BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

REQUEST FOR PROPOSALS

Item Description: **ROOF REPLACEMENT AT BRANCH AVE AND NORTH MAIN ST FIRE STATIONS**

Procurement/MinuteTraq #: 52259

Date to be opened: 3/9/2026

Issuing Department: Public Property

QUESTIONS

- Please direct questions related to the bidding process, how to fill out forms, and how to submit a bid (Pages 1-8) to the Purchasing Department.
  - Email: purchasing@providenceri.gov
    - Please use the subject line "**Solicitation Question**"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 9-13) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
  - Email: gdiaz@providenceri.gov
    - Please use subject line "**MBE WBE Forms**"
- Please direct questions relative to the specifications outlined (beginning on page 14) to the issuing department's subject matter expert:
  - Name: Dan Kittridge
  - Title: Capital Improvements Projects Manager
  - Email Address: dkittridge@providenceri.gov

Pre-bid Conference

There will be a Mandatory Pre-Bid Conference
Date of Pre-Bid Conference: 2/23/26 Time: 10:00 am
Location: North Main St Fire Station, 151 North Main St, Providence, RI

Deadline for questions submissions:
Questions are due Monday, March 2, 2026 by 5 pm.

BOARD OF CONTRACT AND SUPPLY
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INSTRUCTIONS FOR SUBMISSION

Meeting Date: 3/9/2026

Bids may be submitted up to **2:15 P.M.** on the above meeting date at the **Department of the City Clerk. Room 311, City Hall. 25 Dorrance Street, Providence.** At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in Conference Room 305, on the 3rd floor of City Hall.

- Bidders must submit **2 copies** of their bid in sealed envelopes or packages labeled with the captioned **Item Description** and the **City Department to which the solicitation and bid are related and must include the company name and address on the envelope as well**. (On page 1).
- If required by the Department, please keep the original bid bond and check in only one of the envelopes.
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this solicitation. If you have an old version of a form do not recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

Board of Contract and Supply
Department of the City Clerk – City Hall, Room 311, 3rd Floor
25 Dorrance Street
Providence, RI 02903

****PLEASE NOTE: This bid may include details regarding information that you will need to provide (such as proof of licenses) to the issuing department before the formalization of an award.**

This information is NOT requested to be provided in your initial bid by design.

All bids submitted to the City Clerk become public record. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record. The City has made a conscious effort to avoid the posting of sensitive information on the City's Open Meetings Portal, by requesting that such sensitive information be submitted to the issuing department only at their request.

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BID PACKAGE CHECKLIST

Digital forms are available in the City of Providence Purchasing Department Office or online at **http://www.providenceri.gov/purchasing/how-to-submit-a-bid/**

The bid package **MUST** include the following, in this order:

- Bid Form 1: Bidder's Blank as the cover page/ 1st page (s*ee page **6** of this document*)
- Bid Form 2: Certification of Bidder as 2nd page (s*ee page **7** of this document*)
- Bid Form 3: Certificate Regarding Public Records (s*ee page **8** of this document)*
- Bid Form 4: Affidavit of City Vendor (*see pages **9 and 10** of this document*)
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. S*ee forms and instructions enclosed (pages **11-12**) or on: https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/*

***Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of ALL required signatures. Forms without all required signatures will be considered incomplete.**

- Bidder's Proposal/Packet: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, *if requested* (a*s indicated on page 5 of this document under "Bid Terms")*
- Addenda (If Any) - Must Be Acknowledged on Bid Form
- Product Information for Items Submitted as 'Or Equal' to Specified Materials
- City of Providence CDBG Program Federal Construction Contract Provisions for Contracts over $100,000 (**Attachment B**): provide filled-out forms with bid.
    - **Forms must also be provided for each and every subcontractor** providing labor on the project.

All of the above listed documents are REQUIRED. (With the exception of financial assurances, which are only required if specified on page 5.)

******Failure to meet specified deadlines, follow specific submission instructions, or enclose all required documents with all applicable signatures will result in disqualification, or in an inability to appropriately evaluate bids.***

BOARD OF CONTRACT AND SUPPLY
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NOTICE TO VENDORS

1. The Board of Contract and Supply will make the award to the lowest qualified and responsible bidder.
2. In determining the lowest responsible bidder, cash discounts based on preferable payment terms will not be considered.
3. Where prices are the same, the Board of Contract and Supply reserves the right to award to one bidder, or to split the award.
4. No proposal will be accepted if the bid is made in collusion with any other bidder.
5. Bids may be submitted on an "equal in quality" basis. The City reserves the right to decide equality. Bidders must indicate brand or the make being offered and submit detailed specifications if other than brand requested.
6. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with the Rhode Island Business Corporation Act, RIGL Sec. 7-1.2-1401, et seq.
7. The Board of Contract and Supply reserves the right to reject any and all bids.
8. Competing bids may be viewed in person at the Department of the City Clerk, City Hall, Providence, immediately upon the conclusion of the formal Board of Contract and Supply meeting during which the bids were unsealed/opened. Bids may also be accessed electronically on the internet via the City's Open Meetings Portal.
9. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
10. In case of error in the extension of prices quoted, the unit price will govern.
11. The contractor will **NOT** be permitted to: a) assign or underlet the contract, or b) assign either legally or equitably any monies or any claim thereto without the previous written consent of the City Purchasing Director.
12. Delivery dates must be shown in the bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.
13. A certificate of insurance will normally be required of a successful vendor.
14. For many contracts involving construction, alteration and/or repair work, State law provisions concerning payment of prevailing wage rates apply (RIGL Sec. 37-13-1 et seq.)
15. No goods should be delivered, or work started without a Purchase Order.
16. **Submit 2 copies of the bid to the City Clerk, unless the specification section of this document indicates otherwise.**
17. Bidder must certify that it does not unlawfully discriminate on the basis of race, color, national origin, gender, gender identity or expression, sexual orientation and/or religion in its business and hiring practices and that all of its employees are lawfully employed under all applicable federal, state and local laws, rules and regulations. (See Bid Form 2.)

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BID TERMS

1. Financial assurances may be required in order to be a successful bidder for Commodity or Construction and Service contracts. If either of the first two checkboxes below is checked, the specified assurance **must accompany** a bid, or the bid will not be considered by the Board of Contract and Supply. The third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to be awarded the contract.

   a) ☐ A certified check for **$**_____ must be deposited with the City Clerk as a guarantee that the Contract will be signed and delivered by the bidder.

   b) ☒ A bid bond in the amount of **five** per centum (5%) of the proposed total price, must be deposited with the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the amount of such bid bond shall be retained for the use of the City as liquidated damages in case of default. Any person signing a bid bond as an attorney-in-fact shall include with the bid bond an original, or a photocopy or facsimile of an original, power of attorney.

   c) ☒ A performance and payment bond with a satisfactory surety company will be posted by the bidder in a sum equal to one hundred per centum (100%) of the awarded contract.

   d) ☐ No financial assurance is necessary for this item.

2. Awards will be made within **ninety (90) days of bid opening**. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
3. Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and Acts of God.

The following entry applies only for COMMODITY BID TERMS:

4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts.

The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:

5. Only one shipping charge will be applied in the event of partial deliveries for blanket or term contracts.
6. Prior to commencing performance under the contract, the successful bidder shall attest to compliance with the provisions of the Rhode Island Worker's Compensation Act, RIGL 28-29-1, et seq. If exempt from compliance, the successful bidder shall submit a sworn Affidavit by a corporate officer to that effect, which shall accompany the signed contract.
7. Prior to commencing performance under the contract, the successful bidder shall, submit a certificate of insurance, in a form and in an amount satisfactory to the City.

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BID FORM 1: Bidders Blank

1. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
2. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
3. The price or prices proposed should be stated both in **WRITING** and in **FIGURES**, and any proposal not so stated may be rejected. **Contracts exceeding twelve months must specify annual costs for each year.**
4. Bids **SHOULD BE TOTALED** so that the final cost is clearly stated (unless submitting a unit price bid), however **each item should be priced individually**. Do not group items. Awards may be made on the basis of ***total*** bid or by ***individual items***.
5. All bids **MUST BE SIGNED IN INK.**

Name of Bidder (Firm or Individual):

Contact Name:

Business Address:

Business Phone #:

Contact Email Address:

Agrees to bid on (Write the "Item Description" here):

If the bidder's company is based in a state *other than Rhode Island*, list name and contact information for a local agent for service of process that ***is located within Rhode Island***

Delivery Date (if applicable):

Name of Surety Company (if applicable):

Total Amount in Writing*:

Total Amount in Figures*:

If you are submitting a unit price bid, please insert "Unit Price Bid"

Use additional pages if necessary for additional bidding details.

Signature of Representation

Title

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BID FORM 2: Certification of Bidder
(Non-Discrimination/Hiring)

Upon behalf of_____ (Firm or Individual Bidding),

I,_____(Name of Person Making Certification),

being its_____(Title or "Self"), hereby certify that:

1. Bidder does not unlawfully discriminate on the basis of race, color, national origin, gender, sexual orientation and/or religion in its business and hiring practices.
2. All of Bidder's employees have been hired in compliance with all applicable federal, state and local laws, rules and regulations.

I affirm by signing below that I am duly authorized on behalf of Bidder, on

this_____day of_____20____.

_____

Signature of Representation

_____

Printed Name

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BID FORM 3: Certificate Regarding Public Records

Upon behalf of_____ (Firm or Individual Bidding),

I,_____(Name of Person Making Certification),

being its_____(Title or "Self"), hereby certify an

understanding that:

1. All bids submitted in response to Requests for Proposals (RFP's) and Requests for Qualification (RFQ's), documents contained within, and the details outlined on those documents become public record upon receipt by the City Clerk's office and opening at the corresponding Board of Contract and Supply (BOCS) meeting.
2. The Purchasing Department and the issuing department for this RFP/RFQ have made a conscious effort to request that sensitive/personal information be submitted directly to the issuing department and only at request if verification of specific details is critical the evaluation of a vendor's bid.
3. The requested supplemental information may be crucial to evaluating bids. Failure to provide such details may result in disqualification, or an inability to appropriately evaluate bids.
4. If sensitive information that has not been requested is enclosed or if a bidder opts to enclose the defined supplemental information prior to the issuing department's request in the bidding packet submitted to the City Clerk, the City of Providence has no obligation to redact those details and bears no liability associated with the information becoming public record.
5. The City of Providence observes a public and transparent bidding process. Information required in the bidding packet may not be submitted directly to the issuing department at the discretion of the bidder in order to protect other information, such as pricing terms, from becoming public. Bidders who make such an attempt will be disqualified.

I affirm by signing below that I am duly authorized on behalf of Bidder, on

this_____day of_____20___.

_____

Signature of Representation

_____

Printed Name

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BID FORM 4: Affidavit of City Vendor

Per our Code of Ordinances Sec. 21.-28.1 (e), this form applies to a) the business, b) any political action committee whose name includes the name of the business, c) all persons holding ten (10) percent or greater equity interest or five thousand dollars ($5,000.00) or greater cash value interest in the business at any time during the reporting period, d) all executive officers of the business entity, e) any spouse or dependent child of any individual identified in a) though d) above.

Executive officers who are not residents of the state of Rhode Island are exempted from this requirement.

Per R.I.G.L. § 36-14-2, "Business" means a sole proprietorship, partnership, firm, corporation, holding company, joint stock company, receivership, trust, or any other entity recognized in law through which business for profit or not for profit is conducted.

Name of the person making this affidavit: _____

Position in the "Business" _____

Name of Entity _____

Address: _____

Phone number: _____

The number of persons or entities in your entity that are required to report under Sec. 21.-28.1 (e): _____

Read the following paragraph and answer one of the options:

Within the 12 month period preceding the date of this bid submission with the City of Providence, or with respect to the contracts that are not in writing within the 12 month period preceding the date of notification that the contract has reached the $100,000 threshold, have you made campaign contributions within a calendar year to (please list all persons or entities required under Sec. 21.-28.1 (e)).

a. Members of the Providence City Council? ☐ Yes ☐ No
   - If Yes, please complete the following:
     Recipient(s) of the Contribution:
     Contribution Date(s): Contribution Amount(s):

b. Candidates for election or reelection to the Providence City Council? ☐ Yes ☐ No
   - If Yes, please complete the following:
     Recipient(s) of the Contribution:
     Contribution Date(s): Contribution Amount(s):

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c. The Mayor of Providence? ☐ Yes ☐ No
- If Yes, please complete the following:
  Recipient(s) of the Contribution:
  Contribution Date(s): Contribution Amount(s):

d. Candidates for election or reelection to the office of Mayor of Providence? ☐ Yes ☐ No
- If Yes, please complete the following:
  Recipient(s) of the Contribution:
  Contribution Date(s): Contribution Amount(s):

_____
Signed under the pains and penalties of perjury.

_____
Position

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MBE/WBE Participation Plan

Please complete separate forms for each MBE/WBE subcontractor/supplier to be utilized on the solicitation.

Bidder's Name:	
Bidder's Address:	
Point of Contact:	
Telephone:	
Email:	
Procurement #:	
Project Name:	
Which one of the following describes your business' status in terms of Minority and/or Woman Owned Business Enterprise certification with the State of Rhode Island? (Check all that apply).	☐ MBE ☐ WBE ☐ Neither MBE nor WBE

This form is intended to capture commitments between the prime contractor/vendor and MBE/WBE subcontractors and suppliers, including a description of the work to be performed and the percentage of the work as submitted to the prime contractor/vendor. Please note that all MBE/WBE subcontractors/suppliers must be certified by the Office of Diversity, Equity and Opportunity at the time of bid. The MBE/WBE Directory can be found here. Please visit, the City's MBE/WBE page for details of the program (e.g. instructions and requirements).

- **Nonprofit organizations are not required to complete the rest of this form.**
- **Construction projects unable to identify subcontractors prior to bid submission (e.g. Design Build) are required to provide updates to the MBE/WBE Outreach Office**

Name of Subcontractor/Supplier:					
Type of RI Certification:	☐ MBE ☐ WBE ☐ Neither				
Address:					
Point of Contact:					
Telephone:					
Email:					
Detailed Description of Work to Be Performed by Subcontractor or Materials to be Supplied by Supplier Per the Scope of Work provided in the RFP					
Total Contract Value ($):		Subcontract Value ($):		Participation Rate (%):	
Anticipated Date of Performance:					

I certify under penalty of perjury that the forgoing statements are true and correct.

Prime Contractor/Vendor Signature	**Title**	**Date**
Subcontractor/Supplier Signature	**Title**	**Date**

***If you did not meet the 20% MBE/WBE combined participation goal, submit a Waiver Request Form.**

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MBE/WBE Waiver Request Form

Fill out this form only if you did not meet the 20% MBE/WBE participation goal.
State-certified MBE or WBE Prime Bidders are NOT REQUIRED to fill out this form.

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at gdiaz@providenceri.gov, for review **prior to bid submission.** This waiver applies only to the current bid which you are submitting to the City of Providence and does not apply to other bids your company may submit in the future. **In case a waiver is needed, City Department Directors should not** recommend a bidder for an award if this form is not included, absent or is not signed by the city of Providence MBE/WBE director**.**

Prime Bidder: _____ Contact Email and Phone_____
Company Name, Address: _____ Trade _____
Project /Item Description (as seen on RFP):

_____

_____

To receive a waiver, you must list the certified MBE and/or WBE companies you contacted, the name of the primary individual with whom you interacted, and the reason the MBE/WBE company could not participate on this project.

MBE/WBE Company Name	Individual's Name	Company Name	Why did you choose not to work with this company?

I acknowledge the City of Providence's goal of a combined MBE/WBE participation is 20% of the total bid value. I am requesting a waiver of _____ % MBE/WBE (20% minus the value of **Box F** on the Subcontractor Disclosure Form). If an opportunity is identified to subcontract any task associated with the fulfillment of this contract, a good faith effort will be made to select MBE/WBE certified businesses as partners.

_____	_____	_____
Signature of Prime Contractor / or Duly Authorized Representative	Printed Name	Date Signed
_____	_____	_____
Signature of City of Providence MBE/WBE Outreach Director / or Duly Authorized Representative	Printed Name of City of Providence MBE/WBE Outreach Director	Date Signed

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BID PACKAGE SPECIFICATIONS

Background Information

The City of Providence is seeking quotes from responsible vendors for replacement of the roof at two fire stations: 10 Branch Ave and 151 N Main St. Both buildings' roofs are well past their design life and have been leaking for years, causing damage to finishes and generally lowering the quality of life for station staff. Both stations were originally constructed with flat concrete roof decks. Approximately 35 years ago, rather than expend considerable funds to replace the existing flat roofs and repair existing roof rainwater drain systems, the City built new pitched wooden roofs over the existing concrete. Both are now well past their usable life and in both cases existing wood structural members are showing damage and decay, necessitating a full replacement rather than just replacing sheathing and shingles. The City has Aharonian & Associates to develop a new roof design, the documents from which form the basis of design.

Scope of Work

Vendors are requested to provide quotes for replacement of the roof at two fire stations: Branch Ave and N Main St. The roof area is at Branch Ave approximately 6000 sq ft (see drawings), including a main pitched wood roof and a smaller flat patio roof deck. The roof area at North Main St is approximately 7000 sq ft (see drawings) and consists entirely of the main pitched wood roof. The city seeks to replace the current roofing system with a new, long life roofing system which will be durable and require minimal maintenance. This work will include the following items, as laid out in the attached drawing package and specifications including, but not limited to:

- Demolition of the existing wooden roof at each station down to the original concrete deck,
- Installation of a new roofing system including
    - structural lumber
    - sheathing
    - shingles
    - flashing
    - insulation
    - sealing around all penetrations
    - a new pedestal based patio roof deck at Branch Ave
- installation of a new roof hatch to improve future roof access for inspection
- installation of new gutters and downspouts

The total scope of work and requirements for work performed are documented in the attached drawing package and specifications.

The fire stations will remain active during the period of construction. The winning bidder will coordinate this work with the owner to minimize the impact to the staff at the stations. The contractor will be responsible for timely removal of all construction debris and demolished materials from the sites. Hazardous materials testing did not identify any asbestos, lead, or other dangerous materials in the existing roof systems except for a small amount of asbestos in the sealants and putties around existing roof penetrations. State approved abatement plans for this material are attached.

A pre-bid conference will be held on February 23, 2026 (two weeks after advertisement) at 10 am on site for prospective bidders to inspect the area and ask questions of the design team and the City's representative.

Attachments

As a part of the request for proposal package, attached to this document are A) the project drawing package, B) the project specifications, and C) approved asbestos abatement plans.

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PROVISIONS OF THIS PROJECT

- Upon the Issuance of the Award from the Board of Contract – the City shall issue a Contract to be executed by the City and the vendor incorporating the bid specifications. All Provisions of the Specifications are binding.
- Any Permits Required by the City of Providence and/or State of Rhode Island Shall be Obtained by the Vendor – Permit Fees by the City of Providence Shall be Waived – the State ADA Fee Must be Paid
- This project qualifies for prevailing wages per the Davis Bacon Act (HUD). Federal certified payrolls will need to be submitted to the owner for all hours worked on site for this project. The Wage Decision for this project shall be as recorded on the Bid Date and is available at https://sam.gov/content/wage-determinations. Weekly Certified payrolls must be Submitted with Pay Requests Including Monthly Utilization Form
- An Insurance Certificate Shall be Submitted to the City Within 10 Days of Award
- A Copy of the Vendors Contractor's License Must be Submitted within 10 Days of Award
- All On-Site Personnel Shall be Licensed (If Required) and Shall have Proof of All Licenses Required by the State of Rhode Island to Perform the Work Required
- Pay Requests Must be Submitted on Approved AIA Billing Documents (City will Provide if Needed)
- All Subcontractors Shall be Listed on the Bid Form – All Insurance & Payroll Requirements Apply
    - General Contractor Shall be the Insurance Certificate Holder and the City Shall be Named as 'Additionally Insured' with Respect to Liability Insurance
- A Submittal Log Must be Submitted within 10 Days of Award
- For all contracts with the City of Providence over $100,000, contractors must have a registered apprentice program, per City of Providence Code of Ordinances Chapter 21 Art. II Section 21-28.1 c(1) and (2). This ordinance outlines requirements for utilizing not less than 15% of total hours worked by apprentices. The City may lower this percentage only if it determines in writing that compliance is not feasible or that it would be unduly cost prohibitive to the project.

CLOSE OUT DOCUMENTS

- Prior to Final Payment the Vendor Shall Provide the Following:
    - Copies of Permits Signed off and Approved (If Any)
    - Operating Manuals and Warranties Shall Be Transferred and/or Delivered
    - Full and Completed As-Built Drawings Shall be Submitted for Approval
    - Training Shall be Provided to City Personnel (If Required)
    - Certification by Manufacturers Representative (If Required)

QUALIFICATIONS

Qualifications will be evaluated on the basis of similar project experience for:

a. Completion of similar projects within the last 5 years.
b. Size and dollar value of similar completed projects.
c. Contractor's performance with similar projects. (references will be checked)
d. Relevant experience of individuals assigned to the project.

Questions regarding this bid package shall be submitted via e-mail to **The Providence Purchasing Department** at purchasing@providenceri.gov and **Dan Kittridge, Capital Improvements Project Manager** at dkittridge@providenceri.gov , no later than 12:00pm on Monday, March 2, 2026. Dan Kittridge is the project contact and can be reached at 401-473-8418

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SUPPLEMENTAL INFORMATION

If the issuing department for this RFP determines that your firm's bid is best suited to accommodate their need, you will be asked to provide proof of the following prior to formalizing an award.

An inability to provide the outlined items at the request of the department may lead to the disqualification of your bid.

This information is <u>NOT</u> requested to be provided in your initial bid that you will submit to the City Clerk's office by the "date to be opened" noted on page 1. This list only serves as a list of items that your firm should be ready to provide on request.

<u>All bids submitted to the City Clerk become public record</u>. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record.

You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- Proof of Insurance.
- Certificate of Good Standing with the Rhode Island Secretary of State.
- Contractor Licenses

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CITY OF PROVIDENCE STANDARD TERMS & CONDITIONS

1. The terms "you" and "your" contained herein refer to the person or entity that is a party to the agreement with the City of Providence ("the City") and to such person's or entity's employees, officers, and agents.
2. The Request For Proposals ("RFP") and these Standard Terms and Conditions together constitute the entire agreement of the parties ("the Agreement") with regard to any and all matters. By your submission of a bid proposal or response to the City's RFP, you accept these Standard Terms & Conditions and agree that they supersede any conflicting provisions provided by bid or in any terms and conditions contained or linked within a bid and/or response. Changes in the terms and conditions of the Agreement, or the scope of work thereunder, may only be made by a writing signed by the parties.
3. You are an independent contractor and in no way does this Agreement render you an employee or agent of the City or entitle you to fringe benefits, workers' compensation, pension obligations, retirement or any other employment benefits. The City shall not deduct federal or state income taxes, social security or Medicare withholdings, or any other taxes required to be deducted by an employer, and this is your responsibility to yourself and your employees and agents.
4. You shall not assign your rights and obligations under this Agreement without the prior written consent of the City. Any assignment without prior written consent of the City shall be voidable at the election of the City. The City retains the right to refuse any and all assignments in the City's sole and absolute discretion.
5. Invoices submitted to the City shall be payable sixty (60) days from the time of receipt by the City. Invoices shall include support documentation necessary to evidence completion of the work being invoiced. The City may request any other reasonable documentation in support of an invoice.

   The time for payment shall not commence, and invoices shall not be processed for payment, until you provide reasonably sufficient support documentation. In no circumstances shall the City be obligated to pay or shall you be entitled to receive interest on any overdue invoice or payment. In no circumstances shall the City be obligated to pay any costs associated with your collection of an outstanding invoice.
6. For contracts involving construction, alteration, and/or repair work, the provisions of applicable state labor law concerning payment of prevailing wage rates (R.I. Gen. Laws §§ 37-13-1 et seq., as amended) and the City's First Source Ordinance (Providence Code of Ordinances §§ 21-91 et seq., as amended) apply.
7. With regard to any issues, claims, or controversies that may arise under this Agreement, the City shall not be required to submit to dispute resolution or mandatory/binding arbitration. Nothing prevents the parties from mutually agreeing to settle any disputes using mediation or non-binding arbitration.
8. To the fullest extent permitted by law, you shall indemnify, defend, and hold harmless the City, its employees, officers, agents, and assigns from and against any and all claims, damages, losses, allegations, demands, actions, causes of action, suits, obligations, fines, penalties, judgments, liabilities, costs and expenses, including but not limited to attorneys' fees, of any nature whatsoever arising out of, in connection with, or resulting from the performance of the work provided in the Agreement.
9. You shall maintain throughout the term of this Agreement the insurance coverage that is required by the RFP or, if none is required in the RFP, insurance coverage that is considered in your industry to be commercially reasonable, and you agree to name the City as an additional insured on your general liability policy and on any umbrella policy you carry.
10. The City shall not subject itself to any contractual limitations on liability. The City shall have the time permitted within the applicable statute of limitations, and no less, to bring or assert any and all causes of action, suits, claims or demands the City may have arising out of, in connection with, or resulting from the performance of the work provided in the Agreement, and in no event does the City agree to limit your liability to the price of the Agreement or any other monetary limit.

11. The City may terminate this Agreement upon five (5) days' written notice to you if you fail to observe any of the terms and conditions of this Agreement, or if the City believes your ability to perform the terms and conditions of this Agreement has been materially impaired in any way, including but in no way limited to loss of insurance coverage, lapsing of a surety bond, if required, declaration of bankruptcy, or appointment of a receiver. In the event of termination by the City, you shall be entitled to just and equitable compensation for any satisfactory work completed and expenses incurred up to the date of termination.
12. Written notice hereunder shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the entity for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known by the party providing notice.
13. In no event shall the Agreement automatically renew or be extended without a writing signed by the parties.
14. You agree that products produced or resulting from the performance of the Agreement are the sole property of the City and may not be used by you without the express written permission of the City.
15. For any Agreement involving the sharing or exchange of data involving potentially confidential and/or personal information, you shall comply with any and all state and/or federal laws or regulations applicable to confidential and/or personal information you receive from the City, including but not limited to the Rhode Island Identity Theft Protection Act, R.I. Gen. Laws § 11-49.3-1, during the term of the Agreement. You shall implement and maintain appropriate physical, technical, and administrative security measures for the protection of, and to prevent access to, use, or disclosure of, confidential and/or personal information. In the event of a breach of such information, you shall notify the City of such breach immediately, but in no event later than twenty-four (24) hours after discovery of such breach.
16. The Agreement is governed by the laws of the State of Rhode Island. You expressly submit yourself to and agree that any and all actions arising out of, in connection with, or resulting from the performance of the Agreement or relationship between the parties shall occur solely in the venue and jurisdiction of the State of Rhode Island or the federal court located in Rhode Island.
17. The failure of the City to require performance of any provision shall not affect the City's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.
18. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, in any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and each term and provision shall be valid and enforceable to the fullest extent permitted by law.

Project Drawings

PROJECT DESIGN BY:

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CITY OF PROVIDENCE
FIRE DEPARTMENT

ROOF REPLACEMENT AT:

- **FIRE STATION #4**
  10 BRANCH AVENUE 02904

- **FIRE STATION #10**
  151 NORTH MAIN STREET 02903

JANUARY 14, 2026

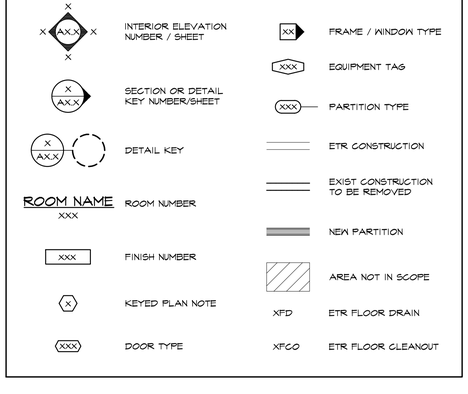
FOR CONSTRUCTION

INDEX OF DRAWINGS

ABBREVIATIONS INDEX

&	AND
@	AT
A/C	AIR CONDITIONING
AF	ABOVE FLOOR
ALUM	ALUMINUM
ALT	ALTERNATIVE
APPROX	APPROXIMATE
BD	BOARD
BG	BELOW GRADE
BLDG	BUILDING
BM	BEAM
BSMT	BASEMENT
BTWN	BETWEEN
BOT	BOTTOM
C/L	CENTER LINE
CT	CERAMIC TILE
CLG	CEILING
CLO	CLOSET
CM	CONSTRUCTION MGR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CONSTR	CONSTRUCTION
DEPT	DEPARTMENT
DTL	DETAIL
DIA/Ø	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EXIST	EXISTING
EXT	EXTERIOR
FCB	FIBER CEMENT BOARD
FD	FLOOR DRAIN
FIN	FINISH
FL	FLOOR
FO	FACE OF
FR	FIRE RETARDANT
FT	FOOT
FTB	FLOOR TILE BASE
FURN	FURNITURE
GA	GAUGE
GALV	GALVANIZED
GYP BD	GYPSUM BOARD
HDWD	HARDWARE
HDR	HEADER
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HGT	HEIGHT
ID	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
KIT	KITCHEN
LAM	LAMINATE
LAV	LAVATORY
LT	LIGHT
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MANUF	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OCH	ON CENTER HORIZONTALLY
OCV	ON CENTER VERTICALLY
OD	OUTER DIAMETER
OPNG	OPENING
OPT	OPTIONAL
PL	PLATE
PLAM	PLASTIC LAMINATE
PLUMB	PLUMBING
PLYWD	PLYWOOD
PR	PAIR
PROP	PROPERTY
PSF	PER SQUARE FOOT
PSI	PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAINTED
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
QTY	QUANTITY
RAD	RADIUS
REF	REFRIGERATOR
REINF	REINFORCING
REV	REVISION
REQ'D	REQUIRED
REQ'TS	REQUIREMENTS
RES	RESILIENT
RM	ROOM
RO	ROUGH OPENING
SCHED	SCHEDULE
SEC	SECTION
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SUSP	SUSPENDED
TBD	TO BE DETERMINED
TEL	TELEPHONE
THK	THICK
THRU	THROUGH
TOP	TOP OF PLATE
TOS	TOP OF STEEL
TOSL	TOP OF SLAB
TRT	TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VB	VINYL BASE
VCT	VINYL COMPOSITE TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VNC	VINYL WALL COVERING
w/	WITH
WC	WATER CLOSET
WD	WOOD
WFS	WATER FILTRATION SYSTEM
w/o	WITHOUT
WP	WATERPROOFING
WT	WEIGHT
WWF	WELDED WIRE FABRIC

GRAPHIC SYMBOLS



GENERAL MEP NOTES

1) ALL EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL, AND PLUMBING SYSTEMS, DEVICES, EQUIPMENT, CONDUITS, PIPING, SUPPORTS, AND PENETRATIONS SHALL REMAIN UNLESS SPECIFICALLY NOTED OTHERWISE
2) GC SHALL PROTECT ALL EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL, AND PLUMBING SYSTEMS DURING ROOF REMOVAL AND INSTALLATION.
3) GC SHALL COORDINATE ROOFING WORK WITH EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL AND PLUMBING COMPONENTS TO MAINTAIN CONTINUOUS OPERATION WHERE REQUIRED.
4) GC SHALL TEMPORARILY DISCONNECT, REMOVE, OR MODIFY EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL, AND PLUMBING ITEMS ONLY AS NECESSARY TO PERFORM THE ROOF REPLACEMENT.
5) GC SHALL REINSTALL, RECONNECT, AND RESTORE ALL AFFECTED EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL, AND PLUMBING COMPONENTS TO THEIR ORIGINAL CONDITION AND PERFORMANCE.
6) GC SHALL REPLACE OR UPGRADE IN KIND ANY EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL, AND PLUMBING ITEMS DAMAGED, DISTURBED, OR RENDERED NONCOMPLIANT AS A RESULT OF THE ROOF WORK, AT NO ADDITIONAL COST TO THE OWNER.
7) MAINTAIN ALL EXISTING RATINGS, CAPACITIES, AND CODE COMPLIANCE. NO CHANGES TO EXISTING ELECTRICAL, DATA/COMMUNICATIONS, MECHANICAL, AND PLUMBING LAYOUT, CAPACITY, OR SYSTEMS ARE INCLUDED IN THIS SCOPE UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS.

ROOF REPLACEMENT NOTES:

1) PROVIDE A COMPLETE NEW ROOF SYSTEM OVER THE ENTIRE INDICATED ROOF AREAS, INCLUDING NEW ENGINEERED ROOF TRUSSES (SEE STRUCT DWGS), NEW ROOF SHEATHING (DECK), NEW ASPHALT SHINGLE ROOFING, AND NEW ATTIC INSULATION.
2) ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC), LOCAL AMENDMENTS, MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND APPLICABLE INDUSTRY STANDARDS (ANSI/TPI 1, APA, NRCA).
3) CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
4) PROVIDE NEW PREFABRICATED WOOD ROOF TRUSSES DESIGNED, ENGINEERED, AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN RHODE ISLAND.
5) TRUSS DESIGN SHALL ACCOUNT FOR ALL APPLICABLE DEAD LOADS, ROOF LIVE LOADS, SNOW LOADS, WIND UPLIFT, SEISMIC FORCES, AND ANY ROOF-MOUNTED EQUIPMENT.
6) TRUSSES SHALL BE FABRICATED, HANDLED, BRACED, AND INSTALLED IN ACCORDANCE WITH ANSI/TPI 1 AND THE TRUSS MANUFACTURER'S REQUIREMENTS.
7) PROVIDE ALL REQUIRED PERMANENT AND TEMPORARY TRUSS BRACING. DO NOT CUT, NOTCH, OR MODIFY TRUSSES WITHOUT WRITTEN APPROVAL FROM THE TRUSS ENGINEER.
8) SUBMIT SEALED TRUSS SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
9) PROVIDE NEW ROOF SHEATHING CONSISTING OF APA-RATED PLYWOOD OR OSB, MINIMUM THICKNESS AS REQUIRED BY CODE AND TRUSS DESIGN (TYPICALLY 5/8 IN. NOMINAL, UNLESS NOTED OTHERWISE).
10) INSTALL SHEATHING WITH STAGGERED JOINTS, REQUIRED EDGE SPACING, BLOCKING, AND FASTENING PER CODE, APA RECOMMENDATIONS, AND WIND UPLIFT REQUIREMENTS.
11) PROVIDE ADDITIONAL FRAMING, BLOCKING, AND EDGE SUPPORT AT RIDGES, HIPS, VALLEYS, EAVES, AND ROOF OPENINGS AS REQUIRED.
12) INSTALL SELF-ADHERED ICE AND WATER SHIELD AT EAVES (MINIMUM 36 IN. INSIDE THE INTERIOR WALL LINE), VALLEYS, HIPS, RIDGES, AND AROUND ALL PENETRATIONS, CHIMNEYS, AND SKYLIGHTS.
13) INSTALL APPROVED SYNTHETIC ROOFING UNDERLAYMENT OR ASTM D226/D4869 COMPLIANT FELT OVER REMAINING ROOF AREAS, LAPPED AND FASTENED PER MANUFACTURER'S INSTRUCTIONS.
14) PROVIDE NEW ARCHITECTURAL ASPHALT SHINGLES, 50-YEAR WARRNTY, UL-LISTED, AND COMPLIANT WITH ASTM D3462.
15) INSTALL SHINGLES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS, INCLUDING STARTER STRIPS, EXPOSURE, OFFSET PATTERN, AND FASTENING REQUIREMENTS.
16) FASTENERS SHALL BE CORROSION-RESISTANT ROOFING NAILS OF SUFFICIENT LENGTH TO FULLY PENETRATE THE ROOF SHEATHING.
17) PROVIDE ALL NEW FLASHINGS, INCLUDING DRIP EDGE, STEP FLASHING, COUNTERFLASHING, VALLEY FLASHING, PIPE BOOTS, CHIMNEY FLASHING AND WALL FLASHINGS.
18) PROVIDE NEW PREFINISHED METAL DRIP EDGE AT ALL EAVES AND RAKES, INSTALLED PER CODE AND MANUFACTURER REQUIREMENTS.
19) PROVIDE NEW ATTIC INSULATION TO ACHIEVE A MINIMUM R-49 OVERALL THERMAL RESISTANCE, UNLESS NOTED OTHERWISE.
20) ATTIC INSULATION SHALL BE R-30 RIGID INSULATION, OVER EXISTING CONCRETE DECK.
21) INSTALL INSULATION TO MAINTAIN REQUIRED CLEARANCES AT EAVES, VENTILATION PATHS, RECESSED FIXTURES, AND OTHER HEAT-PRODUCING ELEMENTS.
22) PROVIDE A COMPLETE AND BALANCED ATTIC VENTILATION SYSTEM MEETING CURRENT CODE REQUIREMENTS FOR NET FREE VENTILATION AREA (NFVA).
23) COORDINATE SOFFIT, RIDGE, GABLE, OR OTHER APPROVED VENTS TO ENSURE CONTINUOUS AIRFLOW ABOVE INSULATION.
24) COORDINATE ROOFING WORK WITH ALL MECHANICAL, PLUMBING, AND ELECTRICAL PENETRATIONS.
25) ENSURE ALL PENETRATIONS ARE PROPERLY FRAMED, FLASHED, SEALED, AND MADE WATERTIGHT.
26) ROOF SYSTEM, INCLUDING TRUSSES, SHEATHING, AND ROOFING, SHALL MEET LOCAL WIND SPEED, EXPOSURE CATEGORY, AND UPLIFT REQUIREMENTS.
27) PROVIDE ENHANCED FASTENING, CONNECTORS, AND ACCESSORIES AS REQUIRED BY CODE AND MANUFACTURER.
28) PROVIDE MANUFACTURER'S 50YR COMMERCIAL WARRANTY + 10YR SURE START WARRANTY
29) PROTECT ADJACENT STRUCTURES AND BUILDING COMPONENTS DURING CONSTRUCTION.
30) MAINTAIN WATERTIGHT INTEGRITY OF THE BUILDING AT ALL TIMES DURING INSTALLATION.

GENERAL CONSTRUCTION NOTES

1) THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND INSPECTIONS NECESSARY TO INSURE ISSUANCE OF AN OCCUPANCY CERTIFICATE UPON COMPLETION OF THE WORK.
2) THE CONTRACTOR SHALL MAINTAIN ALL INSURANCE REQ'D BY THE OWNER AND/OR GOVERNMENTAL AUTHORITIES AND SHALL PROVIDE PROOF OF SUCH INSURANCE AS REQ'D.
3) ALL WORK SHALL BE IN STRICT ACCORDANCE w/ ALL APPLICABLE CODES, TOWN OF FOSTER, RHODE ISLAND REQ'TS & AS PUT FORTH IN THESE CONSTRUCTION DOCUMENTS. WHERE CONFLICTS OCCUR, THE MOST STRINGENT REQ'TS SHALL BE MET.
4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING ALL WORK DURING CONSTRUCTION.
5) THE DRAWINGS MAY NOT BE TO SCALE. SEE PLANS & DETAILS FOR DIMENSIONS.
6) ALL EXTERIOR DIMENSIONS SHOWN ARE TO THE FACE OF FRAMING/MASONRY. ALL INTERIOR DIMENSIONS SHOWN ARE TO THE FACE OF SUBSTRATE/MASONRY.
7) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS & ELEVATIONS BEFORE COMMENCING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING.
8) THE CONTRACTOR SHALL ANCHOR WALL MOUNTED EQUIPMENT & ACCESSORIES TO EXISTING WALLS AS REQ'D FOR PROPER SUPPORT. PROVIDE BLOCKING AS REQ'D.
9) NOTHING IN THE SPECIFICATIONS OR DRAWINGS SHALL BE CONSTRUED TO ALLOW WORK NOT IN ACCORDANCE w/ THE CODE REQ'TS. WHEN REQ'TS SHOWN OR SPECIFIED ARE LESS THAN THOSE DICTATED IN THE CODE, THE CONTRACTOR SHALL FURNISH AND/OR INSTALL THE LARGER SIZE OR HIGHER STANDARD WITHOUT EXTRA COST TO THE OWNER.
10) "PROVIDE" SHALL MEAN TO "SUPPLY & INSTALL".
11) ALL MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT SHALL BE CLASSIFIED AS NONCOMBUSTIBLE PER THE STATE BUILDING CODE WHETHER SO INDICATED ON THE DWGS OR NOT.

FIRE RATED CONSTRUCTION NOTES:

1) SEAL ALL PENETRATIONS THROUGH ANY FIRE RATED CONSTRUCTION W/ FIRE CAULKING. TYPICAL FOR FIRE RATED PARTITIONS & FLOOR/ CEILING CONSTRUCTION.

SEALANTS NOTE:

REFER TO PROJECT MANUAL FOR SURFACE PREPARATION, INSTALLATION AND SPECIFICATION OF SEALANTS REQUIRED AT ALL JOINTS AND PENETRATIONS RELATED TO THE SCOPE OF WORK.

GENERAL DEMOLITION NOTES

PROTECTION

1) ALL RULES & REGULATIONS GOVERNING THE RESPECTIVE UTILITIES SHALL BE OBSERVED IN EXECUTING ALL WORK UNDER THIS SECTION. ALL WORK SHALL BE EXECUTED IN SUCH A MANNER AS TO PREVENT ANY DAMAGE TO THE EXISTING BUILDING, SERVICE UTILITY LINES & STRUCTURES.
2) THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DAMAGES TO THE EXISTING BUILDING AS WELL AS ADJOINING PRIVATE SPACES & PROPERTY CAUSED BY HIS SUBCONTRACTOR'S EQUIPMENT & PERSONNEL.
3) PERFORM THE WORK IN SUCH A MANNER AS TO CAUSE NO INTERFERENCE W/ ACCESS BY THIS SUBCONTRACTOR OR OTHER CONTRACTORS TO ALL PORTIONS OF THE BUILDING AS NECESSARY FOR THE NORMAL CONDUCT OF THEIR WORK.
4) THE CONTRACTOR SHALL NOT COMMENCE WORK UNTIL ITEMS SCHEDULED TO REMAIN HAVE BEEN ADEQUATELY PROTECTED. TAKE ALL POSSIBLE PRECAUTIONS TO AVOID DAMAGING THOSE ITEMS WHICH HAVE BEEN SPECIFIED BY THE OWNER TO BE SALVASED AND/OR STOCKPILED.

PREPARATION

1) NOTIFY ALL CORPORATIONS, COMPANIES, INDIVIDUALS OR LOCAL AUTHORITIES OWNING, OR HAVING JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION OPERATIONS.
2) HAVE ALL UTILITY SERVICES NOT OTHERWISE DESIGNATED TO BE DISCONNECTED BY THE CONTRACTOR, DISCONNECTED @ SERVICE MAINS BY THE GOVERNING UTILITY INVOLVED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR DIRECTED BY THE ARCHITECT.

DEMOLITION

1) DEMOLISH DESIGNATED EXISTING FEATURES ABOVE & BELOW FLOOR LEVELS, WITHIN THE CONTRACT LIMIT LINES, AS NOTED TO PREPARE THE BUILDING FOR ALL OTHER WORK AS SPECIFIED OR AS SHOWN ON THE DRAWINGS & AS ORDERED BY THE ARCHITECT.
2) COMPLY W/ ALL STATE OF RHODE ISLAND DEPARTMENT OF HEALTH STANDARDS DURING DEMOLITION OPERATIONS.
3) REMOVE & SALVAGE MATERIAL REQ'D FOR LATER REUSE AS SHOWN ON THE DRAWINGS & AS DIRECTED BY THE ARCHITECT.
4) REMOVE & DISPOSE OF ALL UNSUITABLE MATERIAL OFF SITE. THE OWNER SHALL HAVE RIGHT OF FIRST REFUSAL FOR ALL MATERIALS. REMOVE ANY STOCKPILED MATERIAL DEEMED SURPLUS BY THE ARCHITECT @ NO ADDITIONAL COST TO THE OWNER.
5) REFER TO KEYED DEMOLITION NOTES & THE DEMOLITION FLOOR PLAN FOR FURTHER CLARIFICATION OF ITEMS SCHEDULED FOR DEMOLITION.

DISPOSAL AND CLEAN UP

1) PROMPTLY REMOVE ANY DEMOLITION DEBRIS OR SIMILAR MATERIAL, KEEPING THE AREA CLEAN @ ALL TIMES.
2) DEMOLISHED MATERIAL
   A) ALL DEMOLISHED MATERIAL DECLARED UNSUITABLE BY THE ARCHITECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR & SHALL BE LEGALLY DISPOSED OF OFF THE PREMISES, UNLESS OTHERWISE INDICATED OR SPECIFIED.
   B) KEEP ALL EXITS, PUBLIC WAYS AND EGRESS PASSAGEWAYS CLEAR OF ALL DEBRIS @ ALL TIMES.
3) PREMISES: LEAVE THE PREMISES IN A SAFE, CLEAN & RELATIVELY ORDERLY CONDITION UPON COMPLETION OF WORK.

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

CHAPTER 2: SCOPING REQUIREMENTS

SECTION 203: GENERAL EXCEPTIONS

203.5 MACHINERY SPACES. SPACES FREQUENTED ONLY BY SERVICE PERSONNEL FOR MAINTENANCE, REPAIR, OR OCCASIONAL MONITORING OF EQUIPMENT SHALL NOT BE REQUIRED TO COMPLY WITH THESE REQUIREMENTS OR TO BE ON AN ACCESSIBLE ROUTE. MACHINERY SPACES INCLUDE, BUT ARE NOT LIMITED TO, ELEVATOR PITS OR ELEVATOR PENTHOUSES; MECHANICAL, ELECTRICAL OR COMMUNICATIONS EQUIPMENT ROOMS; PIPING OR EQUIPMENT CATWALKS; WATER OR SEWAGE TREATMENT PUMP ROOMS AND STATIONS; ELECTRIC SUBSTATIONS AND TRANSFORMER VAULTS; AND HIGHWAY AND TUNNEL UTILITY FACILITIES.

CODES, RULES, REGULATIONS

FEDERAL, STATE AND MUNICIPAL LAWS

PROVIDENCE, RHODE ISLAND RULES AND/OR REGULATIONS

RISRC-1: STATE OF RHODE ISLAND REHABILITATION BUILDING AND FIRE CODE FOR EXISTING BUILDINGS AND STRUCTURES, 2021 EDITION

CHAPTER 5: ALTERATIONS

CHAPTER 10: ACCESSIBILITY

ANY PREVAILING RULES, REGULATIONS PERTAINING TO ADEQUATE PROTECTION AND/OR GUARDING OF ANY MOVING PARTS OR OTHERWISE HAZARDOUS LOCATIONS.

ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 OR REVISIONS THERETO, WHICH ARE APPLICABLE DURING THE TERM OF THIS CONTRACT AND HOLD THE OWNER AND/OR HIS/HER AGENTS HARMLESS FROM ANY CLAIM OR LOSS THAT MAY RESULT FROM VIOLATIONS OF OR CLAIMS UNDER THIS ACT.

AHARONIAN & ASSOCIATES, INC.
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DISCLAIMER

OWNERSHIP AND USE OF DOCUMENTS, DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF PROFESSIONAL SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECTS OR PURPOSES OR BY ANY OTHER PARTIES THAN THOSE PROPERLY AUTHORIZED BY CONTRACT WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF THE ARCHITECT.

FOR CONSTRUCTION

REVISIONS:

△ NUMBER	REMARKS	DATE

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATIONS #4 & #10
PROVIDENCE COUNTY

DRAWING TITLE:

GENERAL NOTES

DATE:	PROJ NO:
JAN 14, 2026	25146
DRAWN BY: AL	CHECKED BY: DH

DRAWING NUMBER:

A0.1

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NOTE:

SEE A0.1 FOR DEMOLITION AND ROOF REPLACEMENT NOTES, GRAPHIC SYMBOLS AND ABBREVIATIONS.

KEYED DEMOLITION NOTES

(A1) GC MUST COORDINATE WITH THE OWNER TO CLEAR THE ATTIC AND THE BALCONY AREAS BEFORE CONSTRUCTION BEGINS. ALL STORED AND/OR OBSOLETE MATERIALS AND EQUIPMENT MUST BE REMOVED FROM THE ATTIC AND THE BALCONY AS NEEDED TO CLEAR THE WORK AREA.

(A2) GC SHALL REMOVE THE EXISTING PITCHED ROOF ASSEMBLY IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO: FIBERGLASS SHINGLES, UNDERLAYMENT, ROOF SHEATHING, RIDGE, HIP AND ALL FRAMING COMPONENTS, FLASHING, DRIP EDGES, GUTTERS, DOWNSPOUTS, ICE-AND-WATER MEMBRANES, AND ALL ASSOCIATED FASTENERS AND ACCESSORIES, UNLESS SPECIFICALLY NOTED TO REMAIN.

(A3) GC SHALL REMOVE COMPLETELY THE EXISTING FLAT ROOF ASSEMBLY AT THE BALCONY FLOOR BACK TO CONCRETE SLAB, INCLUDING MEMBRANE ROOFING SYSTEM, INSULATION (IF EXISTS), FLASHING, DRIP EDGES AND ANY OTHER ASSOCIATED ACCESSORIES.

(A4) GC SHALL COMPLETELY REMOVE EXISTING ATTIC INSULATION AS REQUIRED FOR ITS REPLACEMENT.

(A5) DISCONNECT, REMOVE, AND SALVAGE FOR REINSTALLATION ALL EXISTING MECHANICAL, ELECTRICAL, OR MISCELLANEOUS DEVICES IN THE DEMOLITION AREA UNLESS OTHERWISE DIRECTED BY OWNER. COORDINATE REINSTALLATION SCOPE WITH OWNER PRIOR TO START OF CONSTRUCTION.

(A6) REMOVE ALL EXISTING ROOF PENETRATIONS, FLASHINGS, BOOTS, AND SEALANTS. PROVIDE TEMPORARY PROTECTION AND COORDINATE LOCATIONS OF ALL NEW PENETRATIONS.

(A7) REMOVE EXISTING METAL RAILING SYSTEM AND ALL RELATED ACCESSORIES.

(A8) REMOVE EXISTING BALCONY WALL CAP.

(A9) REMOVE EXISTING WOOD PICKET FENCE

(A10) REMOVE EXISTING ATTIC ACCESS HATCH AND ALL RELATED ACCESSORIES.

(A11) REMOVE EXIST ROOF DRAIN COMPLETELY INCLUDING RISERS DOWN TO CLEAN OUT LOCATED AT THE BASEMENT.

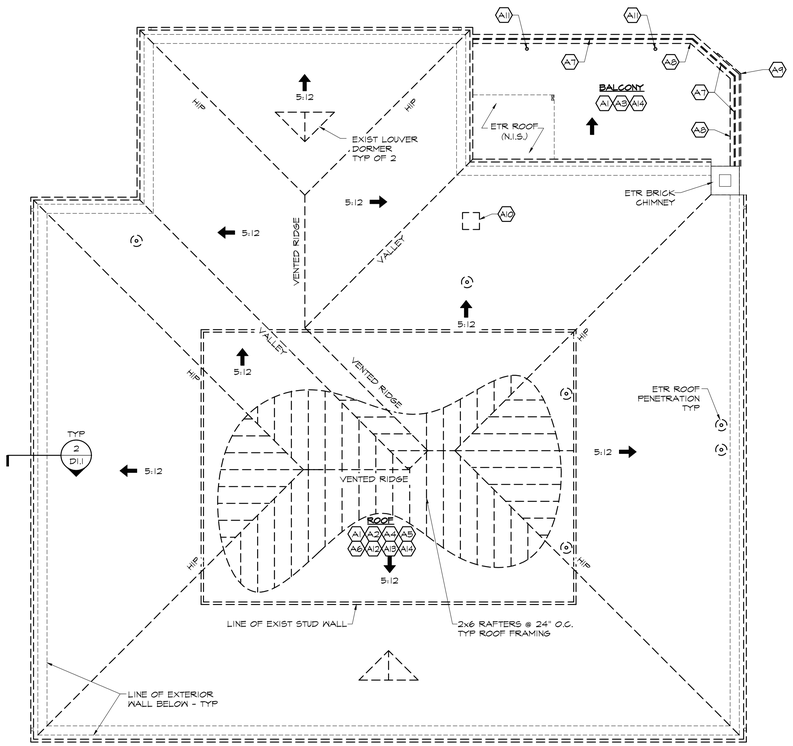
(A12) PROTECT ALL ADJACENT CONSTRUCTION, BUILDING INTERIORS, MECHANICAL/ELECTRICAL/PLUMBING SYSTEMS, AND LANDSCAPING DURING DEMOLITION. PROVIDE TEMPORARY WEATHER PROTECTION AT ALL TIMES TO ENSURE BUILDING REMAINS WATERTIGHT.

(A13) IF SUSPECTED HAZARDOUS MATERIALS ARE FOUND DURING DEMOLITION WORK, DO NOT DISTURB THEM AND NOTIFY THE PROJECT MANAGER/ENGINEER IMMEDIATELY.

(A14) VERIFY FIELD DIMENSIONS PRIOR TO BEGINNING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING.

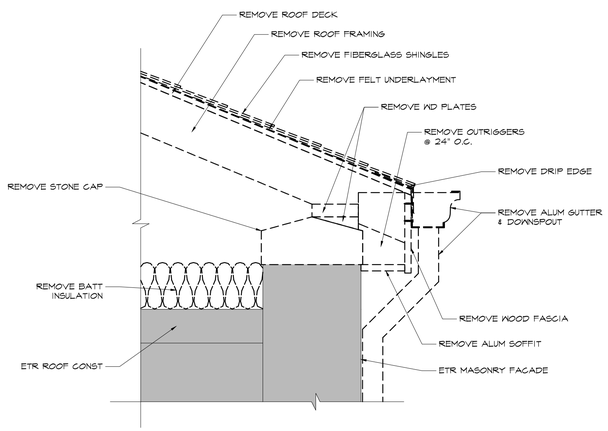
LEGEND

ALL ITEMS SHOWN DASHED — — — — ARE TO BE REMOVED



1 FIRE STATION #4 - DEMOLITION ROOF PLAN

SCALE: 1/8" = 1'-0"



2 TYP EAVE DEMOLITION DETAIL

SCALE: 1 1/2" = 1'-0"

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FOR CONSTRUCTION

REVISIONS:

△ NUMBER	REMARKS	DATE

KEYPLAN

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATIONS #4 & #10
PROVIDENCE COUNTY

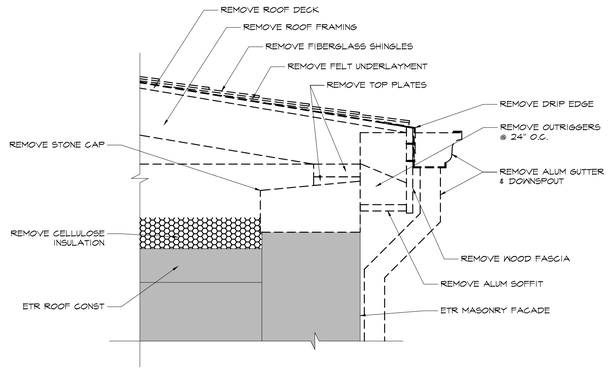
DRAWING TITLE:

FIRE STATION #4 DEMO ROOF PLAN AND DETAIL

DATE:	PROJ NO:
JAN 14, 2026	25146
DRAWN BY: AL	CHECKED BY: DH

DRAWING NUMBER:

D1.1



2 TYP EAVE DEMOLITION DETAIL

SCALE: 1 1/2" = 1'-0"

NOTE:

SEE A0.1 FOR DEMOLITION AND ROOF REPLACEMENT NOTES, GRAPHIC SYMBOLS AND ABBREVIATIONS

KEYED DEMOLITION NOTES

A1 GC MUST COORDINATE WITH THE OWNER TO CLEAR THE ATTIC AREA BEFORE CONSTRUCTION BEGINS. ALL STORED AND/OR OBSOLETE MATERIALS AND EQUIPMENT MUST BE REMOVED FROM THE ATTIC AS NEEDED TO CLEAR THE WORK AREA.

A2 GC SHALL REMOVE THE EXISTING PITCHED ROOF ASSEMBLY IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO: FIBERGLASS SHINGLES, UNDERLAYMENT, ROOF SHEATHING, RIDGE, HIP AND ALL FRAMING COMPONENTS, FLASHING, DRIP EDGES, GUTTERS, DOWNSPOUTS, ICE-AND-WATER MEMBRANES, AND ALL ASSOCIATED FASTENERS AND ACCESSORIES, UNLESS SPECIFICALLY NOTED TO REMAIN.

A3 GC SHALL COMPLETELY REMOVE EXISTING ATTIC INSULATION AS REQUIRED FOR ITS REPLACEMENT.

A4 DISCONNECT, REMOVE, AND SALVAGE FOR REINSTALLATION ALL EXISTING MECHANICAL, ELECTRICAL, OR MISCELLANEOUS DEVICES IN THE DEMOLITION AREA UNLESS OTHERWISE DIRECTED BY OWNER. COORDINATE REINSTALLATION SCOPE WITH OWNER PRIOR TO START OF CONSTRUCTION.

A5 REMOVE ALL EXISTING ROOF PENETRATIONS, FLASHINGS, BOOTS, AND SEALANTS. PROVIDE TEMPORARY PROTECTION AND COORDINATE LOCATIONS OF ALL NEW PENETRATIONS.

A6 REMOVE EXISTING ATTIC ACCESS HATCH AND ALL RELATED ACCESSORIES.

A7 PROTECT ALL ADJACENT CONSTRUCTION, BUILDING INTERIORS, MECHANICAL/ELECTRICAL/PLUMBING SYSTEMS, AND LANDSCAPING DURING DEMOLITION. PROVIDE TEMPORARY WEATHER PROTECTION AT ALL TIMES TO ENSURE BUILDING REMAINS WATERTIGHT.

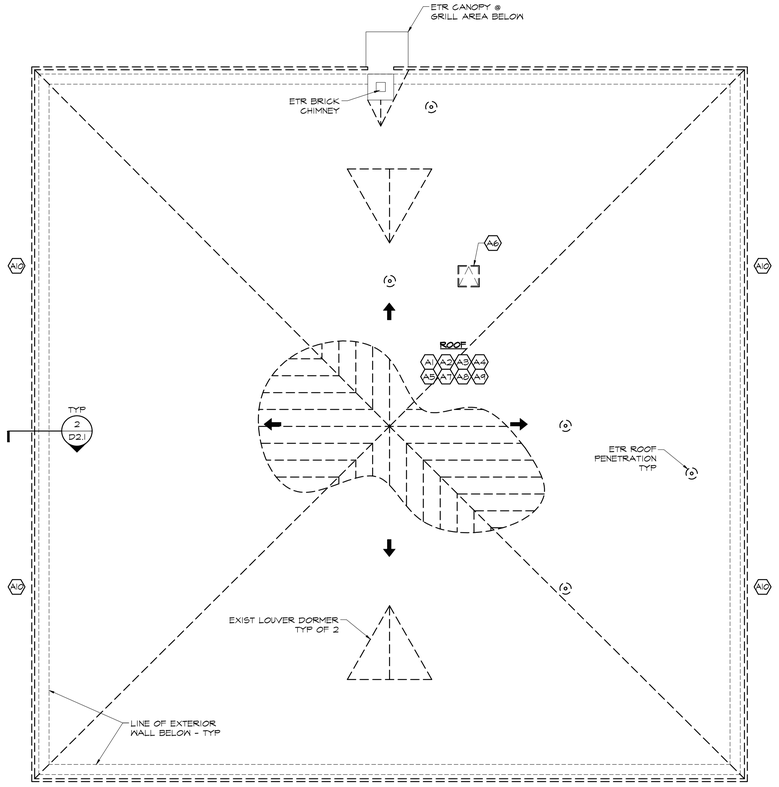
A8 IF SUSPECTED HAZARDOUS MATERIALS ARE FOUND DURING DEMOLITION WORK, DO NOT DISTURB THEM AND NOTIFY THE PROJECT MANAGER/ENGINEER IMMEDIATELY.

A9 VERIFY FIELD DIMENSIONS PRIOR TO BEGINNING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING.

A10 REMOVE EXISTING OBSOLETE (ORIGINAL) DOWNSPOUTS FROM FACADES.

LEGEND

ALL ITEMS SHOWN DASHED - - - - - - - - ARE TO BE REMOVED



1 FIRE STATION #10 - DEMOLITION ROOF PLAN

SCALE: 1/8" = 1'-0"

N PLAN

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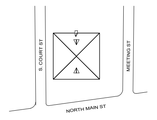


KEYPLAN N

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATIONS #4 & #10
PROVIDENCE COUNTY

DRAWING TITLE:

FIRE STATION #10 DEMO ROOF PLAN AND DETAIL

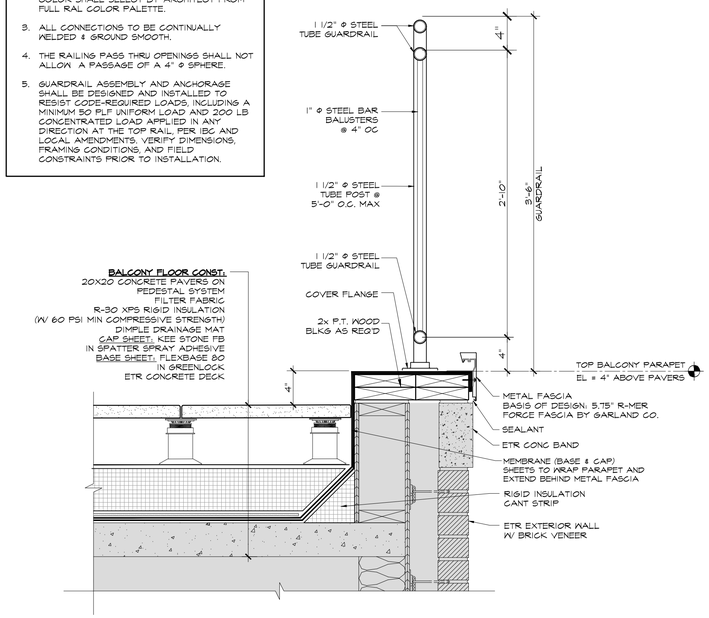
DATE:	PROJ NO:
JAN 14, 2026	25146
DRAWN BY: AL	CHECKED BY: DH

DRAWING NUMBER:

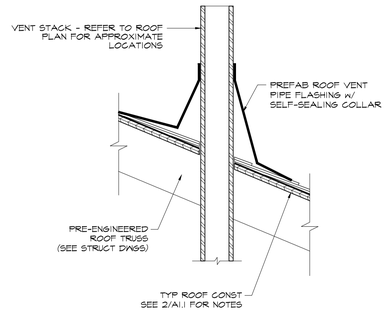
D2.1

BALCONY GUARDRAIL NOTES:

1. TOP OF GUARDRAIL TO BE AT 42" ABOVE BALCONY PAVERS.
2. ALL RAILING TO BE 1 1/2"ø GALV STEEL PIPE AND TO RECEIVE A POWDER COAT FINISH. COLOR SHALL SELECT BY ARCHITECT FROM FULL RAL COLOR PALETTE.
3. ALL CONNECTIONS TO BE CONTINUALLY WELDED & GROUND SMOOTH.
4. THE RAILING PASS THRU OPENINGS SHALL NOT ALLOW A PASSAGE OF A 4" ø SPHERE.
5. GUARDRAIL ASSEMBLY AND ANCHORAGE SHALL BE DESIGNED AND INSTALLED TO RESIST CODE-REQUIRED LOADS, INCLUDING A MINIMUM 50 PLF UNIFORM LOAD AND 200 LB CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT THE TOP RAIL, PER IBC AND LOCAL AMENDMENTS. VERIFY DIMENSIONS, FRAMING CONDITIONS, AND FIELD CONSTRAINTS PRIOR TO INSTALLATION.



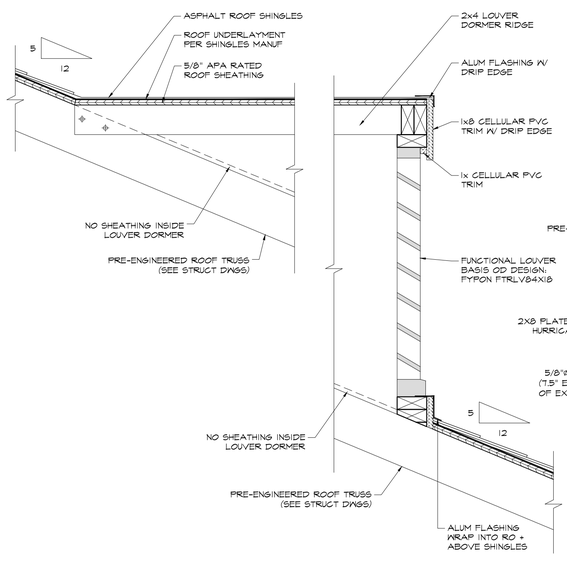
5 TYP BALCONY DETAIL
A1.4 SCALE: 1 1/2" = 1'-0"



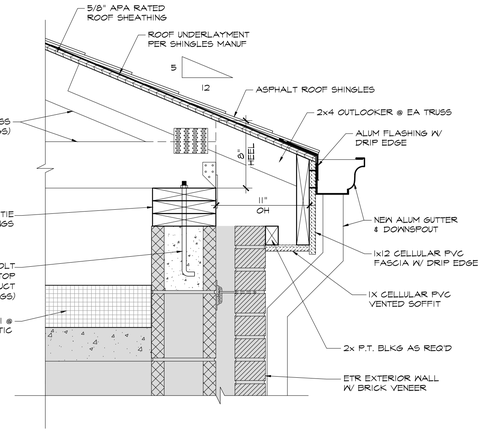
4 TYP VENT STACK PENETRATION DETAIL
A1.1 SCALE: 1 1/2" = 1'-0"

CELLULAR PVC TRIM NOTE:

1. BASIS OF DESIGN: PLY GEM PVC - BUILD READY.
2. ALL CELLULAR PVC TRIM BOARDS TO BE 5/4" THICK W/ WOODGRAIN TEXTURE, FIELD PAINTED
3. USE ONE-PIECE OUTSIDE CORNERS WHERE APPLICABLE.
4. PAINT COLOR TO BE SELECTED BY ARCHITECT & OWNER FROM FULL RANGE OF SHERWIN WILLIAMS EMERALD EXTERIOR ACRYLIC LATEX PAINT.



3 TYP LOUVER DORMER DETAIL
A1.1 SCALE: 1 1/2" = 1'-0"



2 TYP EAVE DETAIL
A1.1 SCALE: 1 1/2" = 1'-0"

LEGEND

- DIRECTION OF SLOPE
- DS — DOWNSPOUT
- TAPERED INSULATION 1/4" PER FT SLOPE

ROOF SYSTEMS

A
- ASPHALT ROOF SHINGLES
- UNDERLAYMENT PER SHINGLE MANUF SPEC
- ICE & WATER SHEILD, 3'-0" BEYOND EXT. WALL
- 5/8" CDX PLYWOOD SHEATHING
- PRE-ENG ROOF TRUSS (SEE STRUCT DWGS)
- R-44 FACED FG BATT INSULATION

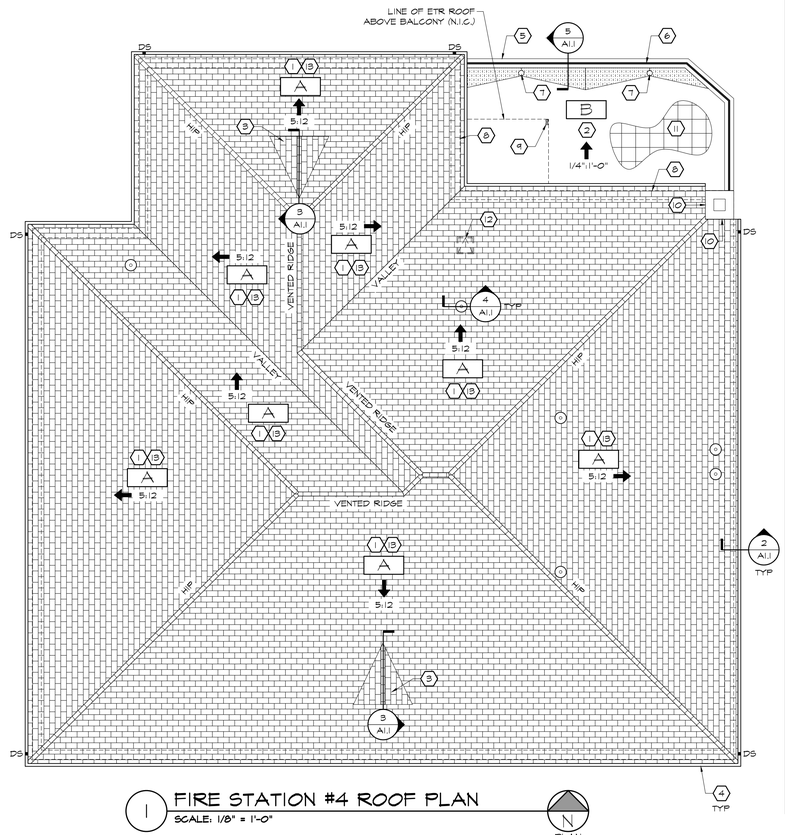
B
- PEDESTAL SYSTEM W/ CONCRETE PAVERS
- FILTER FABRIC
- R-30 XPS RIGID INSULATION
- DIMPLE DRAINAGE MAT
- CAP SHEET - KEE STONE FB IN SPATTER SPRAY ADHESIVE
- BASE SHEET - FLEXBASE 80 IN GREENLOCK
- ETR CONCRETE DECK

KEYED ROOF NOTES

1. PROVIDE NEW ROOF SYSTEM 'A' AS SHOWN. SEE ROOF SYSTEMS ON THIS SHEET.
2. PROVIDE NEW ROOF SYSTEM 'B' AS SHOWN. SLOPE 1/4" PER FOOT. SEE ROOF SYSTEM 'B' ON THIS SHEET.
3. PROVIDE LOUVER DORMER W/ HIGH-DENSITY POLYURETHANE LOUVER. BASIS OF DESIGN: FYPON FUNCTIONAL LOUVER TRIANGLE BRICKMOULD STYLE 84"W x 17.5"H x 5:12 PITCH. SEE X/A1.4.
4. PROVIDE NEW ALUM GUTTER SYSTEM CONTINUOUSLY AT ROOF PERIMETER W/ 3"X4" ALUM DOWNSPOUTS TO MATCH PREVIOUS EXISTING LOCATIONS. SEE PROJECT MANUAL FOR SPEC.
5. PROVIDE NEW METAL COPING AT ENTIRE BALCONY SILL. SEE 5/A1.4.
6. PROVIDE NEW METAL PIPING RAILING SYSTEM. SEE 5/A1.4.
7. PROVIDE NEW ROOF DRAIN AND RELATED RISERS IN KIND. INSTALL DRAIN PER MANUFACTURE'S RECOMMENDATIONS.
8. EXTEND NEW MEMBRANE UP TO FIRST BRICK COURSE AND PROVIDE CONTINUOUS REGLET + COUNTERFLASHING TRANSITION.
9. WRAP THE EXIST ROOF POST BASE AND EXTEND UP MIN 8" MIN.
10. PROVIDE METAL STEP FLASHING ALONG EXIST BRICK CHIMNEY SIDES.
11. PROVIDE PEDESTAL DECK SYSTEM W/ 20"x20" CONC ROOF PAVERS. SEE PROJECT MANUAL FOR SPECS.
12. PROVIDE NEW ATTIC ACCESS HATCH AS REQ'D TO FIT INTO EXIST ROUGH OPENING.
13. PROVIDE NEW ATTIC R-30 RIGID INSULATION INSTALLED ABOVE EXISTING CONCRETE DECK.

NOTE:

SEE A0.1 FOR ROOF REPLACEMENT AND CONSTRUCTION NOTES, GRAPHIC SYMBOLS AND ABBREVIATIONS.



1 FIRE STATION #4 ROOF PLAN
SCALE: 1/8" = 1'-0"

N PLAN

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△ NUMBER	REMARKS	DATE

KEYPLAN N

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATIONS #4 & #10
PROVIDENCE COUNTY

DRAWING TITLE:

FIRE STATION #4 ROOF PLAN & DETAILS

DATE:	PROJ NO:
JAN 14, 2026	25146
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A1.1

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KEYED ROOF NOTES

1. PROVIDE NEW ROOF SYSTEM 'A' AS SHOWN. SEE ROOF SYSTEMS ON THIS SHEET.
2. PROVIDE LOUVER DORMER W/ HIGH-DENSITY POLYURETHANE LOUVER. BASIS OF DESIGN: FYPON FUNCTIONAL LOUVER TRIANGLE BRICKMOULD STYLE 84"W x 17.5"H x 3.5:12 PITCH. SEE 3/A1.4.
3. PROVIDE NEW ALUM GUTTER SYSTEM CONTINUOUSLY AT ROOF PERIMETER W/ 3"X4" ALUM DOWNSPOUTS TO MATCH PREVIOUS EXISTING LOCATIONS. SEE PROJECT MANUAL FOR SPEC.
4. PROVIDE METAL STEP FLASHINGS ALONG EXIST BRICK CHIMNEY SIDES.
5. PROVIDE NEW ATTIC ACCESS HATCH AS REQ'D TO FIT INTO EXIST ROUGH OPENING.
6. PROVIDE NEW ATTIC R-30 RIGID INSULATION INSTALLED ABOVE EXISTING CONCRETE DECK.

NOTE:

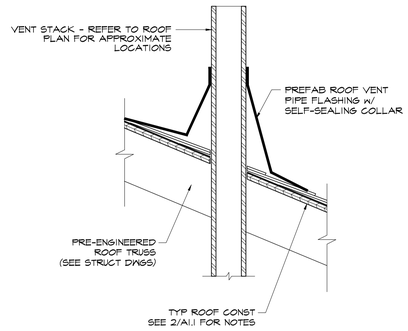
SEE A0.1 FOR ROOF REPLACEMENT AND CONSTRUCTION NOTES, GRAPHIC SYMBOLS AND ABBREVIATIONS.

ROOF SYSTEM A

- ASPHALT ROOF SHINGLES
- UNDERLAYMENT PER SHINGLE MANUF SPEC
- ICE & WATER SHEILD, 3'-0" BEYOND EXT. WALL
- 5/8" CDX PLYWOOD SHEATHING
- PRE-ENG WOOD ROOF TRUSS (SEE STRUCT DWGS)
- R-49 FACED FS BATT INSULATION

LEGEND

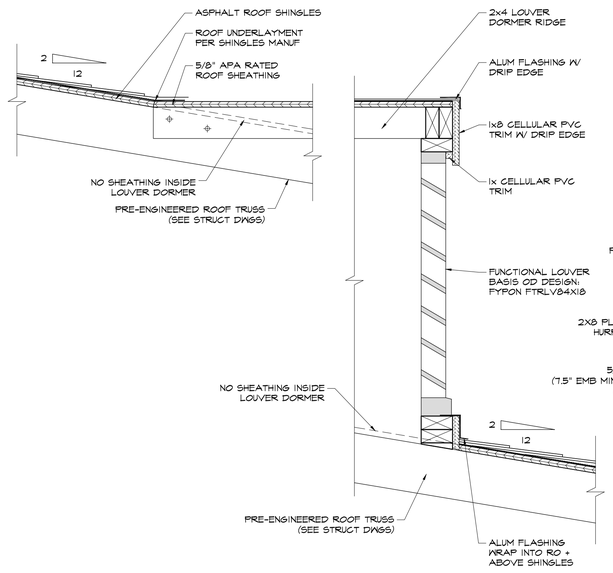
- DIRECTION OF SLOPE
- DS — DOWNSPOUT
- TAPERED INSULATION 1/4" PER FT SLOPE



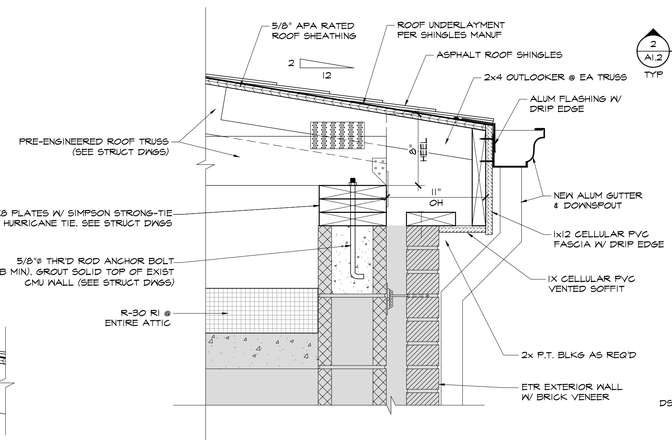
4 A1.1 TYP VENT STACK PENETRATION DETAIL
SCALE: 1 1/2" = 1'-0"

CELLULAR PVC TRIM NOTE:

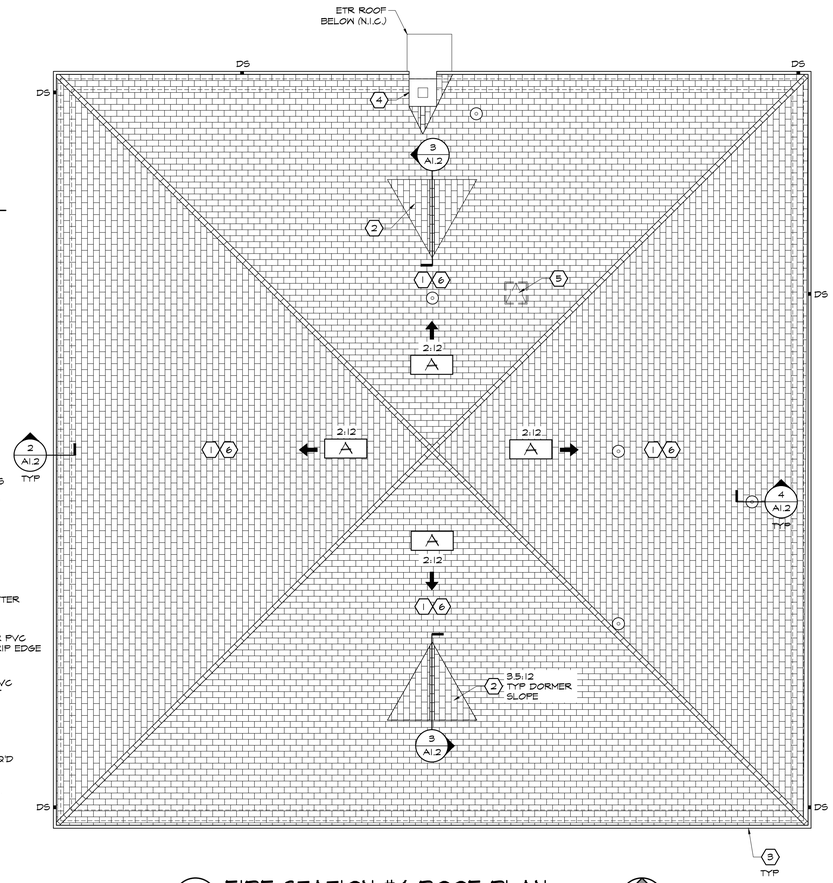
1. BASIS OF DESIGN: PLY GEM PVC - BUILD READY.
2. ALL CELLULAR PVC TRIM BOARDS TO BE 5/4" THICK W/ WOODGRAIN TEXTURE, FIELD PAINTED
3. USE ONE-PIECE OUTSIDE CORNERS WHERE APPLICABLE.
4. PAINT COLOR TO BE SELECTED BY ARCHITECT & OWNER FROM FULL RANGE OF SHERWIN WILLIAMS EMERALD EXTERIOR ACRYLIC LATEX PAINT.



3 A1.1 TYP LOUVER DORMER DETAIL
SCALE: 1 1/2" = 1'-0"



2 A1.1 TYP EAVE DETAIL
SCALE: 1 1/2" = 1'-0"



1 FIRE STATION #4 ROOF PLAN
SCALE: 1/8" = 1'-0"

N PLAN

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REVISIONS:

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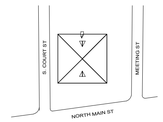


KEYPLAN

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATIONS #4 & #10
PROVIDENCE COUNTY

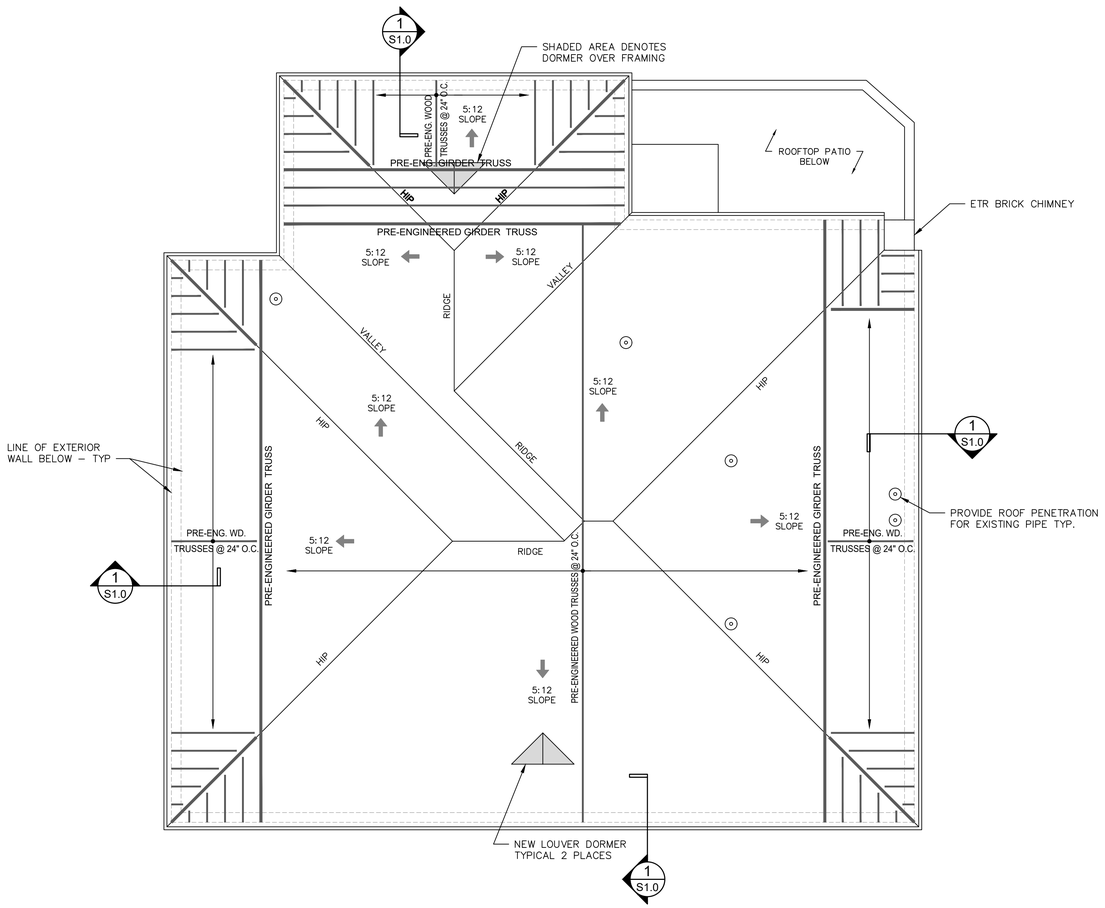
DRAWING TITLE:

FIRE STATION #10 ROOF PLAN & DETAILS

DATE:	PROJ NO:
JAN 14, 2026	25146
DRAWN BY: AL	CHECKED BY: DH

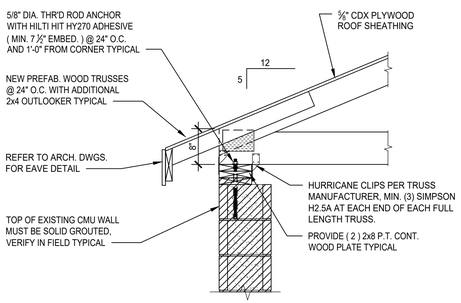
DRAWING NUMBER:

A2.1



STATION #4 ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"



1
S1.0 **NEW TRUSS BEARING DETAIL**

SCALE: 3/4"=1'-0"

GENERAL NOTES

DESIGN LOADS (EXCEPT AS NOTED):

BUILDING CODE: RHODE ISLAND STATE BUILDING CODE SBC-1
(2018 INTERNATIONAL BUILDING CODE WITH 2025 RI AMENDMENTS)

SEISMIC FACTORS:
GROUND ACCELERATIONS: Ss=.199g, S1=.055g
DESIGN ACCELERATIONS: Sds=.212g, Sd1=.088g
SEISMIC IMPORTANCE FACTOR (Ie): 1.5
RISK CATEGORY: IV
SEISMIC DESIGN CATEGORY: C
SEISMIC SITE CLASS: D

ROOF CRITERIA:
FLAT ROOF SNOW LOAD (Pf): 30 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.2
THERMAL FACTOR (Ct): 1.0

WIND CRITERIA:
ULTIMATE DESIGN WIND SPEED (V ULT): 138 MPH
NOMINAL DESIGN WIND SPEED (V ASD): 107 MPH
RISK CATEGORY: IV
WIND EXPOSURE: B
INTERNAL PRESSURE COEFF. (GCpi): ±0.18

PRE-ENGINEERED WOOD ROOF TRUSSES:

1. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR WOOD FRAMING DETAILS.
2. ALL FASTENING SHALL COMPLY WITH TABLE 2304.10.1 FASTENING SCHEDULE OF THE RHODE ISLAND STATE BUILDING CODE.
3. ALL ROOF TRUSSES AND OVERHANGING WOOD MEMBERS SHALL BE HELD DOWN WITH HURRICANE ANCHORS. REFER TO DRAWINGS FOR TYPE AND LOCATIONS.
4. WOOD TRUSSES SHALL BE DESIGNED PER THE "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES", PUBLISHED BY THE TRUSS PLATE INSTITUTE.
5. WOOD TRUSS FABRICATOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION, SHOP DRAWINGS BEARING SEAL AND SIGNATURE OF THE DESIGN PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF RHODE ISLAND. SHOP DRAWINGS SHALL INCLUDE BUT ARE NOT LIMITED TO: TRUSS LAYOUT PLAN; TRUSS DETAILS SHEETS SHOWING CONFIGURATION, DIMENSIONS, LOADS, MEMBER SIZES AND GRADES, MEMBER FORCES, CONNECTION PLATE SIZES, AND PERMANENT BRACING REQUIRED; TRUSS CONNECTION HANGERS FOR FLUSH FRAMING.
6. WOOD TRUSS ERECTOR SHALL BE RESPONSIBLE FOR DESIGN AND INSTALLATION OF ALL TEMPORARY ERECTION BRACING AND PERMANENT BRACING.
7. SEE GENERAL NOTES - DESIGN LOADS FOR TRUSS DESIGN LOADS REQUIREMENTS. SEE ROOF DIAGRAM FOR ADDITIONAL LOADS ON ROOF CAUSED BY SNOW.

WOOD SHEATHING NOTES:

1. ROOF SHEATHING SHALL BE MINIMUM 5/8" APA RATED SHEATHING, EXTERIOR GRADE. SHEATHING SHALL BE FASTENED WITH 8d NAILS AT NOT MORE THAN 6" O.C. ON ALL SUPPORTED PANEL EDGES. "H" CLIPS SHALL BE USED AT ALL UNSUPPORTED PANEL EDGES WHEN FRAMING IS SPACED GREATER THAN 16" ON CENTER. NAIL INTERMEDIATE MEMBERS AT 12" O.C.

JOSEPH MARCHELEWICZ
No. 12504
REGISTERED
PROFESSIONAL ENGINEER
(CIVIL)

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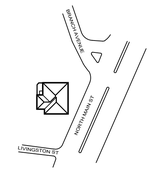
C.A. PRETZER ASSOCIATES INC.
STRUCTURAL ENGINEERS
50 Freeway Drive
Cranston, R.I. 02920
401-785-2690
DESIGN, CONSULTATION, INVESTIGATION

FOR CONSTRUCTION

REVISIONS:

△ NUMBER	REMARKS	DATE



KEYPLAN

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATION #4
10 BRANCH AVE, PROVIDENCE
PROVIDENCE COUNTY

DRAWING TITLE:

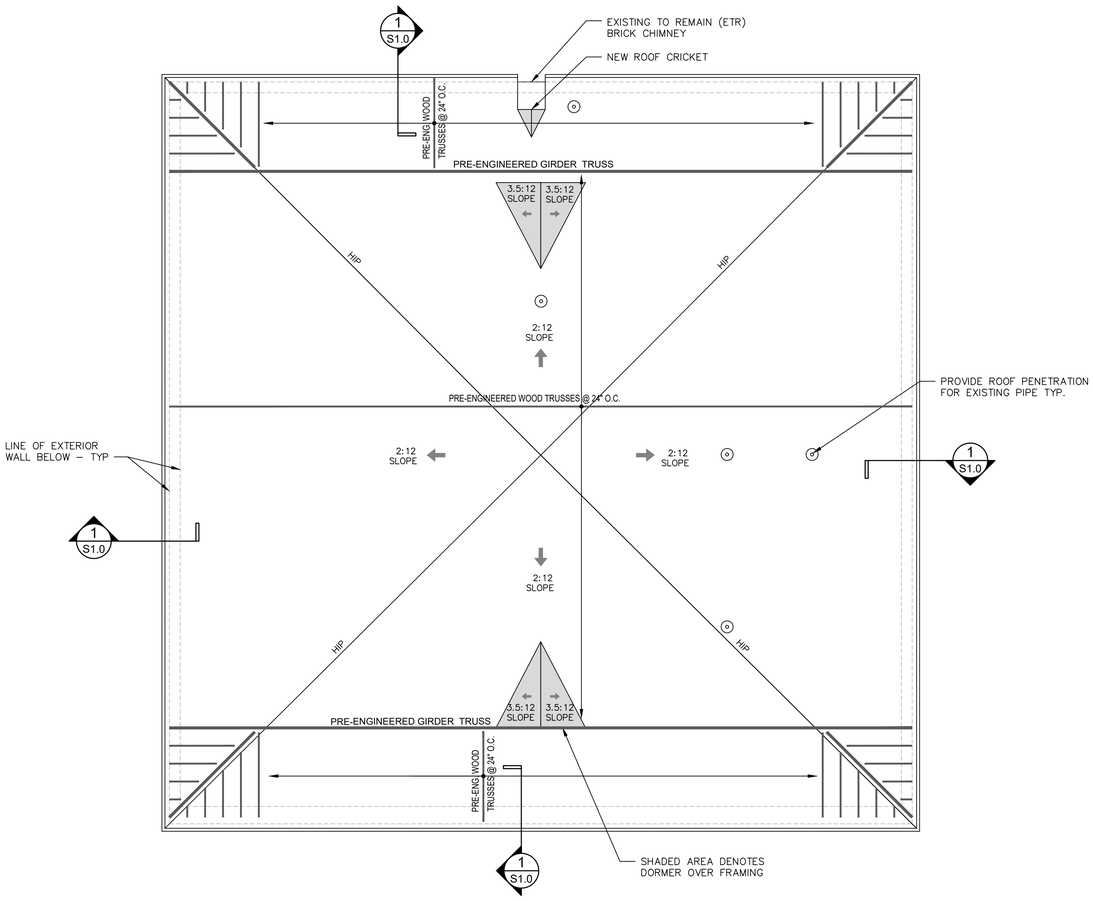
STATION #4 ROOF FRAMING PLAN

DATE:	PROJ NO:
01.14.2026	225296.20
DRAWN BY: JMF	CHECKED BY: TPG

DRAWING NUMBER:

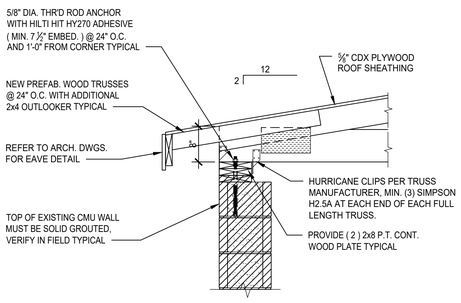
S1.0

File Location: P:\Projects\225296. City of Prov FD. Aharonian\1. CAPA\DRAFTING\CAPA AUTOCAD FILES\225296.20 CAPA PROVIDENCE FIRE DEPT No.4-No.10 ROOFS.dwg, Printed on: 1/14/2026, by: Joe Marchelewicz



STATION #10 ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"



1 S1.1 **NEW TRUSS BEARING DETAIL**

SCALE: 3/4"=1'-0"

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WIND EXPOSURE: B
INTERNAL PRESSURE COEFF. (GCpi): ±0.18

PRE-ENGINEERED WOOD ROOF TRUSSES:

1. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR WOOD FRAMING DETAILS.
2. ALL FASTENING SHALL COMPLY WITH TABLE 2304.10.1 FASTENING SCHEDULE OF THE RHODE ISLAND STATE BUILDING CODE.
3. ALL ROOF TRUSSES AND OVERHANGING WOOD MEMBERS SHALL BE HELD DOWN WITH HURRICANE ANCHORS. REFER TO DRAWINGS FOR TYPE AND LOCATIONS.
4. WOOD TRUSSES SHALL BE DESIGNED PER THE "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES", PUBLISHED BY THE TRUSS PLATE INSTITUTE.
5. WOOD TRUSS FABRICATOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION, SHOP DRAWINGS BEARING SEAL AND SIGNATURE OF THE DESIGN PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF RHODE ISLAND. SHOP DRAWINGS SHALL INCLUDE BUT ARE NOT LIMITED TO: TRUSS LAYOUT PLAN; TRUSS DETAILS SHEETS SHOWING CONFIGURATION, DIMENSIONS, LOADS, MEMBER SIZES AND GRADES, MEMBER FORCES, CONNECTION PLATE SIZES, AND PERMANENT BRACING REQUIRED; TRUSS CONNECTION HANGERS FOR FLUSH FRAMING.
6. WOOD TRUSS ERECTOR SHALL BE RESPONSIBLE FOR DESIGN AND INSTALLATION OF ALL TEMPORARY ERECTION BRACING AND PERMANENT BRACING.
7. SEE GENERAL NOTES - DESIGN LOADS FOR TRUSS DESIGN LOADS REQUIREMENTS. SEE ROOF DIAGRAM FOR ADDITIONAL LOADS ON ROOF CAUSED BY SNOW.

WOOD SHEATHING NOTES:

1. ROOF SHEATHING SHALL BE MINIMUM 5/8" APA RATED SHEATHING, EXTERIOR GRADE. SHEATHING SHALL BE FASTENED WITH 8d NAILS AT NOT MORE THAN 6" O.C. ON ALL SUPPORTED PANEL EDGES. "H" CLIPS SHALL BE USED AT ALL UNSUPPORTED PANEL EDGES WHEN FRAMING IS SPACED GREATER THAN 16" ON CENTER. NAIL INTERMEDIATE MEMBERS AT 12" O.C.

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DISCLAIMER

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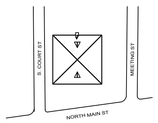
DESIGN, CONSULTATION, INVESTIGATION

FOR CONSTRUCTION

REVISIONS:

△ NUMBER	REMARKS	DATE



KEYPLAN

PROJECT TITLE:

PROVIDENCE FIRE DEPT
ROOF REPLACEMENT

FIRE STATION #10
151 NORTH MAIN STREET, PROVIDENCE
PROVIDENCE COUNTY

DRAWING TITLE:

STATION #10 ROOF FRAMING PLAN

DATE:	PROJ NO:
01.14.2026	225296.20
DRAWN BY: JMF	CHECKED BY: TPG

DRAWING NUMBER:

S1.1

File Location: P:\Projects\225296. City of Prov FD_Aharonian\1. CAPA\DRAFTING\CAPA AUTOCAD FILES\225296.20 CAPA PROVIDENCE FIRE DEPT No.4-No.10 ROOFS.dwg, Printed on: 1/14/2026, by: Joe Marchelewicz

Project Specifications

PROJECT MANUAL

Issued For Construction

January 2026

CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT AT

Fire Station #4 – 10 Branch Ave, 02904
Fire Station # 10 – 151 North Main Street, 02903

PROJECT DESIGN BY:

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& ASSOCIATES, INC.
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CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

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DIVISION 9 FINISHES

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AHARONIAN & ASSOCIATES INC. - ARCHITECTS

310 George Washington Highway - Suite 100 - Smithfield, Rhode Island 02917 T 401-232-5010 F 401-232-5080

CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

DOCUMENT 00 01 15
LIST OF DRAWING SHEETS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work specified in this Document.

1.02 REFERENCE

A. The Drawings hereinafter listed represents an integral part of the Contract Documents. They should not be considered as a separate entity, as along with the technical specifications, form a process of disseminating information required to perform the Work of this Project.

B. The Drawings may be issued in multiple packages or phases. The Schedule below will be modified as these packages are issued.

1.03 SCHEDULE

A. The following schedule indicates the Drawings of this Contract. The manner of listing and respective order is for convenience only and does not obligate the Contractor to perform the Work in any specific sequence. The work indicated on each drawing should not be construed as specific work for a specific trade, subcontractor or supplier.

B. SCHEDULE OF DRAWINGS:

Number	Title
A0.1	GENERAL NOTES
D1.1	FIRE STATION #4 - DEMO ROOF PLAN AND DETAIL
D2.1	FIRE STATION #10 - DEMO ROOF PLAN AND DETAIL
A1.1	FIRE STATION #4 - ROOF PLAN & DETAILS
A1.2	FIRE STATION #4 - ROOF PLAN & DETAILS
S1.0	FIRE STATION #4 - ROOF FRAMING PLAN
S1.1	FIRE STATION #10 - ROOF FRAMING PLAN

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTIONS (Not Applicable)

END OF DOCUMENT 00 01 15

AHARONIAN & ASSOCIATES INC. - ARCHITECTS

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CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

SECTION 02 41 13
SELECTIVE DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Demolition and removal of selected portions of building elements.

B. Patching and repairs.

1.02 DEFINITIONS

A. REMOVE: Remove and legally dispose of items except those indicated to be reinstalled, salvaged or to remain the Owner's property.

B. REMOVE AND SALVAGE: The items indicated to be removed and salvaged shall remain the Owner's property. Remove, clean and pack or crate items to protect against damage. Identify contents of containers and deliver them to Owner's designated storage area.

C. REMOVE AND REINSTALL: Remove items indicated; clean, service and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.

D. EXISTING TO REMAIN: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Architect, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

1.03 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

1.04 QUALITY ASSURANCE

A. REGULATORY REQUIREMENTS: Comply with governing EPA/RI DEM/RI DOH notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. PRE-DEMOLITION CONFERENCE: Conduct conference at Project site to comply with pre-installation conference requirements.

1.05 PROJECT CONDITIONS

A. Owner assumes no responsibility for actual condition of building elements to be selectively demolished.

B. Storage or sale of removed items or materials on-site will not be permitted.

1.06 SCHEDULING

A. Arrange selective demolition schedule so as not to interfere with Owner's on-site operations.

1.07 WARRANTY

A. EXISTING SPECIAL WARRANTY: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void the existing warranties.

PART 2 PRODUCTS

2.01 REPAIR MATERIALS

A. Use repair materials identical to existing materials.

1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually fully match existing adjacent surfaces as much as possible.
2. Use materials whose installed performance equals or surpasses that of existing materials.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that utilities have been disconnected and capped.

B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.

D. When unanticipated mechanical, electrical or structural elements that conflict with the intended function or design are encountered, investigate, and measure the nature and extent of the conflict. Promptly submit a written report to the Architect.

E. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.

F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.02 PREPARATION

A. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with selective demolition operations.
B. Employ a certified, licensed exterminator to treat building and to control rodents and vermin before and during selective demolition operations.

C. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

D. Conduct demolition operations to prevent injury to people and damage to adjacent buildings, spaces, and facilities to remain. Ensure safe passage of people around selective demolition area.

1. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
2. Protect existing site improvements, appurtenances, and landscaping to remain.
3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
4. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior surfaces and new construction to ensure that no water leakage or damage occurs to structure or interior areas.
5. Protect walls, ceilings, floors, and other existing finish work that are to remain and are exposed during selective demolition operations.
6. Cover and protect furniture, furnishings and equipment that have not been removed.

E. Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.
1. Construct dustproof partitions of not less than nominal 4-inch studs, 5/8-inch gypsum wallboard with joints taped on occupied side, and 1/2-inch fire-retardant plywood on the demolition side.
2. Insulate partition to provide noise protection to occupied areas.
3. Seal joints and perimeter.
4. Equip partitions with dustproof doors and security locks.
5. Protect air-handling equipment.
6. Weatherstrip openings.

F. Provide and maintain interior and exterior shoring, bracing or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

1. Strengthen or add new support when required during the progress of selective demolition.

3.03 POLLUTION CONTROLS

A. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.

1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

1. Remove debris from elevated portions of the building by chute, hoist or other device that will convey debris to grade level.

C. Clean the adjacent structures and the improvements of dust, dirt and debris caused by selective demolition operations. Return adjacent areas to the condition existing before start of selective demolition.

3.04 SELECTIVE DEMOLITION

A. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition work above each floor or tier before disturbing supporting members on lower levels.
2. Neatly cut openings and holes plumb, square and true to dimensions required. Use cutting methods is least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering, and chopping. Temporarily cover openings to remain.
3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
4. Do not use cutting torches until the work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
5. Maintain adequate ventilation when using cutting torches.
6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
8. Locate selective demolition equipment throughout the structure and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
9. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
10. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.

B. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power-driven masonry saw or hand tools; do not use power-driven impact tools.

C. Break up and remove concrete slabs on grade, unless otherwise shown to remain.

D. Remove resilient floor coverings and adhesive according to recommendations of the Resilient Floor Covering Institute's (RFCI) "Recommended Work Practices for the Removal of Resilient Floor Coverings" and Addendum.

E. Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RFCI.

F. Remove air-conditioning equipment without releasing refrigerants.

3.05 PATCHING AND REPAIRS

A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.

B. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
1. Completely fill holes and depressions in existing masonry walls to remain with an approved masonry patching material, applied according to manufacturer's printed recommendations.

C. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

E. Patch and repair floor and wall surfaces in the new space where demolished walls or partitions extend one finished area into another. Provide a flush and even surface of uniform color and appearance.

1. Closely match texture and finish of existing adjacent surface.
2. Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
3. When patching smooth painted surfaces, extend final paint coat over entire unbroken surface containing the patch after the surface has received primer and second coat.
4. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
5. Inspect and test patched areas to demonstrate integrity of the installation, where feasible.

F. Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

A. GENERAL: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.

B. BURNING: Do not burn demolished materials.

C. DISPOSAL: Transport demolished materials off Owner's property and legally dispose of them.

3.07 CLEANING

A. Sweep the building broom clean on completion of selective demolition operation.

B. Change filters on air-handling equipment on completion of selective demolition operations.

END OF SECTION 02 41 13

AHARONIAN & ASSOCIATES INC. - ARCHITECTS

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CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

SECTION 05 50 00
METAL FABRICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Shop fabricated ferrous metal items, galvanized and prime painted.

B. Refer to Schedule at end of this Section.

1.02 RELATED SECTIONS

A. Section 06 10 00 – Rough Carpentry.

1.03 REFERENCES

A. ASTM A992 – W Shapes.

B. ASTM A36 - Structural Steel.

C. ASTM A53 - Hot-Dipped, Zinc-coated Welded and Seamless Steel Pipe.

D. ASTM A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

E. ASTM A307 - Low-Carbon Steel Externally and Internally Threaded Fasteners.

F. ASTM A283 - Carbon Steel Plates, Shapes and Bars.

G. ASTM A325 - High Strength Bolts for Structural Steel Joints.

H. ASTM A386 - Zinc-Coating (Hot-Dip) on Assembled Steel Products.

I. ASTM A500 - Cold-formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

J. AWS D1.1 - Structural Welding Code.

K. AWS A2.0 - Standard Welding Symbols.

L. SSPC - Steel Structures Painting Council.

M. FS TT-P-641 - Primer Coating, Zinc Dust-Zinc Oxide (for Galvanized Surfaces).

1.04 SUBMITTALS

A. Submit shop drawings under provisions of Section 01 33 00.

B. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners and accessories.

C. Include erection drawings, elevations and details where applicable.

D. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.

E. Prepare shop drawings under direct supervision of a Professional Structural Engineer registered in the State of Rhode Island.

1.05 QUALIFICATIONS

A. WELDERS' CERTIFICATES: Submit certificates certifying welders employed on the work, verifying AWS qualification within the previous 12 months.

PART 2 PRODUCTS

2.01 MATERIALS

A. STEEL SECTIONS: ASTM A36, A992.

B. STEEL TUBING: ASTM A500, Grade B or ASTM A501.

C. PIPE: ASTM A53, Grade B, Schedule 40.

D. BOLTS, NUTS AND WASHERS: ASTM A307 or ASTM A325 galvanized to ASTM A153 for galvanized components.

E. WELDING MATERIALS: AWS D1.1; type required for materials being welded.

F. PLATES: ASTM A283.

G. PRIMER: SSPC 15, Type 1, Red Oxide for shop application and field touch-up.

H. TOUCH-UP PRIMER FOR GALVANIZED SURFACES: FS TT-P-641.

2.01 FABRICATION

A. Verify dimensions on site prior to shop fabrication.

B. Fabricate items with joints tightly fitted and secured.

C. Fit and shop assemble in largest practical sections for delivery to site.

D. Continuously seal joined members by continuous welds.

E. Grind exposed welds flush and smooth with adjacent finished surfaces. Ease exposed edges to small uniform radius.

F. EXPOSED MECHANICAL FASTENINGS:

1. Flush countersunk screws or bolts unobtrusively located.

2. Consistent with design of component, except where specifically noted otherwise.

G. Make exposed joints butt tight, flush and hairline.

H. Supply components required for anchorage of metal fabrications. Fabricate anchorage and related components of same material and finish as metal fabrication, except where specifically noted otherwise.

2.02 FINISH

A. Clean surfaces of rust, scale, grease and foreign matter prior to finishing.

B. Do not prime surfaces in direct contact bond with concrete or where field welding is required.

C. Prime paint items scheduled with one coat.

D. Galvanize items to minimum 1.25 oz/sq. ft. zinc coating in accordance with ASTM A386.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and ready to receive work.

B. Beginning installation means erector accepts existing conditions.

3.02 PREPARATION

A. Obtain Architect approval prior to site cutting or making adjustments not scheduled.

B. Clean and strip site primed steel items to bare metal where site welding is required.

C. Make provision for erection loads with temporary bracing.

D. Supply items required to be cast into concrete or embedded in masonry with setting templates to appropriate Sections.

3.03 INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. Perform field welding in accordance with AWS D1.1.

C. After installation, touch-up field welds, scratched or damaged surfaces and surfaces not shop-primed with primer, except surfaces to be in contact with concrete.

3.04 ERECTION TOLERANCES

A. MAXIMUM VARIATION FROM PLUMB: 1/4 inch per story, non-cumulative.

B. MAXIMUM OFFSET FROM TRUE ALIGNMENT: 1/4 inch.

3.05 SCHEDULE

A. Provide and install the following items with anchorage and attachments necessary for installation:

1. Balcony Guardrail System.

END OF SECTION 05 50 00

AHARONIAN & ASSOCIATES INC. - ARCHITECTS

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CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

SECTION 06 10 00
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concealed wood blocking, nailers, and support for items to be reinstalled.

B. Plywood over the entire roof area, all levels.

C. All other carpentry work noted on the drawings or required for the installation of new work not contained in Sections 06 01 00 and 06 20 00.

1.02 RELATED REQUIREMENTS

A. Division 7 – for roofing items requiring blocking, nailers, or mounting support, as well as air barrier waterproof shingle underlayment installed with roofing.

1.03 REFERENCE STANDARDS

A. ASTM A153/A153M -Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

B. AWPA U1 -Use Category System: User Specification for Treated Wood; American Wood Protection Association; 2012.

C. PS 20 -American Softwood Lumber Standard; National Institute of Standards and Technology (Department of Commerce); 2010.

1.04 SUBMITTALS

A. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.

1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.

2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

3. Lumber fabricated from old growth timber is not permitted.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Sizes: Nominal sizes as indicated on drawings. Thickness to match existing and sizes to fit for replacement of sheathing.

B. Moisture Content: S-dry or MC19.

C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:

1. Lumber: S4S, No. 2 or Standard Grade.
2. Boards: No. 2 or better for sheathing.

2.03 CONSTRUCTION PANELS

A. Roof Sheathing: APA PRP-108, Structural I Rated Sheathing, Exterior Exposure Class, and as follows:

1. Span Rating: 24/0 (610/0).
2. Thickness: 5/8 inch (13 mm), nominal.

2.04 ACCESSORIES

A. Concealed Fasteners and Anchors:

1. Metal and Finish: Hot-dipped galvanized steel per ASTM A 153/A 153M for all exterior concealed locations, including high humidity and preservative-treated wood locations.

2.05 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 -Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.

1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION -GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including shims, bracing, and blocking.

3.03 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

3.04 ROOF-RELATED CARPENTRY

A. Coordinate installation of roofing carpentry with deck construction, repair of roof openings, and roofing assembly installation.

3.05 INSTALLATION OF CONSTRUCTION PANELS

A. Roof Sheathing: Secure panels with long dimensions perpendicular to framing members, with ends staggered and over firm bearing.

1. Nail panels to framing; staples are not permitted.

END OF SECTION 06 10 00

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CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

DOCUMENT 06 17 53
WOOD TRUSSES

PART 1 GENERAL

1.01 SUMMARY

A. Provide prefabricated and pre-engineered wood trusses.

1.02 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.

B. Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

1. Shop drawings shall be prepared and stamped by a qualified engineer licensed in the jurisdiction of the project.

1.03 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products from acceptable manufacturers which have been in satisfactory use in a similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

B. Standards: TPI, Design Specification for Metal Plate Connected Wood Trusses; TPI, Design Specification for Metal Plate Connected Parallel Chord Wood Trusses.

C. Design Engineering: Registered engineer.

PART 2 PRODUCTS

2.01 MATERIALS

A. Wood Trusses:

1. Lumber Standard: PS 20 American Softwood Lumber Standard.
2. Dressing: Dressed four sides.
3. Species and Grade: Manufacturer’s option.
4. Moisture Content: Seasoned, 19 percent maximum.

B. Connectors, Fasteners, and Metal Framing Anchors:

1. Nails, Wire, Brads, and Staples: FS FF-N-105.

2. Power Driven Fasteners: National Evaluation Report NER-272.
3. Wood Screws: ANSI B18.6.1.
4. Lag Bolts: ANSI B18.2.1.
5. Bolts: ASTM A 307, Grade A; ASTM A 563.
6. Metal Framing Anchors: Hot-dip galvanized steel sheet, ASTM A 653, G60.
7. Connectors: Hot-dip galvanized steel sheet, ASTM A 653, G60 on Electrolytic zinc-coated steel sheet, ASTM A 653; ASTM A 591, Coating Class C.

PART 3 EXECUTION

3.01 INSTALLATION

A. Comply with recommendations of TPI Design Specifications for Metal Plate Connected Wood Trusses.

B. Comply with Structural Building Component Association's "Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses."

C. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with work of other sections.

D. Restore damaged components.

E. Clean and protect work from damage.

END OF SECTION 06 17 53

AHARONIAN & ASSOCIATES INC. - ARCHITECTS

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CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
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SECTION 06 45 50
SIMULATED WOOD TRIM

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Decorative and functional exterior and interior louvers manufactured from cellular polyurethane.
2. All associated mounting accessories and fastening materials.

B. Related Sections:

1. 06 10 00 – Rough Carpentry
2. 07 92 00 – Joint Sealants
3. 09 91 00 – Painting

1.02 REFERENCES

A. ASTM D638 – Standard Test Method for Tensile Properties of Plastics. B. ASTM D695 – Standard Test Method for Compressive Properties of Rigid Plastics. C. ASTM D256 – Impact Resistance of Plastics.

1.03 SUBMITTALS

A. Product Data:

1. Manufacturer’s specifications and installation instructions for louvers and accessories.

B. Shop Drawings:

1. Indicate louver sizes, profiles, blade spacing, and mounting conditions.

C. Samples:

1. Submit minimum 6-inch long sample of louver frame and blade profile if requested.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Manufacturer shall have a minimum of 10 years' experience producing polyurethane architectural products.

B. Mock-Ups:

1. Provide mock-up installation when required by Architect for review of appearance and attachment method.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original, unopened packaging. B. Store products flat, supported, and protected from direct sunlight and excessive heat. C. Handle products to prevent cracking, warping, or surface damage.

1.06 WARRANTY

A. Manufacturer's Limited Warranty:

1. Fypon, LLC standard limited warranty against defects in material and workmanship.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. Basis of Design:

1. Fypon, LLC

B. Substitutions:

1. Under provisions of Section 01 60 00.

2.02 MATERIALS

A. Louvers:

1. Material: Molded cellular polyurethane.
2. Color: Factory white, paint-grade.
3. Finish: Smooth, suitable for field painting.
4. Moisture Resistance: Non-rotting, insect-resistant, and moisture-resistant.

B. Construction:

1. One-piece or assembled louver units as manufactured by Fypon.
2. Fixed blade configuration unless otherwise indicated.

2.03 ACCESSORIES

A. Fasteners:

1. Corrosion-resistant screws appropriate for substrate.

B. Adhesives:

1. Manufacturer-approved polyurethane or PVC trim adhesive.

C. Sealants:

1. Paintable exterior-grade sealant compatible with polyurethane.

2.04 FABRICATION

A. Fabricate louvers to sizes and profiles indicated on Drawings. B. Provide factory-assembled units when possible, to minimize field joints.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify substrates are sound, clean, dry, and properly prepared.

B. Do not begin installation until unsatisfactory conditions are corrected.

3.02 INSTALLATION

A. Install louvers in accordance with Fypon’s published installation instructions.

B. Secure louvers plumb, level, and true using concealed or exposed fasteners as recommended.

C. Allow for thermal movement; do not overtighten fasteners.

3.03 FIELD QUALITY CONTROL

A. Inspect installed louvers for proper alignment, secure attachment, and surface condition.

B. Replace damaged units.

3.04 CLEANING AND PROTECTION

A. Remove excess adhesive and sealant.

B. Protect installed louvers from damage during remaining construction activities.

3.05 PAINTING

A. Prime and paint louvers in accordance with manufacturer’s recommendations.

B. Use 100% acrylic latex exterior paint unless otherwise specified.

END OF SECTION 06 45 50

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CITY OF PROVIDENCE FIRE DEPARTMENT
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SECTION 06 65 00
PLASTIC TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

A. A free-foam cellular polyvinyl chloride (PVC) material forming the following building components:

1. Sheet Stock, Corner Boards, Trim Boards.

1.02 REFERENCES

A. Leadership in Energy and Environmental Design (LEED)

B. National Green Building Standard (NGBS)

1.03 SUBMITTALS

A. Refer to Section 01 33 00 Submittal Procedures.

B. Product Data: Submit manufacturer current technical literature for each type of product.

1.04 QUALITY ASSURANCE

A. Manufacturer Instructions: Provide manufacturer's written instructions including proper material storage, material handling, and attachment methods.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver trim materials and components in manufacturer's original, unopened, undamaged packaging with identification labels intact.

B. Store materials on dry, level, firm, and clean surface. Cover and ventilate to allow air to circulate and moisture to escape.

C. Allow material to acclimate to environment, as recommended by manufacturers, prior to installation.

1.06 WARRANTY

A. Limited Warranty:

1. Standard form in which manufacturer agrees that under normal use and service conditions Ply Gem Trim products shall be free from material defects in workmanship and materials and will not split, splinter, or rot.

2. Warranty Period: 30 years.

PART 2 PRODUCTS

1.01 MANUFACTURERS

A. Ply Gem Trim and Mouldings; Ply Gem Siding Group - www.plygemtrim.com
2600 Grand Boulevard, Suite 900; Kansas City, Missouri 64108 - (Tel 800-788-19640)

B. Substitutions: Under provisions of Section 01 60 00.

1.02 PERFORMANCE CRITERIA

A. Manufacturing Tolerances:

1. Variation in component length: Plus 1.00; minus 0.00
2. Variation in component width: Plus, or minus 1/16 inch.
3. Variation in component thickness: Plus, or minus 1/16 inch.
4. Variation in component edge cut: Plus, or minus 2 degrees.

1.03 MATERIALS

A. Extruded free-foam cellular PVC material used for interior and exterior building components.

1. Standard Profiles:
   a. Trim board:
      i. Nominal width: as indicated on Drawings.
      ii. Nominal thickness: 5/4 inch
      iii. Texture: Smooth
      iv. Provide J-Notch
   b. Sheet:
      i. Sheet Width: 4 feet
      ii. Thickness: 5/4 inch
      iii. Texture: Smooth
      iv. Integral J/rabetted

1.04 ACCESSORIES

A. Fasteners: Provide Cortex custom fasteners with plugs and setting tool size as recommended by manufacturer.

B. Adhesive: Provide product as recommended by manufacturer.

C. Sealants: Refer to section 07 92 00 – Joint Sealants

1.05 FINISH

A. Manufacturer’s standard finish “White” to be painted in field

PART 3 EXECUTION

1.01 EXAMINATION

A. Verify that substrate is ready for the installation of trim.

B. Verify that building components that require installation prior to trim installation are complete and ready for the work of this Section.

1.02 INSTALLATION

A. Install free foam cellular PVC trim per manufacturer's written installation instructions and as follows:

1. Install trim to flat, solid and stable surfaces.
2. Install trim level, plumb, true, and aligned with adjacent materials.
3. Do not install damaged components.
4. Fasten trim with minimum 2 fasteners at each framing member. Refer to manufacturer's installation instructions for recommended fastening patterns.
5. Allow for thermal movement in long trim runs, provide a minimum of 1/8 inch movement for each 18 feet.
6. Install fasteners not more than 2 inches from each end of trim.
7. Bond running joints and corners with adhesive.
8. Joinery:
    a. A trim shall be installed with the minimum number of joints practical, using full length pieces.
    b. Do not use trim pieces less than 24 inches long for long trim runs, except where necessary.
    c. End to end joints to be scarf joints.
    d. Stagger end joints in adjacent and related members.
    e. Scribe and cut trim to fit adjoining work.
    f. Cut joints shall be fit to exclude water.
    g. Cope joints at returns and miter outside corners.
    h. Lightly sand joints after cutting.

B. Install flashings over trim as indicated on Drawings.

1.03 CLEANING AND PROTECTION

A. Remove damaged, defective or improperly installed materials. Replace them with new materials installed per requirements of this section.

B. Clean finished surfaces according to manufacturer's written instructions; maintain condition until Substantial Completion.

END OF SECTION 06 65 00

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SECTION 07 21 13
POLYISOCYANURATE FOAM BOARD INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Rigid polyisocyanurate foam board insulation with foil facers.

B. Fasteners, adhesives, and sealants necessary for complete installation.

1.02 REFERENCES

A. ASTM C 578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.

B. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

C. ASTM E 2178 - Standard Test Method for Air Permeance of Building Materials.

D. CAN/ULC-S701 - Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.

1.03 PERFORMANCE REQUIREMENTS

A. Materials of this Section shall provide a thermal and vapor and air barrier at building enclosure elements.

1.04 SUBMITTALS

A. Make submittals in accordance with the provisions of the Contract and Specification Sections.

B. Product Test Reports: Submit evaluation reports published by independent authorities indicating evidence of compliance with specified criteria.

C. Product Data: Submit product data for each type of product indicated.

1.05 QUALITY ASSURANCE

A. Surface Burning Characteristics: Mark products with readily identifiable mark from recognizable testing agency indicating compliance with CAN/ULC S102

1. Flame spread: less than 500.

B. CCMC Evaluation Report No. 12422-R: Meets CAN/ULC S704-03, Type 2, Class 1

1.06 STORAGE & HANDLING

A. Comply with Manufacturer's recommendations for the proper storage and handling of insulation materials.

B. Store materials off ground, protected from physical damage, and covered or otherwise shielded from sunlight.

C. Protect insulation so that insulation does not come in direct contact with rain, snow, or other moisture sources.

D. Cover installation within 60 calendar days of initial installation.

1.07 WASTE MANAGEMENT AND DISPOSAL

A. Separate and recycle waste materials in accordance with the provisions of the Contract and Specification Sections.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Certainteed Corporation.

B. Owens-Corning Fiberglass Corporation.

C. Kingspan

D. Firestone

2.02 MATERIALS

A. POLYISOCYANURATE RIGID FOAM BOARD INSULATION: Foil Faced Polyisocyanurate Foam Board Insulation: High performance rigid insulation board consisting of CAN/ULC S704-03, Type 2, Class 1 closed-cell polyisocyanurate foam core laminated between a coated foil facer on front side of board and a reflective foil facer on the back side of the board. 1219 mm x 2438 mm (4 ft x 8 ft) or factory cut to 406 mm x 2438 mm (16 in x 8 ft) EnergyShield manufactured by Atlas Roofing Corporation.

1. Provide foil faced polyisocyanurate board insulation with the following thickness, RSI Value, and R-values.
2. Facer Materials: foil facer on each face of insulation.
3. Size: [1219 mm x 2438 mm] (4 ft x 8 ft) or/and [1219 mm x 2743 mm] (4 ft x 9 ft).
4. Flame Spread and Smoke Developed: Less than 500 when tested in accordance CAN/ULC S102.
5. Water Vapor Permeance: Less than 60 ng/ (Pa s m2) at 25.4 mm (1 perm per inch) when tested in accordance with ASTM E 96, Desiccant Method.
6. Compressive Strength: Greater than 140 kPa when tested in accordance with ASTM D 1621.
7. Water Absorption: Less than 3.5% by volume when tested in accordance with ASTM C 209.
8. Dimensional Stability: Less than 2% linear change when tested in accordance with ASTM D 2126.
9. Service Temperatures: -73ºC to +122ºC.
10. Produced without using HCFC, CFC and HFC blowing agents.

2.03 ACCESSORIES

A. Insulation Adhesive and joint treatment: High strength, heavy-bodied adhesive formulated to bond insulation to metal, concrete air/ vapor membranes or masonry surfaces.

1. Product: Subject to compliance with the requirements, provide one of the following:
   a. Bakor/Henry Air Block 21
   b. Other products approved in writing by the board insulation manufacturer.

B. Mechanical Fasteners: Select type, size, and length compatible with the substrate, wall system and exposure.

C. Joint Sealant: Single component, non-shrink joint sealants, backings that are compatible with each other and with other materials in the assembly.

D. Expanding Foam Sealant: Single component, non-shrink, complying with CAN/ULC S710 that is compatible with insulation board.

E. Joint Tape: Joint tape suitable for use with foil facers. Ensure compatibility prior to use by field testing.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify site conditions under the provisions of the Contract and Specification Sections.

B. Verify that substrate and adjacent materials are dry and ready to receive insulation.

C. Verify mechanical and electrical services within walls have been installed and tested.

3.02 INSTALLATION

A. Install Polyisocyanurate Foam Board in accordance with manufacturer's instructions.

B. Install Polyisocyanurate Foam Board at locations shown on Drawings without gaps or voids.

3.03 SCHEDULE

A. Tape: Install tape to form a continuous seal between adjacent boards. Ensure compatibility and maintain adequate overlaps.

B. Install Polyisocyanurate Foam Board to thickness, R-value and type at locations indicated on the Drawings.

3.04 PROTECTION

A. Protect polyisocyanurate rigid foam board insulation from excess moisture, mechanical damage, and exposure to open flame.

B. Promptly repair damage caused to board insulation in a manner that retains integrity and continuity of board insulation and facer materials.

END OF SECTION 07 21 13

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SECTION 07 31 13
ASPHALT SHINGLES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Asphalt roofing shingles.

1. Leak barrier and roof deck protection.
2. Metal flashing associated with shingle roofing.

1.02 RELATED SECTIONS

A Section 06 10 00 - Rough Carpentry: Framing, wood decking, and roof sheathing.

B. Section 07 71 23 – Manufactured gutters and downspouts.

1.03 REFERENCES

A. American Society for Testing and Materials (ASTM) - Annual Book of ASTM Standards

1. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
2. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
3. ASTM B 370 - Standard Specification for Copper Sheet and Strip for Building Construction.
4. ASTM D 3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
5. ASTM D 3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
6. ASTM D 3462 – Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
7. ASTM D 4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
8. ASTM D 7158 - Standard Test Method for Wind-Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
9. ASTM E 903 – Standard Test Method for Solar Absorptance, Reflectance, and Transmission of Materials Using Integrating Spheres.

B. Underwriters Laboratories (UL) - Roofing Systems and Materials Guide (TFWZ.R21)

1. UL 790 - Tests for Fire Resistance of Roof Covering Materials.
2. UL 997 - Wind Resistance of Prepared Roof Covering Materials.

3. UL 2218 – Impact Resistance of Prepared Roof Coverings Materials.

C. Asphalt Roofing Manufacturers Association (ARMA)

D. Sheet Metal and Air Conditioning Contractors National Association, 1nc. (SMACNA) - Architectural Sheet Metal Manual.

E. National Roofing Contractors Association (NRCA)

F. American Society of Civil Engineers (ASCE).

1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

1.04 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

1.05 SUBMITTALS

A. Submit copies of GAF product data sheets, detail drawings and samples for each type of roofing product.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, leak barrier, and ventilation, by a single manufacturer.

B. Installer Qualifications: Installer must be approved for installation of all roofing products to be installed under this section.

1.07 REGULATORY REQUIREMENTS

A. Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification. Install all roofing products in accordance with all federal, state and local building codes.

B. All work shall be performed in a manner consistent with current OSHA guidelines.

1.08 PREINSTALLATION MEETING

A. General: For all projects with more than 250 squares of roofing, a pre-installation meeting is strongly recommended.

B. Timing: The meeting shall take place at the start of the roofing installation, no more than 2 weeks into the roofing project.

C. Attendees: Meeting to be called for by manufacturer’s certified contractor. Meeting’s mandatory attendees shall include the certified contractor and the manufacturer’s representative. Non-mandatory attendees shall include the owner’s representative, architect or engineer’s representative, and the general contractor’s representative.

D. Topics: Certified contractors and manufacturers’ representatives shall review all pertinent requirements for the project, including, but not limited to, scheduling, weather considerations, project duration, and requirements for the specified warranty.

1.09 DELIVERY, STORAGE, AND HANDLING

A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.

B. Store products in a covered, ventilated area, at temperatures not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.

C. Store bundles on a flat surface. Maximum stacking height shall not exceed GAF's recommendations. Store all rolls on end.

D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.

1.10 WEATHER CONDITIONS

A. Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with GAF's recommendations

1.11 WARRANTY

A. Provide for the owner a **GAF® Weather Stopper® Golden Pledge® Ltd Warranty**:

1. Eligibility requirements: Roofs installed by a GAF® Certified GAF® Master Elite™ Roofing Contractor only. Requires at least 5 qualifying accessory products in addition to GAF shingles.
2. Manufacturing defects:
   a) Any other type of owner or building:
      1. 40 years with a 20-year Smart Choice® Protection Period (non-prorated). *GAF Accessories installed with lifetime shingles are also covered with a 40-year limited warranty with a 20-year Smart Choice® Protection Period (non-prorated).*
3. Workmanship:
   a) Thirty (30) years.
4. Wind Warranty Coverage:
   a) 15-year limited warranty for 130 mph with the special installation of **6** nails per shingle and GAF Starter Strip Products installed at the eaves AND rakes. Otherwise, wind warranty is 110 mph without special installation described above.
5. Algae Warranty Coverage:
   1. StainGuard® labeled Shingles:10-year limited warranty with 1-year Smart Choice® Protection Period (non-prorated).

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acceptable Manufacturer: GAF, 1 Campus Drive, Parsippany NJ 07054. Tel: 1-973-628-3000.

B. Roof shingles and accessories substitutions is not allowed.

2.02 SHINGLES

A. Architectural laminate, granule surfaced, self-sealing asphalt shingle with a strong fiberglass reinforced Micro Weave® core; LayerLock™ Technology, a mechanically fused common bond; larger Strick Zone nailing area and features GAF®'s patented High-Definition® color blends and enhanced shadow effect and wood shake appearance, Timberline HDZ® High-Definition Lifetime Shingles, by GAF®.

1. Shingle Size: 13 1/4" x 39 3/8"
2. Shingle Exposure: 5 5/8"
3. Bundle Application Exposure: 30.76 sq. ft. (2.86 sq. m)
4. Coverage: 3 bundles (2 bundles of 22 and 1 bundle of 20), when applied according to instructions, will cover 1 square.

5. StainGuard® Protection: 10-year limited warranty against blue-green algae discoloration
6. CRRC Rated Color: White
7. Can be used to comply with 2016 Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations
8. Color: As selected from manufacturers' full range.

2.03 HIP AND RIDGE SHINGLES

A. High profile self-sealing hip and ridge cap shingle matching the color of selected roof shingle. Each bundle covers approx. 20 lineal feet (6.10m). **Timbertex**® Premium Ridge Cap Shingles, by GAF.

2.04 STARTER STRIP

A. Self-sealing starter shingle designed for premium roof shingles. Each bundle covers approx. 100 lineal feet (30.48m) for English and metric shingles or 50 lineal feet (15.24m) for oversized shingles. **WeatherBlocker™ Eave/Rake Starter Strip** by GAF.

2.05 LEAK BARRIER

A. Self-adhering, self-sealing, bituminous leak barrier surfaced with a smooth polyethylene film. Approved by UL, Dade County, ICC, State of Florida and Texas Department of Insurance, **StormGuard® Leak Barrier,** by GAF.
   1. Roll contains approx. 200 sq ft (18.6 sq.m.), 36" X 66.7' (0.9m x 20.3m)

2.06 SHINGLE UNDERLAYMENT

A. Premium, water repellant, breather type non-asphaltic underlayment. UV stabilized polypropylene construction. Meets or exceeds ASTM D226 and D4869. Approved by Dade Country, Florida Building Code, and ICC. **Deck-Armor™** Premium Breathable Roof Deck Protection, by GAF.
   1. 4 square roll approx. 400 sq. ft (37.2 sq m) , 48" x 100' (1.22 m x 30.5 m)
   2. 10 square roll approx. 1003 sq. ft (92.9 sq m) , 48" x 250' (1.22 m x 76.2 m)

2.07 ROOFING CEMENT

A. Asphalt Plastic Roofing Cement meeting the requirements of ASTM D 4586, Type I or II.

B. Roof Cement: ASTM D 4586, **Matrix™ 203 Plastic Roof Cement**.

C. Roof Cement: ASTM D 4586. **Matrix™ 204 Wet/Dry Roof Cement.**

2.08 ROOF ACCESSORIES

A. Exterior acrylic rust resistant aerosol roof accessory paint. Each 6 oz can is available in boxes of 6 and in a wide variety of colors to compliment the roof. **Shingle-Match™** Roof Accessory Paint by GAF.

B. UV stable solid molded PVC compression collar, Kynar PVDF coated 24-gauge galvanized flange, **Ultimate Pipe Flashing** by Lifetime Tool.

2.09 ATTIC VENTILATION

A. Ridge Vents
   1. Rigid plastic ridge ventilator designed to allow the passage of hot air from attics while prohibiting snow infiltration. For use in conjunction with eave/ soffit intake ventilation products. Each package contains 40 lineal feet (12.19m) of vent. **Cobra® Snow Country Advanced™** Ridge Vent (includes 3" (76mm) galvanized ring shank nails), by GAF.
      a) Net Free Ventilation (per foot): 18.0 sq inches (11613 sq.mm/m)

b) Product Size: 9 in x 4 ft. (229 mm x 1.22 m); 11.5 in x 4 ft. (292 mm x 1.22 m)

B. Hip Vents

1. Rigid plastic ridge ventilator designed to allow the passage of hot air out of attics. For use in conjunction with eave/ soffit intake ventilation products. Provides 9 sq inches in NFVA per lineal foot. **Cobra® Hip Vent** (includes 3" (76mm) galvanized ring shank nails), by GAF

2.10 NAILS

A. Standard round wire, zinc-coated steel or aluminum; 10 to 12 gauge, smooth, barbed or deformed shank, with heads 3/8 inch (9 mm) to 7/16 inch (11 mm) in diameter. Length must be sufficient to penetrate solid wood at least 3/4 inch (19mm) or through plywood or oriented strand board by at least 1/8 inch (3.18mm).

2.11 METAL FLASHING

A. 0.032-inch (0.8mm) aluminum sheet, complying with ASTM B 209.

PART 3 EXECUTION

3.01 PREPARATION

A. Use minimum 3/8" (10 mm) plywood or OSB decking as recommended by APA-The Engineered Wood Assn.

A. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

B. At areas that receive eaves protection membrane, fill knotholes and cracks with latex filler.

C. Roof slope should be a minimum 2:12

D. Install crickets on the upslope side of all chimneys in the north, any chimney wider than 24" (610mm), and on all roof's steeper than 6/12.

3.02 SUBSTRATE INSTALLATION

A. The structural roof deck shown in the plans shall be smooth and level and free of water or debris before the nail base insulation is installed. Apply vapor retarder if required.

B. Installation shall follow the GAF written installation instructions.

C. Fasten with ThermaCal® Fasteners to the supporting roof deck shown in the plans.

D. Protect nail base insulation work from exposure to moisture damage and deterioration, primarily by prompt installation of the roofing, sheet metal and waterproofing work.

3.03 INSTALLATION OF UNDERLAYMENTS

A. General:

1. Install using methods recommended by GAF, in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.

B. Eaves:

1. Install eaves edge metal flashing tight with fascia boards; lap joints 2 inches (51mm) and seal with plastic cement or high-quality urethane sealant; nail at the top of the flange.

2. In the north, and on all roofs between 2/12 and 4/12 (low slopes) install GAF leak barrier up the slope from eaves edge a full 36 inches (914mm) or to at least 24 inches (610 mm) beyond the interior "warm wall". Lap ends 6 inches (152mm) and bond.

C. Valleys:

1. Install eaves protection membrane at least 36 (914mm) inches wide and centered on the valley. Lap ends 6 inches (152mm) and seal.

D. Hips and Ridges:

1. Install GAF leak barrier along entire lengths. If ridge vents are to be installed, position the GAF leak barrier so that the ridge slots will not be covered.

E. Roof Deck:

1. Install one layer of GAF roof deck protection over the entire area not protected by GAF leak barrier at the eaves or valley. Install sheets horizontally so water sheds and nail in place.
2. On roofs sloped at 4:12 or greater, lap horizontal edges at least 2 inches (51mm) and at least 2 inches (51mm) over eaves protection membrane.
3. On roofs sloped between 2:12 to less than 4:12, lap horizontal edges at least 19 inches (482 mm) and at least 19 inches (482mm) over eaves protection membrane.
4. Lap ends at least 4 inches (102 mm). Stagger end laps of each layer at least 36 inches (914 mm).
5. Lap GAF roof deck protection over GAF leak barrier in valley at least 6 inches (152mm).

F. Deck-Armor™ Application

1. Deck-Armor shall be installed over a clean, dry deck.
2. Install Weather Watch® or StormGuard® Leak Barrier at eaves, valleys, rakes, skylights, dormers and other vulnerable leak areas.
3. Lay Deck-Armor™ over deck and overlap 3” (76mm) at side laps and 6” (152mm) at end laps.
4. For exposure to rain or snow, overlap 12” (305mm) at end laps.
5. For side and end laps: fasten Deck-Armor 12” (305mm) o.c. (6” (152mm) o.c. for high wind areas).
6. For middle of the roll: fasten Deck-Armor 24” (610mm) o.c. (12” (305mm) o.c. for high wind areas).
7. For exposure to rain or snow, completely cover all side laps, end laps and fasteners with tape.
8. For long term exposure see complete Deck-Armor installation instructions for side lap detail.
9. If roof may be exposed to high winds, apply tape over all fasteners at the center of the roll to prevent rain or snow from entering at the fasteners.
10. For slopes between 2:12 to less than 4:12, a double application of Deck-Armor is required. See complete Deck-Armor installation instructions for more information.

G. Penetrations:

1. Vent pipes: Install a 24 inch (610 mm) square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.
2. Vertical walls: Install eaves protection membrane extending at least 6 inches (152mm) up the wall and 12 inches (305mm) onto the roof surface. Lap the membrane over the roof deck underlayment.
3. Skylights and roof hatches: Install eaves protection membrane from under the built-in counterflashing and 12 inches (305mm) on to the roof surface lapping over roof deck underlayment.
4. Chimneys: Install eaves protection membrane around entire chimney extending at least 6 inches (152mm) up the wall and 12 inches (305mm) onto the roof surface. Lap the membrane over the roof deck underlayment.

5. Rake Edges: Install metal edge flashing over eaves protection membrane and roof deck underlayment; set tight to rake boards; lap joints at least 2 inches (51mm) and seal with plastic cement; secure with nails.

3.04 INSTALLATION OF SHINGLES

A. General:

1. Install in accordance with GAF's instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully (not by "breaking" over ridge or bundles), and by taking extra precautions in temperatures below 40 degrees F (4 degrees C).
3. Handle carefully in hot weather to avoid scuffing the surface or damaging the shingle edges.

B. Placement and nailing:

1. Beginning with the starter strip, trim shingles so that they “nest” within the shingle located beneath it. This procedure will yield a first course that is typically 3” (76mm) to 4” (102mm) rather than a fully exposed shingle.
2. For maximum wind resistance along rakes, install any GAF starter strip containing sealant or cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.
3. Laterally, offset the new shingles from the existing keyways, to avoid waves or depressions caused by excessive dips in the roofing materials.
4. Using the bottom of the tab on existing shingles, align subsequent courses.
5. *Note: DO NOT install standard sized shingles (5” exposure) over metric (5 5/8” exposure) shingles, as it will overexpose the shingles and reveal the nails. Use standard alignment methods to assure proper shingle placement.
6. Secure with 4, 5, or 6 nails per shingle per GAF’s instructions or local codes.
7. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
8. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
9. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.

C. Valleys

1. Install valleys using the "closed cut valley" method:
   a Run the first course of shingles from the higher roof slope across the valley at least 12 inches (305mm).
   b Run succeeding courses of shingles from the lower roof slope across the valley at least 12 inches (305mm) and nail not closer than 6 inches (152mm) to center of valley.
   c Run shingles from the upper roof slope into the valley and trim 2 inches (51mm) from the center line.

D. Penetrations

2. All Penetrations are to be flashed according to GAF, ARMA and NRCA application instructions and construction details.

E. Skylights and Roof Hatches

3. Consult the manufacturer of the skylight or roof hatch for specific installation recommendations.

4. Skylights and roof hatches shall be installed with prefabricated metal flashings specifically designed for the application of the unit.

3.05 INSTALLATION OF ATTIC VENTILATION

A. General

1. Ventilation must meet or exceed current F.H.A., H.U.D. and local code requirements.

B. Ridge / Soffit ventilation

1. Install ridge vent along the entire length of ridges:
2. Cut continuous vent slots through the sheathing, stopping 6 inches (152mm) from each end of the ridge.
3. On roofs without ridge board, make a slot 1 inch (25mm) wide, on either side of the peak (2" (51mm) overall).
4. On roofs with ridge board, make two slots 1-3/4 inches (44.5mm) wide, one on each side of the peak (3 ½" (89mm) overall).
5. Install ridge vent material along the full length of the ridge, including uncut areas.
6. Butt ends of ridge vent material and join using roofing cement.
7. Install eaves vents in sufficient quantity to equal or exceed the ridge vent area.

C. Roof and Gable Louvers:

1. Cut vent hole through sheathing as specified by the manufacturer for the type of vent to be installed.
2. Install a 24 inches (610mm) square of leak barrier, centered around the hole for roof louvers
3. Install according to manufacturer's instructions for flashing vent penetrations
4. Install eave vents in sufficient quantity to equal or exceed the exhaust vent area, calculated as specified by manufacturer.

3.06 PROTECTION

D. Protect installed products from foot traffic until completion of the project.

E. Any roof areas that are not completed by the end of the workday are to be protected from moisture and contaminants.

END OF SECTION 07 31 13

310 George Washington Highway - Suite 100 - Smithfield, Rhode Island 02917 T 401-232-5010 F 401-232-5080

CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

SECTION 07 55 00
PROTECTED MEMBRANE ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

1. Cold Applied 2-Ply Thermoplastic Hybrid Roof System

1.02 RELATED SECTIONS

A. Section 06 1000 - Rough Carpentry.

1.03 REFERENCES

A. ASTM D 41 - Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing.

B. ASTM D 312 - Standard Specification for Asphalt used in Roofing.

C. ASTM D 451 - Standard Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products.

D. ASTM D 1970 - Specification for Sheet Materials, Self-Adhering Polymer Modified Bituminous, Used as Steep Roofing Underlayment for Ice Dam Protection.

E. ASTM D 1079 Standard Terminology Relating to Roofing, Waterproofing and Bituminous Materials.

F. ASTM D 1227 Standard Specification for Emulsified Asphalt Used as Protective Coating for Roofing.

G. ASTM D 1863 Standard Specification for Mineral Aggregate Used as a Protective Coating for Roofing.

H. ASTM D 2178 Standard Specification for Asphalt Glass Felt Used in Roofing and Waterproofing.

I. ASTM D 2824 Standard Specification for Aluminum-Pigmented Asphalt Roof Coating.

J. ASTM D 4586 Standard Specification for Asphalt Roof Cement, Asbestos-Free.

K. ASTM D 4601 Standard Specification for Asphalt Coated Glass Fiber Base Sheet Used in Roofing.

L. ASTM D 5147 Standard Test Method for Sampling and Testing Modified Bituminous Sheet Materials.

M. ASTM D 6162 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements.

N. ASTM D 6163 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements.

O. ASTM D 6164 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements.

P. ASTM D 6754 - Standard Specification for Ketone Ethylene Ester (KEE) Sheet Roofing.

Q. ASTM D 6757 - Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.

R. ASTM E 108 - Standard Test Methods for Fire Test of Roof Coverings

S. Factory Mutual Research (FM): Roof Assembly Classifications.

T. National Roofing Contractors Association (NRCA): Roofing and Waterproofing Manual.

U. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - Architectural Sheet Metal Manual.

V. Underwriters Laboratories, Inc. (UL): Fire Hazard Classifications.

W. Warnock Hersey (WH): Fire Hazard Classifications.

X. ANSI-SPRI ES-1 Wind Design Standard for Edge Systems used with Low Slope Roofing Systems.

Y. ASCE 7, Minimum Design Loads for Buildings and Other Structures

Z. UL - Fire Resistance Directory.

AA. FM Approvals - Roof Coverings and/or RoofNav assembly database.

BB. FBC - Florida Building Code.

CC. Miami-Dade Building Code Compliance - N.O.A. (Notice of Acceptance).

DD. California Title 24 Energy Efficient Standards.

1.04 DESIGN / PERFORMANCE REQUIREMENTS

A. Perform work in accordance with all federal, state and local codes.

Design Requirements:

a. Uniform Wind Uplift Load Capacity - Installed roof system shall withstand negative (uplift) design wind loading pressures complying with the following criteria.

1. Design Code: ASCE 7-16 ASD
2. Risk Category: IV
3. Wind Speed: 133 mph
4. Exposure Category: C
5. Design Roof Height: 22 feet.
6. Minimum Building Width: 15 feet.
7. Base Velocity Pressure: 21.3 psf
8. Roof Pitch: 1/4:12
9. Roof Area Design Uplift Pressure:
   Zone 1’ - Field of roof – 30.8 PSF
   Zone 1 – Field of roof – 47.8 PSF
   Zone 2 - Eaves, ridges, hips and rakes – 60.6 PSF
   Zone 3 – Corners – 79.7
   Zone 4 – Wall Perimeter – 32.7
   Zone 5 – Wall Corner – 38.5

1.05 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
Preparation instructions and recommendations.
Storage and handling requirements and recommendations.
Installation instructions.

C. Submit shop drawings including installation details of roofing, flashing, fastening, insulation and vapor barrier, including notation of roof slopes and fastening patterns of insulation and base modified bitumen membrane, prior to job start.

D. Design Pressure Calculations: Submit design pressure calculations for the roof area in accordance with ASCE 7 and local Building Code requirements. Include a roof system attachment analysis report, certifying the system's compliance with applicable wind load requirements before Work begins.

E. Verification Samples: For each modified bituminous membrane ply product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

F. Manufacturer's Certificates: Provide to certify products meet or exceed specified requirements.

G. Test Reports: Submit test reports, prepared by an independent testing agency, for all modified bituminous sheet roofing, indicating compliance with ASTM D5147. Testing must be performed at 77 deg. F. Tests at 0 deg. F will not be considered.

H. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic inspection and maintenance of all completed roofing work. Provide product warranty executed by the manufacturer. Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.

1.06 QUALITY ASSURANCE

A. Perform Work in accordance with NRCA Roofing and Waterproofing Manual.

B. Manufacturer Qualifications: Company specializing in manufacturing products specified with documented ISO 9001 certification and minimum of twelve years of documented experience and must not have been in Chapter 11 bankruptcy during the last five years.

C. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience and a certified Pre-Approved Garland Contractor.

D. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress.

E. Product Certification: Provide manufacturer's certification that materials are manufactured in the United States and conform to requirements specified herein, are chemically and physically compatible with each other, and are suitable for inclusion within the total roof system specified herein.

F. Source Limitations: Obtain all components of roof system from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the roofing system Manufacturer. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the Manufacturer.

1.07 PRE-INSTALLATION MEETINGS

A. Convene minimum two weeks prior to commencing Work of this section.

B. Review installation procedures and coordination required with related Work.

C. Inspect and make notes of job conditions prior to installation:
Record minutes of the conference and provide copies to all parties present.
Identify all outstanding issues in writing designating the responsible party for follow-up action and the timetable for completion.
Installation of roofing system shall not begin until all outstanding issues are resolved to the satisfaction of the Architect.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging with labels intact until ready for installation.

B. Store all roofing materials in a dry place, on pallets or raised platforms, out of direct exposure to the elements until time of application. Store materials at least 4 inches above ground level and covered with "breathable" tarpaulins.

C. Stored in accordance with the instructions of the manufacturer prior to their application or installation. Store roll goods on end on a clean flat surface except store KEE-Stone FB 60 rolls flat on a clean flat surface. No wet or damaged materials will be used in the application.

D. Store at room temperature wherever possible, until immediately prior to installing the roll. During winter, store materials in a heated location with a 50-degree F (10 degree C) minimum temperature, removed only as needed for immediate use. Keep materials away from open flame or welding sparks.

E. Avoid stockpiling of materials on roofs without first obtaining acceptance from the Architect/Engineer.

F. Adhesive storage shall be between the range of above 50-degree F (10 degree C) and below 80-degree F (27 degree C). Area of storage shall be constructed for flammable storage.

1.09 COORDINATION

A. Coordinate Work with installing associated metal flashings as work of this section proceeds.

1.10 PROJECT CONDITIONS

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

1.11 WARRANTY

A. Upon completion of the work, provide the Manufacturer's written and signed NDL Edge-to-Edge Warranty, warranting that, if a leak develops in the roof during the term of this warranty, due either to defective material or defective workmanship by the installing contractor, the manufacturer shall provide the Owner, at the Manufacturer's expense, with the labor and material necessary to return the defective area to a watertight condition.
Warranty Period: 30 years from date of acceptance.

B. Installer is to guarantee all work against defects in materials and workmanship for a period indicated following final acceptance of the Work.
Warranty Period: 3 years from date of acceptance.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. Garland Company, Inc. (The); 3800 E. 91st St., Cleveland, OH 44105. ASD. Toll Free: 800-321-9336. Phone: 216-641-7500. Fax: 216-641-0633. Web Site: www.garlandco.com. Fkaram@garlandco.com, Dwall@garlandco.com

2.02 COLD APPLIED 2-PLY THERMOPLASTIC HYBRID ROOF SYSTEM - KEE-Stone FB 60

A. Base (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive: FlexBase Plus 80:

B. Thermoplastic Cap (Ply) Sheet: One ply bonded to the prepared substrate with Interply Adhesive (2): KEE-Stone FB 60:

C. Interply Adhesive: (1)
Green-Lock Plus Membrane Adhesive.

D. Interply Adhesive: (2)
KEE-Lock Spatter Spray

E. Flashing Base Ply: One ply bonded to the prepared substrate with Flashing Ply Adhesive: FlexBase 80:

F. Flashing Cap (Ply) Sheet: One ply bonded to the prepared substrate with Flashing Ply Adhesive: KEE-Stone FB 60 Flashing.

G. Flashing Ply Adhesive (1):
Green-Lock Plus Flashing Adhesive.

PART 3 EXECUTION

2.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. Inspect and approve the deck condition, slopes and fastener backing if applicable, parapet walls, expansion joints, roof drains, stack vents, vent outlets, nailers and surfaces and elements.

C. Verify that work penetrating the roof deck, or which may otherwise affect the roofing, has been properly completed.

D. If substrate preparation and other conditions are the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

2.02 PREPARATION

A. General: Clean surfaces thoroughly prior to installation.

a. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

b. Fill substrate surface voids that are greater than 1/4 inch wide with an acceptable fill material.

c. Roof surface to receive roofing system shall be smooth, clean, free from loose gravel, dirt and debris, dry and structurally sound.

d. Wherever necessary, all surfaces to receive roofing materials shall be power broom and vacuumed to remove debris and loose matter prior to starting work.

e. Do not apply roofing during inclement weather. Do not apply roofing membrane to damp, frozen, dirty, or dusty surfaces.

f. Fasteners and plates for fastening components mechanically to the substrate shall provide a minimum pull-out capacity of 300 lbs. (136 k) per fastener. Base or ply sheets attached with cap nails require a minimum pullout capacity of 40 lb. per nail.

g. Prime decks where required, in accordance with requirements and recommendations of the primer and deck manufacturer.

2.03 INSTALLATION - GENERAL

A. Install modified bitumen membranes and flashings in accordance with manufacturer's instructions and with the recommendations provided by the National Roofing Contractors Association's Roofing & Waterproofing Manual, the Asphalt Roofing Manufacturers Association, and applicable codes.

B. General: Avoid installation of modified bitumen membranes at temperatures lower than 40-45 degrees. When work at such temperatures unavoidable use the following precautions:

a. Take extra care during cold weather installation and when ambient temperatures are affected by wind or humidity, to ensure adequate bonding is achieved between the surfaces to be joined. Use extra care at material seam welds and where adhesion of the applied product to the appropriately prepared substrate as the substrate can be affected by such temperature constraints as well.

b. Unrolling of cold materials, under low ambient conditions must be avoided to prevent the likelihood of unnecessary stress cracking. Rolls must be at least 40 degrees F at the time of application. If the membrane roll becomes stiff or difficult to install, it must be replaced with roll from a heated storage area.

C. Commence installation of the roofing system at the lowest point of the roof (or roof area), working up the slope toward the highest point. Lap sheets shingle fashion to constantly shed water

D. All slopes greater than 2:12 require back-nailing to prevent slippage of the ply sheets. Use ring or spiral-shank 1 inch cap nails, or screws and plates at a rate of 1 fastener per ply (including the membrane) at each insulation stop. Place insulation stops at 16 ft o.c. for slopes less than 3:12 and 4 feet o.c. for slopes greater than 3:12. On non-insulated systems, nail each ply directly into the deck at the rate specified above. When slope exceeds 2:12, install all plies parallel to the slope (strapping) to facilitate back nailing. Install 4 additional fasteners at the upper edge of the membrane when strapping the plies.

2.04 INSTALLATION COLD APPLIED ROOF SYSTEM

A. Base Ply: Cut base ply sheets into 18-foot lengths and allow plies to relax before installing. Install base sheet in Interply Adhesive: applied at the rate required by the manufacturer. Shingle base sheets uniformly to achieve one ply throughout over the prepared substrate. Shingle in proper direction to shed water on each large area of roofing.

a. Lap ply sheet ends 8 inches. Stagger end laps 12 inches minimum.

b. Solidly bond to the substrate and adjacent ply with specified cold adhesive at the rate of 2 to 2-1/2 gallons per 100 square feet.

c. Roll must push a puddle of adhesive in front of it with adhesive slightly visible at all side laps. Use care to eliminate air entrapment under the membrane.

d. Install subsequent rolls of modified across the roof as above with a minimum of 4-inch side laps and 8-inch staggered end laps. Lay modified membrane in the same direction as the underlayers but the laps shall not coincide with the laps of the base layers.

e. Extend plies 2 inches beyond top edges of cants at wall and projection bases.

f. Install base flashing ply to all perimeter and projection details.

g. Allow the one ply of base sheet to cure at least 30 minutes before installing the modified membrane. However, the modified membrane must be installed on the same day as the base plies.

B. Thermoplastic Cap Ply: Allow plies to relax before installing. Install in interplay adhesive applied at the rate required by the manufacturer. Shingle sheets uniformly over the prepared substrate to achieve the number of specified plies. Shingle in proper direction to shed water on each large area of roofing.

a. All field seams exceeding 10 feet in length shall be welded with an approved automatic welder.

b. All field seams must be clean and dry prior to initiating any field welding. Remove foreign materials from the seams (dirt, oils, etc.) with acetone or authorized alternative. Use CLEAN WHITE COTTON cloths and allow approximately five minutes for solvents to dissipate before initiating the automatic welder. Do not use denim or synthetic rags for cleaning.

c. Contaminated areas within a membrane seam will inhibit proper welding and will require a membrane patch or strip.

d. All welding shall be performed only by qualified personnel to ensure the quality and continuity of the weld. The lap or seam area of the membrane may be intermittently tack welded to hold the membrane in place.

e. The back interior edge of the membrane shall be welded first, with a thin, continuous weld to concentrate heat along the exterior edge of the lap during the final welding pass.

f. Follow local code requirements for electric supply, grounding and surge protection. The use of a dedicated, portable generator is highly recommended to ensure a consistent electrical supply, without fluctuations that can interfere with weld consistency.

g. Properly welded seams shall utilize a 1.5-inch-wide nozzle, to create a homogeneous weld, a minimum of 1.5 inches in width.

C. Fibrous Cant Strips: Provide non-combustible perlite or glass fiber cant strips at all wall/curb detail treatments where angle changes are greater than 45 degrees. Cant may be set in approved cold adhesives, hot asphalt or mechanically attached with approved plates and fasteners.

D. Wood Blocking, Nailers and Cant Strips: Provide wood blocking, nailers and cant strips as specified in Section 06114.

a. Provide nailers at all roof perimeters and penetrations for fastening membrane flashings and sheet metal components.

b. Wood nailers should match the height of any insulation, providing a smooth and even transition between flashing and insulation areas.

c. Nailer lengths should be spaced with a minimum 1/8-inch gap for expansion and contraction between each length or change of direction.

d. Nailers and flashings should be fastened in accordance with Factory Mutual "Loss Prevention Data Sheet 1- 49, Perimeter Flashing" and be designed to be capable of resisting a minimum force of 200 lbs/lineal foot in any direction.

E. Metal Work: Provide metal flashings, counter flashings, parapet coping caps and thru-wall flashings as specified in Section 07620 or Section 07710. Install in accordance with the SMACNA "Architectural Sheet Metal Manual" or the NRCA Roofing Waterproofing manual.

F. Termination Bar: Provide a metal termination bar or approved top edge securement at the terminus of all flashing sheets at walls and curbs. Fasten the bar to a minimum of 8 inches (203 mm) o/c to achieve constant compression. Provide suitable, sealant at the top edge if required.

G. Flashing Base Ply: Install flashing sheets by the same application method used for the base ply.

a. Seal curb, wall and parapet flashings with an application of mastic and mesh on a daily basis. Do not permit conditions to exist that will allow moisture to enter behind, around or under the roof or flashing membrane.

b. Prepare all walls, penetrations, expansion joints and where shown on the Drawings to be flashed with required primer at the rate of 100 square feet per gallon. Allow primer to dry tack free.

c. Adhere to the underlying base ply with specified flashing ply adhesive unless otherwise specified. Nail off at a minimum of 8 inches (203 mm) o.c. from the finished roof at all vertical surfaces.

d. Solidly adhere the entire flashing ply to the substrate. Secure the tops of all flashings that are not run up and over curb through termination bar fastened at 6 inches (152 mm) O.C. and sealed at top.

e. Seal all vertical laps of flashing ply with a three-course application of trowel-grade mastic and fiberglass mesh.

f. Coordinate counter flashing, cap flashings, expansion joints and similar work with modified bitumen roofing work as specified.

g. Coordinate roof accessories, miscellaneous sheet metal accessory items, including piping vents and other devices with the roofing system work.

h. Secure the top edge of the flashing sheet using a termination bar only when the wall surface above is waterproofed or nailed 4 inches on center and covered with an acceptable counter flashing.

H. Flashing Cap Ply:

a. Seal curb, wall and parapet flashings with an application of mastic and mesh on a daily basis. Do not permit conditions to exist that will allow moisture to enter behind, around or under the roof or flashing membrane.

b. Prepare all walls, penetrations, expansion joints and where shown on the Drawings to be flashed with required primer at the rate of 100 square feet per gallon. Allow primer to dry tack free.

c. Adhere to the underlying base flashing ply with specified flashing ply adhesive unless otherwise specified. Nail off at a minimum of 8 inches (203 mm) o.c. from the finished roof at all vertical surfaces.

d. Coordinate counter flashing, cap flashings, expansion joints and similar work with modified bitumen roofing work as specified.

e. Coordinate roof accessories, miscellaneous sheet metal accessory items with the roofing system work.

f. All striping shall be installed prior to flashing cap sheet installation.

g. Heat and scrape granules when welding or adhering at cut areas and seams to granular surfaces at all flashings.

h. Secure the top edge of the flashing sheet using a termination bar only when the wall surface above is waterproofed or nailed 4 inches on center and covered with an acceptable counter flashing.

I. Roof Walkways: Provide walkways in areas indicated on the Drawings.

2.05 CLEANING

A. Clean-up and remove daily from the site all wrappings, empty containers, paper, loose particles and other debris resulting from these operations.

B. Remove asphalt markings from finished surfaces.

C. Repair or replace defaced or disfigured finishes caused by Work of this section.

2.06 PROTECTION

A. Provide traffic ways, erect barriers, fences, guards, rails, enclosures, chutes and the like to protect personnel, roofs and structures, vehicles and utilities.

B. Protect exposed surfaces of finished walls with tarps to prevent damage.

C. Plywood for traffic ways required for material movement over existing roofs shall be not less than 5/8

inch (16 mm) thick.

D. In addition to the plywood listed above, an underlayment of minimum 1/2 inch (13 mm) recover board is required on new roofing.

E. Special permission shall be obtained from the Manufacturer before any traffic shall be permitted over new roofing.

2.07 FIELD QUALITY CONTROL

A. Inspection: Provide manufacturer's daily field observations and a final inspection upon completion of the Work.

a. Daily field observations shall be performed by a Technical Representative employed full-time by the manufacturer and whose primary job description is to assist, inspect and approve roofing installations for the manufacturer.

b. Daily roofing progress reports must include photographic documentation of work in-progress and written statements of compliance with details/shop drawings, weather conditions, and any discrepancies found during inspection.

c. Progress reports must be published to an online database accessible to the Owner/Architect at no additional cost.

d. Provide a final report from the Technical Representative, certifying that the roofing system has been satisfactorily installed according to the project specifications, approved details and good general roofing practice.

e. Warranty shall be issued upon manufacturer's acceptance of the installation.

2.08 SCHEDULES

A. Base (Ply) Sheet:

1. FlexBase Plus 80: 80 mil SBS (Styrene-Butadiene-Styrene) rubber modified roofing base sheet reinforced with a fiberglass and polyester composite scrim, performance requirements according to ASTM D 5147.

a. Tensile Strength, ASTM D5147
   1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 310 lbf/in XD 310 lbf/in
   2) 50 mm/min. @ 23 +/- 2 deg. C MD 54.25 kN/m XD 54.25 kN/m

b. Tear Strength, ASTM D 5147
   1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 650 lbf XD 650 lbf
   2) 50 mm/min. @ 23 +/- 2 deg. C MD 2891 N XD 2891 N

c. Elongation at Maximum Tensile, ASTM D5147
   1) 2 in/min. @ 73.4 +/- 3.6F MD 8% XD 8%
   2) 50 mm/min. @ 23 +/- 2 deg. C MD 8% XD 8%

d. Low Temperature Flexibility, ASTM D 5147, Passes -30 deg. F (-34.4 deg. C)

B. Thermoplastic/Modified Cap (Ply) Sheet:

1. KEE-Stone FB 60: 60 mil thermoplastic, ketone ethylene ester (KEE) roofing membrane with polyester scrim. ASTM D6754

a. Breaking Strength, ASTM D 751, Proc. B, strip
   1) 375 lbf. (1,668 N)

b. Tear Strength ASTM D 751
   1) 120 lbf. min. (534 N)

c. Elongation at Break (%), ASTM D 751, Proc. B, Strip
   1) 40.0%

C. Interply Adhesive:

1. Green-Lock Plus Membrane Adhesive: Cold applied solvent free membrane adhesive: zero V.O.C. compliant performance requirements:

   a. Non-Volatile Content ASTM D 4586 100%

   b. Density ASTM D 1475 12.3 lbs./gal. (1.47 g/cm3)

   c. Viscosity Brookfield Spindle T-E at 5 rpm 124,000 cPs.

   d. Flash Point ASTM D 93 400 deg. F min. (232 deg. C)

   e. Slope: up to 3:12

2. KEE-Lock Spatter Spray: Two components, low rise, solvent-free, polyurethane foamable membrane adhesive.

   a. Tensile Strength (ASTM D 412) 250 psi

   b. Density (ASTM D 1875) 8.5 lbs./gal.

   c. Viscosity (ASTM D 2556) 22,000 - 60,000 cP

   d. Peel Strength (ASTM D 903) 17 lb./in.

   e. Flexibility (ASTM D 816) Pass -70 deg. F (-56.7 deg. C)

D. Flashing Base Ply:

1. FlexBase 80: 80 mil SBS (Styrene-Butadiene-Styrene) rubber modified roofing base sheet reinforced with a dual fiberglass reinforced scrim, performance requirements according to ASTM D 5147.

   a. Tensile Strength, ASTM D 5147

      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 225 lbf/in XD 225 lbf/in
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 39.0 kN/m XD 39 kN/m

   b. Tear Strength, ASTM D 5147

      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 300 lbf XD 300 lbf
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 1335 N XD 1335 N

   c. Elongation at Maximum Tensile, ASTM D 5147

      1) 2 in/min. @ 73.4 +/- 3.6 deg. F MD 7% XD 7%
      2) 50 mm/min. @ 23 +/- 2 deg. C MD 7% XD 7%

   d. Low Temperature Flexibility, ASTM D 5147:

      1) Passes -30 deg. F (-34.4 deg. C)

E. Flashing Ply Adhesive:

1. Green-Lock Plus Flashing Adhesive: Cold applied solvent free flashing adhesive: zero V.O.C.

   a. Non-Volatile Content ASTM D 4586 100%

   b. Density ASTM D 1475 11.8 lbs./gal. (1.17 g/cm3)

c. Viscosity Brookfield 400,000 cPs.

d. Flash Point ASTM D 93 400 deg. F min. (232 deg. C)

F. Surfacing:

- Flashing Cap (Ply) Sheet:

a. KEE-Stone FB 60 Flashing: 60 mil thermoplastic, ketone ethylene ester (KEE) roofing membrane with polyester scrim. ASTM D 6754.

1) Breaking Strength, ASTM D 751, Proc. B, strip
   a) 378 lbf

2) Tear Strength ASTM D 751
   a) 120 lbf. minumum.

3) Elongation at Break (%), ASTM D 751, Proc. B, Strip
   a) 40.0%

END OF SECTION 07 55 00

310 George Washington Highway - Suite 100 - Smithfield, Rhode Island 02917 T 401-232-5010 F 401-232-5080

CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

SECTION 07 71 23
MANUFACTURED GUTTERS AND DOWNSPOUTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Prefabricated aluminum gutters and downspouts.

B. Accessories and anchorage.

1.02 RELATED SECTIONS

A. Section 07 92 00 - Joint Sealants.

1.03 REFERENCES

A. ASTM B209 - Aluminum and Aluminum Alloy Sheet and Plate.

B. FS TT-C-494 - Coating Compound, Bituminous, Solvent Type, Acid Resistant.

C. SMACNA - Architectural Sheet Metal Manual.

D. AAMA Specification 1405.1 - Specifications for Aluminum Gutters and Downspouts.

1.04 SUBMITTALS

A. Submit shop drawings and product data under provisions of Section 01 33 00.

B. Indicate on shop drawings, general construction, configurations, jointing methods and locations, fastening methods, locations and installation details.

C. Provide product data on prefabricated components.

D. Submit samples under provisions of Section 01 33 00.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver products to site under provisions of Section 01 60 00.

B. Store and protect products under provisions of Section 01 60 00. Stack preformed and prefinished material to prevent twisting, bending or abrasion and to aid ventilation.

C. Slope to drain.

D. Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.06 SITE CONDITIONS

A. Field measure site conditions prior to constructing system.

1.07 WARRANTY

A. Provide manufacturer's standard lifetime limited warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Aluminum gutters and downspouts: ALCOA Building Products; System Six.

B. SUBSTITUTIONS: Under provisions of Section 01 25 00.

2.02 MATERIALS

A. ALUMINUM SHEET: 3005-H25 with 26,000 psi minimum tensile strength and 23,000 psi minimum yield strength.

2.03 COMPONENTS

A. GUTTERS, INSIDE AND OUTSIDE MITERS: .032 gauge.

B. END CAPS: .024 gauge.

C. DOWNSPOUTS AND DOWNSPOUT OUTLETS: .027 gauge; 3 x 4 inches in size.

2.04 ACCESSORIES

A. ANCHORAGE DEVICES AND GUTTER SUPPORTS: Types recommended by gutter manufacturer.

B. DOWNSPOUT STRAPS: .014 gauge: profiled to suit downspouts.

C. PROTECTIVE BACKING PAINT: Zinc chromate alkyd.

D. PROTECTIVE BACK COATING: FS TT-C-494, bituminous.

E. SPLASH BLOCKS

1. Precast concrete type, 1’-0” x 2’-0” in size.
2. Minimum 3000 psi at 28 days, with minimum 5 percent air entrainment.

F. LEADER SCREENS: Aluminum, basket type.

G. SEALANT: Manufacturer’s standard.

2.05 MANUFACTURED UNITS

A. Manufacturer components in accordance with AAMA Specification 1405.1.

2.06 FINISHING

A. Aluminum Gutters and Downspouts

1 Prior to painting, clean all components thoroughly to assure maximum paint adhesion.

2 Inside of gutters and downspouts shall be coated with a corrosion-inhibiting finish.

3 Exterior of gutters and downspouts shall receive a two-coat acrylic finish.

a. 1st Coat: Corrosion-inhibiting primer.

b. 2nd Coat: High performance acrylic finish, baked on.

B. Accessories designed for use with the specified system shall have the same finish.

C. COLOR: To be selected by Architect from manufacturer's full range.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and substrate are ready to receive work, and conditions are as indicated on shop drawings.

B. Beginning of installation means acceptance of site conditions and substrate.

3.02 INSTALLATION

A. Install gutters, downspouts and accessories in strict accordance with manufacturer's instructions.

B. Joint lengths with formed seams sealed watertight. Flash and seal gutters to downspouts.

C. Apply backing paint to metal back surfaces.

D. Apply bituminous protective backing on surfaces in contact with dissimilar materials.

E. Seal metal joints watertight.

F. Install expansion joints as required for proper performance of the system.

G. Provide leaders screens in gutters at all downspout locations.

H. Set splash blocks under downspouts.

I. Contractor shall clean all work upon completion.

END OF SECTION 07 71 23

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SECTION 07 76 00
ROOF DECKING PAVERS

PART 1 GENERAL

1.01 SECTION INCLUDES

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

1.02 RELATED SECTIONS

A. Furnish and install a complete Architectural Pavers and Adjustable Pedestals deck support system with a maximum cavity height of up to 22 inches.

B. Related Sections include the following:

1. Division 06 - Section 06 10 00 Rough Carpentry.
2. Division 07 – Section 07 55 00 Protected Membrane Roofing

1.03 REFERENCES

A. American Society for Testing and Materials (ASTM)

1. ASTM D 638 - Tensile Properties of Plastics
2. ASTM D 790 - Flexural Properties of Unreinforced and Reinforced Plastics Insulating
3. ASTM D 1525 -Vicat Softening Temperature of Plastics

1.04 SUBMITTALS

A. Submit shop drawings and product data under provisions of Section 01 33 00.

B. Samples:

1. Architectural Pavers: Submit samples for type, color and texture required.
2. Pedestals: Submit sample of each pedestal component.
3. PVC Pipe: Submit 12-inch-long sample of PVC pipe.

C. Shop Drawings: Submitted by contractor showing all components required for the paver & pedestal requirements. Shop drawings shall include plan drawings showing layout of all paver areas and detail drawings showing how the various components of the system fit together. Include manufacturer's literature completely describing all components of the paver pedestal systems and giving detailed installation recommendations and instructions. Also included detailed installation drawings for all precast pavers.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: All products covered under this Section shall be produced by a single manufacturer unless otherwise specified with a minimum of fifteen (15) years' proven production experience**.**

B. Installer Qualifications: Installer shall have a minimum of three (3) years' proven construction experience and be capable of estimating & building from blueprint plans and details, determining elevations, in addition to proper material handling. All Work must comply with Tile Tech Inc installation application procedures for pedestal mounted pavers as specified herein.

C. Special Consideration: The installer and subcontractor must assume responsibility for and take into consideration (1) the structural capability and adequacy of the structure to carry the dead and live load weight(s) involved, and (2) that the density of any insulation is satisfactory to resist crushing and damaging the waterproofing membrane.

1.06 DELIVERY, SYORAGE AND HANDLING

A. Deliver products to site under provisions of Sections 01 30 00 & 01 60 00.

B. Store and protect products under provisions of Section 01 30 00 & 01 60 00. Stack preformed and prefinished material to prevent twisting, bending or abrasion and to aid ventilation.

C. Protect Concrete Pavers and Pedestal System during shipment, storage and construction against damage. Store a minimum of 4 inches off the ground in a dry location and cover with polyethylene to protect from contact with materials which would cause staining or discoloration.

1.07 PROJECT/SITE CONDITIONS

A. Tile Tech Pedestal System specified are to be used with pedestrian traffic only & all four (4) sides of a deck system must restrain and contain the decking panels with perimeter blocking or walls.

B. Decking panels must not be allowed to move laterally.

C. All membrane waterproofing and protection board surfaces to receive pedestals must be broom clean, frost free, and free of dirt, oil or any rough foreign matter, which may impair the waterproofing / roofing manufacturers guarantee or protection requirements.

D. The substrate that is to receive pedestals must have slope and provide positive and adequate drainage in accordance with good building practice and applicable building codes.

E. Decks over Roofing and Waterproofing.

1. If high density closed cell extruded 60psi polystyrene insulation is installed on top of the membrane in a protected membrane system, Tile Tech Pedestals may be installed directly on top of this type of insulation.
2. Do not use Tile Tech Pedestals over any insulation less than 60psi or with low density polystyrene (bead board) insulation.

F. Decks on Grade:

1. Any substrate soil that is to receive pedestals shall be adequately compacted and have positive drainage slope. A "walkway gravel" base i.e.: ¼" Minus should be installed and compacted at pedestal locations.
2. A wall or perimeter containment on all open sides is required. Install structural perimeter containment that restrains the entire decking system.

G. Installation or anticipated installation of additional items on top of the deck such as planters, hot tubs, sculptures, or industrial equipment must be supported directly by additional pedestals that are in addition to the main deck paver/tile pedestal system. Failure to adequately support the additional weight of any such features or items may cause significant damage to the deck, underlying structure, or waterproofing.

1.08 WARRANTIES / GUARENTEES

A. Tile Tech Pedestal System (pavers and pedestals) shall remain free from defects for a period of ten (10) years. The contractor shall warrant that his work will remain free from defects of labor and materials used in conjunction with his work in accordance with the general conditions for this project or a maximum of three (3) years.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. The Paver Pedestal Systems specified herein are based upon products manufactured by:
Tile Tech Inc., 888-380-5575 Phone: (213) 380-5560 Fax: (213) 380-5561
E-mail: sales@tiletechpavers.com Website: www.tiletechpavers.com

B. Paver Pedestal Systems equal in appearance and function and meeting these specifications will be acceptable when the specified submittals are approved in writing by the Architect prior to bid.

2.02 MATERIALS

A. CONCRETE PAVERS:

1. Type: Granite-Tech™
2. Color: to be selected by Architect from full manufacturer's options range.
3. Size: 20"x20"x2"
4. Finish: Shot-blasted with 3/16" bevel on all four (4) sides of finished surface.
5. Weight: 11 to 22 lbs per square foot depending on paver size & thickness.

B. PEDESTALS:

1. Stak-Cap™ Pedestals: PVC Pipe & Stack Adjustable

   a. Stack or use SDR35 PVC pipe to accommodate various HEIGHT adjustments of ½" to 2".
   b. Each cap provides maximum of ½" of HEIGHT and 1% SLOPE. Rotate and stack one cap relative to another to accommodate SLOPE adjustments from 0% to 5%.
   c. Base diameter of 6-inch and top diameter of 5-¼-inch and is ½-inch high.
   d. Made of high impact and flame-resistant ABS plastic.
   e. Use of Buffer Pads under Stak-Cap™ Pedestals is MANDATORY.

2. Uni-Just™ Pedestals: PVC Pipe & Screw Adjustable

   a. Assembly consists of 5 parts: Uni-Base™, Uni-Collar™, Uni-Insert™, Uni-Cap™ & Buffer Pads.
   b. Use SDR35 PVC pipe to accommodate various HEIGHT adjustments from 2-½" to 24".
   c. Additional precise height adjustment of up to 1-½" with the use of Uni-Insert™ which can screw up or down while loaded. Additional heights beyond 24" can be accomplished subject to consultation with manufacturer and approval by manufacturer.
   a. Self-leveling and can tilt in any direction to a level plane to accommodate slope adjustments from 0% to 6%.
   b. Base diameter of 7.25-inch with bearing surface area of thirty-eight (38) square inches.
   c. Made of 100% recycled and flame-resistant High-Density Polypropylene.
   d. Use of Buffer Pads under Uni-Just™ Pedestals is MANDATORY.

3. Uni-Shims™: 1/8-inch & 1/16-inch Thick

   a. Can be used whole or broken into halves or quarters and can be stacked up to 2 high.
   b. Used on top or under Stak-Cap™ or Uni-Just™ Pedestals for fine leveling of pedestals and or individual pavers.
   c. Made of high impact and flame-resistant ABS plastic.

C. OTHER COMPONENTS: INSTALLER OR USER SUPPLIED

1. Pedestal Pipe: 4-inch diameter SDR35 PVC Sewer Pipe

   a. Used with either Stak-Cap™ or Uni-Just™ Pedestals and is cut to required height.
   b. Dimensions: 4.215-inch outside diameter & 3.890-inch inside diameter.
   c. Meet ASTM D-3034 and F-679.
   d. NOT supplied with pedestal components by Tile Tech Inc.

2. Protection Course:

   a. Protection board (required over insulated BUR systems, and when specified for use over bituminous asphalt-based waterproofing): W.R. Meadows “Vibraflex” or equal, minimum 3/8-inch-thick asphaltic composition protection board.

   b. Insulation (when specified): Dow Styrofoam “Highload 100” or equal, minimum compressive strength of 100psi recommended for foam plastic insulation placed beneath Pedestal System to prevent damage to the waterproofing membrane.

   C. NOT supplied with pedestal components by Tile Tech Inc.

2.03 PERIMETER CONTAINMENT AND SUPPORT

A. The complete assembly of insulation (if used), protection board (if used), drainage mat (if used), pedestals and pavers must be restrained at the perimeter of the deck area.

B. Perimeter parapet walls, concrete dividers or other perimeter restraint must be capable of resisting lateral forces (including seismic and wind). Cumulative movement more than 1/8 inch will void the Tile Tech Inc Pedestal System warranty.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to starting work inspect the substrate to ensure that it has been properly prepared to accept the Tile Tech Pedestal System. The substrate and or surface shall be clean and free of any projections and debris which may impair the performance of the pedestal and the deck system. Verify all elevations, required pedestal heights and deck dimensions. Commencement of work shall imply acceptance of surfaces & deck conditions.

B. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.02 PREPARATION

A. The substrate surface that will receive the Pedestal System must be well compacted (on Grade) or structurally capable of carrying the dead and live loads anticipated.

1. Insulation OVER the membrane: (Option 1) Insulation and/or protection board (if specified) must be applied over the waterproofing substrate and/or specified drainage mat. Install the system according to the membrane manufacturer’s recommendations and specifications.
2. Insulation UNDER membrane: (Option 2) Insulation required to be installed within a roofing system below deck supports must meet the roofing membrane manufacturers’ specifications and must have a minimum core density of 60psi.
3. Protection Board: (for asphalt type systems used over waterproofing) Full coverage 1/8-inch asphaltic composition protection board is recommended. When protection is specified only under the pedestal cut protection board pads to extend beyond the outside perimeter of the pedestal system base or buffer pad by a minimum of TWO (2) inch.

4. Drainage Mat: (when desired or specified) Install drainage mat according to the manufacturers' recommendations to avoid crushing.

3.03 INSTALLATION

A. Installation in accordance with Tile Tech Inc. and other contributing manufacturer's instructions. Installation requirements vary for each individual project site. Decking paver or tile used, pattern, grid layout, starting point, and finished elevation should be shown on plan view shop drawings, which have been prepared and approved by the designer, installing contractor and/or owner.

B. GRID LAYOUT AND ELEVATIONS:

1. Once the starting point and the finished elevation of the deck surface have been determined, "Top of Pedestal Elevation" (finished elevation less decking paver or tile thickness) is established and marked around the perimeter using a transit water level or laser leveling device.

2. Precise measurements should be taken, and deck area should be accurately defined. Mark off and 'square up' all outside edges with control lines using "snapped" chalk lines. Mark two (2) lines that are perpendicular to each other across the deck area. Continue to mark a grid of lines in both directions marking the location of each pedestal. Use the control lines as references to periodically check and assure a square layout during installation.

3. Next, a pedestal must be placed where each measured grid line meets the perimeter. Remove two (2) spacer tabs in line with one another atop each pedestal system placed around the perimeter. Remove all four (4) spacer tabs at corners.

4. Adjust each pedestal height to the "Top of Pedestal Elevation" marked on the perimeter. Position the pedestal as close to the edge of the perimeter as possible, with the two remaining spacer tabs aligned with the grid line. Using the elevation marked on the perimeter, stretch a mason's line along and slightly ahead of the second row of pedestals. A laser leveling device may also be used for this purpose.

5. On larger decks, it is recommended that Tile Tech Pedestal System be pre-assembled and pre-set to the proper elevation and placed in position prior to the installation of decking paver or tile.

6. As the pedestals located along the grid lines are loaded with pavers or tiles, fine vertical height adjustment can be made by inserting and rotating, from the top, a T-handle Hex Key into the Uni-Insert™ of the Pedestal assembly. Clockwise rotation of the Uni-Insert™ will raise the bearing surface and the deck. Counter-clockwise rotation will lower the top bearing surface and deck

7. Always maintain adequate thread engagement. Tile Tech Pedestal Uni-Insert™ contains a locking tab that will not allow the screw to extend past its maximum extension. Never use it if the locking tab is broken. If the height required goes beyond the Uni-Insert™ limit re-cut PVC pipe to the correct height and re-assemble the pedestal using the correct size pipe.

8. Slight irregularities in decking paver or tile thickness can be compensated for by using one (1) to two (2) shim segments. Place on top of the pedestal, under the corner(s) of the decking paver or tile. Use no more than two (2) shims on top of the pedestal and always adhere quartered (1/4) wedges with construction adhesive.

9. Stak-Cap™ Pedestal can be used for limited and or fixed height requirements. Complete deck and grid layout as instructed above. Stack no more than five (5) fixed height Stak-Cap™ Pedestals together and place in lieu of Uni-Just™ Pedestals where needed. Stak-Cap™ Pedestal can also be used with PVC pipe to reduce cost. Space tabs can be removed to accommodate perimeter and corner support locations.

C. SLOPE AND HEIGHT COMPENSATION:

1. Stak-Cap™ Pedestals can provide limited slope and height compensation to maintain a level decking surface over sloping substrates and is accomplished using a combination of the following:

a. Rotate and stack one cap in relation to another to change slope and add height. Each cap will add ½-inch of height and provide 1% slope. Stack no more than 5 caps.

b. It can also be used with PVC Pipe cut to required height of maximum of 6-inches.

2. Uni-Just™ Pedestals can provide both slope and height compensation to maintain a level decking surface over sloping substrates and is accomplished using a combination of the following:

a. PVC Pipe cut to varying lengths to compensate for GENERAL height requirements.

b. SCREW extension for PRECISE height adjustment.

c. Self-Leveling cap that pivots and tilts in any direction for slope compensation from 0% to 6%.

d. Additional slope adjustments are achieved using the Base Slop Plates that provide 2% slope per plate and can be stacked to a maximum of 5 units to obtain 10% slope.

e. Tile Tech Pedestals are designed to be rotated for final precise adjustment when they are fully loaded. Pedestals should be leveled in each succeeding row as the installation proceeds. Final height adjustment or maintenance is easily made by simply using a T-handle Hex Key that allows you to adjust the pedestals without removing the pavers. T-handle Hex Key is inserted between the four paver corners to engage Uni-Insert™ portion and is adjusted clockwise or counterclockwise to level as needed.

f. Uni-Shims™ may be used in multiples, whole or quarters, and placed under the pedestal base or on top the pedestal cap to level pedestals. Use a small amount of construction adhesive to adhere sections of shims and/or whole shims to each other or to the pedestal. DO NOT use construction adhesive to adhere pedestal or shims to insulation, roofing or waterproofing membrane. Additional sections of shims may be used and should be available for regular maintenance.

3.04 PERIMETER CONTAINMENT

A. Any area of the pedestal deck that is not restrained by a parapet or foundation wall must be ‘boxed-in’ and contained. The deck panels will move if all sides are not adequately restrained. Perimeter framing and edging boards located outside of the deck perimeter must be installed to provide restraint. No movement should be allowed at the perimeter of the deck system greater than one tab width.

3.05 FIELD QUALITY CONTROL

A. Inspect often during installation to assure that grid spacer lines are being maintained in a straight and consistent pattern and that deck pavers or tiles are level and not rocking. Unless otherwise specified in writing to allow for expansion, inspect to assure that all paver spacing between tiles and at perimeter walls does not exceed a tab width. Attention should be made to ensure that all pedestrians’ entry or access points to the deck are level and that the deck surface tiles are not randomly raised or uneven, creating a tripping or safety hazard. Confirm that deck pedestal height excess of sixteen (16) inches has been braced in accordance with Tile Tech Inc written instructions.

3.06 ROUTINE MAINTENANCE AND CARE

A. The deck owner must perform routine maintenance of the deck. Check for rocking pavers and adjust using T-Handle Hex Key or shim immediately. Pedestals can settle and may have to be realigned.

Failure to do so can cause a tripping hazard. Periodically check spacer tabs and immediately replace broken tabs to limit deck movement. Make sure the edge restraint stays intact and structurally sound.

B. Extra Materials: Deliver supply of maintenance materials to the owner. Furnish not less than 1 percent maintenance materials from same lot as materials installed and enclosed in protective packaging with appropriate identifying labels.

3.07 MANUFACTURER TRAINING

A. GENERAL

a. Provide manufacturer-led training for the installed pedestal paver system.

b. Training shall be conducted by a Tile Tech, Inc. technical representative or an authorized Tile Tech distributor.

c. Training shall be provided to the Owner, Owner's Representative, and Facility Management personnel.

d. Training shall occur after substantial completion of the pedestal paver installation and prior to final acceptance.

e. Provide written training materials, including:

i. Manufacturer maintenance guidelines
ii. Contact information for technical support
iii. Recommended inspection intervals

B. SCOPE OF TRAINING

a. Overview of the Tile Tech Pedestal System components

b. Proper removal and reinstallation of pavers

c. Height adjustment and leveling principles

d. Access to waterproofing, drains, and services below

e. Load limitations and acceptable use conditions

f. Routine inspection and maintenance procedures

g. Identification of conditions requiring manufacturer consultation

h. Actions that may damage pedestals or waterproofing and shall be avoided

C. DURATION AND FORMAT

a. Provide a minimum 2-hour on-site training session, unless otherwise approved by the Owner.

b. Training may be on-site or virtual, subject to Owner approval and project conditions.

c. Provide hands-on demonstration of paver removal and replacement.

END OF SECTION 07 76 00

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SECTION 07 92 00
JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preparing sealant substrate surfaces.

B. Sealant and backing.

1.02 RELATED SECTIONS

A. Section 07 21 13 – Poly Foam Board.

B. Section 09 21 16 - Gypsum Board Assemblies.

C. Division 22 Sections: Plumbing Fixtures.

1.03 REFERENCES

A. ANSI/ASTM D1056 - Flexible Cellular Materials - Sponge or Expanded Rubber.

B. ANSI/ASTM D1565 - Flexible Cellular Materials - Vinyl Chloride Polymers and Copolymers (Open-Cell Foam).

C. ASTM C790 - Use of Latex Sealing Compounds.

D. ASTM C834 - Latex Sealing Compounds.

E. FS TT-S-00227 - Sealing Compound: Elastomeric Type, Multi-Component.

F. SWI (Sealing and Waterproofers Institute) - Sealant and Caulking Guide Specification.

1.04 SUBMITTALS

A. Submit product data under the provisions of the Contract and Specification Sections.

B. Submit product data indicating sealant chemical characteristics, performance criteria, limitations, color, and availability.

C. Submit samples under the provisions of the Contract and Specification Sections.

D. Submit two samples 1/2 x 1/2 inches in size illustrating colors selected.

E. Submit manufacturer's installation instructions under provisions of the Contract and Specification Sections.

1.05 QUALITY ASSURANCE

A. MANUFACTURER: Company specializing in manufacturing the products specified in this Section with a minimum of ten years' documented experience.

B. APPLICATOR: Company specializing in applying the work of this Section with minimum ten years' documented experience.

C. Conform to Sealant and Water Proofers Institute requirements for materials and installation.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Do not install solvent curing sealants in enclosed building specs.

B. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.07 SEQUENCING AND SCHEDULING

A. Coordinate work under provisions of the Contract and Specification Sections.

B. Coordinate the work of this Section with all Sections referencing this Section.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. SUBSTITUTIONS: Under provisions of Section 01 60 00.

2.02 SEALANTS

A. TYPE 1: Tremco Spectrum 1

1. General purpose, high-performance, ultra-low modulus, one-part, moisture-curing, non-staining, construction grade silicone sealant.
2. Conforms to ASTM C920 Type S, Grade NS, Class 100/50, Use NT, G, M, A and O, ASTM C-1382 and US Federal Specifications TT-S-001543A (COM-NBS) Class A and TT-S-00230C (COM-NBS) Class A, Type II, EIMA Test Method 300.01 ASTM C-1382.
3. +100%/-50% joint movement capability in extension and compression.

B. TYPE 2: Tremco Tremflex 834 Siliconized Acrylic Latex Sealant

1. General purpose, interior, one-part, paintable, pure acrylic latex sealant.
2. Conforms to ASTM C834.
3. +/- 12 1/2% joint movement capability.
4. Acceptable for use where an acoustic sealant is required.

C. TYPE 3: Tremco Tremsil 200

1. One-part, acetoxy silicone sealant.
2. Conforms to ASTM C920, use NT, G, A and O and US Federal Specifications TT-S-00230, Class A and TT-S-001543A Class A.
3. White and clear colors; containing fungicide.

D. TYPE 4: Tremco Dymonic FC

1. Low modulus, one-component, fast moisture-cure, non-staining, polyurethane hybrid sealant.
2. Conforms to ASTM C920 Type S, Grade NS, Class 35, Use NT, M, A and O, and US Federal Specifications TT-S-00230C, Class A and TT-S-00230C (COM-NBS) Class A, Type II.
3. +/- 35% joint movement capability; low VOC, paintable.

2.03 ACCESSORIES

A. PRIMER: Non-staining type, recommended by sealant manufacturer to suit application.

B. JOINT CLEANER: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. JOINT BACKING: ANSI/ASTM D1056; round, closed cell polyethylene foam rod; oversized 30 to 50 percent larger than joint width, No. 92 Green Rod Closed Cell Polyurethane manufactured by Pecora Corporation.

D. BOND BREAKER: Pressure sensitive tape recommended by sealant manufacturer to suit application.

2.04 COLORS

A. Colors to be selected by Architect from sealant manufacturer's standard range.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces are ready to receive Work and are as shown in Drawings and as recommended by sealant manufacturer.

B. Beginning of installation means the installer accepts existing substrate.

3.02 PREPARATION

A. Thoroughly clean joints in accordance with manufacturer's instructions. Remove loose materials and foreign matter which might impair adhesion of sealant.

B. Verify that joint backing and release tapes are compatible with sealant.

C. Protect elements surrounding the work of this Section from damage or disfiguration. Apply masking tape to each exposed surface of joints.

3.03 INSTALLATION

A. Install sealants in strict accordance with manufacturer's instructions; ASTM C804 for solvent release sealants and ASTM C790 for latex base sealants.

B. Measure joint dimensions and size materials to achieve a 2 to 1width/depth ratio. Sealant depth shall not be more than 3/4 inch and not less than 3/8 inch.

C. Joints more than 3/4 inch in depth that have no means of providing a backup for sealant, shall receive joint backing material. Place backing material in joints taking care to maintain a constant depth 1/8 inch greater than the sealant depth tolerances specified.

1. Install joint backing to achieve a neck dimension no greater than 1/3 the joint width.
2. Do not stretch backing into joints. Backing shall be continuous, no voids allowed.

D. Install bond breaker where joint backing is not used.

E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

1. Apply sealants using a hand caulking gun or power gun with a nozzle of proper size and sufficient power to completely fill joints.

F. Install sealant in neat manner in true lines free of air pockets, foreign embedded matter, ridges or sags.

G. Tool joints with a dry or water wet tool only. Do not use detergents or soapy water for tooling operations. Tool joints slightly concave, creating an hourglass sealant profile within the joint.

1. Fillet beads are not acceptable unless approved by the Architect or shown as such in the Drawings. Sealant shall not lap over the face of adjacent work being sealed.

H. Remove masking tape immediately after tooling or before sealant has taken initial set.

3.04 CLEANING AND REPAIRING

A. Clean work under provisions of the Contract and Specification Sections.

B. Clean adjacent soiled surfaces.

C. Repair or replace defaced or disfigured finishes caused by the work of this Section.

3.05 PROTECTION OF FINISHED WORK

D. Protect finished installation under the provisions of the Contract and Specification Sections.

E. Protect sealants until cured.

3.06 SEALANT SCHEDULE

A. Type 1: All exterior conditions unless noted otherwise.

B. Type 2: All interior conditions unless noted otherwise; at countertop and wall intersections.

C. Type 3: Interior: Around fixtures in toilet rooms, kitchens, janitor's closets and other "wet" locations.

D. Type 4: All exterior expansion and control joint conditions unless noted otherwise.

END OF SECTION 07 92 00

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SECTION 08 31 13
ACCESS DOORS AND FRAMES

PART 1 GENERAL

1.01 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each type of access door and frame and for each specified finish, complete assembly minimum 6 by 6 inches in size.

C. Product Schedule: For access doors and frames.

1.02 INFORMATIONAL SUBMITTALS

A. Provide manufacturer's standard warranty.

1.03 CLOSEOUT SUBMITTALS

A. Manufacturer's Installation Instructions and Operation & Maintenance: Indicate installation, operation and maintenance requirements and rough-in dimensions.

1.04 QUALITY ASSURANCE

A. Specify single source supplier for consistent appearance throughout the building.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site ready use.

B. Exercise proper care in handling of Work so as not to disrupt finished surfaces.

C. Store materials under cover in a dry and clean location off the ground.

1.06 WARRANTY

A. Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Nystrom - 9300 73rd Avenue North, Minneapolis, MN 55428
Phone: 800.547.2635

Web: www.nystrom.com

2.02 PERFORMANCE REQUIREMENTS

A. Fire-Rated Access Doors and Frames: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, according to NFPA 252 or UL 10B.

2.03 FIRE-RATED ACCESS DOORS AND FRAMES

A. Fire-Rated, Flush (Model IT) Access Doors with Exposed Flanges:

1. Description: Door face flush with frame, with a core of mineral-fiber insulation enclosed in sheet metal with exposed flange, self-closing door, and continuous piano hinge.
2. Locations: Wall.
3. Door Size: 24” x 24” (verify in field to match exist rough opening, prior to ordering)
4. Fire-Resistance Rating: 1-1/2 hours for walls
5. Cold-Rolled Steel Sheet:
   a. Door Material: Nominal 0.036 inch, 20 gauge.
   b. Frame Material: Nominal 0.062 inch, 16 gauge.
   c. Finish: Paintable white powder-primer coat.
6. Latch and Lock: Self-latching door hardware, operated by knurled knobs.
7. Options: Gasketing.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Comply with manufacturer's written instructions for installing access doors and frames.

3.03 ADJUSTING

A. Adjust doors and hardware, after installation, for proper operation.

END OF SECTION 08 31 13

CITY OF PROVIDENCE FIRE DEPARTMENT
ROOF REPLACEMENT
Fire Station #4 – 10 Branch Avenue
Fire Station #10 – 151 North Main Street AA# 25146

SECTION 09 91 00
PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Surface finish schedule.

1.02 RELATED SECTIONS

A. Section 05 50 00 Metal Fabrications

B. Section 06 45 50 - Simulated Wood Trim

C. Section 06 65 00 - Plastic Trim

1.03 REFERENCES

A. ANSI/ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer and Related Products.

B. ASTM D2016 - Test Method for Moisture Content of Wood.

1.04 DEFINITIONS

A. Conform to ANSI/ASTM D16 for interpretation of terms used in this Section.

1.05 QUALITY ASSURANCE

A. PRODUCT MANUFACTURER: Company specializing in manufacturing quality paint and finish products with 20 years' experience.

B. APPLICATOR: Company specializing in commercial painting and finishing with 10 years' documented experience.

1.06 REGULATORY REQUIREMENTS

A. Conform to applicable code for flame/fuel/smoke rating requirements for finishes.

1.07 ENVIRONMENTAL REQUIREMENTS

A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during and 48 hours after application of finishes, unless required otherwise by manufacturer's instructions.

B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent unless allowed or required otherwise by manufacturer's instructions.

C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior, unless allowed or required otherwise by manufacturer's instructions.

D. Minimum Application Temperature for Varnish and Urethane Finishes: 65 degrees F for interior or exterior, unless allowed or required otherwise by manufacturer's instructions.

E. Provide lighting level of 80 ft candles measured mid-height at substrate surf.

1.08 SUBMITTALS

A. Submit product data under the provisions of the Contract and Specification Sections.

B. Provide product data on all finishing products and special coatings.

C. Submit samples under the provisions of the Contract and Specification Sections.

D. Submit two samples 1 x 1 inch in size illustrating range of colors and textures available for each surface finishing product scheduled, for selection.

E. Submit manufacturer's application instructions under the provisions of the Contract and Specification Sections.

1.09 FIELD SAMPLES

A. Provide samples under the provisions of the Contract and Specification Sections.

B. Provide one field sample panel for each type of coating, 4 feet square, illustrating coating color, texture, and finish.

C. Locate where directed by Architect.

D. Accepted sample may not remain as part of the Work.

1.10 DELIVERY, STORAGE AND HANDLING

A. Deliver products to site under the provisions of the Contract and Specification Sections.

B. Store and protect products under the provisions of the Contract and Specification Sections.

C. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.

D. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation and instructions for mixing and reducing.

E. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.

F. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.11 EXTRA STOCK

A. Provide a five-gallon container of each color and surface texture to Owner.

B. Label each container with color, texture, and room locations, in addition to the manufacturer's label.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Except as otherwise specified, materials shall be the first line products of the following manufacturers:

1. Benjamin Moore.
2. Pittsburgh Paints.
3. Sherwin Williams.

B. Materials selected for coating systems for each type of surface shall be the product of a single manufacturer.

2.02 MATERIALS

A. Products specified are manufactured by paint companies identified with manufacturers listed in Paragraph 2.01.

B. Select primary products of the coating system from the products of a single manufacturer.

C. Secondary products not specified by name and required for the job, such as shellac, thinners, putty, shall be "best grade" or "first line" products of a reputable manufacturer.

D. Coatings

1. Ready mixed, except field catalyzed coatings; tile-like gloss finish.
2. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.
3. Good flow and brushing properties; capable of drying or curing free of streaks or sags.

E. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.03 FINISHES

A. Refer to schedule at end of Section for surface finish schedule.

B. In addition to the finish systems specified in the painting schedule, materials shall be lead-free.

2.04 TINTING AND MIXING

A. Job mixing or tinting may be done only when approved by the Architect.

2.05 COLORS AND PATTERNS

A. Colors shall be as selected by the Architect from the manufacturer’s standard range of colors.

B. The Architect reserves the right to select, allocate and vary colors on different surfaces throughout the building.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify that surfaces or substrate conditions are ready to receive work as instructed by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

C. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:

1. GYPSUM WALLBOARD: 12 percent.
2. CONCRETE UNIT MASONRY: 12 percent.
3. INTERIOR LOCATED WOOD: 15 percent, measured in accordance with ASTM D2016.

D. Beginning of installation means acceptance of surfaces or substrate.

3.02 PREPARATION

A. Remove electrical plates, hardware, light fixtures trim and fittings prior to preparing surfaces or finishing.

B. Correct minor defects and clean surfaces which affect work of this Section.

C. Shellac and seal marks which may bleed through surface finishes.

D. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow the surface to dry.

E. Asphalt or Bituminous Surfaces Scheduled for Paint Finish: Remove foreign particles to permit adhesion of finishing materials. Apply compatible sealer or primer.

F. Gypsum Board Surfaces: Latex fill minor defects. Spot prime defects after repair

G. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.

H. Unit Masonry Surfaces Scheduled to Receive Paint Finish: Remove dirt, loose mortar, scale, salt or alkali powder and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weather corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow it to dry.

I. Uncoated Steel and Iron Surfaces: Remove grease, scale, dirt and rust. Where heavy coatings of scales are evident, remove by wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring welded joints, bolts and nuts are similarly cleaned. Spot prime paint after repairs

J. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

3.03 PROTECTION

A. Protect elements surrounding the work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by the work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.04 APPLICATION

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to the uniform finish.

D. Apply each coat of paint slightly darker than the preceding coat unless otherwise approved.

E. Sand lightly between coats to achieve the required finish.

F. Allow the applied coat to dry before the next coat is applied.

G. Where clear finishes are required, tint fillers match wood. Work fillers into the grain before set. Wipe excess from surface.

H. Prime back surfaces of interior and exterior woodwork with primer paint.

I. Prime back surfaces of interior woodwork scheduled to receive stain or varnish finish with gloss varnish reduced 25 percent with mineral spirits.

3.05 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

A. Paint shop primed equipment.

B. Remove unfinished louvers, grilles, covers and access panels on mechanical and electrical components and paint separately.

C. Prime and paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports except where items are prefinished.

D. Replace identification markings on mechanical or electrical equipment when painted accidentally.

E. Paint interior surfaces of air ducts, and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint, to limit of sight line. Paint dampers exposed behind louvers, grilles and convector and baseboard cabinets to match face panels.

F. Paint exposed conduit and electrical equipment occurring in finished areas.

G. Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment.

H. Replace electrical plates, hardware, light fixture trim and fittings removed prior to finishing.

3.06 CLEANING

A. As Work proceeds, promptly remove paint where spilled, splashed or spattered.

B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

C. Collect cotton waste, cloths and material which may constitute a fire hazard, place it in closed metal containers and remove daily from site.

D. Touch up and restore finish where damaged. Do not mar the surface of item being cleaned.

E. Leave storage space clean and in condition required for equivalent spaces in project.

3.07 SCHEDULE - EXTERIOR SURFACES

A. STEEL - SHOP PRIMED

1.	PRIME COAT:	PRIME WITH ACRYLIC LATEX PRIMER.
2.	1ST FINISH COAT:	WATERBASED INTUMESCENT COATING
3.	2ND FINISH COAT:	ALKYD GLOSS ENAMEL

B. PVC TRIM

1.	PRIME COAT:	FACTORY PAINT - WHITE
2.	1ST FINISH COAT:	100% ACRYLIC LATEX
3.	2ND FINISH COAT:	100% ACRYLIC LATEX

NOTE: Light colors only; comply with PVC manufacturer's LRV limitations.

END OF SECTION 09 91 00

Asbestos Abatement Plans

Rhode Island Department of Health

3 Capitol Hill
Providence, RI 02908-5097

TTY: 711
www.health.ri.gov

June 18, 2025

City of Providence - Department of Public Property
Dan Kitridge
25 Dorrance St
Providence, RI 02903

Plan No.: *241359*

Dear Owner/Agent:

The Rhode Island Department of Health (RIDOH) reviewed and approved the Asbestos Abatement Plan you submitted for North Main Fire Station - Providence Fire Department, 151 North Main St Providence. The plan will expire 12 months from the date of this letter and the work must begin within six months of this approval date.

The asbestos abatement work must be performed by a RIDOH-licensed Asbestos Contractor in accordance with all other requirements of the Rules and Regulations for Asbestos Control (216-RICR-50-15-1). A Start Work Notification (ASB-22) must be submitted to RIDOH at least 10 business days before the work begins. In addition, the Asbestos Supervisor must notify RIDOH at 401-222-7796 when site preparation begins. Clearance air sample results and confirmation of disposal of asbestos must also be submitted to RIDOH in accordance with 216-RICR-50-15-1.

Please contact Alexander Yelle, 401-222-7777 or doh.asbestos@health.ri.gov if you have any questions regarding these requirements.

Sincerely,

Bonnie Cassani-Brandt
Asbestos & Radon Program Manager
Center for Healthy Homes & Environment
Division of Environmental Health

Cc: Asbestos Consultant

RHODE ISLAND DEPARTMENT OF HEALTH

NOTARIZED CERTIFICATION OF ASBESTOS ABATEMENT PLAN

Facility/Building: North Main St Fire Station

Address: 151 N Main St

City/Town: Providence ZIP: 02903 Amendment Phase No: _____

Abatement Plan Prepared By: Joseph M. Lepore RIDOH License No.: APD00661

Summary of specific waivers/variances being requested:

Abatement Information

Abatement Method: (Check all that apply)

- [x] Removal
- [ ] Encapsulation
- [ ] Enclosure
- [ ] Other (specify): _____
- [ ] Demolition
- [ ] Glovebag
- [x] Asphalt Roofing

Asbestos Contractor: TBD RIDOH License No.: TBD

Estimated Starting Date: July 2025

Pre-Abatement Sampling Information

Bulk samples collected by: Joseph M. Lepore RIDOH License No.: AI000661

Bulk samples analyzed by: San Air Labs RIDOH License No.: PLM00126

Air samples collected by: ECM Inc. RIDOH License No.: PCM00131

Air samples analyzed by: ECM Inc. RIDOH License No.: PCM00131

Clearance Air Sampling Information

Air samples to be collected by: ECM Inc.

Air samples to be analyzed by: ECM Inc. RIDOH License No.: PCM00131

CERTIFICATION

I certify that: this asbestos abatement plan is prepared and submitted under the provisions of Rhode Island General Laws Chapter 23-24.5 and the Rules and Regulations for Asbestos Control (216-RICR-50-15-1); all abatement/ management activities performed in conjunction with this plan will be in compliance with the specifications prescribed in this plan (when approved) and the most current revision of all applicable federal and state regulations; and the asbestos abatement/management activities described in this plan will be performed by a Rhode Island licensed asbestos abatement contractor.

State of Rhode Island, County of _____. On this _____ day of _____,20__, before me, the undersigned notary public, personally appeared _____ (name of document signer), and proved to me through satisfactory evidence of identification to be the person whose name is signed on the preceding or attached document, and acknowledged that they signed it voluntarily for its stated purpose.

_____ _____

Signature of Building Owner or Agent Printed Name of Building Owner or Agent

_____

(official signature and stamp of notary)

_____ My Commission expires: _____

Printed Name, ID Number Notary Public

RHODE ISLAND DEPARTMENT OF HEALTH
Center for Healthy Homes and Environment – Asbestos Program

ABATEMENT PLAN APPLICATION

1. Owner/Contact Name: Mr. Dan Kitridge
   Title: Department of Public Property
   If owned by an organization, organization name: City of Providence
   Address: 25 Dorrance Street
   City/State: Providence, RI ZIP: 02903
   Phone: 401-680-5329 Email: dkitridge@providenceri.gov

2. Application prepared by:
   Name: Joseph M. Lepore RIDOH License No.: APD00661
   Phone: 401-304-6614 Email: jlepore@ecmne.com

4. Location of abatement work:
   Facility/Building Name: N. Main Street
   Street Address: 151 North Main Street
   City/Town: Providence ZIP: 02903

5. Reason for Application: (Check all that apply)
   ☐ Emergency Plan No. _____
   ☑ Standard Plan
   ☐ Annual Plan
   ☐ Response to a Notice or Order (attach copy)

6. Asbestos contractor (if known):
   Name: TBD RIDOH License No.: TBD

7. Estimated Abatement Work Dates

Start Date: July 2025 Completion Date: June 2026

8. Abatement Method: **(Check all that apply)**

- [x] Removal
- [ ] Encapsulation
- [ ] Enclosure
- [ ] Demolition
- [ ] Other (Specify): _____
- [ ] Glovebag
- [x] Asphalt Roofing
- [ ] Operations & Maintenance Only

9. Facility Type: **(Check one)**

- ( ) Child Care Facility
- ( ) College/University
- ( ) Hospital
- (•) Other (Specify): Fire Station (City of Providence)
- ( ) Private Residential Dwelling
- ( ) Public Housing
- ( ) School/School Building

10. Building Access: **(Check one)**

- ( ) Public Access
- ( ) Limited Public Access
- (•) No Public Access
- ( ) Other (specify)_____

11. Bulk Sampling:

A. Samples collected by:
Name: Joseph M. Lepore RIDOH License No.: AI000661

B. Sampling Methodology: (**Check one)**
EPA AHERA Sampling requirements [40 CFR 763.86].
Other (Specify): _____

C. Analytical Service:
Name: SanAir Labs RIDOH License No.: PLM00126

D. Analytical Method: (**Check one)**

- (•) PLM (Phase Light Microscopy)
- ( ) TEM (Transmission Electron Microscopy)
- ( ) Other (Specify): _____

12. Pre-Abatement Air Sampling:
    A. Samples collected by:
    Name: Joseph M. Lepore RIDOH License No.: PCM00131
    Affiliation: ECM Inc.
    B. Analytical Service:
    Name: ECM Inc. RIDOH License No.: PCM00131
    C. Analytical Method: (**Check one)**
    (●) PCM (Phase Contrast Microscopy)
    ( ) TEM (Transmission Electron Microscopy)
    ( ) Other (Specify): _____

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13. Removal and Disposal of Asbestos-Containing Material (ACM):
    A. How will ACM be removed from the abatement site? If a hauler or broker will be used to transport the ACM to a disposal site, they must also be identified.

    TBD

    B. Provide the name and location of the authorized asbestos waste facility where the ACM will be transferred for disposal (if known).

    TBD

---

14. Project Monitor: **(not required)**
    Name: _____ RIDOH License No.: _____
    Affiliation: _____

---

15. In-Process & Clearance Air Sampling:
    A. Describe in an attachment the type, number and location of air samples that will be collected outside the work area during the abatement project.

    B. Describe in an attachment the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (0.01 fibers per cubic centimeter) is exceeded outside the work area during the abatement project.

    C. Describe in an attachment the type, number and location of air samples that will be collected as part of the final clearance testing.

    D. Describe in an attachment the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (0.01 fiber per cubic centimeter) is exceeded during final clearance testing.

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16. A separate and fully completed Form ASB-16A must be submitted for ***each area*** to be abated. List below the entry in Item 1 from each attached ASB-16A.

Area 1-Interstitial Roof Area

---

17. Asbestos Abatement Plan Application Fee:

☐	State Agency, fee waived	$0
☐	Operation & Maintenance Program Only	$75
☑	Up to One (1) NESHAP Unit	$75
☐	Between One (1) & Ten (10) NESHAP Units	$300
☐	Between Ten (10) & Fifty (50) NESHAP Units	$600
☐	Over Fifty (50) NESHAP Units	$900
☐	Annual Plan	N/A

One (1) NESHAP Unit = 260 linear feet or 160 square feet or 35 cubic meters

---

18. I certify that this plan was prepared by me, and I am responsible for its content.

Name: Joseph M. Lepore RIDOH License No.: APD00661

Signature: _____ Date: June 2, 2025

Affiliation: ECM Inc.

Email: jlepore@ecmne.com Phone: 401-304-6614

RHODE ISLAND DEPARTMENT OF HEALTH
Center for Healthy Homes and Environment – Asbestos Program

ASBESTOS ABATEMENT PLAN APPLICATION

Supplemental Information: Area Description and Proposed Plan

Facility/Building: N. Main Street Fire Station #7

INSTRUCTIONS:
A separate and fully completed Form ASB-16A must be submitted for ***each area*** to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification (Room Name/No., etc.):
   Area 1-Interstitial Roof

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

4. Proposed Plan:
   A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

   B. Will any portion of this area be abated by use of 1.14 work procedures?
   (●) Yes ( ) No

   If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: **(Check all that apply)**

   ☑ 1.14.2 & 1.14.3 Removal — Lexonite/Flashing around penetrations

☐ 1.14.2 & 1.14.4 Encapsulation _____

☐ 1.14.2 & 1.14.5 Enclosure _____

☐ 1.14.6 Demolition _____

☐ 1.14.7 Glovebag _____

☐ 1.14.8 Asphalt Roofing _____

☐ Other (Specify) _____

C. Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?

◯ Yes ◉ No

If yes, attach a detailed description of the waivers requested you are proposing to utilize. ***All items must be keyed to the specific section(s) of the regulations for which waivers are requested.***

D. Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?

◯ Yes ◉ No

If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. ***Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.***

E. Will any ACM remain in this area after abatement?

◯ Yes ◉ No Beyond scope of inspection

If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

ATTACHMENT #1

In Process and Clearance Air Sampling

A. If requested by the building owner, ECM will be on site for part time monitoring and will collect one compliance air sample outside of each containment area daily for the duration of asbestos removal operations inside this building. The sample will be collected outside the decontamination unit.

B. Any deviation in proper procedures on the part of the contractor shall be reported to the building owner. This includes inadequate paperwork on site, disagreement and/or any deviation from previously outlined work procedures, or if compliance samples in the work area vicinity exceed 0.01 f/cc. The contractor's work shall then be stopped, without repercussion to the building owner or the project-monitoring firm until any conflicts and/or problems have been resolved.

C. After the interior areas have passed the consultant's visual inspection, he or his authorized representative will collect:

Area 1: ECM will collect two PCM clearance air samples per contained area.

D. If clearance monitoring after clean-up results in fiber concentrations in excess of the RI rules and regulation clearance air requirements, the project area shall be wet-cleaned, misted with water, and encapsulated with a liquid encapsulant. A period of no less than 24 hours shall elapse before the next set of clearance air samples can be collected. The sampling process shall be repeated until a satisfactory clearance air level is attained.

The asbestos contractor is held responsible for any costs associated with the re-cleaning and re-sampling of an area should clearance air samples exceed 0.01 f/cc.

ATTACHMENT #2

ASB-16A-2

Description of Asbestos Containing Material

Fire Station North Main Street, Providence, RI– Asbestos Sampling Results

Sample #	Material	Location	Asbestos %
01A-B	Roofing underlay	Pitched roof under shingles	None Detected
02A-B	Roof shingles	Pitched roof	None Detected
03A-B	**Roof flashing**	**Interior original roof around penetrations throughout the tar and gravel roof.**	**5% Chrysotile**
04A-D	Tar and gravel roofing	Interior original roofing field	None Detected
05A-C	Insulation under tar and gravel on roof deck	Interior original roofing field	None Detected
06A-C	Blown in insulation	Interior roof space	None Detected

Asbestos: Recommendations & Summary

Asbestos containing roof flashing was identified around penetrations located in the interstitial space on the original roofing system. This material is located in a what would basically be considered an attic space. All other roofing and insulation sampled from both the interior roof and newer pitched roofing was found to be none detected for asbestos. ECM estimates there to be 50sf of asbestos containing roof flashing present at the site.

ATTACHMENT #2 (Cont.)

Laboratory Analysis Reports:

1 Bulk Sample Analysis
2 Pre-Abatement Air Samples

SanAir Technologies Laboratory

The Identification Specialists

Analysis Report
prepared for
Environmental Consulting & Management Inc

Report Date: 5/1/2025

Project Name: N. Main Fire Station

Project #: 250203

SanAir ID#: 25026740

NVLAP TESTING

NVLAP LAB CODE 200870-0

10501 Trade Court, North Chesterfield, Virginia 23236
888.895.1177 | 804.897.1177 | fax: 804.897.0070 | LabReports@SanAir.com | SanAir.com

SanAir ID Number
25026740
FINAL REPORT
5/1/2025 2:33:13 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: N. Main Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

Dear Joseph M. Lepore,

We at SanAir would like to thank you for the work you recently submitted. The 16 sample(s) were received on Wednesday, April 23, 2025 via UPS. The final report(s) is enclosed for the following sample(s): 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 04C, 04D, 05A, 05B, 05C, 06A, 06B, 06C.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:
- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:
- 16 samples in Good condition.

SanAir Technologies Laboratory

SanAir ID Number
25026740
FINAL REPORT
5/1/2025 2:33:13 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: N. Main Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

Analyst: Dixon, Alana

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Components		
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
01A / 25026740-001 Roof Underlay - Pitched Roof	Black Non-Fibrous Homogeneous	10% Glass	90% Other	None Detected
01B / 25026740-002 Roof Underlay - Pitched Roof	Black Non-Fibrous Homogeneous	10% Glass	90% Other	None Detected
02A / 25026740-003 Roof Shingles - Pitched Roof	Black Non-Fibrous Heterogeneous	10% Glass	90% Other	None Detected
02B / 25026740-004 Roof Shingles - Pitched Roof	Black Non-Fibrous Homogeneous	10% Glass	90% Other	None Detected
03A / 25026740-005 Lexonite Around Penetrations	Black Non-Fibrous Homogeneous		95% Other	5% Chrysotile
03B / 25026740-006 Lexonite Around Penetrations	Black Non-Fibrous Homogeneous		100% Other	None Detected
04A / 25026740-007 Old Roof - Interior, Tar	Black Non-Fibrous Homogeneous		100% Other	None Detected
04A / 25026740-007 Old Roof - Interior, Tar Paper	Black Non-Fibrous Homogeneous	40% Cellulose	60% Other	None Detected
04B / 25026740-008 Old Roof - Interior, Tar	Black Non-Fibrous Homogeneous		100% Other	None Detected
04B / 25026740-008 Old Roof - Interior, Tar Paper	White Non-Fibrous Homogeneous	40% Cellulose	60% Other	None Detected

Analyst: Alana Dixon
Analysis Date: 5/1/2025

Approved Signatory: Sandra Sobrino
Date: 5/1/2025

SanAir Technologies Laboratory

SanAir ID Number
25026740
FINAL REPORT
5/1/2025 2:33:13 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: N. Main Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

Analyst: Dixon, Alana

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Components		
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
04C / 25026740-009 Old Roof - Interior	Black Non-Fibrous Homogeneous	40% Cellulose	60% Other	None Detected
04D / 25026740-010 Old Roof - Interior	Black Non-Fibrous Homogeneous	40% Cellulose	60% Other	None Detected
05A / 25026740-011 Insulation Under Roof	Pink Fibrous Homogeneous	99% Glass	1% Other	None Detected
05B / 25026740-012 Insulation Under Roof	Pink Fibrous Homogeneous	99% Glass	1% Other	None Detected
05C / 25026740-013 Insulation Under Roof	Yellow Fibrous Homogeneous	99% Glass	1% Other	None Detected
06A / 25026740-014 Blown In Insulation	Pink Fibrous Homogeneous		100% Other	None Detected
06B / 25026740-015 Blown In Insulation	Pink Fibrous Homogeneous	99% Glass	1% Other	None Detected
06C / 25026740-016 Blown In Insulation	Pink Fibrous Homogeneous	99% Glass	1% Other	None Detected

Analyst: Alana Dixon

Analysis Date: 5/1/2025

Approved Signatory: Sandra Sobrino

Date: 5/1/2025

SanAir Technologies Laboratory

10501 Trade Ct., Suite 100
N. Chesterfield, VA 23236
804.897.1177 / 888.895.1177
Fax 804.897.0070
sanair.com

Asbestos Chain of Custody

Form 140, Rev 7, 10/20/2022

SanAir ID Number: 25026740

Company: Environmental Consulting & Management Inc	Project #: 250203	Collected by: Joseph Lepore	
Address: 50 Kickemuit Ave	Project Name: N. Main Fire Station	Phone #: 401-438-1360	
City, St., Zip: Bristol, RI 02809	Date Collected: 4/21/25	Fax #: 401-438-1316	
State of Collection: RI Account#: 2667	P.O. Number:	Email: JLepore@ECMNE.com	

Bulk

ABB	PLM EPA 600 R-93/116	☒
	Positive Stop	☐
ABEPA	PLM EPA 400 Point Count	☐
ABB1K	PLM EPA 1000 Point Count	☐
ABBEN	PLM EPA NOB**	☐
ABBCH	TEM Chatfield**	☐
ABBTM	TEM EPA NOB**	☐
ABQ	PLM Qualitative	☐

** Available on 24-hr. to 5-day TAT

Water

ABHE	EPA 100.2	☐

Air

ABA	PCM NIOSH 7400	☐
ABA-2	OSHA w/ TWA*	☐
ABTEM	TEM AHERA	☐
ABATN	TEM NIOSH 7402	☐
ABT2	TEM Level II	☐
Other:		☐

New York ELAP

ABEPA2	NY ELAP 198.1	☐
ABENY	NY ELAP 198.6 PLM NOB	☐
ABBNY	NY ELAP 198.4 TEM NOB	☐
	Positive Stop	☐

Soil

ABSE	PLM EPA 600/R-93/116 (Qual.)	☐

Vermiculite

ABB	PLM EPA 600/R-93/116	☐
ABEPA3	PLM EPA 400 Point Count	☐
ABCM	Cincinnati Method	☐

Dust

ABWA	TEM Wipe ASTM D-6480	☐
ABDMV	TEM Microvac ASTM D-5755	☐

Matrix	Other	
		☐

Turn Around Times				
	3 HR (4 HR TEM) ☐	6 HR (8HR TEM) ☐	12 HR ☐	1 Day ☐
	☐ 2 Days	☐ 3 Days	☐ 4 Days	☒ 5 Days

Special Instructions

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start – Stop Time	
01A	Roof underlay – Pitched Roof					
01B	" "					
02A	Roof Shingles - Pitched Roof					
02B	" "					
03A	Lexonite around penetrations					
03B	" "					
04A	Old Roof – interior					
04B	↓					
04C	↓					
04D	↓					
05A	Insulation under Roof					
05B	" "					

Relinquished by	Date	Time	Received by	Date	Time
	4/22/25		MN	4/23/25	10:15a

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST will be logged in the next business day. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the 3hr TAT or a minimum charge of $150. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Ground and Next Day Air shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

Page _____ of _____

25026740 Form 140, Revision 1, 1 20 2017

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start – Stop Time*	
05C	Insulation under Roof					
06A	Blown in insulation					
06B	↓					
06C						

Special Instructions	

Relinquished by	Date	Time	Received by	Date	Time
[signature]	4/22/25		MN	4/23/25	10:15am

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST will be logged in the next business day. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the 3hr TAT or a minimum charge of $150. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Ground and Next Day Air shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges. Page _of ____

Environmental Consulting
& Management Inc.
181 Amaral Street
Riverside, RI 02915
401-438-1360

Certificate of Analysis

Asbestos PCM Air Analysis by NIOSH 7400

Client: City of Providence
Project Location: N. Main Street and Branch Ave Providence Fire Stations
Sample Type: Background Airs & Blanks

Project Number: 250203
Collected By: JML
Date: 4-21-2025
PCM Lot #: 20230602

Sample	Identification	Start	End	Flow (LPM)	Volume (L)	Fibers / Fields	Fiber Density (f/mm²)	Concentration (f/cc)
B	Blank	-	-	-	-	0 / 100	<7	< -
B	Blank	-	-	-	-	0 / 100	<7	< -
1	Branch Ave Inteior	10:05	11:20	14	1050	11 / 100	14.01	0.0051
2	North Main St. Interior	11:02	12:14	14	1008	6 / 100	7.64	0.0029

Analyzed By: Joseph M. Lepore

Date Analyzed: 6-2-2025

Reviewed By: Daniel J. Simas

Standards

Clearance Criteria: <0.01 f/cc
OSHA Permissible Exposure Limit (8 hour TWA): 0.1 f/cc
OSHA 30 Minute Excursion Limit: 1.0 f/cc
Limit of Detection fibers/100 fields: 5.5
Limit of Detection fiber density: 7 f/mm
Relative Standard Deviation:0.45

WO#25000489

Lab Certifications: RI AAL-0131
MA AA000247

ATTACHMENT #3

Interim Operations & Maintenance Plan

The contractors, maintenance personnel and staff associated with the North Main Street Fire Station are aware of ACM in the above stated areas. They have been instructed not to disturb the material due to the potential health hazards if fibers become airborne.

1. Notification

All building occupants, also any contractors entering the building and/or premises to perform work, shall be notified of the presence and location of asbestos-containing material(s) and cautioned regarding disturbance of the material(s). Also, the building occupants must be notified regarding the occurrence of asbestos abatement activities. If an emergency fiber release occurs, the following procedures shall be initiated.

2. Fiber Release Episodes

A. Minor Release Episode

If a minor fiber release episode occurs (release of less than 10 linear feet or 25 square feet of material), trained maintenance staff may perform the cleaning. Access to the area shall be restricted during clean-up. All debris shall be thoroughly wetted using amended water and placed in labeled, double six-mil polyethylene bags. The area shall then be cleaned using HEPA filtered vacuums and/or wet cleaning methods. Damaged material must be cleaned and repaired with non-asbestos-containing material. The area shall then be evaluated to decide if further action is necessary.

B. Major Release Episode

If a major fiber release episode occurs (falling or dislodging of more than 10 linear feet or 25 square feet of ACBM), the cleaning must be carried out and directed by persons accredited to conduct and design response actions. After such an episode, the area shall be immediately restricted and entry to the area prevented. Warning signs shall be posted to caution people other than those qualified to deal with the problem. Air handling units in the area shall be shut down to prevent the spread of fibers beyond the problem area. A response action shall be designed and carried out by qualified personnel.

3. Training

Any employee who, because of their work, may disturb asbestos- containing material shall be trained and certified as a Competent Person as described by the R.I. Rules and Regulations for Asbestos Control. The program coordinator shall ensure that the procedures described above to protect the building occupants shall be followed for any operations and maintenance activities disturbing or involving ACBM.

ATTACHMENT #4

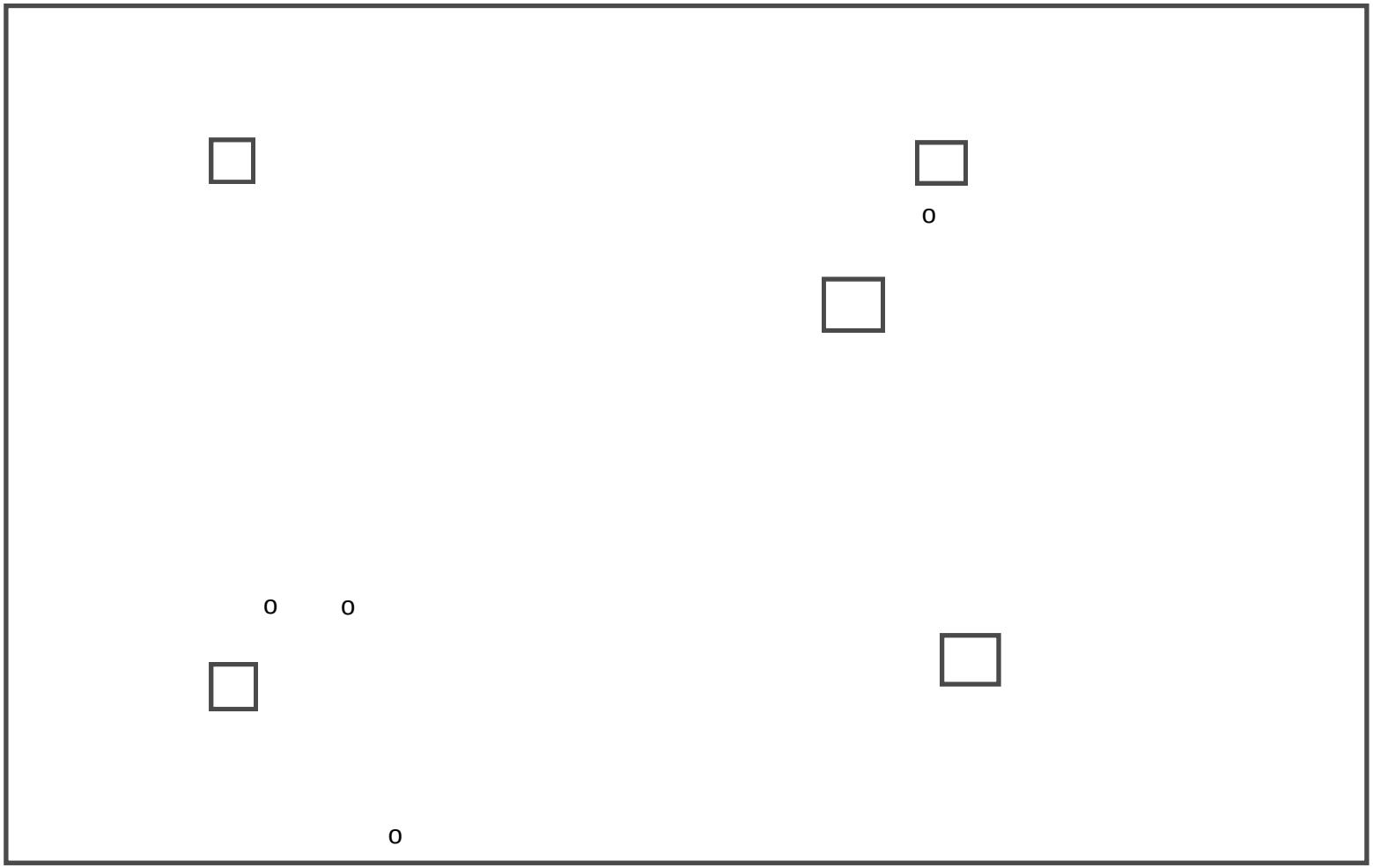
Scope of Work / Description of Waivers

It is the contractor's responsibility to verify material locations and quantities.

All proper OSHA, federal, state, and local safety regulations shall be followed.

Area 1: Asbestos containing roof flashing in this area was formerly an exterior flat tar and gravel roof that has been roofed over creating an interior attic space. Since this area is interior to the building abatement will be conducted utilizing 1.14.2 and 1.14.3 removal practices.

Area 1- Interior Roof Space
Asbestos containing lexonite around penetrations.



North Main Street

Rhode Island Department of Health

3 Capitol Hill
Providence, RI 02908-5097

TTY: 711
www.health.ri.gov

June 18, 2025

City of Providence - Department of Public Property
Dan Kitridge
25 Dorrance St
Providence, RI 02903

Plan No.: *241356*

Dear Owner/Agent:

The Rhode Island Department of Health (RIDOH) reviewed and approved the Asbestos Abatement Plan you submitted for Branch Ave Fire Station - Providence Fire Department, 10 Branch Ave Providence. The plan will expire 12 months from the date of this letter and the work must begin within six months of this approval date.

The asbestos abatement work must be performed by a RIDOH-licensed Asbestos Contractor in accordance with all other requirements of the Rules and Regulations for Asbestos Control (216-RICR-50-15-1). A Start Work Notification (ASB-22) must be submitted to RIDOH at least 10 business days before the work begins. In addition, the Asbestos Supervisor must notify RIDOH at 401-222-7796 when site preparation begins. Clearance air sample results and confirmation of disposal of asbestos must also be submitted to RIDOH in accordance with 216-RICR-50-15-1.

Please contact Alexander Yelle, 401-222-7777 or doh.asbestos@health.ri.gov if you have any questions regarding these requirements.

Sincerely,

Bonnie Cassani-Brandt
Asbestos & Radon Program Manager
Center for Healthy Homes & Environment
Division of Environmental Health

Cc: Asbestos Consultant

RHODE ISLAND DEPARTMENT OF HEALTH

NOTARIZED CERTIFICATION OF ASBESTOS ABATEMENT PLAN

Facility/Building: North Main St Fire Station

Address: 151 N Main St

City/Town: Providence ZIP: 02903 Amendment Phase No: _____

Abatement Plan Prepared By: Joseph M. Lepore RIDOH License No.: APD00661

Summary of specific waivers/variances being requested:

Abatement Information

Abatement Method: (Check all that apply)

- [x] Removal
- [ ] Encapsulation
- [ ] Enclosure
- [ ] Other (specify): _____
- [ ] Demolition
- [ ] Glovebag
- [x] Asphalt Roofing

Asbestos Contractor: TBD RIDOH License No.: TBD

Estimated Starting Date: July 2025

Pre-Abatement Sampling Information

Bulk samples collected by: Joseph M. Lepore RIDOH License No.: AI000661

Bulk samples analyzed by: San Air Labs RIDOH License No.: PLM00126

Air samples collected by: ECM Inc. RIDOH License No.: PCM00131

Air samples analyzed by: ECM Inc. RIDOH License No.: PCM00131

Clearance Air Sampling Information

Air samples to be collected by: ECM Inc.

Air samples to be analyzed by: ECM Inc. RIDOH License No.: PCM00131

CERTIFICATION

I certify that: this asbestos abatement plan is prepared and submitted under the provisions of Rhode Island General Laws Chapter 23-24.5 and the Rules and Regulations for Asbestos Control (216-RICR-50-15-1); all abatement/ management activities performed in conjunction with this plan will be in compliance with the specifications prescribed in this plan (when approved) and the most current revision of all applicable federal and state regulations; and the asbestos abatement/management activities described in this plan will be performed by a Rhode Island licensed asbestos abatement contractor.

State of Rhode Island, County of _____. On this _____ day of _____,20__, before me, the undersigned notary public, personally appeared _____ (name of document signer), and proved to me through satisfactory evidence of identification to be the person whose name is signed on the preceding or attached document, and acknowledged that they signed it voluntarily for its stated purpose.

_____ _____

Signature of Building Owner or Agent Printed Name of Building Owner or Agent

_____

(official signature and stamp of notary)

_____ My Commission expires: _____

Printed Name, ID Number Notary Public

RHODE ISLAND DEPARTMENT OF HEALTH
Center for Healthy Homes and Environment – Asbestos Program

ABATEMENT PLAN APPLICATION

1. Owner/Contact Name: Mr. Dan Kitridge
   Title: Department of Public Property
   If owned by an organization, organization name: City of Providence
   Address: 25 Dorrance Street
   City/State: Providence, RI ZIP: 02903
   Phone: 401-680-5329 Email: dkitridge@providenceri.gov

2. Application prepared by:
   Name: Joseph M. Lepore RIDOH License No.: APD00661
   Phone: 401-304-6614 Email: jlepore@ecmne.com

4. Location of abatement work:
   Facility/Building Name: N. Main Street
   Street Address: 151 North Main Street
   City/Town: Providence ZIP: 02903

5. Reason for Application: (Check all that apply)
   ☐ Emergency Plan No. _____
   ☑ Standard Plan
   ☐ Annual Plan
   ☐ Response to a Notice or Order (attach copy)

6. Asbestos contractor (if known):
   Name: TBD RIDOH License No.: TBD

7. Estimated Abatement Work Dates

Start Date: July 2025 Completion Date: June 2026

8. Abatement Method: **(Check all that apply)**

- [x] Removal
- [ ] Encapsulation
- [ ] Enclosure
- [ ] Demolition
- [ ] Other (Specify): _____
- [ ] Glovebag
- [x] Asphalt Roofing
- [ ] Operations & Maintenance Only

9. Facility Type: **(Check one)**

- ◯ Child Care Facility
- ◯ College/University
- ◯ Hospital
- ◯ Other (Specify): Fire Station (City of Providence)
- ◯ Private Residential Dwelling
- ◯ Public Housing
- ◯ School/School Building

10. Building Access: **(Check one)**

- ◯ Public Access
- ◯ Limited Public Access
- ◯ No Public Access
- ◯ Other (specify)_____

11. Bulk Sampling:

A. Samples collected by:
Name: Joseph M. Lepore RIDOH License No.: AI000661

B. Sampling Methodology: (**Check one)**
EPA AHERA Sampling requirements [40 CFR 763.86].
Other (Specify): _____

C. Analytical Service:
Name: SanAir Labs RIDOH License No.: PLM00126

D. Analytical Method: (**Check one)**

- ◯ PLM (Phase Light Microscopy)
- ◯ TEM (Transmission Electron Microscopy)
- ◯ Other (Specify): _____

12. Pre-Abatement Air Sampling:
    A. Samples collected by:
    Name: Joseph M. Lepore RIDOH License No.: PCM00131
    Affiliation: ECM Inc.
    B. Analytical Service:
    Name: ECM Inc. RIDOH License No.: PCM00131
    C. Analytical Method: (**Check one)**
    ◯ PCM (Phase Contrast Microscopy)
    ◯ TEM (Transmission Electron Microscopy)
    ◯ Other (Specify): _____

---

13. Removal and Disposal of Asbestos-Containing Material (ACM):
    A. How will ACM be removed from the abatement site? If a hauler or broker will be used to transport the ACM to a disposal site, they must also be identified.

    TBD

    B. Provide the name and location of the authorized asbestos waste facility where the ACM will be transferred for disposal (if known).

    TBD

---

14. Project Monitor: **(not required)**
    Name: _____ RIDOH License No.: _____
    Affiliation: _____

---

15. In-Process & Clearance Air Sampling:
    A. Describe in an attachment the type, number and location of air samples that will be collected outside the work area during the abatement project.

    B. Describe in an attachment the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (0.01 fibers per cubic centimeter) is exceeded outside the work area during the abatement project.

    C. Describe in an attachment the type, number and location of air samples that will be collected as part of the final clearance testing.

    D. Describe in an attachment the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (0.01 fiber per cubic centimeter) is exceeded during final clearance testing.

---

16. A separate and fully completed Form ASB-16A must be submitted for ***each area*** to be abated. List below the entry in Item 1 from each attached ASB-16A.

Area 1-Interstitial Roof Area

---

17. Asbestos Abatement Plan Application Fee:

☐	State Agency, fee waived	$0
☐	Operation & Maintenance Program Only	$75
☑	Up to One (1) NESHAP Unit	$75
☐	Between One (1) & Ten (10) NESHAP Units	$300
☐	Between Ten (10) & Fifty (50) NESHAP Units	$600
☐	Over Fifty (50) NESHAP Units	$900
☐	Annual Plan	N/A

One (1) NESHAP Unit = 260 linear feet or 160 square feet or 35 cubic meters

---

18. I certify that this plan was prepared by me, and I am responsible for its content.

Name: Joseph M. Lepore RIDOH License No.: APD00661

Signature: _____ Date: June 2, 2025

Affiliation: ECM Inc.

Email: jlepore@ecmne.com Phone: 401-304-6614

RHODE ISLAND DEPARTMENT OF HEALTH
Center for Healthy Homes and Environment – Asbestos Program

ASBESTOS ABATEMENT PLAN APPLICATION

Supplemental Information: Area Description and Proposed Plan

Facility/Building: N. Main Street Fire Station #7

INSTRUCTIONS:
A separate and fully completed Form ASB-16A must be submitted for ***each area*** to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification (Room Name/No., etc.):
   Area 1-Interstitial Roof

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

4. Proposed Plan:
   A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

   B. Will any portion of this area be abated by use of 1.14 work procedures?
   ◯ Yes ◯ No

   If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: **(Check all that apply)**

   ☑ 1.14.2 & 1.14.3 Removal — Lexonite/Flashing around penetrations

☐ 1.14.2 & 1.14.4 Encapsulation _____

☐ 1.14.2 & 1.14.5 Enclosure _____

☐ 1.14.6 Demolition _____

☐ 1.14.7 Glovebag _____

☐ 1.14.8 Asphalt Roofing _____

☐ Other (Specify) _____

C. Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?

◯ Yes ◯ No

If yes, attach a detailed description of the waivers requested you are proposing to utilize. ***All items must be keyed to the specific section(s) of the regulations for which waivers are requested.***

D. Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?

◯ Yes ◯ No

If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. ***Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.***

E. Will any ACM remain in this area after abatement?

◯ Yes ◯ No Beyond scope of inspection

If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

RHODE ISLAND DEPARTMENT OF HEALTH
Center for Healthy Homes and Environment – Asbestos Program

ASBESTOS ABATEMENT PLAN APPLICATION

Supplemental Information: Area Description and Proposed Plan

Facility/Building: Branch Ave Fire Station

INSTRUCTIONS:
A separate and fully completed Form ASB-16A must be submitted for ***each area*** to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification (Room Name/No., etc.):
   Area 2-Patio (Exterior Roof)

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

4. Proposed Plan:
   A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

   B. Will any portion of this area be abated by use of 1.14 work procedures?
   (●) Yes ( ) No

   If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: **(Check all that apply)**

   [ ] 1.14.2 & 1.14.3 Removal

☐	1.14.2 & 1.14.4	Encapsulation	
☐	1.14.2 & 1.14.5	Enclosure	
☐	1.14.6	Demolition	
☐	1.14.7	Glovebag	
☑	1.14.8	Asphalt Roofing	Silver lexonite on knee wall
☐		Other (Specify)	

C. Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?

○ Yes ◉ No

If yes, attach a detailed description of the waivers requested you are proposing to utilize. ***All items must be keyed to the specific section(s) of the regulations for which waivers are requested.***

D. Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?

○ Yes ◉ No

If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. ***Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.***

E. Will any ACM remain in this area after abatement?

○ Yes ◉ No Beyond scope of inspection

If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

ATTACHMENT #1

In Process and Clearance Air Sampling

A. If requested by the building owner, ECM will be on site for part time monitoring and will collect one compliance air sample outside of each containment area daily for the duration of asbestos removal operations inside this building. The sample will be collected outside the decontamination unit.

B. Any deviation in proper procedures on the part of the contractor shall be reported to the building owner. This includes inadequate paperwork on site, disagreement and/or any deviation from previously outlined work procedures, or if compliance samples in the work area vicinity exceed 0.01 f/cc. The contractor's work shall then be stopped, without repercussion to the building owner or the project-monitoring firm until any conflicts and/or problems have been resolved.

C. After the interior areas have passed the consultant's visual inspection, he or his authorized representative will collect:

Area 1: ECM will collect two PCM clearance air samples per contained area.

Area 2: Clearance air samples will <u>not</u> be required as removal is exterior. A qualified individual will perform a visual inspection to confirm all asbestos containing materials identified within this abatement plan have been removed. It is the responsibility of the asbestos abatement contractor to collect personnel air samples in compliance with OSHA 29 CFR 1926.1101 (f). These samples must be submitted to the RIDOH at the completion of the abatement area.

D. If clearance monitoring after clean-up results in fiber concentrations in excess of the RI rules and regulation clearance air requirements, the project area shall be wet-cleaned, misted with water, and encapsulated with a liquid encapsulant. A period of no less than 24 hours shall elapse before the next set of clearance air samples can be collected. The sampling process shall be repeated until a satisfactory clearance air level is attained.

The asbestos contractor is held responsible for any costs associated with the re-cleaning and re-sampling of an area should clearance air samples exceed 0.01 f/cc.

ATTACHMENT #2

ASB-16A-2

Description of Asbestos Containing Material

Branch Ave, Providence, RI– Asbestos Sampling Results

Sample #	Material	Location	Asbestos %
01A-B	Roofing shingles	Pitched roof under shingles	None Detected
02A-B	Patio roof	Patio in rear of building	None Detected
03A-B	**Silver lexonite**	**Patio roof on edge and penetrations**	**2% Chrysotile**
04A-C	Tar and gravel roofing	Interior original roofing field	None Detected
05A-C	Cork insulation and black sealant	Insulation under interior original roofing field	None Detected
06A-B	**Lexonite around penetrations**	**Interior roof space around stacks and vents**	**4% Chrysotile**
7A-B	Black lexonite on kneewall	Interior roof around edge on kneewall	None Detected
8A-B	Insulation on surface	Interior roof insulation	None Detected

Asbestos: Recommendations & Summary

ACM silver lexonite was identified on the kneewall, edge and around penetrations on the exterior patio roof. This material contains 2% Chrysotile asbestos. ECM estimates there to be 100sf of this material present within this area.

Asbestos containing flashing was identified around stacks and penetrations on the interior roof that has been covered over with the newer pitched roof. ECM estimates there to be approximately 50sf of this material present in the attic space.

ATTACHMENT #2 (Cont.)

Laboratory Analysis Reports:

1 Bulk Sample Analysis
2 Pre-Abatement Air Samples

SanAir Technologies Laboratory

The Identification Specialists

Analysis Report
prepared for
Environmental Consulting & Management Inc

Report Date: 5/1/2025

Project Name: Branch Ave Fire Station

Project #: 250203

SanAir ID#: 25026742

NVLAP TESTING

NVLAP LAB CODE 200870-0

10501 Trade Court, North Chesterfield, Virginia 23236
888.895.1177 | 804.897.1177 | fax: 804.897.0070 | LabReports@SanAir.com | SanAir.com

SanAir Technologies Laboratory

SanAir ID Number
25026742
FINAL REPORT
5/1/2025 12:22:26 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: Branch Ave Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

Dear Joseph M. Lepore,

We at SanAir would like to thank you for the work you recently submitted. The 18 sample(s) were received on Wednesday, April 23, 2025 via UPS. The final report(s) is enclosed for the following sample(s): 01A, 01B, 02A, 02B, 03A, 03B, 04A, 04B, 04C, 05A, 05B, 05C, 06A, 06B, 07A, 07B, 08A, 08B.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:
- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:
- 18 samples in Good condition.

SanAir Technologies Laboratory

SanAir ID Number
25026742
FINAL REPORT
5/1/2025 12:22:26 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: Branch Ave Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

Analyst: Dixon, Alana

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Components		
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
01A / 25026742-001 Roof Shingles	Green Non-Fibrous Heterogeneous	10% Glass	90% Other	None Detected
01B / 25026742-002 Roof Shingles	Green Non-Fibrous Heterogeneous	10% Glass	90% Other	None Detected
02A / 25026742-003 Patio Roof	Black Non-Fibrous Homogeneous		100% Other	None Detected
02B / 25026742-004 Patio Roof	Black Non-Fibrous Homogeneous		100% Other	None Detected
03A / 25026742-005 Lexonite On Patio	Silver Non-Fibrous Homogeneous		98% Other	2% Chrysotile
03B / 25026742-006 Lexonite On Patio	Silver Non-Fibrous Homogeneous		98% Other	2% Chrysotile
04A / 25026742-007 Interior Roof Core, Tar Paper	Black Fibrous Homogeneous	40% Cellulose 10% Glass	50% Other	None Detected
04A / 25026742-007 Interior Roof Core, Tar	Black Non-Fibrous Homogeneous		100% Other	None Detected
04B / 25026742-008 Interior Roof Core, Tar Paper	Black Fibrous Homogeneous	40% Cellulose 10% Glass	50% Other	None Detected
04B / 25026742-008 Interior Roof Core, Tar	Black Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: Alana Dixon

Analysis Date: 5/1/2025

Approved Signatory: Sandra Sobrino

Date: 5/1/2025

SanAir Technologies Laboratory

SanAir ID Number
25026742
FINAL REPORT
5/1/2025 12:22:26 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: Branch Ave Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

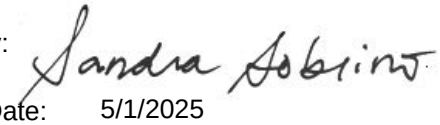
Analyst: Dixon, Alana

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Components		
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
04C / 25026742-009 Interior Roof Core, Shingle	Black Non-Fibrous		100% Other	None Detected
04C / 25026742-009 Interior Roof Core, Tar	Black Non-Fibrous Homogeneous		100% Other	None Detected
05A / 25026742-010 Cork & Mastic Under Roof, Cork	Brown Non-Fibrous Homogeneous		100% Other	None Detected
05A / 25026742-010 Cork & Mastic Under Roof, Mastic	Black Non-Fibrous Homogeneous		100% Other	None Detected
05B / 25026742-011 Cork & Mastic Under Roof, Cork	Brown Non-Fibrous Homogeneous		100% Other	None Detected
05B / 25026742-011 Cork & Mastic Under Roof, Mastic	Black Non-Fibrous Homogeneous		100% Other	None Detected
05C / 25026742-012 Cork & Mastic Under Roof, Cork	Brown Non-Fibrous Homogeneous		100% Other	None Detected
05C / 25026742-012 Cork & Mastic Under Roof, Mastic	Black Non-Fibrous Homogeneous		100% Other	None Detected
06A / 25026742-013 Lexonite On Penetrations - Interior	Black Non-Fibrous Homogeneous		96% Other	4% Chrysotile
06B / 25026742-014 Lexonite On Penetrations - Interior	Black Non-Fibrous Homogeneous		100% Other	None Detected

Analyst: 

Analysis Date: 5/1/2025

Approved Signatory: 

Date: 5/1/2025

SanAir Technologies Laboratory

SanAir ID Number
25026742
FINAL REPORT
5/1/2025 12:22:26 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 250203
P.O. Number:
Project Name: Branch Ave Fire Station
Collected Date: 4/21/2025
Received Date: 4/23/2025 10:15:00 AM

Analyst: Dixon, Alana

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Components		
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
07A / 25026742-015 Lexonite Int. Knee Wall	Black Non-Fibrous Homogeneous		100% Other	None Detected
07B / 25026742-016 Lexonite Int. Knee Wall	Black Non-Fibrous Homogeneous		100% Other	None Detected
08A / 25026742-017 Insulation On Surface	Pink Fibrous Homogeneous	99% Glass	1% Other	None Detected
08B / 25026742-018 Insulation On Surface	Pink Fibrous Homogeneous	99% Glass	1% Other	None Detected

Analyst: Alana Dixon

Analysis Date: 5/1/2025

Approved Signatory: Sandra Sobrino

Date: 5/1/2025

SanAir Technologies Laboratory

10501 Trade Ct., Suite 100
N. Chesterfield, VA 23236
804.897.1177 / 888.895.1177
Fax 804.897.0070
sanair.com

Asbestos Chain of Custody
Form 140, Rev 7, 10/20/2022

SanAir ID Number 2502742

Company: Environmental Consulting & Management Inc	Project #: 250203	Collected by: Joe Lepore
Address: 50 Kickemuit Ave	Project Name: Branch Ave Fire Station	Phone #: 401-438-1360
City, St., Zip: Bristol, RI 02809	Date Collected: 4/21/25	Fax #: 401-438-1316
State of Collection: RI Account#: 2667	P.O. Number:	Email: JLepore@ECMNE.com

Bulk

ABB	PLM EPA 600 R-93/116	☒
	Positive Stop	☐
ABEPA	PLM EPA 400 Point Count	☐
ABB1K	PLM EPA 1000 Point Count	☐
ABBEN	PLM EPA NOB**	☐
ABBCH	TEM Chatfield**	☐
ABBTM	TEM EPA NOB**	☐
ABQ	PLM Qualitative	☐

** Available on 24-hr. to 5-day TAT

Water

ABHE	EPA 100.2	☐

Air

ABA	PCM NIOSH 7400	☐
ABA-2	OSHA w/ TWA*	☐
ABTEM	TEM AHERA	☐
ABATN	TEM NIOSH 7402	☐
ABT2	TEM Level II	☐
Other:		☐

New York ELAP

ABEPA2	NY ELAP 198.1	☐
ABENY	NY ELAP 198.6 PLM NOB	☐
ABBNY	NY ELAP 198.4 TEM NOB	☐
	Positive Stop	☐

Soil

ABSE	PLM EPA 600/R-93 116 (Qual.)	☐

Vermiculite

ABB	PLM EPA 600/R-93/116	
ABEPA3	PLM EPA 400 Point Count	
ABCM	Cincinnati Method	

Dust

ABWA	TEM Wipe ASTM D-6480	☐
ABDMV	TEM Microvac ASTM D-5755	☐

Matrix	Other

Turn Around Times				
	3 HR (4 HR TEM) ☐	6 HR (8HR TEM) ☐	12 HR ☐	1 Day ☐
	☐ 2 Days	☐ 3 Days	☐ 4 Days	☒ 5 Days

Special Instructions

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start – Stop Time*	
01A	Roof Shingles					
01B	" "					
02A	Patio Roof					
02B	Patio Roof					
03A	Silver Loxonite on Patio					
03B	" "					
04A	~~Interior~~ Interior Roof Core					
04B	↓					
04C	↓					
05A	Cork + mastic under Roof					
05B	↓					
05C	↓					

Relinquished by	Date	Time	Received by	Date	Time
[signature]	4/22/25		MW	4/23/25	10:15a

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST will be logged in the next business day. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the 3hr TAT or a minimum charge of $150. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Ground and Next Day Air shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

Page_____of_____

25026742 Form 140, Revision 1, 1 20 2017

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start – Stop Time*	
06A	Lexonite on Penetrations – Interior					
06B	" "					
07A	Black lexonite int. Knee wall					
07B	" "					
08A	Insulation on Surface					
08B	" "					

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
	4/22/25		MN	4/23/25	10:15am

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm [illegible] will be logged in the next business day. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the 3hr TAT or a minimum charge of $150. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Ground and Next Day Air shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges. Page _of____

Environmental Consulting
& Management Inc.
181 Amaral Street
Riverside, RI 02915
401-438-1360

Certificate of Analysis

Asbestos PCM Air Analysis by NIOSH 7400

Client: City of Providence
Project Location: N. Main Street and Branch Ave Providence Fire Stations
Sample Type: Background Airs & Blanks

Project Number: 250203
Collected By: JML
Date: 4-21-2025
PCM Lot #: 20230602

Sample	Identification	Start	End	Flow (LPM)	Volume (L)	Fibers / Fields	Fiber Density (f/mm²)	Concentration (f/cc)
B	Blank	-	-	-	-	0 / 100	<7	< -
B	Blank	-	-	-	-	0 / 100	<7	< -
1	Branch Ave Inteior	10:05	11:20	14	1050	11 / 100	14.01	0.0051
2	North Main St. Interior	11:02	12:14	14	1008	6 / 100	7.64	0.0029

Analyzed By: Joseph M. Lepore

Date Analyzed: 6-2-2025

Reviewed By: Daniel J. Simas

Standards

Clearance Criteria: <0.01 f/cc
OSHA Permissible Exposure Limit (8 hour TWA): 0.1 f/cc
OSHA 30 Minute Excursion Limit: 1.0 f/cc
Limit of Detection fibers/100 fields: 5.5
Limit of Detection fiber density: 7 f/mm
Relative Standard Deviation:0.45

WO#25000489

Lab Certifications: RI AAL-0131
MA AA000247

ATTACHMENT #3

Interim Operations & Maintenance Plan

The contractors, maintenance personnel and staff associated with the Branch Ave Fire Station are aware of ACM in the above stated areas. They have been instructed not to disturb the material due to the potential health hazards if fibers become airborne.

1. Notification

All building occupants, also any contractors entering the building and/or premises to perform work, shall be notified of the presence and location of asbestos-containing material(s) and cautioned regarding disturbance of the material(s). Also, the building occupants must be notified regarding the occurrence of asbestos abatement activities. If an emergency fiber release occurs, the following procedures shall be initiated.

2. Fiber Release Episodes

A. Minor Release Episode

If a minor fiber release episode occurs (release of less than 10 linear feet or 25 square feet of material), trained maintenance staff may perform the cleaning. Access to the area shall be restricted during clean-up. All debris shall be thoroughly wetted using amended water and placed in labeled, double six-mil polyethylene bags. The area shall then be cleaned using HEPA filtered vacuums and/or wet cleaning methods. Damaged material must be cleaned and repaired with non-asbestos-containing material. The area shall then be evaluated to decide if further action is necessary.

B. Major Release Episode

If a major fiber release episode occurs (falling or dislodging of more than 10 linear feet or 25 square feet of ACBM), the cleaning must be carried out and directed by persons accredited to conduct and design response actions. After such an episode, the area shall be immediately restricted and entry to the area prevented. Warning signs shall be posted to caution people other than those qualified to deal with the problem. Air handling units in the area shall be shut down to prevent the spread of fibers beyond the problem area. A response action shall be designed and carried out by qualified personnel.

3. Training

Any employee who, because of their work, may disturb asbestos- containing material shall be trained and certified as a Competent Person as described by the R.I. Rules and Regulations for Asbestos Control. The program coordinator shall ensure that the procedures described above to protect the building occupants shall be followed for any operations and maintenance activities disturbing or involving ACBM.

ATTACHMENT #4

Scope of Work / Description of Waivers

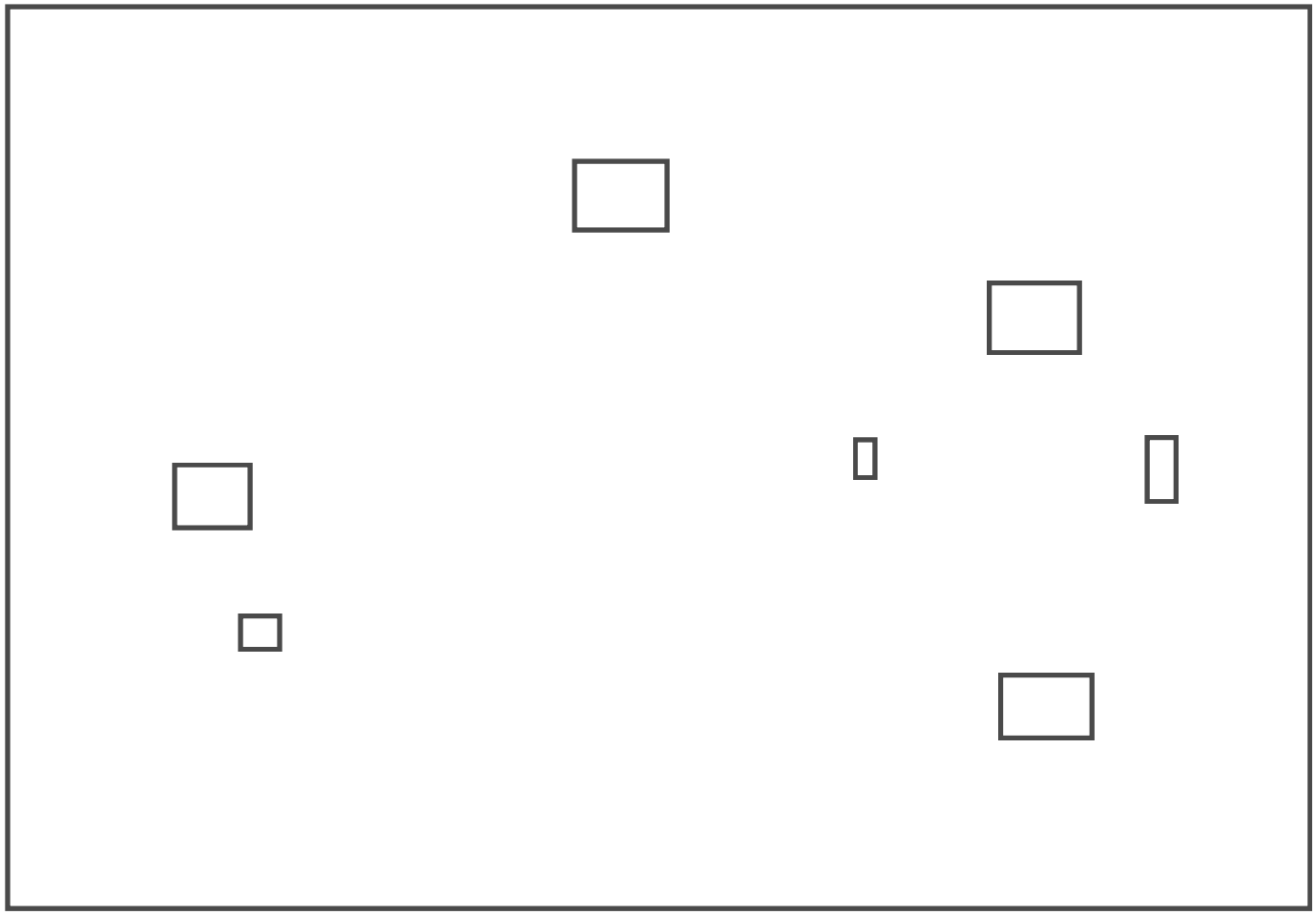
It is the contractor's responsibility to verify material locations and quantities.

All proper OSHA, federal, state, and local safety regulations shall be followed.

Area 1: Asbestos containing roof flashing in this area was formerly an exterior flat tar and gravel roof that has been roofed over creating an interior attic space. Since this area is interior to the building abatement will be conducted utilizing 1.14.2 and 1.14.3 removal practices.

Area 2: Since the materials are located on the exterior of the building and are non-friable they will be removed utilizing 1.14.8 Exterior work procedures.

Area 1- Interstitial Roof Space
Flashing around penetrations (vent stacks, roof hatch and HVAC units).




Area 2- Patio Roof
Asbestos containing silver lexonite

Asbestos containing silver lexonite around edge.
Providence Fire Department
6