hinges for 1-3/8 inch (35 mm) thick wood doors.
  - 3. Three hinges for 1-3/4 inch (45 mm) thick doors 90 inches (2300 mm) or less in height; four hinges for doors more than 90 inches (2300 mm) in height.
- C. Locksets and Latchsets:
  - 1. BHMA A156.2, Series 4000, Grade 1 for bored locks and latches.
  - 2. BHMA A156.3, Grade 1 for exit devices.
  - 3. Lever handles on locksets and latchsets.
  - 4. Provide trim on exit devices matching locksets.
- D. Key locks to Owner's existing master-key system.
- E. Closers:
  - 1. Mount closers on interior side (room side) of door opening. Provide regular-arm, parallel-arm, or top-jamb-mounted closers as necessary.
  - 2. Adjustable delayed opening (accessible to people with disabilities) feature on closers.
- F. Provide wall stops or floor stops for doors without closers.
- G. Hardware Finishes:
  - 1. Hinges: Matching finish of lockset/latchset.
  - 2. Locksets, Latchsets, and Exit Devices: Bright brass, clear coated; (at toilet rooms and bath rooms, provide split finish with bright chrome-plated finish on inside).
  - 3. Closers: Matching finish of lockset/latchset.
  - 4. Other Hardware: Matching finish of lockset/latchset.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Mount hardware in locations required to comply with governing regulations and according to SDI A250.8 and DHI WDHS.3.
- B. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet.
- C. Deliver keys to Owner.

**END OF SECTION**

## **SECTION 092116 – GYPSUM BOARD ASSEMBLIES**

### **PART 1 – GENERAL**

#### **1.1 SECTION INCLUDES**

- A. Performance criteria for gypsum board assemblies.
- B. Metal stud wall framing.
- C. Metal channel ceiling framing.
- D. Acoustic insulation.
- E. Gypsum sheathing.
- F. Gypsum wallboard.
- G. Joint treatment and accessories.

#### **1.2 RELATED REQUIREMENTS**

- A. Section 054000 - Cold-Formed Metal Framing: Structural steel stud framing.
- B. Section 061000 - Rough Carpentry: Wood blocking product and execution requirements.
- C. Section 072100 - Thermal Insulation: Acoustic insulation.
- D. Section 072500 - Weather Barriers: Water-resistive barrier over sheathing.
- E. Section 078400 - Firestopping: Top-of-wall assemblies at fire rated walls.
- F. Section 079200 - Joint Sealants: Sealing acoustical gaps in construction other than gypsum board or plaster work.
- G. Section 093000 - Tiling: Tile backing board.

#### **1.3 REFERENCE STANDARDS**

- A. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2012.
- B. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2013.
- C. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2015.
- D. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2014.
- E. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 2014a.
- F. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2013.
- G. ASTM C1280 - Standard Specification for Application of Gypsum Sheathing Board; 2013.
- H. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2014.
- I. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2012
- J. GA-216 - Application and Finishing of Gypsum Board; 2013.

1.4 SUBMITTALS

- A. Product Data: Provide data on metal framing, gypsum board, accessories, and joint finishing system.

PART 2 – PRODUCTS

2.1 BOARD MATERIALS

- A. Exterior Sheathing Board: Sizes to minimize joints in place; ends square cut.
1. Application: Exterior sheathing, unless otherwise indicated.
  2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
  3. Glass Mat Faced Sheathing: Glass mat faced gypsum substrate as defined in ASTM C1177/C1177M.
  4. Core Type: Regular and Type X, as indicated.
  5. Type X Thickness: 5/8 inch.
  6. Regular Board Thickness: 5/8 inch.
  7. Edges: Square.
  8. Glass Mat Faced Products:
    - a. American Gypsum Company; M-Glass Exterior Sheathing Type X.
    - b. American Gypsum Company; M-Glass Exterior Sheathing.
    - c. Georgia-Pacific Gypsum; DensGlass Sheathing.
    - d. Georgia-Pacific Gypsum; DensGlass Fireguard Sheathing.
- B. Exterior Soffit Board: Exterior gypsum soffit board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings and soffits in protected exterior areas, unless otherwise indicated.
  2. Types: Type X and Type C, in locations indicated.
  3. Type X Thickness: 5/8 inch.
  4. Type C Thickness: 5/8 inch.
  5. Edges: Tapered.
  6. Products: a. Georgia-Pacific Gypsum; ToughRock Fireguard C Soffit Board.

2.2 GYPSUM WALLBOARD ACCESSORIES

- A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: 3 inches.
- B. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.
- C. Water-Resistive Barrier: As specified in Section 072500.
- D. Finishing Accessories: ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.
1. Types: As detailed or required for finished appearance.
  2. Special Shapes: In addition to conventional corner bead and control joints, provide Ubead at exposed panel edges.
  3. Products:
    - a. Same manufacturer as framing materials.
    - b. Phillips Manufacturing Co: [www.phillipsmfg.com](http://www.phillipsmfg.com).
    - c. Trim-tex, Inc: [www.trim-tex.com/#sle](http://www.trim-tex.com/#sle).
- E. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inch in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion resistant.
- F. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws, corrosion resistant.

- G. Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify that project conditions are appropriate for work of this section to commence.

3.2 ACOUSTIC ACCESSORIES INSTALLATION

- A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.
- B. Acoustic Sealant: Install in accordance with manufacturer's instructions.

3.3 BOARD INSTALLATION

- A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Exterior Sheathing: Comply with ASTM C1280. Install sheathing horizontally, with edges butted tight and ends occurring over firm bearing.
  - 1. Seal joints, cut edges, and holes with water-resistant sealant.
- C. Exterior Soffits: Install exterior soffit board perpendicular to framing, with staggered end joints over framing members or other solid backing.

3.4 INSTALLATION OF TRIM AND ACCESSORIES

- A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
- B. Corner Beads: Install at external corners, using longest practical lengths.
- C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

3.5 TOLERANCES

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

END OF SECTION

## **SECTION 093013 – CERAMIC TILING**

### **PART 1 – GENERAL**

#### **1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data and Samples.
- B. Obtain tile of each type and color or finish from same production run for each contiguous area.
- C. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use.

#### **1.2 CERAMIC TILE**

- A. Ceramic tile that complies with ANSI A137.1.
- B. Wall Tile Type: **Daltile** Color Wheel Classic – Glossy Visual
  - 1. Module Size: 3” X 6”
  - 2. Finish: Bright, opaque glaze
  - 3. Color and Pattern: As selected by Owner
  - 4. Grout Color: As selected by Owner

#### **1.3 INSTALLATION MATERIALS**

- A. Cementitious Backer Units: ANSI A118.9 or ASTM C 1325, 1/2 inch thick.
- B. Low-Emitting Materials: Adhesives and fluid-applied waterproofing membranes shall have a VOC content of 65 g/L or less.
- C. Waterproofing Membranes for Thinset Installations: ANSI A118.10.
- D. Low-Emitting Materials: Adhesives and fluid-applied waterproofing membranes shall comply with Green Seal’s GS-36.
- E. Setting and Grouting Materials: Comply with material standards in ANSI’s “Specifications for the Installation of Ceramic Tile” that apply to materials and methods indicated.
  - 1. Portland Cement Mortar (Thickset) Installation Materials: ANSI A108.02.
  - 2. Thinset Mortar Type: Dry-set portland cement; white, unless otherwise indicated.
  - 3. Grout Type: Standard cement grout, ANSI A118.6d.

### **PART 2 – EXECUTION**

#### **2.1 INSTALLATION**

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of ANSI A108 Series "Specifications for Installation of Ceramic Tile".
- B. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight, aligned joints. Fit tile closely to electrical outlets, piping, and other penetrations so plates, collars, or covers overlap tile.
- C. Lay tile in running bond pattern unless otherwise indicated. Install cementitious backer units, and treat joints according to ANSI A108.11.
- D. Install waterproofing to comply with ANSI A108.13.
- E. Do not install tile over waterproofing until waterproofing has cured and been tested to determine that it is watertight.
- F. Interior Wall Tile Installation Method(s): TCNA W245 or TCNA W248; thinset mortar on glass-mat, water-resistant backer board.

END OF SECTION

## **SECTION 096500 – RESILIENT FLOORING**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Furnish and install VCT in bathrooms and hallway.

#### **1.2 SECTION INCLUDES**

- A. Resilient tile flooring.
- B. Installation accessories.

#### **1.3 RELATED REQUIREMENTS**

- A. Section 016116 – Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 033000 – Cast-in-Place Concrete: Restrictions on curing compounds for concrete slabs and floors to receive adhesive-applied resilient flooring.

#### **1.4 REFERENCE STANDARDS**

- A. ASTM F1066 – Standard Specification for Vinyl Composition Floor Tile; 2004 (Reapproved 2014).

#### **1.5 SUBMITTALS**

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- C. Selection Samples: Submit manufacturers complete set of color samples for Architect's initial selection.
- D. Verification Samples: Submit two samples, 12 by 12 inch in size illustrating color and pattern for each resilient flooring product specified.
- E. Concrete Testing Standard: Submit a copy of ASTM F710.
- F. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.
- G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 016000 - Product Requirements, for additional provisions.

#### **1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.
- B. Store all materials off of the floor in an acclimatized, weather-tight space.
- C. Maintain temperature in storage area between 55 degrees F and 90 degrees F.
- D. Protect roll materials from damage by storing on end.
- E. Do not double stack pallets.

#### **1.7 FIELD CONDITIONS**

- A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

PART 2 – PRODUCTS

2.1 VINYL COMPOSITION FLOOR TILE

- A. Basis of Design: **Armstrong Exelon** or approved equal.
  - 1. Tile Standard: ASTM F 1066, Class 2, through-pattern.
  - 2. Wearing Surface: Smooth.
  - 3. Thickness: 0.125 inch.
  - 4. Size: 12 by 12 inches.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.
- B. Cementitious Subfloor Surfaces: Verify that substrates are ready for resilient flooring installation by testing for moisture and alkalinity (pH).
  - 1. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
- C. Verify that required floor-mounted utilities are in correct location.

3.2 PREPARATION

3.3 INSTALLATION – GENERAL

- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install in accordance with manufacturer's written instructions.
- C. Spread only enough adhesive to permit installation of materials before initial set.
- D. Fit joints and butt seams tightly.
- E. Set flooring in place, press with heavy roller to attain full adhesion.
- F. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.
- G. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
  - 1. Resilient Strips: Attach to substrate using adhesive.
- G. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4 INSTALLATION – SHEET FLOORING

- A. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay out seams to avoid widths less than 1/3 of roll width; match patterns at seams.
- B. Coved Base: Install as detailed on drawings, using coved base filler as backing at floor to wall junction. Extend sheet flooring vertically to height indicated, and cover top edge with metal cap strip.



3.5 INSTALLATION – TILE FLOORING

- A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless otherwise indicated in manufacturer's installation instructions.
- B. Install tile with three colors in each space in pattern to be determined.

3.6 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's written instructions. 3.07 PROTECTION A. Prohibit traffic on resilient flooring for 48 hours after installation.

END OF SECTION

## **SECTION 096513 – RESILIENT BASE AND ACCESSORIES**

### **PART 1 – GENERAL**

#### **1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data and Samples.
- B. Extra Materials: Deliver to Owner at least **20 linear feet** of each type and color of resilient wall base installed.

### **PART 2 – PRODUCTS**

#### **2.1 RESILIENT BASE**

- A. Vinyl Base: ASTM F 1861, Type TV (vinyl, thermoplastic), Group I (solid, homogeneous).
  - 1. **Tarkett Traditional** Wall Base or approved equal.
- B. Style: Cove (base with toe).
- C. Minimum Thickness: 0.080 inch.
- D. Height: 4 inches.
- E. Lengths: Cut lengths 48 inches long or coils in manufacturer's standard lengths.
- F. Outside Corners: Job formed.
- G. Inside Corners: Job formed.

#### **2.2 INSTALLATION ACCESSORIES**

- A. Adhesives: Water-resistant type recommended by manufacturer to suit floor covering and substrate conditions indicated.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Prepare horizontal surfaces according to ASTM F 710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
- B. Adhesively install resilient wall base and accessories.
- C. Install wall base in maximum lengths possible. Apply to walls, columns, pilasters, casework, and other permanent fixtures in rooms or areas where base is required.
- D. Install stair-tread-nose filler to nosing substrates that do not conform to tread contours.
- E. Install reducer strips at edges of floor coverings that would otherwise be exposed.

**END OF SECTION**

## **SECTION 102800 – TOILET, BATH, AND LAUNDRY ACCESSORIES**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Remove and reset existing toilet accessories.
- B. Provide new accessories to match existing in new bathroom.

#### **1.2 SECTION INCLUDES**

- A. Accessories for toilet rooms, utility rooms, and janitor room.
- B. Electric hand/hair dryers.
- C. Utility room accessories.
- D. Grab bars.

#### **1.3 RELATED REQUIREMENTS**

- A. Section 102113.19 – Plastic Toilet Compartments.

#### **1.4 REFERENCE STANDARDS**

- A. ASTM A269/A269M - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service; 2015.
- B. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.
- C. ASTM C1036 - Standard Specification for Flat Glass; 2011.
- D. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.
- E. ASTM F2285 - Standard Consumer Safety Performance Specification for Diaper Changing Tables for Commercial Use; 2004 (Reapproved 2010).

#### **1.5 ADMINISTRATIVE REQUIREMENTS**

- A. Coordinate the work with the placement of internal wall reinforcement, concealed ceiling supports, and reinforcement of toilet partitions to receive anchor attachments.

#### **1.6 SUBMITTALS**

- A. See Section 013000 – Administrative Requirements, for submittal procedures.
- B. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.
- C. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention.

### **PART 2 – PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. Match existing accessories

#### **2.2 MATERIALS**

- A. Accessories – General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
  - 1. Grind welded joints smooth.
  - 2. Fabricate units made of metal sheet of seamless sheets, with flat surfaces.

- B. Stainless Steel Sheet: ASTM A666, Type 304.
- C. Stainless Steel Tubing: ASTM A269/A269M, Grade TP304 or TP316.
- D. Mirror Glass: Tempered safety glass, ASTM C1048; and ASTM C1036, Type 1, Class 1, Quality 2, with silvering as required.
- E. Adhesive: Two component epoxy type, waterproof.
- F. Fasteners, Screws, and Bolts: Hot dip galvanized; tamper-proof; security type.
- G. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

### 2.3 FINISHES

- A. Stainless Steel: Satin finish, unless otherwise noted.

### 2.4 COMMERCIAL TOILET ACCESSORIES

- A. Mirrors: Stainless steel framed, 1/4 inch thick tempered safety glass; ASTM C1048.
  - 1. Size: As indicated on drawings.
  - 2. Frame: 0.05 inch angle shapes, with mitered and welded and ground corners, and tamperproof hanging system; satin finish
  - 3. Backing: Full-mirror sized, minimum 0.03 inch galvanized steel sheet and nonabsorptive filler material.
  - 4. Product: B-165 Series Channel Frame manufactured by Bobrick.
- B. Grab Bars: Stainless steel, smooth surface.
  - 1. Standard Duty Grab Bars:
    - a. Push/Pull Point Load: 250 pound-force, minimum.
    - b. Dimensions: 1-1/4 inch outside diameter, minimum 0.05 inch wall thickness, exposed flange mounting, 1-1/2 inch clearance between wall and inside of grab bar.
    - c. Length and Configuration: As indicated on drawings.
- C. Sanitary Napkin Disposal Unit: Stainless steel, surface-mounted, self-closing door, locking bottom panel with full-length stainless steel piano-type hinge, removable receptacle.
  - 1. Product: Classic Series manufactured by Bobrick.
  - 2. Recessed, Semi-recessed, or Surface Mounted as indicated on drawings.

### 2.5 UTILITY ROOM ACCESSORIES

- A. Combination Utility Shelf/Mop and Broom Holder: 0.05 inch thick stainless steel, Type 304, with 1/2 inch returned edges, 0.06 inch steel wall brackets.
  - 1. Hooks: 4, 0.06 inch stainless steel rag hooks at shelf front.
  - 2. Mop/broom holders: Three spring-loaded rubber cam holders at shelf front.
  - 3. Length: Manufacturer's standard length for number of holders/ hooks.
  - 4. Product: B-239 manufactured by Bobrick.

## PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify exact location of accessories for installation.
- C. For electrically-operated accessories, verify that electrical power connections are ready and in the correct locations.
- D. Verify that field measurements are as indicated on drawings.

3.2 INSTALLATION

- A. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.
  - 1. Grab Bars: As indicated on drawings.
  - 2. Mirrors: 40 inch, measured to bottom of mirrored surface.
  - 3. Electric Hand Dryers: Measured from floor to bottom of nozzle:
    - a. Handicap: 36 inches.
  - 4. Other Accessories: As indicated on drawings.

END OF SECTION

**SECTION 113100 – KITCHEN APPLIANCES**

**PART 1 – GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data.

**PART 2 – PRODUCTS**

**2.1 KITCHEN APPLIANCES**

- A. Regulatory Requirements: Comply with the following:
  - 1. NFPA: Provide electrical appliances listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
  - 2. ANSI: Provide gas-burning appliances that comply with ANSI Z21 Series standards.
- B. Accessibility: Where residential appliances are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's Accessibility Guidelines.
- C. MICROWAVE OVEN: Freestanding microwave oven, **1.6 cu. ft.** capacity, 1200 W.
  - 1. Basis of design: **KitchenAid** model #**KMCS1016GSS**
  - 2. Color: Stainless Steel
- D. EXHAUST HOOD: **30 inch**, under cabinet exhaust hood with three-speed fan.
  - 1. Basis of design: **Bosch 300 Series** model #**DUH30152UC**
  - 2. Color: Stainless Steel
  - 3. Fan Control: Hood-mounted switch, with separate light switch.
- E. DISHWASHER: Built-in, undercounter, automatic dishwasher, sized to replace **24 inch (610 mm)** base cabinet
  - 1. Basis of design: **KitchenAid** model #**KDTE334GPS**
  - 2. Wash cycles: 5, five wash cycles
  - 3. Drying: hot-air and heat-off drying cycles
  - 4. Stainless steel tub and door liner

**PART 3 – EXECUTION**

**3.1 INSTALLATION**

- A. Built-in Appliances: Securely anchor to supporting cabinetry or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and rough openings are completely concealed.
- B. Freestanding Appliances: Place in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.
- C. Test each item of residential appliances to verify proper operation. Make necessary adjustments.
- D. Verify that accessories required have been furnished and installed.

END OF SECTION

## **SECTION 123560 – KITCHEN CASEWORK**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Furnish and install heavy duty base and wall cabinets in the kitchen per drawings.

#### **1.2 SECTION REQUIREMENTS**

- A. Submittals: Product Data, Shop Drawings, and Material Samples.
- B. Comply with KCMA A161.1. Provide cabinets with KCMA’s “Certified Cabinet” seal affixed in a semi-exposed location of each unit.
- C. Comply with KCMA A161.2 for plastic-laminate countertops.
- D. Verify dimensions by field measurements; measure for countertops after base cabinets are installed.

### **PART 2 – PRODUCTS**

#### **2.1 KITCHEN CASEWORK**

- A. SHOWPLACE CABINETRY <http://showplacecabinetry.com/> or approved equal
  1. Face frames: 3/4” thick select hardwood, dadoed to receive tops, bottoms, and end panels.
  2. Hand-applied finish: sealed with oven-baked topcoat of catalyzed varnish.
  3. Drawers: Dovetailed solid hardwood box with and full-extension drawer glides.
  4. Shelves: 3/4” thick and adjustable
  5. Hinges: 170 degree hinges required
  6. Durability: 1/2” plywood sides, tops and bottoms
  7. Wall cabinets: 13” deep

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Install cabinets with no variations in flushness of adjoining surfaces by using concealed shims. Where casework abuts other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match casework face.

Install cabinets without distortion so doors and drawers fit openings properly and are aligned.

- C. Install level and plumb to a tolerance of **1/8 inch in 8 feet**.
- D. Fasten each cabinet to adjacent unit and to structural members of wall construction. Fasten wall cabinets through back, near top and bottom, at ends and not less than **24 inches** o.c.
- E. Fasten solid surface countertops by screwing through corner blocks in base units into underside of countertop. Align adjacent surfaces.

**END OF SECTION**

## **SECTION 123661 – SIMULATED STONE COUNTERTOPS**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Provide new countertops in the kitchen per drawing.

#### **1.2 SECTION REQUIREMENTS**

- A. Submittals: Product Data, Shop Drawings, and material Samples.

### **PART 2 – PRODUCTS**

#### **2.1 QUARTZ AGGLOMERATE COUNTERTOPS**

- A. Quartz Agglomerate Countertops: **3/4 inch (19 mm)** thick, quartz agglomerate with front edge built up of same material.
  - 1. Front: Straight, slightly eased at top.
  - 2. Backsplash: Straight, slightly eased at corner.
  - 3. Endsplash: [Matching backsplash] [None].
- B. Quartz Agglomerate: Solid sheets consisting of quartz aggregates bound together with a matrix of filled plastic resin and complying with the “Physical Characteristics of Materials” Article of ANSI SS1.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Install countertops according to manufacturer’s written directions. Fasten to substrates with adhesive. Align adjacent surfaces. Seal seams and perimeter with mildew-resistant silicone sealant.
  - 1. Seal edges of cutouts in particleboard subtops by saturating with varnish.
- B. Install level and plumb to a tolerance of 1/8 inch in 8 feet.

**END OF SECTION**



## **SECTION 221116 – DOMESTIC WATER PIPING**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Plumb new bathroom fixtures per drawing.
- B. Relocate baseboard heat as shown on drawing.
- C. Install water hammer arrestors per specifications.

#### **1.2 SECTION REQUIREMENTS**

- A. Submittals:
  - 1. Product Data: For transition fittings and dielectric fittings.
  - 2. Product for solvent cements and adhesive primers, documentation including printed statement of VOC content.

### **PART 2 – PRODUCTS**

#### **2.1 PERFORMANCE REQUIREMENTS**

- A. Potable-water piping and components shall comply with NSF 14 and NSF 61. Plastic piping components shall be marked with “NSF-pw.”

#### **2.2 PIPE AND FITTINGS**

- A. Hard Copper Tubing: **ASTM B 88, Types L and M (ASTM B 88M, Types B and C)**, water tube, drawn temper with wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if indicated.
  - 1. Copper Unions: Cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.
  - 2. Joining Materials: Use ASTM B 813, water-flushable, lead-free flux; ASTM B 32, lead-free-alloy solder.
- B. Soft Copper Tubing: **ASTM B 88, Types K and L (ASTM B 88M, Types A and B)**, water tube, annealed temper with copper pressure fittings, cast-copper-alloy or wrought-copper, solder-joint fittings. Furnish wrought-copper fittings if indicated.
  - 1. Joining Materials: Use ASTM B 813, water-flushable, lead-free flux; ASTM B 32, lead-free-alloy solder.
- C. Galvanized-Steel Piping: ASTM A 53/A 53M, Schedule 40, galvanized-steel pipe, with ASME B16.4, Class 125, galvanized, standard pattern gray-iron, threaded fittings.
- D. CPVC Piping: ASTM F 441/F 441M, Schedule 40 pipe with ASTM F 438, CPVC Schedule 40 socket-type fittings.
- E. PEX Tube and Fittings: ASTM F 877, SDR 9 PEX tubing and ASTM F 1807, metal insert-type fittings with copper or stainless-steel crimp rings.
  - 1. Manifold: ASTM F 877 plastic or corrosion-resistant-metal assembly, with a plastic or corrosion-resistant-metal valve for each outlet.
- F. PVC Piping: ASTM D 1785, Schedule 40 pipe with ASTM D 2466, Schedule 40, socket-type fittings.
- G. Transition Fittings: Manufactured piping coupling or specified piping system fitting. Same size as pipes to be joined and pressure rating at least equal to pipes to be joined.
  - 1. Plastic-to-Metal Transition Fittings: CPVC or CPVC one-piece fitting with manufacturer’s Schedule 80 equivalent dimensions. One end with threaded brass insert and one solvent-cement-socket or threaded end.

2. Plastic-to-Metal Transition Unions:
    - a. CPVC or CPVC four-part union.
    - b. Brass or stainless-steel threaded end.
    - c. Solvent-cement-joint or threaded plastic end.
    - d. Rubber O-ring.
    - e. Union nut.
  - H. Flexible Connectors: **Stainless-steel**, corrugated-metal tubing with wire-braid covering. Working-pressure rating a minimum of **250 psig (1725 kPa)**.
- 2.3 PRESSURE GAGES AND TEST PLUGS
- A. Direct-Mounted, **Metal-Case**, Dial-Type Pressure Gages:
    1. Standard: ASME B40.100.
    2. Case: Sealed **pressure relief** type(s); **cast aluminum or drawn steel**.
    3. Movement: Mechanical, with link to pressure element and connection to pointer.
    4. Dial: Nonreflective aluminum with permanently etched scale markings graduated in **psi**.
    5. Pointer: Dark-colored metal.
    6. Ring: Metal.
    7. Accuracy: **Grade A, plus or minus 1 percent of middle half** of scale range.
  - B. Test Plug: Corrosion-resistant brass or stainless-steel body with two self-sealing rubber core inserts and gasketed and threaded cap, with extended stem for units to be installed in insulated piping. Minimum pressure and temperature rating **500 psig at 200 deg F**.
- 2.4 WATER HAMMER ARRESTOR
- A. Determine water system pressure and install properly sized water hammer arrestor between the last two fixtures served at the end of bathrooms branch lines.

### PART 3 – EXECUTION

#### 3.1 INSTALLATION

- A. Install hammer arrestors as needed.
- B. Install piping free of sags and bends.
- C. Install fittings for changes in direction and branch connections.
- D. Install unions at final connection to each piece of equipment.
- E. Install dielectric unions and flanges to connect piping materials of dissimilar metals in gas piping.
- F. Install dielectric coupling and nipple fittings to connect piping materials of dissimilar metals in water piping.
- G. Soldered Joints: Comply with procedures in ASTM B 828 unless otherwise indicated.
- H. Install shutoff valve, hose-end drain valve, strainer, pressure gage, and test tee with valve, inside the building at each domestic water service entrance. Comply with requirements in Section 221119 “Domestic Water Piping Specialties” for drain valves and strainers.
- I. Install domestic water piping **with 0.25 percent slope downward toward drain** for horizontal piping and plumb for vertical piping.
- J. Rough-in domestic water piping for water-meter installation according to utility company’s requirements.
- K. Comply with requirements in Section 220529 “Hangers and Supports for Plumbing Piping and Equipment” for pipe hanger and support devices.

1. Install hangers for steel piping with the following maximum horizontal spacing and minimum rod diameters:

NPS 1-1/4 (DN 32) and smaller: 84 inches (2100 mm) with 3/8 inch (10 mm) rod.

NPS 1-1/2 (DN 40): 108 inches (2700 mm) with 3/8 inch (10 mm) rod.

NPS 2 (DN 50): 10 feet (3 m) with 3/8 inch (10 mm) rod.

NPS 2-1/2 (DN 65): 11 feet (3.4 m) with 1/2 inch (13 mm) rod.

Support vertical piping at each floor.

2. Install vinyl-coated hangers for CPVC piping with the following maximum horizontal spacing and minimum rod diameters:

NPS 1 and smaller: 36 inches with 3/8 inch rod.

NPS 1-1/4 to NPS 2: 48 inches (1200 mm) with 3/8 inch (10 mm) rod.

NPS 2-1/2 to NPS 3-1/2 (DN 65 to DN 90): 48 inches with 1/2 inch (13 mm) rod.

Install supports for vertical CPVC piping every 60 inches for NPS 1 and smaller, and every 72 inches for NPS 1-1/4 and larger.

3. Install vinyl-coated hangers for PEX piping with the following maximum horizontal spacing and minimum rod diameters:

NPS 1 (DN 25) and smaller: 32 inches (815 mm) with 3/8 inch (10 mm) rod.

Install hangers for vertical PEX piping every 48 inches (1200 mm).

4. Install vinyl-coated hangers for PVC piping with the following maximum horizontal spacing and minimum rod diameters:

NPS 2 (DN 50) and smaller: 48 inches (1200 mm) with 3/8 inch (10 mm) rod.

NPS 2-1/2 to NPS 3-1/2 (DN 65 to DN 90): 48 inches (1200 mm) with 1/2 inch rod.

Install supports for vertical PVC piping every 48 inches (1200 mm).

- L. Install flexible connectors in suction and discharge piping connections to each domestic water pump and in suction and discharge manifold connections to each domestic water booster pump.

### 3.2 INSPECTING AND CLEANING

- A. Inspect and test piping systems as follows:

1. Fill domestic water piping. Check components to determine that they are not air bound and that piping is full of water.
2. Test for leaks and defects in new piping and parts of existing piping that have been altered, extended, or repaired.

- B. Clean and disinfect potable [**and non-potable**] domestic water piping by filling system with water/chlorine solution with at least 50 ppm (50 mg/L) of chlorine. Isolate with valves and allow to stand for 24 hours. Flush system with clean, potable water until no chlorine is in.

### 3.3 PIPING SCHEDULE

- A. Aboveground Distribution Piping: **Type L, hard copper tubing.**

### 3.4 VALVE SCHEDULE

- A. Drawings indicate valve types to be used. Where specific valve types are not indicated, the following requirements apply:

1. Shutoff Duty: Use bronze ball or gate valves for piping NPS 2 and smaller. Use cast-iron butterfly or gate valves with flanged ends for piping NPS 2-1/2 (DN 65) and larger.
2. Throttling Duty: Use bronze ball or globe valves for piping NPS 2 (DN 50) and smaller. Use cast-iron butterfly valves with flanged ends for piping NPS 2-1/2 (DN 65) and larger.
3. Hot-Water-Piping, Balancing Duty: **Calibrated** balancing valves.
4. Drain Duty: Hose-end drain valves.

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- B. Install gate valves close to main on each branch and riser serving one or more plumbing fixtures or equipment connections and where indicated.
- C. Install gate or ball valves on inlet to each plumbing equipment item, on each supply to each plumbing fixture not having stops on supplies, and elsewhere as indicated.
- D. **CPVC and PVC** ball, butterfly, and check valves may be used in matching piping materials.
- E. Install drain valve at base of each riser, at low points of horizontal runs, and where required to drain water distribution piping system.
- F. Install swing check valve on discharge side of each pump and elsewhere as indicated.
- G. Install ball valves in each hot-water circulating loop and discharge side of each pump.
- H. Label all new and existing shut off valves.

END OF SECTION

## **SECTION 224000 – PLUMBING FIXTURES**

### **PART 1 – GENERAL**

#### **1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data for each type of plumbing fixture, including trim, fittings, accessories, appliances, appurtenances, equipment, and supports.
- B. Regulatory Requirements: Comply with requirements in Public Law 102-486, “Energy Policy Act,” about water flow and consumption rates for plumbing fixtures.
- C. NSF Standard: Comply with NSF 61, “Drinking Water System Components – Health Effects,” for fixture materials that will be in contact with potable water.

### **PART 2 – PRODCUTS**

#### **2.1 SHOWER**

- A. Shower Enclosure: One (1) each 54” x 30” multi piece unit, and one (1) 30” x 30” multi piece unit.
  - 1. Basis-of-Design Product 1: **Best Bath Systems 5LDS5430 or approved equal** with the following accessories:
    - a. Caulkless Brass Drain with Chrome Screen
    - b. 5 ¾” Curb height
    - c. Curtain Rod/Brackets and Rings
    - d. Heavy Vinyl Shower Curtain
  - 2. Basis-of-Design Shower 2: **Best Bath Systems 4LBS3030 or approved equal** with the following accessories:
    - a. Caulkless Brass Drain with Chrome Screen
    - b. 5 ¾” Curb height
    - c. Curtain Rod/Brackets and Rings
    - d. Heavy Vinyl Shower Curtain
- B. Shower control valve and handspray:
  - 1. Basis-of-Design Product: **Symmons Temptrol II** (2000 Series) **25-300-B30-V** or approved equal.

#### **2.2 WATER CLOSET**

- A. Vitreous-China Water Closet: Elongated front, floor-mounted, floor outlet with close-coupled, gravity-type tank.
  - 1. Basis-of-Design Product: **Kohler Highline Classic Comfort Height** 2 piece toilet or approved equal.
  - 2. Design Consumption: 1.6 gal./flush Sloan FLUSHMATE
  - 3. Toilet Seat: **K-4636 Cachet** Quiet-Close Elongated Toilet Seat.

#### **2.3 LAVATORY**

- A. Vitreous China Wall Hung Lavatory
  - 1. Basis-of-Design Product: **Kohler K-2084**
  - 2. Faucet: Kohler Alteo Model: **K-45800-4-CP**
  - 3. ADA protective insulation
  - 4. Color: White

#### **2.4 LAUNDRY TUB SINK**

- A. Basis-of-Design Product: **Fiat FL7**
  - 1. Faucet: **A1000** Faucet Blade Handles, 4” centers, chrome
  - 2. Color: White

2.5 KITCHEN SINK

- A. Stainless Steel, 0.063 inch thick.
  - 1. Drop in counter-mounting type.
  - 2. Single Bowl: 22" x 30" x 8".
  - 3. Drain: 3-1/2 inch removable, stainless-steel crumb cup with stainless-steel tailpiece.
- B. Faucet: Commercial, Solid-Brass Faucet
  - 1. Type: Center set with central inlets and spray.
  - 2. Finish: Polished chrome plate.
  - 3. Handle(s): Single-lever toggle.
  - 4. Spout: Swing gooseneck with aerator 2 gpm laminar flow.

PART 3 – EXECUTION

3.1 INSTALLATIONS

- A. Install fixtures with flanges and gasket seals.
- B. Fasten floor-mounted fixtures to substrate. Fasten fixtures having holes for securing fixture to wall construction, to reinforcement built into walls.
- C. Fasten wall-mounted fittings to reinforcement built into walls.
- D. Secure supplies to supports or substrate within pipe space behind fixture.
- E. Install individual supply inlets, supply stops, supply risers, and tubular brass traps with cleanouts at fixture.
- F. Install water-supply stop valves in accessible locations.
- G. Install traps on fixture outlets. Omit traps on fixtures having integral traps. Omit traps on indirect wastes unless otherwise indicated.
- H. Seal joints between fixtures and walls, floors, and counters using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color.
- I. Ground equipment.

END OF SECTION

## **SECTION 238380 – MECHANICAL FANS**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Furnish and install mechanical ventilation per municipal code.

#### **1.2 SECTION REQUIREMENTS**

- A. Submittals: Product Data and Shop Drawings.
- B. Bear the AMCA seal complying with UL 705.

### **PART 2 – PRODUCTS**

#### **2.1 MECHANICAL EXHAUST FAN WITH LIGHT**

- A. Product: **Broan Model QTRE080FLT** fan with light or approved equal.
  - 1. Volume: 80 CFM
  - 2. Sones: 0.8
  - 3. Energy efficiency: Energy Star rated.
- B. EXHAUST HOOD
  - 1. Basis-of-Design: **Bosch 300 Series** model #**DUH30152UC**
  - 2. **30 inch**, under 30 inch, under cabinet exhaust hood with three-speed fan.
  - 3. Color: stainless steel
  - 4. Fan Control: Hood-mounted switch, with separate light switch.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Location of fan mounting site to be approved by the owner.
- B. Vent fan to outside of building.
- C. Install all equipment per manufacturers' direction.
- D. Seal between sections of positive-pressure fittings with sealants recommended by manufacturer.
- E. Support flexible ductwork at intervals recommended by manufacturer to support weight of duct and all accessories, without exceeding appliance loading.
- F. Assure that flexible ductwork is fully stretched and free of sharp turns.

#### **3.2 TESTING, ADJUSTING, AND BALANCING**

- A. Balance airflow within distribution systems, branches, and terminals to satisfy code requirements.

**END OF SECTION**

**SECTION 260500 – COMMON WORK RESULTS FOR ELECTRICAL**

**PART 1 – GENERAL**

**1.1 WORK INCLUDES**

- A. The work included under this Section consists of providing all labor, materials, supervision, and construction procedures necessary for the installation of the complete electrical systems required by these specifications and/or shown on the drawings of the contract, including:
  - 1. Relocation of existing outlets and switches
  - 2. Provide power to mechanical fans
  - 3. Furnish and install new devices per code.
- B. The Contract Drawings are shown in part diagrammatic intended to convey the scope of work, indicating the intended general arrangement of equipment, conduit, and outlets. Follow the drawings in laying out the work and verify spaces for the installation of the materials and equipment based on the dimensions of actual equipment furnished. Whenever a question exists as to the exact intended location of outlets or equipment, obtain instructions from the Architect/Engineer before proceeding with the work.

**1.2 RELATED WORK**

- A. Contractor will examine Contract Documents for requirements that affect work of this Section.

**1.3 QUALITY ASSURANCE**

- A. Provide in accordance with Contract Documents and Specifications, Control of Work section.

**1.4 SUBMITTALS**

- A. Furnish manufacturer's product data, test reports, and materials certifications as required.
- B. As-built copies of all Drawings shall be submitted to the Engineer.

**1.5 COORDINATION**

- A. Coordination, Sequencing, and Scheduling: per Contract Documents and Specifications.
- B. The electrical work shall be coordinated with the Work of other trades to prevent interferences and so that the progress in construction of the building will in no way be retarded.
- C. Coordinate with all local utility companies and make all installations for their services in accordance with all utility company requirements.
- D. Where lighting fixtures and other electrical items are shown in conflict with locations of structural members and mechanical or other equipment, furnish and install all required supports and wiring to clear the encroachment for a complete installation.
- E. Any Work installed contrary to or without acceptance by the Engineer shall be subject to change as directed by the Engineer, and no extra compensation will be allowed to the Contractor for making these changes.

**1.6 PRODUCT DELIVERY AND STORAGE**

- A. Use all means necessary to protect electrical system materials before, during and after installation and to protect the installed Work and materials of all other trades.
- B. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the Engineer and at no additional cost to the Owner. If any apparatus has been subject to possible injury by water, it shall be thoroughly dried out and put through such special tests as directed by the Engineer, at the cost and expense of the Contractor, or shall be replaced by the Contractor at his own expense.



- C. Protect the Work of other trades. Restore any damage caused to other trades to the condition existing prior to damage at no additional cost to the Owner.
- D. Investigate each space in the building through which equipment must pass to reach its final location. If necessary, the manufacturer shall be required to ship his material in sections sized to permit passing through such restricted areas in the building.

## PART 2 – PRODUCTS

### 2.1 MATERIALS

- A. Materials and equipment shall be listed by UL unless it can be demonstrated that no UL standards exist for a specific item or class of equipment.
- B. All other materials, not specifically described but required for a complete and operable electrical installation, shall be new, first quality of their respective kinds, Specification grade or better, and as selected by the Contractor subject to the acceptance by the Engineer.
- C. All materials and equipment furnished and installed on this Project shall meet the most stringent efficiency standards of the local utility to qualify for the maximum rebate.

### 2.2 MATERIAL AND CONSTRUCTION REQUIREMENTS

- A. Unless otherwise shown or specified, all enclosures, motors, wiring and other materials and all construction methods shall conform to NEMA 1, Indoor Enclosures.

### 2.3 MISCELLANEOUS MATERIALS

- A. Inserts, Anchors, Fasteners, and Hooks: Provide inserts, anchors, anchor bolts, lag bolts, screws, washers, nuts, hooks, and other rough hardware. Assist other trades as necessary in the placement of inserts and anchor bolts in concrete and masonry. Furnish full instructions regarding locations, sizes, and other requirements to ensure proper preparation. Provide rough hardware which complies with requirements of the governing laws and codes.

## PART 3 – EXECUTION

### 3.1 COORDINATION

- A. Prior to all Work of this section, carefully inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
- B. Field verify all locations and dimensions to ensure that the equipment will be properly located, readily accessible, and installed in accordance with all pertinent codes and Regulations, the Contract Documents, and the referenced standards.
- C. The Work shall be carefully laid out in advance, and where cutting, drilling, etc., of floors, walls, ceilings, or other surfaces is necessary for the proper installation, this Work shall be carefully done, and any damage to building, piping, or equipment shall be repaired by mechanics of the trades involved at no additional cost to the Owner.
- D. In the event any discrepancies are discovered, immediately notify the Owner's Representative in writing. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

### 3.2 INSTALLATION

- A. Install all equipment and fixtures in complete accordance with the manufacturer's recommendations and all pertinent codes and Regulations.
- B. Thoroughly inspect all items of equipment and any items dented, scratched, or otherwise damaged in any manner shall be replaced or repaired and painted to match original finish. All

items to repaired and refinished shall be brought to the attention of the Engineer for inspection and acceptance.

- C. Coordinate the installation of required supporting devices and sleeves to be set in poured-in-place concrete or supported from or on other structural components, as they are constructed.
- D. Sequence, coordinate, and integrate installations of electrical materials and equipment for efficient flow of the Work. Give particular attention to large equipment requiring positioning prior to closing in the building and equipment which must be placed in service before further construction can take place.
- E. Where mounting heights are not detailed or dimensioned, install systems, materials, and equipment to provide the maximum headroom possible.
- F. The final routing of raceways shall be determined by structural conditions, interferences with other trades and by terminal locations on apparatus. The Engineer reserves the right of a reasonable amount of shifting at no extra cost up until time of roughing in the Work.
- G. Where circuits are shown as “home-runs” all necessary fittings and boxes shall be provided for a complete raceway installation.
- H. In general, wiring and raceway systems for security alarm, fire alarm, telephone, and intercommunications systems are not indicated on the Drawings but shall be furnished and installed under this section.
- I. Each lighting and each receptacle circuit shall have its own neutral, dedicated to that circuit. A common neutral for more than one signal phase circuit is not allowed.
- J. The Electrical Contractor shall be responsible for all cutting and patching of holes in building construction which are required for the passage of electrical work. Cutting and patching shall conform to the requirements of Division 08 and, if applicable, Division 09 of these specifications.
- K. Cutting of structural framing, walls, floors, decks and other members intended to withstand stress is not permitted.
- L. Surface mounted panel boxed, junction boxes, conduits, etc., shall be supported by spacers to provide a clearance between wall and equipment.
- M. Upon completion of all installation, lamping, and testing, thoroughly inspect all exposed portions of the electrical installation and completely remove all exposed labels, soils, markings and foreign material.

### 3.3 CLEANING

- A. Upon completion of rough electrical work in any given area, remove all rubbish and debris from the work area and leave in broom clean condition.

END OF SECTION

## **SECTION 262726 – WIRING DEVICES**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Furnish and install the following:
  - 1. Switched lighting in bathrooms per municipal code.
  - 2. GFCI in bathroom per municipal code.
  - 3. Dedicated circuit for refrigerators.
  - 4. Power for range hood and bath fans.
  - 5. Additional outlet on outside wall in the kitchen.

#### **1.2 SECTION REQUIREMENTS**

- A. Submittals: Product Data
- B. Quality Assurance: Wiring devices shall be listed and labeled as defined in NFPA 70, Article 100 by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NFPA 70.

### **PART 2 – PRODUCTS**

#### **2.1 DEVICES**

- A. Convenience Receptacles: NEMA WD 1, NEMA WD 6, Configuration 5-20R, and UL 498.
- B. Duplex GFCI Convenience Receptacles: 125 V, 20 A, straight blade, feed-through type. NEMA WD 1, NEMA WD 6, UL 498, and UL 943, Class A, and include indicator light that is lighted when device is tripped.
- C. Snap Switches: NEMA WD 1 and UL 20. Single-pole, double-throw, momentary contact, center-off switches, 120/277 V, 20 A; for use with mechanically held lighting contactors.
- D. Wall-Box Dimmer Switches: Modular, full-wave, solid-state units with integral, quiet on-off switches, with audible frequency and EMI/RFI suppression filters.
  - 1. Control: Continuously adjustable slider; with single-pole or three-way switching to suit connections. Comply with UL 1472.
  - 2. Incandescent Lamp Dimmers: 120 V; control shall follow square-law dimming curve. On-off switch positions shall bypass dimmer module.
  - 3. Fluorescent Lamp Dimmer Switches: Modular compatible with dimmer ballasts; trim potentiometer to adjust low-end dimming; dimmer-ballast combination capable of consistent dimming with low end not greater than 20 percent of full brightness.
- E. Wall Plates, Finished Areas: Smooth, high-impact thermoplastic, fastened with metal screws having heads matching plate color.
- F. Finishes: As selected by Owner unless otherwise indicated or required by NFPA 70.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Comply with NECA 1, including the mounting heights listed in that standard, unless otherwise noted.
- B. Install devices and assemblies plumb, level, and square with building lines.
- C. When mounting into metal boxes, remove the fiber or plastic washers used to hold device mounting screws in yokes, allowing metal-to-metal contact.

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- D. Install unshared neutral conductors on line and load side of dimmers.
- E. Mount devices flush, with long dimension vertical, and grounding terminal of receptacles on top unless otherwise indicated. Group adjacent devices under single, multigang wall plates.

END OF SECTION

## **SECTION 283111 – FIRE-ALARM SYSTEM**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Remove and reset existing fire strobes and PA speakers in renovated bathrooms.
- B. Provide new strobe and public address speaker in new bathroom.

#### **1.2 SECTION REQUIREMENTS**

- A. Submittals: Product Data and system operating description.
- B. Submittals to Authorities Having Jurisdiction: In addition to distribution requirements for submittals, make an identical submittal to authorities having jurisdiction. To facilitate review, include copies of annotated Contract Drawings as needed to depict component locations.

### **PART 2 – PRODUCTS**

#### **2.1 PERFORMANCE REQUIREMENTS**

- A. Comply with NFPA 72.
- B. UL listed and labeled.
- C. 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 NOTIFICATION APPLIANCES**

- A. General Requirements for Notification Appliances: Connected to notification appliance signal circuits, zoned as indicated, equipped for mounting as indicated and with screw terminals for system connections.
- B. Visible Notification Appliances: Xenon strobe lights comply with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word “FIRE” is engraved in minimum **1 inch** high letters on the lens.
- C. Rated Light Output: 15/30/75/110 cd, selectable in the field.
- D. Public Address Speaker: Provide additional wall mount or ceiling speaker in new bathroom compatible with existing public address system.

### **PART 3 – EXECUTION**

#### **3.1 INSTALLATION**

- A. Comply with NFPA 72 for installation of fire-alarm equipment.
  - 1. Comply with requirements for seismic-restraint devices specified in Section 280500 “Common Work Results for Electronic Safety and Security.”
- B. Connecting to Existing Equipment: Verify that existing fire-alarm system is operational before making changes or connections.
  - 1. Connect new equipment to existing control panel in existing part of the building.
  - 2. Connect new equipment to existing monitoring equipment at the supervising station.
  - 3. Expand, modify, and supplement existing equipment as necessary to extend existing functions to the new points. New components shall be capable of merging with existing configuration without degrading the performance of either system.

#### **3.2 FIELD QUALITY CONTROL**

- A. Field tests shall be witnessed by **Fire Department representative**.

- B. Tests and Inspections:
  - 1. Visual Inspection: Conduct visual inspection prior to testing.
  - 2. Inspection shall be based on completed record Drawings and system documentation that is required by NFPA 72 in its “Completion Documents, Preparation” Table in the “Documentation” Section of the “Fundamentals of Fire Alarm Systems” Chapter.
  - 3. Comply with “Visual Inspection Frequencies” Table in the “Inspection” Section of the “Inspection, Testing and Maintenance” Chapter in NFPA 72; retain the “Initial/Reacceptance” column and list only the installed components.
  - 4. System Testing: Comply with 4 “Test Methods” Table in the “Testing” Section of the “Inspection, Testing and Maintenance” Chapter in NFPA 72.
- C. Prepare test and inspection reports.

END OF SECTION