

**CONTRACT AND SPECIFICATIONS  
FOR  
SOUTH MEETING HOUSE REPAIRS  
BID # 02-10**

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City of Portsmouth, New Hampshire

Prepared by:  
City of Portsmouth  
Community Development Department

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## Bid #02-10

## CITY OF PORTSMOUTH

Public Works Department

## SOUTH MEETING HOUSE REPAIRS

INVITATION TO BID

**Sealed** bid proposals, **plainly marked**, (South Meeting House Repairs Bid Proposal # 02-10) **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, New Hampshire, 03801, will be accepted until **2:00 p.m. Thursday, August 6, 2009**, at which time all bids will be publicly opened and read aloud.

The work will consist of replacing siding and trim over waterproof membrane on the belltower, as well as replacing slate shingle roof and roof accessories. Resulting work will match existing profiles in every way.

A bid alternate for minor carpentry repairs and painting the body and trim of the remainder of the building is also solicited.

There will be a **mandatory** pre-bid walk through on **Tuesday, July 21 at 9:00 a.m.** Bidders will meet at 280 Marcy Street.

Specifications and bid proposal forms may be obtained from the Finance/Purchasing Department on the third floor at the above address or on-line at **www.cityofportsmouth.com** or by calling the Purchasing Coordinator at 603-610-7227, unless otherwise specified.

**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 at least two (2) days prior to the bid due date.**

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, and to accept any bid that it may deem to be in the best interest of the City.

If you have any questions, please contact the Purchasing Coordinator at 603-610-7227.

## INSTRUCTIONS TO BIDDERS

### **BIDDING REQUIREMENTS AND CONDITIONS**

1. Special Notice to Bidders

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.

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, standard 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 maybe 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 venture 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.

c) **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 at least two (2) days prior to the bid due date.**

#### 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;
- 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; or
- If the proposal does not contain a unit price for each pay item listed except in the case of authorized alter pay items.

#### 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 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;
- 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; 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

After the proposals are opened and read, they will be compared on the basis of the total price for all sections of 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 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.

### 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, mailed to the address on his or her proposal, that his or her bid has been accepted and that the bidder has been awarded the contract.

### 3. Reservation of Rights

The Owner reserves the right to undertake such investigation as it deems necessary to evaluate the qualifications of the bidder and to evaluate the proposal submitted. Bidders may be requested to execute releases for information. Failure to provide a release upon request will result in disqualification.

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.

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 Bonds

At the time of the execution of the contract, the successful bidder shall furnish a **Labor and Materials payment bond** in the sum equal to 100 percent of the contract amount.

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 as in effect until it has been fully executed by all parties.

### 7. Failure to Execute Contract

Failure to execute the contract and file acceptable bonds 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 City may exercise its reserved rights including the rejection of all bids or re-advertisement.

**PROPOSAL FORM****SOUTH MEETING HOUSE REPAIRS****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 City 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 therefor the following item prices, to wit:

THIS PROJECT SHALL BE BID BY LUMP SUM

**BELL TOWER and SLATE ROOF**

- A. Clean and seal topmost copper roof on bell tower.
- B. Remove siding and trim boards from bell tower and salvage millwork items per drawing and specs.
- C. Furnish and install waterproof membrane and flashing over bell tower sheathing to make watertight transitions to metal roofs.
- D. Replace siding and trim boards with PVC boards milled to profile of existing pieces per drawing and specs.
- E. Prep, prime and paint one coat latex paint on all new bell tower work. Prep, prime and paint remaining bell tower components to match.
- F. Remove and replace existing slate shingles with new slate on all slate roofs. Salvage any slate shingles of value for reuse and future repairs.



- G. Remove and reset existing snow guards on south eave of the roof. Furnish and install new snow guards on the north eave to match existing.

TOTAL BID COMPILED BY BIDDER

PRICE IN FIGURES: \$ \_\_\_\_\_

PRICE IN WORDS: \$ \_\_\_\_\_

**NOTE: Contract Award will be based on Items A to G**

BID ALTERNATE #1 FRAMING, SIDING AND TRIM

- A. Remove siding and sheathing on south sidewall of building between two windows, up to the bottom of the windows. Remove and replace rotted sill section and framing, install new sheathing and siding to match existing.
- B. Repair siding and roof trim below slate roof to match existing. Prep, prime and paint two coats all siding and trim.

PRICE IN FIGURES: \$ \_\_\_\_\_

PRICE IN WORDS: \$ \_\_\_\_\_

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 other items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item.

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.

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.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company

By: \_\_\_\_\_  
Print Name

\_\_\_\_\_  
Business Address

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

\_\_\_\_\_  
City, State, Zip Code

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

Telephone: \_\_\_\_\_

**STATEMENT OF BIDDER'S QUALIFICATIONS**

Supply with Bid

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 foremen available for this contract.

STATEMENT OF BIDDERS QUALIFICATIONS (continued)

- 15. List any subcontractors and trade whom you would expect to use (unless this work is to be done by your own organization).
  - a. Slate Roofing \_\_\_\_\_
  - b. Carpentry \_\_\_\_\_
  - c. Painting: \_\_\_\_\_
  - d. Metal work: \_\_\_\_\_

Latest Financial Statements: The City reserves the right to request Bidders' latest Financial Statements. Certified audited statements 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 Statement are preferred. Internal statements may be used 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 of Public

My Commission expires \_\_\_\_\_

CONTRACT AGREEMENT

SOUTH MEETING HOUSE REPAIRS

THIS AGREEMENT made as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_, by and between the City of Portsmouth, New Hampshire (hereinafter call 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 for the completion of the Project. 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 City Engineer shall mean 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 - The work will commence and finish in accordance with the Notice to Proceed and be completed within seventy five (75) days.

ARTICLE III - CONTRACT PRICE - Owner shall pay Contractor for performance of the work in accordance with the Contract Documents as shown under item prices in the Bid Proposal.

ARTICLE IV - 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 V - RETAINAGE – To insure proper performanc of this Contract, the Owner shall retain 10% of the Contract Price as specified in the Contract Documents

ARTICLE VI - LIQUIDATED DAMAGES - In event the Contractor fails to successfully complete the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of Fifty Dollars (\$50.00) for each calendar day beyond the specified completion date. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

ARTICLE VII – 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 Award, Notice to Proceed
- 8.4 Instruction to Bidders
- 8.5 Insurance Requirements
- 8.6 General Requirements
- 8.7 Technical Specifications
- 8.8 Any modifications, including change orders, duly delivered after execution of this Agreement.

In the event of a conflict, the Technical Specifications will govern.

ARTICLE VIII – 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 belonging to Contractor, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

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

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

ARTICLE XII – 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: \_\_\_\_\_

John P. Bohenko

TITLE: City Manager

**NOTICE OF INTENT TO AWARD**

Date:

TO:

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

**SOUTH MEETING HOUSE REPAIRS**

You are hereby notified that the City intends to award the above referenced project to you.

Immediately take the necessary steps to execute the Contract and to provide 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:

SOUTH MEETING HOUSE REPAIRS

TO:

YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE WITH THE AGREEMENT DATED \_\_\_\_\_, WITHIN THIRTY (30) DAYS FROM THE NOTICE TO PROCEED. ALL WORK SHALL BE COMPLETED BY \_\_\_\_\_.

CITY OF PORTSMOUTH, N.H.

BY: Steven F. Parkinson, 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 Number \_\_\_\_\_ 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:  
\_\_\_\_\_ days

Net Increase or Decrease of  
this Change Order:  
\$ \_\_\_\_\_

Net Increase or Decrease of  
this Change Order:  
\_\_\_\_\_ days

Contract Price with all  
approved Change Orders:  
\$ \_\_\_\_\_

Contract Time with all  
approved Change Orders:  
\_\_\_\_\_ days

RECOMMENDED:

APPROVED:

APPROVED:

by \_\_\_\_\_

by \_\_\_\_\_

by \_\_\_\_\_

by \_\_\_\_\_

PW 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, 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.

(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

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

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)

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.

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 installation of Police Department

\_\_\_\_\_

(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

I, \_\_\_\_\_ {insert name},

in my capacity as \_\_\_\_\_ {insert title}

of \_\_\_\_\_ { name of Contractor}

agree that upon receipt of the sum of \$ \_\_\_\_\_ from the CITY OF

PORTSMOUTH NEW HAMPSHIRE as final and completed payment for the construction of:

\_\_\_\_\_ {name of project}

do hereby on behalf of \_\_\_\_\_ {name of Contractor} and its successors and assigns 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 construction of the above-referenced project and the contract dated \_\_\_\_\_.

All claims and demands shall include without limitation all actions, causes, suits, debts, dues, duties, sums of money, accounts, reckonings, bonds, bills, specifications, covenants, contracts, agreements, promises, damages and judgments whatsoever in law or equity against the City of Portsmouth, New Hampshire which Contractor ever had, now has 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,

Witness

Contractor:

\_\_\_\_\_

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

print name : \_\_\_\_\_

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) Comprehensive 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 - \$1,000,000  
Per occurrence and general aggregate
- C) Builders Risk  
Coverage requirements can be met with excess policies

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.
- D) Builders Risk

**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 Insureds.**

- 1) The contractor's insurance shall be primary in the event of a loss.**
- 2) 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**

**SECTION 01000 - GENERAL REQUIREMENTS**

## PART 1 - GENERAL

## 1.1 INTENT OF CONTRACT

- A. 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.
- B. 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.

## 1.2 INCIDENTAL WORK

- A. 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:
  - 1. Clean up
  - 2. Signs
  - 3. Mobilization
  - 4. Restoration of property
  - 5. Cooperation with other contractors, abutters and utilities.
  - 6. Accessories and fasteners or components required to make items complete and functional.

## 1.3 ALTERATION OF PLANS OR OF CHARACTER OF WORK

- A. 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.
- B. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond.
- C. Any 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.
- D. The Contractor shall perform the work as altered at the contract unit price or prices.

## 1.4 EXTRA WORK ITEMS

- A. Extra work shall be performed by the Contractor in accordance with the specifications and as directed.
  - 1. 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.
- B. Extra work will be paid for at a price as provided in the Contract documents or if such pay items are not applicable than at a price negotiated between the contractor and the Owner or at the unit Bid price.

- C. If the Owner determines that extra work is to be performed, a change order will be issued.

1.5 CHANGE ORDERS

- A. 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.
- B. The Contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

1.6 FINAL CLEAN UP

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

1.7 ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

- A. 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 and Standard Specifications.
  - 2. Shop Drawings will govern Technical Specifications, Standard Specifications and General Requirements.

PART 2 - CONTROL OF WORK

2.1 AUTHORITY OF THE CITY ENGINEER

- A. All work shall be done under supervision of the City Engineer and to his satisfaction.
- B. The City Engineer will decide all questions which may arise as to:
  - 1. the quality and acceptability of materials furnished and work performed;
  - 2. the rate of progress of the work;
  - 3. the interpretation of the plans and specifications;
  - 4. the acceptable fulfillment of the Contract by the Contractor.
- C. The City Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary
  - 1. due to the failure of the Contractor to correct conditions unsafe for workers or the general public;
  - 2. for failure to carry out provisions of the Contract;
  - 3. for failure to carry out orders;
  - 4. 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.
- D. The Contractor shall not be entitled any additional payments arising out of any such suspensions.
- E. 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 City

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.

## 2.2 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

- A. The Contractor shall be responsible for all damage or injury to property of any character:
  - 1. during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work,
  - 2. 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.

## 2.3 MAINTENANCE DURING CONSTRUCTION

- A. The Contractor shall maintain the work during construction and until the project is accepted.
- B. 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.

## 2.4 SAFETY PRECAUTIONS

- A. 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.

## 2.5 PERMITS

- A. It will be the responsibility of the Contractor to obtain all permits required for the operation of equipment in, or on, all city streets and public ways.

## 2.6 BARRICADES AND WARNING SIGNS

- A. The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the building occupants and the public.
- B. Closed off areas shall be protected by effective barricades. 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.
- C. The Contractor will be held responsible for all damage to the work due to lack of adequate controlling devices.



**PART 3 - TEMPORARY FACILITIES**

**3.1 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.

**3.2 WATER FACILITIES**

- A. The Owner shall provide the Contractor with reasonable access to water necessary for construction operations at the site.

**3.3 TEMPORARY ELECTRICITY**

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

**PART 4 - MEASUREMENT AND PAYMENT**

**4.1 MEASUREMENT OF QUANTITIES (As may be applicable to the Project)**

- 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.

**4.2 SCOPE OF PAYMENT**

- A. The Contractor shall receive and accept compensation provided for work 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.

4.3 PAYMENT PROCEDURES

- A. 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.

4.4 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.

4.5 PARTIAL PAYMENTS

- A. Partial payments will be made on a monthly basis during the Contract period. 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 receives final acceptance.

4.6 FINAL ACCEPTANCE AND FINAL PAYMENT

- A. Upon due notice from the Contractor of presumptive completion of the entire project, the 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 City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.
- B. If the City Engineer's inspection discloses any work in whole or in part, as being unsatisfactory, the City 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.

4.7 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.

#### 4.8 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 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.

#### 4.9 TERMINATION OF CONTRACTOR'S RESPONSIBILITY

- A. 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 4.5 above.

**SECTION 01100 - SUMMARY**

## PART 1 - GENERAL

## 1.1 SUMMARY OF WORK

## A. BELL TOWER and SLATE ROOF

1. Clean and seal topmost copper roof on bell tower.
2. Remove and dispose of siding and trim from bell tower; salvage millwork items.
3. Furnish and install waterproof membrane and flashing over bell tower sheathing to make watertight transitions to metal roofs.
4. Replace siding and trim boards with PVC boards milled to existing profiles.
5. Prep, prime and paint two coats all new work on the bell tower. Prep, prime and paint remaining bell tower components to match.
6. Inspect and make repairs to two (2) existing metal roofs on the bell tower.
7. Remove and replace existing slate shingles with new slate on all slate roofs.
8. Furnish and install new snow guards on the north eave to match existing.

## B. FRAMING, SIDING AND TRIM (Bid Alternate)

1. Remove siding and sheathing on south sidewall of building between two windows, up to the bottom of the windows. Remove and replace rotted sill section, replace siding.
2. Repair siding and roof trim below slate roof to match existing. Prep, prime and paint two coats all siding and trim.

## 1.2 WORK RESTRICTIONS

## A. During construction, Contractor will have limited use of area indicated as follows:

1. All work will be done between 7:00a.m.and 6:00 p.m., Monday to Friday.
2. Work areas will be cleaned at the end of each work day.

## 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. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

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 contractor's 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 01100

**SECTION 01300 - ADMINISTRATIVE REQUIREMENTS**

**PART 1- GENERAL**

**1.1 PROJECT MANAGEMENT AND COORDINATION**

- A. Conduct progress meetings with Owner at Project site as needed. Record minutes and distribute to parties involved, including Owner.

**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.
- D. Construction Schedule Submittal Procedure:
  - 1. Submit schedule within 10 days after date established for Commencement of the Work. Distribute copies to Owner and parties required to comply with dates.

**PART 2 - PRODUCTS**

**2.1 ACTION SUBMITTALS**

- A. Product Data: Mark each copy to show applicable choices and options. Include the following:
  - 1. Data 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 finished as specified and identical with the material proposed. Where variations are inherent in the material, submit sufficient units to show full range of the variations. Include name of manufacturer and product name on label.

**2.2 INFORMATION SUBMITTALS**

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

END OF SECTION 01300

**SECTION 01600 - 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.
  - 5. Architect will review the proposed substitution and notify Contractor of its acceptance or rejection.
- 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.
  - 3. Architect will review the proposed product and notify Contractor of its acceptance or rejection.
- 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.
  - 1. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
- B. Select products to comply with all of the following that are applicable:
  - 1. Where only a single product or manufacturer is named, provide the item indicated. No substitutions will be permitted.
  - 2. Where two or more products or manufacturers are named, provide one of the items indicated. No substitutions will be permitted.
  - 3. Where products or manufacturers are specified by name, accompanied by the term "available products" or "available manufacturers," provide one of the named items or comply with provisions for "comparable product" to obtain approval for use of an unnamed product or manufacturer.
  - 4. Where a single product is named as the "basis-of-design" and no other manufacturers are named, provide the named product or comply with provisions for "comparable product submittal" to obtain approval for use of a product of another manufacturer.
  - 5. Where a product is described with required characteristics, provide a product that complies with those characteristics.
  - 6. Where compliance with performance requirements is specified, provide products that comply and are recommended in writing by the manufacturer for the application.
  - 7. Where compliance with codes, regulations, or standards, is specified, select a product that complies with the codes, regulations, or standards referenced.
- 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 01600

**SECTION 01701 - EXECUTION AND CLOSEOUT REQUIREMENTS**

## PART 1 - GENERAL

## 1.1 CLOSEOUT SUBMITTALS

- A. Record Drawings: Maintain a set of the Shop Drawings as Record Drawings. Mark to show installation that varies from the Work originally shown.
- B. Operation and Maintenance Data: Organize data into three-ring binders with identification on front and spine of each binder and pocket folders for folded sheet information. . Include the following:
  - 1. Manufacturer's operation and maintenance brochures.
  - 2. 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. Verify layout information shown on Drawings, in relation to property survey and existing benchmarks, before laying out the Work.
- C. Prepare substrates and adjoining surfaces according to manufacturer's written instructions, including, but not limited to, filler and primer application.
- D. 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 fabricating 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. For patching, provide materials whose installed performance will equal or surpass that of existing materials. For exposed surfaces, provide or finish materials to visually match existing adjacent surfaces to the fullest extent possible.

## 3.3 INSTALLATION

- A. Comply with manufacturer's written instructions for installation. Anchor each product securely in place, accurately located and aligned. Clean exposed surfaces and protect from damage. If applicable, prepare surfaces for field finishing.
- B. Clean Project site and work areas daily, including common areas.

## 3.4 FINAL CLEANING



- A. Clean each surface or item as follows before requesting inspection for certification of Substantial Completion:
  - 1. Remove labels that are not permanent.
  - 2. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication.

### 3.5 CLOSEOUT PROCEDURES

- A. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:
  - 1. Submit specific warranties, maintenance agreements, and similar documents.
  - 2. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities.
  - 3. Submit Record Drawings and Specifications, operation and maintenance manuals and similar final record information.
  - 4. Deliver tools, spare parts, extra materials, and similar items.
  - 5. Complete startup testing of systems by Portsmouth Fire Department and instruction of operation and maintenance personnel.
  - 6. Remove temporary facilities and controls.
  - 7. Advise Owner of changeover information related to Owner's occupancy, operation, and maintenance.
  - 8. Complete final cleaning requirements, including touchup painting.
  - 9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. On receipt of a request for inspection, Owner will proceed with inspection or advise Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or advise Contractor of items that must be completed or corrected before the certificate will be issued.
- C. Request inspection for certification of Final Completion, once the following are complete:
  - 1. Submit a copy of Substantial Completion inspection list stating that each item has been completed or otherwise resolved for acceptance.
  - 2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- D. Owner will reinspect the Work on receipt of notice that the Work has been completed.
  - 1. On completion of reinspection, Owner will prepare a final Certificate for Payment. If the Work is incomplete, Owner will advise Contractor of the Work that is incomplete or obligations that have not yet been fulfilled.

END OF SECTION 01701

**TECHNICAL SPECIFICATIONS**

- SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION
- SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY
- SECTION 064550 - SIMULATED WOOD TRIM
- SECTION 071326 - SELF-ADHERING SHEET WATERPROOFING
- SECTION 073150 - SLATE SHINGLES
- SECTION 076100 - SHEET METAL ROOFING
- SECTION 076200 - SHEET METAL FLASHING AND TRIM
- SECTION 076500 - COPPER ROOF SPECIALTIES
- SECTION 079200 - JOINT SEALANTS
- SECTION 099100 - PAINTING
- DRAWING 1 - BELL TOWER REMOVALS
- DRAWING 2 - BELL TOWER AND CLOCK FACE FLASHINGS

**SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION**

**PART 1 - GENERAL**

**1.1 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. 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.
- B. Locate, identify, shut off, disconnect, and cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
- C. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- D. 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.
- E. Provide temporary weather protection to prevent water leakage and damage to structure and interior areas.
- 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.
- H. Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.

END OF SECTION 024119

**SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY**

**PART 1 - GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Submittals: Model code evaluation reports for treated wood.

**PART 2 - PRODUCTS**

**2.1 WOOD PRODUCTS, GENERAL**

- A. Lumber: Provide dressed lumber, S4S, marked with grade stamp of inspection agency.

**2.2 TREATED MATERIALS**

- A. Preservative-Treated Materials: AWPA C2 or AWPA C31 with inorganic boron (SBX).

- 1. Use treatment containing no arsenic or chromium.
- 2. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent.
- 3. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.

- B. Provide preservative-treated materials for all miscellaneous rough carpentry unless otherwise indicated.

- 1. Wood members in connection with framing, roofing, flashing, vapor barriers, and waterproofing.

**2.3 LUMBER**

- A. Dimension Lumber:

- 1. Maximum Moisture Content: 19 percent.
- 2. Bell tower Framing: Mixed southern pine: SPIB.

**2.4 FASTENERS**

- A. Fasteners: Size and type indicated. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.

- 1. Power-Driven Fasteners: CABO NER-272.

**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Set miscellaneous rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.

- B. Securely attach miscellaneous rough carpentry to substrates, complying with the following:

- 1. CABO NER-272 for power-driven fasteners.

2. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.

END OF SECTION 061053

**SECTION 06 45 50 PVC SIMULATED WOOD TRIM**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Provide simulated wood trim and siding to match profiles of existing millwork on bell tower per drawing.
- B. Horizontal and vertical siding will be milled to existing tongue and groove profile.

**1.2 SECTION INCLUDES**

- A. Simulated Wood Trimboards.
- B. Simulated Wood Architectural Millwork.

**1.3 REFERENCES**

- A. ASTM D 792 - Density and Specific Gravity of Plastics by Displacement.
- B. ASTM D 570 - Water Absorption of Plastics.
- C. ASTM D 638 - Tensile Property of Plastics.
- D. ASTM D 790 - Flexural Properties of Unreinforced and Reinforced Plastics
- E. ASTM D 792 - Standard Test Methods for Density and Specific Gravity
- F. ASTM D 1761- Mechanical Fasteners in Wood.
- G. ASTM D 5420 - Standard Test Method for Impact Resistance
- H. ASTM D 256 - Determining the Pendulum Impact Resistance of Plastics.
- I. ASTM D 696 - Coefficient of Linear Thermal Expansion of Plastics
- J. ASTM D 635 - Rate and/or Extent and Time of Burning in a Horizontal Position.
- K. ASTM E 84 - Surface Burning Characteristics of Building Materials
- L. ASTM D 648 - Deflection Temperature Under Flexural Load in Edgewise Position.
- M. ASTM 3679 - Standard Specification for Rigid Poly Vinyl Chloride (PVC) Siding.

**1.4 SUBMITTALS**

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods, including nailing patterns.
- C. Verification Samples: For each finish profile specified, two samples, minimum size 6 inches (150 mm) long, representing actual product and patterns finish.
- D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

**1.5 QUALITY ASSURANCE**

- A. Installer Qualifications: A minimum of 3 years in the installation of PVC products.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.

## 1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

## 1.8 WARRANTY

- A. Warranted to the original Owner under normal and proper use to be free of manufacturing defects for a period of 25 years.

## 1.9 COORDINATION

- A. Coordinate Work with other operations and installation of trim to avoid damage to installed materials.

## PART 2 - PRODUCTS

### 2.1 MATERIAL

- A. Cellular PVC that is homogenous and free of voids, holes, cracks, and foreign inclusions and other defects. Edges must be square and top and bottom surfaces shall be flat with no convex or concave deviation.
- B. Physical Properties: Free foam cellular PVC material with a small-cell microstructure of 0.60 grams/cm<sup>3</sup> in accordance with ASTM D 792 with the following physical and performance properties:
- C. Mechanical:
  - 1. Tensile Strength: 1261 psi when tested in accordance with ASTM D 638.
  - 2. Tensile Modulus: 79,463 psi when tested in accordance with ASTM D 638.
  - 3. Flexural Strength: 4082 psi when tested in accordance with ASTM D 790.
  - 4. Nail Hold: 66 (finish nail) lbf/in of penetration per ASTM D 1761.
  - 5. Screw Hold: 593 lbf/in of penetration in accordance with ASTM D 1761.
  - 6. Gardner Impact: 16 in-lbs when tested in accordance with ASTM D 4226.
  - 7. Charpy Impact (23 deg C): 0.1526 ft-lbs/in in accordance with ASTM D 256.
- D. Thermal:
  - 1. Coefficient of Linear Expansion: 3.2 x10<sup>-5</sup> in/in/deg F when tested in accordance with ASTM D 696.
  - 2. Burning Rate: No burn when flame removed when tested in accordance with ASTM D 635.
  - 3. Flame Spread Index: 20 when tested in accordance with ASTM E 84.
- E. Manufacturing Tolerances:
  - 1. Variation in component length: minus 0.00 plus 1.00 inch.
  - 2. Variation in component width: plus or minus 1/16 inch.

3. Variation in component edge cut: plus or minus 2 degrees.
4. Variation in Density: minus 0 percent to plus 10 percent.

F. Workmanship, Finish, and Appearance:

1. Products are provided with a smooth finish on both sides.
2. Products will be painted to achieve a custom color.

## 2.2 SIMULATED WOOD TRIM

A. General:

1. Provide simulated wood siding and trim to the profiles and configurations indicated on the Drawings.
2. Horizontal siding will be tongue and groove type as existing

## 2.3 ACCESSORIES

A. Fasteners:

1. Use fasteners designed for wood trim and siding (thinner shank, blunt point, full round head).
2. Use a durable fastener such as stainless steel or hot dipped galvanized steel.
3. Staples, small brads and wire nails must not be used as fastening members.
4. Fasteners should be long enough to penetrate a solid wood substrate a minimum of 1-1/2 inch (38 mm).
5. The use of standard nail guns is acceptable.
6. Use two fasteners per every framing member for trimboard applications. Use additional fasteners for trimboards 12 inches (305 mm) or wider, as well as sheets.
7. Install fasteners no more than 2 inches (51 mm) from the end of the board.
8. Fasten trim into a flat, solid substrate. Fastening trim into hollow or uneven areas must be avoided.
9. Pre-drilling is typically not required unless a large fastener is used or product is being installed in low temperatures.

B. Adhesives:

1. Glue all trim joints (scarf or miter) with a cellular PVC cement/adhesive such as Gorilla PVC or Bond&Fill.
2. Glue joints should be secured with a fastener and/or fastened on each side of the joint to allow adequate bonding time.
3. Surfaces to be glued should be smooth, clean and in complete contact with each other.
4. Various adhesives may be used. Consult adhesive manufacturer to determine suitability.

C. Sealants:

1. Use urethane, polyurethane or acrylic based sealants without silicone.

## PART 3 - EXECUTION

### 3.1 EXAMINATION



- A. Do not begin installation until substrates have been properly prepared.
- B. Prior to installation, verify governing dimensions of and condition of substrate.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Examine, clean, and repair as necessary any substrate conditions that would be detrimental to proper installation.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Comply with all terms necessary to maintain warranty coverage.
- C. Use trim details indicated on drawings.
- D. Touch up all field cut edges before installing.
- E. Cutting:
  - 1. Use conventional woodworking saws.
  - 2. Use carbide tipped blades designed to cut wood. Do not use fine-tooth metal-cutting blades.
  - 3. Avoid rough edges from cutting caused by: excessive friction, poor board support, worn saw blades or badly aligned tools.
- F. Drilling:
  - 1. Do not use bits made for rigid PVC.
  - 2. Avoid frictional build-up and remove shavings from the drill hole frequently as necessary.
  - 3. Drill with standard woodworking drill bits.
- G. Milling:
  - 1. Mill using standard milling machines used to mill lumber.
  - 2. Relief angle 20 to 30 degrees.
- H. Routing:
  - 1. Use carbide tipped router bits and the same tools used to rout lumber.
- I. Edge Finishing: Edges can be finished sanding, grinding, or filling with traditional woodworking tools.
- J. Nail Location:
  - 1. Use two fasteners per every framing member for trimboard applications.
  - 2. Trimboards over 12 inches (305 mm) or wider, as well as sheets, will require additional fasteners.
  - 3. Install fasteners no more than 2 inches (51 mm) from the end of each board.
- K. Thermal Expansion and Contraction:

1. Expansion and contraction will occur with changes in temperature.
2. When properly fastened, allow 1/8 inch (3 mm) per 18 foot (5.49 m) for expansion and contraction.
3. Joints between pieces should be glued to eliminate joint separation. When gaps are glued on a long run, allow for expansion and contraction at the end of the runs.

L. Finishing.

1. Correct dents and gouges before applying final coating.
2. Prepare surfaces and paint materials as recommended by the molding manufacturer. Paint as specified in Section 09900.
3. If moldings get dirty during installation, clean with a light detergent and warm water. For stubborn stains use denatured alcohol or one pint bleach to 5 parts water.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

**SECTION 071326 - SELF-ADHERING SHEET WATERPROOFING**

**PART 1 - GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data.

**PART 2 - PRODUCTS**

**2.1 WATERPROOFING MATERIALS**

- A. Rubberized-Asphalt Sheet: **60-mil-** thick, self-adhering sheet consisting of **56 mils** of rubberized asphalt laminated to a **4-mil-** thick, polyethylene film with release liner on adhesive side.
- B. Auxiliary Materials: Primer, surface conditioner, liquid membrane, substrate patching membrane, sheet strips, mastic, adhesives, tape, and metal termination bars recommended by waterproofing manufacturer.
  - 1. Primer: Liquid waterborne primer recommended for substrate.
  - 2. Surface Conditioner: Liquid, waterborne surface conditioner recommended for substrate.

**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Clean, prepare, and treat substrates. Provide clean, dust-free, and dry substrates for waterproofing application.
- B. Remove oil, form-release agents, curing compounds, and other contaminants or coatings.
- C. Remove projections and fill honeycomb, aggregate pockets, holes, and other voids.
- D. Prepare, fill, prime, and treat joints and cracks in substrates. Remove dust and dirt from joints and cracks.
- E. Apply primer to substrates at required rate and allow it to dry.
- F. Install self-adhering sheet waterproofing according to manufacturer's written instructions and recommendations in ASTM D 6135.
- G. Apply and firmly adhere sheets. Accurately align sheets and maintain uniform **2-1/2-inch- (64-mm-)** minimum lap widths and end laps. Overlap and seal seams and stagger end laps.
- H. Bridge and cover isolation joints expansion joints and discontinuous deck-to-wall and deck-to-deck joints with overlapping sheet strips. Invert and loosely lay first sheet strip over center of joint. Firmly adhere second sheet strip to first and overlap to substrate.
- I. Prepare, prime, and treat inside and outside corners according to ASTM D 6135.
- J. Prepare, treat, and seal surfaces at terminations, penetrations, drains, and protrusions according to ASTM D 6135.
- K. Repair tears, voids, and lapped seams not complying with requirements. Slit and flatten fishmouths and blisters. Patch with sheets extending **6 inches (150 mm)** beyond repaired areas in all directions.

- L. Install protection course over waterproofing membrane immediately. Use adhesive or tape applied according to manufacturer's written instructions.
  - 1. Lap edges and ends of geotextile to maintain continuity.

END OF SECTION 071326

**SECTION 073150 - SLATE SHINGLES****PART 1 GENERAL****1.1 QUALIFICATIONS**

- A. The Contractor shall provide qualified workers, trained and experienced in installing slate roofing systems of this configuration, and shall submit documentation of 3 years of work of this type.
- B. The Contractor shall be familiar with and shall perform work in accordance with [NRCA](#) 0405. A list of installations made shall be provided, identifying when, where, and for whom the installations were made.

**1.2 DELIVERY, STORAGE AND HANDLING**

- A. Materials shall be delivered in manufacturer's unopened bundles and containers with the manufacturer's brand and name marked clearly thereon.
- B. Shingles shall be stored in accordance with manufacturer's printed instructions.
- C. Roll goods shall be stored on end in an upright position. Immediately before laying, roofing felt shall be stored for 24 hours in an area maintained at a temperature not lower than 10° C./ 50° F.

**1.3 PROJECT/SITE CONDITIONS**

- A. Environmental Requirements: Slate roofing work shall proceed when existing and forecasted weather conditions permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.
- B. Material Storage: Materials shall not be stored on roof decks in such a manner as to overstress and/or damage the deck and supporting structure. Placing of loads at midspans of framing shall be avoided. Superimposed loads shall be well distributed.
- C. Units of Work: Units of work shall be established, including removal of existing materials, preparation of existing surfaces and application of underlayment and nailers, and related temporary and/or permanent flashing so that the unit of work can be completed prior to the end of each working day.
- D. Temporary Protection Materials: Materials shall be provided and maintained on the site at all times for temporary roofing, flashing, and other protection when delays and/or changed weather conditions do not permit completion of each unit of work prior to the end of each working day. Materials which have been used for temporary roofing, flashing and other protection shall be removed and discarded.

**1.4 WARRANTY**

- A. A warranty shall be furnished against defects in material and workmanship of slate roof assembly, including related metal flashing for a period of 10 years from the date of final acceptance of the work.

**PART 2 - MATERIALS**

**2.1 EXISTING SLATE**

- A. Intact and serviceable existing slate materials shall be salvaged and reused whenever possible. New slate being incorporated into existing slate roofs shall match existing as closely as possible.

**2.2 NEW SLATE**

- A. Slate shall conform to ASTM C 406. Slate shall be Grade A, (ASTM S1), hard, dense rock, punched or drilled for two nails each. Cracked slate shall not be used. Exposed corners shall be full. Broken corners on covered ends which sacrifice nailing strength or the laying of a watertight roof will not be allowed.
- B. Slate shall be smooth texture, in Standard ¼ inch thickness, sized to match existing.  
2.1.2.3 Slate Colors
- C. Slate shall be unfading and non-weathering in nature. Color shall be equivalent to existing slate.

**2.3 UNDERLAYMENT MEMBRANE**

- A. An underlayment membrane shall be furnished on all surfaces to be covered with slate. Membrane shall consist of high strength composite self-adhering membrane.
- B. Membrane shall be a cold applied composite self-adhering membrane of not less than 0.10mm / 0.004 inch high strength polyethylene film with slip resistant embossing, coated on one side with a thick layer of adhesive-consistency rubberized asphalt, interwound with a disposable silicone coated release sheet.
- C. The tensile strength and elongation values shall be not less than 1.7 MPa / 250 psi when tested in accordance with ASTM D 412 and pliability shall be unaffected when tested in accordance with ASTM D 146.
- D. Two component urethane, mastic and primer shall be as approved by the membrane manufacturer. Flashing, expansion joint covers, temporary UV protection and corner fillets shall be as recommended by the membrane manufacturer.

**2.4 NAILS**

- A. Nails shall be large-headed slater's solid copper nails of Number 10 or 11 gauge metal.
- B. Nails shall be 3d for slates 450mm / 18 inch or less in length; 4d nails shall be used for slates 500mm / 20 inch or longer, and 6d nails shall be used for slates on hips and ridges.
- C. Nails used to retain copper flashing and slate at rake edges, hips, ridges, and eaves prone to wind damage shall be of the ring shank design.

**2.5 FLASHING**

- A. Flashing shall be 0.57kg / 20 ounce, light cold-rolled temper (H00) copper conforming to ASTM B 370.

- B. Flashing shall be in accordance with the requirements as specified in Section 076200 SHEET METAL FLASHING AND TRIM.

## 2.6 ELASTIC CEMENT

- A. Elastic cement shall be an approved brand of waterproof elastic slater's cement colored to match as nearly as possible the general color of the slate.

## 2.7 SEALANTS

- A. Sealants, where required, shall be in accordance with the slate manufacturer's recommendations. Snow Guards:

## 2.8 SNOW GUARDS

- A. Prefabricated, noncorrosive units designed to use with slate roofing and complete with predrilled holes or hooks for anchoring.

# PART 3 - EXECUTION

## 3.1 PROTECTION OF ROOF SURFACES

- A. Equipment (such as padded ridge ladders) and techniques shall be used which prevent damage to roof as a result of foot or material traffic. Contractor shall be responsible for controlling breakage of new or existing slate beyond what is indicated.
- B. The progression of work shall be laid out and presented to the Owner to prevent other trades from working on or above completed roofing.
- C. Personnel who are working on the roof shall have proper footwear which will not further damage slates, and shoe soles shall be made of a material which will aid in preventing falls.

## 3.2 PREPARATION OF SURFACES

- A. Roof deck surfaces shall be smooth, clean, firm, dry, and free from loose boards, large cracks, and projecting ends that might damage the roofing. Foreign particles shall be cleaned from interlocking areas to ensure proper seating and to prevent water damming.
- B. Prior to installation of slate, vents and other projections through roofs shall be properly flashed and secured in position, and projecting nails shall be driven firmly home.

## 3.3 ROOFING FELT

- A. Felt shall be laid in horizontal layers with joints lapped toward eaves and at ends at least 50 mm 2 inches, and secured along laps and at ends as necessary to hold the felt in place and protect the structure until covered with the slate.
- B. Felt shall be preserved unbroken, tight and whole. Felt shall lap hips and ridges at least 300mm / 12 inches to form a double thickness and shall be lapped 50mm 2 inches over the metal of valleys or built-in gutters.

**3.4 ELASTOMERIC MEMBRANE UNDERLAYMENT**

- A. Surface Preparation: Dust, dirt, loose nails or other protrusions shall be removed.
- B. Temperature: Membrane shall be applied only in fair weather when air and surface temperatures are above 5° C / 40° F.
- C. Membrane Application:
  - 1. Membrane shall be applied directly to roof deck according to manufacturer's instructions.
  - 2. The membrane shall be cut into 10 to 15 foot lengths and re-rolled.
  - 3. The release paper shall be peeled back 1 to 2 feet; the membrane shall be aligned on the lower edge of the roof and the first 1 to 2 feet shall be placed. The release paper under the membrane shall be peeled from the membrane. The membrane shall be pressed in place. Lower edges shall be rolled firmly with a wallpaper or hand roller.
  - 4. Membrane shall be applied to entire roof.
  - 5. Ends and edges shall be overlapped a minimum of 6 inches. Membrane shall not be folded onto an exposed face of the roof edge.
- D. Valley and Ridge Application
  - 1. The membrane shall be cut 4 to 6 foot lengths. The release paper sheet shall be peeled and centered over the valley or ridge, then draped and pressed in place, working from the center of the valley or ridge outward in each direction.
  - 2. For valleys, membrane shall be applied starting at the low point and working upwards. All sheets shall be overlapped a minimum of 6 inches.
- E. Vertical Membrane Flashings
  - 1. Membrane shall be turned up walls and dormers. Vertical membrane terminations shall be mechanically fastened.
  - 2. Vertical terminations shall receive a troweling of mastic as approved by the membrane manufacturer.
  - 3. Membrane may be folded onto the fascia, provided it will be covered by a gutter metal edge or other material.
- F. Protection
  - 1. Membrane shall be covered with exposed roofing materials as soon as possible. Membrane damaged due to exposure to sunlight shall be patched prior to the application of final roof covering.

**3.5 METAL FLASHING**

- A. Metal flashing shall be at intersections of vertical or projecting surfaces through the roof or against which the roof abuts, such as walls, parapets, dormers, and sides of chimneys.
- B. Flashing installation shall be in accordance with Section 076200 SHEET METAL FLASHING AND TRIM.



## 3.6 SLATING

- A. Repair and Replacement: Existing reusable slates removed from the repair area shall be intermingled with new slates to provide a smooth visual transition between new and existing slate.
- B. Slate Coursing shall match existing.

## 3.7 NAILING

- A. Each slate shall be fastened with a minimum of two copper nails of sufficient length to penetrate the roof decking at least  $\frac{3}{4}$  inch or through the decking thickness, whichever is less.
- B. Where the underside of roof decking is exposed to view, such as in overhanging eaves, the nails shall be long enough to penetrate the roof decking but not so long that they may be driven through the decking.
- C. The heads of slating nails shall just touch the slate and shall not be driven "home" or draw the slate, but left with the heads just clearing the slate so that the slate hangs on the nail.
- D. Nails in slates overlapping sheet metalwork shall not puncture the sheet metal.
- E. Exposed nails are permissible only in top courses where unavoidable. Exposed nail heads shall be covered with elastic cement.
- F. Hip slates and ridge slates shall be laid in elastic cement spread thickly over unexposed surface of under courses of slate, nailed securely in place and pointed with elastic cement.

## 3.8 ROOF PENETRATIONS

- A. Slate shall be fitted neatly around pipes, ventilators, chimneys and other vertical surfaces.

## 3.9 RIDGES

- A. Ridges shall be laid to match existing.

END OF SECTION

**SECTION 076100 - SHEET METAL ROOFING**

**PART 1 - GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data, Shop Drawings, and color Samples.
- B. Comply with SMACNA's "Architectural Sheet Metal Manual" unless otherwise indicated.

**PART 2 - PRODUCTS**

**2.1 ROOFING SHEET METALS**

- A. Aluminum Sheet: Fabricated from aluminum sheet, **ASTM B 209 (ASTM B 209M)** for alclad Alloy 3003, 3004, or 3105; **0.032 inch** thick.
  - 1. Finish: Manufacturer's standard fluoropolymer 2-coat system with topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604.
- B. Copper Sheet: ASTM B 370, cold-rolled copper sheet, H00 temper, **16 oz./sq. ft.**

**2.2 ACCESSORIES**

- A. Underlayment: Self-adhering, polyethylene-faced, polymer-modified, bituminous sheet ASTM D 1970; **40 mils** thick.
- B. Slip Sheet: Rosin-sized building paper, **5 lb/100 sq. ft.**
- C. Metal Accessories: Matching sheet metal roofing in finish and material required for a complete weathertight roofing system, including clips, flashings, ridge closure strips, trim, copings, fasciae, gutters, and louvers.
- D. Solder for Copper: ASTM B 32, Grade Sn50.
- E. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for **15-mil** dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

**2.3 FABRICATION**

- A. Fabricate sheet metal roofing to comply with details shown and recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of installation indicated.
  - 1. Flat-Seam Roofing: Form flat-seam pans from metal sheets **20 by 28 inches** with **1/2-inch** notched and folded edges.

**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Install underlayment on roof sheathing under sheet metal roofing unless otherwise recommended by metal roofing manufacturer.
  - 1. Apply slip sheet over underlayment before installing metal roofing.

- B. Lay out and screw wood battens to wood sheathing screw wood battens to metal deck before installation of sheet metal roofing. Space fasteners as required to resist design uplift, but not more than 18 inches o.c.
- C. Anchor roofing securely in place, with provisions for thermal and structural movement. Install with concealed fasteners unless otherwise indicated.
- D. Separate dissimilar metals with a bituminous coating or polymer-modified, bituminous sheet underlayment.
- E. Coat unpainted back side of roofing with bituminous coating where it will contact treated wood.
- F. Install work with lines and corners of exposed units true and accurate. Form exposed faces flat and free of buckles, excessive waves, and avoidable tool marks, considering temper and reflectivity of metal. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant. Fold back sheet metal to form a hem on concealed side of exposed edges unless otherwise indicated.
  - 1. Install cleats to hold sheet metal panels in position. Attach each cleat with two fasteners to prevent rotation.
  - 2. Nail cleats not more than 12 inches o.c. Bend tabs over nails.
- G. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches, except where pre-tinned surface would show in finished Work.
  - 1. Do not solder metallic-coated steel and aluminum sheet.
  - 2. Do not use torches for soldering. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
- H. Seal joints as shown and as required for leakproof construction. Provide low-slope transverse seams using cleats where backup of moisture may occur.

END OF SECTION 076100

**SECTION 076200 - SHEET METAL FLASHING AND TRIM**

**PART 1 - GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data and Samples.
- B. Comply with SMACNA's "Architectural Sheet Metal Manual." Conform to dimensions and profiles shown unless more stringent requirements are indicated.
- C. Coordinate installation of sheet metal flashing and trim with interfacing and adjoining construction to provide a leakproof, secure, and noncorrosive installation.

**PART 2 - PRODUCTS**

**2.1 SHEET METAL**

- A. Copper: ASTM B 370; Temper H00 or H01, cold rolled, not less than **16 oz./sq. ft.**
- B. Aluminum Sheet: **ASTM B 209 (ASTM B 209M)**, Alloy 3003, 3004, 3105, or 5005, temper suitable for forming and structural performance required, but not less than H14; not less than **0.032 inch (0.8 mm)** thick; and finished as follows:
  - 1. Fluoropolymer Two-Coat System: Manufacturer's standard system with topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight; complying with AAMA 2604.
- C. Stainless-Steel Sheet: ASTM A 240/A 240M, Type 304, with No. 2D finish; not less than **0.016 inch** thick.
- D. Zinc-Tin Alloy-Coated Stainless Steel: ASTM A 240/A 240M, Type 304, dead-soft, fully annealed stainless-steel sheet, coated on both sides with a zinc-tin alloy (50 percent zinc, 50 percent tin); not less than **0.016 inch** thick.
- E. Lead Sheet: ASTM B 749, Type L51121, copper-bearing lead sheet, and minimum thickness of **0.062 inch** except at least **0.094 inch** thick for applications where burning (welding) is involved.

**2.2 FLASHING AND TRIM**

- A. Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of the item indicated.

**2.3 ACCESSORIES**

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation.
- B. Solder for Copper: ASTM B 32, Grade Sn50.
- C. Solder for Stainless Steel: ASTM B 32, Grade Sn60, with acid flux of type recommended by stainless-steel sheet manufacturer.
- D. Solder for Zinc-Tin Alloy-Coated Stainless Steel: ASTM B 32, 100 percent tin.
- E. Solder for Lead: ASTM B 32, Grade Sn50.

- F. Butyl Sealant: ASTM C 1311, solvent-release type, for expansion joints with limited movement.
- G. Asphalt Mastic: SSPC-Paint 12, asbestos free, solvent type.
- H. Roofing Cement: ASTM D 4586, Type I, asbestos free, asphalt based.
- I. Slip Sheet: Rosin-sized paper, minimum 3 lb/100 sq. ft.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Comply with SMACNA's "Architectural Sheet Metal Manual." Allow for thermal expansion; set true to line and level. Install Work with laps, joints, and seams permanently watertight and weatherproof; conceal fasteners where possible.
  - 1. Roof-Edge Flashings: Secure metal flashings at roof edges according to FMG Loss Prevention Data Sheet 1-49 for specified wind zone.
- B. Sealed Joints: Form nonexpansion, but movable, joints in metal to accommodate elastomeric sealant to comply with SMACNA standards.
- C. Fabricate nonmoving seams in sheet metal with flat-lock seams. For metals other than aluminum, tin edges to be seamed, form seams, and solder.
  - 1. Clean surfaces to be soldered, removing oils and foreign matter. Pretin edges of sheets to be soldered to a width of 1-1/2 inches, unless pretinned surface would show in finished Work.
- D. Separation: Separate noncompatible metals or corrosive substrates with a coating of asphalt mastic or other permanent separation.

END OF SECTION 076200

**SECTION 076500 MANUFACTURED COPPER ROOFING SPECIALTIES**

## PART 1 – GENERAL

## 1.1 SUMMARY

- A. Clean and seal copper roof at top of bell tower.
- B. Furnish and install snow guards to match existing.

## 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to

## 1.3 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division-1 Specification Sections.
  - 1. Product data, Specialties, and Accessories: Manufacturer's technical product data, installation instructions and general recommendations for each specified sheet material and fabricated product.
- B. Samples of the following items:
  - 1. 6" or 12" square samples of specified sheet materials to be exposed as finished surfaces.
  - 2. 6" or 12" long samples of factory-fabricated products exposed as finished work. Provide complete with specified factory finish.

## 1.4 PROJECT CONDITIONS

- A. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes.

## PART 2 – PRODUCTS

## 2.1 MATERIALS

- A. Copper: ASTM B 370; temper H00 (cold-rolled) except where temper 060 is required for forming; 16 oz. (0.0216-inch thick) except as otherwise indicated.

## 2.2 MISCELLANEOUS MATERIALS AND ACCESSORIES:

- A. Nailers: cellular plastic; not less than 1-1/2" thick.
- B. Solder: Provide 50 - 50 tin/lead solder (ASTM B 32), with rosin flux.
- C. Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.

- D. Bituminous Coating: SSPC - Paint 12, solvent-type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.
- E. Mastic Sealant: Polyisobutylene; nonhardening, nonskinning, non-drying, nonmigrating sealant.
- F. Elastomeric Sealant: Generic type recommended by manufacturer of copper and fabricator of components being sealed and complying with requirements for joint sealants as specified in SECTION -07 92 00 "JOINT SEALANTS."
- G. Epoxy Seam Sealer: 2-part noncorrosive metal seam cementing compound, recommended by copper manufacturer for nonmoving joints including riveted joints.
- H. Sheet Copper Accessories: Provide sheet copper clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gauge required for performance.
- I. Gutter and Conductor-Head Guards: 20-gauge bronze mesh or fabricated units, with selvaged edges and noncorrosive fasteners. Select materials for compatibility with gutters and downspouts.
- J. Roofing Cement: ASTM D 2822, asphaltic.

### 2.3 FABRICATED UNITS

- A. General Sheet Copper Fabrication: Provide materials of standard factory fabrication to greatest extent possible. Comply with details shown and with applicable requirements of CDA "Copper in Architecture Handbook" and other recognized industry practices.
- B. Fabricate for waterproof and weather-resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage, or deterioration of the work. Form work to fit substrates.
- C. Comply with material manufacturer instructions and recommendations for forming material. Form exposed sheet copper work without excessive oil-canning, buckling, and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.
- D. Seams: Fabricate nonmoving seams in sheet copper with flat-lock seams. Tin edges to be seamed, form seams, and solder. Rivet joints for additional strength where required.
- E. Expansion Provisions: Where lapped or bayonet-type expansion provisions in work cannot be used or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- F. Sealant Joints: Where movable, nonexpansion type joints are indicated or required for proper performance of work, form copper to provide for proper installation of elastomeric sealant, in compliance with CDA standard details.

- G. Separations: Provide for separation of metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.
- H. Snow guards: Prefabricated, noncorrosive units designed to use with slate roofing and complete with predrilled holes or hooks for anchoring.

### PART 3 EXECUTION

#### 3.1 INSTALLATION REQUIREMENTS

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations and with CDA "Copper in Architecture Handbook".
- B. Anchor units of work securely in place by methods indicated, providing for thermal expansion of copper units; conceal fasteners where possible, and set units true to line and level as indicated.
- C. Install work with laps, joints, and seams that will be permanently watertight and weatherproof.
- D. Underlayment: Where units are to be installed directly on cementitious or wood substrates, install a slip sheet of red rosin paper on a course of asphalt saturated felt.
- E. Bed flanges of work in a thick coat of bituminous roofing cement where required for waterproof performance.
- F. Nail flanges of expansion joint units to curb nailers, at maximum spacing of 6" O.C. Fabricate seams at joints between units with minimum 3" overlap, to form a continuous, waterproof system.

#### 3.2 CLEANING AND PROTECTION

- A. Clean exposed copper surfaces, removing substances that might cause corrosion of copper or deterioration of finishes.
- B. Protection: Protect flashings and sheet copper work during construction to ensure that work will be without damage or deterioration other than natural weathering at time of Completion.

END OF SECTION



**SECTION 079200 - JOINT SEALANTS**

**PART 1 - GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Submittals: Product Data and color Samples.
- B. Environmental Limitations: Do not proceed with installation of joint sealants when ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 40 deg F (4.4 deg C).

**PART 2 - PRODUCTS**

**2.1 JOINT SEALANTS**

- A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions.
- B. Sealant for Use in Building Expansion Joints:
  - 1. Single-component, neutral-curing silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; Uses T, M, and O, with the additional capability to withstand 50 percent movement in both extension and compression for a total of 100 percent movement.
- C. Sealant for General Exterior Use Where Another Type Is Not Specified, One of the Following:
  - 1. Single-component, nonsag polysulfide sealant, ASTM C 920, Type S; Grade NS; Class 12-1/2; Uses NT, M, G, A, and O.
  - 2. Single-component, neutral-curing silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; Uses T, NT, M, G, A, and O.
  - 3. Single-component, nonsag urethane sealant, ASTM C 920, Type S; Grade NS; Class 25; and Uses NT, M, A, and O.

**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Comply with ASTM C 1193.
- B. Comply with ASTM C 919 for use of joint sealants in acoustical applications.

END OF SECTION 079200

**SECTION 099100 - PAINTING**

**PART 1 - GENERAL**

**1.1 SECTION REQUIREMENTS**

- A. Summary: Paint exposed surfaces, new and existing, unless otherwise indicated.
  - 1. Paint the back side of access panels.
  - 2. Back prime exterior woodwork.
- B. Submittals:
  - 1. Product Data and samples.
- C. MPI Standards:
  - 1. Products: Complying with MPI standards indicated and listed in "MPI Approved Products List."
  - 2. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems indicated.
- D. Mockups: Full-coat finish Sample of each type of coating, color, and substrate, applied where directed.
- E. Extra Materials: Deliver to Owner **1 gal.** of each color and type of finish coat paint used on Project, in containers, properly labeled and sealed.

**PART 2 - PRODUCTS**

**2.1 PAINT**

- A. Material Compatibility: Provide materials that are compatible with one another and with substrates.
  - 1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. Colors: As selected by Owner.

**PART 3 - EXECUTION**

**3.1 PREPARATION**

- A. Remove storm windows, hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.
- B. Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

**3.2 APPLICATION**

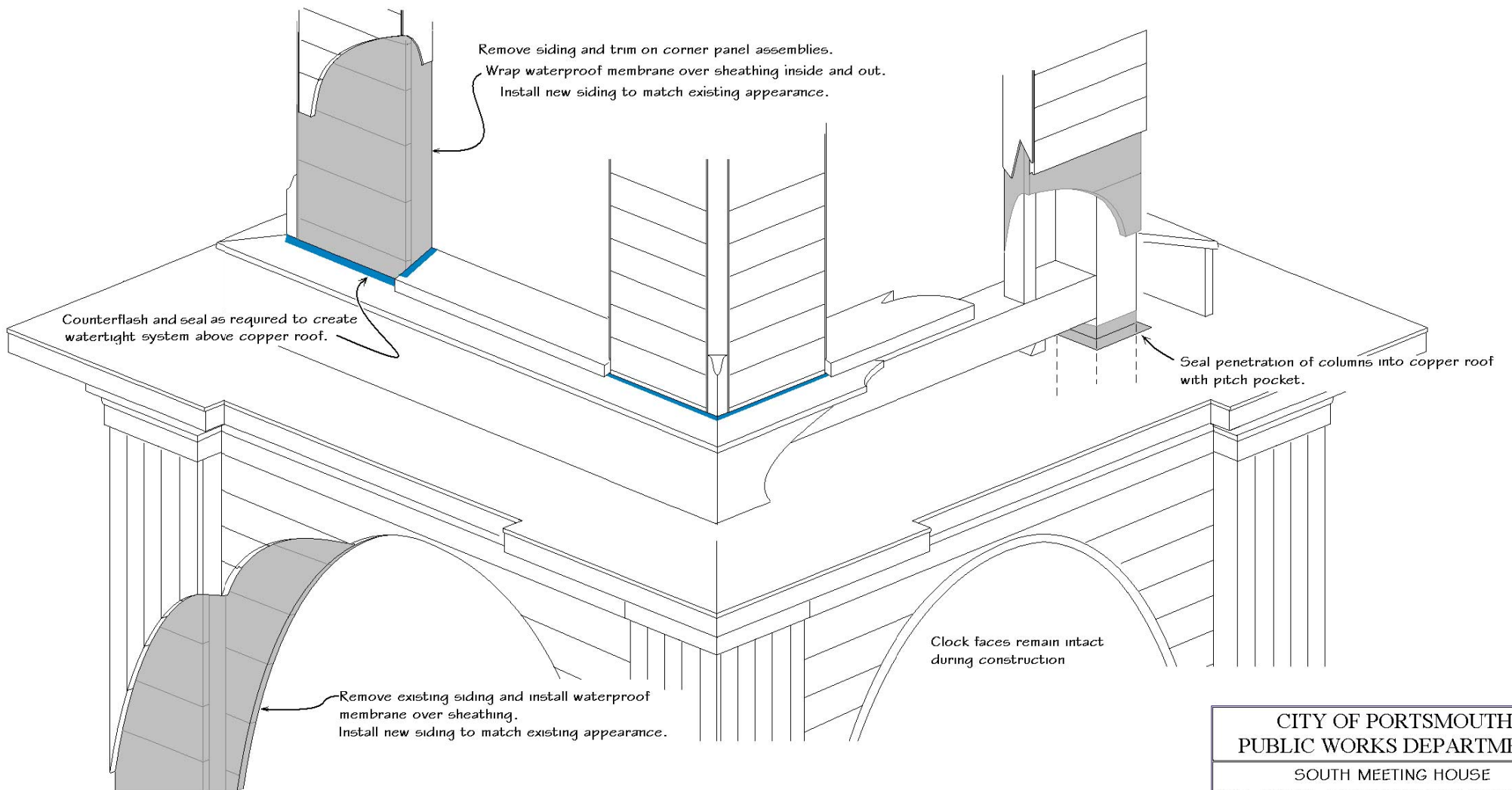
- A. Apply paints according to manufacturer's written instructions.
  - 1. Use brushes only for exterior painting and where the use of other applicators is not practical.

- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
  - 1. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- C. Apply stains and transparent finishes to produce surface films without color irregularity, cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other imperfections. Use multiple coats to produce a smooth surface film of even luster.

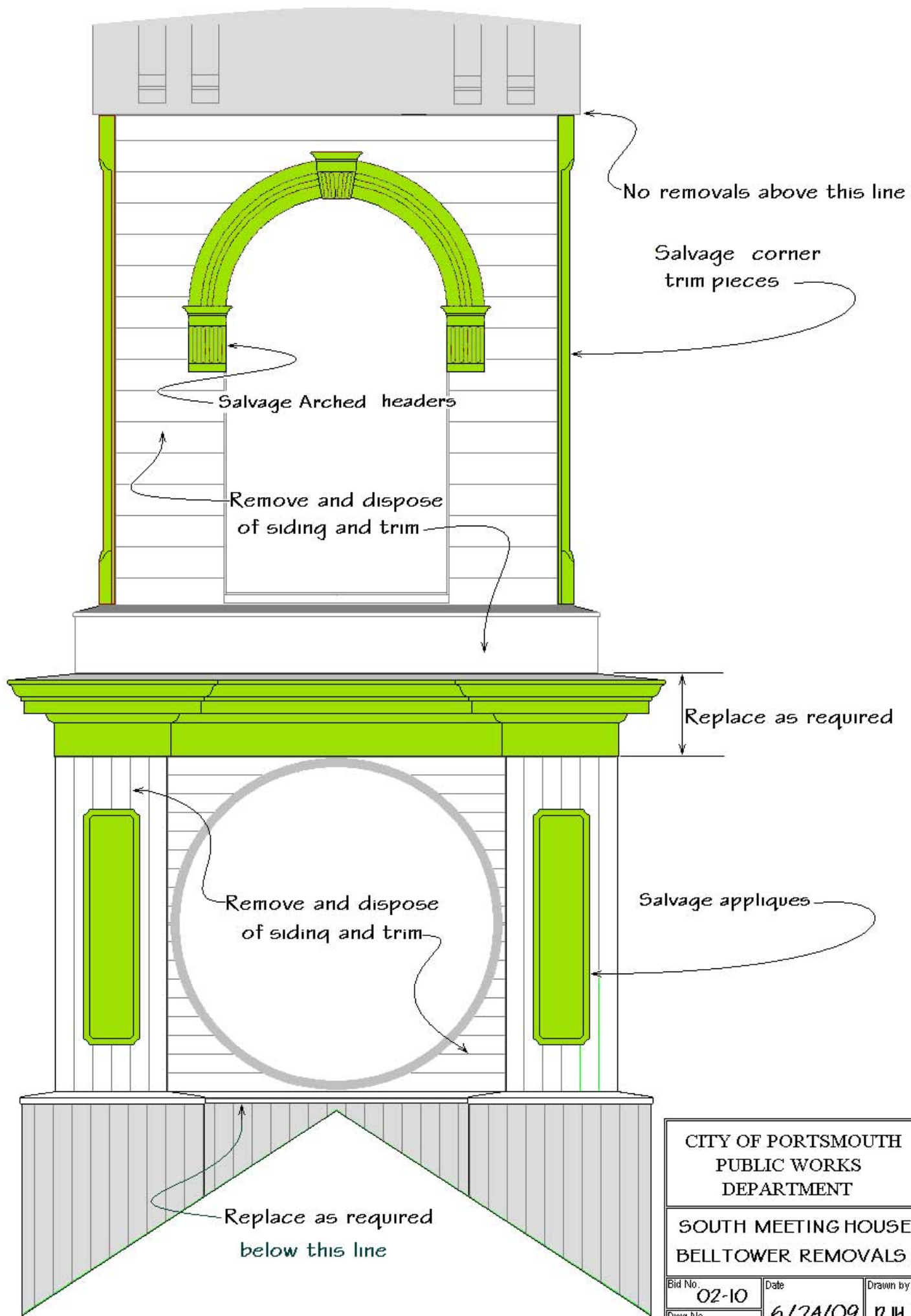
### 3.3 EXTERIOR PAINT APPLICATION SCHEDULE

- A. Dressed Lumber: Including architectural woodwork.
  - 1. Semigloss Latex: One coat over primer: MPI EXT 6.3L.
- B. Wood Panel Products: Including fascias and soffits.
  - 1. Semigloss Latex: One coat over primer: MPI EXT 6.4K.
- C. PVC Trim:
  - 1. Semigloss Latex: One coat over solvent-based bonding primer: MPI EXT 6.8A.

END OF SECTION 099100



CITY OF PORTSMOUTH PUBLIC WORKS DEPARTMENT			
SOUTH MEETING HOUSE BELL TOWER AND CLOCK FACE FLASHINGS			
BID NO. 02-10	DATE 7/01/09	DWG. NO. 2 of 2	DRAWN BY PJH



CITY OF PORTSMOUTH PUBLIC WORKS DEPARTMENT		
SOUTH MEETING HOUSE BELL TOWER REMOVALS		
Bid No.	Date	Drawn by
02-10	6/24/09	DJH
Dwg. No.	1 of 2	