



CITY OF MELROSE

CITY COUNCIL

ORDERS OF THE DAY • OCTOBER 17, 2022

Council Chamber, First Floor, Melrose City Hall Regular Meeting
562 Main Street, Melrose, MA 02176

7:45 PM

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. READING OF THE MINUTES

IV. PUBLIC COMMENT

Public Comment link

<https://cityofmelrose->

[org.zoom.us/webinar/register/WN_IE8U4GoMQ2WENPpvFuWqQQ](https://cityofmelrose-org.zoom.us/webinar/register/WN_IE8U4GoMQ2WENPpvFuWqQQ)

After registering, you will receive a confirmation email containing information about joining the meeting.

V. NEW BUSINESS

A. *Filings by the Honorable Mayor*

1. **ORDER-2023-27** : Authorization of a Bond in the amount of \$1,460,177.00 to pay for costs of replacing the roof at the Horace Mann Elementary School, Fund #3392

Offered by: Mayor Paul Brodeur

2. **ORDER-2023-28** : Authorization of a Bond in the amount of \$2,306,449 to pay for costs of replacing the roof at the Herbert Clark Hoover Elementary School, Fund #3391

Offered by: Mayor Paul Brodeur

3. **ORDER-2023-29** : An Appropriation in the amount of \$167,310 (One Hundred Sixty-Seven thousand, three hundred and ten dollars) to fund the HRS compensation study. The requested appropriation is from the following accounts \$159,784 from the Contract Stabilization fund (84042-590000), \$3,763 from Sewer, Reserve for Retained Earnings (84152-590000) and \$3,763 from Water, Reserve for Retained Earnings (84162-590000) to various salary and wage lines as set forth herein.

Offered by: Mayor Paul Brodeur

4. **ORDER-2023-30** : An Appropriation in the amount of \$72,170 (Seventy-Two thousand, One Hundred Seventy Dollars) to fund Fiscal 2023 of the Local-272 Clerical Union Contract. The requested appropriation is from the following accounts \$63,378 from the Contract Stabilization fund (84042-590000), \$4,396 from Sewer, Reserve for Retained Earnings (84152-590000) and \$4,396 from Water, Reserve for Retained Earnings (84162-590000) to various salary and wage lines as set forth herein.

Offered by: Mayor Paul Brodeur

5. **ORDER-2023-31** : An Appropriation in the amount of \$68,816 (Sixty Eight Thousand, Eight Hundred Sixteen dollars) to fund Fiscal 2023 of the Local-272 Laborers Union Contract. The requested appropriation is from the following accounts \$50,522 from the Contract Stabilization fund (84042-590000), \$8,080 from Sewer, Reserve for Retained Earnings (84152-590000) and \$10,214 from Water, Reserve for Retained Earnings.

Offered by: Mayor Paul Brodeur

6. **GRANT-2023-1** : Department of Justice Bureau of Justice Assistance STOP School Violence Program Grant

Sponsored by: Health Director Anthony Chui

7. **INFO-2023-7:** Health and Human Services Regionalization Project

Sponsored by: Health Director Anthony Chui

B. Filings by the Honorable City Council**VI. COMMUNICATIONS FROM HIS HONOR, THE MAYOR AND OTHER CITY OFFICIALS**

1. **INFO-2023-8:** Addendum to Info 2023-4 Calling State Election - Summary of ballot questions

VII. PETITIONS

1. **PET-2023-1:** Petition of Mass Electric Company d/b/a National Grid & Verizon for Joint Pole Locations as shown on Plan attached No. #30440731. (Public Hearing - Monday, November 14th at 8:00 P.M.)

Sponsored by: Mayor Paul Brodeur

VIII. REPORTS FROM COMMITTEES

1. **ORDER-2023-9 :** Appointment of Craig Molway, 58 Gross Ave, to the Melrose Conservation Commission, for a two-year term, said term to expire on the last day of February, 2024.

Offered by: Mayor Paul Brodeur

From: Public Service Committee

OUGHT TO PASS

2. **ORDER-2023-17 :** Appointment of Michael Barry, 910 Main St., to the Melrose Housing Authority, for a one-year term, said term to expire on the first Monday of March 2023.

Offered by: Mayor Paul Brodeur

3. **ORDER-2023-18 :** Appointment of Susan Lawson Cann to Melrose Cemetery Commission

Offered by: Mayor Paul Brodeur

Sponsored by: Mayor Paul Brodeur

From: Health, Education & Welfare Committee

OUGHT TO PASS

4. **ORDER-2023-19** : Appointment of Francis X. Wright Melrose Board of Registrars of Voters

Offered by: Mayor Paul Brodeur

Sponsored by: Mayor Paul Brodeur

5. **ORDER-2023-20** : Acceptance of Federal Title III B FY23 Grant Through Mystic Valley Elder Services in the Amount of \$10,000

6. **ORDER-2023-21** : Acceptance of Grant from the Massachusetts Department of Conservation and Recreation (DCR) in the Amount of \$75,000 For Enhancements to Recreational Developments and Parks

Offered by: Mayor Paul Brodeur

7. **ORDER-2023-22** : Authorization to Accept a MassWorks Infrastructure Grant in the amount of \$615,000 from the Executive Office of Housing and Economic Development (EOHED) through the Community One Stop for Growth Program and Authorize the Mayor to Execute a Contract with EOHED; funds to be deposited into Fund 4519

Offered by: Mayor Paul Brodeur

8. **ORDER-2023-23** : Authorization to Accept a Grant in the amount of \$500,000.00 from the Department of Energy Resources (DOER) through the Green Communities Division and Authorize the Mayor to Execute a Contract with DOER; funds to be deposited into Fund 4520

Offered by: Mayor Paul Brodeur

9. **ORDER-2023-24** : Funding Authorization in the amount of Sixty Eight Thousand Five Hundred (\$68,500) Dollars for Design Services for Public Safety Facilities

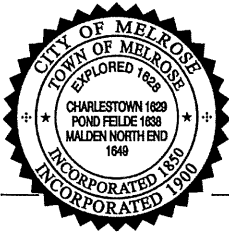
10. **INFO-2023-6:** Status of the Melrose Public Library Construction

Sponsored by: Ward 4 Mark Garipay, Ward 3 Robb Stewart

IX. UNFINISHED BUSINESS

X. RULE 53 REPORTS

XI. ADJOURNMENT



CITY OF MELROSE

Office of Treasurer-Collector

Kathryn J Armata
Treasurer-Collector

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Treasurer - (781) 979-4162
Collector - (781) 979-4120
Fax - (781) 665-6877

MEMORANDUM

To: Melrose City Council
Mayor Brodeur

From: Kathryn Armata

Date: September 20, 2022

Re: Loan Order – Horace Mann Elementary School Roof Replacement

ORDERED: That the City appropriates \$1,460,177 for the purpose of paying costs of replacing the roof at the Horace Mann Elementary School located at 30 Damon Avenue, Melrose, Massachusetts, including the payment of all costs incidental and related thereto (the "Project"), which proposed Project would materially extend the useful life of the school and preserve an asset that otherwise is capable of supporting the required educational program, and for which the City may be eligible for a grant from the Massachusetts School Building Authority (the "MSBA"), said amount to be expended under the direction of the Office of Planning and Community Development; that to meet this appropriation, the Treasurer, with the approval of the Mayor, is authorized to borrow said amount under and pursuant to Chapter 44, Section 7(1) or Chapter 70B of the General Laws, or pursuant to any other enabling authority, and to issue bonds or notes of the City therefor; that the City acknowledges that the MSBA's grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the City incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the City; that any grant that the City may receive from the MSBA for the Project shall not exceed the lesser of (1) forty-nine and thirty-one hundredths percent (49.31%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA; and that the amount of the borrowing authorized by this order shall be reduced by any grant amount set forth in and received pursuant to the Project Funding Agreement that may be executed between the City and the MSBA.

Pursuant to Section 56-14 of the City Ordinances, attached is a projection of the principal and interest costs on the bonds proposed to be authorized by the following loan orders under

Attachment: Order for HM Roof funding authorization (ORDER-2023-27 : Horace Mann School Roof Replacement)

consideration by the City Council. The payment schedule attached assumes a 30-year borrowing term, an interest rate assumption of 5.5% over the life of the borrowing, and a level debt service payment schedule. The debt service on these bonds will not be paid from an enterprise fund and will have no impact on any enterprise fund rates."

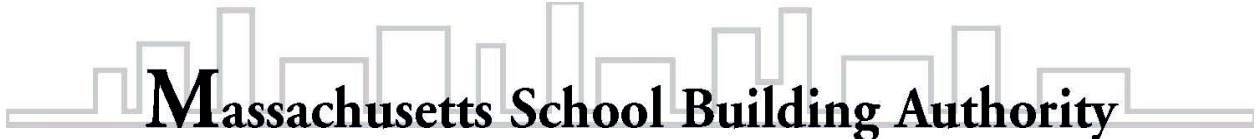
FINANCIAL IMPACT: See attached

BOND DEBT SERVICE

City of Melrose, Massachusetts
Proposed \$1,460,177 Horace Mann Elementary School Roof Bonds
30 years - Level Debt Service
Interest Estimated and Subject to Change

	Dated Date	09/15/2023			
	Delivery Date	09/15/2023			
Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service
03/15/2024	-	-	40,154.87	40,154.87	-
06/30/2024	-	-	-	-	40,154.87
09/15/2024	20,177.00	5.500%	40,154.87	60,331.87	-
03/15/2025	-	-	39,600.00	39,600.00	-
06/30/2025	-	-	-	-	99,931.87
09/15/2025	20,000.00	5.500%	39,600.00	59,600.00	-
03/15/2026	-	-	39,050.00	39,050.00	-
06/30/2026	-	-	-	-	98,650.00
09/15/2026	20,000.00	5.500%	39,050.00	59,050.00	-
03/15/2027	-	-	38,500.00	38,500.00	-
06/30/2027	-	-	-	-	97,550.00
09/15/2027	25,000.00	5.500%	38,500.00	63,500.00	-
03/15/2028	-	-	37,812.50	37,812.50	-
06/30/2028	-	-	-	-	101,312.50
09/15/2028	25,000.00	5.500%	37,812.50	62,812.50	-
03/15/2029	-	-	37,125.00	37,125.00	-
06/30/2029	-	-	-	-	99,937.50
09/15/2029	25,000.00	5.500%	37,125.00	62,125.00	-
03/15/2030	-	-	36,437.50	36,437.50	-
06/30/2030	-	-	-	-	98,562.50
09/15/2030	30,000.00	5.500%	36,437.50	66,437.50	-
03/15/2031	-	-	35,612.50	35,612.50	-
06/30/2031	-	-	-	-	102,050.00
09/15/2031	30,000.00	5.500%	35,612.50	65,612.50	-
03/15/2032	-	-	34,787.50	34,787.50	-
06/30/2032	-	-	-	-	100,400.00
09/15/2032	30,000.00	5.500%	34,787.50	64,787.50	-
03/15/2033	-	-	33,962.50	33,962.50	-
06/30/2033	-	-	-	-	98,750.00
09/15/2033	30,000.00	5.500%	33,962.50	63,962.50	-
03/15/2034	-	-	33,137.50	33,137.50	-
06/30/2034	-	-	-	-	97,100.00
09/15/2034	35,000.00	5.500%	33,137.50	68,137.50	-
03/15/2035	-	-	32,175.00	32,175.00	-
06/30/2035	-	-	-	-	100,312.50
09/15/2035	35,000.00	5.500%	32,175.00	67,175.00	-
03/15/2036	-	-	31,212.50	31,212.50	-
06/30/2036	-	-	-	-	98,387.50
09/15/2036	40,000.00	5.500%	31,212.50	71,212.50	-
03/15/2037	-	-	30,112.50	30,112.50	-
06/30/2037	-	-	-	-	101,325.00
09/15/2037	40,000.00	5.500%	30,112.50	70,112.50	-
03/15/2038	-	-	29,012.50	29,012.50	-
06/30/2038	-	-	-	-	99,125.00
09/15/2038	45,000.00	5.500%	29,012.50	74,012.50	-
03/15/2039	-	-	27,775.00	27,775.00	-
06/30/2039	-	-	-	-	101,787.50
09/15/2039	45,000.00	5.500%	27,775.00	72,775.00	-
03/15/2040	-	-	26,537.50	26,537.50	-
06/30/2040	-	-	-	-	99,312.50
09/15/2040	45,000.00	5.500%	26,537.50	71,537.50	-
03/15/2041	-	-	25,300.00	25,300.00	-
06/30/2041	-	-	-	-	96,837.50
09/15/2041	50,000.00	5.500%	25,300.00	75,300.00	-
03/15/2042	-	-	23,925.00	23,925.00	-
06/30/2042	-	-	-	-	99,225.00
09/15/2042	55,000.00	5.500%	23,925.00	78,925.00	-
03/15/2043	-	-	22,412.50	22,412.50	-
06/30/2043	-	-	-	-	101,337.50
09/15/2043	55,000.00	5.500%	22,412.50	77,412.50	-
03/15/2044	-	-	20,900.00	20,900.00	-
06/30/2044	-	-	-	-	98,312.50
09/15/2044	60,000.00	5.500%	20,900.00	80,900.00	-
03/15/2045	-	-	19,250.00	19,250.00	-
06/30/2045	-	-	-	-	100,150.00
09/15/2045	60,000.00	5.500%	19,250.00	79,250.00	-
03/15/2046	-	-	17,600.00	17,600.00	-
06/30/2046	-	-	-	-	96,850.00
09/15/2046	65,000.00	5.500%	17,600.00	82,600.00	-
03/15/2047	-	-	15,812.50	15,812.50	-
06/30/2047	-	-	-	-	98,412.50
09/15/2047	70,000.00	5.500%	15,812.50	85,812.50	-
03/15/2048	-	-	13,887.50	13,887.50	-
06/30/2048	-	-	-	-	99,700.00
09/15/2048	75,000.00	5.500%	13,887.50	88,887.50	-
03/15/2049	-	-	11,825.00	11,825.00	-
06/30/2049	-	-	-	-	100,712.50
09/15/2049	80,000.00	5.500%	11,825.00	91,825.00	-
03/15/2050	-	-	9,625.00	9,625.00	-
06/30/2050	-	-	-	-	101,450.00
09/15/2050	80,000.00	5.500%	9,625.00	89,625.00	-
03/15/2051	-	-	7,425.00	7,425.00	-
06/30/2051	-	-	-	-	97,050.00
09/15/2051	85,000.00	5.500%	7,425.00	92,425.00	-
03/15/2052	-	-	5,087.50	5,087.50	-
06/30/2052	-	-	-	-	97,512.50
09/15/2052	90,000.00	5.500%	5,087.50	95,087.50	-
03/15/2053	-	-	2,612.50	2,612.50	-
06/30/2053	-	-	-	-	97,700.00
09/15/2053	95,000.00	5.500%	2,612.50	97,612.50	-
06/30/2054	-	-	-	-	97,612.50
	1,460,177.00		1,557,334.74	3,017,511.74	3,017,511.74

Attachment: Order for HM Roof funding authorization (ORDER-2023-27 : Horace Mann School Roof Replacement)



Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

August 31, 2022

The Honorable Paul Brodeur, Mayor
City of Melrose
Melrose City Hall
562 Main Street
Melrose, MA 02176

Re: City of Melrose, Herbert Clark Hoover Elementary School, Horace Mann Elementary School

Dear Mayor Brodeur:

I am pleased to report that the Board of the Massachusetts School Building Authority (the “MSBA”) voted to approve the Proposed Accelerated Repair Project (the “Proposed Project”) in the City of Melrose (the “City”) for a roof replacement project at the Herbert Clark Hoover Elementary School, and a roof replacement project at the Horace Mann Elementary School.

The Board approved an Estimated Maximum Total Facilities Grant for each project as shown in the table below, which does not include any funds for potentially eligible Owner’s or Construction Contingency Expenditures. In the event that the MSBA determines that any Owner’s and/or Construction Contingency Expenditures are eligible for reimbursement, the Maximum Total Facilities Grant for the Herbert Clark Hoover Elementary School and Horace Mann Elementary School Projects may increase to each amount shown below. The final grant amounts will be determined by the MSBA based on a review and audit of all project costs incurred by the City, in accordance with the MSBA’s regulations, policies, and guidelines and the Project Funding Agreement. The final grant amount may be an amount less than the Estimated Maximum Total Facilities Grant.

Project Funding Agreement	Herbert Clark Hoover Elementary School	Horace Mann Elementary School
Estimated Maximum Total Facilities Grant	\$1,021,573	\$624,400
Maximum Total Facilities Grant	\$1,069,127	\$649,456

Pursuant to the terms of the MSBA’s Accelerated Repair Program, the City has 90 days to acquire and certify local approval for an appropriation and all other necessary local votes or approvals showing acceptance of the cost, site, type, scope and timeline for the Herbert Clark

Page 2
 August 31, 2022
 Melrose ARP PFA Board Action Letter

Hoover Elementary School and the Horace Mann Elementary School Projects. Upon receipt of the certified votes demonstrating local approval, the MSBA and the City will execute a Project Funding Agreement, which will set forth the terms and conditions pursuant to which the City will receive its grant from the MSBA. Once the Project Funding Agreement has been executed by both parties, the City will be eligible to submit requests for reimbursement for Proposed Project costs to the MSBA.

We will be contacting you soon to discuss these next steps in more detail, but in the meantime, I wanted to share with you the Board's approval of the Herbert Clark Hoover Elementary School and Horace Mann Elementary School Projects in the City of Melrose for a roof replacement project at the Herbert Clark Hoover Elementary School, and a roof replacement project at the Horace Mann Elementary School, and the Board's authorization to execute a Project Funding Agreement for these Proposed Projects.

Sincerely,



John K. McCarthy
 Executive Director

Cc: Legislative Delegation
 Christopher C. Cinella, President, Melrose City Council
 Denise M. Gaffey, Director of Planning and Community Development, City of Melrose
 Jen McAndrew, Chair, Melrose School Committee
 Dr. Julie Kukenberger, Superintendent, Melrose Public Schools
 Jon Lemieux, Owner's Project Manager, Vertex Companies, Inc.
 Joseph P. Viamari, Jr., Designer, Tighe & Bond, Inc.
 File: 10.2 Letters

Attachment: MSBA ARP Award Letter 8_31_2022 (ORDER-2023-27 : Horace Mann School Roof Replacement)

**EXHIBIT A
PROJECT BUDGET
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

City of Melrose
Herbert Clark Hoover Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Feasibility Study Agreement				
OPM Feasibility Study	\$7,500	\$0	\$7,500	
A&E Feasibility Study	\$49,100	\$0	\$49,100	
Env. & Site	\$0	\$0	\$0	
Other	\$0	\$0	\$0	
Feasibility Study Agreement Subtotal	\$56,600	\$0	\$56,600	\$27,909
Administration				
Legal Fees	\$0	\$0	\$0	\$0
Owner's Project Manager				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$20,434	\$0	\$20,434	
Bidding	\$8,960	\$0	\$8,960	
Construction Contract Administration	\$101,045	\$0	\$101,045	
Closeout	\$12,558	\$0	\$12,558	
Extra Services	\$0	\$0	\$0	
Reimbursable & Other Services	\$5,000	\$0	\$5,000	
Cost Estimates	\$0	\$0	\$0	
Advertising	\$0	\$0	\$0	
Permitting	\$0	\$0	\$0	
Owner's Insurance	\$0	\$0	\$0	
Other Administrative Costs	\$0	\$0	\$0	
Administration Subtotal	\$147,997	\$0	\$147,997	\$72,977
Architecture and Engineering				
Basic Services				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$60,400	\$0	\$60,400	
Bidding	\$4,400	\$0	\$4,400	
Construction Contract Administration	\$34,600	\$0	\$34,600	
Closeout	\$3,600	\$0	\$3,600	
Other Basic Services	\$0	\$0	\$0	
Basic Services Subtotal	\$103,000	\$0	\$103,000	
Reimbursable Services				
Construction testing	\$0	\$0	\$0	
Printing (over minimum)	\$0	\$0	\$0	
Other Reimbursable Costs	\$0	\$0	\$0	
Hazardous Materials	\$10,700	\$0	\$10,700	
Geotech & Geo-Env.	\$0	\$0	\$0	
Site Survey	\$0	\$0	\$0	
Wetlands	\$0	\$0	\$0	
Traffic Studies	\$0	\$0	\$0	
Architectural/Engineering Subtotal	\$113,700	\$0	\$113,700	\$56,065
CM & Risk Preconstruction Services				
Pre-Construction Services	\$0	\$0	\$0	\$0
Site Acquisition				
Land/Building Purchase	\$0	\$0	\$0	
Appraisal Fees	\$0	\$0	\$0	
Recording fees	\$0	\$0	\$0	
Site Acquisition Subtotal	\$0	\$0	\$0	\$0
Construction Costs				
Construction Budget	\$0	\$0		
GMP Fee	\$0	\$0		
GMP Insurance	\$0	\$0		
GMP Contingency	\$0	\$0		
Division 1 - General Requirements	\$543,866	\$0		
Division 2 - Existing Conditions	\$340,900	\$0		
Division 3 - Concrete	\$0	\$0		
Division 4 - Masonry	\$16,200	\$0		
Division 5 - Metals	\$157,086	\$0		
Division 6 - Woods, Plastics and Composites	\$28,464	\$0		
Division 7 - Thermal and Moisture Protection	\$654,165	\$127,577		
Division 8 - Openings	\$0	\$0		
Division 9 - Finishes	\$0	\$0		
Division 10 - Specialties	\$0	\$0		
Division 11 - Equipment	\$0	\$0		
Division 12 - Furnishings	\$0	\$0		
Division 13 - Special Construction	\$0	\$0		
Division 14 - Conveying Systems	\$0	\$0		
Division 21 - Fire Suppression	\$0	\$0		
Division 22 - Plumbing	\$32,685	\$0		
Division 23 - HVAC	\$63,526	\$0		
Division 25 - Integrated Automation	\$0	\$0		
Division 26 - Electrical	\$44,124	\$0		
Division 27 - Communications	\$0	\$0		
Division 28 - Electronic Safety and Security	\$0	\$0		
Division 31 - Earthwork	\$0	\$0		
Division 32 - Exterior Improvements	\$0	\$0		
Division 33 - Utilities	\$0	\$0		
Construction Budget	\$1,881,016	\$127,577	\$1,753,439	\$864,621
Alternates				
	\$0	\$0	\$0	
	\$0	\$0	\$0	
	\$0	\$0	\$0	
Alternates Subtotal	\$0	\$0	\$0	\$0
Miscellaneous Project Costs				
Utility company Fees	\$0	\$0	\$0	
Testing Services	\$0	\$0	\$0	
Swing Space/Modulars	\$0	\$0	\$0	
Other Project Costs (Mailing & Moving)	\$0	\$0	\$0	
Misc. Project Costs Subtotal	\$0	\$0	\$0	\$0

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

City of Melrose
Herbert Clark Hoover Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
<i>Furnishings and Equipment</i>				
<i>Furnishings</i>	\$0	\$0	\$0	
<i>Equipment</i>	\$0	\$0	\$0	
<i>Computer Equipment</i>	\$0	\$0	\$0	
FF&E Subtotal	\$0	\$0	\$0	\$0
Soft Costs that exceed 20% of Const'n Cost		\$0	\$0	
Project Budget	\$2,199,313	\$127,577	\$2,071,736	\$1,021,573

Board Authorization	
Project Budget	\$2,199,313
Scope Items Excluded or Otherwise Ineligible	-\$127,577
Basis of Estimated Total Facilities Grant ¹	\$2,071,736
Reimbursement Rate	49.31%
Estimated Maximum Total Facilities Grant ¹	\$1,021,573

Total Construction Contingency ²	\$94,051
Ineligible Construction Contingency ²	\$6,379
Potentially Eligible Construction Contingency ²	\$87,672
Total Owner's Contingency ²	\$13,085
Ineligible Owner's Contingency ²	\$4,318
Potentially Eligible Owner's Contingency ²	\$8,767
Total Potentially Eligible Contingency ²	\$96,439
Reimbursement Rate	49.31%
Potential Additional Contingency Grant Funds ²	\$47,554
Maximum Total Facilities Grant	\$1,069,127
Total Project Budget	\$2,306,449

This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Owner's Project Manager of City of Melrose for the Herbert Clark Hoover Elementary School project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

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By signing this Total Project Budget, I hereby certify that I have read and understand the form and further certify, to the best of my knowledge and belief, that the information supplied by the District in the table above is true, accurate, and complete.

By:
Title: Chair of School Building Committee

Date: _____

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By:
Title: Superintendent of Schools

Date: _____

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By:
Title: Chair of School Committee

Date: _____

City of Melrose
Horace Mann Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Feasibility Study Agreement				
OPM Feasibility Study	\$7,500	\$0	\$7,500	
A&E Feasibility Study	\$40,700	\$0	\$40,700	
Env. & Site	\$0	\$0	\$0	
Other	\$0	\$0	\$0	
Feasibility Study Agreement Subtotal	\$48,200	\$0	\$48,200	\$23,767
Administration				
Legal Fees	\$0	\$0	\$0	\$0
Owner's Project Manager				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$20,434	\$0	\$20,434	
Bidding	\$8,960	\$0	\$8,960	
Construction Contract Administration	\$101,045	\$0	\$101,045	
Closeout	\$12,558	\$0	\$12,558	
Extra Services	\$0	\$0	\$0	
Reimbursable & Other Services	\$5,000	\$0	\$5,000	
Cost Estimates	\$0	\$0	\$0	
Advertising	\$0	\$0	\$0	
Permitting	\$0	\$0	\$0	
Owner's Insurance	\$0	\$0	\$0	
Other Administrative Costs	\$0	\$0	\$0	
Administration Subtotal	\$147,997	\$0	\$147,997	\$72,977
Architecture and Engineering				
Basic Services				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$41,400	\$0	\$41,400	
Bidding	\$4,400	\$0	\$4,400	
Construction Contract Administration	\$28,800	\$0	\$28,800	
Closeout	\$3,600	\$0	\$3,600	
Other Basic Services	\$0	\$0	\$0	
Basic Services Subtotal	\$78,200	\$0	\$78,200	
Reimbursable Services				
Construction testing	\$0	\$0	\$0	
Printing (over minimum)	\$0	\$0	\$0	
Other Reimbursable Costs	\$0	\$0	\$0	
Hazardous Materials	\$5,400	\$0	\$5,400	
Geotech & Geo-Env.	\$0	\$0	\$0	
Site Survey	\$0	\$0	\$0	
Wetlands	\$0	\$0	\$0	
Traffic Studies	\$0	\$0	\$0	
Architectural/Engineering Subtotal	\$83,600	\$0	\$83,600	\$41,223
CM & Risk Preconstruction Services				
Pre-Construction Services	\$0	\$0	\$0	\$0
Site Acquisition				
Land/Building Purchase	\$0	\$0	\$0	
Appraisal Fees	\$0	\$0	\$0	
Recording fees	\$0	\$0	\$0	
Site Acquisition Subtotal	\$0	\$0	\$0	\$0
Construction Costs				
Construction Budget	\$0	\$0		
GMP Fee	\$0	\$0		
GMP Insurance	\$0	\$0		
GMP Contingency	\$0	\$0		
Division 1 - General Requirements	\$321,849	\$0		
Division 2 - Existing Conditions	\$212,272	\$0		
Division 3 - Concrete	\$0	\$0		
Division 4 - Masonry	\$0	\$0		
Division 5 - Metals	\$5,380	\$0		
Division 6 - Woods, Plastics and Composites	\$16,656	\$0		
Division 7 - Thermal and Moisture Protection	\$475,936	\$96,869		
Division 8 - Openings	\$0	\$0		
Division 9 - Finishes	\$0	\$0		
Division 10 - Specialties	\$0	\$0		
Division 11 - Equipment	\$0	\$0		
Division 12 - Furnishings	\$0	\$0		
Division 13 - Special Construction	\$0	\$0		
Division 14 - Conveying Systems	\$0	\$0		
Division 21 - Fire Suppression	\$0	\$0		
Division 22 - Plumbing	\$29,864	\$0		
Division 23 - HVAC	\$25,226	\$0		
Division 25 - Integrated Automation	\$0	\$0		
Division 26 - Electrical	\$25,960	\$0		
Division 27 - Communications	\$0	\$0		
Division 28 - Electronic Safety and Security	\$0	\$0		
Division 31 - Earthwork	\$0	\$0		
Division 32 - Exterior Improvements	\$0	\$0		
Division 33 - Utilities	\$0	\$0		
Construction Budget	\$1,113,143	\$96,869	\$1,016,274	\$501,125
Alternates				
	\$0	\$0	\$0	
	\$0	\$0	\$0	
	\$0	\$0	\$0	
Alternates Subtotal	\$0	\$0	\$0	\$0
Miscellaneous Project Costs				
Utility company Fees	\$0	\$0	\$0	
Testing Services	\$0	\$0	\$0	
Swing Space/Modulars	\$0	\$0	\$0	
Other Project Costs (Mailing & Moving)	\$0	\$0	\$0	
Misc. Project Costs Subtotal	\$0	\$0	\$0	\$0

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

City of Melrose
Horace Mann Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Furnishings and Equipment				
Furnishings	\$0	\$0	\$0	
Equipment	\$0	\$0	\$0	
Computer Equipment	\$0	\$0	\$0	
FF&E Subtotal	\$0	\$0	\$0	\$0
Soft Costs that exceed 20% of Const'n Cost		\$29,797	-\$29,797	
Project Budget	\$1,392,940	\$126,666	\$1,266,274	\$624,400

Board Authorization	
Project Budget	\$1,392,940
Scope Items Excluded or Otherwise Ineligible	-\$126,666
Basis of Estimated Total Facilities Grant ¹	\$1,266,274
Reimbursement Rate	49.31%
Estimated Maximum Total Facilities Grant ¹	\$624,400

Total Construction Contingency ²	\$55,657
Ineligible Construction Contingency ²	\$4,843
Potentially Eligible Construction Contingency ²	\$50,814
Total Owner's Contingency ²	\$11,580
Ineligible Owner's Contingency ²	\$11,580
Potentially Eligible Owner's Contingency ²	\$0
Total Potentially Eligible Contingency ²	\$50,814
Reimbursement Rate	49.31%
Potential Additional Contingency Grant Funds ²	\$25,056
Maximum Total Facilities Grant	\$649,456
Total Project Budget	\$1,460,177

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By:
Title: Chair of School Building Committee

Date: _____

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Date: _____

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By:
Title: Chair of School Committee

Date: _____

**EXHIBIT B
PROJECT SCOPE
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

Schematic Design Submission Checklist MSBA Accelerated Repair Program



District: Melrose Public Schools

School: Herbert Clark Hoover Elementary School

Scope: Roof Replacement

Schematic Design Deliverables:

OPM	District	
☒	☒	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☒	☒	Code Analysis
☒	☒	Schematic Design Drawings
☒	☒	Cost Estimate (CSI Format) - Include all Proposed Alternates
☒	☒	Form 3011 – Total Project Budget
☒	☒	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☒	☒	Project Schedule (Gantt Chart)
☒	☒	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☒	☒	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Schematic Design Submission Checklist MSBA Accelerated Repair Program



Program Guidelines and Project Funding Agreement:

OPM	District	
☒	☒	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☒	☒	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☒	☒	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☒	☒	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☒	☒	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☒	☒	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☒	☒	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

Schematic Design Submission Checklist MSBA Accelerated Repair Program



☒	☒	MSBA's Audit Department will review requests for reimbursement in the ProPay system of \$50,000 or more. All reimbursement requests which are less than \$50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☒	☒	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

Title: Project Director, Owner's Project Manager

Firm: The Vertex Companies, LLC

Date: June 27, 2022

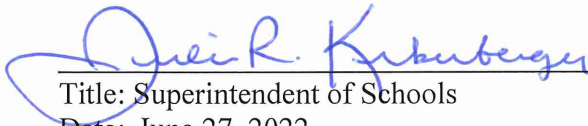
I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

Schematic Design Submission Checklist MSBA Accelerated Repair Program



certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).


Title: Superintendent of Schools
Date: June 27, 2022

Section 1

Project Narrative

1.1 Introduction

The City of Melrose is currently participating in the Massachusetts School Building Authority (MSBA) Accelerated Repair Program (ARP) and has submitted a Statement of Interest for repairs at the Herbert Clark Hoover School. The Vertex Companies, LLC and Tighe & Bond, Inc. were subsequently designated as the Owner's Project Manager (OPM) and Designer, respectively for the proposed project.

The Herbert Clark Hoover School is located at 37 Glendower Road in Melrose, MA. The school building is a two-story brick masonry building with an approximate roof area of 18,000 square feet, which was constructed in 1964. The school has undergone several renovations over time, including a window and door replacement in 2015 and a prefabricated, wood-framed modular building addition in 2017. The first floor of the school generally consists of classrooms, storage rooms, a multipurpose room, a teacher's lounge, administrative and nurse offices, a library, bathrooms, and a boiler room. The second floor contains classrooms and bathrooms. The school currently serves approximately 300 students from kindergarten to fifth grade.

The team assembled for execution of the Herbert Clark Hoover School project includes the following members:

- | | |
|----------------------------------|---|
| • Funding Agency | Massachusetts School Building Authority |
| • Owner | Melrose Public Schools |
| • OPM | The Vertex Companies, LLC |
| • Designer | Tighe & Bond Designer Services, Inc. |
| • Cost Estimating | Ellana Construction Consultants. |
| • Hazardous Materials Assessment | Tighe & Bond Designer Services, Inc. |
| • Code Review | Tighe & Bond Designer Services, Inc. |
| • Structural/Construction Admin | Frawley Engineering, P.C. |

1.2 Existing Conditions

1.2.1 Roof

The existing Ethylene Propylene Diene Monomer (EPDM) roof system was constructed over an original coal tar pitch and gravel built up roof. Based on documents provided by the District, the original roof on the 1964 area consisted of 5 ply built-up coal tar pitch and gravel over 1.5" rigid insulation on a steel deck. Based on recent site visits and field investigation, ½" fiberboard and EPDM membrane were installed over the original roof system. The largest portion of the roof area is ballasted with gravel, while several smaller sections are fully adhered.

There is significant evidence of water damage inside the building from roof leaks and numerous deficiencies in the roofing membrane. The roof does not provide adequate thermal performance and drainage. Based on the site observations and investigation, the existing roofing system and majority of associated appurtenances appear to be in poor condition and are beyond their useful life.



Photo 1: Roof Over Main Building



Photo 2: Roof Over Lower Building

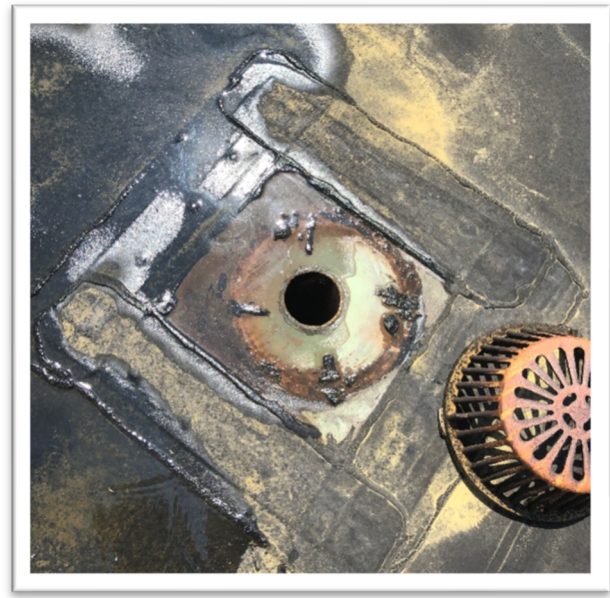
The modular addition constructed in 2017 consists of a single ply membrane roofing system and is not included as part of this project.

1.2.2 Plumbing

There are existing roof drains that are tied into the storm drainage system in the building. The drains appear to be in working order, however some are rusted and in poor condition.

One storm leader exits the building and runs above a sub-roof near the main entrance toward a vertical storm leader tied into the underground storm drainage system.

Plumbing vents penetrate the roof in multiple locations to provide pressure relief for the school's sanitary piping system. The vent piping is in good condition with expected rust on the pipe interior.

**Photo 3:** Roof Drain**Photo 4:** Roof Drain**Photo 5:** Storm Leader Routed on Roof

1.2.3 HVAC

There are seven exhaust fans (EFs) installed on the main building's roof and rooftop air handling units are located on the temporary addition, which is not part of this project.

Most of the exhaust fans appear original and are well beyond the 15-25-year life expectancy. One exhaust fan, identified as “#6” on the 1964 drawings, has been replaced and appears that it can be re-used.



Photo 6: HVAC Equipment on Main Roof

1.2.4 Electrical

The existing electrical items on the roof are limited to electrical connections to HVAC equipment requiring electrical power. It is assumed that each HVAC fan has an integral or equipment-mounted disconnect. In addition, loose telecommunication cables run across the roof from the north wall to an entrance cap near the roof hatch.

1.3 Recommended Solutions

1.3.1 Roof Replacement

Replacement of the existing roof system at the Herbert Clark Hoover School is recommended for improving thermal performance, roof drainage, overall energy efficiency of the building and remedying numerous roof leaks. The following items below outline the proposed scope of work for the project, including demolition. Schematic Design plans with additional detail are included in Appendix B.

Roof Demolition will include:

- Removal of the existing single-ply, adhered and ballasted EPDM membrane roofing systems
- Removal of existing built-up coal tar pitch and gravel roof system
- Removal of the existing rigid insulation
- Removal of the existing access hatch
- Repair of the steel roof deck as needed
- Removal and storage of existing HVAC equipment
- Removal of existing fascia, blocking, damaged curbing, and flashing

- Disposal of existing roofing materials as asbestos waste.

Proposed Roof Improvements will include:

- Repair of any damaged or compromised steel roof decking discovered during demolition
- Installation of a fully-adhered EPDM roofing system. The new roofing system will include, from bottom to top:
 - Fiberglass-reinforced gypsum sheathing cover board
 - Base sheet/ combination air and vapor barrier
 - New polyisocyanurate rigid insulation. The new insulation will meet the stretch energy code. Insulation thickness will provide a minimum R-value of 30. Tapered insulation will be installed to provide a positive pitch toward roof drains.
 - ½" coverboard installed over the insulation
 - Fully-adhered EPDM roofing membrane
- Installation of new curbing, blocking, flashing, metal fascia, and roof drains
- Installation of new access hatches and ladders

1.3.2 Plumbing Systems

Plumbing Demolition will include:

- Removal of all existing roof drains. Existing rain leaders within building will be cut and capped away from the drain body and prepared for reconnection.
- Removal of storm drain leader and it's supports located on the roof. Piping will be cut and capped at the edge of the roof and prepared for reconnection into the vertical storm leader.

Proposed Plumbing Improvements will include:

- Installation of new roof drains and associated piping. All new roof drains will be of the same type.
- Installation of 1" thick insulation on drain bodies and any new associated piping.
- Inspection of existing drainage piping, including snaking the pipes to check for clogs and jetting the pipes should there be any clogs present.
- Installation and rerouting of the new storm leader on the roof to the underground connection. New piping will be provided with supports.
- Extension of vent piping as required to maintain clearance above roof of 18-24".

1.3.3 HVAC Systems

HVAC Demolition will include:

- Disconnection, removal, and storage of roof fan #6.
- Curb for fan #6 to remain.
- Removal, and disposal of all other roof exhaust fans and curbs.
- Prior to unit removal, exhaust fans will be tested and airflows recorded for final balancing efforts.
- Installation of temporary caps for all ductwork.
- Installation of temporary caps over fan #6 curb that is to remain.

HVAC Improvements will include:

- Replacement off all roof exhaust fans, except #6. Replace fans in kind based on original design drawing schedules.
- Installing new curbs for new exhaust fans, including transition curbs as required for fan connection to existing roof opening.
- Repairing curbs and/or blocking and extending existing curb as required to minimum of 12" above new roof for remaining fan.
- Installation of new Exhaust Fans with integral disconnects.
- Reinstallation of retained Exhaust Fan.
- Reconnecting and sealing units to existing ductwork.
- Connecting units to existing controls.
- Re-balancing systems to match pre-existing airflows.

1.3.4 Electrical Systems

The proposed electrical work will include:

- Disconnecting and making safe all existing electrical devices with connections to mechanical equipment. Once the existing equipment is placed back in its permanent location after roofing, the electrical connections will be re-energized. For any equipment that has moved, the existing conduit and wires will be extended as required.
- Installation of exterior weatherproof GFI receptacles and weatherproof luminaire will be located on the roof within 25'-0" of any exterior equipment per NEC. New receptacles and luminaire will be mounted to $\frac{3}{4}$ " rigid galvanized steel or to an adjacent wall if possible.
- Removal and reconnection of telecommunication cable. Upon reconnection cables will be secured and rerouted for safety.

1.4 ARP Sustainability Requirements

MSBA's ARP requires use of the Stretch Energy Code (780 CMR – Appendix AA and 2018 IECC) as the basis of design for ARP projects for roof replacement. Below is a table comparison of the required code values for the relevant project items and the values for the proposed assemblies. The proposed solutions and items for the Herbert Clark Hoover School meet or exceed the ARP sustainability requirements.

Roofs	Maximum U-Value (Btu/hr·ft ² ·°F)	Minimum R-Value (°F·ft ² ·hr/Btu)
Required	0.032	30
Proposed	0.032	30

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Herbert Clark Hoover School Repairs Project

Building Code Analysis

This analysis summarizes codes requirements applicable to the project scope for the Herbert Clark Hoover School Repairs Project. This summary includes general code information applicable to the overall project and more specific requirements related to roof replacement activities.

Applicable codes for this project include:

- International Building Code 2015 (IBC)
- International Existing Building Code 2015 (IEBC)
- International Energy Conservation Code 2018 (IECC)
- 248 CMR 10.00 Uniform State Plumbing Code (2017)
- Commonwealth of Massachusetts State Building Code, Ninth edition 780 CMR (including amendments to the IBC, IECC and IEBC)
- Massachusetts Stretch Energy Code 780 Appendix AA
- Architectural Access Board Regulations 521 CMR (AAB)
- American Society of Civil Engineers – Minimum Design Loads for Buildings and Other Structures (ASCE 7-05)
- National Electrical Code NFPA 70

Section 1 – General Code

Use and Occupancy Classification (305 IBC 2015 & 780 CMR)

- Educational (E)
 - Due to the anticipated scope of work, roof replacement, Level 1 alterations of the IEBC will be triggered. Level 1 alterations encompass the removal and replacement of materials that serve the same purpose. Any new elements must comply with the requirements for new construction.

Types of Construction (602 IBC 2015 & 780 CMR)

- Type III Construction – Construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of a 2-hour rating or less.

Alterations Level 1 (503 IEBC 2015 & 780 CMR)

- Removal and replacement or the covering of existing materials, elements, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

Material and Methods (702.6 & Chapter 8 IEBC 2015 & 780 CMR)

- All new work shall comply with materials and methods requirements in the IBC, IEBC, IECC, IMC, and MSPC, as applicable that specify material standards, details of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 2 – Requirements Applicable to Roof Replacement Work**Building Envelope Requirements (IECC 2015, Table C402.3)**

- Roof Maximum U-Factors
 - Insulation entirely above deck – U-0.032
- Roof Minimum R-Values
 - Insulation entirely above deck – R-30

Massachusetts State Building Code (780 CMR Amendments)

- Dead loads on an existing roof may not increase by more than 5% due to a re-roofing project.
- If the additional dead loads exceed 5%, the structure must conform to current snow load requirements.
- Since a similar EPDM roofing system (and ballast in some locations) is being removed from the roof prior to roof replacement, the new roof system is not anticipated to increase the dead load on the roof by more than 5%.

Code of Federal Regulations Title 29 (29 CFR)

- Holes – each employee on walking/working surfaces shall be protected from falling through holes more than 6 feet above lower levels, by personal fall-arrest systems, covers, or guardrail systems erected around such holes.

Snow Drift Implications of Added Insulation (IECC 2015)

- 2015 IBC Code section 1608 pertains to current snow load requirements and requires use of ASCE 7. Increasing the insulation thickness on an existing roof requires the roof meet current Code requirements. The snow load requirements have snow drift loading requirements that, when calculated for the Herbert Clark Hoover School result in a potential area of overload extending 15 feet from the high wall sections of the roof.
- IECC Section C501.2 notes that this code shall not prevent the continued use and maintenance of an existing building lawfully in existence at the time of adoption of the code. Section C501.5 permits utilization of like materials for repairs, provided that hazards to life, health, or property are not created.
- IECC Section C503.1 states, Alterations shall not overload existing building systems and an exception to IECC requirements is provided for roof recovering projects. To prevent overloading of the existing building, existing insulation thickness will be maintained a distance of 15 feet from the high roof areas.

Uniform State Plumbing Code 248 CMR 10.00

- Storm Drain leaders are sized based on roof area served. The roof is broken up into six areas, which are served by 2", 3" and 4" roof drains. These roof drain can respectively capture storm water from 720sqft, 2200sqft and 4600sqft of roof area per 248 CMR 10.0. The roof drain sizes installed suffice for the school's roof. The new roof drains will use the same outlet size as the existing ones.

Section 4 – Accessibility Requirements

Existing Building (3.3 MAAB 521 CMR)

- Requirements for an accessible entry, toilet, drinking fountain, and telephone (if pay phones are provided) will be triggered based on the estimated cost of the project. A proponent is required to provide these items if the cost of a renovation project exceeds \$500,000.
- If the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR.
- Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of work exceeds \$500,000 or unless work is being performed on the entrance or toilet room.
 - Curb cuts
 - Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR
 - Roof repair or replacement, window repair or replacement, repointing and masonry repair work
 - Work related to septic system repairs, site utilities and landscaping.
- If the cost of the project, and any additional renovations completed within 36 months of the project, exceeds 30% +of the full and fair cash value of the building, the entire building must be upgraded as required to meet 521 CMR requirements.
- The building currently complies with ADA/AAB requirements and accessibility upgrades will not be required as part of this project.

J:\M\M1215\026) Melrose\Design\Schematic Design\Herbert Clark\Building Code Analysis.docx

HOOVER ELEMENTARY SCHOOL

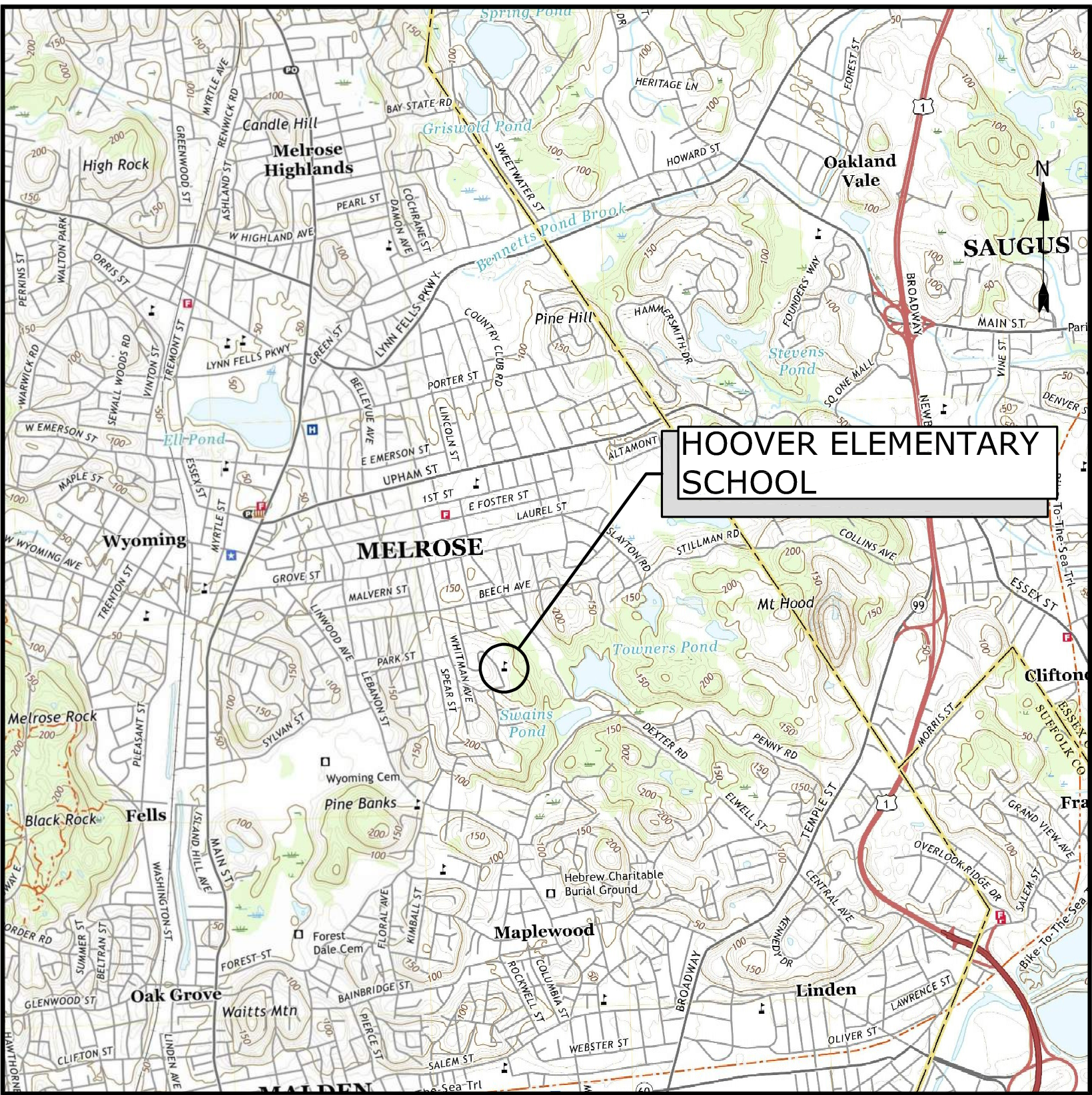
MSBA ACCELERATED REPAIR PROGRAM

ROOF REPLACEMENT PROJECT

MELROSE, MASSACHUSETTS

JUNE 2022

LIST OF DRAWINGS	
	COVER
G-001	ROOF PHOTOGRAPHS
AD-101	ROOF DEMOLITION PLAN
A-101	ROOF REPLACEMENT PLAN
A-501	ROOF DETAILS - 1
A-502	ROOF DETAILS - 2
P-101	PLUMBING ROOF PLAN
H-101	HVAC ROOF PLAN
E-101	ELECTRICAL ROOF PLAN



LOCATION MAP
SCALE: 1" = 2000'

PROJECT TEAM:

OWNER
CITY OF MELROSE
562 MAIN STREET
MELROSE, MA 02176

OWNER'S PROJECT MANAGER
THE VERTEX COMPANIES, INC.
400 LIBBEY PARKWAY
WEYMOUTH, MA 02189

COST ESTIMATING
ELLANA, INC.
98 NORTH WASHINGTON STREET
SUITE 109
BOSTON, MA 02114

FUNDING
MASSACHUSETTS SCHOOL
BUILDING AUTHORITY
40 BROAD STREET, SUITE 500
BOSTON, MA 02109

ENGINEER
TIGHE & BOND
DESIGNER SERVICES, INC.
53 SOUTHAMPTON ROAD
WESTFIELD, MA 01085

PREPARED BY:
Tighe&Bond

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION
COMPLETE SET 9 SHEETS

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Hoover
Elementary
School Roof
Replacement
Project

City Of Melrose

Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - G-001.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: JPV		

ROOF PHOTOGRAPHS

SCALE: AS SHOWN

G-001



ROOF OVER MAIN BUILDING
NO SCALE

A
-



ROOF EQUIPMENT ON
BALLAST ROOF
NO SCALE

B
-



EXISTING CHIMNEY
NO SCALE

C
-



ROOF ACCESS HATCH
NO SCALE

D
-



DRAIN ON LOWER ROOF
NO SCALE

E
-



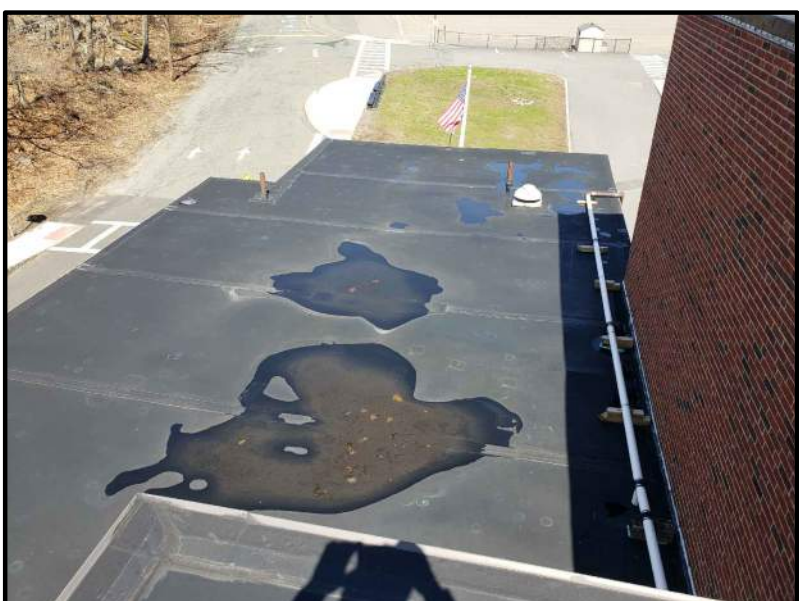
ROOF ON LOWER BUILDING
NO SCALE

F
-



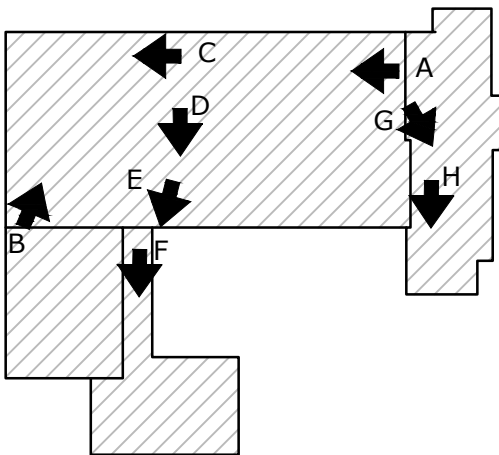
ROOF OVER LOWER BUILDING
NO SCALE

G
-



ROOF OVER LOWER
BUILDING
NO SCALE

H
-



HOOVER KEYPLAN
NO SCALE

LEGEND:

← A PHOTOGRAPH LOCATION

City Of Melrose

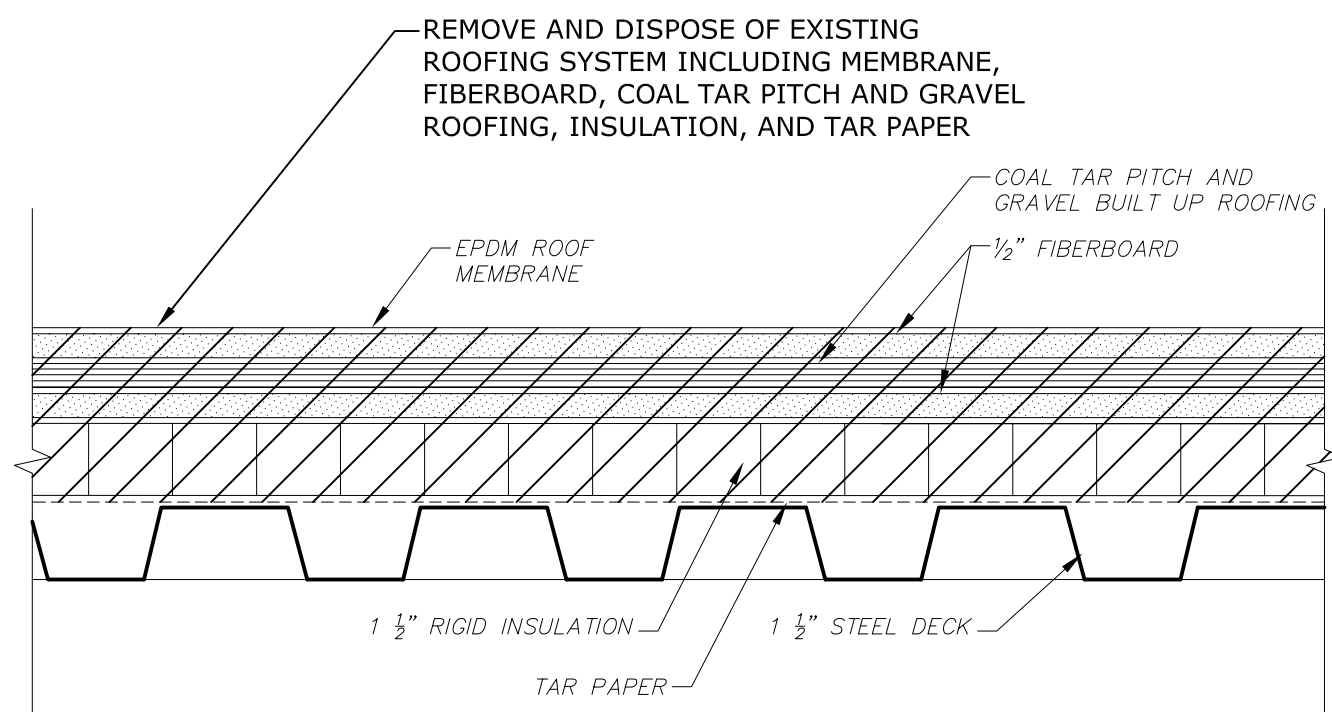
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - AD-101.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: JPV		

ROOF DEMOLITION PLAN

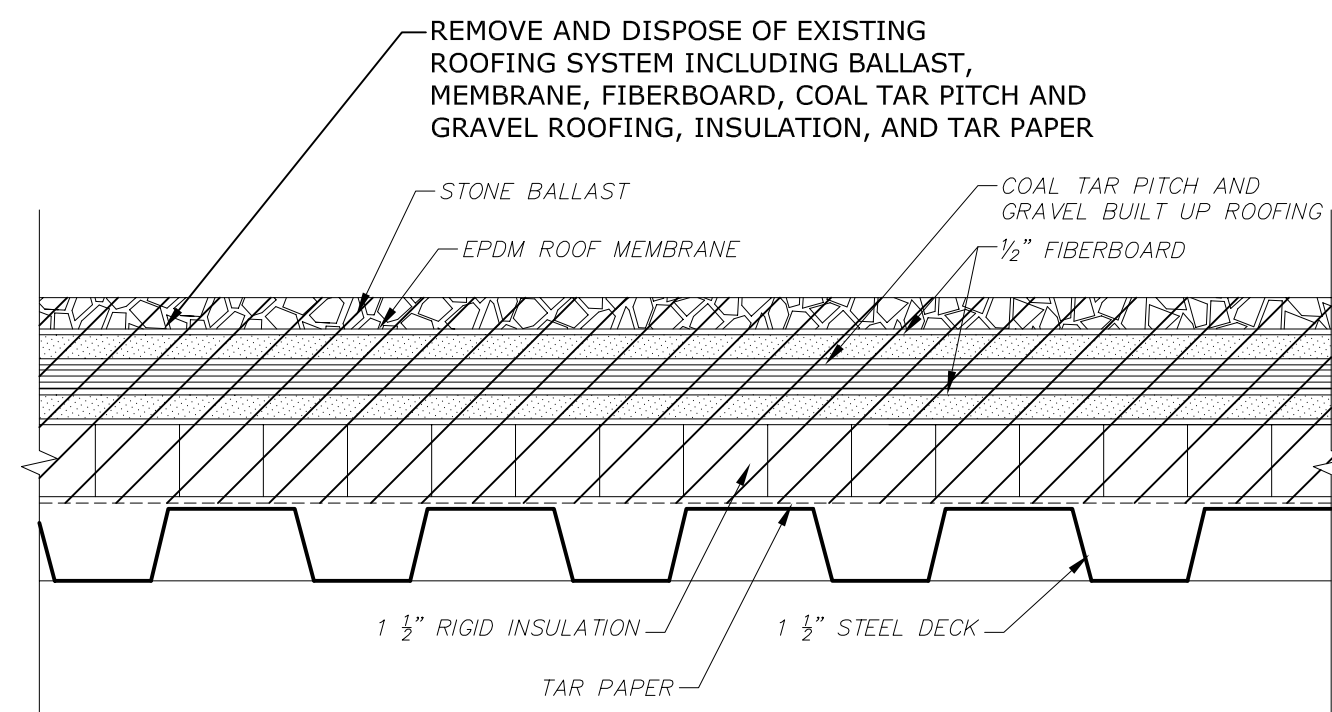
SCALE: $1/16"=1'-0"$

AD-101



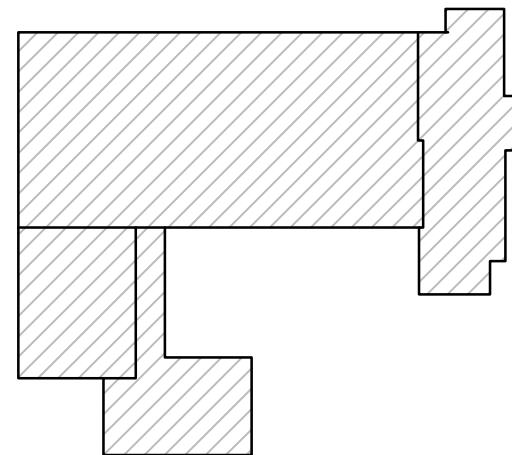
TYPICAL EXISTING UNBALLASTED ROOF SECTION

DETAIL	1
3" = 1'-0"	-

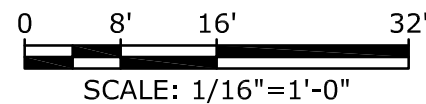


TYPICAL EXISTING BALLASTED ROOF SECTION

DETAIL	2
3" = 1'-0"	-



HOOVER KEYPLAN
NO SCALE



	ROOF DRAIN		EXISTING GOOSENECK (INTAKE OR EXHAUST)
	EXISTING VENT PIPE PENETRATION		EXISTING EXHAUST CAP OR AIR INTAKE
	EXISTING ROOFTOP EXHAUST FAN/DUCT WITH CURB		EXISTING CAPPED CURB
	EXISTING ROOFTOP EQUIPMENT ON SLEEPERS		EXISTING INSULATION THICKNESS TEST CUT
	GAS PIPE ON PIPE SUPPORT		EXISTING CANOPY LINE
			EXISTING ROOF SLOPE LINE
			ITEM TO BE REMOVED/DEMOLISHED

NOTES:

1. REMOVE AND DISPOSE OF ALL EXISTING HVAC EQUIPMENT CURBS.
2. SEE SHEET H-101 FOR HVAC EQUIPMENT REQUIREMENTS.

SCHEMATIC DESIGN
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Hoover
Elementary
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Replacement
Project

City Of Melrose

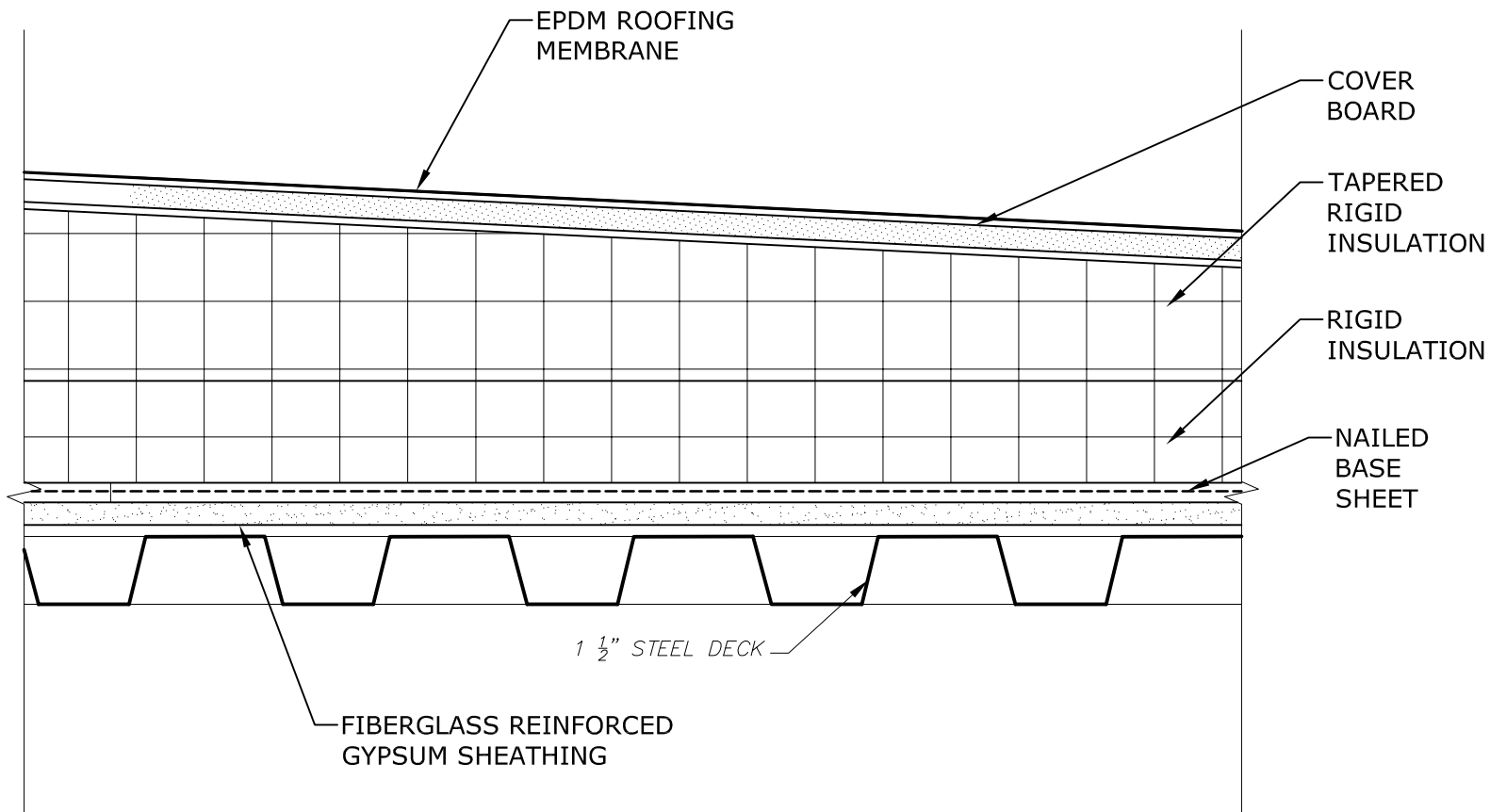
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
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PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - A-101.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: FJH, JPV		

ROOF PLAN

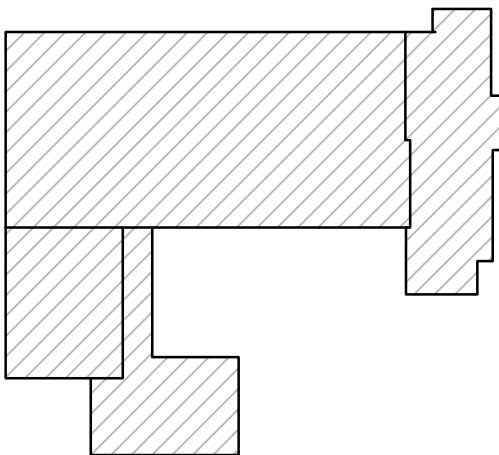
SCALE: AS SHOWN

A-101

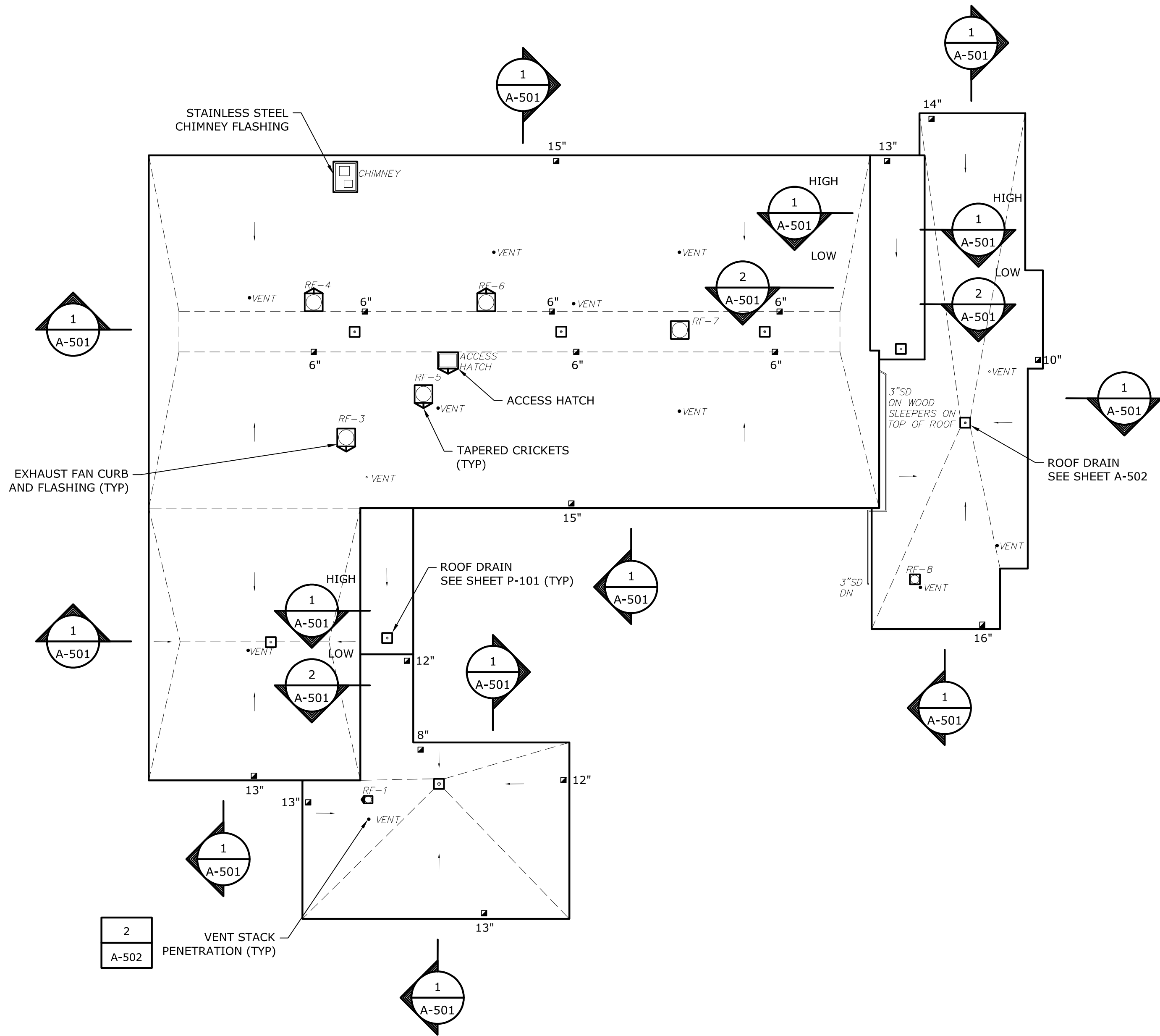
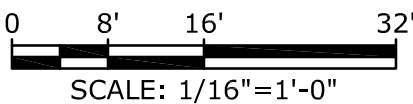


TYPICAL PROPOSED
ROOF SECTION

DETAIL	1
3" = 1'-0"	-



HOOVER KEYPLAN
NO SCALE



LEGEND

- ROOF DRAIN
- VENT PIPE PENETRATION
- ROOFTOP EXHAUST FAN/DUCT WITH CURB
- ROOFTOP EQUIPMENT ON SLEEPERS
- G — GAS PIPE ON PIPE SUPPORT
- GOOSENECK (INTAKE OR EXHAUST)
- EXHAUST CAP OR AIR INTAKE
- APPROXIMATE INSULATION THICKNESS
- — — — ROOF SLOPE LINE
- — — — GUARDRAIL FOR FALL PROTECTION
- — — — WALKPAD
- — — — ROOF SLOPE DIRECTION

NOTES:

1. INSTALL NEW CURBING FOR ALL HVAC EQUIPMENT. NEW CURBS MUST BE MINIMUM 12" ABOVE NEW ROOFING. INSTALL NEW CRICKETS TO ENSURE PROPER DRAINAGE AT ALL ROOF CURBS.
2. ADJUST ELEVATION OF ROOF EDGES TO MATCH THE MAXIMUM INSULATION THICKNESS AT EACH ROOF DECK ELEVATION TO PROVIDE A LEVEL ROOF PERIMETER.
3. ROOF SLOPE TO BE 1/8" PER FOOT MINIMUM UNLESS NOTED OTHERWISE.

SCHEMATIC DESIGN
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Hoover
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City Of Melrose

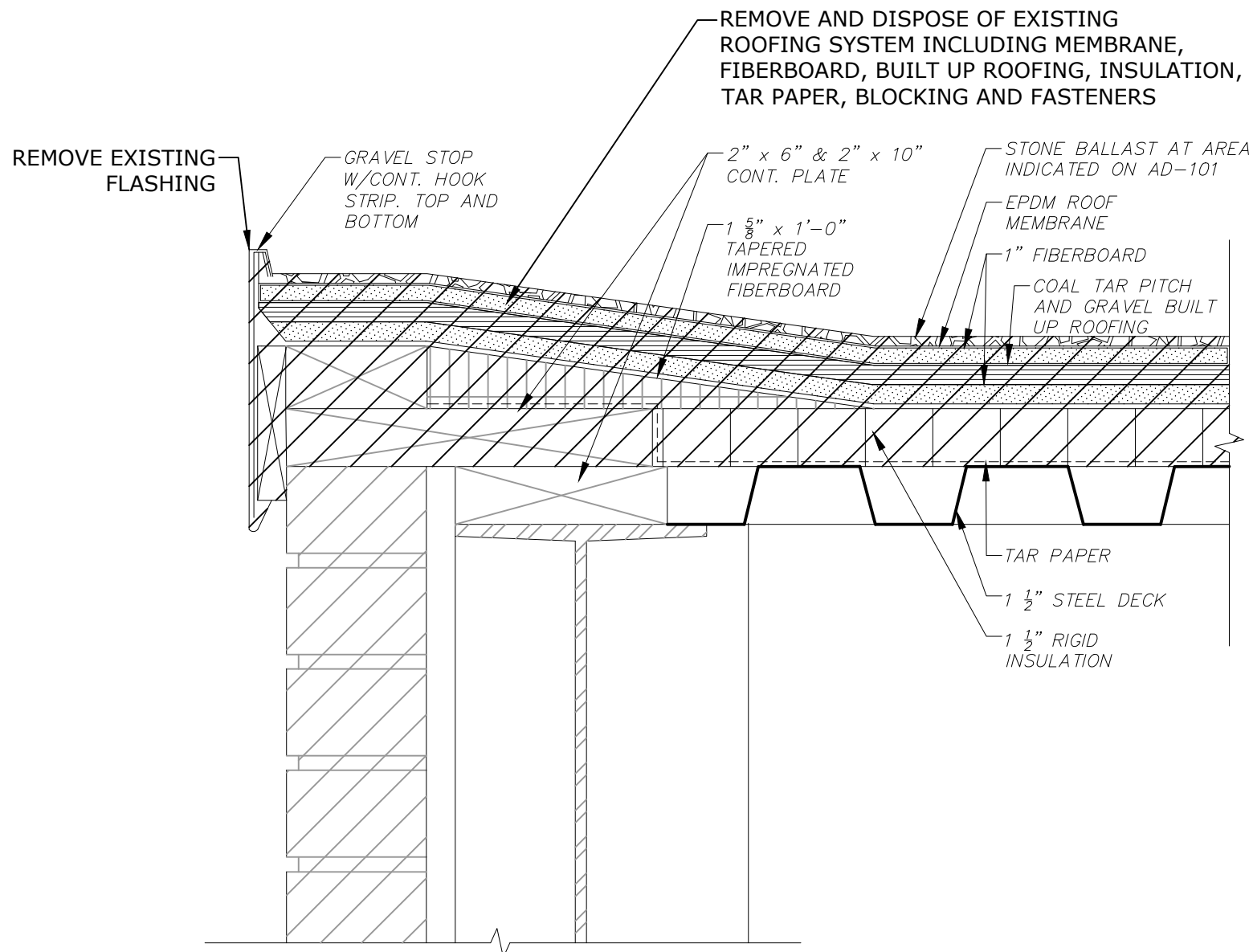
Melrose,
Massachusetts

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PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - A-501.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: JPV		

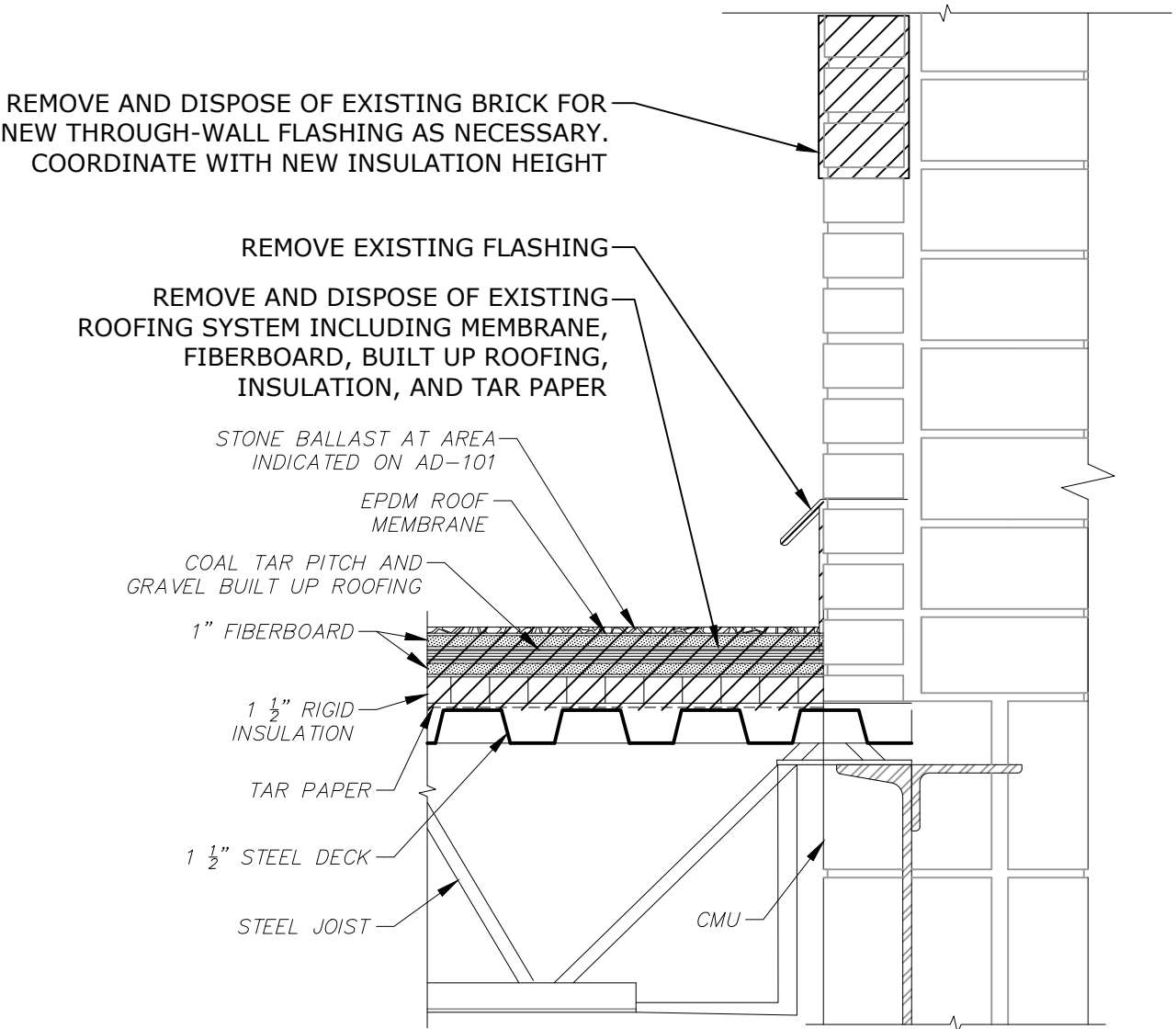
ROOF DETAILS - 1

SCALE: AS SHOWN

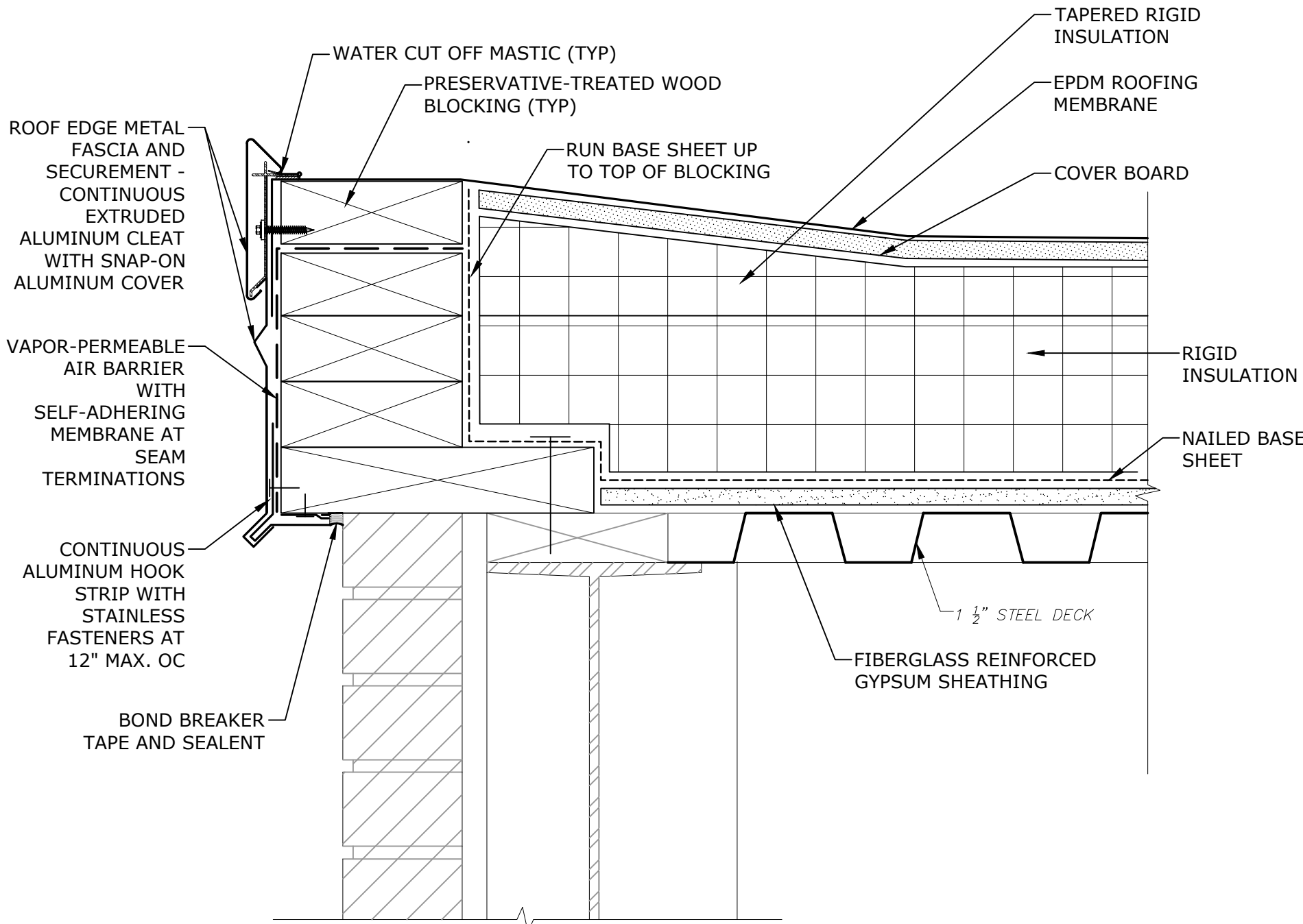
A-501



EXISTING



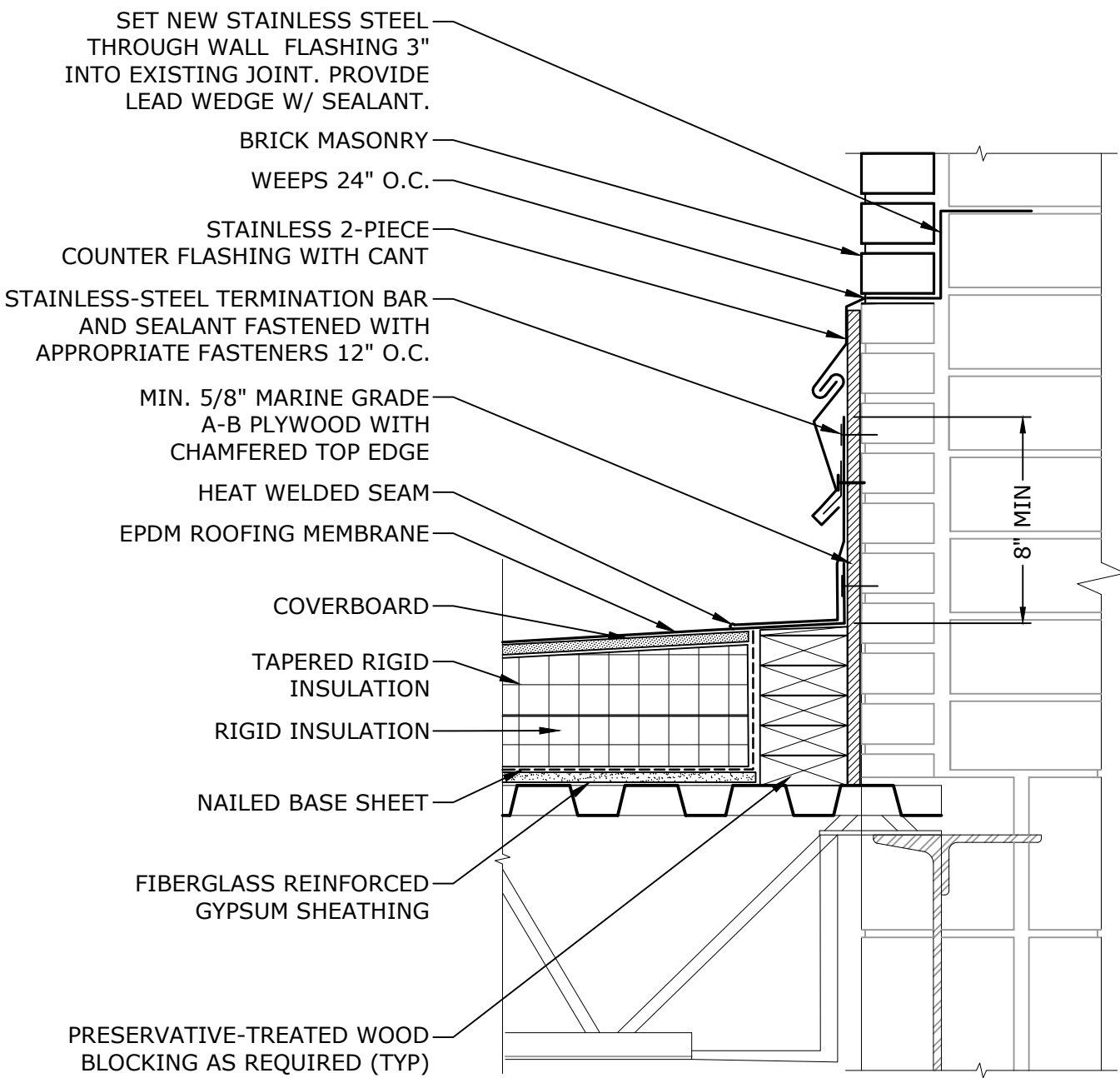
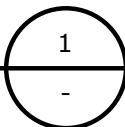
EXISTING



PROPOSED

ROOF EDGE DETAIL

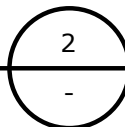
3"= 1'-0"



PROPOSED

ROOF TO WALL DETAIL

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



SCHEMATIC DESIGN
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Hoover
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City Of Melrose

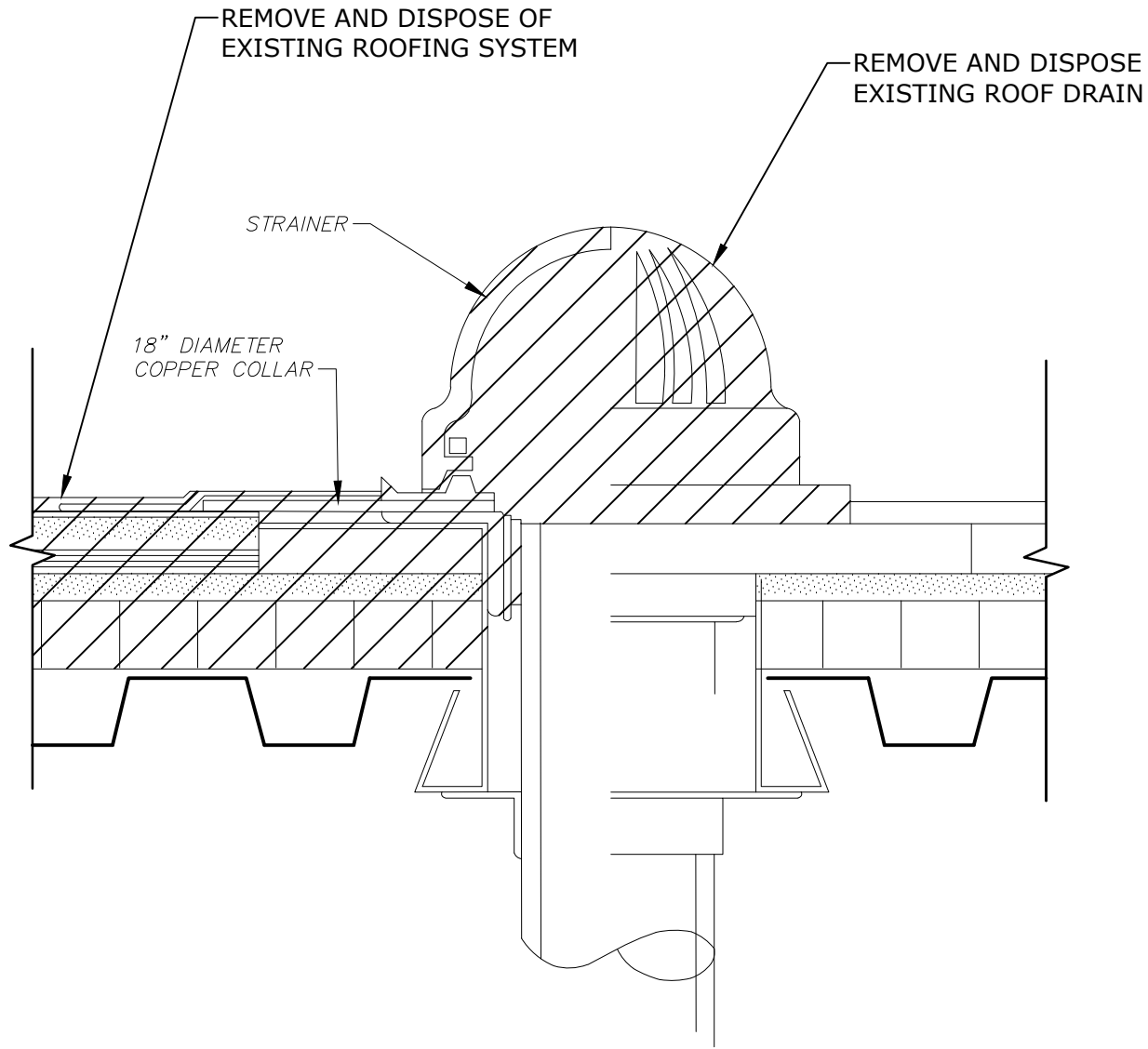
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - A-501.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: JPV		

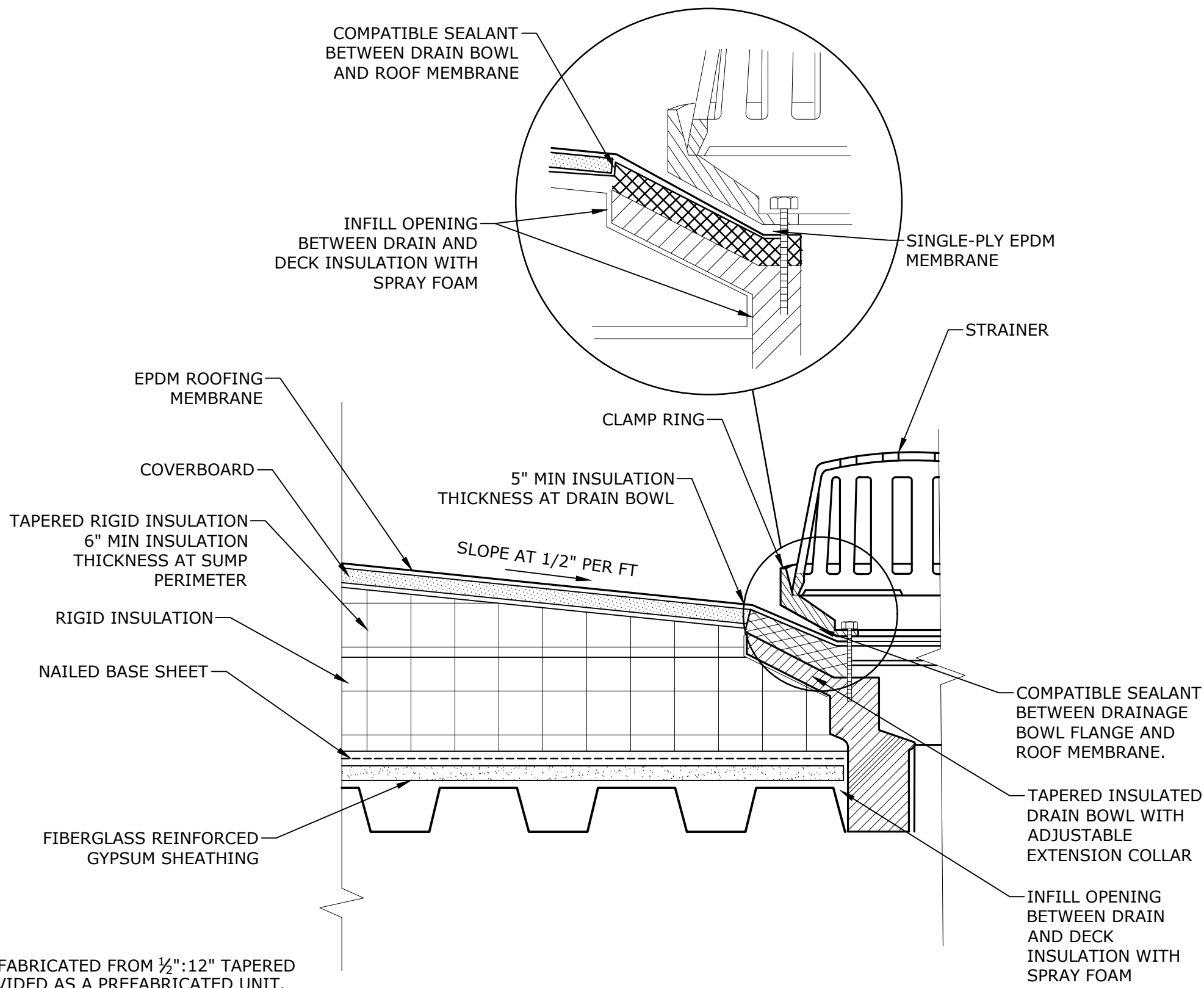
ROOF DETAILS - 2

SCALE: AS SHOWN

A-502



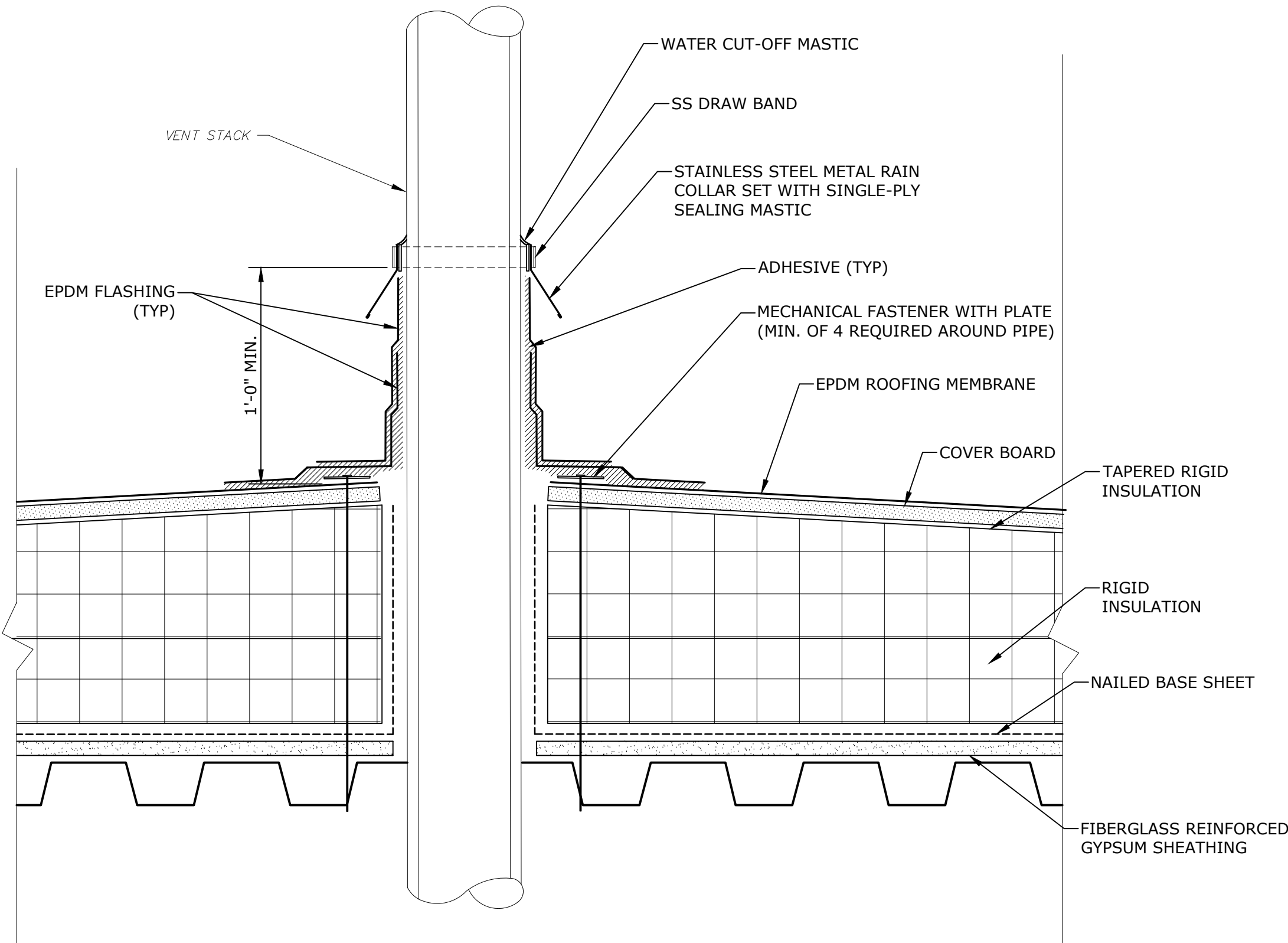
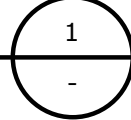
EXISTING



PROPOSED

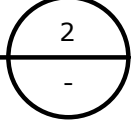
ROOF DRAIN DETAIL

3"=1'-0"



VENT STACK DETAIL

3"=1'-0"



NOTES

1. SUMP MAY BE FIELD-FABRICATED FROM ½":12" TAPERED INSULATION OR PROVIDED AS A PREFABRICATED UNIT.

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Hoover
Elementary
School Roof
Replacement
Project

City Of Melrose

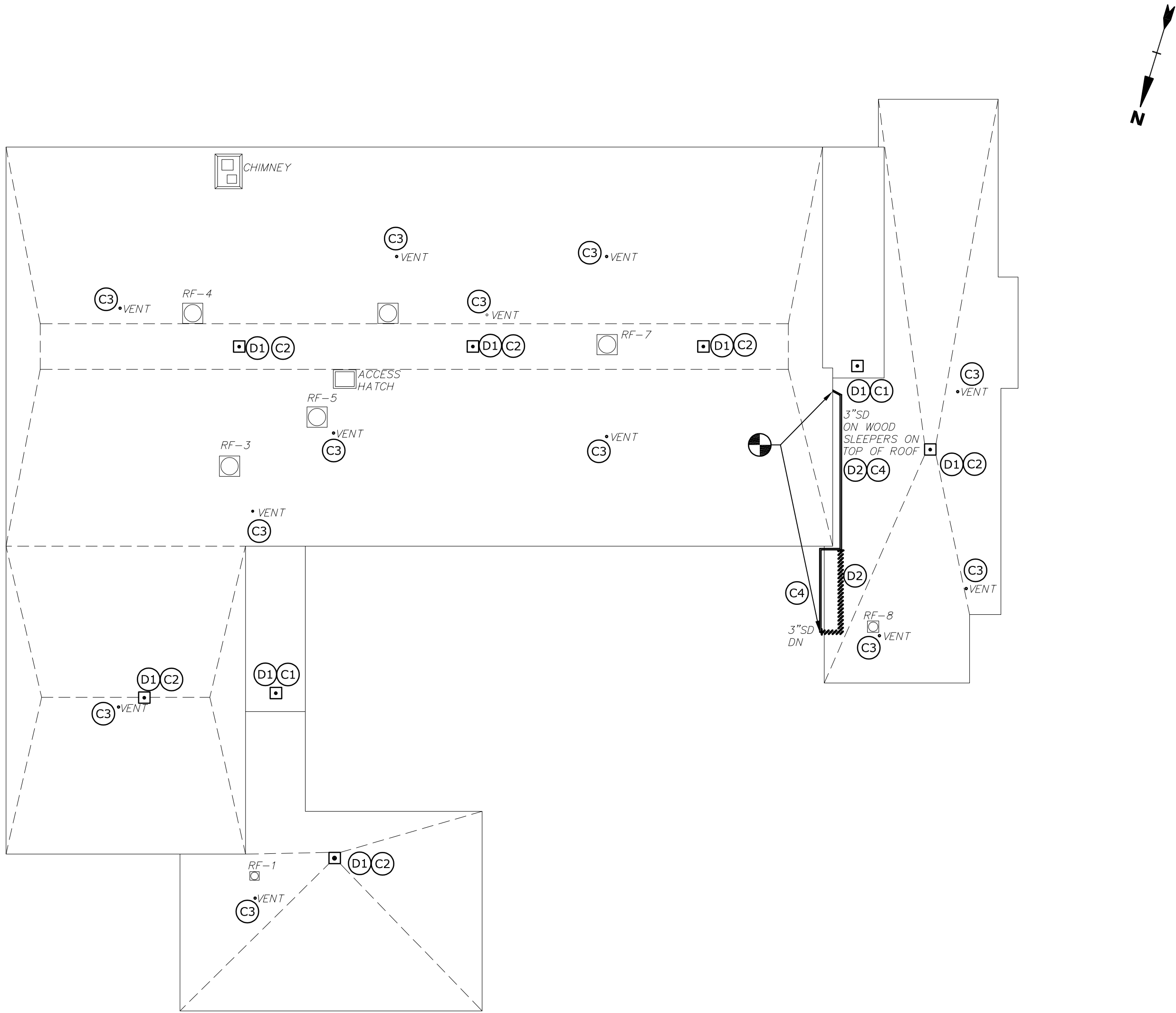
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - P-101.dwg		
DRAWN BY: JM		
CHECKED: MPW		
APPROVED: FJH, JPV		

PLUMBING ROOF PLAN

SCALE: AS SHOWN

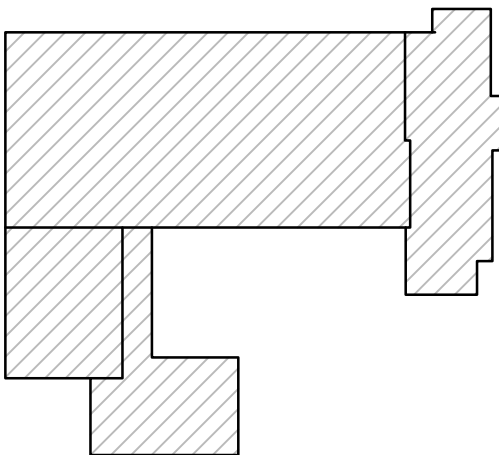
P-101



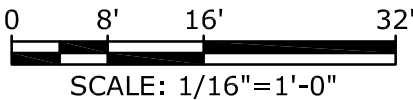
- LEGEND
- ACCESS HATCH
 - ROOF DRAIN
 - VENT PIPE PENETRATION
 - CONNECT TO EXISTING

- DEMOLITION KEY NOTES:
- D1 REMOVE EXISTING ROOF DRAINS. CUT AND CAP EXISTING DRAIN PIPING AWAY FROM DRAIN BODY WITHIN BUILDING. PREPARE FOR FUTURE CONNECTION. COORDINATE EXTENT OF DEMOLITION W/ ROOFING CONTRACTOR TO CONFIRM ADEQUATE CLEARANCE FOR NEW ROOFING INSTALLATION IS PROVIDED.
 - D2 DEMOLISH RAIN LEADER AND SLEEPERS BACK TO WALL PENETRATION. DEMOLISH RAIN LEADER TOWARD GROUND AS REQUIRED TO CLEAR ROOF.

- CONSTRUCTION KEY NOTES:
- C1 NEW ROOF DRAIN. PROVIDE NEW PIPING FROM DRAIN AND CONNECT TO EXISTING PIPING. INSULATE RD SUMP AND NEW SECTION OF STORM DRAIN PIPING WITH 1-INCH FIBERGLASS INSULATION WITH ASJ. INSULATION THERMAL CONDUCTIVITY TO BE 0.21-0.27 BTU-IN/(h-ft²-°F). ROOF DRAIN OUTLET SIZE AND PIPE SIZE TO MATCH EXISTING. COORDINATE INSTALLATION WITH ROOFING CONTRACTOR.
 - C2 NEW ROOF DRAIN. DRAIN TO MATCH OUTLET SIZE OF 4". CONNECT NEW PIPE TO EXISTING STORM DRAINAGE SYSTEM WITHIN THE BUILDING. INSULATE RD SUMP AND NEW SECTION OF STORM DRAIN PIPING WITH 1-INCH FIBERGLASS INSULATION WITH ASJ. INSULATION THERMAL CONDUCTIVITY TO BE 0.21-0.27 BTU-IN/(h-ft²-°F). VERIFY TIE-IN LOCATION IN FIELD. COORDINATE WITH ROOFING CONTRACTOR AND G.C.
 - C3 CONFIRM VENT SIZE IN FIELD. EXTEND VENT PIPE WITH SAME SIZE TO TERMINATE 24" ABOVE NEW ROOF.
 - C4 PROVIDE NEW CI RAIN LEADER. CONNECT AT WALL PENETRATION, INSTALL WITH 1% PITCH ALONG NEW ROUTING SHOWN, ROUTE ABOVE DOOR TOWARD UNDERGROUND LEADER.



HOOVER KEYPLAN
NO SCALE



Hoover
Elementary
School Roof
Replacement
Project

City Of Melrose

Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
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PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - H-101.dwg		
DRAWN BY: JM		
CHECKED: MPW		
APPROVED: FJH, JPV		
HVAC ROOF PLAN		
SCALE:		AS SHOWN
H-101		

GENERAL NOTES

1. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. COORDINATE ALL WORK WITH OTHER TRADES.
2. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT.
3. INSTALL EQUIPMENT AND SUPPORTS IN ACCORDANCE WITH ALL RELEVANT BUILDING CODES.
4. FIELD VERIFY QUANTITY OF MECHANICAL EQUIPMENT, AND SUPPORTS TO BE REMOVED.
5. PERFORM PRE-BALANCE TESTING OF ALL EXHAUST FANS PRIOR TO UNIT REMOVAL, RECORD AIRFLOWS FOR FINAL BALANCING EFFORTS. PROVIDE REPORT TO ENGINEER.
6. PROVIDE TEMPORARY CAPS FOR ALL DUCTWORK. NO DUCTWORK SHALL REMAIN OPEN AT ANY TIME.
7. DURING DEMOLITION, CONTROL WIRING IS TO BE DISCONNECTED AND PROTECTED FOR FUTURE USES/RECONNECTION.
8. PROVIDE NEW HVAC EQUIPMENT PER SCHEDULES. PROVIDE REQUIRED DUCTWORK TRANSITIONS FROM EXISTING DUCTWORK TO NEW FANS AS REQUIRED.
9. ALL MATERIALS, METHODS AND EQUIPMENT INSTALLED MUST BE IN COMPLIANCE WITH PROJECT SPECIFICATIONS AND APPLICABLE CODES.

GENERAL DEMOLITION NOTES

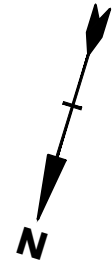
1. IT IS NOT THE INTENT OF THESE DOCUMENTS TO SHOW EVERY DEVICE, APPURTENANCE, PIPE, WIRE, OR CONDUIT TO BE REMOVED. HVAC EQUIPMENT, UNITS, AND SYSTEMS NOT BEING REUSED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ASSOCIATED SUPPORTS.
2. PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEP STANDARDS. INVENTORY, SALVAGE AND TURN OVER OR DISPOSE OF EQUIPMENT AT DIRECTION OF OWNER.
3. ALL EXISTING SYSTEMS SHALL BE MADE FULLY OPERATIONAL, INCLUDING RECONNECTION TO SERVICES AND DUCTWORK.
4. EXISTING EQUIPMENT TO BE REMOVED AND RE-INSTALLED SHALL BE FIELD VERIFIED FOR QUANTITY AND CONDITION. KEEP AN ACCURATE RECORD OF STORED EQUIPMENT INCLUDING CONDITION.
5. SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING DEMOLITION SHALL BE CAREFULLY PROTECTED FROM DAMAGE AND CONTAMINATION BY THE CONSTRUCTION PROCESS.

DRAWING DEMOLITION NOTES:

- (D1) DISCONNECT, AND DEMOLISH EXHAUST FAN. PROVIDE TEMPORARY CAP OVER DUCT OPENING. MEASURE AIRFLOW OF EXISTING FAN PRIOR TO UNIT REMOVAL.
- (D2) DISCONNECT, REMOVE, AND STORE EXHAUST FAN. PROVIDE TEMPORARY CAP OVER DUCT OPENING. EXISTING CURB TO REMAIN.

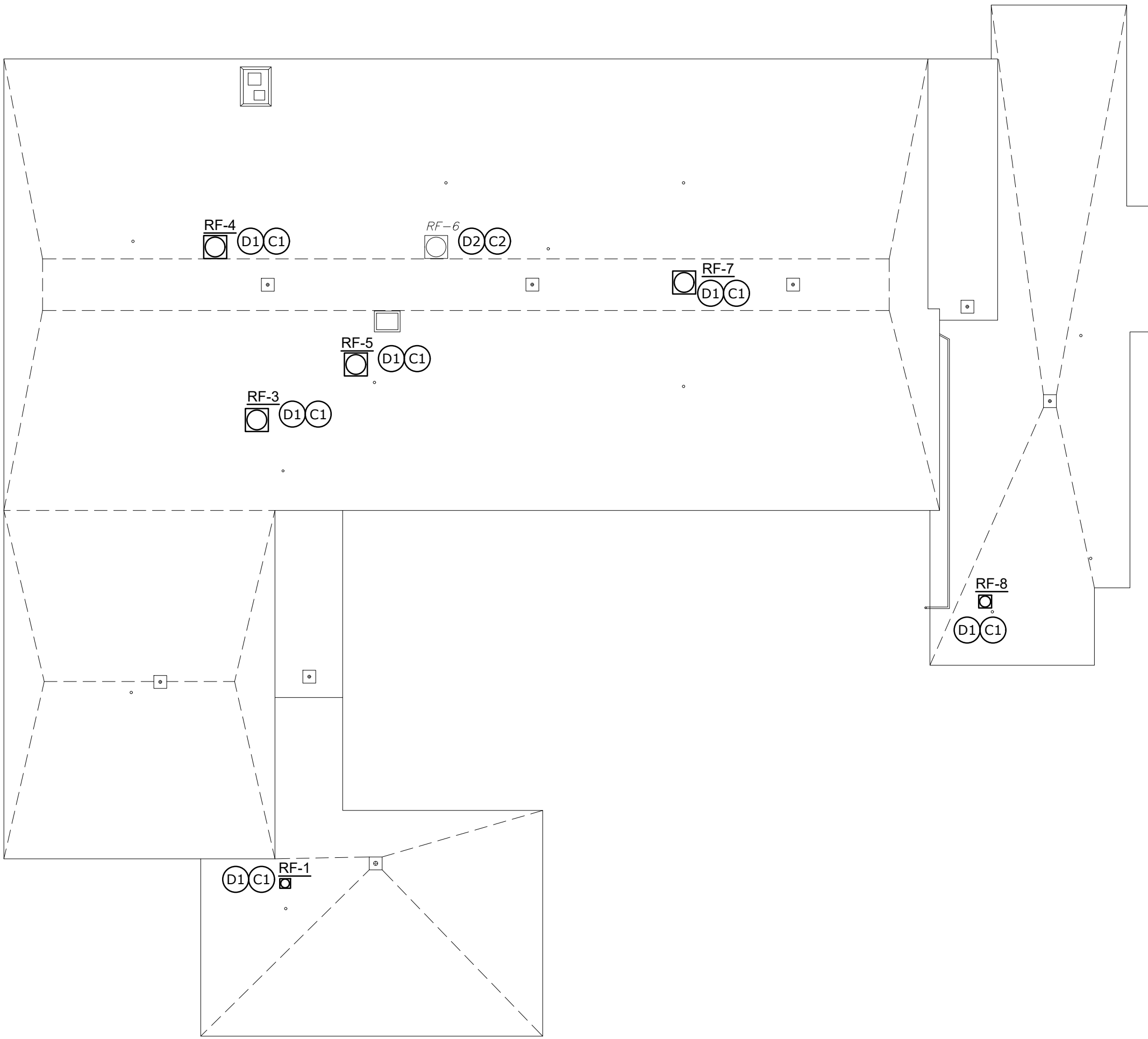
DRAWING CONSTRUCTION NOTES:

- (C1) INSTALL NEW EXHAUST FAN ON CURB, RECONNECT AND SEAL TO EXISTING DUCTWORK. CONNECT FANS TO EXISTING CONTROLS AND BALANCE SYSTEMS TO MATCH SCHEDULED OR EXISTING AIRFLOWS. IF SCHEDULED AND EXISTING AIRFLOWS DIFFER, COORDINATE BALANCING VALUES WITH ENGINEER.
- (C2) RE-INSTALL REMOVED FAN ON CURB, RECONNECT AND SEAL TO EXISTING DUCTWORK. CONNECT FAN TO EXISTING CONTROLS AND BALANCE SYSTEMS TO MATCH SCHEDULED OR EXISTING AIRFLOWS.



LEGEND

- [Hatched Box] ACCESS HATCH
- [Box with X] EXHAUST FAN

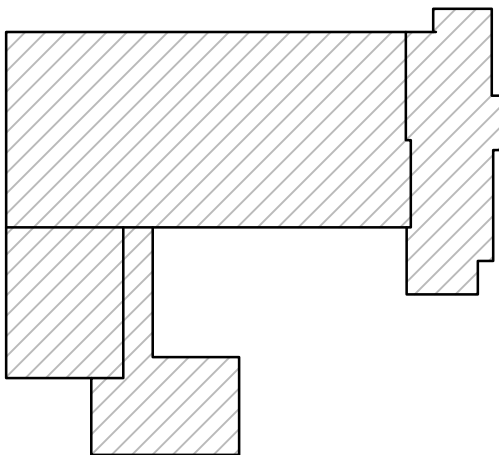


FAN SCHEDULE

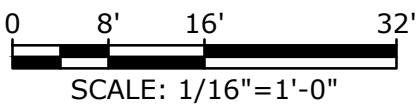
UNIT NO.	LOCATION	SERVING	MANUFACTURER	TYPE	MODEL	CFM	ESP (IN W.C.)	RPM	BHP [W]	MHP	SPEED CONTROL	ELECTRICAL			REMARKS
												VOLTS	PH	FLA	
RF-1	ROOF	KINDERGARTEN	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	101C17DEC	620	¼	1312	[60]	¼	EC	115	1	0.5	[1][2][3][4][5][6]
FAN 2	KITCHEN	KITCHEN		INLINE FAN	B-12	700	¼	1140	-	¼	-	208	1	-	[9]
RF-3	ROOF	2ND FLOOR CLASSROOMS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	165C17D(VF)	2000	⅜	892	0.25	½	EC	115	1	4.1	[1][2][3][4][5][6]
RF-4	ROOF	ALL PURPOSE ROOM	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	210C17D(VF)	2500	⅜	597	0.28	½	EC	115	1	4.3	[1][2][3][4][5][6]
RF-5	ROOF	1SR AND 2ND FLOOR TOILETS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	150C17D(VF)	1500	⅜	921	0.17	¼	EC	115	1	3.2	[1][2][3][4][5][6]
RF-6	ROOF	1ST FLOOR CLASSROOMS	USA VENTILATION SYSTEMS LLC	DOWNBLAST CENTRIFUGAL, BELT DRIVEN FAN W BDD AND DS	DB24RH3S	3640	½	610	-	¾	-	208	3	-	[7][8]
RF-7	ROOF	2ND FLOOR CLASSROOMS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	165C17D(VF)	2000	⅜	892	0.25	½	EC	115	1	4.1	[1][2][3][4][5][6]
RF-8	ROOF	TEACHERS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	LCRF-100	375	¼	1256	0.05	⅛	EC	115	1	1.9	[1][2][3][4][5][6]

SCHEDULE NOTES:

- [1] DEMOLISH AND REPLACE.
- [2] FURNISH NEW ROOF CURBS (INSTALLED BY GC) WITH NEW FANS. CONFIRM ROOF OPENING, PROVIDE TRANSITION CURBS AS REQUIRED. CURB EDGE MINIMUM 12" ABOVE NEW ROOFING.
- [3] PROVIDE ELECTRONICALLY COMMUTATED MOTORS (ECMS) AND MOTOR MOUNTED SPEED CONTROLS FOR BALANCING.
- [4] PROVIDE FACTORY MOUNTED NEMA 3 DISCONNECT SWITCH.
- [5] PROVIDE HINGED CURB BASE.
- [6] PROVIDE WITH BAROMETRIC BACKDRAFT DAMPERS.
- [7] REMOVE, RETAIN, AND RE-INSTALL.
- [8] REUSE EXISTING CURB AND BLOCKING FOR RETAINED FAN. CURB EDGE MUST BE MINIMUM 12" ABOVE NEW ROOFING, PROVIDE CURB ADAPTER AND/OR CURB EXTENSION AS REQUIRED.
- [9] EXISTING, NOT IN SCOPE.



HOOVER KEYPLAN
NO SCALE



SCHEMATIC DESIGN
NOT FOR CONSTRUCTIONHoover
Elementary
School Roof
Replacement
Project

City Of Melrose

Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - E-101.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: FJH, JPV		

ELECTRICAL ROOF PLAN

SCALE: AS SHOWN

E-101

GENERAL NOTES

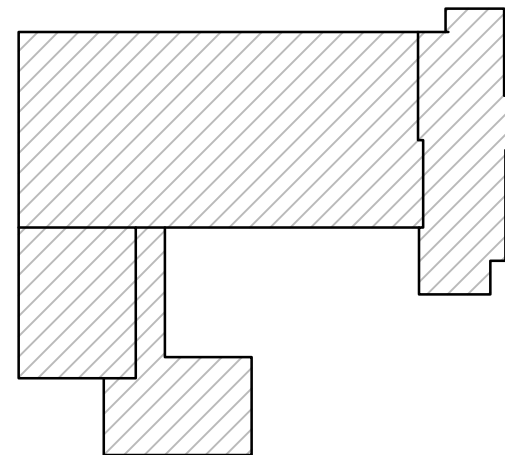
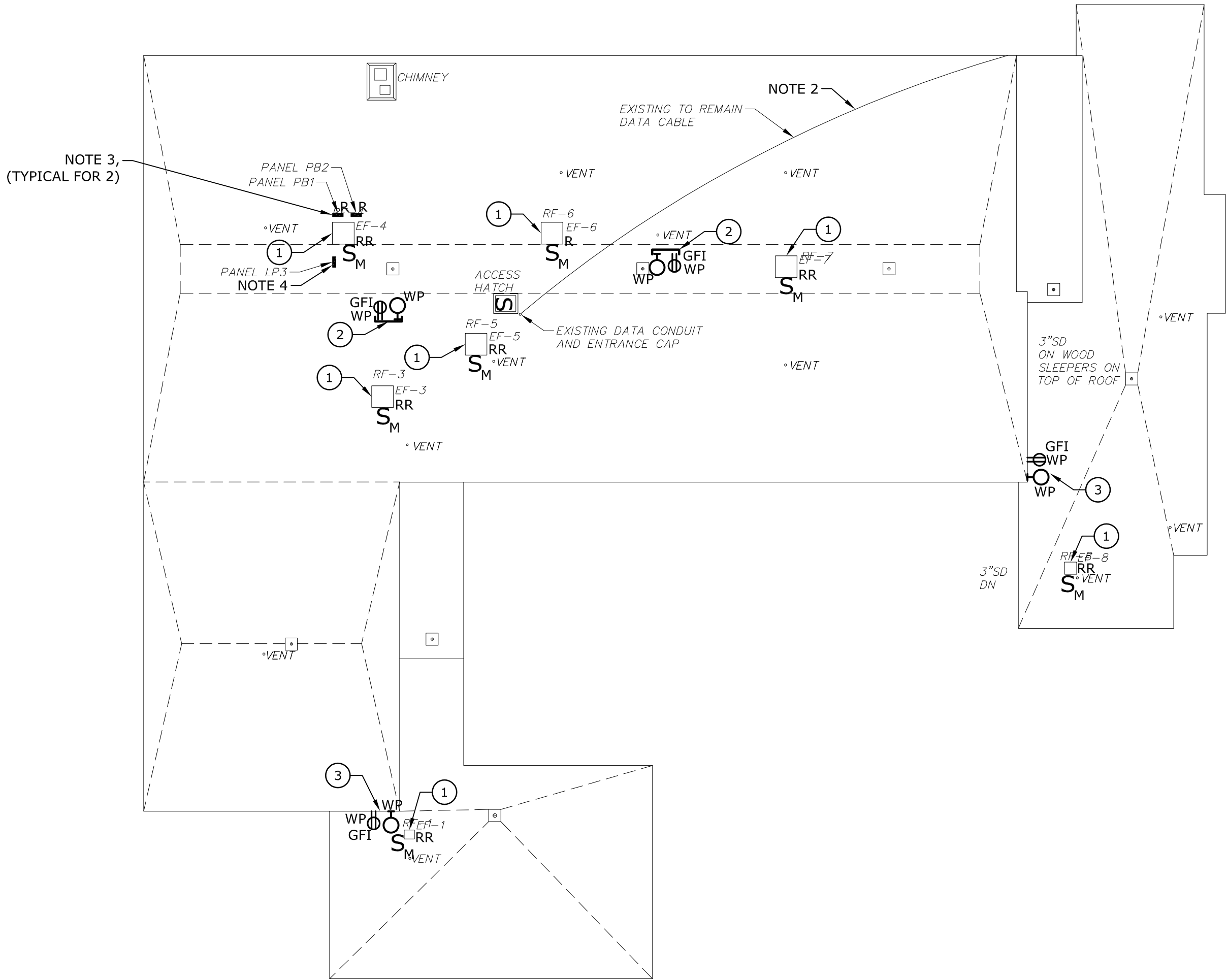
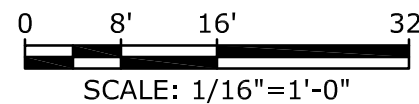
- DISCONNECT AND MAKE SAFE THE EXISTING MECHANICAL EQUIPMENT FOR REMOVAL BY HVAC CONTRACTOR. THE EXISTING FEEDER SHALL BE DE-ENERGIZED AND LOCKED OUT FOR THE DURATION OF THE NEW ROOF WORK. RECONNECT EXISTING FEEDER TO EXISTING AND NEW MECHANICAL EQUIPMENT UPON THE RE-INSTALLATION BY HVAC CONTRACTOR. MODIFY AND EXTEND CONDUIT AND WIRE AS REQUIRED.
- ALL CONDUIT AND CABLE RUNS ACROSS ROOF SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF ROOF (IF REMOVAL IS NOT ACCEPTABLE SECURE AND MAKE SAFE) UNLESS CONDUITS AND WIRE HAVE BEEN ABANDONED IN WHICH CASE THEY SHALL BE REMOVED PERMANENTLY. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CIRCUITING TO ROOF TOP EQUIPMENT.
- PANELBOARDS SHOWN ARE LOCATED ON FIRST FLOOR.
- PANELBOARD SHOWN ARE LOCATED ON SECOND FLOOR.
- BOLD TEXT AND LINES INDICATE PROPOSED WORK, LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.
- PROVIDE TEMPORARY POWER AND EQUIPMENT AS REQUIRED TO KEEP SYSTEMS OPERATIONAL, SEE 23 09 93 FOR SEQUENCING AND SCHEDULING.
- THE LOCATIONS OF EXISTING UTILITIES AND EQUIPMENT ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES AND STRUCTURES BEFORE COMMENCING WORK. BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES AND STRUCTURES.
- PREVENT DUST FROM BECOMING A NUISANCE OR HAZARD. CONTROL DUST DURING AND AFTER CONSTRUCTION.

GENERAL DEMOLITION NOTES

- DEMOLITION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DISCONNECT AND MAKE SAFE BRANCH CIRCUITS, FEEDERS, AS REQUIRED TO ACCOMPLISH THE NEW WORK AS SHOWN OR REASONABLY IMPLIED. THE CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS OF THIS SET TO DETERMINE THE EXTENT OF THE DEMOLITION WORK REQUIRED.
- BRANCH CIRCUITS SERVING EXISTING DEVICES TO REMAIN AND EXISTING DEVICES TO BE REMOVED SHALL BE MAINTAINED AND RECONNECTED AS REQUIRED AFTER REMOVAL OF THE EXISTING DEVICES, AS NECESSARY TO ACCOMMODATE THE ALTERATIONS.
- COORDINATE WITH THE ENGINEER, GENERAL, AND MECHANICAL CONTRACTORS FOR EXISTING EQUIPMENT TO BE DISCONNECTED AND REINSTALLED.
- THE CONTRACTOR SHALL REMOVE ALL WIRING/CABLING NO LONGER IN USE FROM EXISTING CONDUITS. CONDUITS NO LONGER IN USE SHALL BE CUT BACK AS REQUIRED AND CAPPED.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DEMOLITION CRITERIA.
- CONTRACTOR SHALL ASSUME MATERIALS TO BE DEMOLISHED ARE POSITIVE FOR HAZARDOUS MATERIALS AND DISPOSE OF AS NECESSARY IN ACCORDANCE WITH APPLICABLE REGULATIONS. REFER TO SPECIFICATIONS FOR MORE DETAILS.
- OWNER RETAINS RIGHT OF FIRST REFUSAL FOR ALL ITEMS TO BE REMOVED OR DEMOLISHED. CONTRACTOR SHALL TAKE REASONABLE CARE TO AVOID DAMAGE TO ITEMS TO BE RETAINED BY OWNER. NO ADDITIONAL CHARGE WILL BE ALLOWED FOR REMOVAL OF SALVAGEABLE ITEMS.
- PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEEP STANDARDS.

ELECTRICAL KEY NOTES

- DISCONNECT EXISTING EQUIPMENT. SECURE CONDUCTORS AND MAKE SAFE FOR ROOF INSTALLATION. LOCK OUT TAG OUT CIRCUIT AT LOCAL OVERCURRENT PROTECTION DEVICE. RECONNECT TO REINSTALLED OR NEW EQUIPMENT. SEE GENERAL NOTE 1. REFER TO HVAC DRAWINGS FOR DETAILS.
- ROOF TOP WEATHERPROOF GFI RECEPTACLES AND LIGHTS SHALL BE MOUNTED ON ¾" RIGID CONDUIT 18" AFF. LUMINAIRE SHALL BE MOUNTED 6" AFF.
- ROOF TOP WEATHERPROOF GFI RECEPTACLES, SWITCH AND LIGHTS SHALL BE MOUNTED TO EXTERIOR WALL. GFI SHALL BE MOUNTED 18" AFF, LUMINAIRE SHALL BE MOUNTED 6" AFF.

HOOVER KEYPLAN
NO SCALE

**MSBA Accelerated Repair Program
Horace Mann Elementary School
Hoover Elementary School
Roof Replacement project
Melrose, MA**

**Schematic Design Estimate
June 27, 2022**

Tighe & Bond



198 North Washington St, #109, Boston MA 02114



**MSBA Accelerated Repair Program
Roof Replacement project
Melrose, MA
Schematic Design Estimate
BASIS OF ESTIMATE**

6/27/2022

Roof Replacement project**DOCUMENTATION**

This estimate was prepared from the following information:

Schematic Design Drawings provided by Tighe & Bond design team, dated June 20, 2022

BASIS FOR PRICING

This estimate reflects the current construction value for the construction of this project and should not be construed as a prediction of a low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared.

PROJECT OUTLINE

The project consists of roof replacement at Horace Mann Elementary School and Hoover Elementary School in Melrose, MA.

QUALIFICATIONS

Owner costs and fees are excluded

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

Overtime outside industry standard

Work outside normal hours of operation

Preconstruction fees

Utility Company Charges or Hook-up fees have been excluded

No permits or special fees have been included

Third party commissioning costs.

Owner supplied and/or installed items (e.g.. Draperies, furniture and equipment)

Loose Furniture and Equipment

Owner Supplied and Installed Furniture, Fixtures and Equipment

Relocation / move costs

Air Quality monitoring / Vibration monitoring

Loose technology equipment (i.e. Computers, Printers, Etc.)

The estimate assumes all long-lead items can be pre-purchased to meet schedule requirements.

The estimate is based on the premise that the design will meet all codes, laws, ordinances, rules, and regulations in effect at the time that the estimate was prepared. The estimate shall be adjusted should any discrepancies between design

and the aforementioned codes, laws or ordinances result in, or require, an increase in the Cost 'of the Work

Items identified in the design as Not In Contract (NIC)

Builder's Risk insurance, terrorist insurance and other Owner insurances



Roof Replacement project

June 27, 2022

Hoover Elementary School

Melrose, MA

Schematic Design Estimate

		17,714 GSF		
		Cost / SF		
02 Existing Conditions		340,899	19.24	25.5%
04 Masonry		16,200	0.91	1.2%
05 Metals		157,086	8.87	11.7%
06 Wood, Plastics, and Composites		28,464	1.61	2.1%
07 Thermal & Moisture Protection		654,165	36.93	48.9%
22 Plumbing		32,685	1.85	2.4%
23 HVAC		63,526	3.59	4.8%
26 Electrical		44,124	2.49	3.3%
TOTAL DIRECT COST		1,337,148	75.49	100%
Design Contingency	15.00%	200,572	11.32	
General Conditions and General Requirements	11.50%	176,838	9.98	
Permits and fees	excluded	-	-	
Contractor's OH&P	5.00%	76,886	4.34	
Escalation (midpoint 2Q 2023)	5.00%	89,572	5.06	
Construction Contingency	excluded	-	-	
TOTAL ESTIMATED CONSTRUCTION COST		1,881,016	106.19	



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Hoover Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
1	02 Existing Conditions						
2	024100 <i>Selective Demolition</i>						
3	<i>Roof Demolition</i>						
4	Remove and disposed of existing roof - see Hazardous Materials Assessment	17,714	sf		Included		
5	Premium remove original tar & gravel roof system	13,450	sf	4.50	60,525		
6	Roof drain remove	7	ea		with plumbing		
7	Remove and dispose of access hatch	1	ea	450.00	450		
8	Existing insulation thickness test cut	4	ea	150.00	600		
9	Remove and dispose of all exiting exhaust fence curb and flashing	104	lf	18.00	1,872		
10	Remove and dispose of chimney flashing	24	lf	6.50	156		
11	Remove and dispose of vent flashing	10	ea	40.00	400		
12	Cutting and patching	1	ls	3,500.00	3,500		
13	Dispose, cart away	1	ls	4,400.00	4,400		
14	Temporary roof protection	17,714	sf	1.20	21,257		
15	Dust control	1	ls	6,200.00	6,200		
16	Allowance for overhead protection building entrance below.	120	sf	20.00	2,400		
17							
18	026000 <i>Hazardous Materials Assessment</i>						
19	ACM & PCB Abatement of roof	17,714	sf	13.50	239,139		
20							
21	Subtotal: Existing Conditions					\$ 340,899	
22							
23	04 Masonry						
24	041000 <i>Masonry Units</i>						
25	Masonry work associated with installing thru-wall flashing	216	lf	75.00	16,200		
26							
27	Subtotal: Masonry					\$ 16,200	
28							
29	05 Metals						
30	051000 <i>Structural Steel Framing</i>						
31	Structural improvements	1	ls	150,000.00	150,000		
32	053000 <i>Metal Decking</i>						
33	Roof deck replacement at Roof B1 damaged areas, assumed 5% of roof area	886	sf	8.00	7,086		
34							
35	Subtotal: Metals					\$ 157,086	
36							
37	06 Wood, Plastics, and Composites						
38	061600 <i>Rough Carpentry</i>						
39	Install new curbing for all HAVC equipment 12" above new roof	94	lf	48.00	4,512		
40	New 3x Pressure treated blocking at roof edge	998	lf	24.00	23,952		
41							
42	Subtotal: Wood, Plastics, and Composites					\$ 28,464	
43							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Hoover Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
44	07 Thermal & Moisture Protection						
45	075000 <i>Membrane Roofing</i>						
46	<i>New Construction</i>						
47	90 mil EDPM roofing system; 30 year warranty	17,714	sf	30.00	531,420		
48	Tapered crickets	4	ea	80.00	320		
49	New walkway pad, assumed 10% of roof area	1,771	sf	6.50	11,514		
50							
51	076500 <i>Flashing and Sheet Metal</i>						
52	Roof edge metal fascia and securement, continuous extruded aluminum cleat, continuous aluminum hook strip with stainless fasteners	998	lf	49.00	48,902		
53	Snap-on aluminum cover	998	lf	38.00	37,924		
54	New flashing at HAVC equipment curbing	94	lf	14.00	1,316		
55	Stainless steel chimney flashing	20	lf	32.00	640		
56	Access hatch flashing	16	lf	18.00	288		
57	Vents pipe flashing	12	ea	85.00	1,020		
58	Roof drain flashing	8	ea	350.00	2,800		
59	Wall and roof flashing	216	lf	18.00	3,888		
60	Misc. roof flashing	1	al	2,000.00	2,000		
61							
62	077100 <i>Roof Specialties</i>						
63	Access hatch	1	ea	4,250.00	4,250		
64							
65	079100 <i>Joint Sealants</i>						
66	Exterior caulking and sealants at all roof penetrations	17,714	sf	0.45	7,883		
67							
68	Subtotal: Thermal & Moisture Protection					\$ 654,165	
69							
70	22 Plumbing						
71	Demolition						
72	Roof drains	8	ea	332.10	2,657		
73	New						
74	Sanitary vent system						
75	Extend vent piping to 24"	12	ea	570.00	6,840		
76							
77	Roof drainage system						
78	Roof drain including new piping/insulation and tie-in to existing, Allowance	8	ea	1,648.50	13,188		Assume 4" drains
79							
80	Materials supply and bidding/market conditions allowance	1	ls	5,000.00	5,000		
81	Supervision/PM	1	ls	5,000.00	5,000		
82							
83							
84	Subtotal: Plumbing					\$ 32,685	
85							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Hoover Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
86	23 HVAC						
87	Demolition						
88	Disconnect mechanical piping and ductwork from units and remove and store units for reinstallation, Allowance	15	ea	934.00	14,010		
89	Remove obsolete equipment, Allowance	1	ls	4,000.00	4,000		Quantity/type not indicated
90							
91	New						
92	Re-set units and extend mechanical piping and ductwork	15	ea	1,401.04	21,016		
93							
94	Miscellaneous to include seismic controls and testing/start-up	1	ls	3,500.00	3,500		
95	Materials supply and bidding/market conditions allowance	1	ls	15,000.00	15,000		
96							
97	Supervision/PM	1	ls	6,000.00	6,000		
98							
99	Subtotal: HVAC					\$ 63,526	
100	26 Electrical						
101	Demolition						
102	Antenna, to be reinstalled	3	ea	300.00	900		
103	Conduit/wire, lighting	364	lf	11.64	4,237		
104	Electrical fixture, disconnect only, Allowance	11	ea	200.00	2,200		Fixture' description not provided
105							
106	New						
107	Lighting system						
108	Conduit/wire	364	lf	25.24	9,187		
109							
110	Miscellaneous						
111	Antenna, install previously removed	3	ea	450.00	1,350		
112	Electrical fixture, reconnect, Allowance	11	ea	250.00	2,750		
113							
114	Miscellaneous to include seismic controls and testing/start-up	1	ls	500.00	500		
115	Materials supply, small job premium and bidding/market conditions allowance	1	ls	20,000.00	20,000		
116							
117	Supervision/PM	1	ls	3,000.00	3,000		
118							
119	Subtotal: Electrical					\$ 44,124	
120							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

HERBERT CLARK HOOVER ELEMENTARY SCHOOL MELROSE, MA PRE-RENOVATION HBMA SERVICES

TO: Denise M. Gaffey – Directory and City Planner – City of Melrose
FROM: Frank Rodrigues – Tighe & Bond
COPY: Matthew Wzorek – Tighe & Bond
DATE: June 8, 2022

Tighe & Bond Inc., (Tighe & Bond) has prepared the following technical memorandum to summarize the Hazardous Building Material Assessment (HBMA) conducted at the Herbert Clark Hoover Elementary School. (the "Site"). A facility improvement project, which includes full replacement of the existing roof is currently proposed for the school building. The current roof systems consists of a rubber membrane roof system over a tar and gravel/built up roof applied onto a metal roof deck. The HBMA was limited to the roof area being proposed for renovation impact and did not include the roof of the modular classroom section of the school. As required by state and federal regulations, characterization of various waste streams generated during construction projects must be completed to ensure their proper management.

The Assessment included a visual observation and bulk sampling of suspect hazardous building materials (asbestos, painted/coated building materials), and a visual inventory of other hazardous/regulated wastes (i.e., mercury-containing equipment, refrigerants, PCB-containing equipment, etc.). The HBMA was performed to support the proposed facility improvement project and to address/prepare budgets for management of environmentally related building materials.

Tighe & Bond's assessment and report are subject to the HBMA Limitations provided as Appendix A. The Assessment was performed on May 20, 2022, by Tighe & Bond's Massachusetts licensed asbestos inspector, Francisco J. Rodrigues, (#AI040131). Mr. Rodrigues' inspector license and certification are included as Appendix B of this report.

1 Hazardous Building Materials Assessment

1.1 Asbestos-Containing Building Materials

Prior to any type of building renovation or demolition, a thorough investigation is required to identify and quantify asbestos containing materials (ACM) which may be impacted by the demolition or renovation activities. The survey is required by the United States Environmental Protection Agency (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations (Title 40 CFR, Part 61, Subpart M); Massachusetts Department of Environmental Protection (MassDEP) regulations (310 CMR 7.15); Massachusetts Department of Labor Standards (MADLS) regulations, (454 CMR 28.00); as well as applicable portions of the Occupational Safety and Health Administration (OSHA) asbestos in construction regulations (CFR 1926.1101).

The asbestos assessment was limited to accessible areas of the roof and roof top equipment to determine the presence or absence of suspect ACM that have potential for disturbance

during the proposed renovation activities and would be subject to abatement prior to roof replacement.

Suspect materials were divided into "homogeneous materials", building materials which were determined by the inspector to be homogeneous based on their color, texture, and age. A number of bulk samples of suspect ACM from each homogenous group of materials were collected in general accordance with standards described in the Environmental Protection Agency (EPA) Asbestos Hazard and Emergency Response Act (AHERA) Regulations for schools. AHERA sampling protocols are only recommended for use by MassDEP and EPA as they do not regulate bulk sampling standards.

Bulk samples were collected and submitted to Aerobiology Laboratories Associates Inc., (Aerobiology) of Woburn, Massachusetts for analysis via Polarized Light Microscopy with Dispersion Staining (PLM/DS) in accordance with the EPA/600/R-93/116 Method. ProScience is a Massachusetts licensed and American Industrial Hygiene Association (AIHA)-accredited asbestos laboratory.

Suspect materials identified and sampled are included as inventory tables in Appendix C. The tables describes material locations, sample numbers, quantities, condition, analytical results, and specific comments relative to our findings. The asbestos laboratory report is included in Appendix D.

The MassDEP defines a material that contains greater than or equal to one percent ($\geq 1\%$) asbestos utilizing PLM/DS, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos. Materials containing less than one percent ($< 1\%$) asbestos are regulated to a degree by OSHA related to work practices, worker exposure, and waste containerization and in Massachusetts, materials containing $< 1\%$ asbestos are considered asbestos-containing waste material (ACWM) and must be packaged and disposed of as ACWM in accordance with 310 CMR 7.15.

A total of five homogeneous areas were identified during the inspection and 14 samples of suspect ACM were collected. The tar and gravel/built up roof system located under the rubber membrane roof system was determined to contain $< 1\%$ asbestos and therefore classified as an ACWM.

Samples of other suspect ACM collected during the survey, were determined to be non-asbestos containing. Refer to Appendix C for a list of each suspect material identified and sampled.

Other suspect materials encountered during any renovation activities that are not identified in this report as being non-ACM should be assumed to be ACM until sample collection and laboratory analysis indicate otherwise.

The tar and gravel/built up roof identified at the Hoover School must be managed and disposed of as an ACM.

The ACMs identified at the Hoover School should be removed by a licensed asbestos abatement contractor, utilizing trained and licensed personnel prior to renovation, demolition or any activity that has the potential to disturb these materials. Tighe & Bond recommends the creation of a project specific asbestos abatement scope of work or technical specification for the removal of ACWM. The specification must be developed by a Massachusetts licensed asbestos project designer, and it should address such important issues as regulatory requirements, notification procedures, insurance considerations, air sampling needs and other pertinent information. Abatement activities must be subject to a passing post abatement visual inspection by an asbestos monitoring firm not affiliated with the abatement contractor.

The same firm typically collects, analyzes and reports the State required post abatement clearance air samples.

1.2 Universal Waste and Other Regulated Building Waste

Tighe & Bond performed a visual inspection of the proposed renovation areas to identify hazardous materials, universal waste materials or other regulated wastes that have the potential for disturbance during the roof replacement project. No regulated wastes were identified.

1.3 Lead Based Paint (LBP)

Paint chip sampling was performed to identify lead paint concentrations in those painted components likely subject to impact by renovations. Specifically, one sample was collected from the fascia board which is scheduled to be replaced.

The OSHA 1926.62 Lead in Construction regulations require worker protection and the use of certain work practices if painted building components with detectable levels of lead paint are disturbed during a demolition or renovation. The result of the sampling is intended to provide guidance to contractors for occupational lead exposure controls as it is the responsibility of the contractor to ensure the safety of their employees. Contingent upon renovation or demolition methods, building components coated with lead levels may cause exposures to lead above OSHA standards during proposed renovation or demolition activities.

One suspect lead paint sample was collected from the painted fascia board and was submitted to Aerobiology analysis using the SW846-7420/3051 method. A summary of the test result is presented in Appendix E. The Aerobiology laboratory report is located in Appendix F.

The result of the paint chip sampling performed by Tighe & Bond indicates the paint chip sample collected and analyzed was below the EPA regulatory threshold limit for lead based paint.

Although results were below regulatory thresholds, compliance with OSHA Lead in Construction is required for detectable levels of lead. Lead-containing painted building components should not be subjected to dust-generating activities such as sanding, grinding, sawing, etc. Also, lead-containing painted building materials should not be subject to torch cutting. An LBP determination cannot determine a safe level of lead but is intended to provide guidance for implementing industry standards for lead in paint at identified locations. With this data contractors can better determine potential exposure of workers to airborne lead by understanding the different concentrations of LBP and activities that disturb paint on representative surfaces.

Based on the reportable levels of lead on the painted components tested and subject to waste characterization requirements of the disposal facility, the contractor may be required to conduct Toxicity Characteristic Leaching Procedure (TCLP) testing of the remaining painted waste stream prior to disposal, to determine if the results of that testing exceed the 5.0 mg/L hazardous waste threshold as governed under the Federal EPA "Resource Conservation and Recovery Act" (RCRA - 40 CFR Part 261).

Appendices:

APPENDIX A: HBMA Limitations

APPENDIX B: Inspector's Certification

APPENDIX C: Suspect Asbestos Containing Materials Inventory Table

APPENDIX D: Asbestos Laboratory Report

APPENDIX E: Summary of Lead Paint Materials Table

APPENDIX F: Lead Paint Samples Laboratory Report

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Schematic Design Submission Checklist MSBA Accelerated Repair Program



District: Melrose Public Schools

School: Horace Mann Elementary School

Scope: Roof Replacement

Schematic Design Deliverables:

OPM	District	
☒	☒	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☒	☒	Code Analysis
☒	☒	Schematic Design Drawings
☒	☒	Cost Estimate (CSI Format) - Include all Proposed Alternates
☒	☒	Form 3011 – Total Project Budget
☒	☒	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☒	☒	Project Schedule (Gantt Chart)
☒	☒	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☒	☒	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Schematic Design Submission Checklist MSBA Accelerated Repair Program



Program Guidelines and Project Funding Agreement:

OPM	District	
☒	☒	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☒	☒	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☒	☒	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☒	☒	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☒	☒	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☒	☒	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☒	☒	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

Schematic Design Submission Checklist MSBA Accelerated Repair Program



☒	☒	MSBA's Audit Department will review requests for reimbursement in the ProPay system of \$50,000 or more. All reimbursement requests which are less than \$50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☒	☒	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

Title: Project Director, Owner's Project Manager
Firm: The Vertex Companies, LLC
Date: June 27, 2022

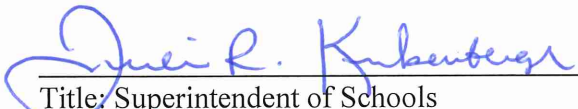
I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

Schematic Design Submission Checklist MSBA Accelerated Repair Program



certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).



Title: Superintendent of Schools
Date: June 27, 2022

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Tighe&Bond

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Appendices

A	Code Analysis
B	Schematic Design Drawings `
C	Cost Estimate
D	Form 3011 – Total Project Budget
E	Project Cash Flow
F	Project Schedule
G	ARP Reimbursement Rate Certification and Checklist
H	Proposed Project Scope and Budget Vote Language
I	Hazardous Materials Assessment Report
J	Roof Sampling Test Cut Report

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

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Section 1

Project Narrative

1.1 Introduction

The City of Melrose is currently participating in the Massachusetts School Building Authority (MSBA) Accelerated Repair Program (ARP) and has submitted a Statement of Interest for repairs at the Horace Mann Elementary School. The Vertex Companies, LLC. and Tighe & Bond Designer Services, Inc. were subsequently designated as the Owner's Project Manager (OPM) and Designer, respectively for the proposed project.

The Horace Mann Elementary School is located at 40 Damon Avenue in Melrose, MA. The school building is a two-story brick masonry building with an approximate roof area of 14,000 square feet, which was constructed in 1949 with an addition constructed in 1955. The school has undergone several renovations over time, including accessibility and interior improvements in 2017. The first floor of the school generally consists of classrooms, a library, administrative and nurse offices, storage rooms, a multipurpose room, and bathrooms. The second floor contains classrooms and bathrooms. The school currently serves approximately 270 students from kindergarten to fifth grade.

The team assembled for execution of the Herbert Clark Hoover School project includes the following members:

- | | |
|----------------------------------|---|
| • Funding Agency | Massachusetts School Building Authority |
| • Owner | Melrose Public Schools |
| • OPM | The Vertex Companies, LLC |
| • Designer | Tighe & Bond, Inc. |
| • Cost Estimating | Ellana Construction Consultants. |
| • Hazardous Materials Assessment | Tighe & Bond, Inc. |
| • Code Review | Tighe & Bond, Inc. |
| • Structural/Construction Admin | Frawley Engineering, P.C. |

1.2 Existing Conditions

1.2.1 Roof

The existing thermoplastic polyolefin (TPO) membrane roof system does not appear to be original to the original building constructed in 1949. The addition constructed in 1955 also consists of a TPO membrane roof system. Based on documents provided by the District, the original roof on the portion of the building constructed in 1949 consisted of 5 ply coal tar pitch and gravel over 2.5" insulation on a steel roof deck. The original roof on the portion of the building constructed in 1955 consisted of a bonded membrane roof over 2.5" insulation on a steel deck. Based on recent site visits and field investigation, the entire roof area currently consists of a fully-adhered TPO membrane roofing system, with 3" rigid insulation and tar paper underlayment.

There is significant evidence of water damage inside the building from roof leaks and numerous deficiencies in the roofing membrane. The roof does not provide adequate thermal performance and drainage. Based on the site observations and investigation, the existing roofing system and majority of associated appurtenances appear to be in poor condition and are beyond their useful life.



Photo 1: Existing Roof over 1949 Building



Photo 2: Existing Roof over 1955 Addition

1.2.2 Plumbing

There are existing roof drains that are tied into the storm drainage system in the building. The drains appear to be in working order, however some are rusted and in poor condition.

Plumbing vents penetrate the roof in multiple locations to provide pressure relief for the school's sanitary piping system. The vent piping is in good condition with expected rust on the pipe interior.



Photo 3: Existing Roof Drains

1.2.3 HVAC

There are four exhaust fans (EFs) installed on the existing roof. Most of the existing fans' nametags are unreadable, therefore the age of the fans can't be determined. The fans appear to be in good condition and should be retained.



**Photo 4: Exhaust Fan
on 1949 Roof**



**Photo 5: Equipment and Chimney
on 1955 Building Addition**

1.2.4 Electrical

The existing electrical items on the roof are limited to electrical connections to any HVAC equipment requiring electrical power. It is assumed that each HVAC fan has an integral or equipment-mounted disconnect.

1.3 Recommended Solutions

1.3.1 Roof Replacement

Replacement of the existing roof system at the Horace Mann School is recommended for improving thermal performance, roof drainage, overall energy efficiency of the building, and remedying numerous roof leaks. The following items below outline the proposed scope of work for the project, including demolition. Schematic Design plans with additional detail are included in Appendix B.

Roof Demolition will include:

- Removal of the existing TPO membrane roofing system
- Removal of the existing rigid insulation and fiberboard
- Removal of the existing access hatch
- Repair of the steel roof deck as needed
- Removal and storage of existing HVAC equipment
- Removal of existing fascia, damaged curbing, blocking, and flashing

Proposed Roof Improvements will include:

- Repair of any damaged or compromised steel roof decking discovered during demolition
- Installation of a fully-adhered EPDM roofing system. The new roofing system will include, from bottom to top:
 - Fiberglass-reinforced gypsum sheathing cover board
 - Base sheet/ combination air and vapor barrier
 - New polyisocyanurate rigid insulation. The new insulation will meet MSBA Accelerated Repair Program Requirements, including the stretch energy code. Insulation thickness will provide a minimum R-value of 30. Tapered insulation will be installed to provide a positive pitch toward roof drains.
 - ½" coverboard installed over the insulation
 - Fully-adhered EPDM roofing membrane
- Installation of new curbing, flashing, blocking, metal fascia, and roof drains
- Installation of new access hatches, ladders, and protective guardrails

1.3.2 Plumbing Systems

Plumbing Demolition will include:

- Removal of all existing roof drains. Existing rain leaders within building will be cut and capped away from the drain body and prepared for reconnection.

Proposed Plumbing Improvements will include:

- Installation of new roof drains and associated piping. All new roof drains will be replaced in kind.
- Installation of 1" thick insulation on drain bodies and new drainage piping.
- Inspection of existing drainage piping, including snaking the pipes to check for clogs and jetting the pipes should there be any clogs present.

Section 1 Project Narrative**Tighe&Bond**

- Extension of vent piping as required to maintain clearance above roof of 18-24".

1.3.3 HVAC Systems**HVAC Demolition will include:**

- Disconnection, removal, and storage of all exhaust fans
- Removal and disposal of roof curbs on original building's roof.
- Prior to unit removal, exhaust fans will be tested and airflows recorded for final balancing efforts.
- Installation of temporary caps for all ductwork.
- Installation of temporary caps over curbs on newer building's roof.

HVAC Improvements will include:

- Installing new curbs for exhaust fans on older roof; including new transition curbs as required for fan connection to the existing roof opening.
- Repairing curbs and/or blocking with minor damage and extending existing curbs as required. Provision of adapter curbs as required for fan re-installation
- Reinstallation of retained exhaust fans
- Reconnecting and sealing units to existing ductwork.
- Reconnecting units to existing controls.
- Re-testing and balancing systems to match pre-existing airflows.

1.3.4 Electrical Systems

The proposed electrical work will include:

- Disconnecting and making safe all existing electrical devices with connections to mechanical equipment. Once the existing equipment is placed back in its permanent location after roofing, the electrical connections will be re-energized. For any equipment that has moved, the existing conduit and wires will be extended as required.

1.4 ARP Sustainability Requirements

MSBA's ARP requires use of the Stretch Energy Code (780 CMR – Appendix AA and 2015 IECC) as the basis of design for ARP projects for roof replacement. Below is a table comparison of the required code values for the relevant project items and the values for the proposed assemblies. The proposed solutions and items for the Herbert Clark Hoover School meet or exceed the ARP sustainability requirements.

Roofs	Maximum U-Value (Btu/hr·ft ² ·°F)	Minimum R-Value (°F·ft ² ·hr/Btu)
Required	0.032	30
Proposed	0.032	30

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Horace Mann School Repairs Project

Building Code Analysis

This analysis summarizes codes requirements applicable to the project scope for the Horace Mann School Repairs Project. This summary includes general code information applicable to the overall project and more specific requirements related to roof replacement activities.

Applicable codes for this project include:

- International Building Code 2015 (IBC)
- International Existing Building Code 2015 (IEBC)
- International Energy Conservation Code 2018 (IECC)
- 248 CMR 10.00 Uniform State Plumbing Code (2017)
- Commonwealth of Massachusetts State Building Code, Ninth edition 780 CMR (including amendments to the IBC, IECC and IEBC)
- Massachusetts Stretch Energy Code 780 Appendix AA
- Architectural Access Board Regulations 521 CMR (AAB)
- American Society of Civil Engineers – Minimum Design Loads for Buildings and Other Structures (ASCE 7-05)
- National Electrical Code NFPA 70

Section 1 – General Code

Use and Occupancy Classification (305 IBC 2015 & 780 CMR)

- Educational (E)
 - Due to the anticipated scope of work, roof replacement, Level 1 alterations of the IEBC will be triggered. Level 1 alterations encompass the removal and replacement of materials that serve the same purpose. Any new elements must comply with the requirements for new construction.

Types of Construction (602 IBC 2015 & 780 CMR)

- Type III Construction – Construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of a 2-hour rating or less.

Alterations Level 1 (503 IEBC 2015 & 780 CMR)

- Removal and replacement or the covering of existing materials, elements, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

Material and Methods (702.6 & Chapter 8 IEBC 2015 & 780 CMR)

- All new work shall comply with materials and methods requirements in the IBC, IEBC, IECC, IMC, and MSPC, as applicable that specify material standards, details of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 2 – Requirements Applicable to Roof Replacement Work**Building Envelope Requirements (IECC 2015, Table C402.3)**

- Roof Maximum U-Factors
 - Insulation entirely above deck – U-0.032
- Roof Minimum R-Values
 - Insulation entirely above deck – R-30ci

Massachusetts State Building Code (780 CMR Amendments)

- Dead loads on an existing roof may not increase by more than 5% due to a re-roofing project.
- If the additional dead loads exceed 5%, the structure must conform to current snow load requirements.
- Since a similar EPDM roofing system (and ballast in some locations) is being removed from the roof prior to roof replacement, the new built-up roof is not anticipated to increase the dead load on the roof by more than 5%.

Code of Federal Regulations Title 29 (29 CFR)

- Holes – each employee on walking/working surfaces shall be protected from falling through holes more than 6 feet above lower levels, by personal fall-arrest systems, covers, or guardrail systems erected around such holes.

Uniform State Plumbing Code 248 CMR 10.00

- Storm Drain leaders are sized based on roof area served. The original roof area and the addition roof area are 9900sqft and 3600sqft respectively and include three (3) 4" roof drains each. A 4" roof drain can capture storm water from 4600sqft of roof area per 248 CMR 10.0. The roof drain sizes installed suffice for the school's roof. The new roof drains will use the same outlet size as the existing ones.

Section 4 – Accessibility Requirements**Existing Building (3.3 MAAB 521 CMR)**

- Requirements for an accessible entry, toilet, drinking fountain, and telephone (if pay phones are provided) will be triggered based on the estimated cost of the project. A proponent is required to provide these items if the cost of a renovation project exceeds \$500,000.

Building Code Analysis**Tighe&Bond**

- If the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR.
- Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of work exceeds \$500,000 or unless work is being performed on the entrance or toilet room.
 - Curb cuts
 - Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR
 - Roof repair or replacement, window repair or replacement, repointing and masonry repair work
 - Work related to septic system repairs, site utilities and landscaping.
- If the cost of the project, and any additional renovations completed within 36 months of the project, exceeds 30% +of the full and fair cash value of the building, the entire building must be upgraded as required to meet 521 CMR requirements.
- The building currently complies with ADA/AAB requirements and accessibility upgrades will not be required as part of this project.

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Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

HORACE MANN ELEMENTARY SCHOOL

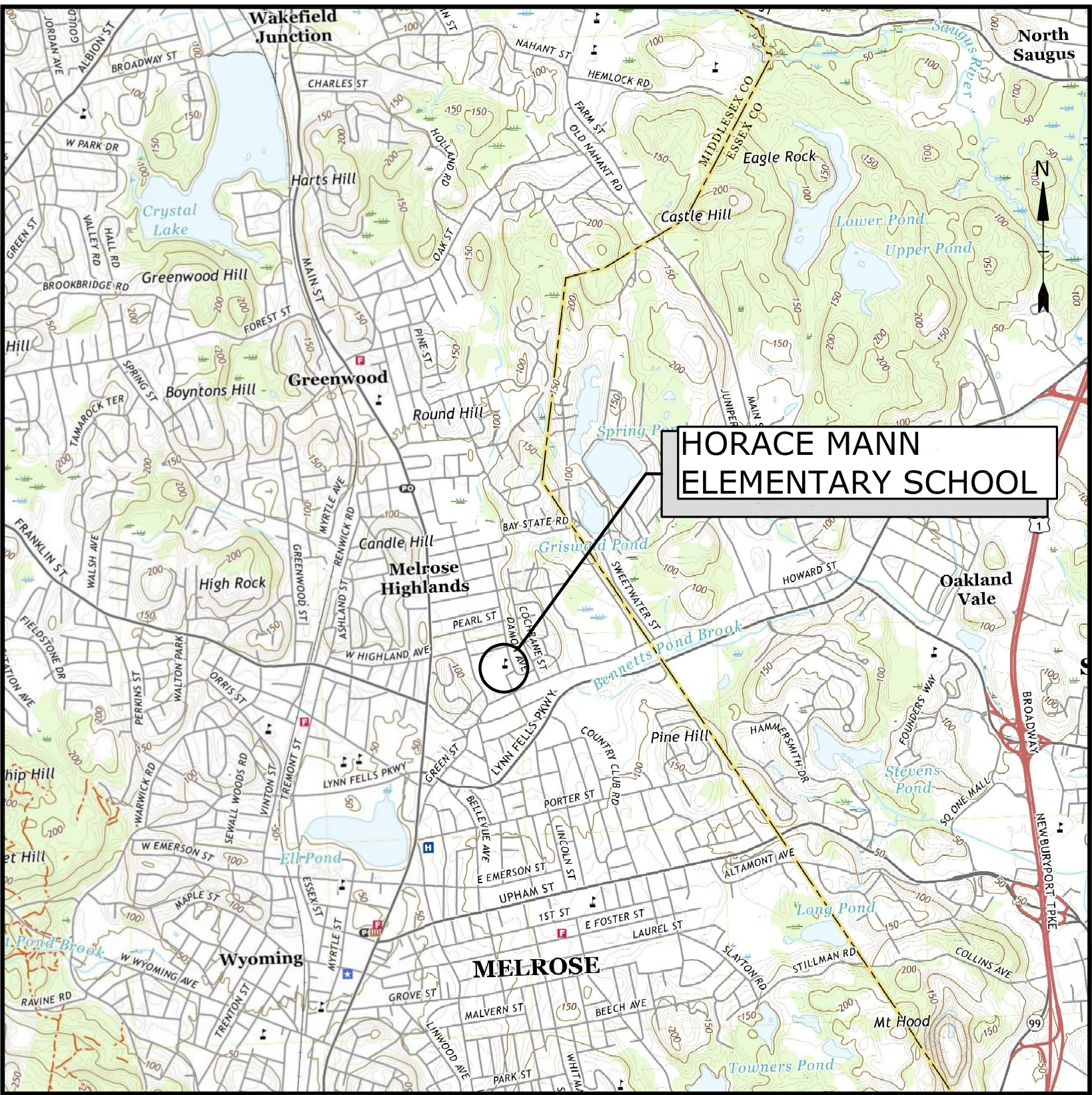
MSBA ACCELERATED REPAIR PROGRAM

ROOF REPLACEMENT PROJECT

MELROSE, MASSACHUSETTS

JUNE 2022

LIST OF DRAWINGS	
	COVER
G-001	ROOF PHOTOGRAPHS
AD-101	ROOF DEMOLITION PLAN
A-101	ROOF REPLACEMENT PLAN
A-501	ROOF DETAILS - 1
A-502	ROOF DETAILS - 2
P-101	PLUMBING ROOF PLAN
H-101	HVAC ROOF PLAN
E-101	ELECTRICAL ROOF PLAN



LOCATION MAP
SCALE: 1" = 2000'

PROJECT TEAM:

OWNER
CITY OF MELROSE
562 MAIN STREET
MELROSE, MA 02176

OWNER'S PROJECT MANAGER
THE VERTEX COMPANIES, INC.
400 LIBBEY PARKWAY
WEYMOUTH, MA 02189

COST ESTIMATING
ELLANA, INC.
98 NORTH WASHINGTON STREET
SUITE 109
BOSTON, MA 02114

FUNDING
MASSACHUSETTS SCHOOL
BUILDING AUTHORITY
40 BROAD STREET, SUITE 500
BOSTON, MA 02109

ENGINEER
TIGHE & BOND
DESIGNER SERVICES, INC.
53 SOUTHAMPTON ROAD
WESTFIELD, MA 01085

PREPARED BY:
Tighe&Bond

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION
COMPLETE SET 9 SHEETS

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Horace Mann
Elementary
School Roof
Replacement
Project

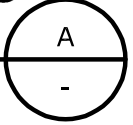
City Of Melrose

Melrose,
Massachusetts

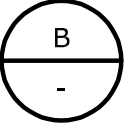
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CHECKED: MPW		
APPROVED: FJH, JPV		
ROOF PHOTOGRAPHS		
SCALE:		AS SHOWN
G-001		



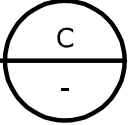
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BUILDING
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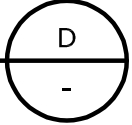
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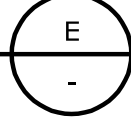
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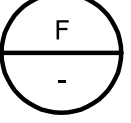
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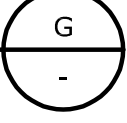
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BUILDING AND 1955 ADDITION
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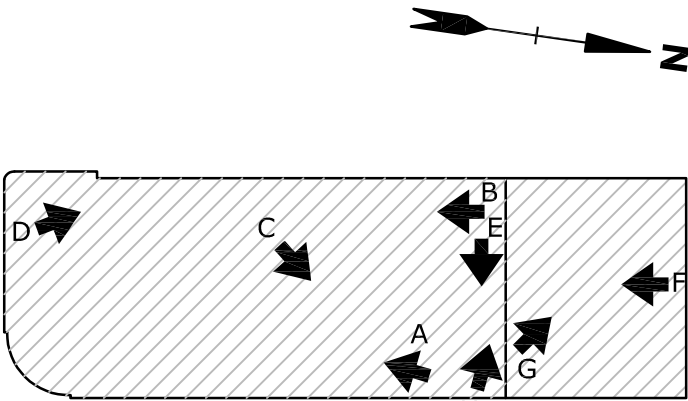
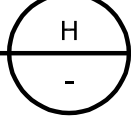
CHIMNEY AND EQUIPMENT ON
1955 ADDITION
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ROOF DRAINS ON 1955
ADDITION
NO SCALE



EXISTING CHIMNEY
NO SCALE



HORACE MANN KEYPLAN
NO SCALE

LEGEND:

← A PHOTOGRAPH LOCATION

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Horace Mann
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Project

City Of Melrose

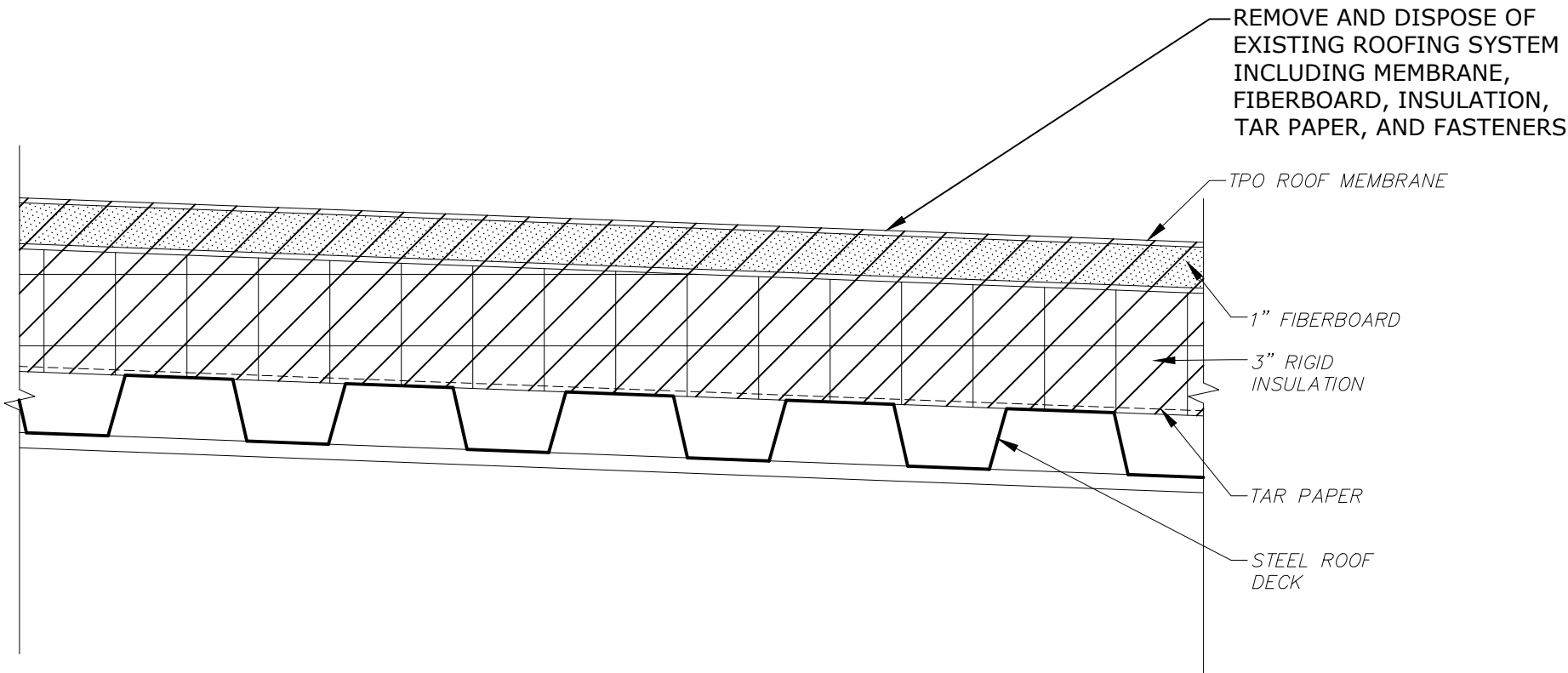
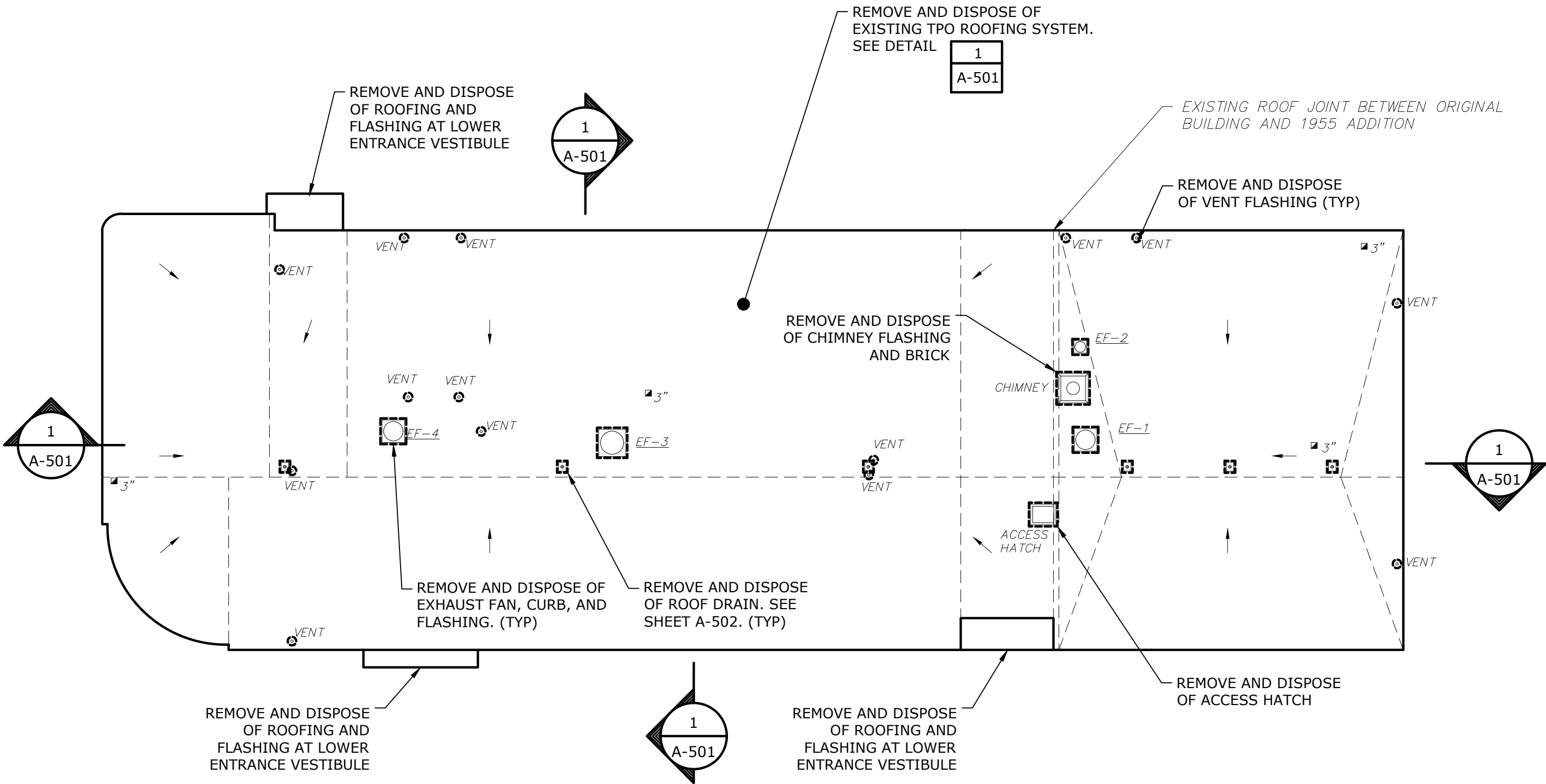
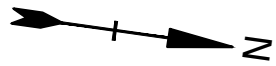
Melrose,
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APPROVED: JPV		

ROOF DEMOLITION PLAN

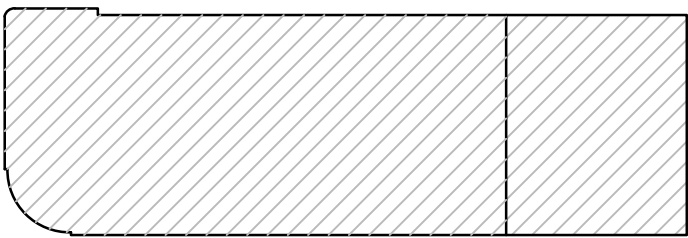
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AD-101

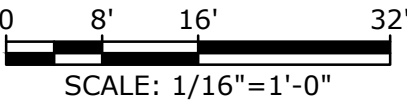


TYPICAL EXISTING ROOF SECTION

DETAIL	1
3" = 1'-0"	-



HORACE MANN KEYPLAN
NO SCALE



LEGEND

- | | |
|---|--|
| ROOF DRAIN | EXISTING GOOSENECK (INTAKE OR EXHAUST) |
| EXISTING VENT PIPE PENETRATION | EXISTING EXHAUST CAP OR AIR INTAKE |
| EXISTING ROOFTOP EXHAUST FAN/DUCT WITH CURB | EXISTING CAPPED CURB |
| EXISTING ROOFTOP EQUIPMENT ON SLEEPERS | EXISTING INSULATION THICKNESS TEST CUT |
| GAS PIPE ON PIPE SUPPORT | EXISTING CANOPY LINE |
| | EXISTING ROOF SLOPE LINE |
| | ITEM TO BE REMOVED/DEMOLISHED |

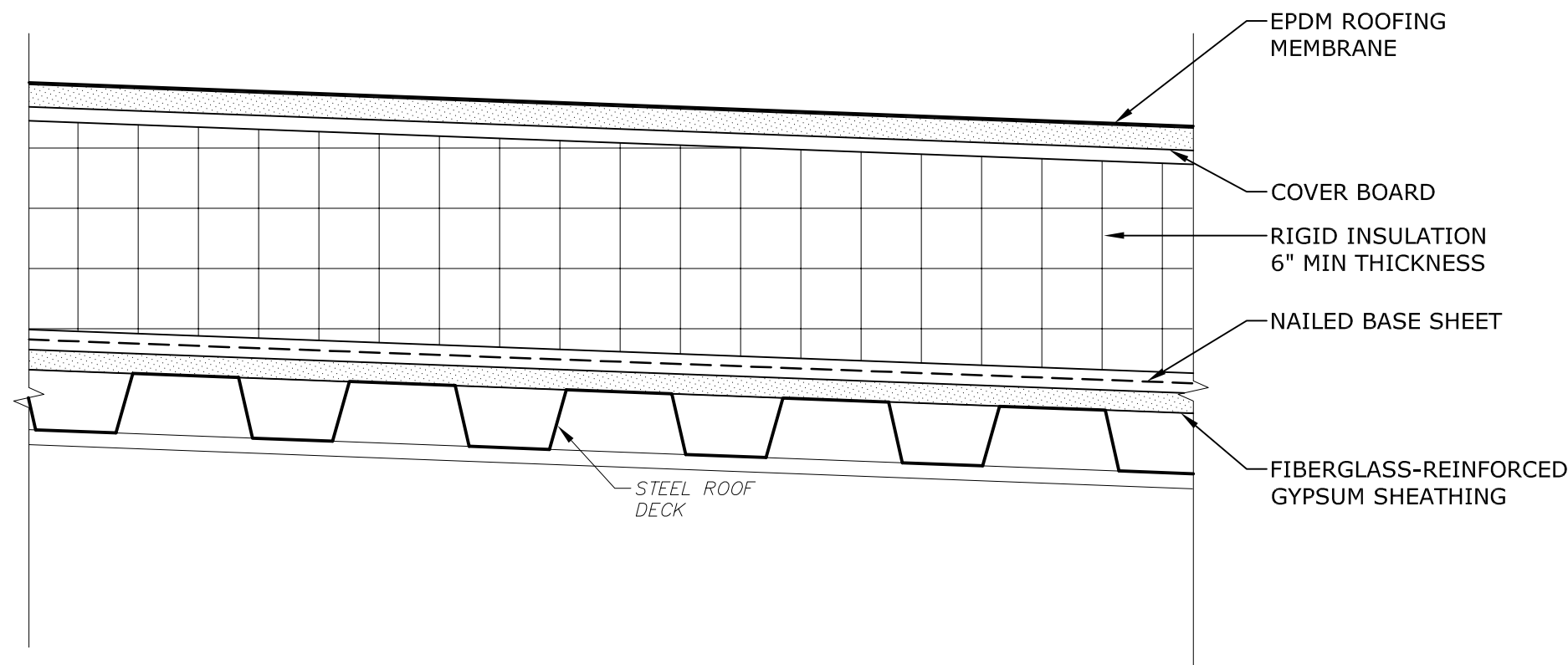
NOTES:

1. REMOVE AND DISPOSE OF ALL EXISTING HVAC EQUIPMENT CURBS.
2. SEE SHEET H-101 FOR HVAC EQUIPMENT REQUIREMENTS.

Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
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DATE: 06/20/2022		
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APPROVED: JPV		

A-101



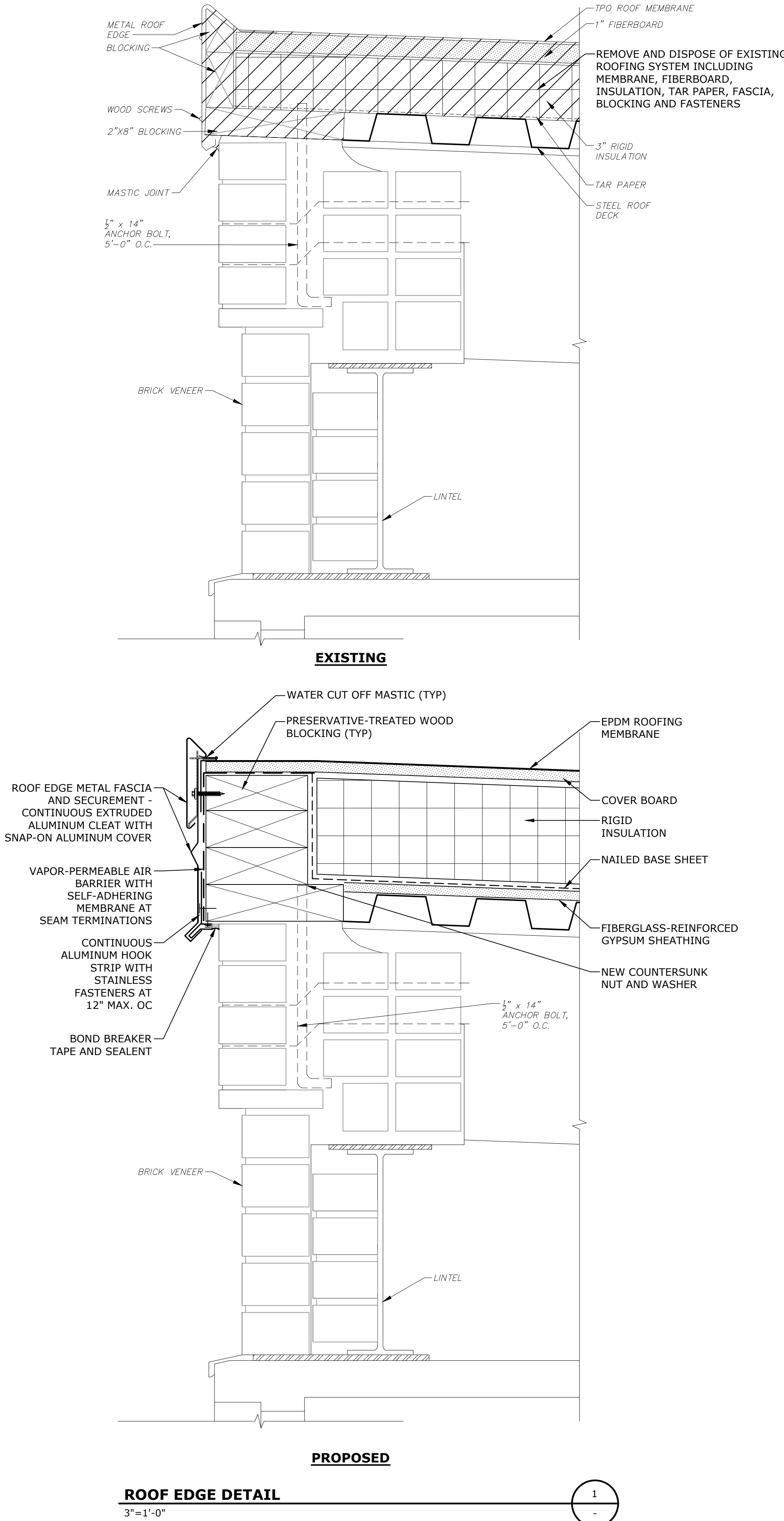
DETAIL	1
3" = 1'-0"	-

DETAIL	1
3" = 1'-0"	-

	ROOF DRAIN		GOOSENECK (INTAKE OR EXHAUST)
	VENT PIPE PENETRATION		EXHAUST CAP OR AIR INTAKE
	ROOFTOP EXHAUST FAN/DUCT WITH CURB		APPROXIMATE INSULATION THICKNESS
	ROOFTOP EQUIPMENT ON SLEEPERS		ROOF SLOPE LINE
	GAS PIPE ON PIPE SUPPORT		GUARDRAIL FOR FALL PROTECTION
			WALKPAD
			ROOF SLOPE DIRECTION

1. INSTALL NEW CURBING FOR ALL HVAC EQUIPMENT. NEW CURBS MUST BE MINIMUM 12" ABOVE NEW ROOFING. INSTALL NEW CRICKETS TO ENSURE PROPER DRAINAGE AT ALL ROOF CURBS.
2. ADJUST ELEVATION OF ROOF EDGES TO MATCH THE MAXIMUM INSULATION THICKNESS AT EACH ROOF DECK ELEVATION TO PROVIDE A LEVEL ROOF PERIMETER.
3. ROOF SLOPE TO BE 1/4" PER FOOT MINIMUM UNLESS NOTED OTHERWISE.
4. FOR SMALL-DIAMETER HVAC PENETRATIONS SEE DETAIL 2/A-502.

Last Saved: 6/27/2022
Plotted On: Jun 27, 2022 - 2:20pm By: ABS
Tighe & Bond 2:31PM M1215-026 Melrose Drawings Figures AutoCAD\Horace Mann School\Sheet\M1215-026-HORACE MANN - A-501.dwg



ROOF EDGE DETAIL

3"=1'-0"

1
-

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Project

City Of Melrose

Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
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DATE:		06/20/2022
FILE:		M1215-026-HORACE MANN - A-501.dwg
DRAWN BY:		AH
CHECKED:		MPW
APPROVED:		JPV

ROOF DETAILS - 1

SCALE: AS SHOWN

A-501

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Horace Mann
Elementary
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Replacement
Project

City Of Melrose

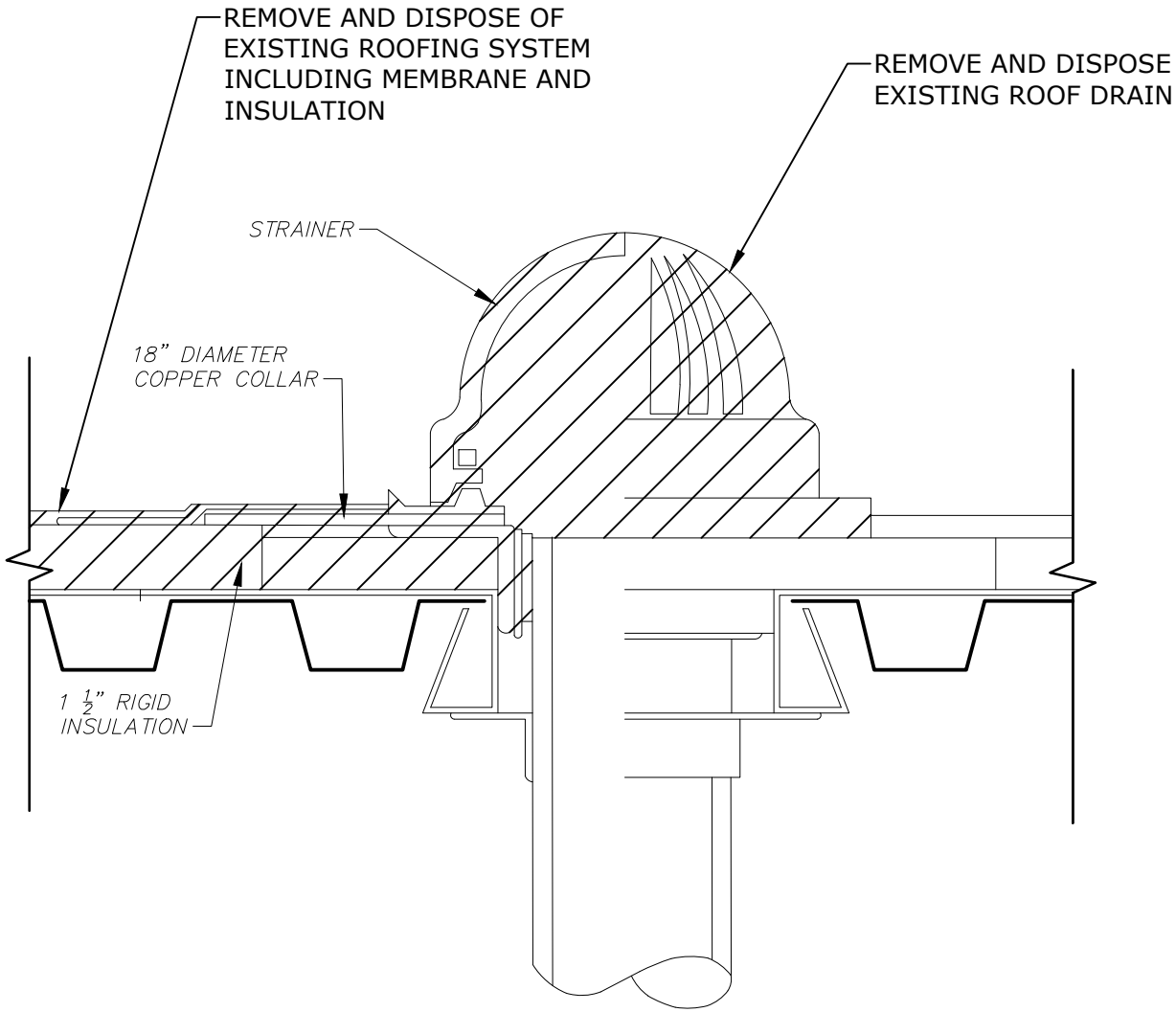
Melrose,
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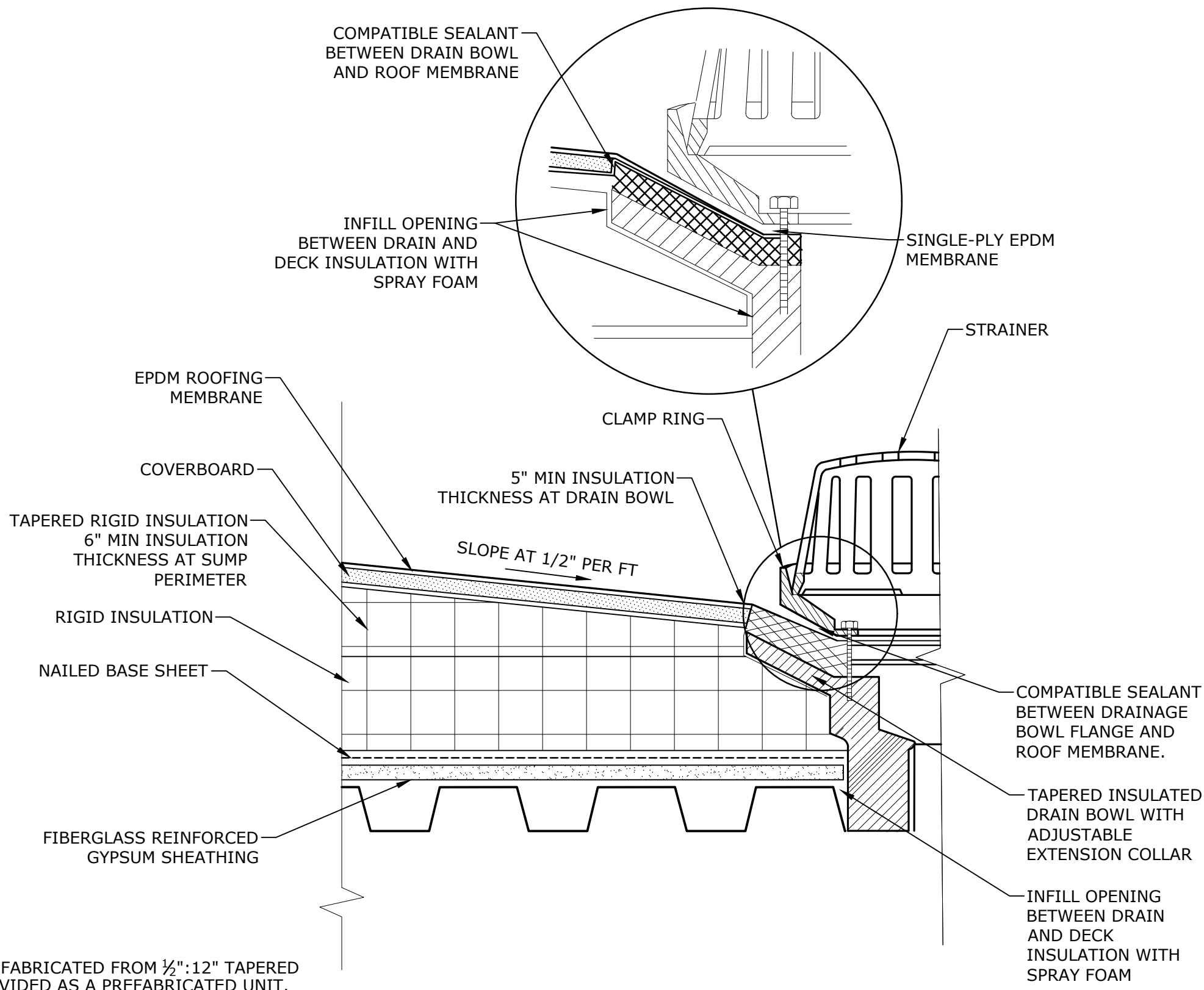
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SCALE: AS SHOWN

A-502



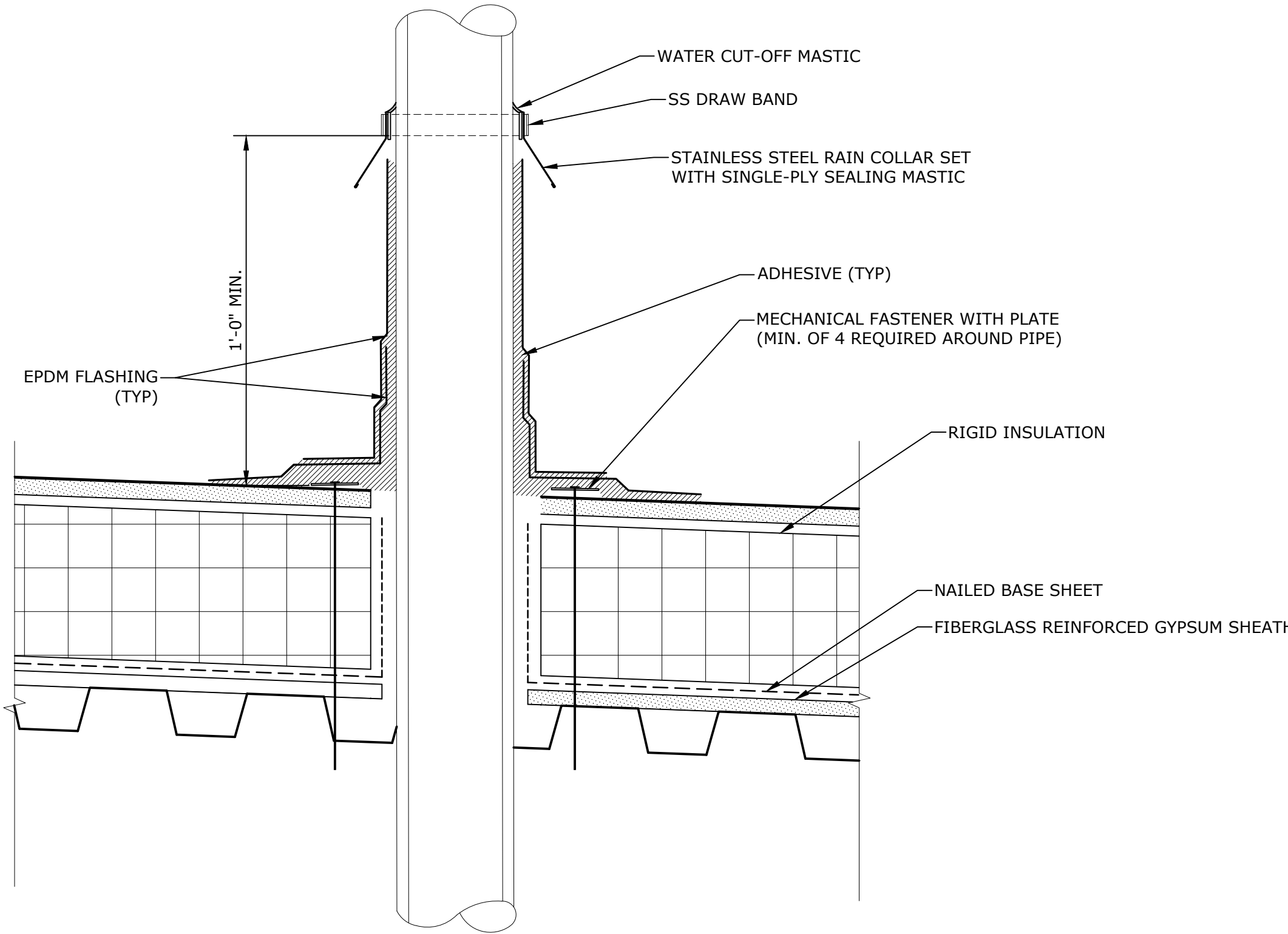
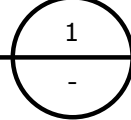
EXISTING



PROPOSED

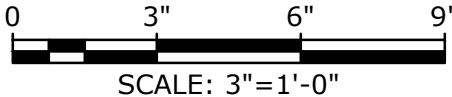
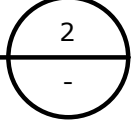
ROOF DRAIN DETAIL

3"=1'-0"



VENT STACK DETAIL

3"=1'-0"



SCALE: 3"=1'-0"

NOTES

1. SUMP MAY BE FIELD-FABRICATED FROM ½":12" TAPERED INSULATION OR PROVIDED AS A PREFABRICATED UNIT.

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Horace Mann
Elementary
School Roof
Replacement
Project

City Of Melrose

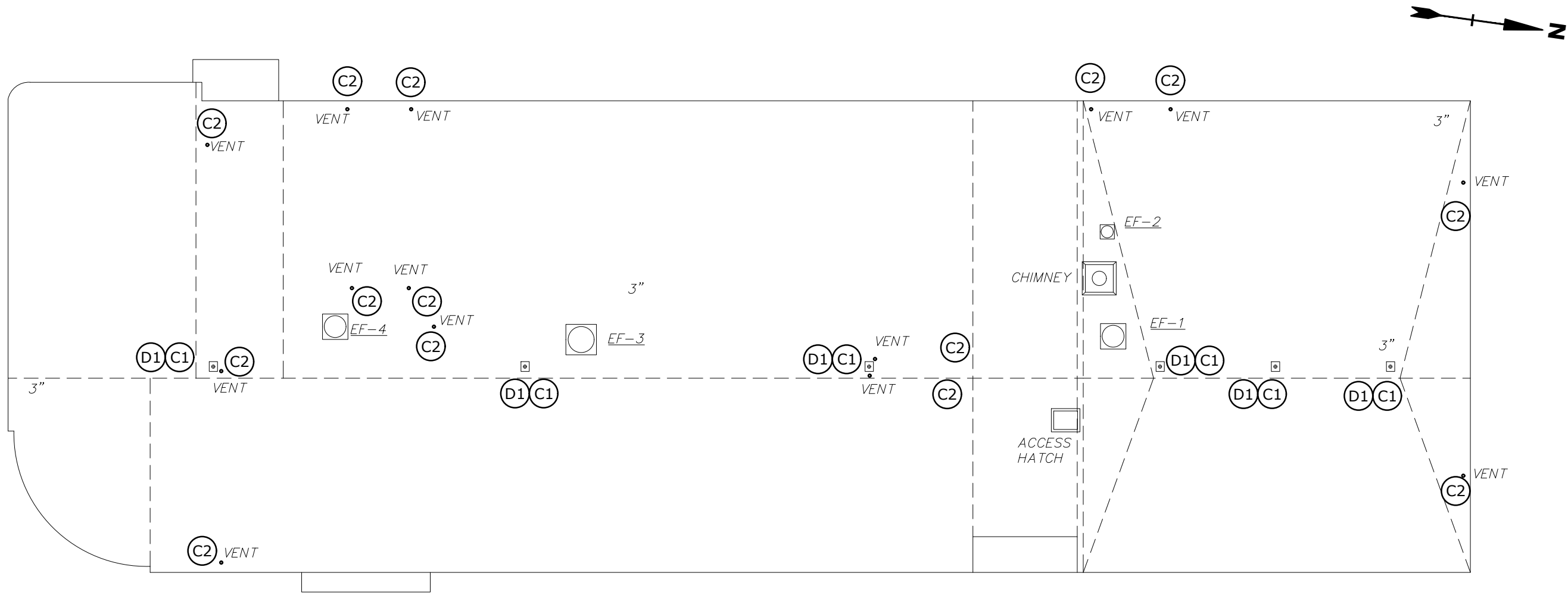
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HORACE MANN - P-101.dwg		
DRAWN BY: PL, JM		
CHECKED: MPW		
APPROVED: FJH, JPV		

PLUMBING ROOF PLAN

SCALE: AS SHOWN

P-101



PLUMBING ROOF DEMOLITION PLAN
1/16" = 1'-0"

- LEGEND
- ACCESS HATCH
 - ROOF DRAIN
 - VENT PIPE PENETRATION

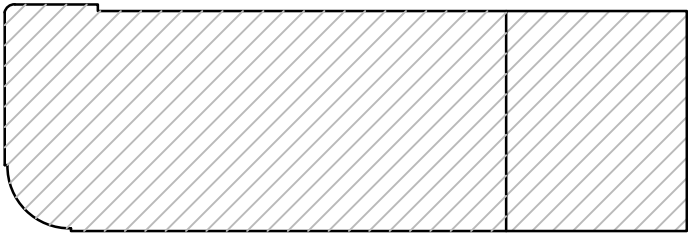
DEMOLITION KEY NOTES:

D1 REMOVE EXISTING ROOF DRAINS. CUT AND CAP EXISTING DRAIN PIPING AWAY FROM DRAIN BODY WITHIN BUILDING. PREPARE FOR FUTURE CONNECTION. COORDINATE EXTENT OF DEMOLITION W/ ROOFING CONTRACTOR TO CONFIRM ADEQUATE CLEARANCE FOR NEW ROOFING INSTALLATION IS PROVIDED.

CONSTRUCTION KEY NOTES:

C1 NEW ROOF DRAIN. DRAIN TO MATCH OUTLET SIZE OF 4". CONNECT NEW PIPE TO EXISTING STORM DRAINAGE SYSTEM WITHIN THE BUILDING. INSULATE RD SUMP AND NEW SECTION OF STORM DRAIN PIPING WITH 1-INCH FIBERGLASS INSULATION WITH ASJ. INSULATION THERMAL CONDUCTIVITY TO BE 0.21-0.27 BTU-IN/(h-ft²-°F). VERIFY TIE-IN LOCATION IN FIELD. COORDINATE WITH ROOFING CONTRACTOR AND GC.

C2 CONFIRM VENT SIZE IN FIELD. EXTEND VENT PIPE WITH SAME SIZE TO TERMINATE 24" ABOVE NEW ROOF.



HORACE MANN KEYPLAN
NO SCALE

0 8' 16' 32'
SCALE: 1/16"=1'-0"

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Horace Mann
Elementary
School Roof
Replacement
Project

City Of Melrose

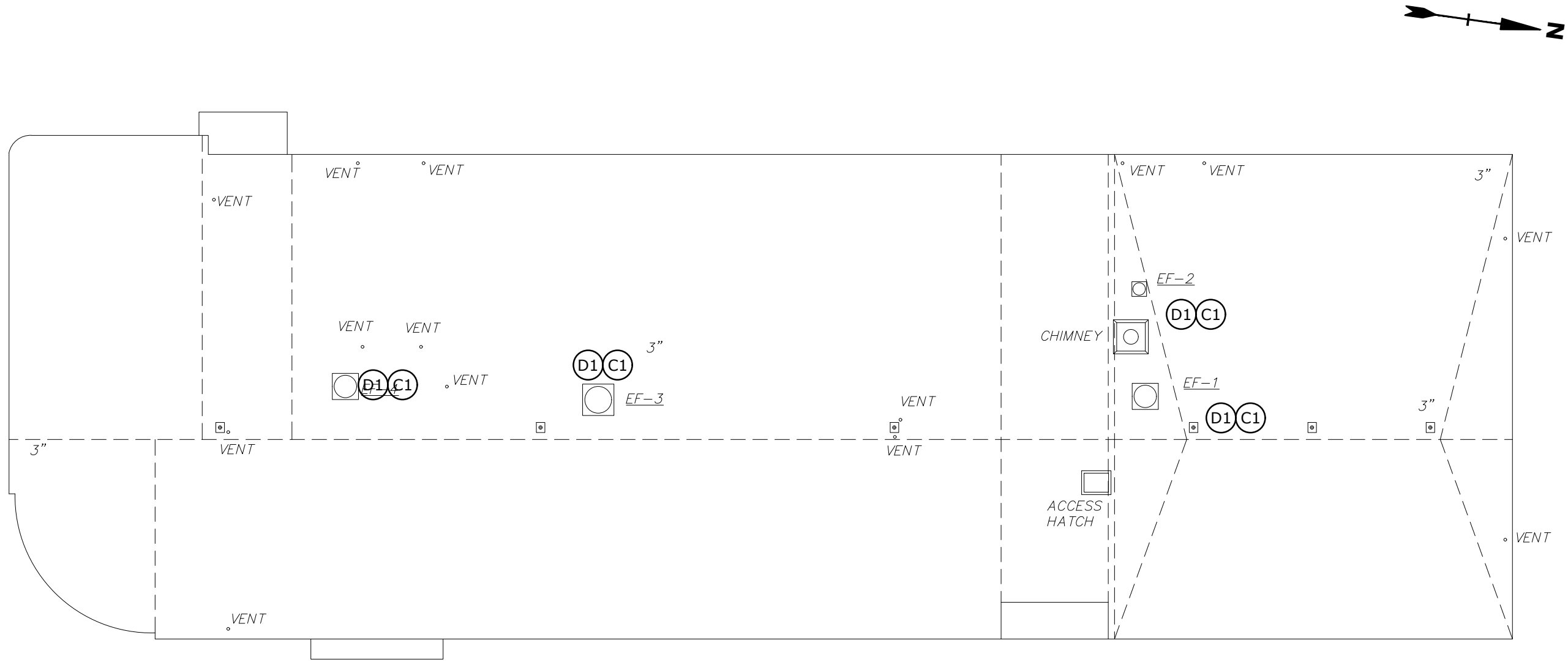
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HORACE MANN - H-101.dwg		
DRAWN BY: PL, JM		
CHECKED: MPW		
APPROVED: FJH, JPV		

HVAC ROOF PLAN

SCALE: AS SHOWN

H-101



LEGEND

- ACCESS HATCH
- EXHAUST FAN

GENERAL NOTES

- VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. COORDINATE ALL WORK WITH OTHER TRADES.
- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT.
- INSTALL EQUIPMENT AND SUPPORTS IN ACCORDANCE WITH ALL RELEVANT BUILDING CODES.
- FIELD VERIFY QUANTITY OF MECHANICAL EQUIPMENT, AND SUPPORTS TO BE REMOVED.
- PERFORM PRE-BALANCE TESTING OF ALL EXHAUST FANS PRIOR TO UNIT REMOVAL, RECORD AIRFLOWS FOR FINAL BALANCING EFFORTS. PROVIDE REPORT TO ENGINEER.
- PROVIDE TEMPORARY CAPS FOR ALL DUCTWORK. NO DUCTWORK SHALL REMAIN OPEN AT ANY TIME.
- DURING DEMOLITION, CONTROL WIRING IS TO BE DISCONNECTED AND PROTECTED FOR FUTURE USES/RECONNECTION.
- ALL MATERIALS, METHODS AND EQUIPMENT INSTALLED MUST BE IN COMPLIANCE WITH PROJECT SPECIFICATIONS AND APPLICABLE CODES.

GENERAL DEMOLITION NOTES

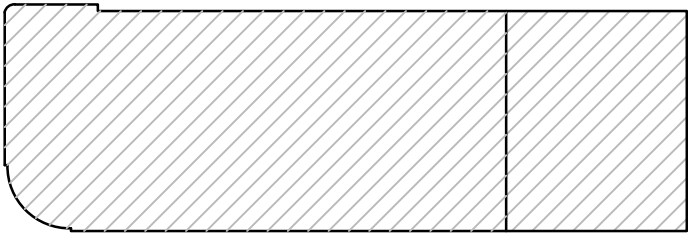
- IT IS NOT THE INTENT OF THESE DOCUMENTS TO SHOW EVERY DEVICE, APPURTENANCE, PIPE, WIRE, OR CONDUIT TO BE REMOVED. HVAC EQUIPMENT, UNITS, AND SYSTEMS NOT BEING REUSED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ASSOCIATED SUPPORTS.
- PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEP STANDARDS. INVENTORY, SALVAGE AND TURN OVER OR DISPOSE OF EQUIPMENT AT DIRECTION OF OWNER.
- ALL EXISTING SYSTEMS SHALL BE MADE FULLY OPERATIONAL, INCLUDING RECONNECTION TO SERVICES AND DUCTWORK.
- EXISTING EQUIPMENT TO BE REMOVED AND RE-INSTALLED SHALL BE FIELD VERIFIED FOR QUANTITY AND CONDITION. KEEP AN ACCURATE RECORD OF STORED EQUIPMENT INCLUDING CONDITION.
- SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING DEMOLITION SHALL BE CAREFULLY PROTECTED FROM DAMAGE AND CONTAMINATION BY THE CONSTRUCTION PROCESS.

DRAWING DEMOLITION NOTES:

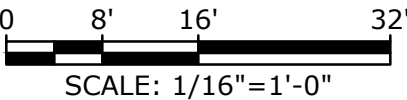
- (D1) DISCONNECT, REMOVE, AND STORE EXHAUST FAN. PROVIDE TEMPORARY CAP OVER DUCT OPENING. DEMOLISH ROOF CURB. MEASURE AIRFLOW OF FAN PRIOR TO UNIT REMOVAL.

DRAWING CONSTRUCTION NOTES:

- (C1) VERIFY ROOF OPENING AND FAN CURB-CAP DIMENSIONS. FURNISH NEW ROOF CURB WITH TRANSITION TO FAN AS REQUIRED (INSTALLED BY GC). CURB TO BE INSULATED AND A MINIMUM 12" ABOVE NEW ROOF. RE-INSTALL REMOVED FAN ON CURB, RECONNECT AND SEAL TO EXISTING DUCTWORK. CONNECT FAN TO EXISTING CONTROLS.



HORACE MANN KEYPLAN
NO SCALE



SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Horace Mann
Elementary
School Roof
Replacement
Project

City Of Melrose

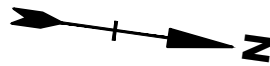
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HORACE MANN - E-101.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: FJH, JPV		

ELECTRICAL ROOF PLAN

SCALE: AS SHOWN

E-101



GENERAL NOTES:

- DISCONNECT AND MAKE SAFE THE EXISTING MECHANICAL EQUIPMENT FOR REMOVAL BY HVAC CONTRACTOR. THE EXISTING FEEDER SHALL BE DE-ENERGIZED AND LOCKED OUT FOR THE DURATION OF THE NEW ROOF WORK. RECONNECT EXISTING FEEDER TO EXISTING MECHANICAL EQUIPMENT UPON THE RE-INSTALLATION BY HVAC CONTRACTOR. MODIFY AND EXTEND CONDUIT AND WIRE AS REQUIRED.
- ALL CONDUIT RUNS ACROSS ROOF SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF ROOF UNLESS CONDUITS AND WIRE HAVE BEEN ABANDONED IN WHICH CASE THEY SHALL BE REMOVED PERMANENTLY. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CIRCUITING TO ROOF TOP EQUIPMENT.
- COORDINATE ALL DEVICE LOCATIONS WITH GC AND/OR OWNER PRIOR TO COMMENCEMENT OF WORK.
- THE LOCATIONS OF EXISTING EQUIPMENT ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF STRUCTURES BEFORE COMMENCING WORK. BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND EQUIPMENT AND STRUCTURES.
- ALL PANELBOARDS SHOWN ARE LOCATED ON THE BASEMENT FLOOR.

DEMOLITION LEGEND

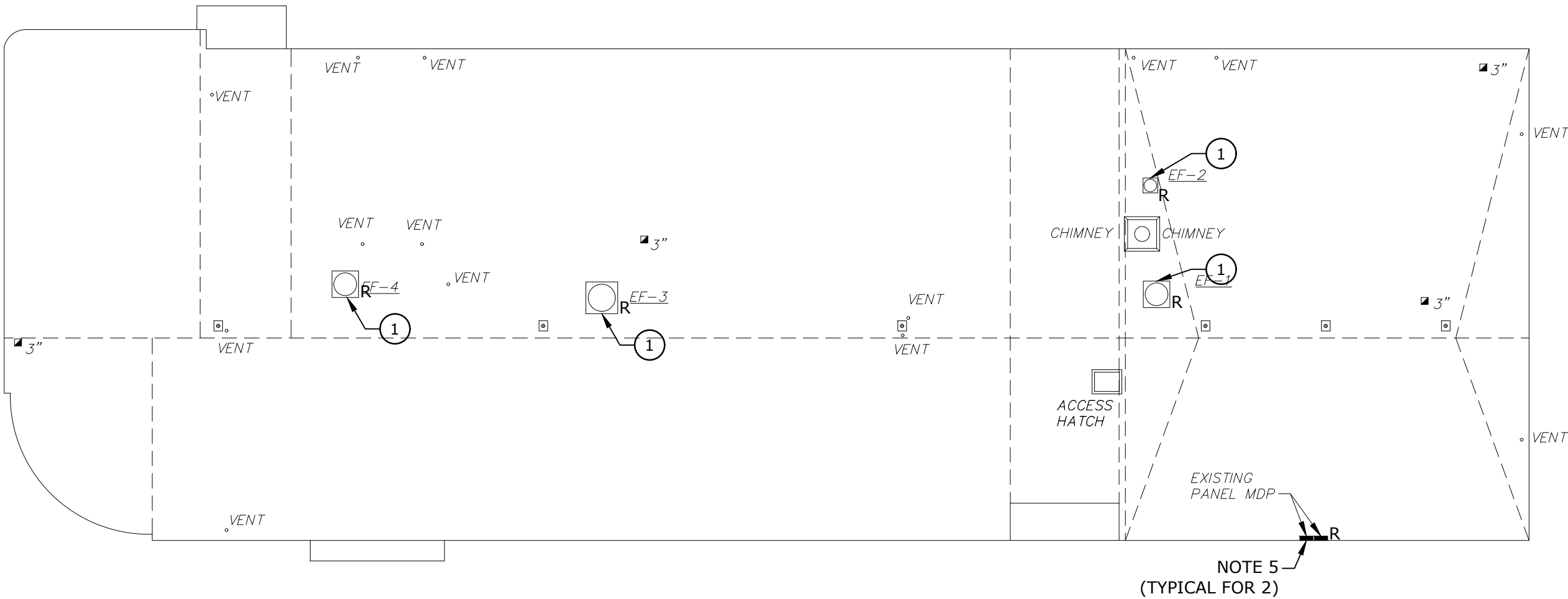
"R" EXISTING DEVICE TO REMAIN ACTIVE AS-IS. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

POWER DISTRIBUTION EQUIPMENT

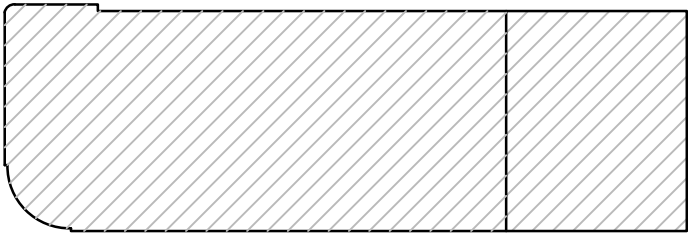
 PANELBOARD, SURFACE MOUNTED

ELECTRICAL KEY NOTES:

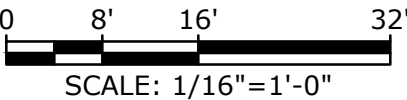
- DISCONNECT EXISTING EQUIPMENT. SECURE CONDUCTORS AND MAKE SAFE FOR ROOF INSTALLATION. LOCK OUT TAG OUT CIRCUIT AT LOCAL OVERCURRENT PROTECTION DEVICE. RECONNECT TO REINSTALLED EQUIPMENT. SEE GENERAL NOTE 1. REFER TO HVAC DRAWINGS FOR DETAILS.



ELECTRICAL ROOF PLAN
1/16" = 1'0"



HORACE MANN KEYPLAN
NO SCALE



**MSBA Accelerated Repair Program
Horace Mann Elementary School
Hoover Elementary School
Roof Replacement project
Melrose, MA**

**Schematic Design Estimate
June 27, 2022**

Tighe & Bond



198 North Washington St, #109, Boston MA 02114



**MSBA Accelerated Repair Program
Roof Replacement project
Melrose, MA
Schematic Design Estimate
BASIS OF ESTIMATE**

6/27/2022

Roof Replacement project

DOCUMENTATION

This estimate was prepared from the following information:

Schematic Design Drawings provided by Tighe & Bond design team, dated June 20, 2022

BASIS FOR PRICING

This estimate reflects the current construction value for the construction of this project and should not be construed as a prediction of a low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared.

PROJECT OUTLINE

The project consists of roof replacement at Horace Mann Elementary School and Hoover Elementary School in Melrose, MA.

QUALIFICATIONS

Owner costs and fees are excluded

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

Overtime outside industry standard

Work outside normal hours of operation

Preconstruction fees

Utility Company Charges or Hook-up fees have been excluded

No permits or special fees have been included

Third party commissioning costs.

Owner supplied and/or installed items (e.g.. Draperies, furniture and equipment)

Loose Furniture and Equipment

Owner Supplied and Installed Furniture, Fixtures and Equipment

Relocation / move costs

Air Quality monitoring / Vibration monitoring

Loose technology equipment (i.e. Computers, Printers, Etc.)

The estimate assumes all long-lead items can be pre-purchased to meet schedule requirements.

The estimate is based on the premise that the design will meet all codes, laws, ordinances, rules, and regulations in effect at the time that the estimate was prepared. The estimate shall be adjusted should any discrepancies between design

and the aforementioned codes, laws or ordinances result in, or require, an increase in the Cost 'of the Work

Items identified in the design as Not In Contract (NIC)

Builder's Risk insurance, terrorist insurance and other Owner insurances



Roof Replacement project

June 27, 2022

Horace Mann Elementary School

Melrose, MA

Schematic Design Estimate

		13,450 GSF		
			Cost / SF	
02 Existing Conditions		212,272	15.78	26.8%
05 Metals		5,380	0.40	0.7%
06 Wood, Plastics, and Composites		16,656	1.24	2.1%
07 Thermal & Moisture Protection		475,936	35.39	60.1%
22 Plumbing		29,864	2.22	3.8%
23 HVAC		25,226	1.88	3.2%
26 Electrical		25,960	1.93	3.3%
TOTAL DIRECT COST		791,294	58.83	100%
Design Contingency	15.00%	118,694	8.82	
General Conditions and General Requirements	11.50%	104,649	7.78	
Permits and fees	excluded	-	-	
Contractor's OH&P	5.00%	45,499	3.38	
Escalation (midpoint 2Q 2023)	5.00%	53,007	3.94	
Construction Contingency	excluded	-	-	
TOTAL ESTIMATED CONSTRUCTION COST		1,113,143	82.76	



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Horace Mann Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
1	02 Existing Conditions						
2	024100 <i>Selective Demolition</i>						
3	<i>Roof Demolition</i>						
4	Remove and disposed of existing roof - see Hazardous Materials Assessment	13,450	sf		Included		
5	Roof drain remove	2	ea		with plumbing		
6	Remove and dispose of access hatch	1	ea	450.00	450		
7	Existing insulation thickness test cut	4	ea	150.00	600		
8	Remove and dispose of all exiting exhaust fence curb and flashing	62	lf	18.00	1,116		
9	Remove and dispose of chimney flashing	22	lf	6.50	143		
10	Remove and dispose of vent flashing	16	ea	40.00	640		
11	Cutting and patching	1	ls	3,500.00	3,500		
12	Dispose, cart away	1	ls	400.00	400		
13	Temporary roof protection	13,450	sf	1.20	16,140		
14	Dust control	1	ls	4,708.00	4,708		
15	Allowance for overhead protection building entrance below.	150	sf	20.00	3,000		
16							
17	026000 <i>Hazardous Materials Assessment</i>						
18	ACM & PCB Abatement of roof	13,450	sf	13.50	181,575		
19							
20	Subtotal: Existing Conditions					\$ 212,272	
21							
22	05 Metals						
23	051000 <i>Structural Steel Framing</i>						
24	No work show in this section						
25	053000 <i>Metal Decking</i>						
26	Roof deck replacement at Roof B1 damaged areas, assumed 5% of roof area	673	sf	8.00	5,380		
27							
28	Subtotal: Metals					\$ 5,380	
29							
30							
31	06 Wood, Plastics, and Composites						
32	061600 <i>Rough Carpentry</i>						
33	Install new curbing for all HAVC equipment 12" above new roof	56	lf	48.00	2,688		
34	New 3x Pressure treated blocking at roof edge	538	lf	24.00	12,912		
35	Roof curb with two block between original building and 1955 addition	66	lf	16.00	1,056		
36							
37	Subtotal: Wood, Plastics, and Composites					\$ 16,656	
38							
39	07 Thermal & Moisture Protection						
40	075000 <i>Membrane Roofing</i>						
41	<i>New Construction</i>						
42	90 mil EDPM roofing system; 30 year warranty	13,450	sf	30.00	403,500		
43	Tapered crickets	4	ea	80.00	320		
44	New walkway pad, assumed 10% of roof area	1,345	sf	6.50	8,743		
45							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Horace Mann Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
46	076500 <i>Flashing and Sheet Metal</i>						
47	Roof edge metal fascia and securement, continuous extruded aluminum cleat, continuous aluminum hook strip with stainless fasteners	538	lf	49.00	26,362		
48	Snap-on aluminum cover	538	lf	38.00	20,444		
49	New flashing at HAVC equipment curbing	56	lf	14.00	784		
50	Stainless steel chimney flashing	20	lf	32.00	640		
51	Access hatch flashing	16	lf	18.00	288		
52	Vents pipe flashing	12	ea	85.00	1,020		
53	Roof drain flashing	6	ea	350.00	2,100		
54	Misc. roof flashing	1	al	1,500.00	1,500		
55							
56	077100 <i>Roof Specialties</i>						
57	Access hatch	1	ea	4,250.00	4,250		
58							
59	079100 <i>Joint Sealants</i>						
60	Exterior caulking and sealants at all roof penetrations	13,450	sf	0.45	5,985		
61							
62	Subtotal: Thermal & Moisture Protection					\$ 475,936	
63							
64	22 Plumbing						
65	Demolition						
66	Roof drains	6	ea	332.10	1,993		
67							
68	New						
69	Sanitary vent system						
70	Extend vent piping to 24"	14	ea	570.00	7,980		
71							
72	Roof drainage system						
73	Roof drain including new piping/insulation and tie-in to existing, Allowance	6	ea	1,648.50	9,891		Assume 4" drains
74							
75	Materials supply and bidding/market conditions allowance	1	ls	5,000.00	5,000		
76	Supervision/PM	1	ls	5,000.00	5,000		
77							
78	Subtotal: Plumbing					\$ 29,864	
79							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Horace Mann Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
80	23 HVAC						
81	Demolition						
82	Exhaust fans, store on site for reinstallation, Allowance	4	ea	764.10	3,056		
83							
84	New						
85	Exhaust fans, reinstall previously removed	4	ea	1,167.52	4,670		
86							
87	Miscellaneous to include seismic controls and testing/start-up	1	ls	2,500.00	2,500		
88	Materials supply and bidding/market conditions allowance	1	ls	10,000.00	10,000		
89							
90	Supervision/PM	1	ls	5,000.00	5,000		
91	Subtotal: HVAC					\$ 25,226	
92	26 Electrical						
93	Demolition						
94	Disconnect and makes safe exhaust fans, for removal by others	4	ea	300.00	1,200		
95	Re-work/remove/replace any conduit/wire as necessary, Allowance	1	ls	2,000.00	2,000		
96							
97	New						
98	Equipment and machinery power						
99	Extend circuit if necessary and reconnect exhaust fans	4	ea	1,390.02	5,560		
100							
101	Miscellaneous to include seismic controls and testing/start-up	1	ls	700.00	700		
102	Materials supply, small job premium and bidding/market conditions allowance	1	ls	15,000.00	15,000		
103							
104	Supervision/PM	1	ls	1,500.00	1,500		
105							
106	Subtotal: Electrical					\$ 25,960	
107							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

HORACE MANN ELEMENTARY SCHOOL, MELROSE, MA PRE-RENOVATION HBMA SERVICES

TO: Denise M. Gaffey – Directory and City Planner – City of Melrose
FROM: Frank Rodrigues – Tighe & Bond
COPY: Matthew Wzorek – Tighe & Bond
DATE: June 8, 2022

Tighe & Bond Inc., (Tighe & Bond) has prepared the following technical memorandum to summarize the Hazardous Building Material Assessment (HBMA) conducted at the Horace Mann Elementary School. (the "Site"). A facility improvement project, which includes full replacement of the existing roof is currently proposed for the school building. The current roof systems consists of a rubber membrane roof system with fiberboard insulation applied onto a metal roof deck. The HBMA was limited to the roof area being proposed for renovation impact. As required by state and federal regulations, characterization of various waste streams generated during construction projects must be completed to ensure their proper management.

The Assessment included a visual observation and bulk sampling of suspect hazardous building materials (asbestos, painted/coated building materials), and a visual inventory of other hazardous/regulated wastes (i.e., mercury-containing equipment, refrigerants, PCB-containing equipment, etc.). The HBMA was performed to support the proposed facility improvement project and to address/prepare budgets for management of environmentally related building materials.

Tighe & Bond's assessment and report are subject to the HBMA Limitations provided as Appendix A. The Assessment was performed on May 20, 2022, by Tighe & Bond's Massachusetts licensed asbestos inspector, Francisco J. Rodrigues, (#AI040131). Mr. Rodrigues' inspector license and certification are included as Appendix B of this report.

1 Hazardous Building Materials Assessment

1.1 Asbestos-Containing Building Materials

Prior to any type of building renovation or demolition, a thorough investigation is required to identify and quantify asbestos containing materials (ACM) which may be impacted by the demolition or renovation activities. The survey is required by the United States Environmental Protection Agency (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations (Title 40 CFR, Part 61, Subpart M); Massachusetts Department of Environmental Protection (MassDEP) regulations (310 CMR 7.15); Massachusetts Department of Labor Standards (MADLS) regulations, (454 CMR 28.00); as well as applicable portions of the Occupational Safety and Health Administration (OSHA) asbestos in construction regulations (CFR 1926.1101).

The asbestos assessment was limited to accessible areas of the roof and roof top equipment to determine the presence or absence of suspect ACM that have potential for disturbance during the proposed renovation activities and would be subject to abatement prior to roof replacement.

Suspect materials were divided into "homogeneous materials", building materials which were determined by the inspector to be homogeneous based on their color, texture, and age. A number of bulk samples of suspect ACM from each homogenous group of materials were collected in general accordance with standards described in the Environmental Protection Agency (EPA) Asbestos Hazard and Emergency Response Act (AHERA) Regulations for schools. AHERA sampling protocols are only recommended for use by MassDEP and EPA as they do not regulate bulk sampling standards.

Bulk samples were collected and submitted to Aerobiology Laboratories Associates Inc., (Aerobiology) of Woburn, Massachusetts for analysis via Polarized Light Microscopy with Dispersion Staining (PLM/DS) in accordance with the EPA/600/R-93/116 Method. ProScience is a Massachusetts licensed and American Industrial Hygiene Association (AIHA)-accredited asbestos laboratory.

Suspect materials identified and sampled are included as inventory tables in Appendix C. The tables describes material locations, sample numbers, quantities, condition, analytical results, and specific comments relative to our findings. The asbestos laboratory report is included in Appendix D.

The MassDEP defines a material that contains greater than or equal to one percent ($\geq 1\%$) asbestos utilizing PLM/DS, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos. Materials containing less than one percent ($< 1\%$) asbestos are regulated to a degree by OSHA related to work practices, worker exposure, and waste containerization and in Massachusetts, materials containing $< 1\%$ asbestos are considered asbestos-containing waste material (ACWM) and must be packaged and disposed of as ACWM in accordance with 310 CMR 7.15.

A total of nine homogeneous areas were identified during the inspection and 18 samples of suspect ACM were collected. The tar material or hot mop applied to the roof deck in the original section of the roof was determined to contain $< 1\%$ asbestos and therefore is classified as an ACWM.

Samples of other suspect ACM collected during the survey, were determined to be non-asbestos containing. Refer to Appendix C for a list of each suspect material identified and sampled.

Other suspect materials encountered during any renovation activities that are not identified in this report as being non-ACM should be assumed to be ACM until sample collection and laboratory analysis indicate otherwise.

Tighe & Bond recommends the bottommost roofing layer be treated as ACM. The ACMs identified at the Horace Mann School should be removed by a licensed asbestos abatement contractor, utilizing trained and licensed personnel prior to renovation, demolition or any activity that has the potential to disturb these materials. Tighe & Bond recommends the creation of a project specific asbestos abatement scope of work or technical specification for the removal of ACM. The specification must be developed by a Massachusetts licensed asbestos project designer, and it should address such important issues as regulatory requirements, notification procedures, insurance considerations, air sampling needs and other pertinent information. Abatement activities must be subject to a passing post abatement visual inspection by an asbestos monitoring firm not affiliated with the abatement contractor. The same firm typically collects, analyzes and reports the State required post abatement clearance air samples.

The current scope of construction does not call for the removal of the metal roof deck. In the event sections of the roof deck must be cut and replaced Tighe & Bond recommends those sections be removed by a licensed asbestos abatement contractor.

1.2 Universal Waste and Other Regulated Building Waste

Tighe & Bond performed a visual inspection of the proposed renovation areas to identify hazardous materials, universal waste materials or other regulated wastes that have the potential for disturbance during the roof replacement project. No regulated wastes were identified.

Appendices:

APPENDIX A: HBMA Limitations

APPENDIX B: Inspector's Certification

APPENIDX C: Suspect Asbestos Containing Materials Inventory Table

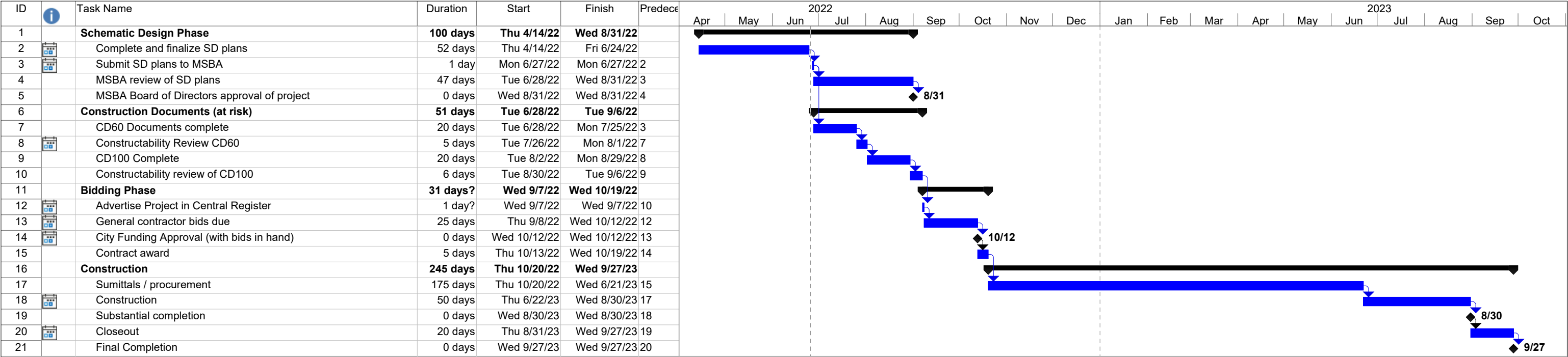
APPENDIX D: Asbestos Laboratory Report

J:\M\M1215\026 Melrose\HBMA\Horace Mann\Final Report\Horace Mann_Tech Memo_Final.docx

**EXHIBIT C
PROJECT SCHEDULE
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

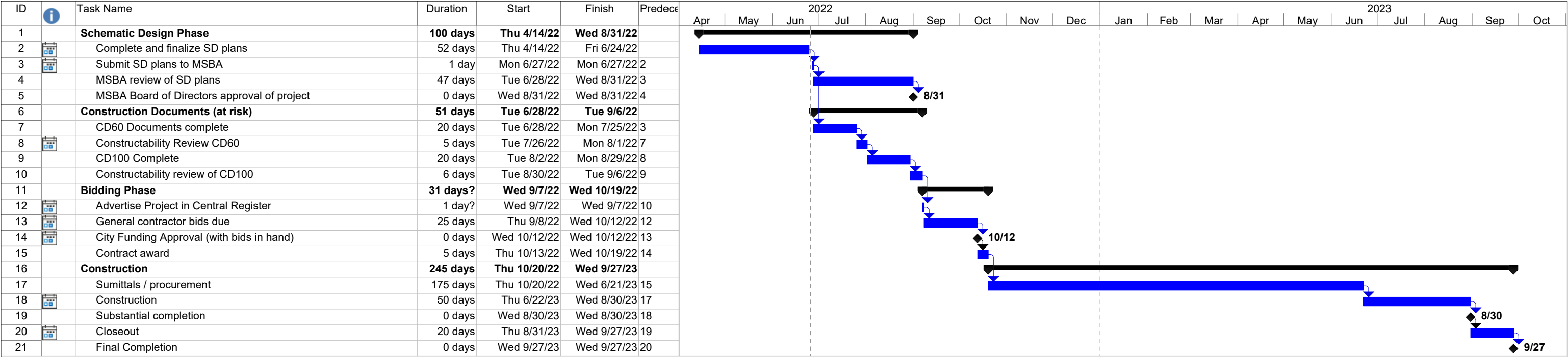
Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT



Hoover Elementary School - Melrose, MA
Date: Sun 6/26/22

Task		Project Summary		Inactive Summary		Manual Summary		External Milestone	
Split		External Tasks		Manual Task		Start-only		Progress	
Milestone		External Milestone		Duration-only		Finish-only		Deadline	
Summary		Inactive Milestone		Manual Summary Rollup		External Tasks			



Horace Mann Elementary School - Melrose, MA
Date: Sun 6/26/22

Task		Project Summary		Inactive Summary		Manual Summary		External Milestone	
Split		External Tasks		Manual Task		Start-only		Progress	
Milestone		External Milestone		Duration-only		Finish-only		Deadline	
Summary		Inactive Milestone		Manual Summary Rollup		External Tasks			

**EXHIBIT D
CASH FLOW
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

Melrose Public Schools Hoover Elementary School - CASH FLOW	Budget	To Date	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Total	Remaining	
OPM Feasibility Study	\$7,500	\$7,500																		\$7,500	\$0	
A&E Feasibility Study	\$49,100	\$49,100																		\$49,100	\$0	
OPM - Construction Contract Documents	\$20,434		\$10,217	\$10,217																\$20,434	\$0	
OPM - Bidding	\$8,960				\$4,480	\$4,480														\$8,960	\$0	
OPM - Construction Contract Administration	\$101,045						\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000	\$30,000	\$30,000	\$13,545			\$101,045	\$0	
OPM - Closeout	\$12,558																	\$6,279	\$6,279	\$12,558	\$0	
OPM - Reimbursable & Other Services	\$5,000				\$2,500	\$2,500														\$5,000	\$0	
AE - Construction Contract Documents	\$60,400		\$30,200	\$30,200																\$60,400	\$0	
AE - Bidding	\$4,400				\$2,200	\$2,200														\$4,400	\$0	
AE - Construction Contract Administration	\$34,600						\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$9,000	\$9,000	\$9,000	\$600			\$34,600	\$0	
AE - Closeout	\$3,600																	\$1,800	\$1,800	\$3,600	\$0	
AE - Hazardous Materials	\$10,700		\$1,500	\$1,500										\$2,700	\$2,500	\$2,500				\$10,700	\$0	
Construction Budget	\$1,881,016											\$150,000	\$150,000	\$200,000	\$500,000	\$500,000	\$200,000	\$181,016		\$1,881,016	\$0	
Construction Contingency	\$94,051											\$7,500	\$7,500	\$10,000	\$25,000	\$25,000	\$10,000	\$9,051		\$94,051	\$0	
Owner's Contingency	\$13,085																	\$7,000	\$6,085		\$13,085	\$0
Total Project Budget	\$2,306,449	\$56,600	\$41,917	\$41,917	\$9,180	\$9,180	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$161,000	\$161,000	\$231,700	\$566,500	\$566,500	\$224,145	\$205,146	\$14,164	\$2,306,449	\$0	
Cummulative Cash Out		\$56,600	\$98,517	\$140,434	\$149,614	\$158,794	\$162,294	\$165,794	\$169,294	\$172,794	\$176,294	\$337,294	\$498,294	\$729,994	\$1,296,494	\$1,862,994	\$2,087,139	\$2,292,285	\$2,306,449		\$0	

Melrose Public Schools Horace Mann Elementary School - CASH FLOW	Budget	To Date	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Total	Remainin
OPM Feasibility Study	\$7,500	\$7,500																		\$7,500	
A&E Feasibility Study	\$40,700	\$40,700																		\$40,700	
OPM - Construction Contract Documents	\$20,434		\$10,217	\$10,217																\$20,434	
OPM - Bidding	\$8,960				\$4,480	\$4,480														\$8,960	
OPM - Construction Contract Administration	\$101,045						\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000	\$30,000	\$30,000	\$13,545			\$101,045	
OPM - Closeout	\$12,558																	\$6,279	\$6,279	\$12,558	
OPM - Reimbursable & Other Services	\$5,000				\$2,500	\$2,500														\$5,000	
AE - Construction Contract Documents	\$41,400		\$20,700	\$20,700																\$41,400	
AE - Bidding	\$4,400				\$2,200	\$2,200														\$4,400	
AE - Construction Contract Administration	\$28,800						\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$8,000	\$8,000	\$8,000	\$1,300			\$28,800	
AE - Closeout	\$3,600																	\$1,800	\$1,800	\$3,600	
AE - Hazardous Materials	\$5,400		\$750	\$750										\$1,500	\$1,500	\$900				\$5,400	
Construction Budget	\$1,113,143											\$50,000	\$50,000	\$100,000	\$300,000	\$300,000	\$200,000	\$113,143		\$1,113,143	
Construction Contingency	\$55,657											\$2,500	\$2,500	\$5,000	\$15,000	\$15,000	\$10,000	\$5,657		\$55,657	
Owner's Contingency	\$11,580																	\$6,000	\$5,580	\$11,580	
Total Project Budget	\$1,460,177	\$48,200	\$31,667	\$31,667	\$9,180	\$9,180	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$55,500	\$55,500	\$124,500	\$354,500	\$353,900	\$224,845	\$132,879	\$13,659	\$1,460,177	
Cummulative Cash Out		\$48,200	\$79,867	\$111,534	\$120,714	\$129,894	\$132,894	\$135,894	\$138,894	\$141,894	\$144,894	\$200,394	\$255,894	\$380,394	\$734,894	\$1,088,794	\$1,313,639	\$1,446,518	\$1,460,177		

**EXHIBIT E
PROJECT SITE
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

**Herbert Clark Hoover Elementary School
37 Glendower Road
Melrose, MA 02176**

**Horace Mann Elementary School
40 Damon Ave
Melrose, MA 02176**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

**EXHIBIT F
FURNISHINGS AND EQUIPMENT
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

THERE IS NO EXHIBIT F

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

EXHIBIT G
STANDARD CONSTRUCTION CONTRACT INSURANCE
PROVISIONS FOR AN OWNER-CONTRACTOR CONTRACT
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

EXHIBIT "G"

**MASSACHUSETTS SCHOOL BUILDING AUTHORITY
STANDARD CONSTRUCTION CONTRACT INSURANCE PROVISIONS FOR AN
OWNER-CONTRACTOR CONTRACT
(Alternate Form for Construction Manager at Risk on Page 6 of this Exhibit)**

The District shall include, at a minimum, the following language regarding insurance requirements in the Owner-Contractor contract. The District may impose additional insurance requirements provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that, prior to issuing an invitation for bids for construction of the Project, the District shall give the Authority adequate written notice clearly describing any such additional requirements so that the Authority may, at its discretion, review and comment upon such additional requirements. Any such additional requirements may be set forth in Section 8 of the Insurance Requirements below. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary for the Project and should be included in the Owner-Contractor contract.

INSURANCE REQUIREMENTS (Design-Bid-Build)**1. Insurance Generally.**

A. The Contractor shall purchase and maintain insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the Contractor's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better as assigned by AM Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the Owner, or as otherwise acceptable to the Owner.

C. The Contractor shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self-insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:

- that the automobile liability, umbrella liability and pollution liability policies include the Authority and the Owner as additional insureds;
- that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this Contract;
- that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;
- the Contractor shall submit updated certificates of insurance prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.

D. The Contractor shall file one certified, complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner is damaged by the Contractor's failure to maintain such insurance and to comply with the terms of this Article, then the Contractor shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

E. Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to the Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

F. The Contractor is responsible for the payment of any and all deductibles under all of the insurance required herein. Neither the Owner nor the Authority shall in any instance be responsible for the payment of deductibles, self-insured retentions, or any portion thereof.

2. Contractor's Commercial General Liability.

A. The Contractor shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/project basis. The policy shall provide the following minimum coverage to protect the Contractor from claims with respect to the operations performed by Contractor and any employee, subcontractor, or supplier, or by anyone for whose acts they may be liable unless a higher coverage is specified in Section 8 below in which case the Contractor shall provide the additional coverage:

Bodily Injury &	\$1,000,000 each occurrence
Property Damage	\$2,000,000 general aggregate per project
Products & Completed Operations	\$1,000,000 annual aggregate
Personal & Advertising Injury	\$1,000,000 each occurrence
Medical Expenses	\$5,000

B. This policy shall include coverage relating to explosion, collapse, and underground property damage.

C. This policy shall include contractual liability coverage.

D. The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The Contractor shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

E. If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

F. This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

G. The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Authority and the Owner.

3. Automobile Liability.

A. The Contractor shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below in which case the Contractor shall provide the additional coverage:

Bodily Injury & Property Damage \$1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the Contractor, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall include coverage Form MCS-90.

C. The policy shall name the Authority and the Owner as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

4. Contractor's Pollution Liability.

The Contractor shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the Contractor during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Authority and the Owner shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below to this Contract, in which case the Contractor shall provide the additional coverage:

Limit of liability	\$1,000,000 per occurrence
	\$3,000,000 aggregate

5. Worker's Compensation.

A. The Contractor shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152, as amended, unless a higher coverage is specified in Section 8 below, in which case the Contractor shall provide the higher coverage:

Worker's Compensation	Statutory limits
Employer's Liability	\$ 500,000 each accident
	\$ 500,000 disease per employee
	\$ 500,000 disease policy aggregate

B. If specified in Section 8 below, the policy must be endorsed to cover United States Longshoremen & Harborworkers Act (USLHW), or Maritime Liability.

C. The policy shall contain a Waiver of Subrogation in favor of the Authority and the Owner.

6. Builder's Risk/ Installation Floater/Stored Materials.

Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of Contractor for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.

If specified in Section 8 below , Owner may require the Contractor to purchase and maintain coverage against loss or damage to the Work in accordance with the following requirements:

A. The Contractor shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

B. When Work will be completed on existing buildings owned by the Owner, the Contractor shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

C. The Contractor shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at an off Site location shall be forthwith replaced by the Contractor at no expense to the Owner or the Authority..

D. The policy or policies shall specifically state that they are for the benefit of and payable to the Authority, the Owner, the Contractor, and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the Contractor, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by the Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by the Contractor as fiduciary and made payable to the Contractor as fiduciary for the insureds. The Contractor shall pay the subcontractors their just shares of insurance proceeds received by the Contractor and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

7. Umbrella Coverage.

The Contractor shall provide Umbrella Coverage in a form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the Contractor shall provide the higher amount:

<u>Contract Price:</u>	<u>Limit of Liability:</u>
Under \$1,000,000	\$2,000,000 per occurrence
\$1,000,001 -- \$5,000,000	\$5,000,000 per occurrence
\$5,000,001-- \$10,000,000	\$10,000,000 per occurrence
\$10,000,001 and over	\$25,000,000 per occurrence

8. Additional Insurance Requirements

The Contractor shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

MASSACHUSETTS SCHOOL BUILDING AUTHORITY
STANDARD CONSTRUCTION CONTRACT INSURANCE PROVISIONS FOR A
CONSTRUCTION MANAGER AT RISK CONTRACT

The District shall include, at a minimum, the following language regarding insurance requirements in the Owner-Construction Manager at Risk ("CM") contract. The District may impose additional insurance requirements provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that, prior to issuing an RFQ for construction management at risk services for the Project, the District shall give the Authority adequate written notice clearly describing any such additional requirements so that the Authority may, at its discretion, review and comment upon such additional requirements. Any such additional requirements may be set forth in Section 8 of the Insurance Requirements below. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary for the Project and should be included in the Owner-CM contract.

INSURANCE REQUIREMENTS (CM at Risk)

1. Insurance Generally.

A. The CM shall purchase and maintain the insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the CM's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better assigned by AM Best Company, or equivalent rating assigned by a similar rating agency acceptable to the Owner or as otherwise acceptable to the Owner.

C. CM shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else that the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:

- that the automobile liability, umbrella liability and pollution liability policies include the Owner and the Authority as additional insureds;
- that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this construction contract;
- that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;
- CM shall submit updated certificates prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.

D. The CM shall file one certified complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner or the Authority is damaged by the CM's failure to maintain such insurance and to comply with the terms of this Article, then the CM shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

E. Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

F. The CM is responsible for the payment of any and all deductibles under all of the insurance required below unless the Owner and the Authority specifically provide a written waiver to the CM.

2. CM's Commercial General Liability.

A. The CM shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/per project basis. The policy shall provide the following minimum coverage to protect the CM from claims with respect to the operations performed by CM and any employee, subcontractor, or supplier, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury &	\$1,000,000	each occurrence
Property Damage	\$2,000,000	general aggregate, per project
Products & Completed Operations	\$1,000,000	annual aggregate
Personal & Advertising Injury	\$1,000,000	each occurrence
Medical Expenses	\$5,000	

B. This policy shall include coverage relating to explosion, collapse, and underground property damage.

C. This policy shall include contractual liability coverage.

D. The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The CM shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

E. If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

F. This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

G. The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Owner and the Authority.

3. Automobile Liability.

A. The CM shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury & Property Damage \$1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the CM, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall contain coverage Form MCS-90.

C. The policy shall name the Owner and the Authority as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

4. Contractor's Pollution Liability.

The CM shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the CM during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Owner and the Authority shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Limit of liability	\$1,000,000 per occurrence
	\$3,000,000 aggregate

5. Worker's Compensation.

A. The CM shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152 as amended, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the higher coverage:

Workers' Compensation	Statutory limits
Employer's Liability	\$ 500,000 each accident
	\$ 500,000 disease per employee
	\$ 500,000 disease policy aggregate

B. If specified in Section 8 below the policy must be endorsed to cover United States Longshoremens & Harborworkers Act (USLHW), or Maritime Liability for \$1,000,000/\$1,000,000.

C. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

6. Builder's Risk/ Installation Floater/Stored Materials.

Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of CM for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.

If specified in Section 8 below, Owner may require the CM to purchase and maintain coverage against loss or damage to the Work in accordance with the following requirements:

A. The CM shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the GMP. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C.** below.

B. When Work will be completed on existing buildings owned by the Owner, the CM shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C.** below.

C. The CM shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at some approved off Site location shall be forthwith replaced by the CM at no expense to the Owner or the Authority.

D. The policy or policies shall specifically state they are for the benefit of and payable to the Authority, the Owner, the CM, subcontractors and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the CM, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by CM as fiduciary and made payable to the Contractor as fiduciary for the insureds. CM shall pay the subcontractors their just shares of insurance proceeds received by the CM and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

7. Umbrella Coverage.

The CM shall provide Umbrella Coverage in form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the CM shall provide the higher amount:

<u>Contract Price:</u>	<u>Limit of Liability:</u>
Under \$1,000,000	\$2,000,000 per occurrence
\$1,000,000 -- \$5,000,000	\$5,000,000 per occurrence
\$5,000,001-- \$10,000,000	\$10,000,000 per occurrence
\$10,000,001 and over	\$25,000,000 per occurrence

8. Additional Insurance Requirements

The CM shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

**EXHIBIT H
EDUCATIONAL PROGRAM
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

THERE IS NO EXHIBIT H

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

**EXHIBIT I
REIMBURSEMENT RATE CERTIFICATION
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

MSBA Accelerated Repair Program Reimbursement Rate Certification Calendar Year 2021

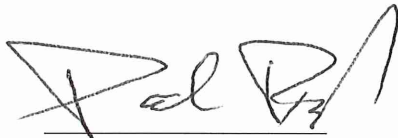
Melrose

MSBA Reimbursement Rate Calculation

Base Points	31.00
Income Factor	5.05
Property Wealth Factor	13.26
Poverty Factor	0
MSBA Reimbursement Rate	49.31

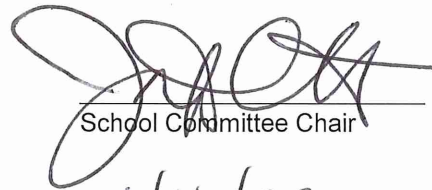
Certification

By signing this Reimbursement Rate Certification, I hereby certify that I have read, understand, and accept the reimbursement rate set forth above, and I hereby acknowledge and agree on behalf of the Eligible Applicant that the above-stated reimbursement rate is the rate that will be used to calculate the maximum Total Facilities Grant for the proposed project.



Local Chief Executive Officer

6/16/2022
Date



School Committee Chair

6/16/22
Date



Superintendent of Schools

6/16/2022
Date

**EXHIBIT J
ELECTRONIC PAYMENT FORM
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-27 : Horace Mann School Roof Replacement)

PROJECT FUNDING AGREEMENT

(Please print on District letterhead)

Banking Information Template

_____ District hereby instructs the Massachusetts School Building Authority make grant payments via electronic ACH directly to the following account:

MSBA Project ID#*: _____

***All future project payments will be made to this account unless the MSBA receives specific instructions to distribute payments to a separate account for each project.**

District Contact Name: _____

Signature: _____

District Telephone No.: _____

Banking Information for ACH Transactions

Financial Institution Name: _____

Financial Institution Address: _____

City & State: _____

Account No.: _____

Transit Number (ABA#): _____
(Routing #)

Please return the completed form to Xingzhen (Stephanie) Bai:

- via email at Xingzhen.Bai@MassSchoolBuildings.org

An acknowledgment of receipt of a new Banking Information Template will be sent to the Eligible Applicant, Treasurer or Business Manager, and District Contact listed on the form.



CITY OF MELROSE

Office of Treasurer-Collector

Kathryn J Armata
Treasurer-Collector

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Treasurer - (781) 979-4162
Collector - (781) 979-4120
Fax - (781) 665-6877

MEMORANDUM

To: Melrose City Council
Mayor Brodeur

From: Kathryn Armata

Date: September 20, 2022

Re: Loan Order –Herbert Clark Hoover Elementary School Roof Replacement

ORDERED: That the City appropriates \$2,306,449 for the purpose of paying costs of replacing the roof at the Herbert Clark Hoover Elementary School located at 37 Glendower Road, Melrose, Massachusetts, including the payment of all costs incidental and related thereto (the "Project"), which proposed Project would materially extend the useful life of the school and preserve an asset that otherwise is capable of supporting the required educational program, and for which the City may be eligible for a grant from the Massachusetts School Building Authority (the "MSBA"), said amount to be expended under the direction of the Office of Planning and Community Development; that to meet this appropriation, the Treasurer, with the approval of the Mayor, is authorized to borrow said amount under and pursuant to Chapter 44, Section 7(1) or Chapter 70B of the General Laws, or pursuant to any other enabling authority, and to issue bonds or notes of the City therefor; that the City acknowledges that the MSBA's grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the City incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the City; that any grant that the City may receive from the MSBA for the Project shall not exceed the lesser of (1) forty-nine and thirty-one hundredths percent (49.31%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA; and that the amount of the borrowing authorized by this order shall be reduced by any grant amount set forth in and received pursuant to the Project Funding Agreement that may be executed between the City and the MSBA.

Pursuant to Section 56-14 of the City Ordinances, attached is a projection of the principal and interest costs on the bonds proposed to be authorized by the following loan orders under

Attachment: Order for Hoover Roof funding authorization (ORDER-2023-28 : Hoover School Roof Replacement)

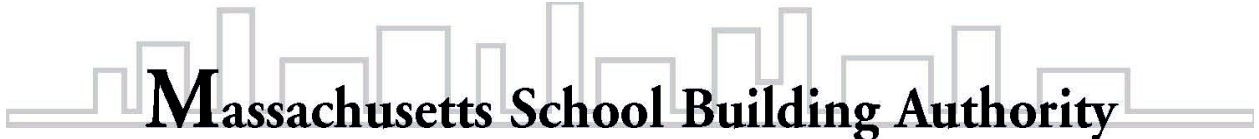
consideration by the City Council. The payment schedule attached assumes a 30-year borrowing term, an interest rate assumption of 5.5% over the life of the borrowing, and a level debt service payment schedule. The debt service on these bonds will not be paid from an enterprise fund and will have no impact on any enterprise fund rates."

FINANCIAL IMPACT: See attached

BOND DEBT SERVICE
City of Melrose, Massachusetts
Proposed \$2,306,449 Hoover Elementary School Roof Bonds
30 years - Level Debt Service
Interest Estimated and Subject to Change

	Dated Date Delivery Date		09/15/2023 09/15/2023		
Period Ending	Principal	Coupon	Interest	Debt Service	Annual Debt Service
03/15/2024	-	-	63,427.35	63,427.35	-
06/30/2024	-	-	-	-	63,427.35
09/15/2024	36,449.00	5.500%	63,427.35	99,876.35	-
03/15/2025	-	-	62,425.00	62,425.00	-
06/30/2025	-	-	-	-	162,301.35
09/15/2025	30,000.00	5.500%	62,425.00	92,425.00	-
03/15/2026	-	-	61,600.00	61,600.00	-
06/30/2026	-	-	-	-	154,025.00
09/15/2026	35,000.00	5.500%	61,600.00	96,600.00	-
03/15/2027	-	-	60,637.50	60,637.50	-
06/30/2027	-	-	-	-	157,237.50
09/15/2027	35,000.00	5.500%	60,637.50	95,637.50	-
03/15/2028	-	-	59,675.00	59,675.00	-
06/30/2028	-	-	-	-	155,312.50
09/15/2028	40,000.00	5.500%	59,675.00	99,675.00	-
03/15/2029	-	-	58,575.00	58,575.00	-
06/30/2029	-	-	-	-	158,250.00
09/15/2029	40,000.00	5.500%	58,575.00	98,575.00	-
03/15/2030	-	-	57,475.00	57,475.00	-
06/30/2030	-	-	-	-	156,050.00
09/15/2030	45,000.00	5.500%	57,475.00	102,475.00	-
03/15/2031	-	-	56,237.50	56,237.50	-
06/30/2031	-	-	-	-	158,712.50
09/15/2031	45,000.00	5.500%	56,237.50	101,237.50	-
03/15/2032	-	-	55,000.00	55,000.00	-
06/30/2032	-	-	-	-	156,237.50
09/15/2032	50,000.00	5.500%	55,000.00	105,000.00	-
03/15/2033	-	-	53,625.00	53,625.00	-
06/30/2033	-	-	-	-	158,625.00
09/15/2033	50,000.00	5.500%	53,625.00	103,625.00	-
03/15/2034	-	-	52,250.00	52,250.00	-
06/30/2034	-	-	-	-	155,875.00
09/15/2034	55,000.00	5.500%	52,250.00	107,250.00	-
03/15/2035	-	-	50,737.50	50,737.50	-
06/30/2035	-	-	-	-	157,987.50
09/15/2035	55,000.00	5.500%	50,737.50	105,737.50	-
03/15/2036	-	-	49,225.00	49,225.00	-
06/30/2036	-	-	-	-	154,962.50
09/15/2036	60,000.00	5.500%	49,225.00	109,225.00	-
03/15/2037	-	-	47,575.00	47,575.00	-
06/30/2037	-	-	-	-	156,800.00
09/15/2037	65,000.00	5.500%	47,575.00	112,575.00	-
03/15/2038	-	-	45,787.50	45,787.50	-
06/30/2038	-	-	-	-	158,362.50
09/15/2038	65,000.00	5.500%	45,787.50	110,787.50	-
03/15/2039	-	-	44,000.00	44,000.00	-
06/30/2039	-	-	-	-	154,787.50
09/15/2039	70,000.00	5.500%	44,000.00	114,000.00	-
03/15/2040	-	-	42,075.00	42,075.00	-
06/30/2040	-	-	-	-	156,075.00
09/15/2040	75,000.00	5.500%	42,075.00	117,075.00	-
03/15/2041	-	-	40,012.50	40,012.50	-
06/30/2041	-	-	-	-	157,087.50
09/15/2041	80,000.00	5.500%	40,012.50	120,012.50	-
03/15/2042	-	-	37,812.50	37,812.50	-
06/30/2042	-	-	-	-	157,825.00
09/15/2042	85,000.00	5.500%	37,812.50	122,812.50	-
03/15/2043	-	-	35,475.00	35,475.00	-
06/30/2043	-	-	-	-	158,287.50
09/15/2043	90,000.00	5.500%	35,475.00	125,475.00	-
03/15/2044	-	-	33,000.00	33,000.00	-
06/30/2044	-	-	-	-	158,475.00
09/15/2044	90,000.00	5.500%	33,000.00	123,000.00	-
03/15/2045	-	-	30,525.00	30,525.00	-
06/30/2045	-	-	-	-	153,525.00
09/15/2045	100,000.00	5.500%	30,525.00	130,525.00	-
03/15/2046	-	-	27,775.00	27,775.00	-
06/30/2046	-	-	-	-	158,300.00
09/15/2046	105,000.00	5.500%	27,775.00	132,775.00	-
03/15/2047	-	-	24,887.50	24,887.50	-
06/30/2047	-	-	-	-	157,662.50
09/15/2047	110,000.00	5.500%	24,887.50	134,887.50	-
03/15/2048	-	-	21,862.50	21,862.50	-
06/30/2048	-	-	-	-	156,750.00
09/15/2048	115,000.00	5.500%	21,862.50	136,862.50	-
03/15/2049	-	-	18,700.00	18,700.00	-
06/30/2049	-	-	-	-	155,362.50
09/15/2049	120,000.00	5.500%	18,700.00	138,700.00	-
03/15/2050	-	-	15,400.00	15,400.00	-
06/30/2050	-	-	-	-	154,100.00
09/15/2050	130,000.00	5.500%	15,400.00	145,400.00	-
03/15/2051	-	-	11,825.00	11,825.00	-
06/30/2051	-	-	-	-	157,225.00
09/15/2051	135,000.00	5.500%	11,825.00	146,825.00	-
03/15/2052	-	-	8,112.50	8,112.50	-
06/30/2052	-	-	-	-	154,937.50
09/15/2052	145,000.00	5.500%	8,112.50	153,112.50	-
03/15/2053	-	-	4,125.00	4,125.00	-
06/30/2053	-	-	-	-	157,237.50
09/15/2053	150,000.00	5.500%	4,125.00	154,125.00	-
06/30/2054	-	-	-	-	154,125.00
	2,306,449.00		2,459,679.70	4,766,128.70	4,766,128.70

Attachment: Order for Hoover Roof funding authorization (ORDER-2023-28 : Hoover School Roof Replacement)



Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

August 31, 2022

The Honorable Paul Brodeur, Mayor
City of Melrose
Melrose City Hall
562 Main Street
Melrose, MA 02176

Re: City of Melrose, Herbert Clark Hoover Elementary School, Horace Mann Elementary School

Dear Mayor Brodeur:

I am pleased to report that the Board of the Massachusetts School Building Authority (the “MSBA”) voted to approve the Proposed Accelerated Repair Project (the “Proposed Project”) in the City of Melrose (the “City”) for a roof replacement project at the Herbert Clark Hoover Elementary School, and a roof replacement project at the Horace Mann Elementary School.

The Board approved an Estimated Maximum Total Facilities Grant for each project as shown in the table below, which does not include any funds for potentially eligible Owner’s or Construction Contingency Expenditures. In the event that the MSBA determines that any Owner’s and/or Construction Contingency Expenditures are eligible for reimbursement, the Maximum Total Facilities Grant for the Herbert Clark Hoover Elementary School and Horace Mann Elementary School Projects may increase to each amount shown below. The final grant amounts will be determined by the MSBA based on a review and audit of all project costs incurred by the City, in accordance with the MSBA’s regulations, policies, and guidelines and the Project Funding Agreement. The final grant amount may be an amount less than the Estimated Maximum Total Facilities Grant.

Project Funding Agreement	Herbert Clark Hoover Elementary School	Horace Mann Elementary School
Estimated Maximum Total Facilities Grant	\$1,021,573	\$624,400
Maximum Total Facilities Grant	\$1,069,127	\$649,456

Pursuant to the terms of the MSBA’s Accelerated Repair Program, the City has 90 days to acquire and certify local approval for an appropriation and all other necessary local votes or approvals showing acceptance of the cost, site, type, scope and timeline for the Herbert Clark

Page 2
 August 31, 2022
 Melrose ARP PFA Board Action Letter

Hoover Elementary School and the Horace Mann Elementary School Projects. Upon receipt of the certified votes demonstrating local approval, the MSBA and the City will execute a Project Funding Agreement, which will set forth the terms and conditions pursuant to which the City will receive its grant from the MSBA. Once the Project Funding Agreement has been executed by both parties, the City will be eligible to submit requests for reimbursement for Proposed Project costs to the MSBA.

We will be contacting you soon to discuss these next steps in more detail, but in the meantime, I wanted to share with you the Board's approval of the Herbert Clark Hoover Elementary School and Horace Mann Elementary School Projects in the City of Melrose for a roof replacement project at the Herbert Clark Hoover Elementary School, and a roof replacement project at the Horace Mann Elementary School, and the Board's authorization to execute a Project Funding Agreement for these Proposed Projects.

Sincerely,



John K. McCarthy
 Executive Director

Cc: Legislative Delegation
 Christopher C. Cinella, President, Melrose City Council
 Denise M. Gaffey, Director of Planning and Community Development, City of Melrose
 Jen McAndrew, Chair, Melrose School Committee
 Dr. Julie Kukenberger, Superintendent, Melrose Public Schools
 Jon Lemieux, Owner's Project Manager, Vertex Companies, Inc.
 Joseph P. Viamari, Jr., Designer, Tighe & Bond, Inc.
 File: 10.2 Letters

Attachment: MSBA ARP Award Letter 8_31_2022 (ORDER-2023-28 : Hoover School Roof Replacement)

**EXHIBIT A
PROJECT BUDGET
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

City of Melrose
Herbert Clark Hoover Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Feasibility Study Agreement				
OPM Feasibility Study	\$7,500	\$0	\$7,500	
A&E Feasibility Study	\$49,100	\$0	\$49,100	
Env. & Site	\$0	\$0	\$0	
Other	\$0	\$0	\$0	
Feasibility Study Agreement Subtotal	\$56,600	\$0	\$56,600	\$27,909
Administration				
Legal Fees	\$0	\$0	\$0	\$0
Owner's Project Manager				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$20,434	\$0	\$20,434	
Bidding	\$8,960	\$0	\$8,960	
Construction Contract Administration	\$101,045	\$0	\$101,045	
Closeout	\$12,558	\$0	\$12,558	
Extra Services	\$0	\$0	\$0	
Reimbursable & Other Services	\$5,000	\$0	\$5,000	
Cost Estimates	\$0	\$0	\$0	
Advertising	\$0	\$0	\$0	
Permitting	\$0	\$0	\$0	
Owner's Insurance	\$0	\$0	\$0	
Other Administrative Costs	\$0	\$0	\$0	
Administration Subtotal	\$147,997	\$0	\$147,997	\$72,977
Architecture and Engineering				
Basic Services				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$60,400	\$0	\$60,400	
Bidding	\$4,400	\$0	\$4,400	
Construction Contract Administration	\$34,600	\$0	\$34,600	
Closeout	\$3,600	\$0	\$3,600	
Other Basic Services	\$0	\$0	\$0	
Basic Services Subtotal	\$103,000	\$0	\$103,000	
Reimbursable Services				
Construction testing	\$0	\$0	\$0	
Printing (over minimum)	\$0	\$0	\$0	
Other Reimbursable Costs	\$0	\$0	\$0	
Hazardous Materials	\$10,700	\$0	\$10,700	
Geotech & Geo-Env.	\$0	\$0	\$0	
Site Survey	\$0	\$0	\$0	
Wetlands	\$0	\$0	\$0	
Traffic Studies	\$0	\$0	\$0	
Architectural/Engineering Subtotal	\$113,700	\$0	\$113,700	\$56,065
CM & Risk Preconstruction Services				
Pre-Construction Services	\$0	\$0	\$0	\$0
Site Acquisition				
Land/Building Purchase	\$0	\$0	\$0	
Appraisal Fees	\$0	\$0	\$0	
Recording fees	\$0	\$0	\$0	
Site Acquisition Subtotal	\$0	\$0	\$0	\$0
Construction Costs				
Construction Budget	\$0	\$0		
GMP Fee	\$0	\$0		
GMP Insurance	\$0	\$0		
GMP Contingency	\$0	\$0		
Division 1 - General Requirements	\$543,866	\$0		
Division 2 - Existing Conditions	\$340,900	\$0		
Division 3 - Concrete	\$0	\$0		
Division 4 - Masonry	\$16,200	\$0		
Division 5 - Metals	\$157,086	\$0		
Division 6 - Woods, Plastics and Composites	\$28,464	\$0		
Division 7 - Thermal and Moisture Protection	\$654,165	\$127,577		
Division 8 - Openings	\$0	\$0		
Division 9 - Finishes	\$0	\$0		
Division 10 - Specialties	\$0	\$0		
Division 11 - Equipment	\$0	\$0		
Division 12 - Furnishings	\$0	\$0		
Division 13 - Special Construction	\$0	\$0		
Division 14 - Conveying Systems	\$0	\$0		
Division 21 - Fire Suppression	\$0	\$0		
Division 22 - Plumbing	\$32,685	\$0		
Division 23 - HVAC	\$63,526	\$0		
Division 25 - Integrated Automation	\$0	\$0		
Division 26 - Electrical	\$44,124	\$0		
Division 27 - Communications	\$0	\$0		
Division 28 - Electronic Safety and Security	\$0	\$0		
Division 31 - Earthwork	\$0	\$0		
Division 32 - Exterior Improvements	\$0	\$0		
Division 33 - Utilities	\$0	\$0		
Construction Budget	\$1,881,016	\$127,577	\$1,753,439	\$864,621
Alternates				
	\$0	\$0	\$0	
	\$0	\$0	\$0	
	\$0	\$0	\$0	
Alternates Subtotal	\$0	\$0	\$0	\$0
Miscellaneous Project Costs				
Utility company Fees	\$0	\$0	\$0	
Testing Services	\$0	\$0	\$0	
Swing Space/Modulars	\$0	\$0	\$0	
Other Project Costs (Mailing & Moving)	\$0	\$0	\$0	
Misc. Project Costs Subtotal	\$0	\$0	\$0	\$0

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

City of Melrose
Herbert Clark Hoover Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
<i>Furnishings and Equipment</i>				
<i>Furnishings</i>	\$0	\$0	\$0	
<i>Equipment</i>	\$0	\$0	\$0	
<i>Computer Equipment</i>	\$0	\$0	\$0	
FF&E Subtotal	\$0	\$0	\$0	\$0
Soft Costs that exceed 20% of Const'n Cost		\$0	\$0	
Project Budget	\$2,199,313	\$127,577	\$2,071,736	\$1,021,573

Board Authorization	
Project Budget	\$2,199,313
Scope Items Excluded or Otherwise Ineligible	-\$127,577
Basis of Estimated Total Facilities Grant ¹	\$2,071,736
Reimbursement Rate	49.31%
Estimated Maximum Total Facilities Grant ¹	\$1,021,573

Total Construction Contingency ²	\$94,051
Ineligible Construction Contingency ²	\$6,379
Potentially Eligible Construction Contingency ²	\$87,672
Total Owner's Contingency ²	\$13,085
Ineligible Owner's Contingency ²	\$4,318
Potentially Eligible Owner's Contingency ²	\$8,767
Total Potentially Eligible Contingency ²	\$96,439
Reimbursement Rate	49.31%
Potential Additional Contingency Grant Funds ²	\$47,554
Maximum Total Facilities Grant	\$1,069,127
Total Project Budget	\$2,306,449

This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Owner's Project Manager of City of Melrose for the Herbert Clark Hoover Elementary School project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

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2. Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

By signing this Total Project Budget, I hereby certify that I have read and understand the form and further certify, to the best of my knowledge and belief, that the information supplied by the District in the table above is true, accurate, and complete.

By:
Title: Chair of School Building Committee

Date: _____

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By:
Title: Superintendent of Schools

Date: _____

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Title: Chief Executive Officer

Date: _____

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By:
Title: Chair of School Committee

Date: _____

City of Melrose
Horace Mann Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Feasibility Study Agreement				
OPM Feasibility Study	\$7,500	\$0	\$7,500	
A&E Feasibility Study	\$40,700	\$0	\$40,700	
Env. & Site	\$0	\$0	\$0	
Other	\$0	\$0	\$0	
Feasibility Study Agreement Subtotal	\$48,200	\$0	\$48,200	\$23,767
Administration				
Legal Fees	\$0	\$0	\$0	\$0
Owner's Project Manager				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$20,434	\$0	\$20,434	
Bidding	\$8,960	\$0	\$8,960	
Construction Contract Administration	\$101,045	\$0	\$101,045	
Closeout	\$12,558	\$0	\$12,558	
Extra Services	\$0	\$0	\$0	
Reimbursable & Other Services	\$5,000	\$0	\$5,000	
Cost Estimates	\$0	\$0	\$0	
Advertising	\$0	\$0	\$0	
Permitting	\$0	\$0	\$0	
Owner's Insurance	\$0	\$0	\$0	
Other Administrative Costs	\$0	\$0	\$0	
Administration Subtotal	\$147,997	\$0	\$147,997	\$72,977
Architecture and Engineering				
Basic Services				
Design Development	\$0	\$0	\$0	
Construction Contract Documents	\$41,400	\$0	\$41,400	
Bidding	\$4,400	\$0	\$4,400	
Construction Contract Administration	\$28,800	\$0	\$28,800	
Closeout	\$3,600	\$0	\$3,600	
Other Basic Services	\$0	\$0	\$0	
Basic Services Subtotal	\$78,200	\$0	\$78,200	
Reimbursable Services				
Construction testing	\$0	\$0	\$0	
Printing (over minimum)	\$0	\$0	\$0	
Other Reimbursable Costs	\$0	\$0	\$0	
Hazardous Materials	\$5,400	\$0	\$5,400	
Geotech & Geo-Env.	\$0	\$0	\$0	
Site Survey	\$0	\$0	\$0	
Wetlands	\$0	\$0	\$0	
Traffic Studies	\$0	\$0	\$0	
Architectural/Engineering Subtotal	\$83,600	\$0	\$83,600	\$41,223
CM & Risk Preconstruction Services				
Pre-Construction Services	\$0	\$0	\$0	\$0
Site Acquisition				
Land/Building Purchase	\$0	\$0	\$0	
Appraisal Fees	\$0	\$0	\$0	
Recording fees	\$0	\$0	\$0	
Site Acquisition Subtotal	\$0	\$0	\$0	\$0
Construction Costs				
Construction Budget	\$0	\$0		
GMP Fee	\$0	\$0		
GMP Insurance	\$0	\$0		
GMP Contingency	\$0	\$0		
Division 1 - General Requirements	\$321,849	\$0		
Division 2 - Existing Conditions	\$212,272	\$0		
Division 3 - Concrete	\$0	\$0		
Division 4 - Masonry	\$0	\$0		
Division 5 - Metals	\$5,380	\$0		
Division 6 - Woods, Plastics and Composites	\$16,656	\$0		
Division 7 - Thermal and Moisture Protection	\$475,936	\$96,869		
Division 8 - Openings	\$0	\$0		
Division 9 - Finishes	\$0	\$0		
Division 10 - Specialties	\$0	\$0		
Division 11 - Equipment	\$0	\$0		
Division 12 - Furnishings	\$0	\$0		
Division 13 - Special Construction	\$0	\$0		
Division 14 - Conveying Systems	\$0	\$0		
Division 21 - Fire Suppression	\$0	\$0		
Division 22 - Plumbing	\$29,864	\$0		
Division 23 - HVAC	\$25,226	\$0		
Division 25 - Integrated Automation	\$0	\$0		
Division 26 - Electrical	\$25,960	\$0		
Division 27 - Communications	\$0	\$0		
Division 28 - Electronic Safety and Security	\$0	\$0		
Division 31 - Earthwork	\$0	\$0		
Division 32 - Exterior Improvements	\$0	\$0		
Division 33 - Utilities	\$0	\$0		
Construction Budget	\$1,113,143	\$96,869	\$1,016,274	\$501,125
Alternates				
	\$0	\$0	\$0	
	\$0	\$0	\$0	
	\$0	\$0	\$0	
Alternates Subtotal	\$0	\$0	\$0	\$0
Miscellaneous Project Costs				
Utility company Fees	\$0	\$0	\$0	
Testing Services	\$0	\$0	\$0	
Swing Space/Modulars	\$0	\$0	\$0	
Other Project Costs (Mailing & Moving)	\$0	\$0	\$0	
Misc. Project Costs Subtotal	\$0	\$0	\$0	\$0

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

City of Melrose
Horace Mann Elementary School

8/24/2022

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Furnishings and Equipment				
Furnishings	\$0	\$0	\$0	
Equipment	\$0	\$0	\$0	
Computer Equipment	\$0	\$0	\$0	
FF&E Subtotal	\$0	\$0	\$0	\$0
Soft Costs that exceed 20% of Const'n Cost		\$29,797	-\$29,797	
Project Budget	\$1,392,940	\$126,666	\$1,266,274	\$624,400

Board Authorization	
Project Budget	\$1,392,940
Scope Items Excluded or Otherwise Ineligible	-\$126,666
Basis of Estimated Total Facilities Grant ¹	\$1,266,274
Reimbursement Rate	49.31%
Estimated Maximum Total Facilities Grant ¹	\$624,400

Total Construction Contingency ²	\$55,657
Ineligible Construction Contingency ²	\$4,843
Potentially Eligible Construction Contingency ²	\$50,814
Total Owner's Contingency ²	\$11,580
Ineligible Owner's Contingency ²	\$11,580
Potentially Eligible Owner's Contingency ²	\$0
Total Potentially Eligible Contingency ²	\$50,814
Reimbursement Rate	49.31%
Potential Additional Contingency Grant Funds ²	\$25,056
Maximum Total Facilities Grant	\$649,456
Total Project Budget	\$1,460,177

This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Owner's Project Manager of City of Melrose for the Horace Mann Elementary School project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

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By:
Title: Chair of School Building Committee

Date: _____

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By:
Title: Superintendent of Schools

Date: _____

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By:
Title: Chair of School Committee

Date: _____

**EXHIBIT B
PROJECT SCOPE
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

Schematic Design Submission Checklist MSBA Accelerated Repair Program



District: Melrose Public Schools

School: Herbert Clark Hoover Elementary School

Scope: Roof Replacement

Schematic Design Deliverables:

OPM	District	
☒	☒	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☒	☒	Code Analysis
☒	☒	Schematic Design Drawings
☒	☒	Cost Estimate (CSI Format) - Include all Proposed Alternates
☒	☒	Form 3011 – Total Project Budget
☒	☒	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☒	☒	Project Schedule (Gantt Chart)
☒	☒	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☒	☒	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Schematic Design Submission Checklist MSBA Accelerated Repair Program



Program Guidelines and Project Funding Agreement:

OPM	District	
☒	☒	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☒	☒	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☒	☒	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☒	☒	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☒	☒	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☒	☒	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☒	☒	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

Schematic Design Submission Checklist MSBA Accelerated Repair Program



☒	☒	MSBA's Audit Department will review requests for reimbursement in the ProPay system of \$50,000 or more. All reimbursement requests which are less than \$50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☒	☒	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

Title: Project Director, Owner's Project Manager

Firm: The Vertex Companies, LLC

Date: June 27, 2022

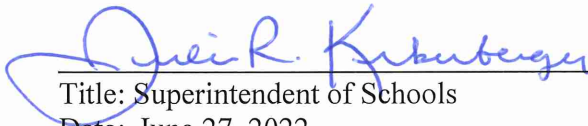
I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

Schematic Design Submission Checklist MSBA Accelerated Repair Program



certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).


Title: Superintendent of Schools
Date: June 27, 2022

Section 1

Project Narrative

1.1 Introduction

The City of Melrose is currently participating in the Massachusetts School Building Authority (MSBA) Accelerated Repair Program (ARP) and has submitted a Statement of Interest for repairs at the Herbert Clark Hoover School. The Vertex Companies, LLC and Tighe & Bond, Inc. were subsequently designated as the Owner's Project Manager (OPM) and Designer, respectively for the proposed project.

The Herbert Clark Hoover School is located at 37 Glendower Road in Melrose, MA. The school building is a two-story brick masonry building with an approximate roof area of 18,000 square feet, which was constructed in 1964. The school has undergone several renovations over time, including a window and door replacement in 2015 and a prefabricated, wood-framed modular building addition in 2017. The first floor of the school generally consists of classrooms, storage rooms, a multipurpose room, a teacher's lounge, administrative and nurse offices, a library, bathrooms, and a boiler room. The second floor contains classrooms and bathrooms. The school currently serves approximately 300 students from kindergarten to fifth grade.

The team assembled for execution of the Herbert Clark Hoover School project includes the following members:

- | | |
|----------------------------------|---|
| • Funding Agency | Massachusetts School Building Authority |
| • Owner | Melrose Public Schools |
| • OPM | The Vertex Companies, LLC |
| • Designer | Tighe & Bond Designer Services, Inc. |
| • Cost Estimating | Ellana Construction Consultants. |
| • Hazardous Materials Assessment | Tighe & Bond Designer Services, Inc. |
| • Code Review | Tighe & Bond Designer Services, Inc. |
| • Structural/Construction Admin | Frawley Engineering, P.C. |

1.2 Existing Conditions

1.2.1 Roof

The existing Ethylene Propylene Diene Monomer (EPDM) roof system was constructed over an original coal tar pitch and gravel built up roof. Based on documents provided by the District, the original roof on the 1964 area consisted of 5 ply built-up coal tar pitch and gravel over 1.5" rigid insulation on a steel deck. Based on recent site visits and field investigation, ½" fiberboard and EPDM membrane were installed over the original roof system. The largest portion of the roof area is ballasted with gravel, while several smaller sections are fully adhered.

There is significant evidence of water damage inside the building from roof leaks and numerous deficiencies in the roofing membrane. The roof does not provide adequate thermal performance and drainage. Based on the site observations and investigation, the existing roofing system and majority of associated appurtenances appear to be in poor condition and are beyond their useful life.



Photo 1: Roof Over Main Building



Photo 2: Roof Over Lower Building

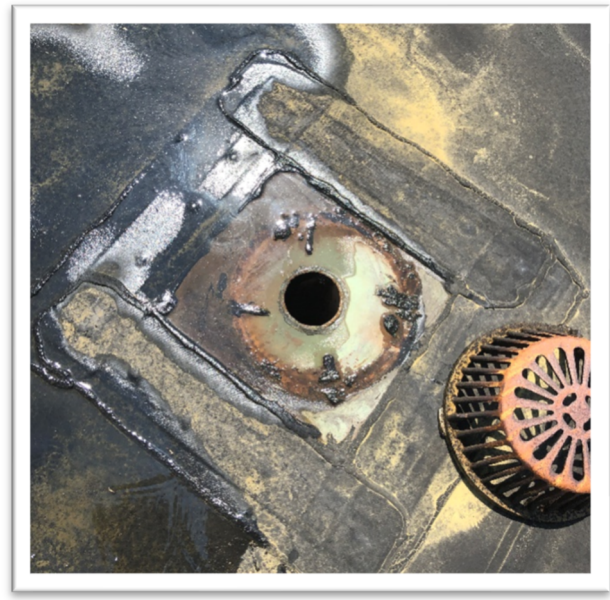
The modular addition constructed in 2017 consists of a single ply membrane roofing system and is not included as part of this project.

1.2.2 Plumbing

There are existing roof drains that are tied into the storm drainage system in the building. The drains appear to be in working order, however some are rusted and in poor condition.

One storm leader exits the building and runs above a sub-roof near the main entrance toward a vertical storm leader tied into the underground storm drainage system.

Plumbing vents penetrate the roof in multiple locations to provide pressure relief for the school's sanitary piping system. The vent piping is in good condition with expected rust on the pipe interior.

**Photo 3:** Roof Drain**Photo 4:** Roof Drain**Photo 5:** Storm Leader Routed on Roof

1.2.3 HVAC

There are seven exhaust fans (EFs) installed on the main building's roof and rooftop air handling units are located on the temporary addition, which is not part of this project.

Most of the exhaust fans appear original and are well beyond the 15-25-year life expectancy. One exhaust fan, identified as “#6” on the 1964 drawings, has been replaced and appears that it can be re-used.



Photo 6: HVAC Equipment on Main Roof

1.2.4 Electrical

The existing electrical items on the roof are limited to electrical connections to HVAC equipment requiring electrical power. It is assumed that each HVAC fan has an integral or equipment-mounted disconnect. In addition, loose telecommunication cables run across the roof from the north wall to an entrance cap near the roof hatch.

1.3 Recommended Solutions

1.3.1 Roof Replacement

Replacement of the existing roof system at the Herbert Clark Hoover School is recommended for improving thermal performance, roof drainage, overall energy efficiency of the building and remedying numerous roof leaks. The following items below outline the proposed scope of work for the project, including demolition. Schematic Design plans with additional detail are included in Appendix B.

Roof Demolition will include:

- Removal of the existing single-ply, adhered and ballasted EPDM membrane roofing systems
- Removal of existing built-up coal tar pitch and gravel roof system
- Removal of the existing rigid insulation
- Removal of the existing access hatch
- Repair of the steel roof deck as needed
- Removal and storage of existing HVAC equipment
- Removal of existing fascia, blocking, damaged curbing, and flashing

- Disposal of existing roofing materials as asbestos waste.

Proposed Roof Improvements will include:

- Repair of any damaged or compromised steel roof decking discovered during demolition
- Installation of a fully-adhered EPDM roofing system. The new roofing system will include, from bottom to top:
 - Fiberglass-reinforced gypsum sheathing cover board
 - Base sheet/ combination air and vapor barrier
 - New polyisocyanurate rigid insulation. The new insulation will meet the stretch energy code. Insulation thickness will provide a minimum R-value of 30. Tapered insulation will be installed to provide a positive pitch toward roof drains.
 - ½" coverboard installed over the insulation
 - Fully-adhered EPDM roofing membrane
- Installation of new curbing, blocking, flashing, metal fascia, and roof drains
- Installation of new access hatches and ladders

1.3.2 Plumbing Systems

Plumbing Demolition will include:

- Removal of all existing roof drains. Existing rain leaders within building will be cut and capped away from the drain body and prepared for reconnection.
- Removal of storm drain leader and it's supports located on the roof. Piping will be cut and capped at the edge of the roof and prepared for reconnection into the vertical storm leader.

Proposed Plumbing Improvements will include:

- Installation of new roof drains and associated piping. All new roof drains will be of the same type.
- Installation of 1" thick insulation on drain bodies and any new associated piping.
- Inspection of existing drainage piping, including snaking the pipes to check for clogs and jetting the pipes should there be any clogs present.
- Installation and rerouting of the new storm leader on the roof to the underground connection. New piping will be provided with supports.
- Extension of vent piping as required to maintain clearance above roof of 18-24".

1.3.3 HVAC Systems

HVAC Demolition will include:

- Disconnection, removal, and storage of roof fan #6.
- Curb for fan #6 to remain.
- Removal, and disposal of all other roof exhaust fans and curbs.
- Prior to unit removal, exhaust fans will be tested and airflows recorded for final balancing efforts.
- Installation of temporary caps for all ductwork.
- Installation of temporary caps over fan #6 curb that is to remain.

HVAC Improvements will include:

- Replacement off all roof exhaust fans, except #6. Replace fans in kind based on original design drawing schedules.
- Installing new curbs for new exhaust fans, including transition curbs as required for fan connection to existing roof opening.
- Repairing curbs and/or blocking and extending existing curb as required to minimum of 12" above new roof for remaining fan.
- Installation of new Exhaust Fans with integral disconnects.
- Reinstallation of retained Exhaust Fan.
- Reconnecting and sealing units to existing ductwork.
- Connecting units to existing controls.
- Re-balancing systems to match pre-existing airflows.

1.3.4 Electrical Systems

The proposed electrical work will include:

- Disconnecting and making safe all existing electrical devices with connections to mechanical equipment. Once the existing equipment is placed back in its permanent location after roofing, the electrical connections will be re-energized. For any equipment that has moved, the existing conduit and wires will be extended as required.
- Installation of exterior weatherproof GFI receptacles and weatherproof luminaire will be located on the roof within 25'-0" of any exterior equipment per NEC. New receptacles and luminaire will be mounted to ¾" rigid galvanized steel or to an adjacent wall if possible.
- Removal and reconnection of telecommunication cable. Upon reconnection cables will be secured and rerouted for safety.

1.4 ARP Sustainability Requirements

MSBA's ARP requires use of the Stretch Energy Code (780 CMR – Appendix AA and 2018 IECC) as the basis of design for ARP projects for roof replacement. Below is a table comparison of the required code values for the relevant project items and the values for the proposed assemblies. The proposed solutions and items for the Herbert Clark Hoover School meet or exceed the ARP sustainability requirements.

Roofs	Maximum U-Value (Btu/hr·ft ² ·°F)	Minimum R-Value (°F·ft ² ·hr/Btu)
Required	0.032	30
Proposed	0.032	30

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Herbert Clark Hoover School Repairs Project

Building Code Analysis

This analysis summarizes codes requirements applicable to the project scope for the Herbert Clark Hoover School Repairs Project. This summary includes general code information applicable to the overall project and more specific requirements related to roof replacement activities.

Applicable codes for this project include:

- International Building Code 2015 (IBC)
- International Existing Building Code 2015 (IEBC)
- International Energy Conservation Code 2018 (IECC)
- 248 CMR 10.00 Uniform State Plumbing Code (2017)
- Commonwealth of Massachusetts State Building Code, Ninth edition 780 CMR (including amendments to the IBC, IECC and IEBC)
- Massachusetts Stretch Energy Code 780 Appendix AA
- Architectural Access Board Regulations 521 CMR (AAB)
- American Society of Civil Engineers – Minimum Design Loads for Buildings and Other Structures (ASCE 7-05)
- National Electrical Code NFPA 70

Section 1 – General Code

Use and Occupancy Classification (305 IBC 2015 & 780 CMR)

- Educational (E)
 - Due to the anticipated scope of work, roof replacement, Level 1 alterations of the IEBC will be triggered. Level 1 alterations encompass the removal and replacement of materials that serve the same purpose. Any new elements must comply with the requirements for new construction.

Types of Construction (602 IBC 2015 & 780 CMR)

- Type III Construction – Construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of a 2-hour rating or less.

Alterations Level 1 (503 IEBC 2015 & 780 CMR)

- Removal and replacement or the covering of existing materials, elements, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

Material and Methods (702.6 & Chapter 8 IEBC 2015 & 780 CMR)

- All new work shall comply with materials and methods requirements in the IBC, IEBC, IECC, IMC, and MSPC, as applicable that specify material standards, details of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 2 – Requirements Applicable to Roof Replacement Work**Building Envelope Requirements (IECC 2015, Table C402.3)**

- Roof Maximum U-Factors
 - Insulation entirely above deck – U-0.032
- Roof Minimum R-Values
 - Insulation entirely above deck – R-30

Massachusetts State Building Code (780 CMR Amendments)

- Dead loads on an existing roof may not increase by more than 5% due to a re-roofing project.
- If the additional dead loads exceed 5%, the structure must conform to current snow load requirements.
- Since a similar EPDM roofing system (and ballast in some locations) is being removed from the roof prior to roof replacement, the new roof system is not anticipated to increase the dead load on the roof by more than 5%.

Code of Federal Regulations Title 29 (29 CFR)

- Holes – each employee on walking/working surfaces shall be protected from falling through holes more than 6 feet above lower levels, by personal fall-arrest systems, covers, or guardrail systems erected around such holes.

Snow Drift Implications of Added Insulation (IECC 2015)

- 2015 IBC Code section 1608 pertains to current snow load requirements and requires use of ASCE 7. Increasing the insulation thickness on an existing roof requires the roof meet current Code requirements. The snow load requirements have snow drift loading requirements that, when calculated for the Herbert Clark Hoover School result in a potential area of overload extending 15 feet from the high wall sections of the roof.
- IECC Section C501.2 notes that this code shall not prevent the continued use and maintenance of an existing building lawfully in existence at the time of adoption of the code. Section C501.5 permits utilization of like materials for repairs, provided that hazards to life, health, or property are not created.
- IECC Section C503.1 states, Alterations shall not overload existing building systems and an exception to IECC requirements is provided for roof recovering projects. To prevent overloading of the existing building, existing insulation thickness will be maintained a distance of 15 feet from the high roof areas.

Uniform State Plumbing Code 248 CMR 10.00

- Storm Drain leaders are sized based on roof area served. The roof is broken up into six areas, which are served by 2", 3" and 4" roof drains. These roof drain can respectively capture storm water from 720sqft, 2200sqft and 4600sqft of roof area per 248 CMR 10.0. The roof drain sizes installed suffice for the school's roof. The new roof drains will use the same outlet size as the existing ones.

Section 4 – Accessibility Requirements**Existing Building (3.3 MAAB 521 CMR)**

- Requirements for an accessible entry, toilet, drinking fountain, and telephone (if pay phones are provided) will be triggered based on the estimated cost of the project. A proponent is required to provide these items if the cost of a renovation project exceeds \$500,000.
- If the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR.
- Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of work exceeds \$500,000 or unless work is being performed on the entrance or toilet room.
 - Curb cuts
 - Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR
 - Roof repair or replacement, window repair or replacement, repointing and masonry repair work
 - Work related to septic system repairs, site utilities and landscaping.
- If the cost of the project, and any additional renovations completed within 36 months of the project, exceeds 30% +of the full and fair cash value of the building, the entire building must be upgraded as required to meet 521 CMR requirements.
- The building currently complies with ADA/AAB requirements and accessibility upgrades will not be required as part of this project.

J:\M\M1215\026) Melrose\Design\Schematic Design\Herbert Clark\Building Code Analysis.docx

HOOVER ELEMENTARY SCHOOL

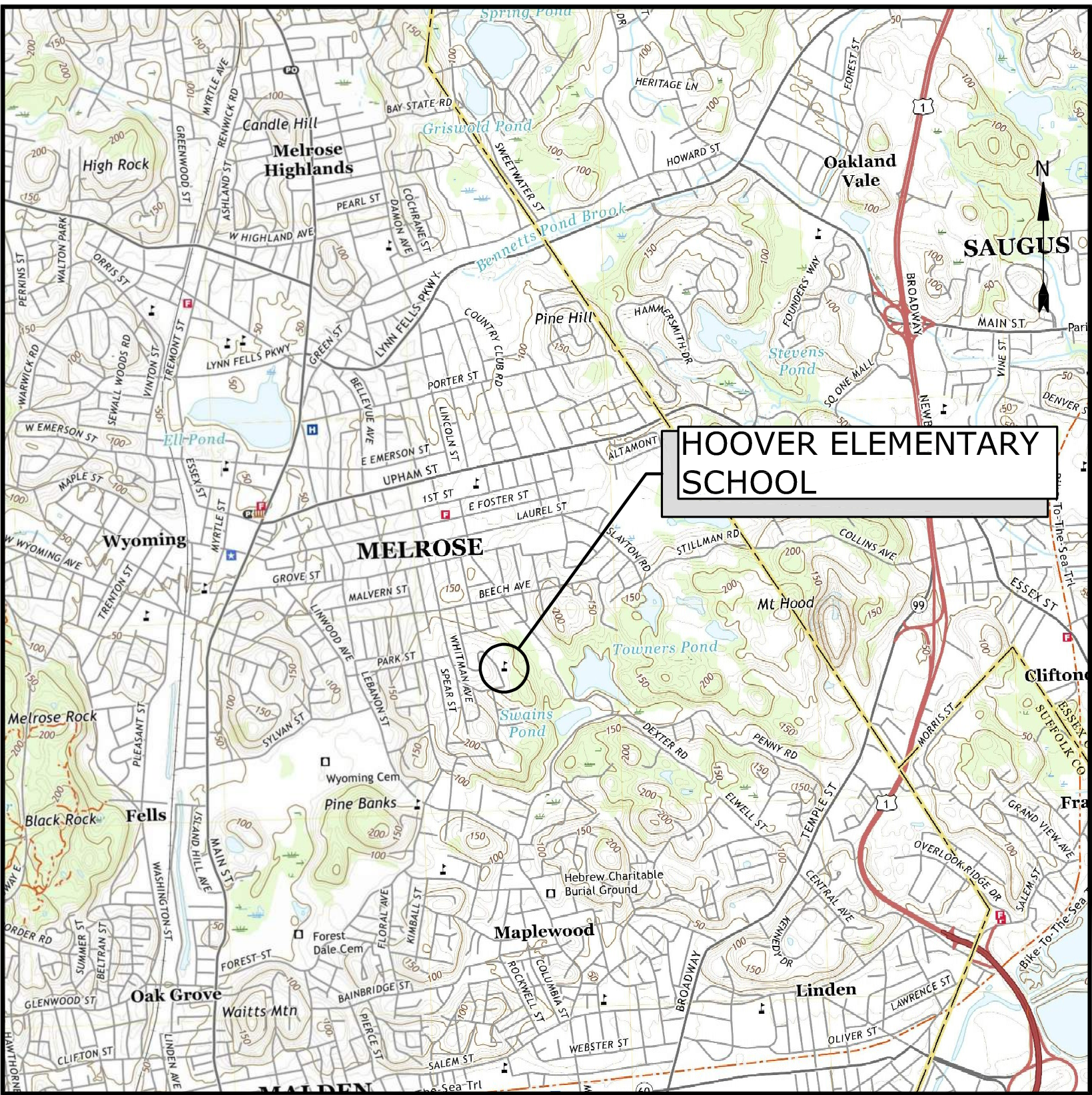
MSBA ACCELERATED REPAIR PROGRAM

ROOF REPLACEMENT PROJECT

MELROSE, MASSACHUSETTS

JUNE 2022

LIST OF DRAWINGS	
	COVER
G-001	ROOF PHOTOGRAPHS
AD-101	ROOF DEMOLITION PLAN
A-101	ROOF REPLACEMENT PLAN
A-501	ROOF DETAILS - 1
A-502	ROOF DETAILS - 2
P-101	PLUMBING ROOF PLAN
H-101	HVAC ROOF PLAN
E-101	ELECTRICAL ROOF PLAN



LOCATION MAP
SCALE: 1" = 2000'

PROJECT TEAM:

OWNER
CITY OF MELROSE
562 MAIN STREET
MELROSE, MA 02176

OWNER'S PROJECT MANAGER
THE VERTEX COMPANIES, INC.
400 LIBBEY PARKWAY
WEYMOUTH, MA 02189

COST ESTIMATING
ELLANA, INC.
98 NORTH WASHINGTON STREET
SUITE 109
BOSTON, MA 02114

FUNDING
MASSACHUSETTS SCHOOL
BUILDING AUTHORITY
40 BROAD STREET, SUITE 500
BOSTON, MA 02109

ENGINEER
TIGHE & BOND
DESIGNER SERVICES, INC.
53 SOUTHAMPTON ROAD
WESTFIELD, MA 01085

PREPARED BY:
Tighe&Bond

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION
COMPLETE SET 9 SHEETS

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Hoover
Elementary
School Roof
Replacement
Project

City Of Melrose

Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - G-001.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: JPV		
ROOF PHOTOGRAPHS		
SCALE:		AS SHOWN
G-001		



ROOF OVER MAIN BUILDING
NO SCALE

A
-



ROOF EQUIPMENT ON
BALLAST ROOF
NO SCALE

B
-



EXISTING CHIMNEY
NO SCALE

C
-



ROOF ACCESS HATCH
NO SCALE

D
-



DRAIN ON LOWER ROOF
NO SCALE

E
-



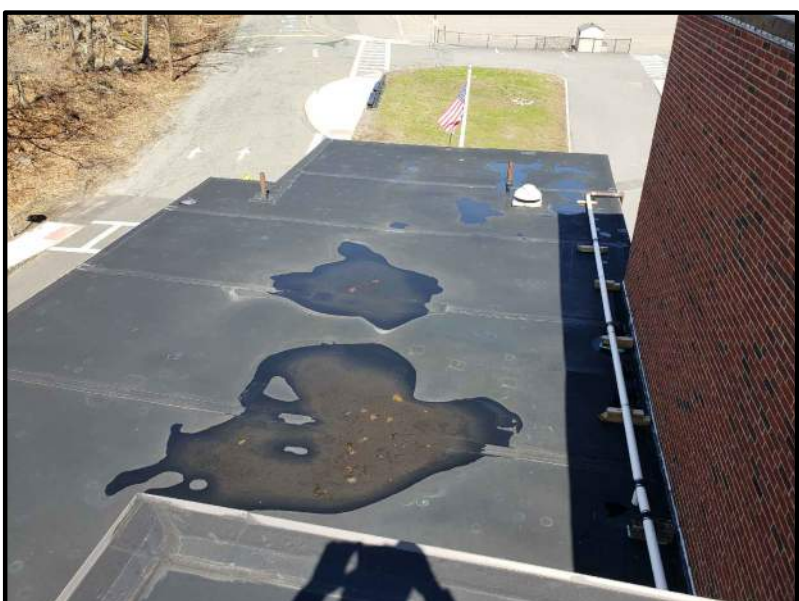
ROOF ON LOWER BUILDING
NO SCALE

F
-



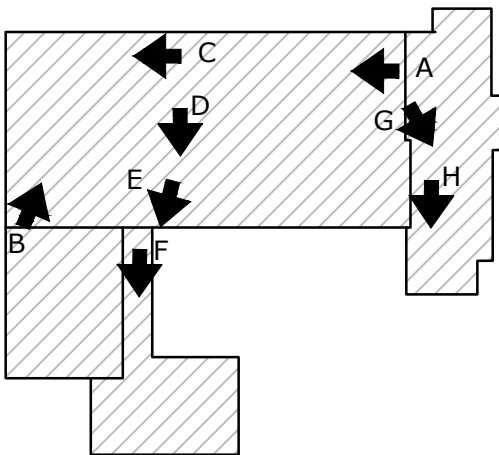
ROOF OVER LOWER BUILDING
NO SCALE

G
-



ROOF OVER LOWER
BUILDING
NO SCALE

H
-



HOOVER KEYPLAN
NO SCALE

LEGEND:

← A PHOTOGRAPH LOCATION

Hoover Elementary School Roof Replacement Project

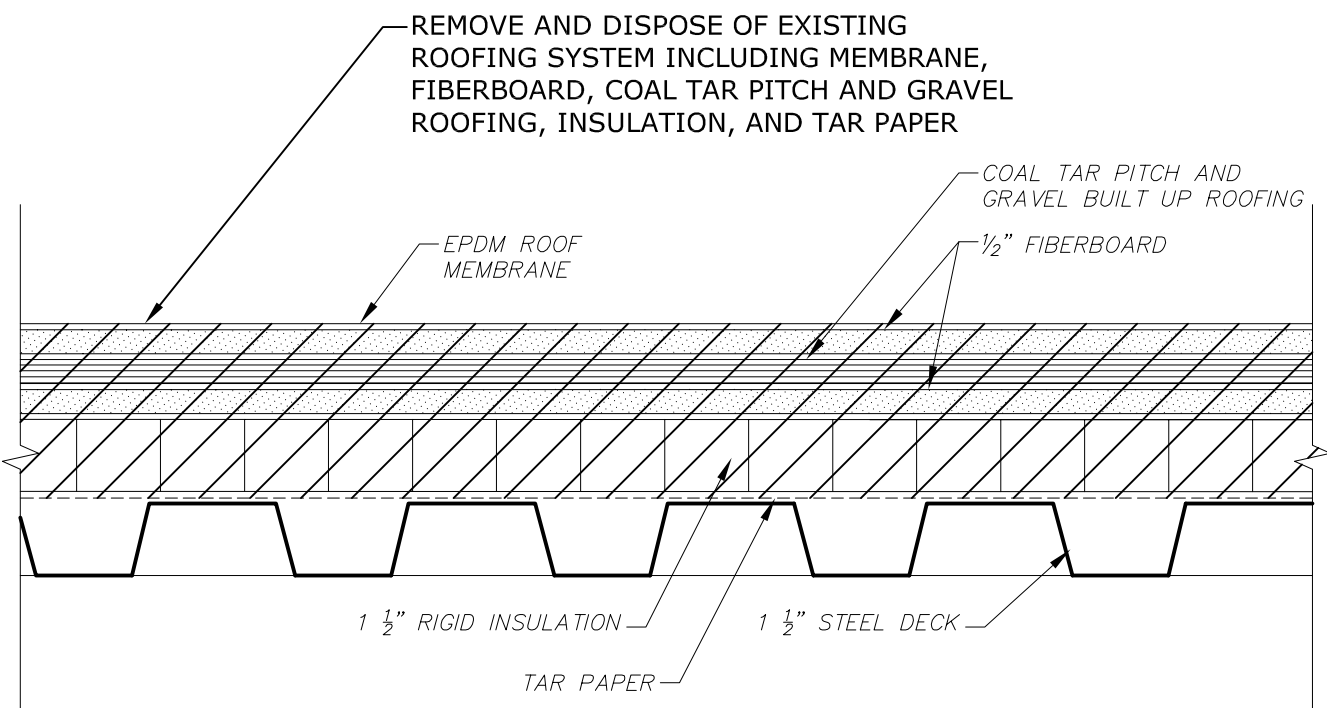
Melrose,
Massachusetts

ROOF DEMOLITION PLAN

SCALE: 1/16"=1'-0"

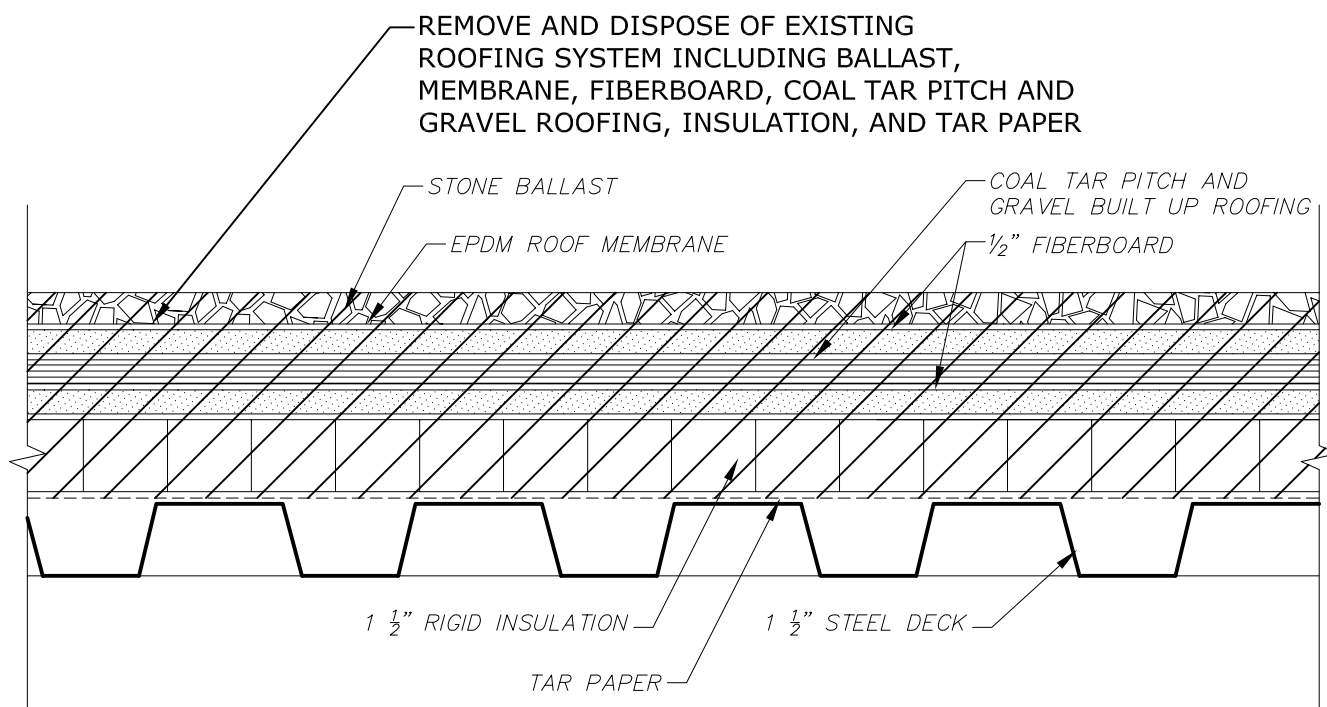
AD-101

Packet Pg. 132



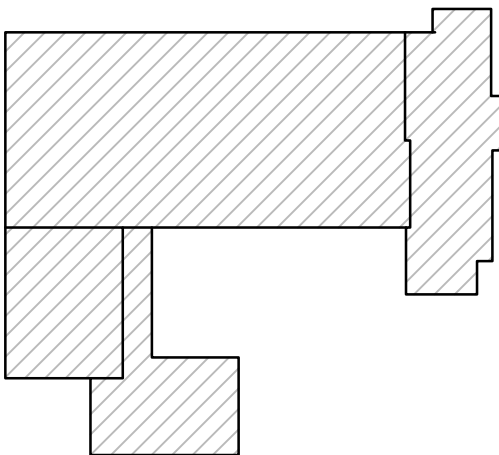
TYPICAL EXISTING UNBALLASTED ROOF SECTION

DETAIL	1
3" = 1'-0"	-

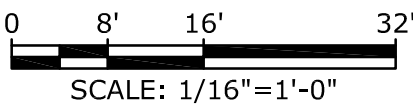


TYPICAL EXISTING BALLASTED ROOF SECTION

DETAIL	2
3" = 1'-0"	-



HOOVER KEYPLAN
NO SCALE



	ROOF DRAIN		EXISTING GOOSENECK (INTAKE OR EXHAUST)
	EXISTING VENT PIPE PENETRATION		EXISTING EXHAUST CAP OR AIR INTAKE
	EXISTING ROOFTOP EXHAUST FAN/DUCT WITH CURB		EXISTING CAPPED CURB
	EXISTING ROOFTOP EQUIPMENT ON SLEEPERS		EXISTING INSULATION THICKNESS TEST CUT
	GAS PIPE ON PIPE SUPPORT		EXISTING CANOPY LINE
			EXISTING ROOF SLOPE LINE
			ITEM TO BE REMOVED/DEMOLISHED

NOTES:

1. REMOVE AND DISPOSE OF ALL EXISTING HVAC EQUIPMENT CURBS.
2. SEE SHEET H-101 FOR HVAC EQUIPMENT REQUIREMENTS.

Melrose,
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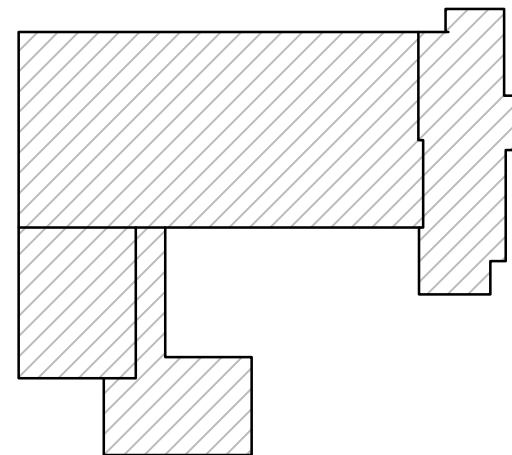


- NOTES:

-
- A detailed cross-section diagram of a flat roof assembly. The diagram shows the following layers from top to bottom:
- EPDM ROOFING MEMBRANE:** The topmost layer, shown as a thin, dark line.
 - COVER BOARD:** A thin layer directly beneath the EPDM membrane.
 - TAPERED RIGID INSULATION:** A layer of insulation that tapers from left to right.
 - RIGID INSULATION:** A layer of insulation with a grid pattern, located below the tapered insulation.
 - NAILED BASE SHEET:** A layer with a dashed line indicating nail placement, located below the rigid insulation.
 - FIBERGLASS REINFORCED GYPSUM SHEATHING:** A layer with a grid pattern, located below the nailed base sheet.
 - 1 1/2" STEEL DECK:** The bottommost structural layer, shown as a series of trapezoidal shapes.

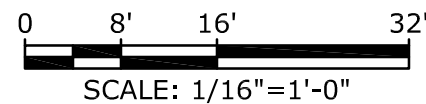
TYPICAL PROPOSED ROOF SECTION

DETAIL	1
3" = 1'-0"	-



HOOVER KEYPLAN

NO SCALE



A	06/20/2022	SCHEMATIC DESIGN
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DRAWN BY: AH		
CHECKED: MPW		
APPROVED: FJH, JPV		

ROOF PLAN

SCALE: AS SHOWN

A-101


$$3'' = 1' - 0''$$

$$1-1/2'' = 1'-0''$$

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NOT FOR CONSTRUCTION**

Hoover Elementary School Roof Replacement Project

City Of Melrose

Melrose,
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APPROVED: JPV		

ROOF DETAILS - 1

SCALE: AS SHOWN

A-501

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Hoover
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City Of Melrose

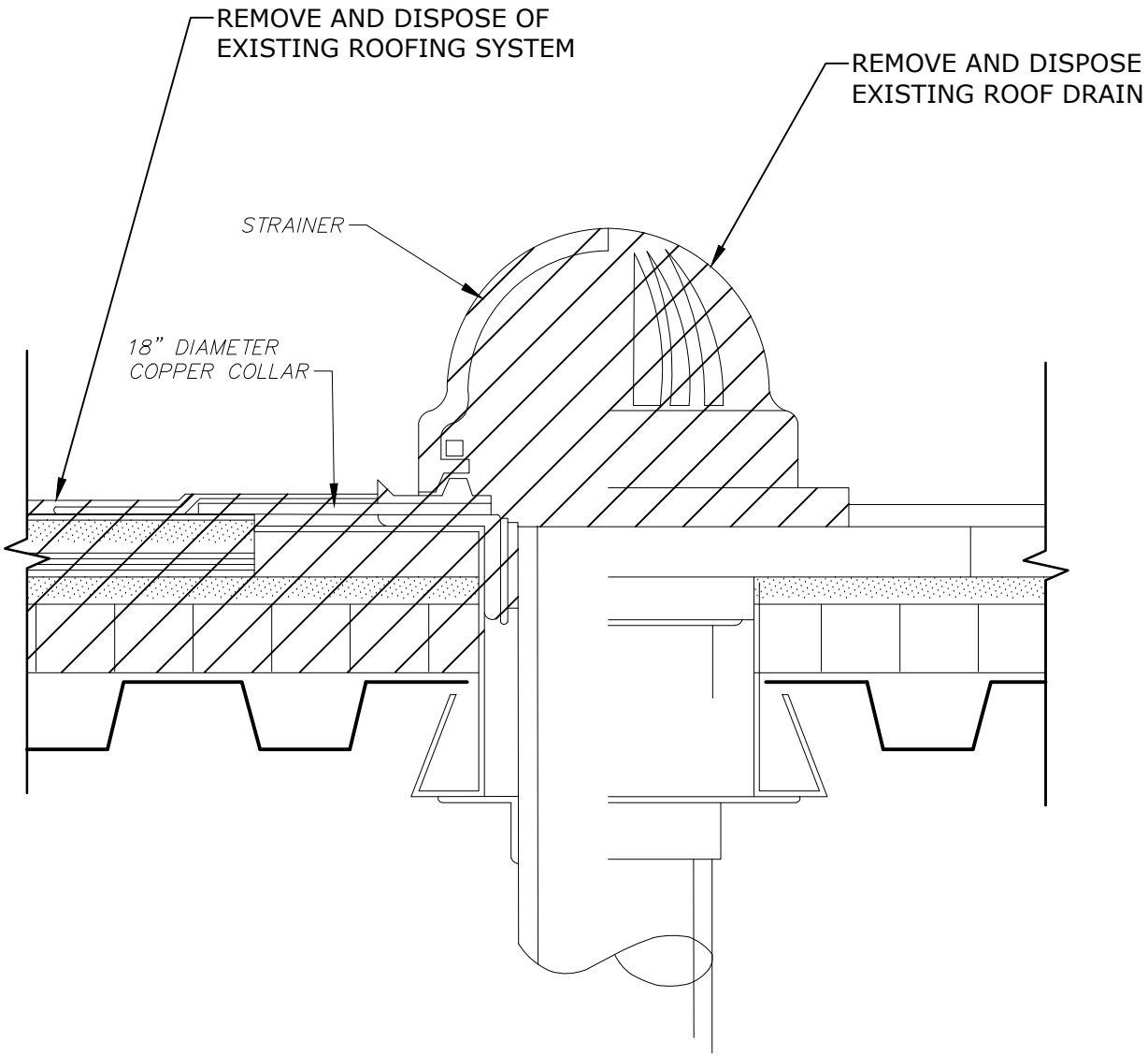
Melrose,
Massachusetts

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CHECKED: MPW		
APPROVED: JPV		

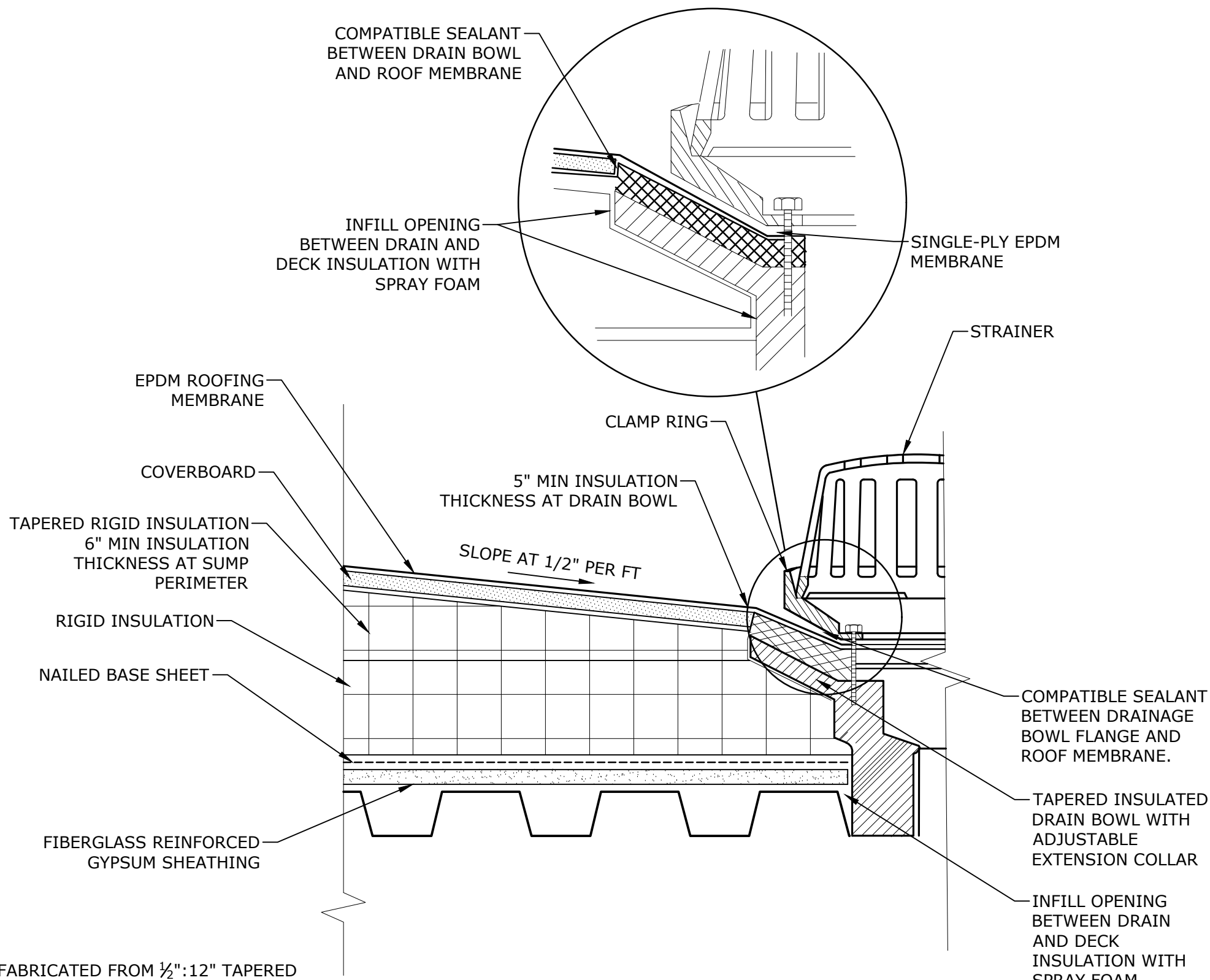
ROOF DETAILS - 2

SCALE: AS SHOWN

A-502



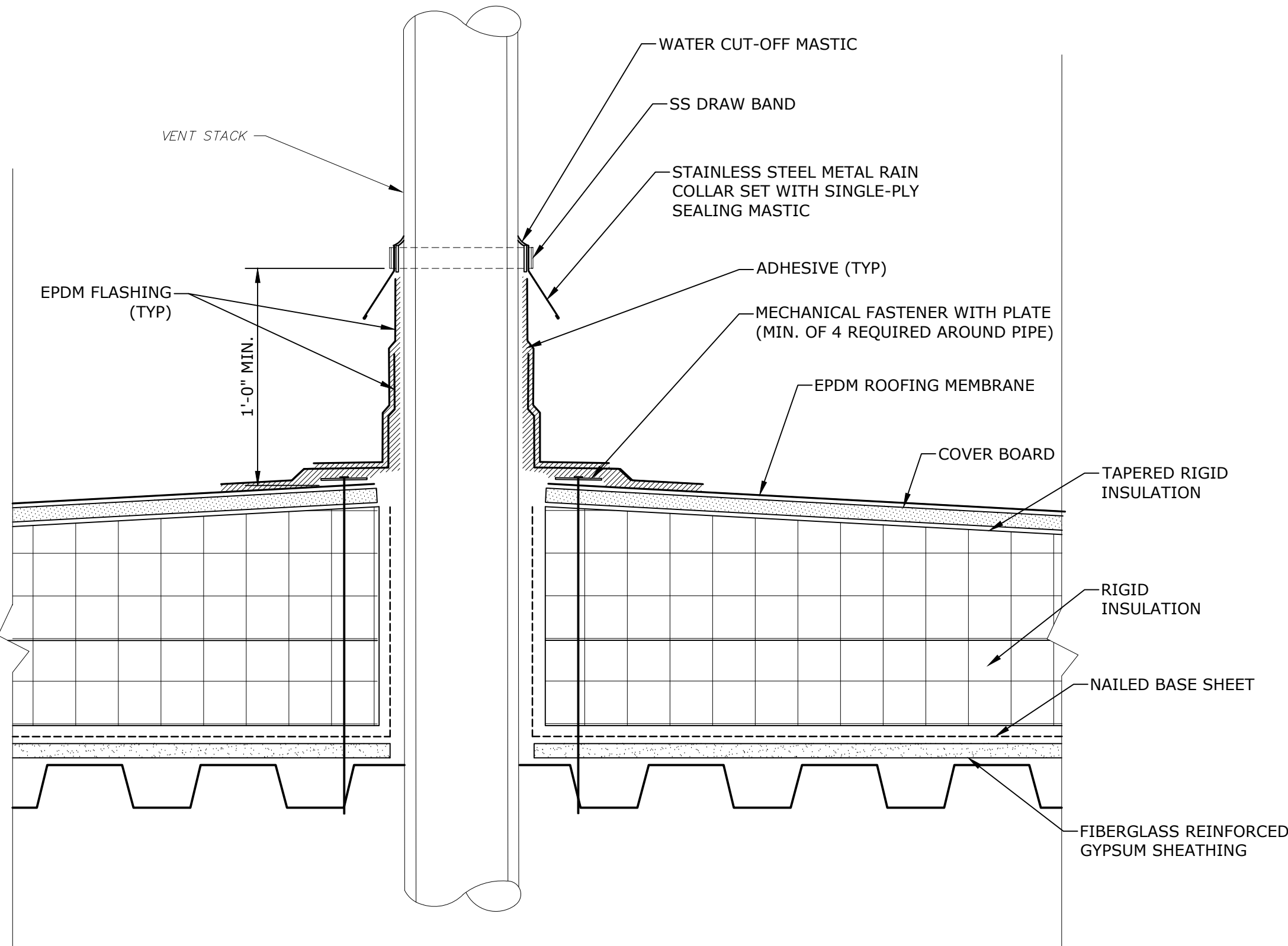
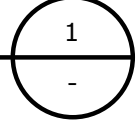
EXISTING



PROPOSED

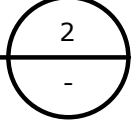
ROOF DRAIN DETAIL

3"=1'-0"



VENT STACK DETAIL

3"=1'-0"



NOTES

1. SUMP MAY BE FIELD-FABRICATED FROM ½":12" TAPERED INSULATION OR PROVIDED AS A PREFABRICATED UNIT.

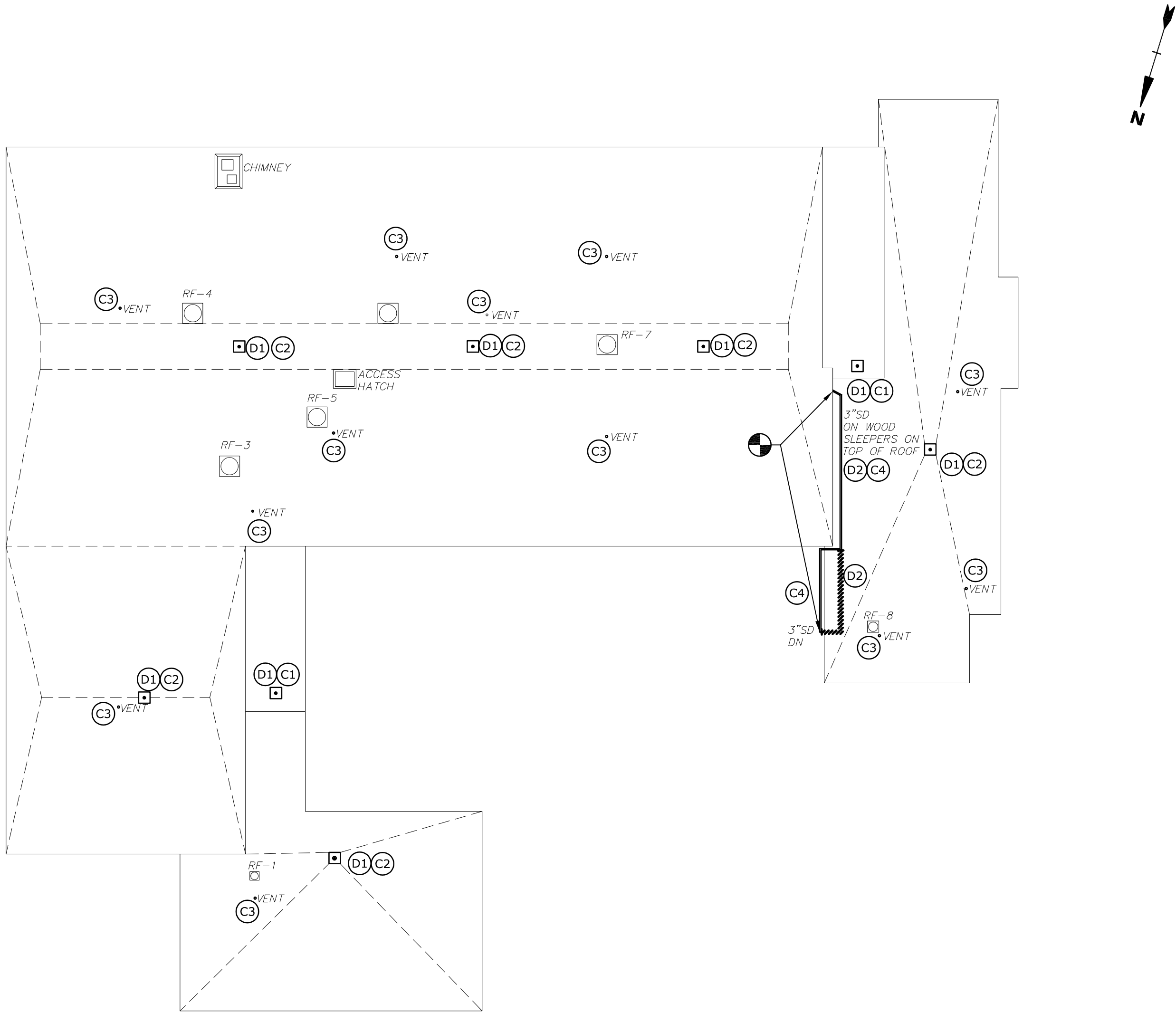
SCHEMATIC DESIGN
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Hoover
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Melrose,
Massachusetts

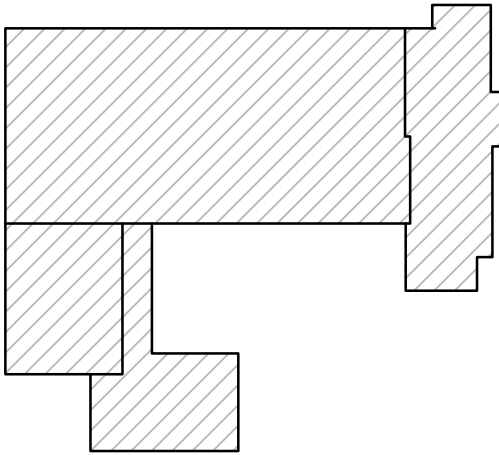
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MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HOOVER - P-101.dwg		
DRAWN BY: JM		
CHECKED: MPW		
APPROVED: FJH, JPV		
PLUMBING ROOF PLAN		
SCALE:		AS SHOWN
P-101		



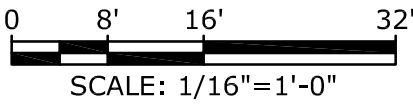
- LEGEND
- ACCESS HATCH
 - ROOF DRAIN
 - VENT PIPE PENETRATION
 - CONNECT TO EXISTING

- DEMOLITION KEY NOTES:
- D1 REMOVE EXISTING ROOF DRAINS. CUT AND CAP EXISTING DRAIN PIPING AWAY FROM DRAIN BODY WITHIN BUILDING. PREPARE FOR FUTURE CONNECTION. COORDINATE EXTENT OF DEMOLITION W/ ROOFING CONTRACTOR TO CONFIRM ADEQUATE CLEARANCE FOR NEW ROOFING INSTALLATION IS PROVIDED.
 - D2 DEMOLISH RAIN LEADER AND SLEEPERS BACK TO WALL PENETRATION. DEMOLISH RAIN LEADER TOWARD GROUND AS REQUIRED TO CLEAR ROOF.

- CONSTRUCTION KEY NOTES:
- C1 NEW ROOF DRAIN. PROVIDE NEW PIPING FROM DRAIN AND CONNECT TO EXISTING PIPING. INSULATE RD SUMP AND NEW SECTION OF STORM DRAIN PIPING WITH 1-INCH FIBERGLASS INSULATION WITH ASJ. INSULATION THERMAL CONDUCTIVITY TO BE 0.21-0.27 BTU-IN/(h-ft²-°F). ROOF DRAIN OUTLET SIZE AND PIPE SIZE TO MATCH EXISTING. COORDINATE INSTALLATION WITH ROOFING CONTRACTOR.
 - C2 NEW ROOF DRAIN. DRAIN TO MATCH OUTLET SIZE OF 4". CONNECT NEW PIPE TO EXISTING STORM DRAINAGE SYSTEM WITHIN THE BUILDING. INSULATE RD SUMP AND NEW SECTION OF STORM DRAIN PIPING WITH 1-INCH FIBERGLASS INSULATION WITH ASJ. INSULATION THERMAL CONDUCTIVITY TO BE 0.21-0.27 BTU-IN/(h-ft²-°F). VERIFY TIE-IN LOCATION IN FIELD. COORDINATE WITH ROOFING CONTRACTOR AND G.C.
 - C3 CONFIRM VENT SIZE IN FIELD. EXTEND VENT PIPE WITH SAME SIZE TO TERMINATE 24" ABOVE NEW ROOF.
 - C4 PROVIDE NEW CI RAIN LEADER. CONNECT AT WALL PENETRATION, INSTALL WITH 1% PITCH ALONG NEW ROUTING SHOWN, ROUTE ABOVE DOOR TOWARD UNDERGROUND LEADER.



HOOVER KEYPLAN
NO SCALE



Hoover
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Replacement
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Melrose,
Massachusetts

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CHECKED: MPW		
APPROVED: FJH, JPV		

HVAC ROOF PLAN

SCALE: AS SHOWN

H-101

GENERAL NOTES

1. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. COORDINATE ALL WORK WITH OTHER TRADES.
2. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT.
3. INSTALL EQUIPMENT AND SUPPORTS IN ACCORDANCE WITH ALL RELEVANT BUILDING CODES.
4. FIELD VERIFY QUANTITY OF MECHANICAL EQUIPMENT, AND SUPPORTS TO BE REMOVED.
5. PERFORM PRE-BALANCE TESTING OF ALL EXHAUST FANS PRIOR TO UNIT REMOVAL, RECORD AIRFLOWS FOR FINAL BALANCING EFFORTS. PROVIDE REPORT TO ENGINEER.
6. PROVIDE TEMPORARY CAPS FOR ALL DUCTWORK. NO DUCTWORK SHALL REMAIN OPEN AT ANY TIME.
7. DURING DEMOLITION, CONTROL WIRING IS TO BE DISCONNECTED AND PROTECTED FOR FUTURE USES/RECONNECTION.
8. PROVIDE NEW HVAC EQUIPMENT PER SCHEDULES. PROVIDE REQUIRED DUCTWORK TRANSITIONS FROM EXISTING DUCTWORK TO NEW FANS AS REQUIRED.
9. ALL MATERIALS, METHODS AND EQUIPMENT INSTALLED MUST BE IN COMPLIANCE WITH PROJECT SPECIFICATIONS AND APPLICABLE CODES.

GENERAL DEMOLITION NOTES

1. IT IS NOT THE INTENT OF THESE DOCUMENTS TO SHOW EVERY DEVICE, APPURTENANCE, PIPE, WIRE, OR CONDUIT TO BE REMOVED. HVAC EQUIPMENT, UNITS, AND SYSTEMS NOT BEING REUSED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ASSOCIATED SUPPORTS.
2. PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEP STANDARDS. INVENTORY, SALVAGE AND TURN OVER OR DISPOSE OF EQUIPMENT AT DIRECTION OF OWNER.
3. ALL EXISTING SYSTEMS SHALL BE MADE FULLY OPERATIONAL, INCLUDING RECONNECTION TO SERVICES AND DUCTWORK.
4. EXISTING EQUIPMENT TO BE REMOVED AND RE-INSTALLED SHALL BE FIELD VERIFIED FOR QUANTITY AND CONDITION. KEEP AN ACCURATE RECORD OF STORED EQUIPMENT INCLUDING CONDITION.
5. SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING DEMOLITION SHALL BE CAREFULLY PROTECTED FROM DAMAGE AND CONTAMINATION BY THE CONSTRUCTION PROCESS.

DRAWING DEMOLITION NOTES:

- (D1) DISCONNECT, AND DEMOLISH EXHAUST FAN. PROVIDE TEMPORARY CAP OVER DUCT OPENING. MEASURE AIRFLOW OF EXISTING FAN PRIOR TO UNIT REMOVAL.
- (D2) DISCONNECT, REMOVE, AND STORE EXHAUST FAN. PROVIDE TEMPORARY CAP OVER DUCT OPENING. EXISTING CURB TO REMAIN.

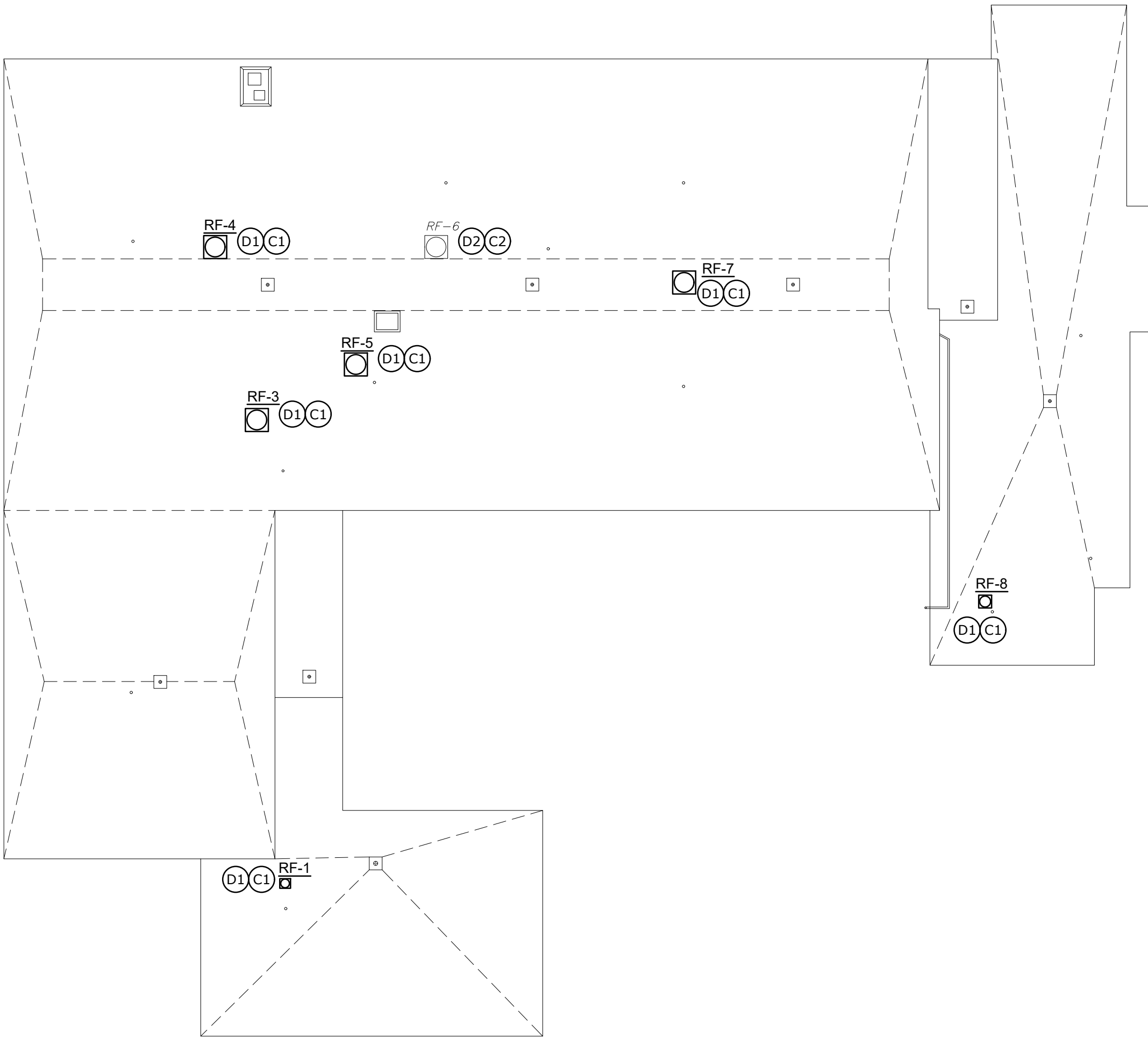
DRAWING CONSTRUCTION NOTES:

- (C1) INSTALL NEW EXHAUST FAN ON CURB, RECONNECT AND SEAL TO EXISTING DUCTWORK. CONNECT FANS TO EXISTING CONTROLS AND BALANCE SYSTEMS TO MATCH SCHEDULED OR EXISTING AIRFLOWS. IF SCHEDULED AND EXISTING AIRFLOWS DIFFER, COORDINATE BALANCING VALUES WITH ENGINEER.
- (C2) RE-INSTALL REMOVED FAN ON CURB, RECONNECT AND SEAL TO EXISTING DUCTWORK. CONNECT FAN TO EXISTING CONTROLS AND BALANCE SYSTEMS TO MATCH SCHEDULED OR EXISTING AIRFLOWS.



LEGEND

- [Hatched Box] ACCESS HATCH
- [Box with X] EXHAUST FAN

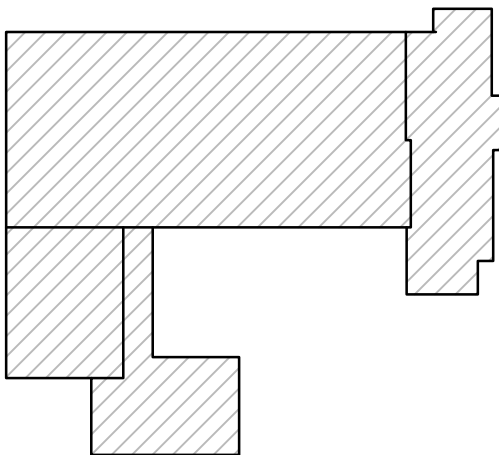


FAN SCHEDULE

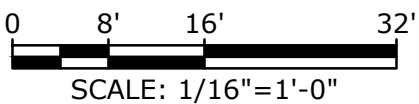
UNIT NO.	LOCATION	SERVING	MANUFACTURER	TYPE	MODEL	CFM	ESP (IN W.C.)	RPM	BHP [W]	MHP	SPEED CONTROL	ELECTRICAL			REMARKS
												VOLTS	PH	FLA	
RF-1	ROOF	KINDERGARTEN	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	101C17DEC	620	¼	1312	[60]	¼	EC	115	1	0.5	[1][2][3][4][5][6]
FAN 2	KITCHEN	KITCHEN		INLINE FAN	B-12	700	¼	1140	-	¼	-	208	1	-	[9]
RF-3	ROOF	2ND FLOOR CLASSROOMS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	165C17D(VF)	2000	⅜	892	0.25	½	EC	115	1	4.1	[1][2][3][4][5][6]
RF-4	ROOF	ALL PURPOSE ROOM	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	210C17D(VF)	2500	⅜	597	0.28	½	EC	115	1	4.3	[1][2][3][4][5][6]
RF-5	ROOF	1SR AND 2ND FLOOR TOILETS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	150C17D(VF)	1500	⅜	921	0.17	¼	EC	115	1	3.2	[1][2][3][4][5][6]
RF-6	ROOF	1ST FLOOR CLASSROOMS	USA VENTILATION SYSTEMS LLC	DOWNBLAST CENTRIFUGAL, BELT DRIVEN FAN W BDD AND DS	DB24RH3S	3640	½	610	-	¾	-	208	3	-	[7][8]
RF-7	ROOF	2ND FLOOR CLASSROOMS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	165C17D(VF)	2000	⅜	892	0.25	½	EC	115	1	4.1	[1][2][3][4][5][6]
RF-8	ROOF	TEACHERS	LOREN COOK	DOWNBLAST CENTRIFUGAL, DIRECT DRIVE FAN W BDD, DS AND EC MOTOR	LCRF-100	375	¼	1256	0.05	⅛	EC	115	1	1.9	[1][2][3][4][5][6]

SCHEDULE NOTES:

- [1] DEMOLISH AND REPLACE.
- [2] FURNISH NEW ROOF CURBS (INSTALLED BY GC) WITH NEW FANS. CONFIRM ROOF OPENING, PROVIDE TRANSITION CURBS AS REQUIRED. CURB EDGE MINIMUM 12" ABOVE NEW ROOFING.
- [3] PROVIDE ELECTRONICALLY COMMUTATED MOTORS (ECMS) AND MOTOR MOUNTED SPEED CONTROLS FOR BALANCING.
- [4] PROVIDE FACTORY MOUNTED NEMA 3 DISCONNECT SWITCH.
- [5] PROVIDE HINGED CURB BASE.
- [6] PROVIDE WITH BAROMETRIC BACKDRAFT DAMPERS.
- [7] REMOVE, RETAIN, AND RE-INSTALL.
- [8] REUSE EXISTING CURB AND BLOCKING FOR RETAINED FAN. CURB EDGE MUST BE MINIMUM 12" ABOVE NEW ROOFING, PROVIDE CURB ADAPTER AND/OR CURB EXTENSION AS REQUIRED.
- [9] EXISTING, NOT IN SCOPE.



HOOVER KEYPLAN
NO SCALE



SCHEMATIC DESIGN
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DRAWN BY: AH		
CHECKED: MPW		
APPROVED: FJH, JPV		

ELECTRICAL ROOF PLAN

SCALE: AS SHOWN

E-101

GENERAL NOTES

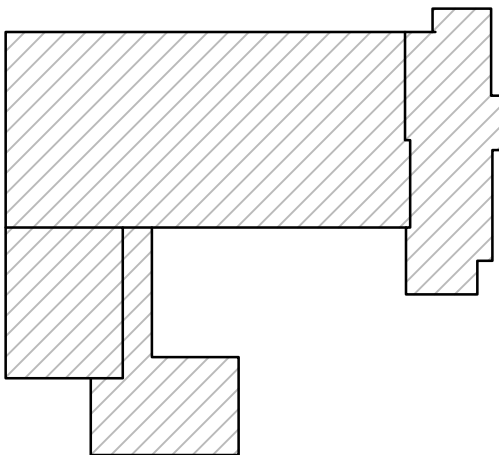
- DISCONNECT AND MAKE SAFE THE EXISTING MECHANICAL EQUIPMENT FOR REMOVAL BY HVAC CONTRACTOR. THE EXISTING FEEDER SHALL BE DE-ENERGIZED AND LOCKED OUT FOR THE DURATION OF THE NEW ROOF WORK. RECONNECT EXISTING FEEDER TO EXISTING AND NEW MECHANICAL EQUIPMENT UPON THE RE-INSTALLATION BY HVAC CONTRACTOR. MODIFY AND EXTEND CONDUIT AND WIRE AS REQUIRED.
- ALL CONDUIT AND CABLE RUNS ACROSS ROOF SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF ROOF (IF REMOVAL IS NOT ACCEPTABLE SECURE AND MAKE SAFE) UNLESS CONDUITS AND WIRE HAVE BEEN ABANDONED IN WHICH CASE THEY SHALL BE REMOVED PERMANENTLY. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CIRCUITING TO ROOF TOP EQUIPMENT.
- PANELBOARDS SHOWN ARE LOCATED ON FIRST FLOOR.
- PANELBOARD SHOWN ARE LOCATED ON SECOND FLOOR.
- BOLD TEXT AND LINES INDICATE PROPOSED WORK, LIGHT TEXT AND LINES INDICATE APPROXIMATE EXISTING CONDITIONS.
- PROVIDE TEMPORARY POWER AND EQUIPMENT AS REQUIRED TO KEEP SYSTEMS OPERATIONAL, SEE 23 09 93 FOR SEQUENCING AND SCHEDULING.
- THE LOCATIONS OF EXISTING UTILITIES AND EQUIPMENT ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES AND STRUCTURES BEFORE COMMENCING WORK. BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES AND STRUCTURES.
- PREVENT DUST FROM BECOMING A NUISANCE OR HAZARD. CONTROL DUST DURING AND AFTER CONSTRUCTION.

GENERAL DEMOLITION NOTES

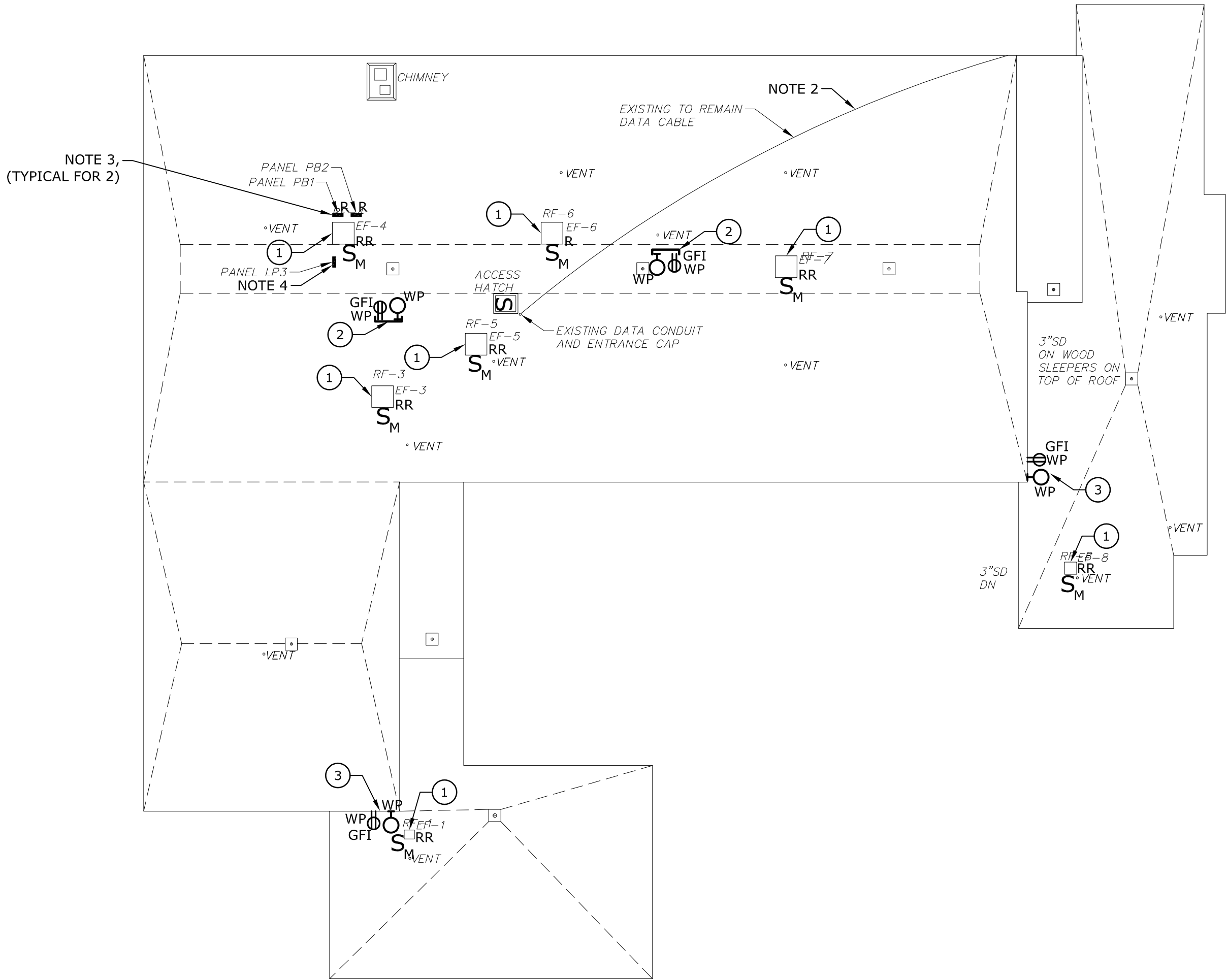
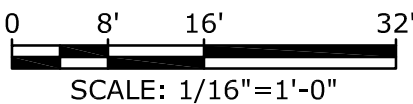
- DEMOLITION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DISCONNECT AND MAKE SAFE BRANCH CIRCUITS, FEEDERS, AS REQUIRED TO ACCOMPLISH THE NEW WORK AS SHOWN OR REASONABLY IMPLIED. THE CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS OF THIS SET TO DETERMINE THE EXTENT OF THE DEMOLITION WORK REQUIRED.
- BRANCH CIRCUITS SERVING EXISTING DEVICES TO REMAIN AND EXISTING DEVICES TO BE REMOVED SHALL BE MAINTAINED AND RECONNECTED AS REQUIRED AFTER REMOVAL OF THE EXISTING DEVICES, AS NECESSARY TO ACCOMMODATE THE ALTERATIONS.
- COORDINATE WITH THE ENGINEER, GENERAL, AND MECHANICAL CONTRACTORS FOR EXISTING EQUIPMENT TO BE DISCONNECTED AND REINSTALLED.
- THE CONTRACTOR SHALL REMOVE ALL WIRING/CABLING NO LONGER IN USE FROM EXISTING CONDUITS. CONDUITS NO LONGER IN USE SHALL BE CUT BACK AS REQUIRED AND CAPPED.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DEMOLITION CRITERIA.
- CONTRACTOR SHALL ASSUME MATERIALS TO BE DEMOLISHED ARE POSITIVE FOR HAZARDOUS MATERIALS AND DISPOSE OF AS NECESSARY IN ACCORDANCE WITH APPLICABLE REGULATIONS. REFER TO SPECIFICATIONS FOR MORE DETAILS.
- OWNER RETAINS RIGHT OF FIRST REFUSAL FOR ALL ITEMS TO BE REMOVED OR DEMOLISHED. CONTRACTOR SHALL TAKE REASONABLE CARE TO AVOID DAMAGE TO ITEMS TO BE RETAINED BY OWNER. NO ADDITIONAL CHARGE WILL BE ALLOWED FOR REMOVAL OF SALVAGEABLE ITEMS.
- PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEEP STANDARDS.

ELECTRICAL KEY NOTES

- DISCONNECT EXISTING EQUIPMENT. SECURE CONDUCTORS AND MAKE SAFE FOR ROOF INSTALLATION. LOCK OUT TAG OUT CIRCUIT AT LOCAL OVERCURRENT PROTECTION DEVICE. RECONNECT TO REINSTALLED OR NEW EQUIPMENT. SEE GENERAL NOTE 1. REFER TO HVAC DRAWINGS FOR DETAILS.
- ROOF TOP WEATHERPROOF GFI RECEPTACLES AND LIGHTS SHALL BE MOUNTED ON ¾" RIGID CONDUIT 18"AFF. LUMINAIRE SHALL BE MOUNTED 6'AFF.
- ROOF TOP WEATHERPROOF GFI RECEPTACLES, SWITCH AND LIGHTS SHALL BE MOUNTED TO EXTERIOR WALL. GFI SHALL BE MOUNTED 18"AFF, LUMINAIRE SHALL BE MOUNTED 6'AFF.



HOOVER KEYPLAN
NO SCALE



ELECTRICAL ROOF PLAN
1/16" = 1'0"

DEMOLITION LEGEND

"RR" EXISTING DEVICE TO BE REMOVED. EXISTING BRANCH CIRCUIT, WIRING AND CONDUIT SHALL BE UTILIZED FOR NEW EQUIPMENT IN EXACT LOCATION. MODIFY AND EXTEND WIRE AND CONDUIT AS REQUIRED. SEE GENERAL DEMO NOTES FOR ADDITIONAL INFORMATION.

"R" EXISTING DEVICE TO REMAIN ACTIVE AS-IS. SEE GENERAL DEMO NOTES FOR ADDITIONAL INFORMATION.

RECEPTACLES

MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED.
NUMBERS/LETTERS SHOWN BESIDE RECEPTACLES SHALL INDICATED THE FOLLOWING:
"GFI" INDICATES INTEGRAL GROUND FAULT INTERRUPTER.
"2" (NUMBER OR PANELBOARD NAME AND NUMBER) INDICATES POWER CIRCUIT NUMBER.

Φ DUPLEX RECEPTACLE.

POWER DISTRIBUTION EQUIPMENT

□ PANELBOARD, SURFACE MOUNTED
S_M LOCKABLE MOTOR RATED TOGGLE SWITCH.
NUMBER OF POLES AS REQUIRED BY LOAD.

**MSBA Accelerated Repair Program
Horace Mann Elementary School
Hoover Elementary School
Roof Replacement project
Melrose, MA**

**Schematic Design Estimate
June 27, 2022**

Tighe & Bond



198 North Washington St, #109, Boston MA 02114



**MSBA Accelerated Repair Program
Roof Replacement project
Melrose, MA
Schematic Design Estimate
BASIS OF ESTIMATE**

6/27/2022

Roof Replacement project

DOCUMENTATION

This estimate was prepared from the following information:

Schematic Design Drawings provided by Tighe & Bond design team, dated June 20, 2022

BASIS FOR PRICING

This estimate reflects the current construction value for the construction of this project and should not be construed as a prediction of a low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared.

PROJECT OUTLINE

The project consists of roof replacement at Horace Mann Elementary School and Hoover Elementary School in Melrose, MA.

QUALIFICATIONS

Owner costs and fees are excluded

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

Overtime outside industry standard

Work outside normal hours of operation

Preconstruction fees

Utility Company Charges or Hook-up fees have been excluded

No permits or special fees have been included

Third party commissioning costs.

Owner supplied and/or installed items (e.g.. Draperies, furniture and equipment)

Loose Furniture and Equipment

Owner Supplied and Installed Furniture, Fixtures and Equipment

Relocation / move costs

Air Quality monitoring / Vibration monitoring

Loose technology equipment (i.e. Computers, Printers, Etc.)

The estimate assumes all long-lead items can be pre-purchased to meet schedule requirements.

The estimate is based on the premise that the design will meet all codes, laws, ordinances, rules, and regulations in effect at the time that the estimate was prepared. The estimate shall be adjusted should any discrepancies between design

and the aforementioned codes, laws or ordinances result in, or require, an increase in the Cost 'of the Work

Items identified in the design as Not In Contract (NIC)

Builder's Risk insurance, terrorist insurance and other Owner insurances



Roof Replacement project

June 27, 2022

Hoover Elementary School

Melrose, MA

Schematic Design Estimate

		17,714 GSF		
		Cost / SF		
02 Existing Conditions		340,899	19.24	25.5%
04 Masonry		16,200	0.91	1.2%
05 Metals		157,086	8.87	11.7%
06 Wood, Plastics, and Composites		28,464	1.61	2.1%
07 Thermal & Moisture Protection		654,165	36.93	48.9%
22 Plumbing		32,685	1.85	2.4%
23 HVAC		63,526	3.59	4.8%
26 Electrical		44,124	2.49	3.3%
TOTAL DIRECT COST		1,337,148	75.49	100%
Design Contingency	15.00%	200,572	11.32	
General Conditions and General Requirements	11.50%	176,838	9.98	
Permits and fees	excluded	-	-	
Contractor's OH&P	5.00%	76,886	4.34	
Escalation (midpoint 2Q 2023)	5.00%	89,572	5.06	
Construction Contingency	excluded	-	-	
TOTAL ESTIMATED CONSTRUCTION COST		1,881,016	106.19	

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Hoover Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
1	02 Existing Conditions						
2	024100 <i>Selective Demolition</i>						
3	<i>Roof Demolition</i>						
4	Remove and disposed of existing roof - see Hazardous Materials Assessment	17,714	sf		Included		
5	Premium remove original tar & gravel roof system	13,450	sf	4.50	60,525		
6	Roof drain remove	7	ea		with plumbing		
7	Remove and dispose of access hatch	1	ea	450.00	450		
8	Existing insulation thickness test cut	4	ea	150.00	600		
9	Remove and dispose of all exiting exhaust fence curb and flashing	104	lf	18.00	1,872		
10	Remove and dispose of chimney flashing	24	lf	6.50	156		
11	Remove and dispose of vent flashing	10	ea	40.00	400		
12	Cutting and patching	1	ls	3,500.00	3,500		
13	Dispose, cart away	1	ls	4,400.00	4,400		
14	Temporary roof protection	17,714	sf	1.20	21,257		
15	Dust control	1	ls	6,200.00	6,200		
16	Allowance for overhead protection building entrance below.	120	sf	20.00	2,400		
17							
18	026000 <i>Hazardous Materials Assessment</i>						
19	ACM & PCB Abatement of roof	17,714	sf	13.50	239,139		
20							
21	Subtotal: Existing Conditions					\$ 340,899	
22							
23	04 Masonry						
24	041000 <i>Masonry Units</i>						
25	Masonry work associated with installing thru-wall flashing	216	lf	75.00	16,200		
26							
27	Subtotal: Masonry					\$ 16,200	
28							
29	05 Metals						
30	051000 <i>Structural Steel Framing</i>						
31	Structural improvements	1	ls	150,000.00	150,000		
32	053000 <i>Metal Decking</i>						
33	Roof deck replacement at Roof B1 damaged areas, assumed 5% of roof area	886	sf	8.00	7,086		
34							
35	Subtotal: Metals					\$ 157,086	
36							
37	06 Wood, Plastics, and Composites						
38	061600 <i>Rough Carpentry</i>						
39	Install new curbing for all HAVC equipment 12" above new roof	94	lf	48.00	4,512		
40	New 3x Pressure treated blocking at roof edge	998	lf	24.00	23,952		
41							
42	Subtotal: Wood, Plastics, and Composites					\$ 28,464	
43							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Hoover Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
44	07 Thermal & Moisture Protection						
45	075000 Membrane Roofing						
46	New Construction						
47	90 mil EDPM roofing system; 30 year warranty	17,714	sf	30.00	531,420		
48	Tapered crickets	4	ea	80.00	320		
49	New walkway pad, assumed 10% of roof area	1,771	sf	6.50	11,514		
50							
51	076500 Flashing and Sheet Metal						
52	Roof edge metal fascia and securement, continuous extruded aluminum cleat, continuous aluminum hook strip with stainless fasteners	998	lf	49.00	48,902		
53	Snap-on aluminum cover	998	lf	38.00	37,924		
54	New flashing at HAVC equipment curbing	94	lf	14.00	1,316		
55	Stainless steel chimney flashing	20	lf	32.00	640		
56	Access hatch flashing	16	lf	18.00	288		
57	Vents pipe flashing	12	ea	85.00	1,020		
58	Roof drain flashing	8	ea	350.00	2,800		
59	Wall and roof flashing	216	lf	18.00	3,888		
60	Misc. roof flashing	1	al	2,000.00	2,000		
61							
62	077100 Roof Specialties						
63	Access hatch	1	ea	4,250.00	4,250		
64							
65	079100 Joint Sealants						
66	Exterior caulking and sealants at all roof penetrations	17,714	sf	0.45	7,883		
67							
68	Subtotal: Thermal & Moisture Protection					\$ 654,165	
69							
70	22 Plumbing						
71	Demolition						
72	Roof drains	8	ea	332.10	2,657		
73	New						
74	Sanitary vent system						
75	Extend vent piping to 24"	12	ea	570.00	6,840		
76							
77	Roof drainage system						
78	Roof drain including new piping/insulation and tie-in to existing, Allowance	8	ea	1,648.50	13,188		Assume 4" drains
79							
80	Materials supply and bidding/market conditions allowance	1	ls	5,000.00	5,000		
81	Supervision/PM	1	ls	5,000.00	5,000		
82							
83							
84	Subtotal: Plumbing					\$ 32,685	
85							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Hoover Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
86	23 HVAC						
87	Demolition						
88	Disconnect mechanical piping and ductwork from units and remove and store units for reinstallation, Allowance	15	ea	934.00	14,010		
89	Remove obsolete equipment, Allowance	1	ls	4,000.00	4,000		Quantity/type not indicated
90							
91	New						
92	Re-set units and extend mechanical piping and ductwork	15	ea	1,401.04	21,016		
93							
94	Miscellaneous to include seismic controls and testing/start-up	1	ls	3,500.00	3,500		
95	Materials supply and bidding/market conditions allowance	1	ls	15,000.00	15,000		
96							
97	Supervision/PM	1	ls	6,000.00	6,000		
98							
99	Subtotal: HVAC					\$ 63,526	
100	26 Electrical						
101	Demolition						
102	Antenna, to be reinstalled	3	ea	300.00	900		
103	Conduit/wire, lighting	364	lf	11.64	4,237		
104	Electrical fixture, disconnect only, Allowance	11	ea	200.00	2,200		Fixture' description not provided
105							
106	New						
107	Lighting system						
108	Conduit/wire	364	lf	25.24	9,187		
109							
110	Miscellaneous						
111	Antenna, install previously removed	3	ea	450.00	1,350		
112	Electrical fixture, reconnect, Allowance	11	ea	250.00	2,750		
113							
114	Miscellaneous to include seismic controls and testing/start-up	1	ls	500.00	500		
115	Materials supply, small job premium and bidding/market conditions allowance	1	ls	20,000.00	20,000		
116							
117	Supervision/PM	1	ls	3,000.00	3,000		
118							
119	Subtotal: Electrical					\$ 44,124	
120							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

HERBERT CLARK HOOVER ELEMENTARY SCHOOL MELROSE, MA PRE-RENOVATION HBMA SERVICES

TO: Denise M. Gaffey – Directory and City Planner – City of Melrose
FROM: Frank Rodrigues – Tighe & Bond
COPY: Matthew Wzorek – Tighe & Bond
DATE: June 8, 2022

Tighe & Bond Inc., (Tighe & Bond) has prepared the following technical memorandum to summarize the Hazardous Building Material Assessment (HBMA) conducted at the Herbert Clark Hoover Elementary School. (the "Site"). A facility improvement project, which includes full replacement of the existing roof is currently proposed for the school building. The current roof systems consists of a rubber membrane roof system over a tar and gravel/built up roof applied onto a metal roof deck. The HBMA was limited to the roof area being proposed for renovation impact and did not include the roof of the modular classroom section of the school. As required by state and federal regulations, characterization of various waste streams generated during construction projects must be completed to ensure their proper management.

The Assessment included a visual observation and bulk sampling of suspect hazardous building materials (asbestos, painted/coated building materials), and a visual inventory of other hazardous/regulated wastes (i.e., mercury-containing equipment, refrigerants, PCB-containing equipment, etc.). The HBMA was performed to support the proposed facility improvement project and to address/prepare budgets for management of environmentally related building materials.

Tighe & Bond's assessment and report are subject to the HBMA Limitations provided as Appendix A. The Assessment was performed on May 20, 2022, by Tighe & Bond's Massachusetts licensed asbestos inspector, Francisco J. Rodrigues, (#AI040131). Mr. Rodrigues' inspector license and certification are included as Appendix B of this report.

1 Hazardous Building Materials Assessment

1.1 Asbestos-Containing Building Materials

Prior to any type of building renovation or demolition, a thorough investigation is required to identify and quantify asbestos containing materials (ACM) which may be impacted by the demolition or renovation activities. The survey is required by the United States Environmental Protection Agency (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations (Title 40 CFR, Part 61, Subpart M); Massachusetts Department of Environmental Protection (MassDEP) regulations (310 CMR 7.15); Massachusetts Department of Labor Standards (MADLS) regulations, (454 CMR 28.00); as well as applicable portions of the Occupational Safety and Health Administration (OSHA) asbestos in construction regulations (CFR 1926.1101).

The asbestos assessment was limited to accessible areas of the roof and roof top equipment to determine the presence or absence of suspect ACM that have potential for disturbance

during the proposed renovation activities and would be subject to abatement prior to roof replacement.

Suspect materials were divided into "homogeneous materials", building materials which were determined by the inspector to be homogeneous based on their color, texture, and age. A number of bulk samples of suspect ACM from each homogenous group of materials were collected in general accordance with standards described in the Environmental Protection Agency (EPA) Asbestos Hazard and Emergency Response Act (AHERA) Regulations for schools. AHERA sampling protocols are only recommended for use by MassDEP and EPA as they do not regulate bulk sampling standards.

Bulk samples were collected and submitted to Aerobiology Laboratories Associates Inc., (Aerobiology) of Woburn, Massachusetts for analysis via Polarized Light Microscopy with Dispersion Staining (PLM/DS) in accordance with the EPA/600/R-93/116 Method. ProScience is a Massachusetts licensed and American Industrial Hygiene Association (AIHA)-accredited asbestos laboratory.

Suspect materials identified and sampled are included as inventory tables in Appendix C. The tables describes material locations, sample numbers, quantities, condition, analytical results, and specific comments relative to our findings. The asbestos laboratory report is included in Appendix D.

The MassDEP defines a material that contains greater than or equal to one percent ($\geq 1\%$) asbestos utilizing PLM/DS, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos. Materials containing less than one percent ($< 1\%$) asbestos are regulated to a degree by OSHA related to work practices, worker exposure, and waste containerization and in Massachusetts, materials containing $< 1\%$ asbestos are considered asbestos-containing waste material (ACWM) and must be packaged and disposed of as ACWM in accordance with 310 CMR 7.15.

A total of five homogeneous areas were identified during the inspection and 14 samples of suspect ACM were collected. The tar and gravel/built up roof system located under the rubber membrane roof system was determined to contain $< 1\%$ asbestos and therefore classified as an ACWM.

Samples of other suspect ACM collected during the survey, were determined to be non-asbestos containing. Refer to Appendix C for a list of each suspect material identified and sampled.

Other suspect materials encountered during any renovation activities that are not identified in this report as being non-ACM should be assumed to be ACM until sample collection and laboratory analysis indicate otherwise.

The tar and gravel/built up roof identified at the Hoover School must be managed and disposed of as an ACM.

The ACMs identified at the Hoover School should be removed by a licensed asbestos abatement contractor, utilizing trained and licensed personnel prior to renovation, demolition or any activity that has the potential to disturb these materials. Tighe & Bond recommends the creation of a project specific asbestos abatement scope of work or technical specification for the removal of ACWM. The specification must be developed by a Massachusetts licensed asbestos project designer, and it should address such important issues as regulatory requirements, notification procedures, insurance considerations, air sampling needs and other pertinent information. Abatement activities must be subject to a passing post abatement visual inspection by an asbestos monitoring firm not affiliated with the abatement contractor.

The same firm typically collects, analyzes and reports the State required post abatement clearance air samples.

1.2 Universal Waste and Other Regulated Building Waste

Tighe & Bond performed a visual inspection of the proposed renovation areas to identify hazardous materials, universal waste materials or other regulated wastes that have the potential for disturbance during the roof replacement project. No regulated wastes were identified.

1.3 Lead Based Paint (LBP)

Paint chip sampling was performed to identify lead paint concentrations in those painted components likely subject to impact by renovations. Specifically, one sample was collected from the fascia board which is scheduled to be replaced.

The OSHA 1926.62 Lead in Construction regulations require worker protection and the use of certain work practices if painted building components with detectable levels of lead paint are disturbed during a demolition or renovation. The result of the sampling is intended to provide guidance to contractors for occupational lead exposure controls as it is the responsibility of the contractor to ensure the safety of their employees. Contingent upon renovation or demolition methods, building components coated with lead levels may cause exposures to lead above OSHA standards during proposed renovation or demolition activities.

One suspect lead paint sample was collected from the painted fascia board and was submitted to Aerobiology analysis using the SW846-7420/3051 method. A summary of the test result is presented in Appendix E. The Aerobiology laboratory report is located in Appendix F.

The result of the paint chip sampling performed by Tighe & Bond indicates the paint chip sample collected and analyzed was below the EPA regulatory threshold limit for lead based paint.

Although results were below regulatory thresholds, compliance with OSHA Lead in Construction is required for detectable levels of lead. Lead-containing painted building components should not be subjected to dust-generating activities such as sanding, grinding, sawing, etc. Also, lead-containing painted building materials should not be subject to torch cutting. An LBP determination cannot determine a safe level of lead but is intended to provide guidance for implementing industry standards for lead in paint at identified locations. With this data contractors can better determine potential exposure of workers to airborne lead by understanding the different concentrations of LBP and activities that disturb paint on representative surfaces.

Based on the reportable levels of lead on the painted components tested and subject to waste characterization requirements of the disposal facility, the contractor may be required to conduct Toxicity Characteristic Leaching Procedure (TCLP) testing of the remaining painted waste stream prior to disposal, to determine if the results of that testing exceed the 5.0 mg/L hazardous waste threshold as governed under the Federal EPA "Resource Conservation and Recovery Act" (RCRA - 40 CFR Part 261).

Appendices:

APPENDIX A: HBMA Limitations

APPENDIX B: Inspector's Certification

APPENDIX C: Suspect Asbestos Containing Materials Inventory Table

APPENDIX D: Asbestos Laboratory Report

APPENDIX E: Summary of Lead Paint Materials Table

APPENDIX F: Lead Paint Samples Laboratory Report

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Schematic Design Submission Checklist MSBA Accelerated Repair Program



District: Melrose Public Schools

School: Horace Mann Elementary School

Scope: Roof Replacement

Schematic Design Deliverables:

OPM	District	
☒	☒	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☒	☒	Code Analysis
☒	☒	Schematic Design Drawings
☒	☒	Cost Estimate (CSI Format) - Include all Proposed Alternates
☒	☒	Form 3011 – Total Project Budget
☒	☒	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☒	☒	Project Schedule (Gantt Chart)
☒	☒	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☒	☒	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Schematic Design Submission Checklist MSBA Accelerated Repair Program



Program Guidelines and Project Funding Agreement:

OPM	District	
☒	☒	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☒	☒	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☒	☒	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☒	☒	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☒	☒	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☒	☒	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☒	☒	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

Schematic Design Submission Checklist MSBA Accelerated Repair Program



☒	☒	MSBA's Audit Department will review requests for reimbursement in the ProPay system of \$50,000 or more. All reimbursement requests which are less than \$50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☒	☒	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

Title: Project Director, Owner's Project Manager
Firm: The Vertex Companies, LLC
Date: June 27, 2022

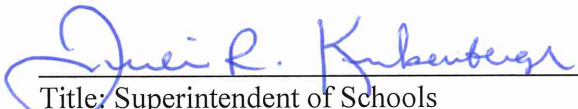
I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

Schematic Design Submission Checklist MSBA Accelerated Repair Program



certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).



Title: Superintendent of Schools
Date: June 27, 2022

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Tighe&Bond

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1.3.4	Electrical Systems	1-5
1.4	ARP Sustainability Requirements.....	1-5

Appendices

A	Code Analysis
B	Schematic Design Drawings `
C	Cost Estimate
D	Form 3011 – Total Project Budget
E	Project Cash Flow
F	Project Schedule
G	ARP Reimbursement Rate Certification and Checklist
H	Proposed Project Scope and Budget Vote Language
I	Hazardous Materials Assessment Report
J	Roof Sampling Test Cut Report

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

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Section 1

Project Narrative

1.1 Introduction

The City of Melrose is currently participating in the Massachusetts School Building Authority (MSBA) Accelerated Repair Program (ARP) and has submitted a Statement of Interest for repairs at the Horace Mann Elementary School. The Vertex Companies, LLC. and Tighe & Bond Designer Services, Inc. were subsequently designated as the Owner's Project Manager (OPM) and Designer, respectively for the proposed project.

The Horace Mann Elementary School is located at 40 Damon Avenue in Melrose, MA. The school building is a two-story brick masonry building with an approximate roof area of 14,000 square feet, which was constructed in 1949 with an addition constructed in 1955. The school has undergone several renovations over time, including accessibility and interior improvements in 2017. The first floor of the school generally consists of classrooms, a library, administrative and nurse offices, storage rooms, a multipurpose room, and bathrooms. The second floor contains classrooms and bathrooms. The school currently serves approximately 270 students from kindergarten to fifth grade.

The team assembled for execution of the Herbert Clark Hoover School project includes the following members:

- | | |
|----------------------------------|---|
| • Funding Agency | Massachusetts School Building Authority |
| • Owner | Melrose Public Schools |
| • OPM | The Vertex Companies, LLC |
| • Designer | Tighe & Bond, Inc. |
| • Cost Estimating | Ellana Construction Consultants. |
| • Hazardous Materials Assessment | Tighe & Bond, Inc. |
| • Code Review | Tighe & Bond, Inc. |
| • Structural/Construction Admin | Frawley Engineering, P.C. |

1.2 Existing Conditions

1.2.1 Roof

The existing thermoplastic polyolefin (TPO) membrane roof system does not appear to be original to the original building constructed in 1949. The addition constructed in 1955 also consists of a TPO membrane roof system. Based on documents provided by the District, the original roof on the portion of the building constructed in 1949 consisted of 5 ply coal tar pitch and gravel over 2.5" insulation on a steel roof deck. The original roof on the portion of the building constructed in 1955 consisted of a bonded membrane roof over 2.5" insulation on a steel deck. Based on recent site visits and field investigation, the entire roof area currently consists of a fully-adhered TPO membrane roofing system, with 3" rigid insulation and tar paper underlayment.

There is significant evidence of water damage inside the building from roof leaks and numerous deficiencies in the roofing membrane. The roof does not provide adequate thermal performance and drainage. Based on the site observations and investigation, the existing roofing system and majority of associated appurtenances appear to be in poor condition and are beyond their useful life.



**Photo 1: Existing Roof over
1949 Building**



**Photo 2: Existing Roof over
1955 Addition**

1.2.2 Plumbing

There are existing roof drains that are tied into the storm drainage system in the building. The drains appear to be in working order, however some are rusted and in poor condition.

Plumbing vents penetrate the roof in multiple locations to provide pressure relief for the school's sanitary piping system. The vent piping is in good condition with expected rust on the pipe interior.



Photo 3: Existing Roof Drains

1.2.3 HVAC

There are four exhaust fans (EFs) installed on the existing roof. Most of the existing fans' nametags are unreadable, therefore the age of the fans can't be determined. The fans appear to be in good condition and should be retained.



**Photo 4: Exhaust Fan
on 1949 Roof**



**Photo 5: Equipment and Chimney
on 1955 Building Addition**

1.2.4 Electrical

The existing electrical items on the roof are limited to electrical connections to any HVAC equipment requiring electrical power. It is assumed that each HVAC fan has an integral or equipment-mounted disconnect.

1.3 Recommended Solutions

1.3.1 Roof Replacement

Replacement of the existing roof system at the Horace Mann School is recommended for improving thermal performance, roof drainage, overall energy efficiency of the building, and remedying numerous roof leaks. The following items below outline the proposed scope of work for the project, including demolition. Schematic Design plans with additional detail are included in Appendix B.

Roof Demolition will include:

- Removal of the existing TPO membrane roofing system
- Removal of the existing rigid insulation and fiberboard
- Removal of the existing access hatch
- Repair of the steel roof deck as needed
- Removal and storage of existing HVAC equipment
- Removal of existing fascia, damaged curbing, blocking, and flashing

Proposed Roof Improvements will include:

- Repair of any damaged or compromised steel roof decking discovered during demolition
- Installation of a fully-adhered EPDM roofing system. The new roofing system will include, from bottom to top:
 - Fiberglass-reinforced gypsum sheathing cover board
 - Base sheet/ combination air and vapor barrier
 - New polyisocyanurate rigid insulation. The new insulation will meet MSBA Accelerated Repair Program Requirements, including the stretch energy code. Insulation thickness will provide a minimum R-value of 30. Tapered insulation will be installed to provide a positive pitch toward roof drains.
 - ½" coverboard installed over the insulation
 - Fully-adhered EPDM roofing membrane
- Installation of new curbing, flashing, blocking, metal fascia, and roof drains
- Installation of new access hatches, ladders, and protective guardrails

1.3.2 Plumbing Systems

Plumbing Demolition will include:

- Removal of all existing roof drains. Existing rain leaders within building will be cut and capped away from the drain body and prepared for reconnection.

Proposed Plumbing Improvements will include:

- Installation of new roof drains and associated piping. All new roof drains will be replaced in kind.
- Installation of 1" thick insulation on drain bodies and new drainage piping.
- Inspection of existing drainage piping, including snaking the pipes to check for clogs and jetting the pipes should there be any clogs present.

Section 1 Project Narrative**Tighe&Bond**

- Extension of vent piping as required to maintain clearance above roof of 18-24".

1.3.3 HVAC Systems**HVAC Demolition will include:**

- Disconnection, removal, and storage of all exhaust fans
- Removal and disposal of roof curbs on original building's roof.
- Prior to unit removal, exhaust fans will be tested and airflows recorded for final balancing efforts.
- Installation of temporary caps for all ductwork.
- Installation of temporary caps over curbs on newer building's roof.

HVAC Improvements will include:

- Installing new curbs for exhaust fans on older roof; including new transition curbs as required for fan connection to the existing roof opening.
- Repairing curbs and/or blocking with minor damage and extending existing curbs as required. Provision of adapter curbs as required for fan re-installation
- Reinstallation of retained exhaust fans
- Reconnecting and sealing units to existing ductwork.
- Reconnecting units to existing controls.
- Re-testing and balancing systems to match pre-existing airflows.

1.3.4 Electrical Systems

The proposed electrical work will include:

- Disconnecting and making safe all existing electrical devices with connections to mechanical equipment. Once the existing equipment is placed back in its permanent location after roofing, the electrical connections will be re-energized. For any equipment that has moved, the existing conduit and wires will be extended as required.

1.4 ARP Sustainability Requirements

MSBA's ARP requires use of the Stretch Energy Code (780 CMR – Appendix AA and 2015 IECC) as the basis of design for ARP projects for roof replacement. Below is a table comparison of the required code values for the relevant project items and the values for the proposed assemblies. The proposed solutions and items for the Herbert Clark Hoover School meet or exceed the ARP sustainability requirements.

Roofs	Maximum U-Value (Btu/hr·ft ² ·°F)	Minimum R-Value (°F·ft ² ·hr/Btu)
Required	0.032	30
Proposed	0.032	30

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Horace Mann School Repairs Project

Building Code Analysis

This analysis summarizes codes requirements applicable to the project scope for the Horace Mann School Repairs Project. This summary includes general code information applicable to the overall project and more specific requirements related to roof replacement activities.

Applicable codes for this project include:

- International Building Code 2015 (IBC)
- International Existing Building Code 2015 (IEBC)
- International Energy Conservation Code 2018 (IECC)
- 248 CMR 10.00 Uniform State Plumbing Code (2017)
- Commonwealth of Massachusetts State Building Code, Ninth edition 780 CMR (including amendments to the IBC, IECC and IEBC)
- Massachusetts Stretch Energy Code 780 Appendix AA
- Architectural Access Board Regulations 521 CMR (AAB)
- American Society of Civil Engineers – Minimum Design Loads for Buildings and Other Structures (ASCE 7-05)
- National Electrical Code NFPA 70

Section 1 – General Code

Use and Occupancy Classification (305 IBC 2015 & 780 CMR)

- Educational (E)
 - Due to the anticipated scope of work, roof replacement, Level 1 alterations of the IEBC will be triggered. Level 1 alterations encompass the removal and replacement of materials that serve the same purpose. Any new elements must comply with the requirements for new construction.

Types of Construction (602 IBC 2015 & 780 CMR)

- Type III Construction – Construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of a 2-hour rating or less.

Alterations Level 1 (503 IEBC 2015 & 780 CMR)

- Removal and replacement or the covering of existing materials, elements, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

Material and Methods (702.6 & Chapter 8 IEBC 2015 & 780 CMR)

- All new work shall comply with materials and methods requirements in the IBC, IEBC, IECC, IMC, and MSPC, as applicable that specify material standards, details of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 2 – Requirements Applicable to Roof Replacement Work**Building Envelope Requirements (IECC 2015, Table C402.3)**

- Roof Maximum U-Factors
 - Insulation entirely above deck – U-0.032
- Roof Minimum R-Values
 - Insulation entirely above deck – R-30ci

Massachusetts State Building Code (780 CMR Amendments)

- Dead loads on an existing roof may not increase by more than 5% due to a re-roofing project.
- If the additional dead loads exceed 5%, the structure must conform to current snow load requirements.
- Since a similar EPDM roofing system (and ballast in some locations) is being removed from the roof prior to roof replacement, the new built-up roof is not anticipated to increase the dead load on the roof by more than 5%.

Code of Federal Regulations Title 29 (29 CFR)

- Holes – each employee on walking/working surfaces shall be protected from falling through holes more than 6 feet above lower levels, by personal fall-arrest systems, covers, or guardrail systems erected around such holes.

Uniform State Plumbing Code 248 CMR 10.00

- Storm Drain leaders are sized based on roof area served. The original roof area and the addition roof area are 9900sqft and 3600sqft respectively and include three (3) 4" roof drains each. A 4" roof drain can capture storm water from 4600sqft of roof area per 248 CMR 10.0. The roof drain sizes installed suffice for the school's roof. The new roof drains will use the same outlet size as the existing ones.

Section 4 – Accessibility Requirements**Existing Building (3.3 MAAB 521 CMR)**

- Requirements for an accessible entry, toilet, drinking fountain, and telephone (if pay phones are provided) will be triggered based on the estimated cost of the project. A proponent is required to provide these items if the cost of a renovation project exceeds \$500,000.

Building Code Analysis**Tighe&Bond**

- If the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR.
- Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of work exceeds \$500,000 or unless work is being performed on the entrance or toilet room.
 - Curb cuts
 - Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR
 - Roof repair or replacement, window repair or replacement, repointing and masonry repair work
 - Work related to septic system repairs, site utilities and landscaping.
- If the cost of the project, and any additional renovations completed within 36 months of the project, exceeds 30% +of the full and fair cash value of the building, the entire building must be upgraded as required to meet 521 CMR requirements.
- The building currently complies with ADA/AAB requirements and accessibility upgrades will not be required as part of this project.

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Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

HORACE MANN ELEMENTARY SCHOOL

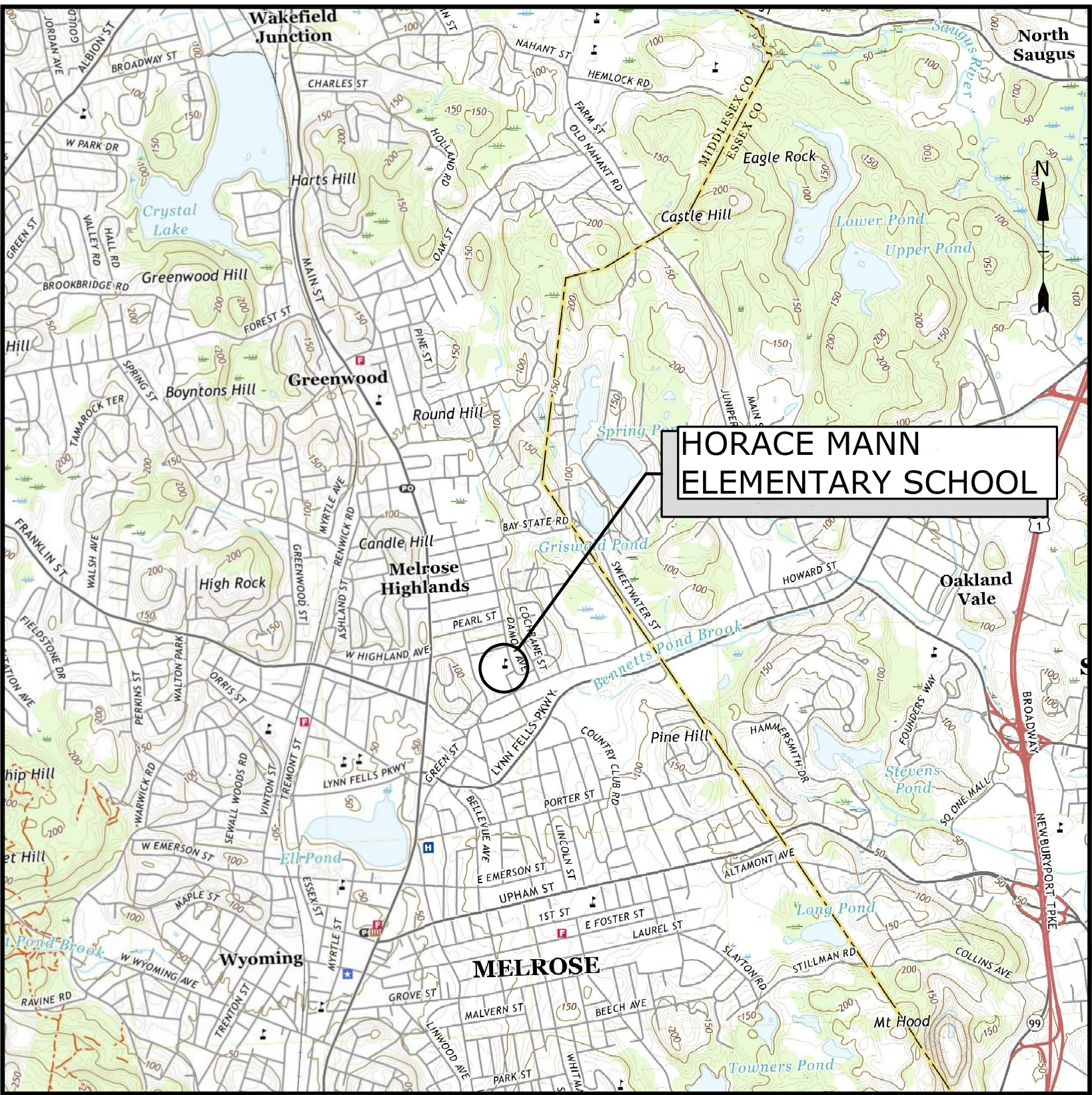
MSBA ACCELERATED REPAIR PROGRAM

ROOF REPLACEMENT PROJECT

MELROSE, MASSACHUSETTS

JUNE 2022

LIST OF DRAWINGS	
	COVER
G-001	ROOF PHOTOGRAPHS
AD-101	ROOF DEMOLITION PLAN
A-101	ROOF REPLACEMENT PLAN
A-501	ROOF DETAILS - 1
A-502	ROOF DETAILS - 2
P-101	PLUMBING ROOF PLAN
H-101	HVAC ROOF PLAN
E-101	ELECTRICAL ROOF PLAN



LOCATION MAP
SCALE: 1" = 2000'

PROJECT TEAM:

OWNER
CITY OF MELROSE
562 MAIN STREET
MELROSE, MA 02176

OWNER'S PROJECT MANAGER
THE VERTEX COMPANIES, INC.
400 LIBBEY PARKWAY
WEYMOUTH, MA 02189

COST ESTIMATING
ELLANA, INC.
98 NORTH WASHINGTON STREET
SUITE 109
BOSTON, MA 02114

FUNDING
MASSACHUSETTS SCHOOL
BUILDING AUTHORITY
40 BROAD STREET, SUITE 500
BOSTON, MA 02109

ENGINEER
TIGHE & BOND
DESIGNER SERVICES, INC.
53 SOUTHAMPTON ROAD
WESTFIELD, MA 01085

PREPARED BY:
Tighe&Bond

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COMPLETE SET 9 SHEETS

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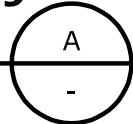
City Of Melrose

Melrose,
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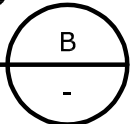
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CHECKED: MPW		
APPROVED: FJH, JPV		
ROOF PHOTOGRAPHS		
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G-001		



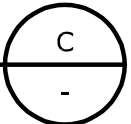
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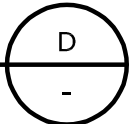
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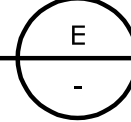
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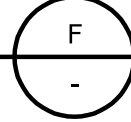
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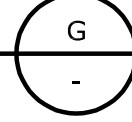
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BUILDING AND 1955 ADDITION
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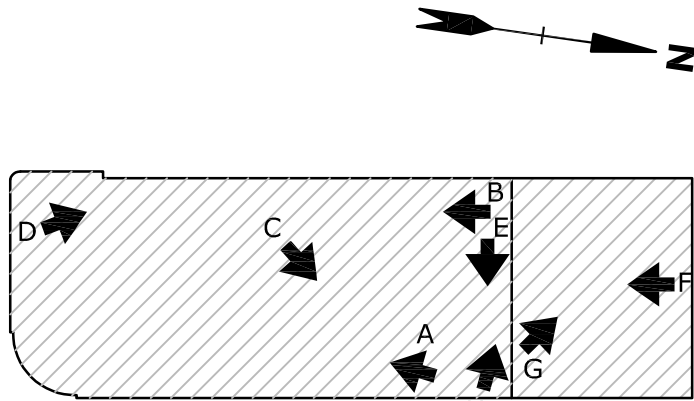
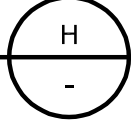
CHIMNEY AND EQUIPMENT ON
1955 ADDITION
NO SCALE



ROOF DRAINS ON 1955
ADDITION
NO SCALE



EXISTING CHIMNEY
NO SCALE



HORACE MANN KEYPLAN
NO SCALE

LEGEND:

← A PHOTOGRAPH LOCATION

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City Of Melrose

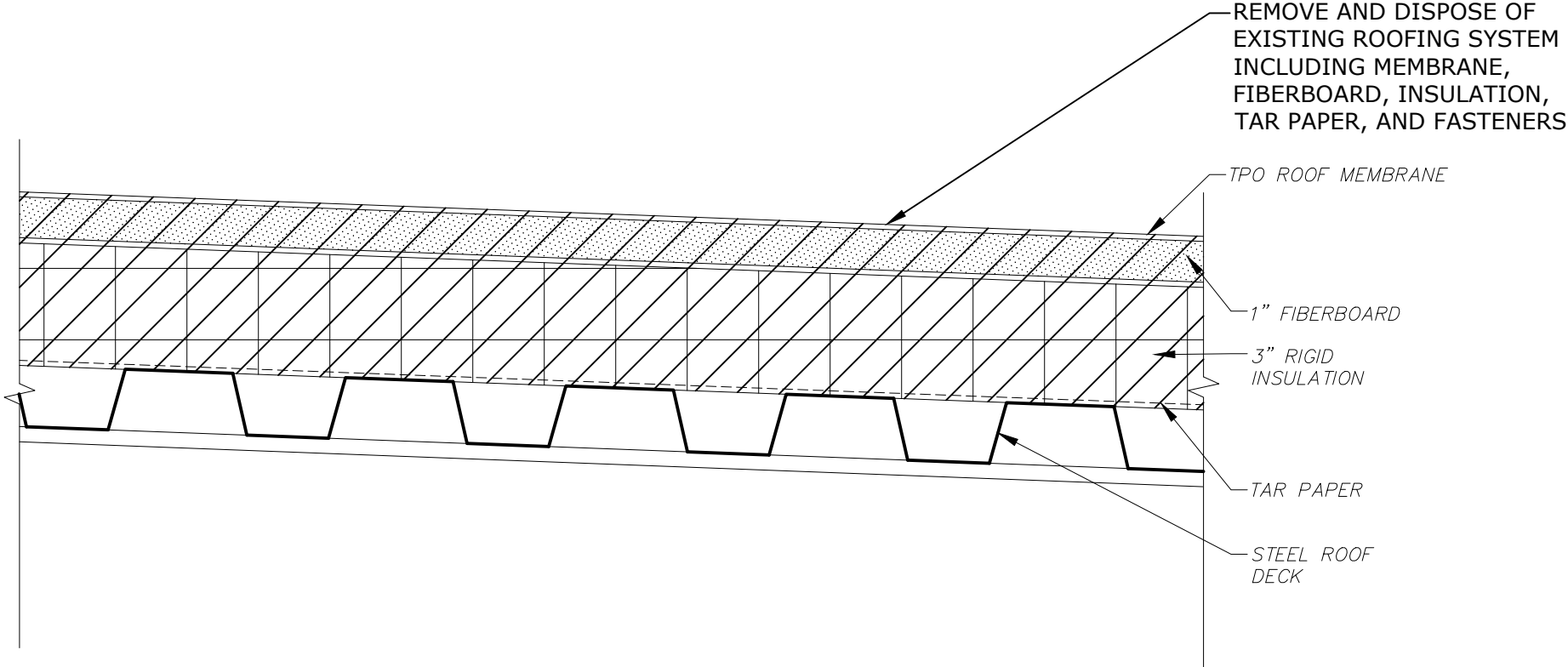
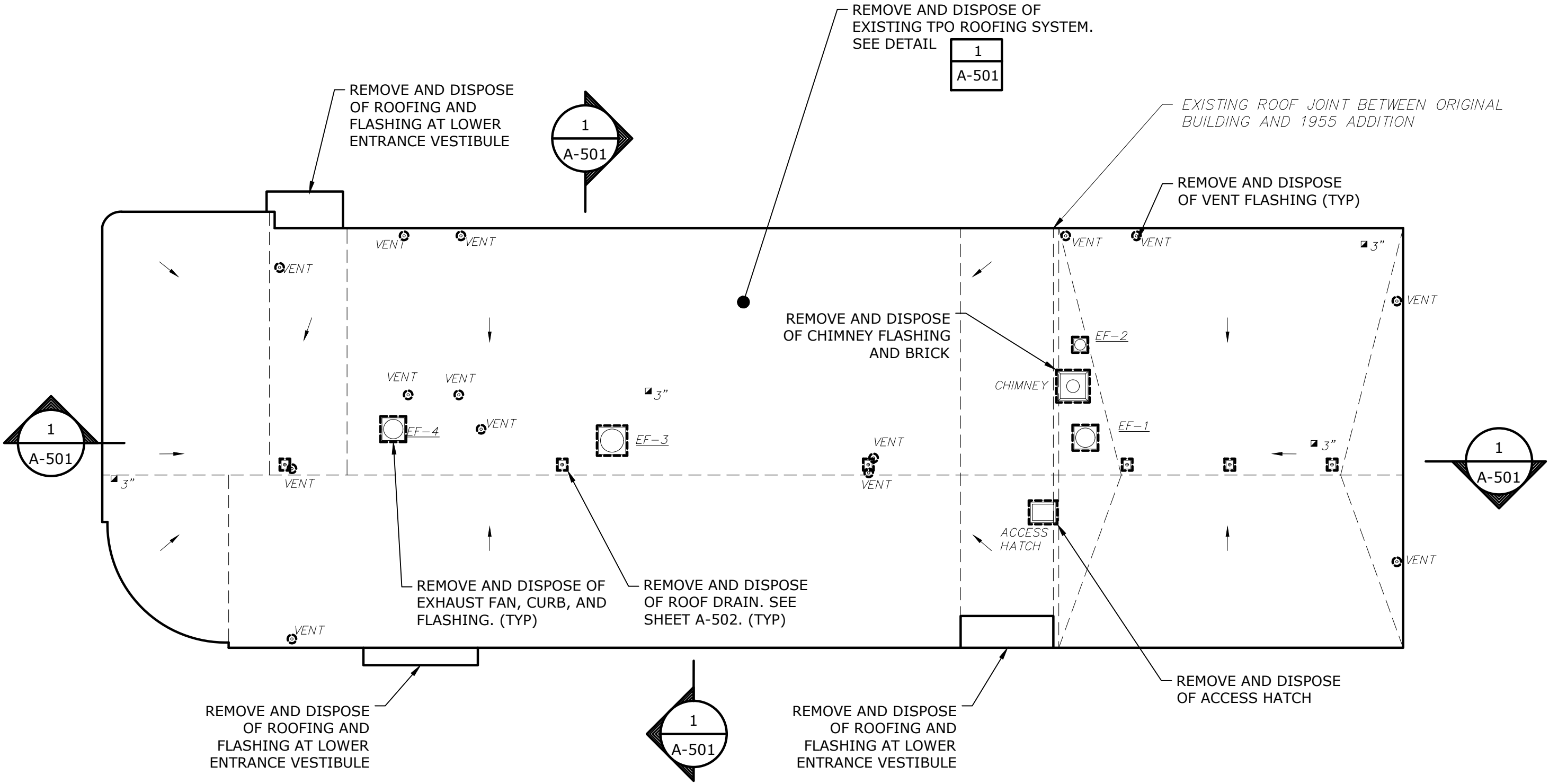
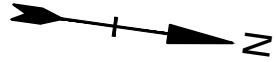
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ROOF DEMOLITION PLAN

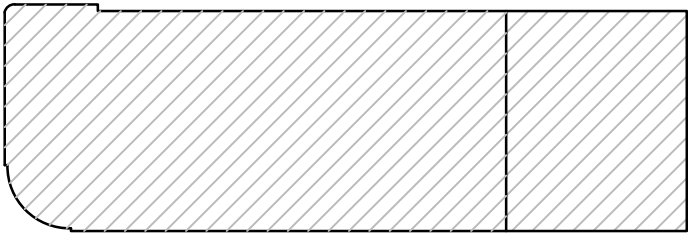
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AD-101

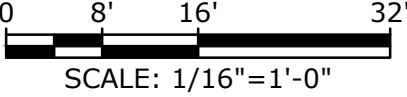


TYPICAL EXISTING ROOF SECTION

DETAIL	1
3" = 1'-0"	-



HORACE MANN KEYPLAN
NO SCALE



LEGEND

- | | |
|---|--|
| ROOF DRAIN | EXISTING GOOSENECK (INTAKE OR EXHAUST) |
| EXISTING VENT PIPE PENETRATION | EXISTING EXHAUST CAP OR AIR INTAKE |
| EXISTING ROOFTOP EXHAUST FAN/DUCT WITH CURB | EXISTING CAPPED CURB |
| EXISTING ROOFTOP EQUIPMENT ON SLEEPERS | EXISTING INSULATION THICKNESS TEST CUT |
| GAS PIPE ON PIPE SUPPORT | EXISTING CANOPY LINE |
| | EXISTING ROOF SLOPE LINE |
| | ITEM TO BE REMOVED/DEMOLISHED |

NOTES:

1. REMOVE AND DISPOSE OF ALL EXISTING HVAC EQUIPMENT CURBS.
2. SEE SHEET H-101 FOR HVAC EQUIPMENT REQUIREMENTS.

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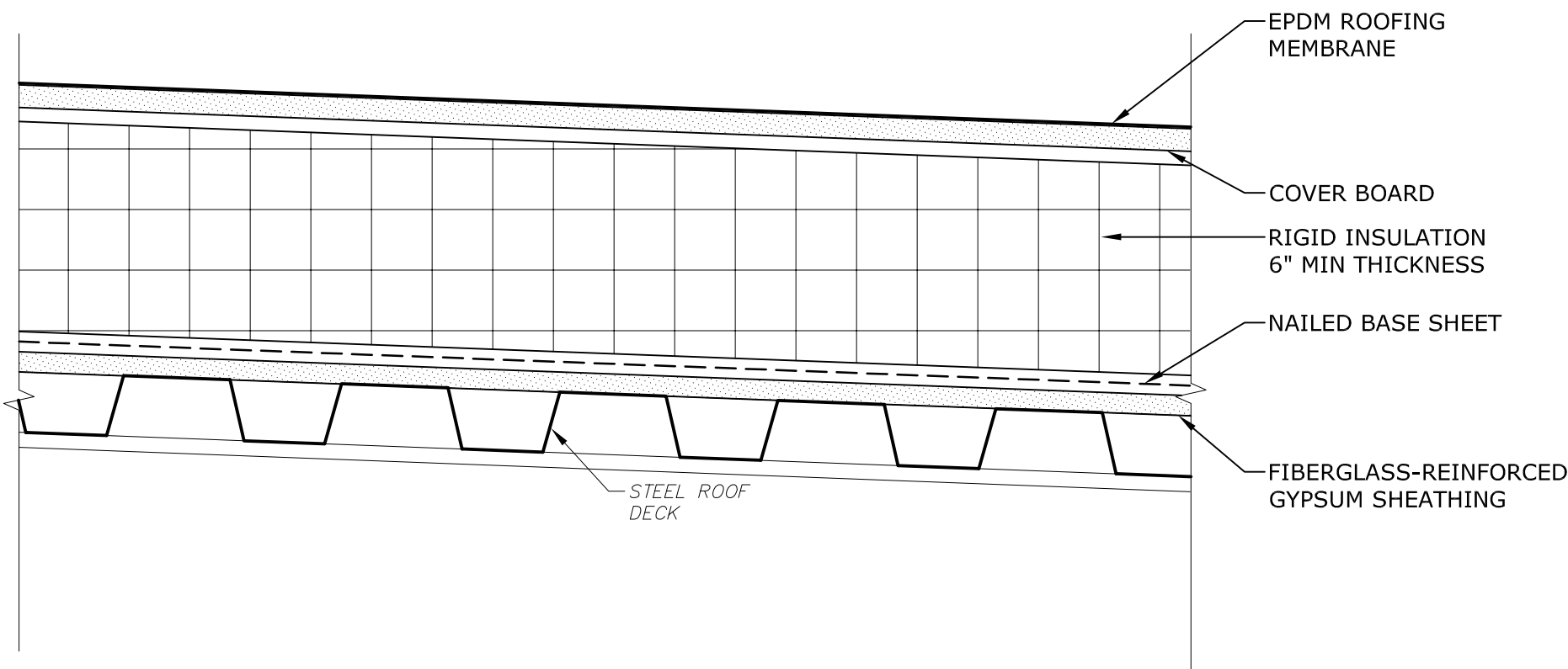
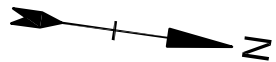
Melrose,
Massachusetts

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ROOF PLAN

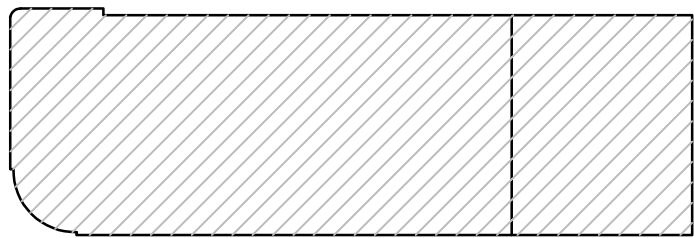
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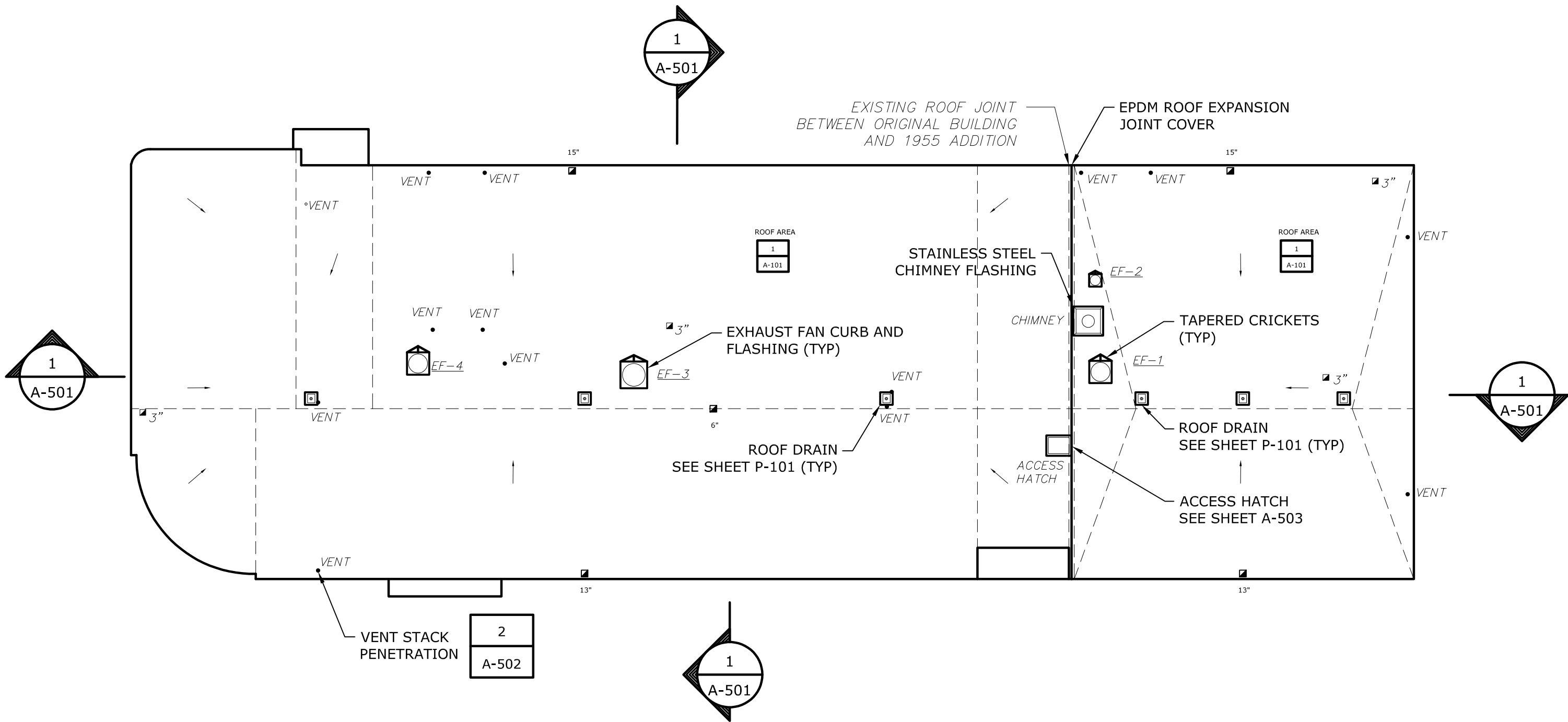
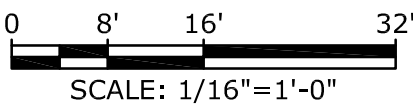


TYPICAL PROPOSED ROOF SECTION

DETAIL	1
3" = 1'-0"	-



HORACE MANN KEYPLAN
NO SCALE



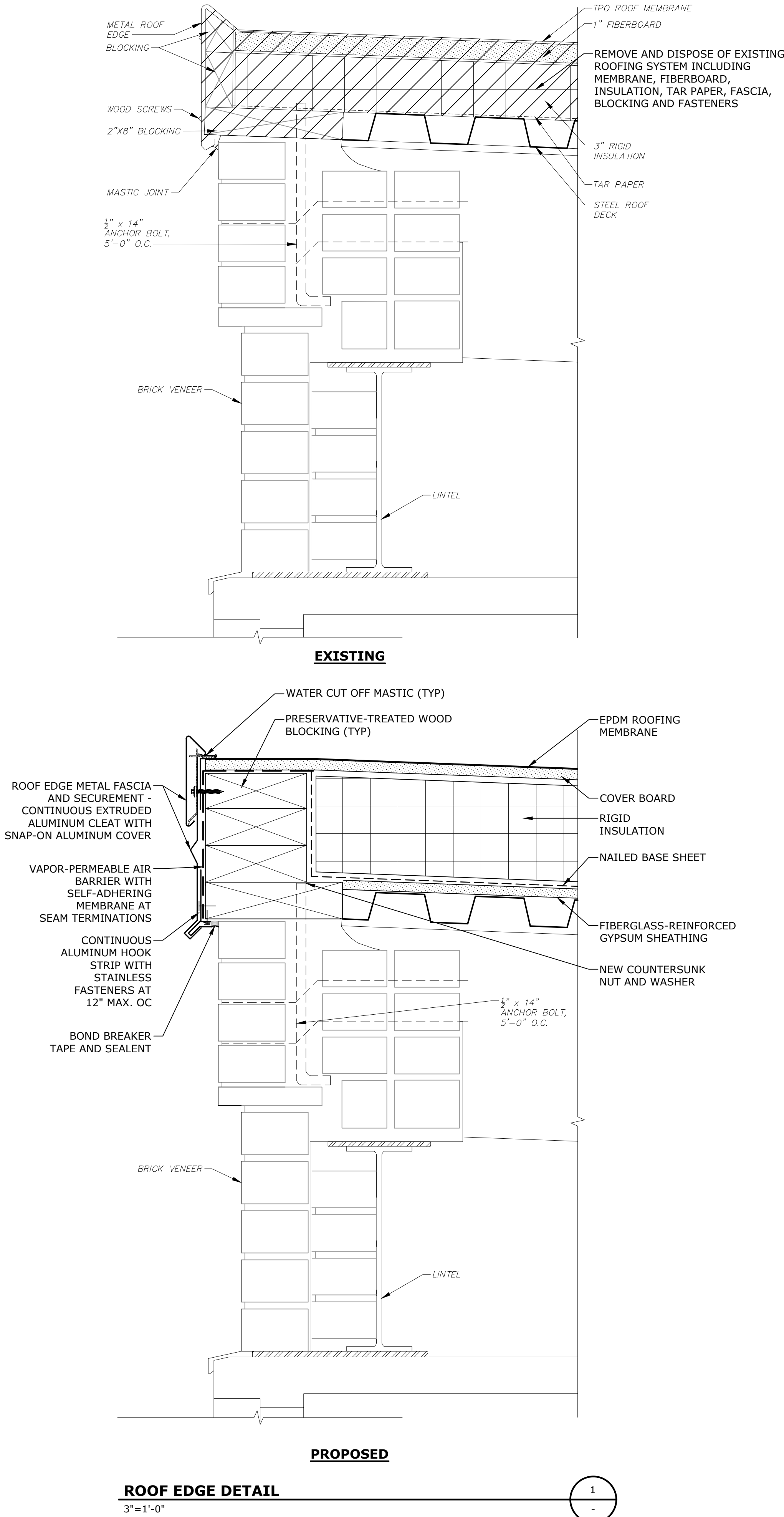
LEGEND

- | | |
|------------------------------------|----------------------------------|
| ROOF DRAIN | GOOSENECK (INTAKE OR EXHAUST) |
| VENT PIPE PENETRATION | EXHAUST CAP OR AIR INTAKE |
| ROOFTOP EXHAUST FAN/DUCT WITH CURB | APPROXIMATE INSULATION THICKNESS |
| ROOFTOP EQUIPMENT ON SLEEPERS | ROOF SLOPE LINE |
| GAS PIPE ON PIPE SUPPORT | GUARDRAIL FOR FALL PROTECTION |
| | WALKPAD |
| | ROOF SLOPE DIRECTION |

NOTES:

1. INSTALL NEW CURBING FOR ALL HVAC EQUIPMENT. NEW CURBS MUST BE MINIMUM 12" ABOVE NEW ROOFING. INSTALL NEW CRICKETS TO ENSURE PROPER DRAINAGE AT ALL ROOF CURBS.
2. ADJUST ELEVATION OF ROOF EDGES TO MATCH THE MAXIMUM INSULATION THICKNESS AT EACH ROOF DECK ELEVATION TO PROVIDE A LEVEL ROOF PERIMETER.
3. ROOF SLOPE TO BE 1/4" PER FOOT MINIMUM UNLESS NOTED OTHERWISE.
4. FOR SMALL-DIAMETER HVAC PENETRATIONS SEE DETAIL 2/A-502.

Last Saved: 6/27/2022
Plotted On: Jun 27, 2022 - 2:20pm By: ABS
Tighe & Bond 2:31PM M1215-026-Horace Mann School Drawings Figures: AutoCAD\Horace Mann School\Sheet\M1215-026-HORACE MANN - A-501.dwg



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Melrose,
Massachusetts

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CHECKED:		MPW
APPROVED:		JPV

ROOF DETAILS - 1

SCALE: AS SHOWN

A-501

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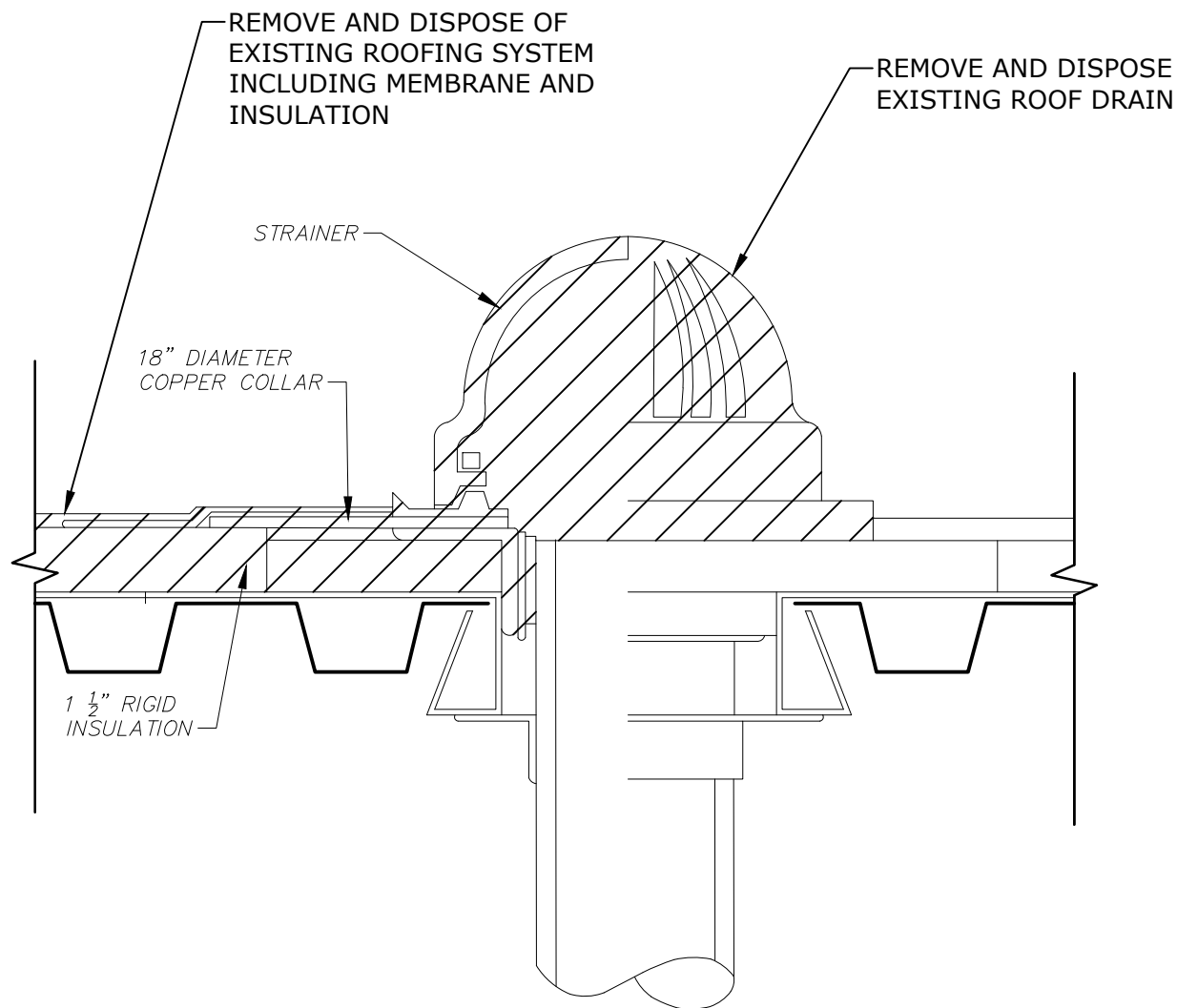
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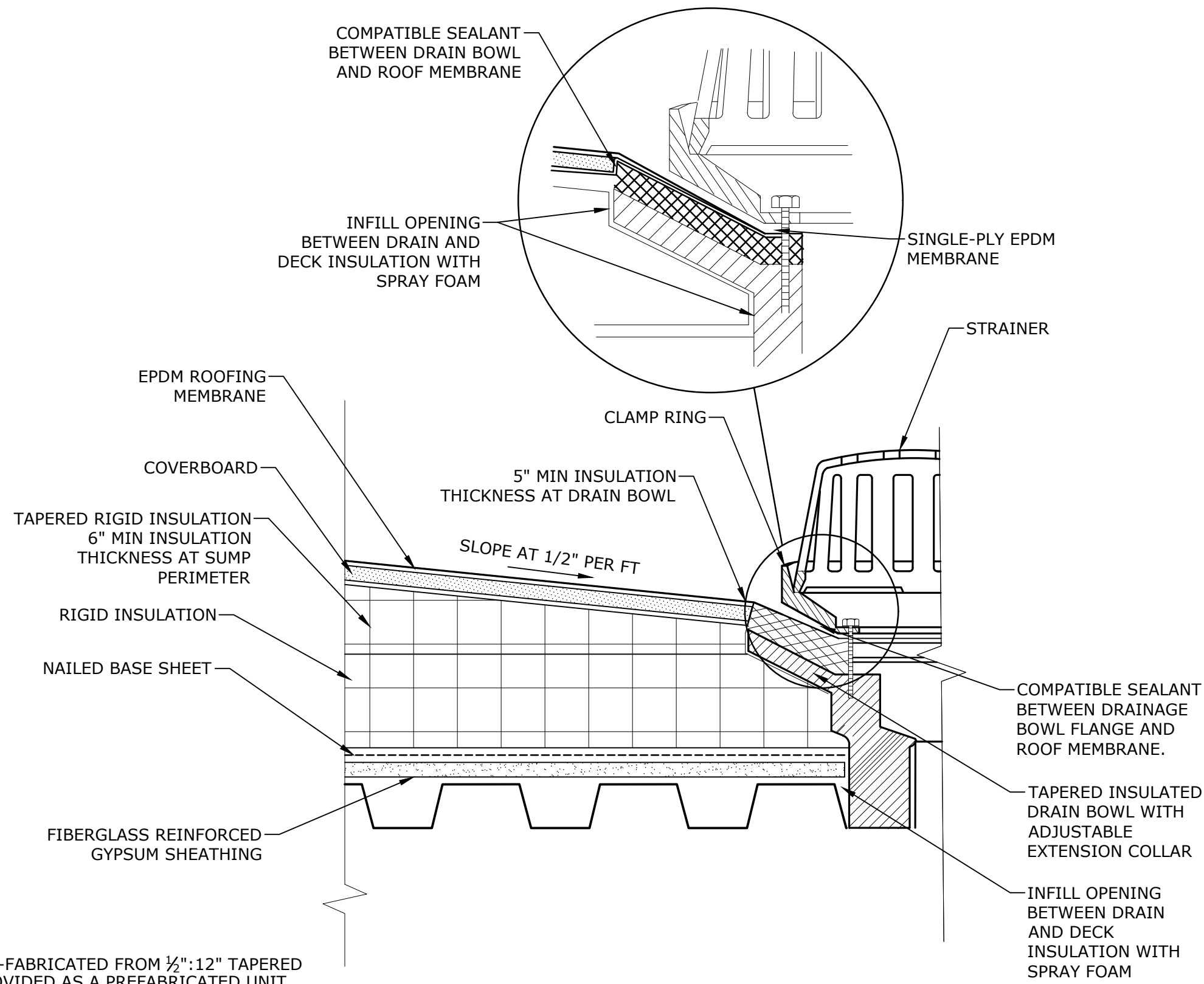
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A-502



EXISTING

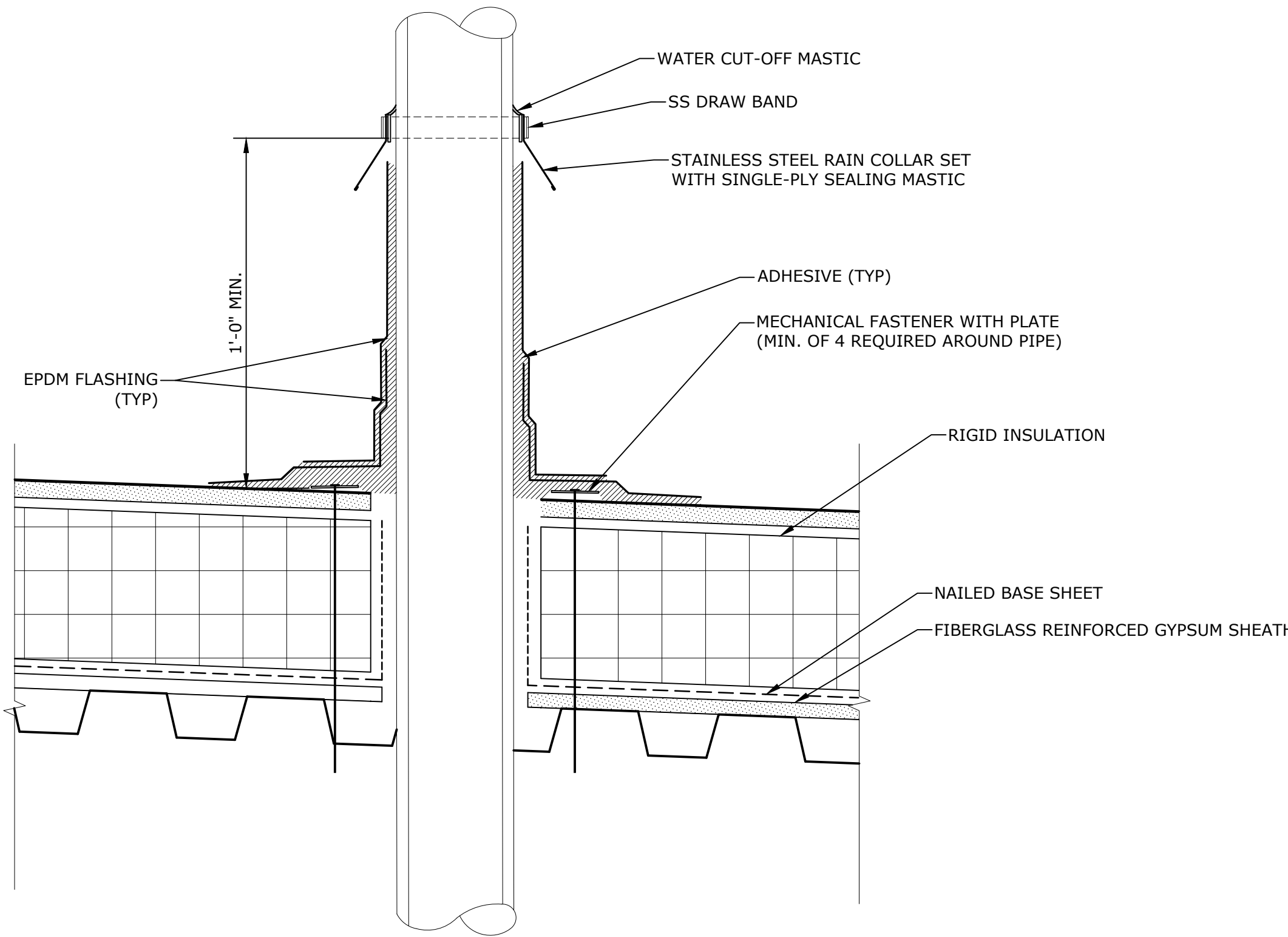
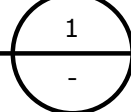


NOTES

1. SUMP MAY BE FIELD-FABRICATED FROM 1/2"x12" TAPERED INSULATION OR PROVIDED AS A PREFABRICATED UNIT.

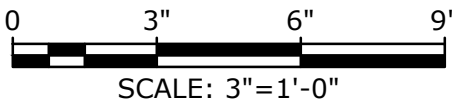
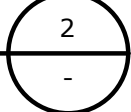
ROOF DRAIN DETAIL

3"=1'-0"



VENT STACK DETAIL

3"=1'-0"



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School Roof
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Project

City Of Melrose

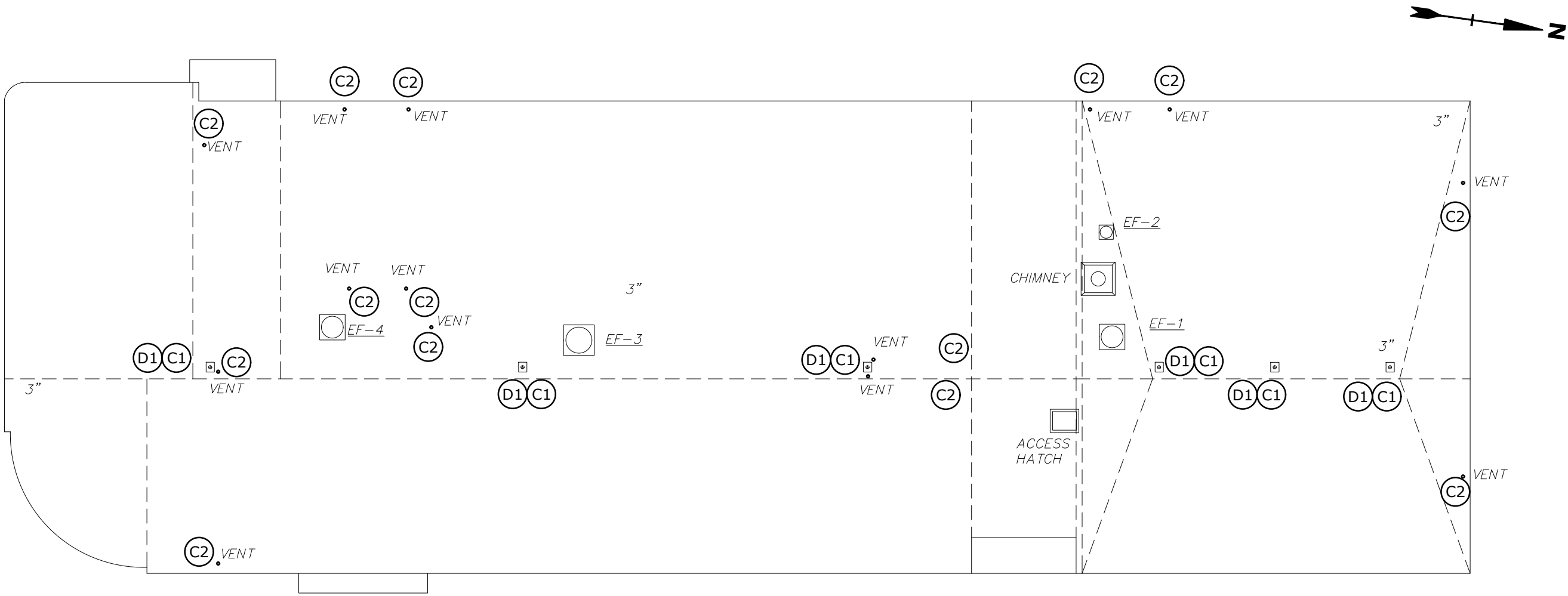
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HORACE MANN - P-101.dwg		
DRAWN BY: PL, JM		
CHECKED: MPW		
APPROVED: FJH, JPV		

PLUMBING ROOF PLAN

SCALE: AS SHOWN

P-101



PLUMBING ROOF DEMOLITION PLAN
1/16" = 1'-0"

- LEGEND
- ACCESS HATCH
 - ROOF DRAIN
 - VENT PIPE PENETRATION

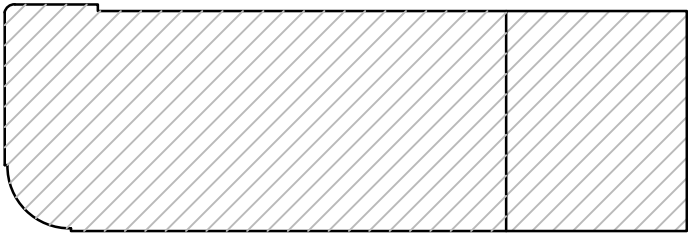
DEMOLITION KEY NOTES:

D1 REMOVE EXISTING ROOF DRAINS. CUT AND CAP EXISTING DRAIN PIPING AWAY FROM DRAIN BODY WITHIN BUILDING. PREPARE FOR FUTURE CONNECTION. COORDINATE EXTENT OF DEMOLITION W/ ROOFING CONTRACTOR TO CONFIRM ADEQUATE CLEARANCE FOR NEW ROOFING INSTALLATION IS PROVIDED.

CONSTRUCTION KEY NOTES:

C1 NEW ROOF DRAIN. DRAIN TO MATCH OUTLET SIZE OF 4". CONNECT NEW PIPE TO EXISTING STORM DRAINAGE SYSTEM WITHIN THE BUILDING. INSULATE RD SUMP AND NEW SECTION OF STORM DRAIN PIPING WITH 1-INCH FIBERGLASS INSULATION WITH ASJ. INSULATION THERMAL CONDUCTIVITY TO BE 0.21-0.27 BTU-IN/(h-ft²-°F). VERIFY TIE-IN LOCATION IN FIELD. COORDINATE WITH ROOFING CONTRACTOR AND GC.

C2 CONFIRM VENT SIZE IN FIELD. EXTEND VENT PIPE WITH SAME SIZE TO TERMINATE 24" ABOVE NEW ROOF.



HORACE MANN KEYPLAN
NO SCALE

0 8' 16' 32'
SCALE: 1/16"=1'-0"

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Horace Mann
Elementary
School Roof
Replacement
Project

City Of Melrose

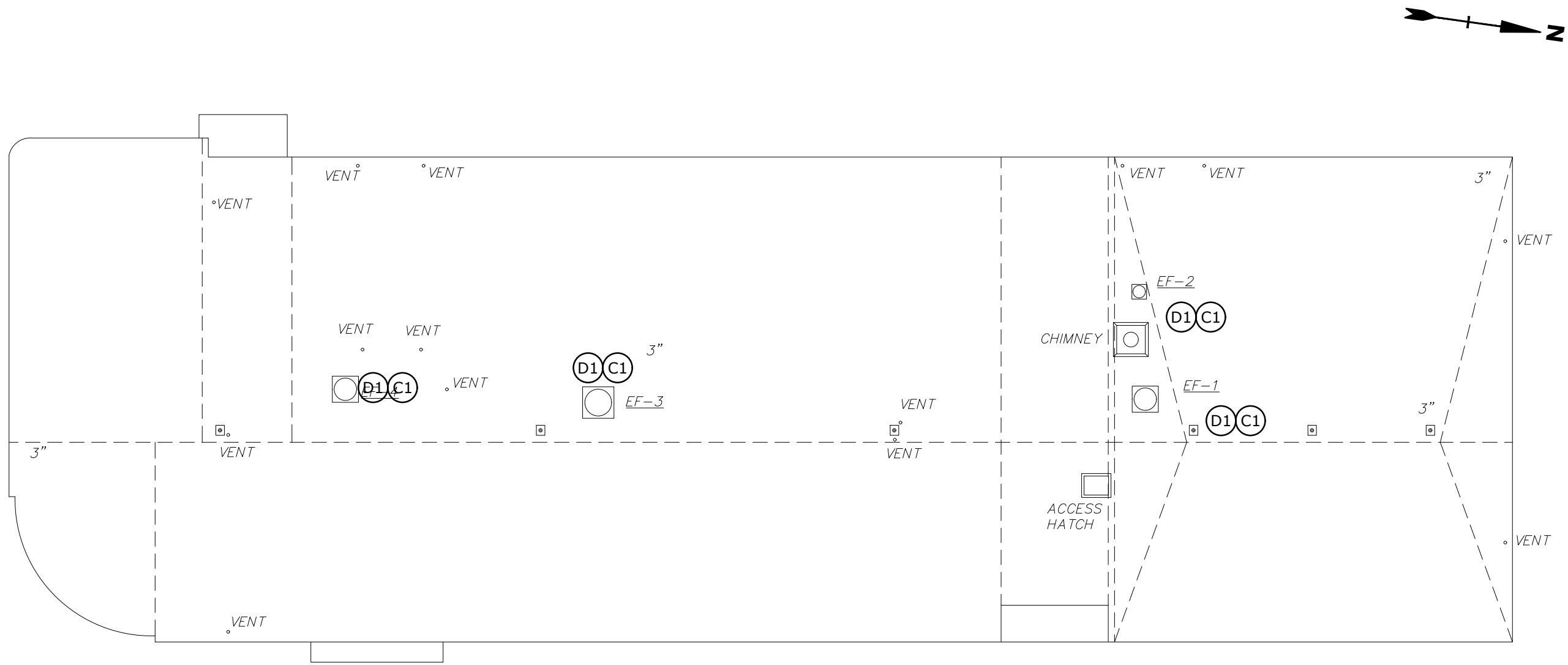
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HORACE MANN - H-101.dwg		
DRAWN BY: PL, JM		
CHECKED: MPW		
APPROVED: FJH, JPV		

HVAC ROOF PLAN

SCALE: AS SHOWN

H-101



LEGEND

- ACCESS HATCH
- EXHAUST FAN

GENERAL NOTES

- VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. COORDINATE ALL WORK WITH OTHER TRADES.
- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT.
- INSTALL EQUIPMENT AND SUPPORTS IN ACCORDANCE WITH ALL RELEVANT BUILDING CODES.
- FIELD VERIFY QUANTITY OF MECHANICAL EQUIPMENT, AND SUPPORTS TO BE REMOVED.
- PERFORM PRE-BALANCE TESTING OF ALL EXHAUST FANS PRIOR TO UNIT REMOVAL, RECORD AIRFLOWS FOR FINAL BALANCING EFFORTS. PROVIDE REPORT TO ENGINEER.
- PROVIDE TEMPORARY CAPS FOR ALL DUCTWORK. NO DUCTWORK SHALL REMAIN OPEN AT ANY TIME.
- DURING DEMOLITION, CONTROL WIRING IS TO BE DISCONNECTED AND PROTECTED FOR FUTURE USES/RECONNECTION.
- ALL MATERIALS, METHODS AND EQUIPMENT INSTALLED MUST BE IN COMPLIANCE WITH PROJECT SPECIFICATIONS AND APPLICABLE CODES.

GENERAL DEMOLITION NOTES

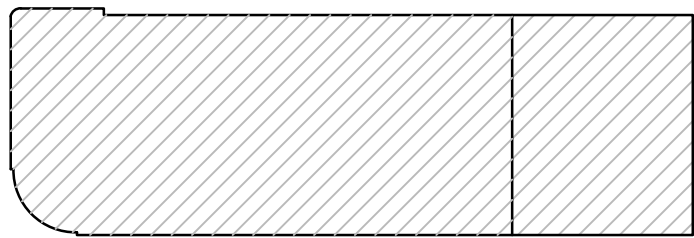
- IT IS NOT THE INTENT OF THESE DOCUMENTS TO SHOW EVERY DEVICE, APPURTENANCE, PIPE, WIRE, OR CONDUIT TO BE REMOVED. HVAC EQUIPMENT, UNITS, AND SYSTEMS NOT BEING REUSED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ASSOCIATED SUPPORTS.
- PROPERLY DISPOSE OF DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES, REGULATIONS, AND DEP STANDARDS. INVENTORY, SALVAGE AND TURN OVER OR DISPOSE OF EQUIPMENT AT DIRECTION OF OWNER.
- ALL EXISTING SYSTEMS SHALL BE MADE FULLY OPERATIONAL, INCLUDING RECONNECTION TO SERVICES AND DUCTWORK.
- EXISTING EQUIPMENT TO BE REMOVED AND RE-INSTALLED SHALL BE FIELD VERIFIED FOR QUANTITY AND CONDITION. KEEP AN ACCURATE RECORD OF STORED EQUIPMENT INCLUDING CONDITION.
- SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING DEMOLITION SHALL BE CAREFULLY PROTECTED FROM DAMAGE AND CONTAMINATION BY THE CONSTRUCTION PROCESS.

DRAWING DEMOLITION NOTES:

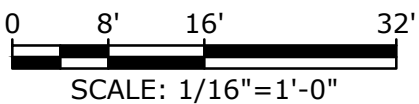
- (D1) DISCONNECT, REMOVE, AND STORE EXHAUST FAN. PROVIDE TEMPORARY CAP OVER DUCT OPENING. DEMOLISH ROOF CURB. MEASURE AIRFLOW OF FAN PRIOR TO UNIT REMOVAL.

DRAWING CONSTRUCTION NOTES:

- (C1) VERIFY ROOF OPENING AND FAN CURB-CAP DIMENSIONS. FURNISH NEW ROOF CURB WITH TRANSITION TO FAN AS REQUIRED (INSTALLED BY GC). CURB TO BE INSULATED AND A MINIMUM 12" ABOVE NEW ROOF. RE-INSTALL REMOVED FAN ON CURB, RECONNECT AND SEAL TO EXISTING DUCTWORK. CONNECT FAN TO EXISTING CONTROLS.



HORACE MANN KEYPLAN
NO SCALE



SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Horace Mann
Elementary
School Roof
Replacement
Project

City Of Melrose

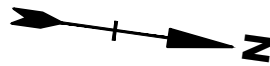
Melrose,
Massachusetts

A	06/20/2022	SCHEMATIC DESIGN
MARK	DATE	DESCRIPTION
PROJECT NO: M1215-026		
DATE: 06/20/2022		
FILE: M1215-026-HORACE MANN - E-101.dwg		
DRAWN BY: AH		
CHECKED: MPW		
APPROVED: FJH, JPV		

ELECTRICAL ROOF PLAN

SCALE: AS SHOWN

E-101



GENERAL NOTES:

- DISCONNECT AND MAKE SAFE THE EXISTING MECHANICAL EQUIPMENT FOR REMOVAL BY HVAC CONTRACTOR. THE EXISTING FEEDER SHALL BE DE-ENERGIZED AND LOCKED OUT FOR THE DURATION OF THE NEW ROOF WORK. RECONNECT EXISTING FEEDER TO EXISTING MECHANICAL EQUIPMENT UPON THE RE-INSTALLATION BY HVAC CONTRACTOR. MODIFY AND EXTEND CONDUIT AND WIRE AS REQUIRED.
- ALL CONDUIT RUNS ACROSS ROOF SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF ROOF UNLESS CONDUITS AND WIRE HAVE BEEN ABANDONED IN WHICH CASE THEY SHALL BE REMOVED PERMANENTLY. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CIRCUITING TO ROOF TOP EQUIPMENT.
- COORDINATE ALL DEVICE LOCATIONS WITH GC AND/OR OWNER PRIOR TO COMMENCEMENT OF WORK.
- THE LOCATIONS OF EXISTING EQUIPMENT ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF STRUCTURES BEFORE COMMENCING WORK. BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MIGHT BE OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND EQUIPMENT AND STRUCTURES.
- ALL PANELBOARDS SHOWN ARE LOCATED ON THE BASEMENT FLOOR.

DEMOLITION LEGEND

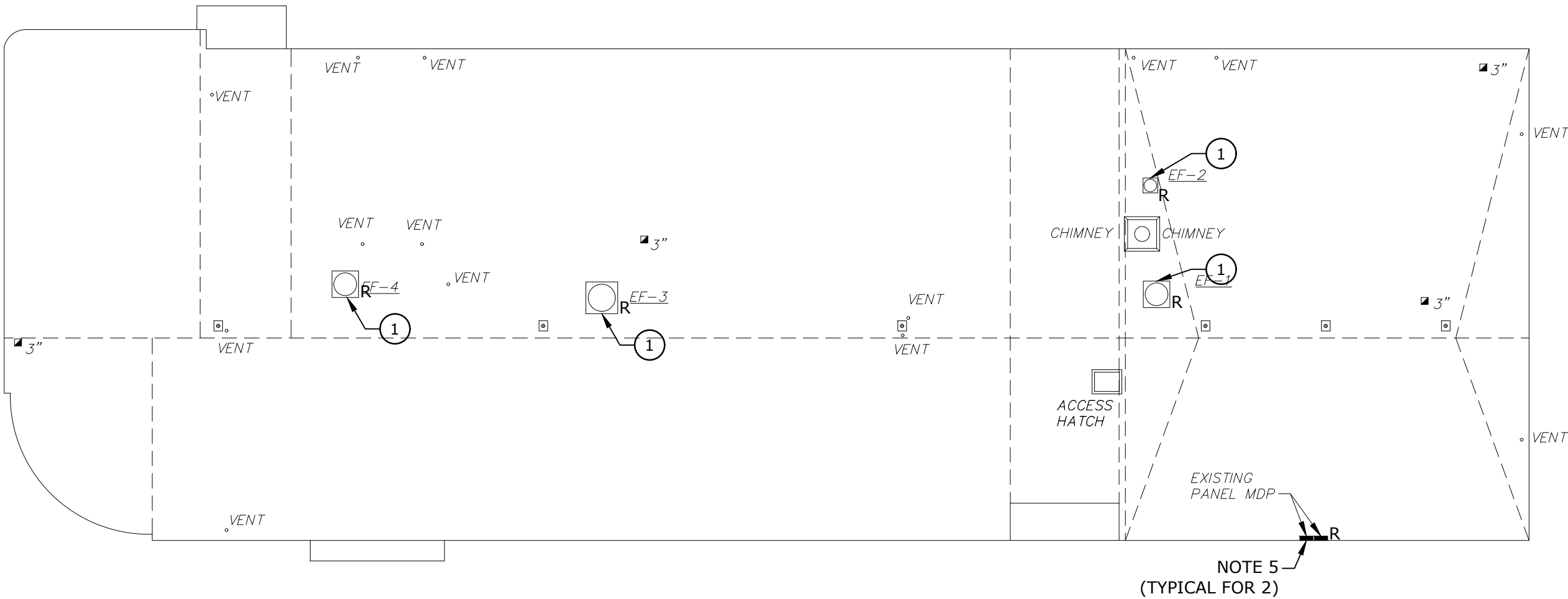
"R" EXISTING DEVICE TO REMAIN ACTIVE AS-IS. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

POWER DISTRIBUTION EQUIPMENT

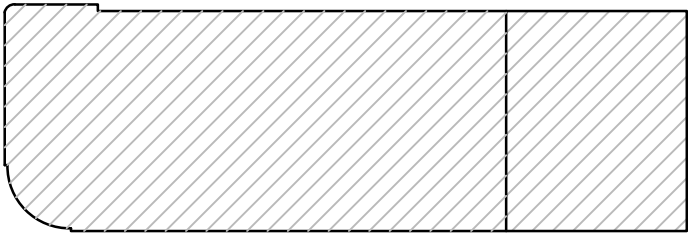
 PANELBOARD, SURFACE MOUNTED

ELECTRICAL KEY NOTES:

- DISCONNECT EXISTING EQUIPMENT. SECURE CONDUCTORS AND MAKE SAFE FOR ROOF INSTALLATION. LOCK OUT TAG OUT CIRCUIT AT LOCAL OVERCURRENT PROTECTION DEVICE. RECONNECT TO REINSTALLED EQUIPMENT. SEE GENERAL NOTE 1. REFER TO HVAC DRAWINGS FOR DETAILS.



ELECTRICAL ROOF PLAN
1/16" = 1'0"



HORACE MANN KEYPLAN
NO SCALE

0 8' 16' 32'
SCALE: 1/16"=1'-0"

**MSBA Accelerated Repair Program
Horace Mann Elementary School
Hoover Elementary School
Roof Replacement project
Melrose, MA**

**Schematic Design Estimate
June 27, 2022**

Tighe & Bond



198 North Washington St, #109, Boston MA 02114



**MSBA Accelerated Repair Program
Roof Replacement project
Melrose, MA
Schematic Design Estimate
BASIS OF ESTIMATE**

6/27/2022

Roof Replacement project**DOCUMENTATION**

This estimate was prepared from the following information:

Schematic Design Drawings provided by Tighe & Bond design team, dated June 20, 2022

BASIS FOR PRICING

This estimate reflects the current construction value for the construction of this project and should not be construed as a prediction of a low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared.

PROJECT OUTLINE

The project consists of roof replacement at Horace Mann Elementary School and Hoover Elementary School in Melrose, MA.

QUALIFICATIONS

Owner costs and fees are excluded

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

Overtime outside industry standard

Work outside normal hours of operation

Preconstruction fees

Utility Company Charges or Hook-up fees have been excluded

No permits or special fees have been included

Third party commissioning costs.

Owner supplied and/or installed items (e.g.. Draperies, furniture and equipment)

Loose Furniture and Equipment

Owner Supplied and Installed Furniture, Fixtures and Equipment

Relocation / move costs

Air Quality monitoring / Vibration monitoring

Loose technology equipment (i.e. Computers, Printers, Etc.)

The estimate assumes all long-lead items can be pre-purchased to meet schedule requirements.

The estimate is based on the premise that the design will meet all codes, laws, ordinances, rules, and regulations in effect at the time that the estimate was prepared. The estimate shall be adjusted should any discrepancies between design

and the aforementioned codes, laws or ordinances result in, or require, an increase in the Cost 'of the Work

Items identified in the design as Not In Contract (NIC)

Builder's Risk insurance, terrorist insurance and other Owner insurances



Roof Replacement project

June 27, 2022

Horace Mann Elementary School

Melrose, MA

Schematic Design Estimate

		13,450 GSF		
		Cost / SF		
02 Existing Conditions		212,272	15.78	26.8%
05 Metals		5,380	0.40	0.7%
06 Wood, Plastics, and Composites		16,656	1.24	2.1%
07 Thermal & Moisture Protection		475,936	35.39	60.1%
22 Plumbing		29,864	2.22	3.8%
23 HVAC		25,226	1.88	3.2%
26 Electrical		25,960	1.93	3.3%
TOTAL DIRECT COST		791,294	58.83	100%
Design Contingency	15.00%	118,694	8.82	
General Conditions and General Requirements	11.50%	104,649	7.78	
Permits and fees	excluded	-	-	
Contractor's OH&P	5.00%	45,499	3.38	
Escalation (midpoint 2Q 2023)	5.00%	53,007	3.94	
Construction Contingency	excluded	-	-	
TOTAL ESTIMATED CONSTRUCTION COST		1,113,143	82.76	



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Horace Mann Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
1	02 Existing Conditions						
2	024100 <i>Selective Demolition</i>						
3	<i>Roof Demolition</i>						
4	Remove and disposed of existing roof - see Hazardous Materials Assessment	13,450	sf		Included		
5	Roof drain remove	2	ea		with plumbing		
6	Remove and dispose of access hatch	1	ea	450.00	450		
7	Existing insulation thickness test cut	4	ea	150.00	600		
8	Remove and dispose of all exiting exhaust fence curb and flashing	62	lf	18.00	1,116		
9	Remove and dispose of chimney flashing	22	lf	6.50	143		
10	Remove and dispose of vent flashing	16	ea	40.00	640		
11	Cutting and patching	1	ls	3,500.00	3,500		
12	Dispose, cart away	1	ls	400.00	400		
13	Temporary roof protection	13,450	sf	1.20	16,140		
14	Dust control	1	ls	4,708.00	4,708		
15	Allowance for overhead protection building entrance below.	150	sf	20.00	3,000		
16							
17	026000 <i>Hazardous Materials Assessment</i>						
18	ACM & PCB Abatement of roof	13,450	sf	13.50	181,575		
19							
20	Subtotal: Existing Conditions					\$ 212,272	
21							
22	05 Metals						
23	051000 <i>Structural Steel Framing</i>						
24	No work show in this section						
25	053000 <i>Metal Decking</i>						
26	Roof deck replacement at Roof B1 damaged areas, assumed 5% of roof area	673	sf	8.00	5,380		
27							
28	Subtotal: Metals					\$ 5,380	
29							
30							
31	06 Wood, Plastics, and Composites						
32	061600 <i>Rough Carpentry</i>						
33	Install new curbing for all HAVC equipment 12" above new roof	56	lf	48.00	2,688		
34	New 3x Pressure treated blocking at roof edge	538	lf	24.00	12,912		
35	Roof curb with two block between original building and 1955 addition	66	lf	16.00	1,056		
36							
37	Subtotal: Wood, Plastics, and Composites					\$ 16,656	
38							
39	07 Thermal & Moisture Protection						
40	075000 <i>Membrane Roofing</i>						
41	<i>New Construction</i>						
42	90 mil EDPM roofing system; 30 year warranty	13,450	sf	30.00	403,500		
43	Tapered crickets	4	ea	80.00	320		
44	New walkway pad, assumed 10% of roof area	1,345	sf	6.50	8,743		
45							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Horace Mann Elementary School

Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
46	076500 <i>Flashing and Sheet Metal</i>						
47	Roof edge metal fascia and securement, continuous extruded aluminum cleat, continuous aluminum hook strip with stainless fasteners	538	lf	49.00	26,362		
48	Snap-on aluminum cover	538	lf	38.00	20,444		
49	New flashing at HAVC equipment curbing	56	lf	14.00	784		
50	Stainless steel chimney flashing	20	lf	32.00	640		
51	Access hatch flashing	16	lf	18.00	288		
52	Vents pipe flashing	12	ea	85.00	1,020		
53	Roof drain flashing	6	ea	350.00	2,100		
54	Misc. roof flashing	1	al	1,500.00	1,500		
55							
56	077100 <i>Roof Specialties</i>						
57	Access hatch	1	ea	4,250.00	4,250		
58							
59	079100 <i>Joint Sealants</i>						
60	Exterior caulking and sealants at all roof penetrations	13,450	sf	0.45	5,985		
61							
62	Subtotal: Thermal & Moisture Protection					\$ 475,936	
63							
64	22 Plumbing						
65	Demolition						
66	Roof drains	6	ea	332.10	1,993		
67							
68	New						
69	Sanitary vent system						
70	Extend vent piping to 24"	14	ea	570.00	7,980		
71							
72	Roof drainage system						
73	Roof drain including new piping/insulation and tie-in to existing, Allowance	6	ea	1,648.50	9,891		Assume 4" drains
74							
75	Materials supply and bidding/market conditions allowance	1	ls	5,000.00	5,000		
76	Supervision/PM	1	ls	5,000.00	5,000		
77							
78	Subtotal: Plumbing					\$ 29,864	
79							

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)



**Roof Replacement project
Melrose, MA
Schematic Design Estimate**

6/27/2022

Horace Mann Elementary School

	Division	Description	Quantity	Unit	Unit Price	Total	Subtotal Trades	Notes
80	23	HVAC						
81		Demolition						
82		Exhaust fans, store on site for reinstallation, Allowance	4	ea	764.10	3,056		
83								
84		New						
85		Exhaust fans, reinstall previously removed	4	ea	1,167.52	4,670		
86								
87		Miscellaneous to include seismic controls and testing/start-up	1	ls	2,500.00	2,500		
88		Materials supply and bidding/market conditions allowance	1	ls	10,000.00	10,000		
89								
90		Supervision/PM	1	ls	5,000.00	5,000		
91		Subtotal: HVAC					\$ 25,226	
92	26	Electrical						
93		Demolition						
94		Disconnect and makes safe exhaust fans, for removal by others	4	ea	300.00	1,200		
95		Re-work/remove/replace any conduit/wire as necessary, Allowance	1	ls	2,000.00	2,000		
96								
97		New						
98		Equipment and machinery power						
99		Extend circuit if necessary and reconnect exhaust fans	4	ea	1,390.02	5,560		
100								
101		Miscellaneous to include seismic controls and testing/start-up	1	ls	700.00	700		
102		Materials supply, small job premium and bidding/market conditions allowance	1	ls	15,000.00	15,000		
103								
104		Supervision/PM	1	ls	1,500.00	1,500		
105								
106		Subtotal: Electrical					\$ 25,960	
107								

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

HORACE MANN ELEMENTARY SCHOOL, MELROSE, MA PRE-RENOVATION HBMA SERVICES

TO: Denise M. Gaffey – Directory and City Planner – City of Melrose
FROM: Frank Rodrigues – Tighe & Bond
COPY: Matthew Wzorek – Tighe & Bond
DATE: June 8, 2022

Tighe & Bond Inc., (Tighe & Bond) has prepared the following technical memorandum to summarize the Hazardous Building Material Assessment (HBMA) conducted at the Horace Mann Elementary School. (the "Site"). A facility improvement project, which includes full replacement of the existing roof is currently proposed for the school building. The current roof systems consists of a rubber membrane roof system with fiberboard insulation applied onto a metal roof deck. The HBMA was limited to the roof area being proposed for renovation impact. As required by state and federal regulations, characterization of various waste streams generated during construction projects must be completed to ensure their proper management.

The Assessment included a visual observation and bulk sampling of suspect hazardous building materials (asbestos, painted/coated building materials), and a visual inventory of other hazardous/regulated wastes (i.e., mercury-containing equipment, refrigerants, PCB-containing equipment, etc.). The HBMA was performed to support the proposed facility improvement project and to address/prepare budgets for management of environmentally related building materials.

Tighe & Bond's assessment and report are subject to the HBMA Limitations provided as Appendix A. The Assessment was performed on May 20, 2022, by Tighe & Bond's Massachusetts licensed asbestos inspector, Francisco J. Rodrigues, (#AI040131). Mr. Rodrigues' inspector license and certification are included as Appendix B of this report.

1 Hazardous Building Materials Assessment

1.1 Asbestos-Containing Building Materials

Prior to any type of building renovation or demolition, a thorough investigation is required to identify and quantify asbestos containing materials (ACM) which may be impacted by the demolition or renovation activities. The survey is required by the United States Environmental Protection Agency (EPA) National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations (Title 40 CFR, Part 61, Subpart M); Massachusetts Department of Environmental Protection (MassDEP) regulations (310 CMR 7.15); Massachusetts Department of Labor Standards (MADLS) regulations, (454 CMR 28.00); as well as applicable portions of the Occupational Safety and Health Administration (OSHA) asbestos in construction regulations (CFR 1926.1101).

The asbestos assessment was limited to accessible areas of the roof and roof top equipment to determine the presence or absence of suspect ACM that have potential for disturbance during the proposed renovation activities and would be subject to abatement prior to roof replacement.

Suspect materials were divided into "homogeneous materials", building materials which were determined by the inspector to be homogeneous based on their color, texture, and age. A number of bulk samples of suspect ACM from each homogenous group of materials were collected in general accordance with standards described in the Environmental Protection Agency (EPA) Asbestos Hazard and Emergency Response Act (AHERA) Regulations for schools. AHERA sampling protocols are only recommended for use by MassDEP and EPA as they do not regulate bulk sampling standards.

Bulk samples were collected and submitted to Aerobiology Laboratories Associates Inc., (Aerobiology) of Woburn, Massachusetts for analysis via Polarized Light Microscopy with Dispersion Staining (PLM/DS) in accordance with the EPA/600/R-93/116 Method. ProScience is a Massachusetts licensed and American Industrial Hygiene Association (AIHA)-accredited asbestos laboratory.

Suspect materials identified and sampled are included as inventory tables in Appendix C. The tables describes material locations, sample numbers, quantities, condition, analytical results, and specific comments relative to our findings. The asbestos laboratory report is included in Appendix D.

The MassDEP defines a material that contains greater than or equal to one percent ($\geq 1\%$) asbestos utilizing PLM/DS, as being an ACM. Materials that are identified as "none detected" are specified as not containing asbestos. Materials containing less than one percent ($< 1\%$) asbestos are regulated to a degree by OSHA related to work practices, worker exposure, and waste containerization and in Massachusetts, materials containing $< 1\%$ asbestos are considered asbestos-containing waste material (ACWM) and must be packaged and disposed of as ACWM in accordance with 310 CMR 7.15.

A total of nine homogeneous areas were identified during the inspection and 18 samples of suspect ACM were collected. The tar material or hot mop applied to the roof deck in the original section of the roof was determined to contain $< 1\%$ asbestos and therefore is classified as an ACWM.

Samples of other suspect ACM collected during the survey, were determined to be non-asbestos containing. Refer to Appendix C for a list of each suspect material identified and sampled.

Other suspect materials encountered during any renovation activities that are not identified in this report as being non-ACM should be assumed to be ACM until sample collection and laboratory analysis indicate otherwise.

Tighe & Bond recommends the bottommost roofing layer be treated as ACM. The ACMs identified at the Horace Mann School should be removed by a licensed asbestos abatement contractor, utilizing trained and licensed personnel prior to renovation, demolition or any activity that has the potential to disturb these materials. Tighe & Bond recommends the creation of a project specific asbestos abatement scope of work or technical specification for the removal of ACM. The specification must be developed by a Massachusetts licensed asbestos project designer, and it should address such important issues as regulatory requirements, notification procedures, insurance considerations, air sampling needs and other pertinent information. Abatement activities must be subject to a passing post abatement visual inspection by an asbestos monitoring firm not affiliated with the abatement contractor. The same firm typically collects, analyzes and reports the State required post abatement clearance air samples.

The current scope of construction does not call for the removal of the metal roof deck. In the event sections of the roof deck must be cut and replaced Tighe & Bond recommends those sections be removed by a licensed asbestos abatement contractor.

1.2 Universal Waste and Other Regulated Building Waste

Tighe & Bond performed a visual inspection of the proposed renovation areas to identify hazardous materials, universal waste materials or other regulated wastes that have the potential for disturbance during the roof replacement project. No regulated wastes were identified.

Appendices:

APPENDIX A: HBMA Limitations

APPENDIX B: Inspector's Certification

APPENIDX C: Suspect Asbestos Containing Materials Inventory Table

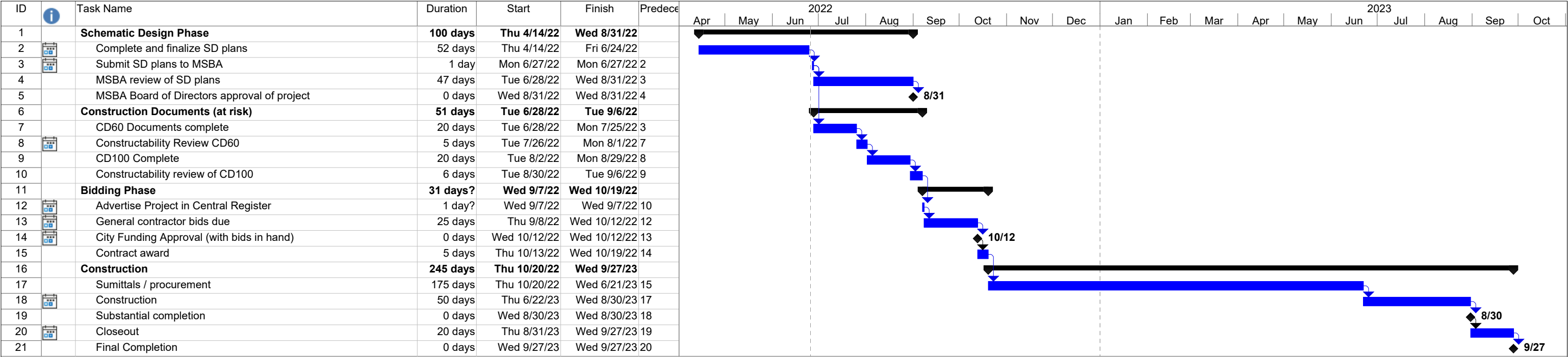
APPENDIX D: Asbestos Laboratory Report

J:\M\M1215\026 Melrose\HBMA\Horace Mann\Final Report\Horace Mann_Tech Memo_Final.docx

**EXHIBIT C
PROJECT SCHEDULE
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

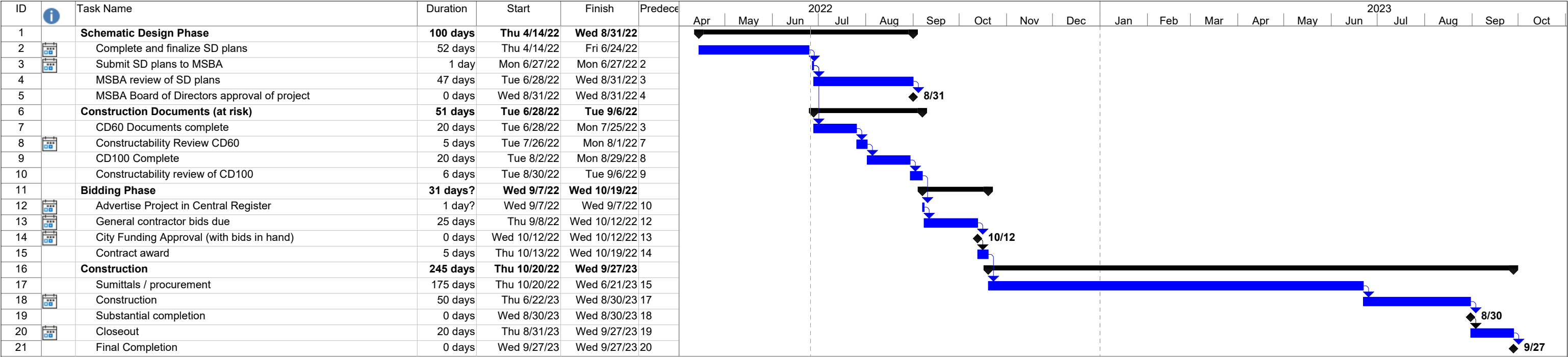
Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT



Hoover Elementary School - Melrose, MA
Date: Sun 6/26/22

Task		Project Summary		Inactive Summary		Manual Summary		External Milestone	
Split		External Tasks		Manual Task		Start-only		Progress	
Milestone		External Milestone		Duration-only		Finish-only		Deadline	
Summary		Inactive Milestone		Manual Summary Rollup		External Tasks			



Horace Mann Elementary School - Melrose, MA
Date: Sun 6/26/22

Task		Project Summary		Inactive Summary		Manual Summary		External Milestone	
Split		External Tasks		Manual Task		Start-only		Progress	
Milestone		External Milestone		Duration-only		Finish-only		Deadline	
Summary		Inactive Milestone		Manual Summary Rollup		External Tasks			

**EXHIBIT D
CASH FLOW
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

Melrose Public Schools Hoover Elementary School - CASH FLOW	Budget	To Date	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Total	Remainin
OPM Feasibility Study	\$7,500	\$7,500																		\$7,500	
A&E Feasibility Study	\$49,100	\$49,100																		\$49,100	
OPM - Construction Contract Documents	\$20,434		\$10,217	\$10,217																\$20,434	
OPM - Bidding	\$8,960				\$4,480	\$4,480														\$8,960	
OPM - Construction Contract Administration	\$101,045						\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000	\$30,000	\$30,000	\$13,545			\$101,045	
OPM - Closeout	\$12,558																	\$6,279	\$6,279	\$12,558	
OPM - Reimbursable & Other Services	\$5,000				\$2,500	\$2,500														\$5,000	
AE - Construction Contract Documents	\$60,400		\$30,200	\$30,200																\$60,400	
AE - Bidding	\$4,400				\$2,200	\$2,200														\$4,400	
AE - Construction Contract Administration	\$34,600						\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$9,000	\$9,000	\$9,000	\$600			\$34,600	
AE - Closeout	\$3,600																	\$1,800	\$1,800	\$3,600	
AE - Hazardous Materials	\$10,700		\$1,500	\$1,500										\$2,700	\$2,500	\$2,500				\$10,700	
Construction Budget	\$1,881,016											\$150,000	\$150,000	\$200,000	\$500,000	\$500,000	\$200,000	\$181,016		\$1,881,016	
Construction Contingency	\$94,051											\$7,500	\$7,500	\$10,000	\$25,000	\$25,000	\$10,000	\$9,051		\$94,051	
Owner's Contingency	\$13,085																	\$7,000	\$6,085	\$13,085	
Total Project Budget	\$2,306,449	\$56,600	\$41,917	\$41,917	\$9,180	\$9,180	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$161,000	\$161,000	\$231,700	\$566,500	\$566,500	\$224,145	\$205,146	\$14,164	\$2,306,449	
Cummulative Cash Out		\$56,600	\$98,517	\$140,434	\$149,614	\$158,794	\$162,294	\$165,794	\$169,294	\$172,794	\$176,294	\$337,294	\$498,294	\$729,994	\$1,296,494	\$1,862,994	\$2,087,139	\$2,292,285	\$2,306,449		

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

Melrose Public Schools Horace Mann Elementary School - CASH FLOW	Budget	To Date	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Total	Remainin
OPM Feasibility Study	\$7,500	\$7,500																		\$7,500	
A&E Feasibility Study	\$40,700	\$40,700																		\$40,700	
OPM - Construction Contract Documents	\$20,434		\$10,217	\$10,217																\$20,434	
OPM - Bidding	\$8,960				\$4,480	\$4,480														\$8,960	
OPM - Construction Contract Administration	\$101,045						\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000	\$30,000	\$30,000	\$13,545			\$101,045	
OPM - Closeout	\$12,558																	\$6,279	\$6,279	\$12,558	
OPM - Reimbursable & Other Services	\$5,000				\$2,500	\$2,500														\$5,000	
AE - Construction Contract Documents	\$41,400		\$20,700	\$20,700																\$41,400	
AE - Bidding	\$4,400				\$2,200	\$2,200														\$4,400	
AE - Construction Contract Administration	\$28,800						\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$8,000	\$8,000	\$8,000	\$1,300			\$28,800	
AE - Closeout	\$3,600																	\$1,800	\$1,800	\$3,600	
AE - Hazardous Materials	\$5,400		\$750	\$750										\$1,500	\$1,500	\$900				\$5,400	
Construction Budget	\$1,113,143											\$50,000	\$50,000	\$100,000	\$300,000	\$300,000	\$200,000	\$113,143		\$1,113,143	
Construction Contingency	\$55,657											\$2,500	\$2,500	\$5,000	\$15,000	\$15,000	\$10,000	\$5,657		\$55,657	
Owner's Contingency	\$11,580																	\$6,000	\$5,580	\$11,580	
Total Project Budget	\$1,460,177	\$48,200	\$31,667	\$31,667	\$9,180	\$9,180	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$55,500	\$55,500	\$124,500	\$354,500	\$353,900	\$224,845	\$132,879	\$13,659	\$1,460,177	
Cummulative Cash Out		\$48,200	\$79,867	\$111,534	\$120,714	\$129,894	\$132,894	\$135,894	\$138,894	\$141,894	\$144,894	\$200,394	\$255,894	\$380,394	\$734,894	\$1,088,794	\$1,313,639	\$1,446,518	\$1,460,177		

**EXHIBIT E
PROJECT SITE
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

**Herbert Clark Hoover Elementary School
37 Glendower Road
Melrose, MA 02176**

**Horace Mann Elementary School
40 Damon Ave
Melrose, MA 02176**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

**EXHIBIT F
FURNISHINGS AND EQUIPMENT
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

THERE IS NO EXHIBIT F

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

EXHIBIT G
STANDARD CONSTRUCTION CONTRACT INSURANCE
PROVISIONS FOR AN OWNER-CONTRACTOR CONTRACT
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

EXHIBIT "G"

**MASSACHUSETTS SCHOOL BUILDING AUTHORITY
STANDARD CONSTRUCTION CONTRACT INSURANCE PROVISIONS FOR AN
OWNER-CONTRACTOR CONTRACT
(Alternate Form for Construction Manager at Risk on Page 6 of this Exhibit)**

The District shall include, at a minimum, the following language regarding insurance requirements in the Owner-Contractor contract. The District may impose additional insurance requirements provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that, prior to issuing an invitation for bids for construction of the Project, the District shall give the Authority adequate written notice clearly describing any such additional requirements so that the Authority may, at its discretion, review and comment upon such additional requirements. Any such additional requirements may be set forth in Section 8 of the Insurance Requirements below. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary for the Project and should be included in the Owner-Contractor contract.

INSURANCE REQUIREMENTS (Design-Bid-Build)**1. Insurance Generally.**

A. The Contractor shall purchase and maintain insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the Contractor's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better as assigned by AM Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the Owner, or as otherwise acceptable to the Owner.

C. The Contractor shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self-insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:

- that the automobile liability, umbrella liability and pollution liability policies include the Authority and the Owner as additional insureds;
- that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this Contract;
- that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;
- the Contractor shall submit updated certificates of insurance prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.

D. The Contractor shall file one certified, complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner is damaged by the Contractor's failure to maintain such insurance and to comply with the terms of this Article, then the Contractor shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

E. Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to the Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

F. The Contractor is responsible for the payment of any and all deductibles under all of the insurance required herein. Neither the Owner nor the Authority shall in any instance be responsible for the payment of deductibles, self-insured retentions, or any portion thereof.

2. Contractor's Commercial General Liability.

A. The Contractor shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/project basis. The policy shall provide the following minimum coverage to protect the Contractor from claims with respect to the operations performed by Contractor and any employee, subcontractor, or supplier, or by anyone for whose acts they may be liable unless a higher coverage is specified in Section 8 below in which case the Contractor shall provide the additional coverage:

Bodily Injury &	\$1,000,000 each occurrence
Property Damage	\$2,000,000 general aggregate per project
Products & Completed Operations	\$1,000,000 annual aggregate
Personal & Advertising Injury	\$1,000,000 each occurrence
Medical Expenses	\$5,000

B. This policy shall include coverage relating to explosion, collapse, and underground property damage.

C. This policy shall include contractual liability coverage.

D. The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The Contractor shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

E. If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

F. This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

G. The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Authority and the Owner.

3. Automobile Liability.

A. The Contractor shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below in which case the Contractor shall provide the additional coverage:

Bodily Injury & Property Damage \$1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the Contractor, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall include coverage Form MCS-90.

C. The policy shall name the Authority and the Owner as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

4. Contractor's Pollution Liability.

The Contractor shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the Contractor during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Authority and the Owner shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below to this Contract, in which case the Contractor shall provide the additional coverage:

Limit of liability	\$1,000,000 per occurrence
	\$3,000,000 aggregate

5. Worker's Compensation.

A. The Contractor shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152, as amended, unless a higher coverage is specified in Section 8 below, in which case the Contractor shall provide the higher coverage:

Worker's Compensation	Statutory limits
Employer's Liability	\$ 500,000 each accident
	\$ 500,000 disease per employee
	\$ 500,000 disease policy aggregate

B. If specified in Section 8 below, the policy must be endorsed to cover United States Longshoremen & Harborworkers Act (USLHW), or Maritime Liability.

C. The policy shall contain a Waiver of Subrogation in favor of the Authority and the Owner.

6. Builder's Risk/ Installation Floater/Stored Materials.

Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of Contractor for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.

If specified in Section 8 below , Owner may require the Contractor to purchase and maintain coverage against loss or damage to the Work in accordance with the following requirements:

A. The Contractor shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

B. When Work will be completed on existing buildings owned by the Owner, the Contractor shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

C. The Contractor shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at an off Site location shall be forthwith replaced by the Contractor at no expense to the Owner or the Authority..

D. The policy or policies shall specifically state that they are for the benefit of and payable to the Authority, the Owner, the Contractor, and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the Contractor, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by the Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by the Contractor as fiduciary and made payable to the Contractor as fiduciary for the insureds. The Contractor shall pay the subcontractors their just shares of insurance proceeds received by the Contractor and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

7. Umbrella Coverage.

The Contractor shall provide Umbrella Coverage in a form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the Contractor shall provide the higher amount:

<u>Contract Price:</u>	<u>Limit of Liability:</u>
Under \$1,000,000	\$2,000,000 per occurrence
\$1,000,001 -- \$5,000,000	\$5,000,000 per occurrence
\$5,000,001-- \$10,000,000	\$10,000,000 per occurrence
\$10,000,001 and over	\$25,000,000 per occurrence

8. Additional Insurance Requirements

The Contractor shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

MASSACHUSETTS SCHOOL BUILDING AUTHORITY
STANDARD CONSTRUCTION CONTRACT INSURANCE PROVISIONS FOR A
CONSTRUCTION MANAGER AT RISK CONTRACT

The District shall include, at a minimum, the following language regarding insurance requirements in the Owner-Construction Manager at Risk ("CM") contract. The District may impose additional insurance requirements provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that, prior to issuing an RFQ for construction management at risk services for the Project, the District shall give the Authority adequate written notice clearly describing any such additional requirements so that the Authority may, at its discretion, review and comment upon such additional requirements. Any such additional requirements may be set forth in Section 8 of the Insurance Requirements below. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary for the Project and should be included in the Owner-CM contract.

INSURANCE REQUIREMENTS (CM at Risk)

1. Insurance Generally.

A. The CM shall purchase and maintain the insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the CM's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better assigned by AM Best Company, or equivalent rating assigned by a similar rating agency acceptable to the Owner or as otherwise acceptable to the Owner.

C. CM shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else that the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:

- that the automobile liability, umbrella liability and pollution liability policies include the Owner and the Authority as additional insureds;
- that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this construction contract;
- that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;
- CM shall submit updated certificates prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.

D. The CM shall file one certified complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner or the Authority is damaged by the CM's failure to maintain such insurance and to comply with the terms of this Article, then the CM shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

E. Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

F. The CM is responsible for the payment of any and all deductibles under all of the insurance required below unless the Owner and the Authority specifically provide a written waiver to the CM.

2. CM's Commercial General Liability.

A. The CM shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/per project basis. The policy shall provide the following minimum coverage to protect the CM from claims with respect to the operations performed by CM and any employee, subcontractor, or supplier, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury &	\$1,000,000	each occurrence
Property Damage	\$2,000,000	general aggregate, per project
Products & Completed Operations	\$1,000,000	annual aggregate
Personal & Advertising Injury	\$1,000,000	each occurrence
Medical Expenses	\$5,000	

B. This policy shall include coverage relating to explosion, collapse, and underground property damage.

C. This policy shall include contractual liability coverage.

D. The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The CM shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

E. If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

F. This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

G. The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Owner and the Authority.

3. Automobile Liability.

A. The CM shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury & Property Damage \$1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the CM, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall contain coverage Form MCS-90.

C. The policy shall name the Owner and the Authority as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

4. Contractor's Pollution Liability.

The CM shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the CM during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Owner and the Authority shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Limit of liability	\$1,000,000 per occurrence
	\$3,000,000 aggregate

5. Worker's Compensation.

A. The CM shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152 as amended, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the higher coverage:

Workers' Compensation	Statutory limits
Employer's Liability	\$ 500,000 each accident
	\$ 500,000 disease per employee
	\$ 500,000 disease policy aggregate

B. If specified in Section 8 below the policy must be endorsed to cover United States Longshoremens & Harborworkers Act (USLHW), or Maritime Liability for \$1,000,000/\$1,000,000.

C. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

6. Builder's Risk/ Installation Floater/Stored Materials.

Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of CM for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.

If specified in Section 8 below, Owner may require the CM to purchase and maintain coverage against loss or damage to the Work in accordance with the following requirements:

A. The CM shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the GMP. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C.** below.

B. When Work will be completed on existing buildings owned by the Owner, the CM shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall each be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C.** below.

C. The CM shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at some approved off Site location shall be forthwith replaced by the CM at no expense to the Owner or the Authority.

D. The policy or policies shall specifically state they are for the benefit of and payable to the Authority, the Owner, the CM, subcontractors and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the CM, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by CM as fiduciary and made payable to the Contractor as fiduciary for the insureds. CM shall pay the subcontractors their just shares of insurance proceeds received by the CM and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

7. Umbrella Coverage.

The CM shall provide Umbrella Coverage in form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the CM shall provide the higher amount:

<u>Contract Price:</u>	<u>Limit of Liability:</u>
Under \$1,000,000	\$2,000,000 per occurrence
\$1,000,000 -- \$5,000,000	\$5,000,000 per occurrence
\$5,000,001-- \$10,000,000	\$10,000,000 per occurrence
\$10,000,001 and over	\$25,000,000 per occurrence

8. Additional Insurance Requirements

The CM shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

**EXHIBIT H
EDUCATIONAL PROGRAM
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

THERE IS NO EXHIBIT H

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

**EXHIBIT I
REIMBURSEMENT RATE CERTIFICATION
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

MSBA Accelerated Repair Program Reimbursement Rate Certification Calendar Year 2021

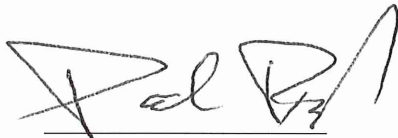
Melrose

MSBA Reimbursement Rate Calculation

Base Points	31.00
Income Factor	5.05
Property Wealth Factor	13.26
Poverty Factor	0
MSBA Reimbursement Rate	49.31

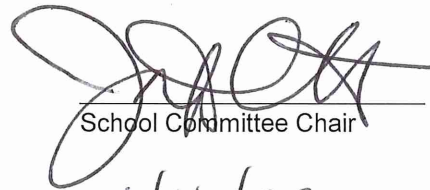
Certification

By signing this Reimbursement Rate Certification, I hereby certify that I have read, understand, and accept the reimbursement rate set forth above, and I hereby acknowledge and agree on behalf of the Eligible Applicant that the above-stated reimbursement rate is the rate that will be used to calculate the maximum Total Facilities Grant for the proposed project.



Local Chief Executive Officer

6/16/2022
Date



School Committee Chair

6/16/22
Date



Superintendent of Schools

6/16/2022
Date

**EXHIBIT J
ELECTRONIC PAYMENT FORM
CITY OF MELROSE
HERBERT CLARK HOOVER ELEMENTARY SCHOOL AND
HORACE MANN ELEMENTARY SCHOOL**

Attachment: 2021 Melrose PFA Exhibits (ORDER-2023-28 : Hoover School Roof Replacement)

PROJECT FUNDING AGREEMENT

(Please print on District letterhead)

Banking Information Template

_____ District hereby instructs the Massachusetts School Building Authority make grant payments via electronic ACH directly to the following account:

MSBA Project ID#*: _____

***All future project payments will be made to this account unless the MSBA receives specific instructions to distribute payments to a separate account for each project.**

District Contact Name: _____

Signature: _____

District Telephone No.: _____

Banking Information for ACH Transactions

Financial Institution Name: _____

Financial Institution Address: _____

City & State: _____

Account No.: _____

Transit Number (ABA#): _____
(Routing #)

Please return the completed form to Xingzhen (Stephanie) Bai:

- via email at Xingzhen.Bai@MassSchoolBuildings.org

An acknowledgment of receipt of a new Banking Information Template will be sent to the Eligible Applicant, Treasurer or Business Manager, and District Contact listed on the form.



CITY OF MELROSE

Human Resources Department

Polina Latta
Director
Platta@cityofmelrose.org

City Hall, 562 Main Street
Melrose, Massachusetts 02176
(P) 781-979-4146
(F) 781-979-4246

To: President Chris Cinella
 Melrose City Council

From: Polina Latta, Human Resources Director

Re: Compensation and Classification Study

Date: October 12, 2022

In FY22 the City of Melrose hired a Human Resources Services, Inc. (HRS) to perform a comprehensive classification and compensation study of approximately 70 non-union positions including department heads and staff, which has not been done since 1988. The goal of this initiative was to invest in the City's role as an employer, and modernize and standardize our pay practices for non-union Managers and staff to provide for meaningful progression and promotion while ensuring compliance with the Fair Labor Standards Act and the Mass Pay Equity Act.

The study involved updating the job descriptions, classifying positions according to a uniform point analysis standard, surveying the market of comparable municipalities as needed to determine representative rates of compensation, and developing and recommending a new compensation and classification system for the non-union group of positions.

Based on internal and external equity, the study recommended replacing the current multiple non-union plans with one consolidated compensation and classification plan for the non-union positions. The proposed pay plan supports pay equity and hierarchy based on skill and job requirements. It consists of 23 pay grades and ten steps in each grade with minimum and maximum salary and 2% between steps. HRS recommended continuing the policy on pay steps for easier maintenance and consistency of the plan. The pay ranges targeted the 75th percentile of market, which was necessary in order to remain competitive as compared to other municipalities in Massachusetts.

This is a base salary plan and does not include compensation for stipends, cost-of living, benefits, or other compensation. For initial placement of employees within the plan, the City used the approach of placing at the step closest to but just above their current wage in order to not

Attachment: HRMemoHRS [Revision 2] (ORDER-2023-29 : An Appropriation from Contract Stabilization)

reduce the pay of any current employee. For employees whose salary was below the minimum of the pay range efforts were made to bring it into the range. To maintain fairness, it was recommended that should an employee salary fall above the upper limit of the range the City should maintain that salary and not reduce it.

The proposed pay structure is designed to provide appropriate compensation through the next three fiscal years. As position duties and responsibilities change over time or as new positions emerge, the consultant has furnished a tool to evaluate and measure the position against a common set of criteria in a systematic and objective manner to rank the job in the appropriate grade of the compensation structure.

In order to ensure that pay levels remain equitable and competitive the City was advised to maintain the current plan by applying cost-of-living increase across the entire compensation structure periodically, as determined by the administration, or the new compensation structure will become outdated, and the City will have difficulty recruiting talent, as we have witnessed in the past.

Therefore, we are requesting an appropriation in the amount of \$167,310 (One Hundred Sixty-Seven thousand, three hundred and ten dollars) to fund the HRS compensation study. The requested appropriation is from the following accounts \$159,784 from the Contract Stabilization fund (84042-590000), \$3,763 from Sewer, Reserve for Retained Earnings (84152-590000) and \$3,763 from Water, Reserve for Retained Earnings (84162-590000) to various salary and wage lines as set forth herein.

nationalgrid

CITY CLERK MELROSE-MA
2022 OCT 3 PM12:44

September 22, 2022

City of Melrose

To Whom It May Concern:

Enclosed please find a petition of NATIONAL GRID and VERIZON, covering joint NATIONAL GRID-VERIZON pole location(s)

If you have any questions regarding this permit please contact:

Please notify National Grid's Vincent LoGuidice of the hearing date / time at 978-725-1392 or Vincent.LoGuidice@NationalGrid.com.

If this petition meets with your approval, please return an executed copy to each of the above named Companies.

National Grid Contact: Vincent LoGuidice; 1101 Turnpike Street; North Andover, MA 01845

Very truly yours,

Bob Coulter
Supervisor, Distribution Design

Enclosures

Attachment: ngrid Joint Pole 22.10.17 (PET-2023-1 : Verizon & Mass. Electric - Joint Pole installations)

Questions contact – Richard Paz 781-907-4942

PETITION FOR JOINT OR IDENTICAL POLE LOCATIONS

North Andover, Massachusetts

To the City Council
Of Melrose, Massachusetts

Massachusetts Electric Company d/b/a National Grid and Verizon New England, Inc requests permission to locate poles, wires, and fixtures, including the necessary sustaining and protecting fixtures, along and across the following public way:

Ashland St - National Grid to install 3 JO Poles and Remove 1 JO Pole on Ashland St beginning at a point approximately 20 feet south of the centerline of the intersection of Franklin St. Install 2 new poles and replace 1 pole with anchor for 3 line voltage regulators.

Location approximately as shown on plan attached

Wherefore it prays that after due notice and hearing as provided by law, it be granted a location for and permission to erect and maintain poles and wires, together with such sustaining and protecting fixtures as it may find necessary, said poles to be erected substantially in accordance with the plan filed herewith marked – Ashland St – Melrose – Massachusetts.

No.# 30440731 August 17, 2022

Also for permission to lay and maintain underground laterals, cables, and wires in the above or intersecting public ways for the purpose of making connections with such poles and buildings as each of said petitioners may desire for distributing purposes.

Your petitioner agrees to reserve space for one cross-arm at a suitable point on each of said poles for the fire, police, telephone, and telegraph signal wires belonging to the municipality and used by it exclusively for municipal purposes.

Massachusetts Electric Company d/b/a

NATIONAL GRID *Bob Coulter*

BY _____

Engineering Department

VERIZON NEW ENGLAND, INC.

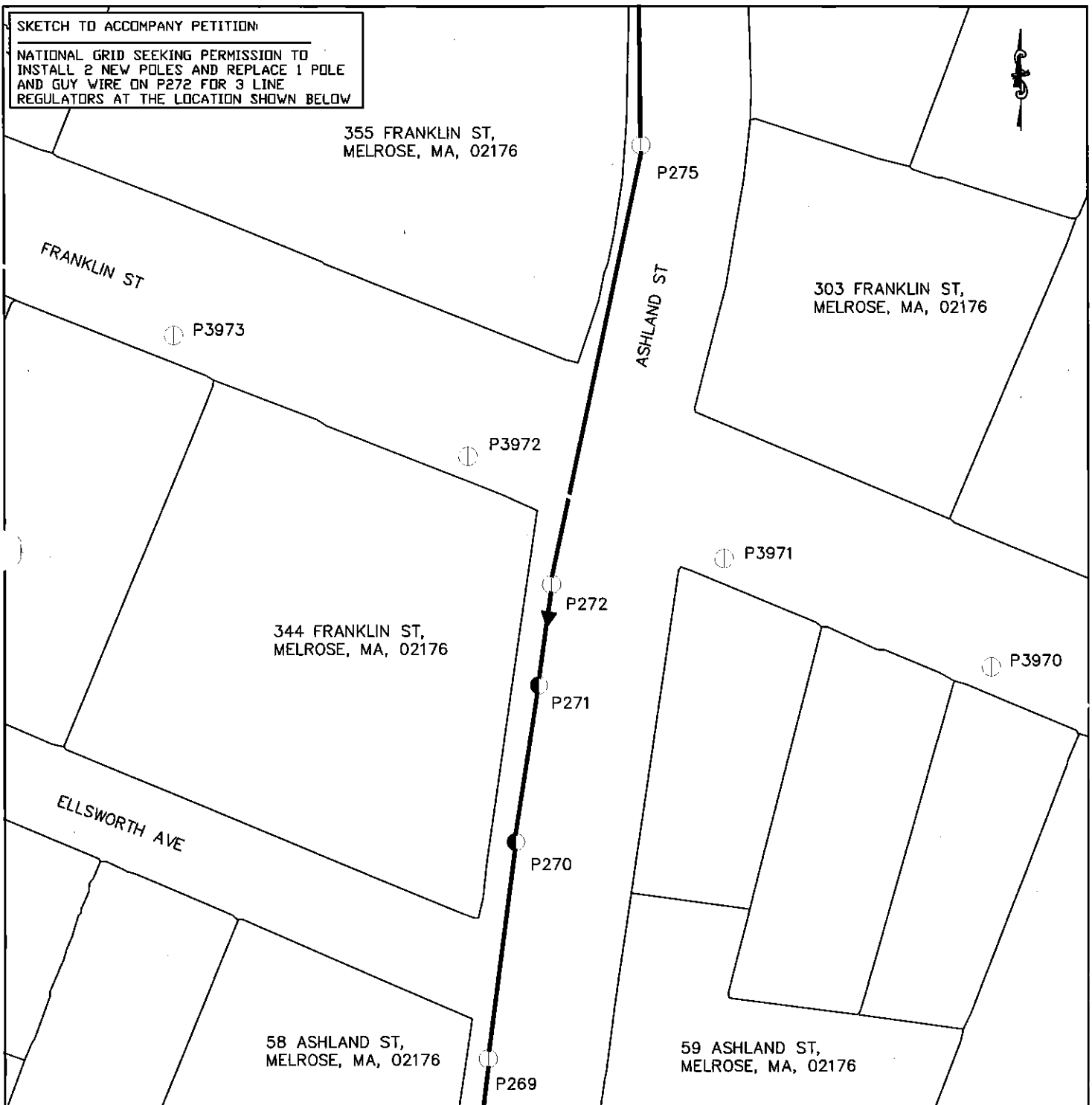
BY _____

Manager / Right of Way

Attachment: ngrid Joint Pole 22.10.17 (PET-2023-1 : Verizon & Mass. Electric - Joint Pole installations)

SKETCH TO ACCOMPANY PETITION

NATIONAL GRID SEEKING PERMISSION TO
INSTALL 2 NEW POLES AND REPLACE 1 POLE
AND GUY WIRE ON P272 FOR 3 LINE
REGULATORS AT THE LOCATION SHOWN BELOW



LEGEND



EXISTING J/O POLE



PROPOSED J/O POLE

ON SECONDARY



ON PRIMARY



SPAN GUY



INSTALL NEW ANCHOR AND GUY

MELROSE TOWN PETITION

344 FRANKLIN ST

MELROSE, MA

Exhibit 'A' not to scale. The exact location of said facilities to be established upon the installation and erection of the facilities thereof

Date: 7/12/2022

Designer: PAZRIC

W/R: 30440731

nationalgrid

To: Mayor Brodeur and the Conservation Commission City of Melrose
562 Main Street
Melrose, MA 02176

Dear Mayor Brodeur and members of the Conservation Commission.

I am writing to express my strong interest in joining the Melrose Conservation Commission. I have been a resident of Melrose 16 years.

In those years, I have spent many hours exploring the trails and open spaces that Melrose has to offer, some of which are steps from my house. For the past few years, I have volunteered as a trail steward for the city. During that time, I have responded to issues on the trails, organized cleanup efforts and "trail days" to reclaim overgrown trails, address trail erosion and work to mitigate invasive species such as bittersweet and knot weed. As a certified trail builder, I can be regularly found working in other cities performing trail maintenance and repair. I have been called upon by the Melrose Conservation Commission to also help with trail design and to work with the commission to identify and correct issues. I am a strong advocate for conservation while at the same time increasing the sustainable use and access to the green spaces that make Melrose so inviting. I feel as a member of the commission, I would give a valuable perspective and would be able to do more for the city to conserve our green spaces than I can as a trail steward.

I appreciate your consideration and look forward to discussing this opportunity with you at your convenience.

Please let me know if there is any other information that I can provide that will support my candidacy for the Conservation Commission.

Sincerely,

Craig

--

Craig Molway

Experience

Mount Auburn Hospital- Cambridge Massachusetts April 2018 – Present *Applications Analyst III*

- Senior Analyst supporting the Emergency Department ASAP platform and the technical lead for Care Everywhere
- Project lead for various clinical and interoperability projects.
- Responsible for ongoing environment evaluation, testing, initiatives and upgrades.
- Technical expert for the hospital's web portal connection for non-Epic trading partners.
- Haiku/Canto (Epic mobile applications) lead for the application team.
- Responsible for ongoing development and validation of associated reports including Reporting Workbench, Crystal and Excel.
- Responsible for Radar Dashboard development to drive provider performance and enhance the user experience.
- Provide end-user clinical application on-call support for Epic ASAP, Care Everywhere and associated reporting analytic tools.
- Contributing member of the Onboarding, Mobile Applications, Security, Printing Blood Admin and SOGI workgroups.
- Recipient of the 2022 Achievement in Patient Safety Team Award.

Recent Projects

- ED to Inpatient Admission Project (Project Lead): Large-scale project to change the hospital admission process in the emergency department. Project spanned 10 months and involved Inpatient, ambulatory and emergency department teams and stakeholders.
- Dementia and Delirium project (Project Lead for ED workflows): New workflows for different roles in the ED to identify, treat and follow-ups for patient who present with delirium and dementia in the ED.
- 21 Century Cures Act Project (Project Member and Interoperability Lead): Project was to insure that the hospital was able to meet the new regulatory requirements of interoperability for sharing data between patients and providers.

Boston Medical Center – Boston Massachusetts August 2015 – April 2018 *Applications Analyst II*

- Epic certified Ambulatory analyst. Certified Epic Regulatory analyst. MyChart (patient portal) analyst. Detailed knowledge of the Centers of Medicare & Medicaid (CMS) Meaningful Use (MU) incentive and Quality Payment Program (QPP) programs. Performed analysis on multiple aspects of the CMS program including measure detail, CHPL certification, hardship exemptions, review and analysis of new and changing regulations covered in the federal register. Authoring of BMC's interpretation and attestation documents for audit.
- Lead for MU/QPP-related projects, environment evaluation and upgrade build attestation submissions, audit risk analysis and mitigation. Performance overview and mitigation of over 700 eligible clinicians in the MU program and over 1200 providers in the QPP program.
- Responsible for the build and maintenance of all outpatient clinical quality measures (CQM) reported out of the EHR.
- Provide end-user clinical application on-call support for Epic Ambulatory, MyChart and associated reporting analytic tools.

Dana Farber Cancer Institute- May 2014 – August 2015 *Applications Analyst (Consultant)*

- Provide adult and pediatric clinical application IS support
- Member of the LMR (EHR), Pediatric Oncology, eScripton, Dragon and Dawn AC support teams.
- Provide support, in person and over the phone to clinical staff on a variety of clinical applications.
- Facilitate the design and implementation of Meaningful Use (MU) Standards within EHR.
- Author and update business and technical documents and give end-user training.
- Identify, develop and train clinical workflow for new applications to meet MU standards.
- Regression, integration and HL7 interface testing for multiple software releases.
- Work with users and developers to identify and track software bugs.

Boston Children's Hospital - Boston Massachusetts Jan 2014 - Mar 2014 *Applications Specialist (Consultant)*

- Providing IT and Laboratory Information System support (LIS) for BCH department of Pathology
- Regression and integration testing for new LIS upgrade in advance of ICD-10 requirements.
- Perform database queries and perform statistical analysis on results.
- Author and update technical documentation for end-user training.
- Manage department SharePoint team site and Sitecore CMS website.
- Provide desktop support for the department.

Education

University of Massachusetts Boston

Bachelor of Arts in History. *Magna Cum Laude*
Golden Key International Honor Society.

Mount Auburn

Mount Auburn Interdisciplinary Processional Leadership Academy (IPLA) - 2022 class.

Epic Certifications

- EpicCare Ambulatory
- Care Everywhere
- ASAP Emergency Department
- MyChart
- Advanced Care Everywhere Badge
- Epic Regulatory Badge
- Advanced Analyst Badge



CITY OF MELROSE

OFFICE OF THE MAYOR

PAUL
BRODEUR
Mayor

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440
Fax - (781) 662-2182

MEMORANDUM

To: Melrose City Council
From: Mayor Paul Brodeur
Re: Melrose Conservation Commission Appointment
Date: August 9, 2022

I respectfully request the Honorable City Council confirm the appointment of Craig Molway, 58 Gross Ave, to the Melrose Conservation Commission, for a two-year term, said term to expire on the last day of February 2024. Mr. Molway's appointment will replace the membership of Gwendolyn Orford, who resigned from the Commission on July 13, 2022.

Mr. Molway has been a resident of Melrose for the past 16 years. During this time, he has dedicated himself to exploring the many trails and open spaces that Melrose has to offer and taken the initiative to serve Melrose as a trail steward and a certified trail builder. As a steward for Melrose trails, he has used his event planning skills and experience to organize various trail cleanup efforts, and "trail days" — all with the intention of protecting Melrose's conservation spaces.

In addition, Mr. Molway's preexisting relationship with the Melrose Conservation Commission, developed through co-trail building, has set a strong foundation for him to serve as a Commission team member.

Thank you for your consideration.

Michael P. Barry
910 Main St. Apt. 316
Melrose MA 02176

Lily Wall
Office of the Mayor
Melrose City Hall
562 Main St
Melrose MA 02176

Dear Lily,

Thank you for providing this opportunity for me to enter my name as a person of interest to be considered for appointment to the Melrose Housing Authority Board. I believe my professional background would allow me to be a contributing member of the Melrose Housing Authority Board.

Sincerely,

Michael P. Barry

Attachment: Michael_Barry_LOI (ORDER-2023-17 : Appointment of Michael Barry, 910 Main St., to the Melrose Housing Authority)



Summary

Michael P. Barry
910 Main St. Apt 316
Melrose MA 02176

Born and raised Malden.

1977 Moved to Wakefield

Town of Wakefield

- Dept head of town's computer department
- Served on Town Employees Credit Union board of directors
- Tabulation Commissioner responsible for election results tabulation.

Medford-Malden Lodge of Elks

- Member 48 years
- Board of Trustees 20 years
- Served as: Esquire Lecturing, Loyal and Leading Knight; Chairman of Flag Day ritual multiple years. Awards: Elk of the year, Officer of the year,

Honorary Life Member and special citation for years of service leading the Flag Day Ritual.

Professional History

- Town of Wakefield
- AZREX a software development company of query package
- AIM a mutual fund software vendor
- AT and T a transfer agency established to track Ma Bell diversification.
- Kemper Financial mutual fund transfer agency
- DST the largest mutual fund processor
- USAA special assignment to transition software for mutual fund and brokerage systems into Y2K.





PAUL BRODEUR
Mayor

CITY OF MELROSE

OFFICE OF THE MAYOR

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440
Fax - (781) 662-2182

MEMORANDUM

To: Melrose City Council
From: Mayor Paul Brodeur
Re: Melrose Housing Authority
Date: September 6, 2022

I respectfully request the Honorable City Council confirm the appointment of Michael Barry, 910 Main St., to the Melrose Housing Authority for a one-year term; said term to expire on the first Monday of March 2023. Mr. Barry's term would replace Francis Paglia's, who has resigned from the Housing Authority.

Mr. Barry's professional experience, contributions to our neighboring communities, such as the town of Wakefield, and 20 years of service as a Trustee for the Medford-Malden Lodge of Elks qualify him to replace MR. Paglia's role on the Melrose Housing Authority.

I'm thrilled that such a civically engaged individual has joined the Melrose community, and I am honored to submit his appointment for the Housing Authority.

I thank you in advance for your consideration.

Attachment: 9_6_22_Memo (ORDER-2023-17 : Appointment of Michael Barry, 910 Main St., to the Melrose Housing Authority)



CITY OF MELROSE

PAUL BRODEUR

Mayor

OFFICE OF THE MAYOR

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440

MEMORANDUM

To: Melrose City Council
From: Mayor Paul Brodeur
Re: Melrose Cemetery Commission
Date: September 13, 2022

I respectfully request the Honorable City Council confirm the appointment of Susan Lawson Cann, 123 West Foster, to the Melrose Cemetery Commission. Ms. Cann's appointment replaces the membership of Doug MacDonald, whose appointment was set to expire on the last day of February 2024. Doug who passed away in August, but his commitment, passion, and good humor were a model for all who serve the public.

A Melrose resident for 42 years, Ms. Cann is eager to apply her many years of dedication to the community through her time serving on the Melrose School Committee and, in particular, her time as a six-year member of the Board of the Park Commission.

Thank you for your consideration.

September 11, 2022

The Honorable Paul Brodeur
Office of the Mayor
Melrose City Hall
562 Main Street
Melrose, MA 02176

Re: Melrose Cemetery Commission

Dear Mayor Brodeur:

This letter is written to express my desire to become a member of the Board for the Melrose Cemetery Commission. I have been a resident of the city for 42 years. During that time, I contributed to the care and management of the:

- The public schools, as a 10-year member of the School Committee, and
- The Mount Hood Memorial Park and Golf Course and all City playing fields as a six-year member of the Board of the Park Commission.

My work on the School Committee and the Park Commission has provided me with an insight into and appreciation of the community that will enable me to become an effective member of the Cemetery Commission. It would be an honor to continue my service to Melrose as a member of the Board.

I look forward to hearing back from you regarding the next steps in the application process.

Best regards,



Susan Lawson Cann
123 East Foster Street
Melrose, MA 02176
suecannendo@outlook.com
617.306.7019



PAUL BRODEUR

Mayor

CITY OF MELROSE

OFFICE OF THE MAYOR

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440

MEMORANDUM

To: Melrose City Council
From: Mayor Paul Brodeur 
Re: Melrose Board of Registrars of Voters
Date: September 13, 2022

I respectfully request the Honorable City Council confirm the appointment of Francis X. Wright, 191 Florence Street, a registered Democrat, to the Melrose Board of Registrars of Voters to fill the existing vacancy on the Board and serve a three-year term.

Mr. Wright served the community for 14 years as an Alderman/City Councilor and professionally served the City of Somerville for 23 years as a municipal attorney. He is eager to put his background in municipal government, and his recent experience as a Clerk during the September 6, 2022 primary election, to work as a member of the Board of Registrars of Voters.

Thank you for your consideration.

Attachment: Melrose Board of Registrars of Voters_ F Wright 9 13 22 (ORDER-2023-19 : Appointment of Francis X. Wright)

**Melrose Democratic City Committee
Candidates Endorsed for the Vacancy on the Board of Registrars of Voters**

Candidate One:

Francis X. Wright
191 Florence Street
781-854-2621
fxwright@yahoo.com

As a registered Democrat, I am interested in the vacancy on the Melrose Board of Registrars of Voters.

My related experience includes:

Serving 23 years as a municipal attorney for the City of Somerville. As such, I advised Somerville Election Commissioners on a variety of election law issues.

Serving 14 years as an Alderman/City Councilor, I was a candidate in seven (7) elections, including three (3) contested preliminaries.

Finally, I will be serving as a Clerk during the September 6, 2022 primary election.

The following is a link to my LinkedIn profile:
<https://www.linkedin.com/in/frank-wright-2b38bb1a>

Please let me know if you have any questions. Thank you.

Stacey A. Minchello
Executive Director



781 665-4304
sminchello@cityofmelrose.org

MEMORANDUM

To: Melrose City Council
From: Stacey Minchello, COA Director
Re: Acceptance of Title III B Grant (\$10,000)
Date: October 3, 2022

The City of Melrose has received a federal Fiscal Year 2023 Title III B Grant in the amount of \$10,000. Mystic Valley Elder Services is the grantor under the federal Older Americans Act of 1965. Funding will be used for events, programs, and workshops to combat social isolation and loneliness among individuals aged 60 or older, including:

- LGBTQ+ outreach
- Recognize diversity, equity, and inclusion

This is a regular grant that the City applies for and receives annually. There is a matching requirement of not less than 15% of the program budget which can be fulfilled through either non-Title III cash or in-kind services.

I respectfully request City Council acceptance of this grant.

Attachment: COA Grant acceptance (ORDER-2023-20 : Mystic Valley Elder Services Title III B FY23 Grant Acceptance)

PROGRAM SERVICE AGREEMENT

between

MYSTIC VALLEY ELDER SERVICES

Area Agency on Aging (AAA)

and

Melrose Council on Aging

Grantee

This Agreement is entered into by and between the Area Agency on Aging (AAA), **Mystic Valley Elder Services** (hereinafter referred to as the **Corporation**), and the Grantee, **Melrose Council on Aging** (hereinafter called the **Provider**), operating in the Commonwealth of Massachusetts as a 501(c)3 organization, having its principal offices at **235 West Foster Street, Melrose, MA 02176**.

WHEREAS, the Corporation desires to purchase programs to provide access to services for isolated, marginalized, and LGBT elders, and those who are disadvantaged by racial, cultural and/or linguistic barriers and giving priority to those elderly individuals with the greatest social and economic needs as defined in Attachment B; and

WHEREAS, the Corporation has received authorization from the Commonwealth of Massachusetts, Executive Office of Elder Affairs (hereinafter "Elder Affairs") to fund such services as an Area Agency on Aging under Title III of the Older Americans Act of 1965, as amended in 2020 (Public Law 109-365) under the Special Programs for Aging Title III, Part B, Grants for Supportive Services, CFDA Number 93.044, Administration for Community Living, hereinafter referred to as Title III, and

WHEREAS, the Provider agrees, under Title IIIB, to conduct programs that provide access to services for socially insecure/isolated elders and elders marginalized for reasons including sexual orientation in the **Mystic Valley area**, giving priority to those elder individuals with the greatest social and economic needs as defined in Attachment B; and

NOW, THEREFORE, the Corporation and the Provider do mutually agree as follows:

1. Engagement

The Corporation hereby engages the Provider to provide and the Provider agrees to provide "Project Services" to individuals sixty years of age or older, giving priority to those elder individuals with the greatest social and economic need who reside within the following designated area as set forth in Attachment A of this contract. The term "Project Services" shall mean the program as described in the grantee's grant application (see Attachment E). The term "Greatest Social and Economic Need" is defined in Attachment B, which definition may be changed from time to time by the Corporation. The activities of the Provider under this agreement shall hereinafter be referred to as the "Program".

2. Period of Performance

This Agreement shall take effect on or about **October 1, 2022** and shall remain in effect until and through **September 30, 2023**, at which time the Agreement expires automatically, unless earlier terminated in accordance with the terms set forth herein. This renewable contract is subject to the Corporation and the Executive Office of Elder Affairs confirmation of available Title III funds, and compliance with the provisions of the regulations as set forth in this Program Service Agreement. Programmatic and fiscal activity on this grant must be demonstrated within thirty (30) days* of the issuance of the grant award or the corporation may terminate the grant.

*Days are defined as calendar days unless specified in the agreement as business days.

3. Fiscal and Administrative Conditions

I. Maximum Obligation

- The Corporation shall pay to the Provider an obligation of up to **\$10,000** of Title III funds for the period ending **September 30, 2023**, as contained in Section 2 of this Agreement. These funds shall be the Corporation's maximum obligation under this contract. The Provider shall provide a matching share of not less than **15%** of the total Program budget in non-Title III cash or in-kind services. **Specific administrative conditions for FY23 include:**

- The Melrose Council on Aging will serve 216 unduplicated individuals age 60 and older in the Mystic Valley Elder Services (MVES) planning and service area through the Teachable Moments Workshops and the LGBT Social Programs;
- The Melrose Council on Aging will provide monthly documentation regarding the number of referrals made to Mystic Valley Elder Services, and
- During FFY 23, grantee will provide MVES with information about their organization, resources, and programs by providing ways to serve older adults in the MVES service area through either in-house or Zoom training to MVES staff or contributing grantee information to use on the MVES web site.

II. Approved Budget

In no case shall the Provider's Program Services expenditures exceed the total approved budget or exceed the approved costs for each budget category as specified in this Agreement without the prior written approval of the Corporation. The portion of the total budget allocated to the individual line items as set forth in the budget may be amended by mutual consent of the parties at the request of either party, but in no event shall the sum of the reimbursable amounts as amended exceed the level of funding itemized in the original budget. Failure of the Provider to request written approval for budget changes from the Corporation may be a cause for disallowance of expended monies, which determination is the sole decision of the Corporation.

III. Reimbursement of Provider Expenditures

The Provider shall submit periodic expenditure and program reports as requested by the Corporation in a format as set forth in Attachment C to this Agreement. Such reports shall be for Program Services authorized by the Corporation pursuant to this Agreement and rendered to eligible participants by the Provider during the previous period, and shall include such programmatic, fiscal and administrative data as the Corporation reasonably deems necessary for the monitoring and evaluation of such services and to substantiate the Corporation's claim for reimbursement from Elder Affairs. Upon receipt and approval of properly completed expenditure and program reports, the Corporation shall, subject to receipt of funds from Elder Affairs, make its best effort to process payments to the Provider within thirty (30) days. The Corporation may, within ninety (90) days of the expiration of this Agreement and after consultation with the Provider, adjust any invoice of the Provider both before and after payments have been made; however, the failure of the Corporation to exercise this provision shall not constitute a waiver of any right of the Corporation to otherwise recover funds paid to the Provider pursuant to this Agreement.

IV. Accounts

Both federal Program grant funds and non-federal resources (cash or in-kind) which constitute matching share for the Program shall be maintained in a separate account from any other funds. Provider Program accounting records shall be itemized in sufficient detail to show the exact nature of all receipts and disbursements. The Provider shall establish and maintain appropriate procedures to safeguard and account for all contributions and project income. All financial and accounting records shall be maintained by the Provider in accordance with generally accepted accounting practice and principles.

V. Contributions

Consistent with the mandate of the Older Americans Act, 42 USC 3001 et seq. and 45 CFR 1321.67, the Area Agency on Aging shall assure that each Provider shall provide each older person with an opportunity to voluntarily contribute to the cost of the service(s). This opportunity should be publicized with project participants while effective procedures maintain both the voluntary nature and confidentiality of any donations. A service Provider that receives funds under Title III may not deny any older person a service because the older person will not or cannot contribute to the cost of the service. All contributions are to be used by the grantee to expand the services of the program being funded under this grant.

4. Monitoring

The Provider shall establish and maintain such documents and financial and program records which are required by the Corporation to ensure documentation, monitoring and evaluation of financial activities and the provision of purchased services. All financial records, program records, and other books, records, documents, and property pertaining to this Agreement shall at all reasonable times be open for inspection, review or audit by the Administration on Aging, Elder Affairs, the Corporation, or their authorized representatives, who shall at all reasonable time have access to the premises wherein such books, records, documents and property are stored for seven (7) years after final payment hereunder.

The Corporation reserves the right to make a site visit at any time during the regular business hours of the program for the purpose of conducting program and fiscal audits. The Corporation shall conduct at least an annual site visit for such purpose. The

provider shall develop and keep on file participant surveys as well as other evaluation measures the Provider uses to measure its program impact and improve Program operations.

The Provider shall provide the Corporation with any additional data that the Corporation may reasonably require to permit it to monitor performance of this Agreement at a level sufficient to assure fiscal administration, accountability and program quality.

5. **Confidentiality**

The Provider shall not use or release any reports, data, or other information identifying applicants or persons served, or which could reasonably lead to the identification of such applicant or person served, in accordance with the laws of the Commonwealth, including but not limited to Executive Order 588, M.G.L. c 93H, M.G.L. c. 66A § 2, Elder Affairs PI-97-55; and where applicable, Federal law, governing the use, safeguarding and access to personal data as defined in The Fair Information Practices Act. Such information as may be necessary shall be used only to assure proper administration, planning, coordination and monitoring of performance under this Agreement and to permit the transfer of records of a person served to another agency for the purpose of continuing services. The Provider shall provide the Corporation such additional data as the Corporation may require to monitor the Provider's information system and to guarantee adequate safeguarding of the human and civil rights of the applicants and persons served. The Provider shall furnish to the Corporation, within thirty (30) days following the request by the Corporation, a written description of the Provider's system for gathering, storing, and releasing personal data so the Corporation may determine compliance with Section 6 of this Agreement.

6. **Protection of Clients**

The Provider shall comply with the applicable provisions of Elder Affairs' rules governing the Elder Rights Review Committee (ERRC), set forth at EOEA-PI-03-17. Under these rules, Elder Affairs must review all research, experimentation, surveys, market testing or similar research that seeks access to clients or client information connected with programs funded by Elder Affairs.

7. **Non-Discrimination in Service Delivery**

The Provider shall not deny any services to or otherwise discriminate in the delivery of services against any person who otherwise meets the eligibility criteria for the program as determined by the Corporation on the basis of race, color, religion, sex, age, national origin, ancestry, physical or mental disability, sexual orientation or because such a person is a recipient of federal, state or local public assistance or housing subsidies. The Provider agrees that program staff shall make reasonable accommodations to allow for client participation in the program and its benefits.

The Provider shall comply with all applicable provisions of:

- (a) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.) - prohibits discrimination on the basis of race, color or national origin, in programs receiving federal assistance;
- (b) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794) and the regulations promulgated thereunder, (45 CFR part 84) - prohibits discrimination against qualified disabled individuals on the basis of the disability in any program or activity receiving or benefiting from federal financial assistance and requires programs and activities, when viewed in their entirety, to be readily accessible to disabled persons;
- (c) M.G.L. c 151B, § 4 (10) - prohibits discrimination in furnishing services on the grounds that an individual is a recipient of federal, state or local public assistance or housing subsidies, nor should any services be denied to any person who chooses not to make a donation to the cost of the Program.

8. **Non-Discrimination in Employment**

The Provider shall not discriminate against any qualified employee or applicant for employment because of race, color, national origin, ancestry, age, sex, sexual orientation, religion, or physical or mental handicap. The Provider shall comply with all applicable provisions of:

- (a) Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et. seq.) - prohibits discrimination in Employment on the basis of race, color, religion, sex, or national origin;
- (b) M.G.L.,c. 151B, § 4 subsections 1, 1A and 1B - prohibits discrimination on the basis of race, color, sex, religion, creed, national origin, ancestry or age;
- (c) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794) and the regulations promulgated thereunder (45 CRF part 84) - prohibits discrimination against qualified disabled individuals on the basis of the disability and requires employers to make reasonable accommodations to known physical or mental limitations of otherwise qualified disabled applicants and employees.

9. Affirmative Action

The Provider shall develop and adhere to a policy of affirmative action in all aspects of employment under this Agreement. In addition, if the maximum compensation paid to the Provider in the Commonwealth's fiscal year immediately prior to the beginning of this Agreement, or payable during the term of this Agreement, from agencies acting pursuant to contracts with the Executive Office of Elder Affairs, is fifty thousand dollars (\$50,000) or more, the Provider shall develop and maintain an affirmative action plan in accordance with the applicable requirements of Executive Order 526 and transmit a copy to the Corporation within thirty (30) days of receiving the Notification of Grant Award.

10. Grievance

The Provider shall develop and adhere to a policy in writing, in a conspicuous manner at the place where services are rendered or delivered, a notice informing individuals eligible for or receiving Title III services that they may file a grievance with the Corporation, within twenty-one (21) days, when said individuals are dissatisfied with or denied Title III services by the Provider. This notice must include the name and address of the Corporation. The Corporation will provide to the complainant a written Grievance Application.

11. Conflict of Interest

The Provider shall not knowingly employ, compensate or arrange to compensate any employee of the Corporation during the term of the Agreement without the prior written approval of the Corporation. It shall be a breach of this Agreement for the Provider to give, or agree to give, or to solicit, demand, accept, or agree to accept, any additional gratuity, including an offer of prospective employment or favor, in connection with any action or other particular matter within the purview of scope of duties of any employee, officer or director of the Corporation.

12. Notice

Unless otherwise specified herein, any notice, approval, request, or demand hereunder from either party to the other shall be in writing and shall be deemed to have been given when either delivered personally, electronically by fax, or deposited in a United States mail box in a postage prepaid envelope addressed to the other.

13. Political Activity

No employee of the Provider may engage in partisan or non-partisan political activity during hours for which the employee is paid in whole or in part with Corporation funds. The Provider may not select or promote an employee based on his or her political affiliation. The Provider agrees that for the term of this Agreement, no employee paid in whole or in part, nor board member of the Provider, shall at any time use the name of the Corporation and funds received pursuant to this Agreement, either directly or indirectly, for the purpose of interfering with or affecting the results of an election or nomination for office, whether partisan or non-partisan.

14 Lobbying

I. The Provider agrees that for the term of this Agreement, to the best of his or her knowledge, no federal appropriated funds will be paid, by or on behalf of the provider, to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, contribution, renewal, amendment, or modification of any federal contract, grant, loan or cooperative agreement.

II. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the Provider shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

III. The Provider shall require that the language of this certification be included in the award documents for all subawards at all tiers, including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements, and that all subrecipients shall certify and disclose accordingly.

"This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31,

U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.”

15. **Termination**

(a) If, for any reason, the Provider is unable to provide the services specified by this Agreement, it shall promptly notify the Corporation of its inability to provide services and indicate the specific reasons.

(b) The Corporation may suspend, reduce the grant in whole or in part at any time or terminate this Agreement, if the Provider has failed to comply with the provisions of this Agreement, in whole or part. However, prior to suspension, reduction of the grant in whole or part or termination of this Agreement pursuant to this subsection, the Corporation shall notify the Provider, in writing, of the specific areas of non-compliance. The Provider shall restore compliance within thirty (30) days of the date of notice. If the Provider has not restored compliance within the thirty (30) day period, the Corporation may terminate this Agreement by furnishing the Provider with written notice not less than forty-five (45) days prior to the effective date of termination.

(c) If the Corporation determines that any non-compliance with the terms of this Agreement on the part of the Provider endangers the life, health, and safety of any recipients of services under this Agreement, it shall terminate this Agreement by orally notifying the Provider of termination followed by the making of written notification, return receipt requested, setting forth the specific reasons for termination, within three (3) business days following the oral notification. Termination pursuant to this subsection shall take effect upon the furnishing of the oral notification.

(d) The Provider may terminate this Agreement prior to its expiration date if the Corporation fails to comply with a material provision of this Agreement. The Provider shall furnish the Corporation with written notice of termination not less than forty-five (45) days prior to the effective date of termination.

16. **Early Termination: Change in Law**

In the event that any statute or regulation which governs performance hereunder is changed, differently interpreted by a court or other competent authority, or newly enacted, adopted or promulgated, so as to increase the burden on either party in complying with the terms of this Agreement significantly beyond those existing at the time of the execution of this Agreement, the party so burdened may terminate this Agreement upon written notice to the other party of not less than forty-five (45) calendar days.

17. **Early Termination: Elimination or Reduction in Funding**

In the event that Title III funding appropriated through the Executive Office for Elder Affairs for Title III service contracts to the Corporation is eliminated or reduced to an extent that funding of this contract is not feasible, the Corporation may terminate this Agreement by providing written notice of termination to the Provider effective not less than forty-five (45) days after date of such notice.

18. **Early Termination: De-Designation of the Area Agency on Aging**

The Corporation shall notify the Provider in writing of its receipt of notification by Elder Affairs (hereinafter in this subsection referred to as "the Department") that the Department intends to de-designate the Corporation as the Area Agency on Aging for the service area covered by this Agreement. Thereafter, the Corporation shall notify the Provider of any appeal it may take of the Department's action and the disposition of any such appeal. All notices required by this subsection shall be made in writing within ten (10) days of the event which prompts the notice requirement.

In the event that Elder Affairs finally de-designates the Corporation as the Area Agency on Aging for the service area covered by this Agreement, the Corporation may terminate this Agreement by furnishing the Provider with written notice at least sixty (60) days prior to the effective date of termination. The parties shall cooperate fully with each other and with the Department, and take all reasonable steps and utilize all reasonable means to ensure continuity of services to program clients, including the use of available Corporation funds for the continuing delivery of legal assistance under this Agreement.

19. **Obligations upon Expiration, Termination, or Suspension**

The Corporation will pay the Provider for any reimbursable cost not covered by previous payments, for services rendered, pursuant to this Agreement, prior to notice of termination, if rendered in accordance with this Agreement, provided that the Provider submits the properly completed fiscal reports to the Corporation covering services rendered not later than thirty (30) days after notice of termination, suspension, or expiration. The Provider will immediately refund to the Corporation in accordance with the Corporation's instructions any unobligated balances of cash advanced by the Corporation.

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If the Grant is terminated or expires without an audit, the Corporation retains the right to disallow and recover an appropriate amount after fully considering any recommended disallowance's resulting from an audit, which may be conducted later. The termination or expiration of this Agreement does not affect the retention period for or the Corporation's right to access to program records as contained in Section 5 of this Agreement. The expiration or termination of this Agreement does not affect the Provider's responsibilities with respect to property as contained in Section 25 of this Agreement.

20. **Reproduction of Reports: Copyright**

The Provider shall not disseminate, reproduce or publish any report, information, data, or other documents produced in whole or in part pursuant to the terms of this Agreement without prior written consent of the Corporation, nor shall any such report, information, data or other document be the subject of an application for copyright by or on behalf of the Provider without the prior written consent of the Corporation.

21. **Assignment and Subcontract**

The Provider shall not assign or subcontract any interest in this Agreement without the express written permission of the Corporation and Elder Affairs; provided that claims for money due or to become due to the Provider from the Corporation under this Agreement may be assigned to a bank, trust company or other financial institution without such consent. Notice of any such assignment shall be furnished promptly to the Corporation. None of the services to be provided by the Provider pursuant to this Agreement shall be subcontracted to any other organization, association, individual, partnership or group of individuals without the prior express written approval of the Corporation and EOEA.

22. **Insurance**

The Provider shall procure and maintain insurance. The insurance will protect itself, its subcontractors, and the Corporation adequately from fire and extended coverage losses and from claims for bodily injury, death or property damage which may arise from operations under this Agreement. The Provider will provide the Corporation with a Certificate of Insurance prior to the commencement of the Program work. This certificate will provide that the policy shall not be canceled by the insurance company without ten (10) days notice to the Corporation of intention to cancel.

The Provider agrees to hold harmless and safe the Corporation, its officers, its agents, and employees from liability of any nature or kind including costs, expenses and attorney's fees for or on account of any or all suits or damages sustained by any person(s) or property resulting in whole or in part, from the negligence, performance, omissions or intentional act of any employee, agent, or representative of the Provider.

The Provider shall procure and maintain the following insurance coverage from a company or companies authorized to do business in Massachusetts:

- (a) Workers Compensation Insurance shall be secured and maintained as required by the Commonwealth of Massachusetts;
- (b) Public Liability - Bodily injury and Property Damage in amounts approved by the Commonwealth of Massachusetts;
- (c) Malpractice-professional Liability Coverage (as applicable) in amounts approved by the Commonwealth of Massachusetts;
- (d) Provider shall also purchase and maintain fidelity bonds of no less than twenty-five thousand dollars (\$25,000) per incident for all employees with direct access to or responsibility for the receipt and disbursement of funds.

23. **Waiver of Default**

Waiver by either party of any non-compliance shall not constitute a waiver of any subsequent non-compliance. A waiver or modification of any of the provisions of this Agreement shall be effective only if made in writing and executed with the same formality as this Agreement.

24. **Maintenance of Effort**

Services provided with funds under this Agreement must be in addition to any program services already provided to elderly persons in the cities and towns of Chelsea, Everett, Malden, Medford, Melrose, North Reading, Reading, Revere, Stoneham, Wakefield, and Winthrop.

25. Equipment

Equipment acquired or purchased by the Provider which was fully paid or reimbursed by grant funds provided by the Corporation pursuant to this Agreement shall be the property of the Corporation. No title or right in said equipment shall pass to the Provider except the right herein expressly granted. Plates or other markings will be affixed to or placed on said equipment by the Corporation indicating that the Corporation is the owner thereof and the Provider will not remove said plates or other markings. Upon expiration or termination of this Agreement, the Provider will immediately return said equipment to the Corporation in as good condition as received less normal wear, tear, and depreciation. Said equipment shall always remain and be deemed personal property even though attached to realty.

All replacements, equipment repairs, or accessories made to or placed in or upon said equipment shall become a component part thereof and title thereto shall be immediately vested in the Corporation and shall be included under the terms thereof. The Corporation may inspect the equipment at any time; and the Provider agrees to keep the equipment in first-class condition and repair it at the Provider's expense and house the equipment in a suitable shelter; and not to sell, pledge, encumber or otherwise dispose or limit the Corporation's interest in the equipment or accessories attached thereto without the written approval of the Corporation.

The Provider assumes the entire risk of loss or damages to the equipment, whether or not covered by insurance. The Provider agrees to and does hereby indemnify and hold the Corporation harmless of, from and against all claims, costs expenses, damages, and liabilities, including reasonable attorney fees resulting from an incident to the use, operation, or storage of the equipment during the term of this Agreement and while said equipment is in possession or control of the Provider. The Provider agrees to keep the equipment insured to protect all interests of the Corporation, at the Provider's expense against all risks of loss or damage from every cause whatsoever in a manner and in an amount approved by the Corporation. Said insurance proceeds therefrom shall be payable to the Corporation. *Equipment means those items identified in Appendix I, attached hereto and incorporated herein in reference.*

26. Staffing Pattern of Provider (Refer to Grant Application)

27. Provision and Delivery of Services (Refer to Grant Application)

28. Licenses

The Provider shall procure and keep current any license, certification, permit or accreditation required by local, state, or federal statute or regulations and shall, upon the request of the Corporation, submit to the Corporation proof of such license, certification, permit or accreditation.

29. Criminal Procedure

The Provider shall request a Criminal Offender Record Information (hereinafter referred to as "CORI") from the Criminal History Systems Board, prior to employing an individual whose salary is to be paid with Title III funds, referring for employment or accepting such individual as a volunteer, pursuant to M.G.L.c.6, § 172 and § 172C, and 101 CMR 15.00 et seq. This includes but is not limited to agencies which employ or accept as a volunteer or refer for employment those persons who will provide care, treatment, education, training, transportation, delivery of meals, instruction, counseling, supervision, recreation or other services in a home or in a community-based setting for any elderly and/or disabled person, or one who will have direct or indirect contact with such elderly and/or disabled person, or access to such person's files.

30. Publications

The Provider shall insure that the distribution of any web sites, videos, vehicles, brochures, periodicals or other publications describing any program funded, in part or whole, by Title III funds, prominently display in such report a statement to the following effect:

"This agency and its programs are funded (in whole or in part) by a grant from Mystic Valley Elder Services, the Massachusetts Executive Office of Elder Affairs, and the federal Administration on Aging."

31. Compliance with Legal Services Corporation Restrictions as Set Forth In Public Law 104-134 (If Applicable)

Title III legal assistance Providers (LAP) who receive funding from the Legal Services Corporation shall comply with the restrictions on activities set forth in P.L. 104-134. The Corporation and said LAP may elect to execute the Model Title III-B Legal Assistance Agreement previously adopted by Elder Affairs in place of this Agreement.

32. **Integration**

All attachments to this Agreement are deemed to be part of this Agreement. The entire agreement of the parties is contained herein and this Agreement supersedes all oral agreement and negotiations between the parties relating to the subject matter contained herein.

This Agreement has the following attachments:

Attachment A	Corporation's Service Area
Attachment B	Definition of Greatest Social and Economic Need
Attachment C	Project Reporting (program and expenditure report formats)
Attachment D	Executive Order 588

If any provision of this Agreement is held to be invalid or unenforceable, all other provisions shall nevertheless continue in full force and effect.

33. **Compliance with Law and Regulations**

Provider agrees to comply with the provisions of the Older Americans Act of 1965 as amended in 2020 (Public Law 109-365) and all regulations pertaining thereto, as well as all terms of 45 CFR Part 74 (Administration of Grants) that has not been expressly and specifically modified by this Agreement.

IN WITNESS WHEREOF, the parties have caused this contract to be executed by their duly authorized officers.

Mystic Valley Elder Services

Melrose Council on Aging



By: _____
Title: Lisa Gurgone, MS, Chief Executive Officer

By: _____
Title: _____

Date: 9/19/22

Date: _____

PROGRAM AND SERVICE AGREEMENT ATTACHMENTS

ATTACHMENT A

Corporation's Planning and Service Area

City of Chelsea	Town of North Reading
City of Everett	Town of Reading
City of Malden	Town of Stoneham
City of Medford	Town of Wakefield
City of Melrose	Town of Winthrop
City of Revere	

ATTACHMENT B

Definition of Greatest Social and Economic Need

The definition of ***Greatest Social and Economic Need*** as set forth by the Older Americans Act, Section 102, part 23 and 24 as amended in 2006 and re-authorized in 2020.

Greatest Social Need

The need caused by non-economic factors which include physical and mental disabilities, language barriers, cultural, social or geographical isolation, including isolation caused by racial or ethnic status that restricts the ability of an individual to live perform normal daily tasks or threatens the capacity of the individual to live independently.

While the definition of ***greatest social need*** in the Older Americans Act includes isolation caused by racial or ethnic status, the definition is not intended to exclude the targeting of other populations that experience cultural social or geographic isolation due to other factors. In some communities, such isolation may be caused by minority religious affiliation. In others, isolation due to sexual orientation or gender identity may restrict a person's ability to perform normal daily tasks or live independently

Greatest Economic Need

The need resulting from an income level at or below the poverty line.

COMMONWEALTH OF MASSACHUSETTS ~ STANDARD CONTRACT FORM



8.6.a

This form is jointly issued and published by the Office of the Comptroller (CTR), the Executive Office for Administration and Finance (ANF), and the Operational Services Division (OSD) as the default contract for all Commonwealth Departments when another form is not prescribed by regulation or policy. The Commonwealth deems void any changes made on or by attachment (in the form of addendum, engagement letters, contract forms or invoice terms) to the terms in this published form or to the [Standard Contract Form Instructions and Contractor Certifications](#), the [Commonwealth Terms and Conditions for Human and Social Services](#) or the [Commonwealth IT Terms and Conditions](#) which are incorporated by reference herein. Additional non-conflicting terms may be added by Attachment. Contractors are required to access published forms at CTR Forms: <https://www.macomptroller.org/forms>. Forms are also posted at OSD Forms: <https://www.mass.gov/lists/osd-forms>.

CONTRACTOR LEGAL NAME: City of Melrose (and d/b/a):		COMMONWEALTH DEPARTMENT NAME: Department of Conservation and Recreation MMARS Department Code: DCR	
Legal Address: (W-9, W-4): 562 Main Street Melrose Ma 02176		Business Mailing Address: 251 Causeway Street Suite 600 Boston MA 02114	
Contract Manager: Joan Bell	Phone: 978-979-4169	Billing Address (if different):	
E-Mail: jbell@cityofmelrose.org	Fax:	Contract Manager: Cheryl Brooks	Phone: 617-626-1256
Contractor Vendor Code: VC 6000192116		E-Mail: cheryl.brooks@mass.gov	Fax: 617-626-1449
Vendor Code Address ID (e.g. "AD001"): AD_001 (Note: The Address ID must be set up for EFT payments.)		MMARS Doc ID(s): 3CTDCR8900MELROSEEAR	
		RFR/Procurement or Other ID Number: Legislative Exemption	
☒ NEW CONTRACT PROCUREMENT OR EXCEPTION TYPE: (Check one option only) ☐ Statewide Contract (OSD or an OSD-designated Department) ☐ Collective Purchase (Attach OSD approval, scope, budget) ☐ Department Procurement (includes all Grants - 815 CMR 2.00) (Solicitation Notice or RFR, and Response or other procurement supporting documentation) ☐ Emergency Contract (Attach justification for emergency, scope, budget) ☐ Contract Employee (Attach Employment Status Form, scope, budget) ☒ Other Procurement Exception (Attach authorizing language, legislation with specific exemption or earmark, and exception justification, scope and budget)		☐ CONTRACT AMENDMENT Enter Current Contract End Date <u>Prior</u> to Amendment: ____, 20 ____. Enter Amendment Amount: \$ _____. (or "no change") AMENDMENT TYPE: (Check one option only. Attach details of amendment changes.) ☐ Amendment to Date, Scope or Budget (Attach updated scope and budget) ☐ Interim Contract (Attach justification for Interim Contract and updated scope/budget) ☐ Contract Employee (Attach any updates to scope or budget) ☐ Other Procurement Exception (Attach authorizing language/justification and updated scope and budget)	
The Standard Contract Form Instructions and Contractor Certifications and the following Commonwealth Terms and Conditions document are incorporated by reference into this Contract and are legally binding: (Check ONE option): ☒ Commonwealth Terms and Conditions ☐ Commonwealth Terms and Conditions For Human and Social Services ☐ Commonwealth IT Terms and Conditions			
COMPENSATION: (Check ONE option): The Department certifies that payments for authorized performance accepted in accordance with the terms of this Contract will be supported in the state accounting system by sufficient appropriations or other non-appropriated funds, subject to intercept for Commonwealth owed debts under 815 CMR 9.00 . ☐ Rate Contract. (No Maximum Obligation) Attach details of all rates, units, calculations, conditions or terms and any changes if rates or terms are being amended.) ☒ Maximum Obligation Contract. Enter total maximum obligation for total duration of this contract (or new total if Contract is being amended). \$ <u>75,000</u> .			
PROMPT PAYMENT DISCOUNTS (PPD): Commonwealth payments are issued through EFT 45 days from invoice receipt. Contractors requesting accelerated payments must identify a PPD as follows: Payment issued within 10 days __% PPD; Payment issued within 15 days __% PPD; Payment issued within 20 days __% PPD; Payment issued within 30 days __% PPD. If PPD percentages are left blank, identify reason: ☒ agree to standard 45 day cycle ☐ statutory/legal or Ready Payments (M.G.L. c. 29, § 23A); ☐ only initial payment (subsequent payments scheduled to support standard EFT 45 day payment cycle. See Prompt Pay Discounts Policy.)			
BRIEF DESCRIPTION OF CONTRACT PERFORMANCE or REASON FOR AMENDMENT: (Enter the Contract title, purpose, fiscal year(s) and a detailed description of the scope of performance or what is being amended for a Contract Amendment. Attach all supporting documentation and justifications.) FY23 earmark: provided further, that not less than \$75,000 shall be expended for the city of Melrose for enhancements to the city's recreational developments and parks			
ANTICIPATED START DATE: (Complete ONE option only) The Department and Contractor certify for this Contract, or Contract Amendment, that Contract obligations: ☒ 1. may be incurred as of the Effective Date (latest signature date below) and no obligations have been incurred prior to the Effective Date. ☐ 2. may be incurred as of ____, 20 ____, a date LATER than the Effective Date below and no obligations have been incurred prior to the Effective Date. ☐ 3. were incurred as of ____, 20 ____, a date PRIOR to the Effective Date below, and the parties agree that payments for any obligations incurred prior to the Effective Date are authorized to be made either as settlement payments or as authorized reimbursement payments, and that the details and circumstances of all obligations under this Contract are attached and incorporated into this Contract. Acceptance of payments forever releases the Commonwealth from further claims related to these obligations.			
CONTRACT END DATE: Contract performance shall terminate as of <u>6/30, 2023</u> , with no new obligations being incurred after this date unless the Contract is properly amended, provided that the terms of this Contract and performance expectations and obligations shall survive its termination for the purpose of resolving any claim or dispute, for completing any negotiated terms and warranties, to allow any close out or transition performance, reporting, invoicing or final payments, or during any lapse between amendments.			
CERTIFICATIONS: Notwithstanding verbal or other representations by the parties, the "Effective Date" of this Contract or Amendment shall be the latest date that this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, or a later Contract or Amendment Start Date specified above, subject to any required approvals. The Contractor certifies that they have accessed and reviewed all documents incorporated by reference as electronically published and the Contractor makes all certifications required under the Standard Contract Form Instructions and Contractor Certifications under the pains and penalties of perjury, and further agrees to provide any required documentation upon request to support compliance, and agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached or incorporated by reference herein according to the following hierarchy of document precedence, the applicable Commonwealth Terms and Conditions, this Standard Contract Form, the Standard Contract Form Instructions and Contractor Certifications, the Request for Response (RFR) or other solicitation, the Contractor's Response (excluding any language stricken by a Department as unacceptable, and additional negotiated terms, provided that additional negotiated terms will take precedence over the relevant terms in the RFR and the Contractor's Response only if made using the process outlined in 801 CMR 21.07 , incorporated herein, provided that any amended RFR or Response terms result in best value, lower costs, or a more cost effective Contract.			
AUTHORIZING SIGNATURE FOR THE CONTRACTOR: X: _____ Date: _____ (Signature and Date Must Be Captured At Time of Signature) Print Name: _____ Print Title: _____		AUTHORIZING SIGNATURE FOR THE COMMONWEALTH: X: _____ Date: _____ (Signature and Date Must Be Captured At Time of Signature) Print Name: _____ Print Title: _____	



CITY OF MELROSE

PARKS DEPARTMENT

100 Slayton Road
Melrose, MA 02176

Joan Bell
Superintendent of Mount Hood
& Public Open Space
jbell@cityofmelrose.org
O: 781.979-4168

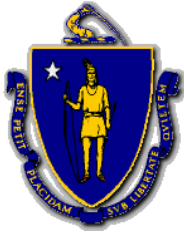
RE: Acceptance of Earmark Grant from DCR (\$75,000)

Per legislation, the Department of Conservation and Recreation is issuing Melrose a \$75,000 earmark grant intended to be used for enhancements to recreational developments and parks. After discussing options with the Park Commission, the decision was made to use these funds to fix and resurface some of our most in need basketball courts, and to repair and possibly add additional pieces to the Melrose Rotary Skateboard Park.

I respectfully request that the City Council accept this grant funding.

Very truly yours,

Ms. Joan Bell, Superintendent of Public Open Space
City of Melrose Parks Department



Commonwealth of Massachusetts
**EXECUTIVE OFFICE OF
 HOUSING & ECONOMIC DEVELOPMENT**
 ONE ASHBURTON PLACE, ROOM 2101
 BOSTON, MA 02108

CHARLES D. BAKER
 GOVERNOR

KARYN E. POLITO
 LIEUTENANT GOVERNOR

MIKE KENNEALY
 SECRETARY

TELEPHONE
 (617) 788-3610

FACSIMILE
 (617) 788-3605

www.mass.gov/eohed

June 28, 2022

Paul Brodeur, Mayor
 City of Melrose
 562 Main Street
 Melrose, MA 02176

Dear Mayor Brodeur:

I would like to thank you for applying to the Community One Stop for Growth, and for recently taking the time to meet with my team to discuss your project. I very much appreciate hearing about cities and towns that are being proactive in leveraging opportunities for economic growth, and infrastructure projects that enable the production of housing near public transit are a top priority of our Administration. I am happy to consider making targeted state investments to projects that may benefit from an early grant decision to accelerate their timelines.

Therefore, on behalf of the Baker-Polito Administration, I am pleased to inform you that I have approved a grant in the amount of **\$615,000** to the **City of Melrose** (Grantee) in support of the **Ell Pond Culvert Relocation Project**, as outlined in your application to the One Stop. Given that this is a partial award, the city will be expected to cover any additional funds needed to complete the project. A member of the MassWorks team will reach out to your office to discuss next steps for contracting.

Please be advised that this letter does not constitute an agreement or contract with EOHED or the Commonwealth of Massachusetts, nor does it confer any rights onto the Grantee. The Grantee is not authorized to proceed with any purchases or work, for which it expects reimbursement from this grant, until a contract has been fully executed with EOHED. This grant commitment is contingent upon successful execution of a contract no later than September 30, 2022 and a project scope/timeline confirming that the project can be completed within three years.

Sincerely,

Mike Kennealy
 Secretary

cc: Senator Jason M. Lewis
 Representative Kate Lipper-Garabedian
 Denise Gaffey, City Planner, City of Melrose
 Juan R. Vega, Assistant Secretary for Communities and Programs, EOHED

Attachment: MassWorks Award Letter - City of Melrose June 2022 (ORDER-2023-22 : MassWorks Grant for Culvert Relocation)

COMMONWEALTH OF MASSACHUSETTS ~ STANDARD CONTRACT FORM



8.7.b

This form is jointly issued and published by the Office of the Comptroller (CTR), the Executive Office for Administration and Finance (ANF), and the Operational Services Division (OSD) as the default contract for all Commonwealth Departments when another form is not prescribed by regulation or policy. The Commonwealth deems void any changes made on or by attachment (in the form of addendum, engagement letters, contract forms or invoice terms) to the terms in this published form or to the [Standard Contract Form Instructions and Contractor Certifications](#), the [Commonwealth Terms and Conditions for Human and Social Services](#) or the [Commonwealth IT Terms and Conditions](#) which are incorporated by reference herein. Additional non-conflicting terms may be added by Attachment. Contractors are required to access published forms at CTR Forms: <https://www.macomptroller.org/forms>. Forms are also posted at OSD Forms: <https://www.mass.gov/lists/osd-forms>.

CONTRACTOR LEGAL NAME: City of Melrose (and d/b/a):		COMMONWEALTH DEPARTMENT NAME: Executive Office of Housing and Econ. Dev. MMARS Department Code: EED	
Legal Address: (W-9, W-4): 562 Main Street, Melrose, MA 02176		Business Mailing Address: 1 Ashburton Place, Boston, MA 02108	
Contract Manager: Denise Gaffey	Phone: 781-979-4190	Billing Address (if different):	
E-Mail: DGaffey@cityofmelrose.org	Fax:	Contract Manager: Jong Wai Tommee	Phone: 617-686-1328
Contractor Vendor Code: VC6000192115		E-Mail: jong.wai.tommee@mass.gov	Fax:
Vendor Code Address ID (e.g. "AD001"): AD_0001 (Note: The Address ID must be set up for EFT payments.)		MMARS Doc ID(s): 22MWIPMELROSELLPOND	
		RFR/Procurement or Other ID Number: MWIP FY2023	
<u>X</u> NEW CONTRACT PROCUREMENT OR EXCEPTION TYPE: (Check one option only) ☐ Statewide Contract (OSD or an OSD-designated Department) ☐ Collective Purchase (Attach OSD approval, scope, budget) ☒ Department Procurement (includes all Grants - 815 CMR 2.00) (Solicitation Notice or RFR, and Response or other procurement supporting documentation) ☐ Emergency Contract (Attach justification for emergency, scope, budget) ☐ Contract Employee (Attach Employment Status Form, scope, budget) ☐ Other Procurement Exception (Attach authorizing language, legislation with specific exemption or earmark, and exception justification, scope and budget)		<u> </u> CONTRACT AMENDMENT Enter Current Contract End Date <u>Prior</u> to Amendment: <u> </u> , 20 <u> </u> . Enter Amendment Amount: \$ <u> </u> . (or "no change") AMENDMENT TYPE: (Check one option only. Attach details of amendment changes.) ☐ Amendment to Date, Scope or Budget (Attach updated scope and budget) ☐ Interim Contract (Attach justification for Interim Contract and updated scope/budget) ☐ Contract Employee (Attach any updates to scope or budget) ☐ Other Procurement Exception (Attach authorizing language/justification and updated scope and budget)	
The Standard Contract Form Instructions and Contractor Certifications and the following Commonwealth Terms and Conditions document are incorporated by reference into this Contract and are legally binding: (Check ONE option): <u>X</u> Commonwealth Terms and Conditions <u> </u> Commonwealth Terms and Conditions For Human and Social Services <u> </u> Commonwealth IT Terms and Conditions			
COMPENSATION: (Check ONE option): The Department certifies that payments for authorized performance accepted in accordance with the terms of this Contract will be supported in the state accounting system by sufficient appropriations or other non-appropriated funds, subject to intercept for Commonwealth owed debts under 815 CMR 9.00 . ☐ Rate Contract. (No Maximum Obligation) Attach details of all rates, units, calculations, conditions or terms and any changes if rates or terms are being amended.) ☒ Maximum Obligation Contract. Enter total maximum obligation for total duration of this contract (or new total if Contract is being amended). \$ <u>615,000</u>			
PROMPT PAYMENT DISCOUNTS (PPD): Commonwealth payments are issued through EFT 45 days from invoice receipt. Contractors requesting accelerated payments must identify a PPD as follows: Payment issued within 10 days <u> </u> % PPD; Payment issued within 15 days <u> </u> % PPD; Payment issued within 20 days <u> </u> % PPD; Payment issued within 30 days <u> </u> % PPD. If PPD percentages are left blank, identify reason: <u>X</u> agree to standard 45 day cycle <u> </u> statutory/legal or Ready Payments (M.G.L. c. 29, § 23A); <u> </u> only initial payment (subsequent payments scheduled to support standard EFT 45 day payment cycle. See Prompt Pay Discounts Policy.)			
BRIEF DESCRIPTION OF CONTRACT PERFORMANCE or REASON FOR AMENDMENT: (Enter the Contract title, purpose, fiscal year(s) and a detailed description of the scope of performance or what is being amended for a Contract Amendment. Attach all supporting documentation and justifications.) Capital grant funding through the MassWorks Infrastructure Program (pursuant to Plan Item D001 in the Mass. Capital Investment Plan 2022-2026) to support a public infrastructure project, in accordance with the scope and additional terms and conditions outlined in Attachment A, and as described in the attached RFR response.			
ANTICIPATED START DATE: (Complete ONE option only) The Department and Contractor certify for this Contract, or Contract Amendment, that Contract obligations: ☒ 1. may be incurred as of the Effective Date (latest signature date below) and no obligations have been incurred prior to the Effective Date. ☐ 2. may be incurred as of <u> </u> , 20 <u> </u> , a date LATER than the Effective Date below and no obligations have been incurred prior to the Effective Date. ☐ 3. were incurred as of <u> </u> , 20 <u> </u> , a date PRIOR to the Effective Date below, and the parties agree that payments for any obligations incurred prior to the Effective Date are authorized to be made either as settlement payments or as authorized reimbursement payments, and that the details and circumstances of all obligations under this Contract are attached and incorporated into this Contract. Acceptance of payments forever releases the Commonwealth from further claims related to these obligations.			
CONTRACT END DATE: Contract performance shall terminate as of <u>June 30</u> , 2024, with no new obligations being incurred after this date unless the Contract is properly amended, provided that the terms of this Contract and performance expectations and obligations shall survive its termination for the purpose of resolving any claim or dispute, for completing any negotiated terms and warranties, to allow any close out or transition performance, reporting, invoicing or final payments, or during any lapse between amendments.			
CERTIFICATIONS: Notwithstanding verbal or other representations by the parties, the "Effective Date" of this Contract or Amendment shall be the latest date that this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, or a later Contract or Amendment Start Date specified above, subject to any required approvals. The Contractor certifies that they have accessed and reviewed all documents incorporated by reference as electronically published and the Contractor makes all certifications required under the Standard Contract Form Instructions and Contractor Certifications under the pains and penalties of perjury, and further agrees to provide any required documentation upon request to support compliance, and agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached or incorporated by reference herein according to the following hierarchy of document precedence, the applicable Commonwealth Terms and Conditions, this Standard Contract Form, the Standard Contract Form Instructions and Contractor Certifications, the Request for Response (RFR) or other solicitation, the Contractor's Response (excluding any language stricken by a Department as unacceptable, and additional negotiated terms, provided that additional negotiated terms will take precedence over the relevant terms in the RFR and the Contractor's Response only if made using the process outlined in 801 CMR 21.07 , incorporated herein, provided that any amended RFR or Response terms result in best value, lower costs, or a more cost effective Contract.			
AUTHORIZING SIGNATURE FOR THE CONTRACTOR: X: _____ Date: _____ (Signature and Date Must Be Captured At Time of Signature) Print Name: <u>Paul Brodeur</u> Print Title: <u>Mayor</u>		AUTHORIZING SIGNATURE FOR THE COMMONWEALTH: X: _____ Date: _____ (Signature and Date Must Be Captured At Time of Signature) Print Name: <u>Mike Kennealy or Designee</u> Print Title: <u>Secretary of Housing and Economic Development</u>	



CITY OF MELROSE

OFFICE OF PLANNING AND COMMUNITY DEVELOPMENT

DENISE M. GAFFEY
Director & City Planner

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4190
Fax - (781) 979-4290

MEMORANDUM

TO: Melrose City Council

FROM: Denise Gaffey, Director of Planning and Community Development
Vonnie Reis, P.E., City Engineer

RE: MassWorks Infrastructure Program Grant Award

DATE: September 19, 2022

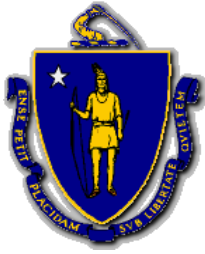
We respectfully request your approval of a MassWorks Infrastructure Grant in the amount of \$615,000 through the Executive Office of Housing and Economic Development Community One Stop for Growth Program. The grant funding will support the relocation of a portion of the Ell Pond Culvert, which currently runs below the property at 681-697 Main Street. The deteriorated condition of the culvert is a major impediment to realizing the full potential of this important gateway to downtown Melrose.

The city will supplement the grant funding with in-kind services to manage the culvert relocation project. We do not anticipate any city funding being allocated toward the project and we are not requesting or required to provide city matching funds. The project costs that exceed the grant funding, estimated at \$36,000, will be paid by the developer who is currently undergoing a permitting process for a new mixed-use building at the site.

In conjunction with the permitting, we anticipate that the construction documents for the culvert relocation will be completed this fall and the project will be bid during the winter months in anticipation of work to occur when the weather is favorable in the late spring or early summer of 2023.

Thank you for your consideration. We look forward to discussing this further with you at an upcoming Committee meeting.

Attachment: Council memo Massworks culvert grant 9_19_2022 (ORDER-2023-22 : MassWorks Grant for Culvert Relocation)



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF
ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
100 CAMBRIDGE ST., SUITE 1020
BOSTON, MA 02114
Telephone: 617-626-7300
Facsimile: 617-727-0030

Charles D. Baker
Governor

Karyn E. Polito
Lt. Governor

Bethany A. Card
Secretary

Patrick C. Woodcock
Commissioner

July 25, 2022

Paul Brodeur, Mayor
City of Melrose
562 Main Street
Melrose, MA 02176

Dear Mayor Brodeur:

I am pleased to inform you that the Department of Energy Resources (DOER) Green Communities Division has approved an award of **\$500,000** for the following projects proposed in the City of Melrose's Green Communities Competitive Grant application.

List of projects funded:

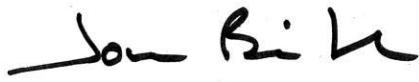
- \$500,000, Public Library — Decarbonization project

The Division reviewed Melrose's grant application and has determined these are viable projects that meet the eligibility requirements of our Competitive Grant program. **Please note that, due to the competitive nature of this grant program, the use of these funds is restricted to the specifically-approved projects listed above.**

Jane Pfister, Green Communities Grant Coordinator, will follow up with the contact listed in your competitive grant application to discuss next steps, including coordination of the grant contract process. The Green Communities Division looks forward to working with the City of Melrose on your grant projects. We congratulate you on your grant award and applaud your efforts to create a cleaner energy future for your community and the Commonwealth as a whole.

Please do not hesitate to contact me at 617-823-4029 or by email at Joanne.Bissetta@mass.gov with any questions you may have regarding your grant award.

Sincerely,



Joanne Bissetta, Director
Green Communities Division

Cc: Martha Grover, Sustainability Manager
Neal Duffy, Northeast Green Communities Regional Coordinator

Attachment: melrose_cpt11-1 award letter (ORDER-2023-23 : Green Communities Grant for Library Decarbonization)

BACKGROUND

1. The DOER has selected the Grantee to receive Green Communities grant funds for projects described in the Grantee’s response to the PON.
2. The DOER approves the expenditure of funds as described in Attachment D (Budget) for the work planned and described in Attachment C (Scope of Grant Award).
3. The Grantee agrees to complete the projects described in the Scope of Grant Award (collectively referred to as “the Project”).

This agreement (Agreement) incorporates and makes part hereof certain attachments and forms which have been provided and accepted by the parties as part to this Agreement. Copies of such agreed upon attachments and forms are attached hereto set forth in their entirety and made part of this Agreement by reference:

THE COMMONWEALTH STANDARD CONTRACT FORM

BACKGROUND

ATTACHMENT A: GREEN COMMUNITIES COMPETITIVE GRANT APPLICATION
MATERIALS

ATTACHMENT B: GRANTEE RESPONSE

ATTACHMENT C: SCOPE OF GRANT AWARD

ATTACHMENT D: BUDGET

THE COMMONWEALTH OF MASSACHUSETTS STANDARD CONTRACT ATTACHMENTS

1. COMMONWEALTH TERMS AND CONDITIONS
2. GRANTEE AUTHORIZED SIGNATORY LISTING
3. W-9 FORM
4. EFT

ATTACHMENT A – Green Communities Competitive Grant Application Materials

The Program Opportunity Notice (PON) was provided to the municipality via Commbuys, the Commonwealth's procurement website.

DOER PON-ENE-2022-007 2022 Green Communities Competitive Grant Program

Bid # [BD-22-1041-ENE01-ENE01-71370](#)

ATTACHMENT B – Grantee Response

(All documents listed below are available to DOER fiscal staff at:

<https://massdoer.imeetcentral.com/greencommunities/dbapp=7ary4jojv3xnh83ficwf09s252274943&ac=h&num=0&view=1152484>

1. Grantee submission narrative – Melrose gc grant narrative.pdf; Melrose public library schematic design narrative revised 032322.pdf
2. Grantee grant table submitted – gc grant table 2022.xlsx
3. Grantee certification of application submitted – Melrose certificate of application.pdf

Response included additional files:

- gc grant match letter.pdf;
- hvac spec design development phase.pdf
- public library dd estimate 03 29 22 rev1.pdf
- sd phase energy analysis draft preliminary report.pdf
- proposed addition image.pdf
- sd phase energy analysis emailed date.pdf

ATTACHMENT C – SCOPE OF GRANT AWARD**COMMONWEALTH OF MASSACHUSETTS
SCOPE OF GRANT AWARD AGREEMENT**

**By and Between
Department of Energy Resources
and
City of Melrose**

SCOPE OF GRANT AWARD**1. Overview**

The purpose of this contract is to award a grant to the City of Melrose (Grantee) for a maximum obligation amount not to exceed Five Hundred Thousand Dollars and No Cents (\$500,000.00) to fund energy conservation measures in municipal facilities including Public Library, as more particularly described in Attachment B (Project). In connection with the above referenced grant, the Grantee requested five hundred thousand dollars and no cents (\$500,000.00) in public funding out of twenty one million twenty nine thousand one hundred thirty three dollars and no cents (\$21,029,133.00) in total project costs for energy conservation measures listed in attachment B. The energy conservation measures funded are decarbonization project.

The Grantee is responsible for informing the Department of Energy Resources (DOER) of all eligible expenses and Project deliverables as compared to the original proposal as set forth in Attachment B.

Note that no changes in Project scope can occur or proceed without the prior written authorization from the DOER.

2. Contingencies

The Grantee shall provide to the DOER's satisfaction, the required information as stated below as applicable to the Project(s), as soon as the information becomes available.

1. Documentation that the municipality has met, teleconferenced, or had an email exchange with its gas and/or electric public utility representatives regarding the availability of utility incentives for any eligible energy conservation or efficiency measures.
2. Documentation of having **applied for all gas and electric rebates** provided for eligible energy conservation or efficiency measures. The Grantee is required to have documentation from utilities regarding rebates before selection and installation of products.

3. Procurement

All procurement contracts and subcontracts entered into by public agencies and governmental bodies shall be governed by and in accordance with Massachusetts General Laws. Where applicable, such procurements, contracts and subcontracts shall be governed by the all provisions of either M.G.L. c.25A, § 11C or §11I, M.G.L. c.30B, or M.G.L c.149. All designer selection for building projects shall be governed by M.G.L. c.7, §§38A1/2 - O.

4. Program Schedule

The following are milestones to ensure timely completion of the Project(s). If the Grantee is unable to meet these milestones Grantee shall promptly contact the DOER.

- (1) Complete construction of the Project (s) – August 1, 2025
- (2) End of grant period – September 30, 2025

5. Disbursement of Funds

Initial Disbursement: Twenty five percent (25%) of the award in the amount of one hundred twenty five thousand dollars and no cents (\$125,000.00) will be disbursed by the DOER subsequent to the execution of this grant agreement and upon the DOER's agreement that contingency number one as stated under Section Two Contingencies of this Scope of Grant Award has been fully satisfied.

Second Disbursement: Fifty percent (50%) of the award in the amount of two hundred fifty thousand dollars and no cents (\$250,000.00), shall be disbursed upon verification by the DOER that twenty-five percent (25%) of the grant funds have been expended and that contingency number two as stated in Section Two Contingencies of this Scope of Contract Award has been fully satisfied and that all reporting requirements have been met. Reporting requirements will include submittal by the Grantee to the DOER of detailed dated invoices of Grantee's costs incurred to date.

Final Disbursement: Twenty five percent (25%) of the award in the amount of one hundred twenty five thousand dollars and no cents (\$125,000.00), shall be disbursed after a site visit by the DOER, a review of the detailed invoices of the Project(s) and any other requested documentation and verification by the DOER that the Project(s) are complete, that one hundred percent (100%) of grant funds have been expended, evidence of approved utility incentives have been provided, and that all reporting requirements and requests by the DOER have been met, including submittal and approval of the Final Report.

Funds shall not be used for the reimbursement of any work related to this Project(s) performed before the contract Effective Date.

6. Grantee Warrants to Keep Facility Open

For Project(s) involving services or construction at facility(s) owned by or under the control of the Grantee, the Grantee hereby warrants and certifies that the facility (s) for which grant funds are designated will remain open and in service for at least five (5) years following completion of proposed project(s).

7. Separate Accounts

The Grantee shall at all times conduct its business and affairs in such a manner that any and all ledger accounts and records pertaining to the receipt and expenditure of the DOER funds under this Agreement shall be kept separate and distinct from all ledger accounts and records of the Grantee relative to any other enterprise which the Grantee has engaged in, developed, or administered.

8. Unused Funds

Any funds undisbursed or uncommitted by the Grantee after September 30, 2025, shall be promptly returned to the DOER within sixty (60) days.

9. Administrative Costs

Grantee's administrative costs shall not exceed ten percent (10%) of the maximum obligation contract amount of Five Hundred Thousand Dollars and No Cents (\$500,000.00).

10. Publicity

The municipality will coordinate with the DOER on all publicity regarding this Project(s).

11. Reporting and Other Required Documentation

- A. Should Grantee engage a third party to manage administrative functions of the program and rely on the internal controls of that third party, the third party shall provide the results of an internal controls audit annually according to the provisions Statements of Auditing Standards No. 70 to the DOER and Grantee.
- B. Grantee shall have a program to combat fraud, waste and abuse of funds and shall incorporate into its program guidance provided by the Office of the State Comptroller.
- C. **Quarterly reports:** The Grantee shall be required to file progress and financial reports once every quarter, unless specifically exempted in writing by the DOER. Quarterly reports are due by 5PM four (4) days after the completion of each of the following quarters:
 - a. July 1 – Sept 30
 - b. Oct 1 – Dec 30
 - c. Jan 1 – Mar 30
 - d. Apr 1 – June 30

Quarterly reports shall include:

- a. The progress and status of activities performed in relation to the Scope of Grant Award including an explanation of any delays or obstacles encountered in meeting the performance schedule as well as a description of efforts taken to resolve delays; and
 - b. The actual costs incurred to date by the Project, breaking down all costs in such manner as the DOER may prescribe.
- D. **Final report:** The final report shall be submitted within two (2) months after completion of the final project receiving funding, and shall include a summary of the projects completed, including project locations and capacity. All quarterly and final reports above shall be submitted to:

Jane Pfister
 Green Communities Grant Coordinator
jane.pfister@mass.gov

NOTE: If the services funded by this Agreement are solicited pursuant to M.G.L. Ch. 25A § 11C or § 11I, then the Grantee shall also comply with the monitoring and reporting requirements set forth in the DOER's regulations at 225 C.M.R. 10.00, 19.00 or other applicable regulations. For solar PV systems, registration with and reporting to the Massachusetts Clean Energy Center Production Tracking System (PTS) is required.

- E. **Ownership of Reports and Other Required Documentation:** The deliverables shall be owned by the Commonwealth of Massachusetts and treated as public documents. Following the completion of the contract both the Commonwealth of Massachusetts and the Grantee retain the right to make further use of the deliverables.

VI. ATTACHMENT D - BUDGETCheck one: ☒ Initial Budget☐ Budget/Account Amendment. Maximum Obligation before this Amendment:

PRIOR MMARS DOCUMENT ID: _____ (for reference - if applicable)

CURRENT DOC ID: _____.

[See Instructions for Additional Guidance on completion. Insert as many additional lines as necessary.]

A	B	C	D	E	F	G	H	I
Budget Fiscal Year	Account	Object Class	Activity / Function Codes	Initial Amount / or Amount Prior to Amendment	Indicate Add or Reduce +/-	Amendment Amount	Enter "YES" if Amount is a prior FY budget reduction or a current FY "Carry-in" authorization for Federal Funds	New Amount After Amendment
FY23	2000-0113	P01	GNCO-COMP	\$499,997.00				
FY24	2000-0113	P01	GNCO-COMP	\$ 1.00				
FY25	2000-0113	P01	GNCO-COMP	\$ 1.00				
FY26	2000-0113	P01	GNCO-COMP	\$ 1.00				

FISCAL YEAR SUBTOTALS AND TOTAL MAXIMUM OBLIGATION FOR DURATION OF CONTRACT	
FISCAL YEAR: <u>2023</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$499,997.00
FISCAL YEAR: <u>2024</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$ 1.00
FISCAL YEAR: <u>2025</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$ 1.00
FISCAL YEAR: <u>2026</u> SUBTOTAL (or New Subtotal if Fiscal Year Subtotal being amended)	\$ 1.00
TOTAL MAXIMUM OBLIGATION FOR DURATION OF CONTRACT	\$500,000.00

Attachment: melrose CPT11-1 grant contract (ORDER-2023-23 : Green Communities Grant for Library Decarbonization)

**VII. COMMONWEALTH OF MASSACHUSETTS
STANDARD CONTRACT ATTACHMENTS (ENCLOSED)**

1. COMMONWEALTH TERMS AND CONDITIONS
2. GRANTEE AUTHORIZED SIGNATORY LISTING
3. W-9 FORM
4. EFT



CITY OF MELROSE

OFFICE OF PLANNING AND COMMUNITY DEVELOPMENT

DENISE M. GAFFEY
Director & City Planner

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4190
Fax - (781) 979-4290

MEMORANDUM

TO: Melrose City Council

FROM: Denise Gaffey, Director of Planning and Community Development
Martha Grover, Sustainability Manager

RE: Green Communities Decarbonization Grant for Library Renovation Project

DATE: September 19, 2022

In April 2022 we applied for our seventh Green Communities Competitive Grant from the Massachusetts Department of Energy Resources (DOER) and Mayor Brodeur was recently notified of the award. The \$500,000 grant award is from a new Green Communities grant category for building decarbonization implementation projects and will be applied to the Melrose Public Library Renovation Project. We are requesting City Council approval to accept the grant and enter into the contract with DOER. There are no city matching funds required for this grant.

The grant funds will be used to offset the costs of switching the original building designs proposed in 2016 from natural gas heating to all-electric space and water heating along with ventilation and building envelope measures that were not included in early project estimates. Much has changed since 2016 but first and foremost, in recognition of the devastating impacts of climate change and the need to reduce greenhouse gas emissions, the City of Melrose made a commitment to be net zero and carbon free quickly and significantly by 2050. In addition, the recently revised MassSave New Construction program has established a path for Zero Net Energy / Deep Energy Savings for Library Building Types with a target Energy Use Intensity (EUI) goal of 30.0 to be eligible for the maximum incentives. As a result of these new requirements, the initial building plans that called for a natural gas heating system had to be overhauled and additional ventilation and building envelope improvements considered. The project team is also seeking LEED (Leadership in Energy and Environmental Design) Certification for the building.

Thank you for your consideration. We look forward to discussing this further with you at an upcoming committee meeting.

September 19, 2022

Melrose City Council
562 Main Street
Melrose, MA 02176

RE: Request for Funding for Pre-Design Services for Public Safety Buildings

Dear Honorable City Councilors,

We, the Melrose Public Safety Building Committee, request \$68,500 for design services, including reimbursable expenses, for an architectural firm to complete pre-design services for proposed upgrades to the city's fire and police stations. These services, which include developing conceptual design plans, schedules, and cost estimates for several possible options, will allow our committee to refine two options and present these options to the Mayor, the City Council, and the public for review in early 2023.

In late 2021, the Mayor established this Public Safety Building Committee to come up with a recommendation for how to upgrade our public safety buildings to best serve the needs of the Police and Fire Departments. We initiated our effort by reviewing the previous feasibility study for public safety buildings completed in 2017 and are coming up with our recommendations which balance both the needs of our city and an effective use of our tax-payer dollars. We will present our recommendations to the Mayor, City Council, and the general public in stages as we come up with our findings. Our task is to make an informed recommendation on the best path for public safety buildings for our city, and to explain this to our fellow citizens so that we, as a community, can reach consensus on the funding for this effort.

Our committee has confirmed that our police and fire stations have been in dire need of upgrades for quite some time now. Improving our public safety buildings will be a major, multi-year project for our city to undertake. The actual cost of this effort will depend on which plan Melrose selects, the design fees, the construction and land costs, and the phasing of the project. Outdated police and fire stations are not a local phenomenon. We have studied how surrounding municipalities have upgraded their public safety building infrastructure, and are learning from their planning, funding, and execution.

Dore and Whittier, the architecture firm who also performed the previous 2017 feasibility study, have completed a [number of public safety building projects](#) for municipalities in New England. They have presented us with a scope of work and fee proposal to assist our Committee, which we determine to be reasonable. Their work will take approximately four months, pending approval of this appropriation request, contracting, and signing a notice to proceed.

Request for Funding for Public Safety Facility Design Services
Page Two

We are requesting this funding for Dore and Whittier to refine the design, including schedules and cost estimates, for the following options identified by our committee through our work over the past year:

- Making structural, utilities, and accessibility improvements to the Central Fire Station on Main St.
- Renovating and adding a 2-story addition to Engine 2 on Tremont St.
- Demolishing and building a new Engine 2 on Tremont St.
- Renovating and adding a second floor to Engine 3 on East Foster St.
- Demolishing and building a new Engine 3 on East Foster St.
- Renovating Engine 3 on East Foster St., without any additions.
- Building a new police station and dispatch center on a larger site.
- Converting a larger, existing building into a new police station on a new site.
- Different combinations of the above.

We appreciate your consideration of this request and look forward to discussing it with you.

Respectfully,

Eugenia Gibbons

Jeff McNaught

Public Safety Buildings Committee Co-Leaders

cc: Mayor Paul Brodeur

Attachments: Dore & Whittier Proposal Letter dated August 31, 2022
Proposed Conceptual Options

August 31, 2022

Elena Proakis Ellis, PE, BCEE
 Director of Public Works
 City of Melrose
 72 Tremont Street
 Melrose, MA 02176



RE: Additional Public Safety Study Fee Proposal – *Revision 1*

Dear Elena and Public Safety Committee members,

Dore + Whittier has been requested by the Melrose Public Safety Committee to furnish a fee proposal to develop conceptual plans and “high level” programming/space needs analysis, schedule and cost estimates related to their public safety facilities. *This revised proposal adds a design option which removes and replaces Engine 3 with a new fire station on the existing site.*

In accordance with the Draft RFP for Pre-Design Services dated July 31, 2022, and sent to us via e-mail on August 2, we offer the following understanding of the scope of work and a fee proposal to provide the requested deliverables.

Programming

Dore + Whittier will meet with the Public Safety Committee to review the 2017 programming and space needs analyses and discuss the current considerations and needs for each department. This includes any current or anticipated changes to staffing or operational procedures that may have come up since the 2017 study. We will then generate an updated program and space needs summary for the Police and Fire Departments based on the three facility Options defined in the Draft RFP.

We will then develop new Space Diagrams and other details needed to convey the type / location / configuration of spaces so that the scope of renovation and new construction work is evident and sufficient for our Estimator’s use in developing conceptual cost estimates. This includes considerations for any changes to code requirements, regulations, industry standards, equipment, etc., that may have occurred since 2017.

Existing Conditions Assessment

We will not be assessing existing conditions and do not plan on making any site visits except for our structural engineer, EDG, who will need to take a closer look at Engine 2 and Engine 3 since the Options for additions at those stations were not considered in our 2017 Study. Their evaluation of existing conditions will enable the development of proposed design solutions and structural details for cost estimating purposes.

Schedule

Dore + Whittier will provide a proposed time frame estimate to complete the design and construction associated with each of the six possible build options. These schedules are to be developed based on the City’s use of a Construction Manager at Risk (Ch. 149A) delivery method. We note that D+W has extensive experience with this approach to construction in Massachusetts.

Cost Estimates

We will again retain PM+C for Construction Cost Estimating. Together we will generate a Total Project Cost Estimate for each of the six possible build options based on information that we develop and issue to them.

PM+C provided cost estimates for two projects in 2017 – a new HQ/Engine 2 station proposed for the Station 2 site and a renovation/addition project to convert the existing Fire Headquarters for Police Department use. (Initial guidelines provided to us then were that we could only consider the use of existing sites for police and fire facility solutions or adaptations). PM+C also provided the line-item costs for each fire station capital improvement plan, so they are familiar with existing conditions at each site and facility.

Execution of the Work (Tasks and Schedule)

Month 1:

Meet with the Public Safety Committee (meeting #1)

- Review 2017 program and space needs
- Discuss current departmental needs and expectations.

Develop new program and space needs analysis based on these discussions in accordance with three optional approaches to facility upgrades and construction.

Review new program with PSC (meeting #2)

Modify program as directed

Structural Engineer, EDG, to visit Engine 2 and Engine 3

Months 2-3:

Develop Conceptual Design for each of six potential building projects.

Develop time frames for design and construction of each

Review Conceptual Designs with Public Safety Committee (meeting #3)

Establish a prioritization/sequence of work

Finalize the plans and Issue to PM+C

Month 4:

Generate and review Cost Estimates for six building projects

Review with Public Safety Committee

Submit deliverables/final report

Notes:

1. The six build options we are to explore are described in the attached scope of work from the City and summarized below.
 - 1.1. A new 3-story, 20,000 SF police station at a to-be-determined site. Basis of design narrative needed, suitable for conceptual cost estimating purposes.
 - 1.2. Renovations/upgrades only to Central Fire Headquarters.
 - 1.3. Engine 2 – a new, 2-story, 20,000 SF station at existing site
 - 1.4. Engine 2 – a renovation/2-story addition
 - 1.5. Engine 3 – renovation/2nd story addition

1.6. Engine 3 – renovation only

1.7. Engine 3 – remove and replace with a new fire station on the existing site

2. Our assumption is that the Committee will select one of the three options to move forward with, although we anticipate that the final project definition will be somewhat different than what is currently stated. The suggested square footages for each facility are markedly lower than those derived during our 2017 study, so the programming requirements will reflect significant differences from those established in the 2017 plan.

D+W Staff that completed the 2017 study will again be available to work with you on this assignment. Specifically:

Donald Walter, AIA	Principal in Charge
Glen Gollrad, RA	Project Manager
Jason Harris, Assoc. AIA	Programmer/Designer
David Mentzer, AIA	Project Architect

3. Should a preferred option be defined and selected for further development and the City elects to retain D+W for the design phase, we propose to utilize the same team that produced the 2017 study, specifically:

Garcia Galuska DeSousa	MEP/FP Engineering
Nitsch Engineering Inc.	Site/Civil/Permitting
Project Management + Cost	Cost Estimating
Universal Environmental Consultants	Hazardous Materials
Engineers Design Group	Structural Engineering

4. Exclusions:

- There will be no work associated with the existing police station or any other existing building the City might consider for the police department's relocation.
- We will not assist with a site search or acquisition. Conceptual plans generated for a new police station will be based on a hypothetical site.
- We will not be generating any 3D renderings, building elevations drawings, site plans, floor plans, room diagrams, or basis of design narratives.
- We will not be making any presentations to the public or engaging in any meetings other than those described in the Execution of the Work unless requested and approved as an additional service.
- Providing MEP or Civil Engineering service.
- Preparation of site surveys and/or geotechnical reports.
- Preparation of Architectural renderings, models, and presentation drawings/materials.
- Inventory existing equipment / furnishings; if any are to be re-used.

Owner Provisions:

Professional design services which are not provided by the Architect, and which shall be provided under a separate contract to Owner include:

- Site survey (if required).
- Geotechnical Investigation (if required).

- Hazardous Materials Testing (if required).

As a condition of this Proposal, the Owner shall agree to provide the following:

- Access to the Project site for field verification as needed.
- Complete site survey, if one exists.
- Geotechnical engineering services, if required.
- Existing building drawings, if available.
- Environmental testing reports currently on file.

Terms:

In recognition of the relative risks, rewards and benefits of the Project to both the Owner and the Architect, the risks have been allocated such that the Owner agrees, to the fullest extent permitted by law, to limit the Architect's liability to the Owner for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from negligent errors or omissions or causes, including reasonable attorney's fees and costs and expert witness fees and costs, so that the total aggregate liability of the Architect to Owner shall not exceed the amount of the Architect's total fee for services rendered on this project. It is intended that this limitation shall apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

In an effort to provide resolution for any conflicts that may arise during the design or construction of the Project, the Owner and the Architect agree that all disputes between them, arising out of or relating to this Proposal, shall be submitted to non-binding mediation unless the parties agree otherwise.

The Architect cannot or shall not be required to author or execute any documents that would certify, guarantee, or warrant the existence of conditions whose existence the Architect has been contracted to ascertain or over which the Architect has not control.

Neither the Architect, the Architect's Consultants, nor their agents or employees have offered any fiduciary service to the Owner/Owner and no fiduciary responsibility shall be owed to Owner by Architect, the Architect's Consultants, nor their agents or employees, as a consequence of Architect entering into this Agreement with Owner.

The Owner shall, to the fullest extent permitted by law, indemnify and hold harmless the Architect, its officers, directors, employees, agents and sub-consultants from and against all damage, liability and cost, including reasonable attorney's fees and defense cost, arising out of, or in any way connected with, the performance by any of the parties above named for the services under this Agreement, excepting only those damages, liabilities or costs attributable to the sole negligence or willful misconduct of the Architect.

In providing services under this Agreement, the Architect will endeavor to perform in a manner consistent with the degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. The Architect makes no warranty, express or implied, as to its professional services rendered under this Agreement.

Drawings, specifications, and other documents prepared by the Architect are instruments of the Architect's service and are for the Owner's use solely with respect to this Project. The Architect shall retain all common law, statutory and other reserved rights, including the copyright. Upon completion of the Project or termination of this Agreement, the ownership of these instruments of Service shall transfer to the Owner only after the Architect has been paid in full for services rendered and for all applicable reimbursable expenses. When transmitting copy-right-protected information for use on the Project, the transmitting party represents that either the copyright owner of the information or has permission from the copyright owner to transmit the information for its use on the Project.

In the event of termination, suspension or abandonment of the Project by the Owner, the Architect shall be compensated, for services performed. The Owner's failure to make payments in accordance with this Agreement shall be considered substantial nonperformance and sufficient cause for the Architect to suspend or terminate services. Either the Architect or the Owner may terminate this Agreement after giving no less than seven days' written notice if the Project is suspended for more than 90 days, or if the other party substantially fails to perform in accordance with the Terms of this Agreement.

Fees:

Basic Services

The compensation for the additional public safety study will be an agreed upon Lump Sum Fee as listed below:

Costs of Study Services: \$66,500.00

A professional services fee retainer will not be required for this Project.

This Proposal shall remain valid for a period of Sixty (60) days from the date of issue.

Billings are compiled at the end of each month based upon the work completed and are due in full upon receipt of invoice. Invoices which are unpaid and past due more than 60 days may be subject to interest penalty charges at 1.5% per month. In the event that any portion of an account remains unpaid Sixty (60) days after billing, the Owner shall pay all costs of collection, including reasonable attorney's fees and the Architect may elect to suspend services.

The Owner explicitly understands and agrees that the Architect's fees for professional services for this project are payable per the terms stated herein and are not dependent upon funding for the project, approval by agencies, or the construction of the project. The Architect will not issue final report if the Owner's account is not current.

Reimbursable Expenses:

Not included in the above listed services are out-of-pocket reimbursable expenses such as those listed below which will be billed at cost plus 10% (1.10). We will provide a Not-to-Exceed cap of \$2,000 on reimbursable expenses:

- Extraordinary CAD plotting, printing and Xerox copy reproduction costs.
- Project photographs.
- Extraordinary postage and courier delivery services.
- Out of town travel expenses.
- Long distance communications and telephone fees/charges.

- Third party consulting fees not included in Basic Services.
- Liability insurance premiums/costs, in excess of that normally carried by the Architect, specific to the Project as requested by Owner.

If this Proposal is acceptable to you, please execute the attached Project Proposal Approval Form. Upon the Owner's acceptance, please issue a purchase order to memorialize this work as part the on-call services contract.

We look forward to working with you, and a successful completion of this Project.

Sincerely,

DORE + WHITTIER

A handwritten signature in black ink, appearing to be 'DW', written over a faint circular stamp or watermark.

Donald M. Walter, AIA, MCPPO
Principal

PROJECT PROPOSAL APPROVAL FORM

OWNER: City of Melrose
72 Tremont Street
Melrose, MA 02176

PROJECT NAME: Additional Public Safety Study – *Revision 1*
PROPOSAL DATE: 31 August 2022
PROJECT FEE: \$66,500.00
PROPOSED START DATE: Upon Authorization to Proceed

PROPOSED COMPLETION DATE: Completion of scope of work 6 months from date of commencement

Owner authorizes the Architect to proceed with the project in accordance with the attached Proposal of Professional Design Services. Owner approves this Proposal and grants The Architect permission to proceed with this project by signing in the space indicated below. Acceptance is limited to the terms stated within the Proposal unless noted otherwise.

OWNER

DORE & WHITTIER ARCHITECTS, INC



Signature

Signature

Printed Name

Donald M. Walter

Printed Name

Title

Principal

Title

Date

8/31/22

Date

Please sign, keep one copy for your files and return one copy to Dore + Whittier.

Workstream #1: Proposal Development

Chief Lyle, Chief Collina, Elena Proakis, Denise Gaffey, Paul Norton,
Dale Parsons, John McCarron, Emmanuel Andrade

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Current Stations

With a total of 33,852 GSF

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Police Station

56 West Foster Street

Year of Construction: 1900
Lot Area: 16,596 SF
Building Area: 7,354 GSF

DRAFT Confidential for Policy Development Only



Central Fire Station

576 Main Street

Year of Construction: 1910

Lot Area: 11,881 SF

Building Area: 12,368 GSF

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Engine 2

206 Tremont Street

Year of Construction: 1929
Lot Area: 22,041 SF
Building Area: 6,830 GSF

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Engine 3

278 East Foster Street

Year of Construction: 1964
Lot Area: 16,117 SF
Building Area: 7,300 GSF

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Conceptual Option 1

With a total of 67,000 GSF

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New Police Station + Dispatch Center

Address to be determined

New, 3-Story Police Station
on Empty Site (20,000 SF)

NOTE: Police Station on W Foster Street remains in operation during construction (about 18 months).

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Central Fire Station

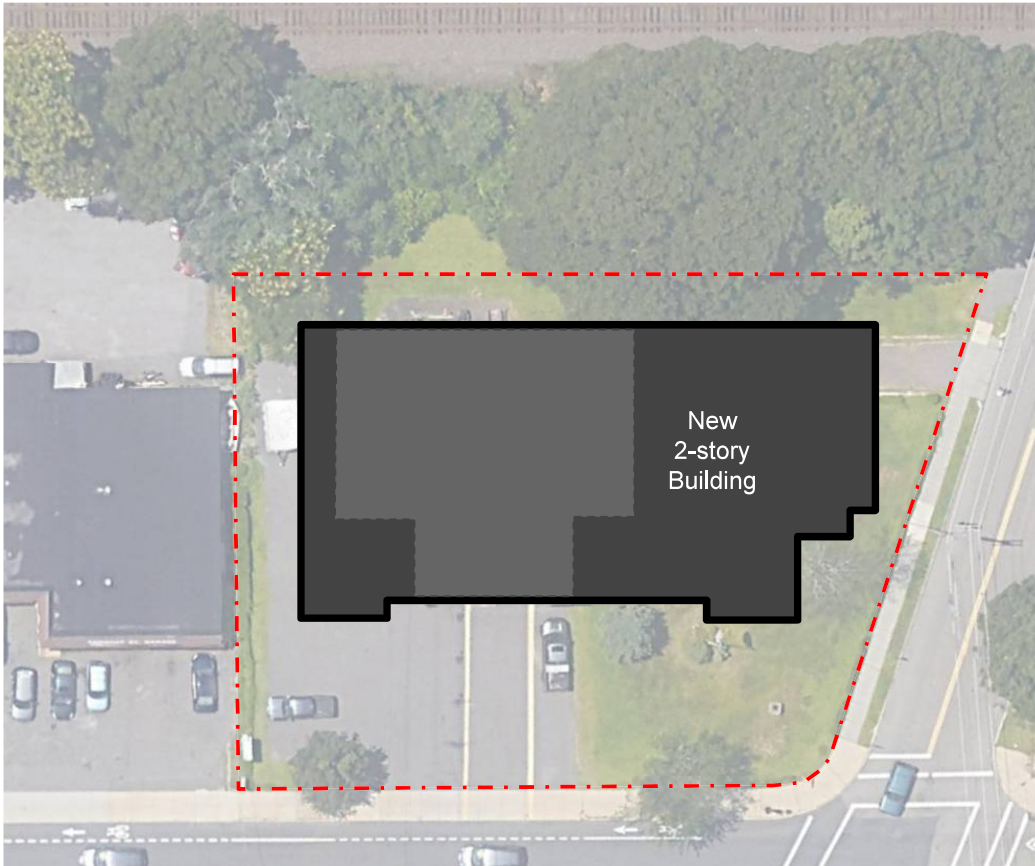
576 Main Street

Renovation (12,368 SF)

- Site improvements and replacement of site utilities.
- Roof and masonry repairs, new windows and exterior doors.
- Extensive structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades including new elevator.
- Reconfigured spaces on top floors.

NOTE: Central Fire Station personnel relocates to Engine 2 and Engine 3 during construction (about 15 months).

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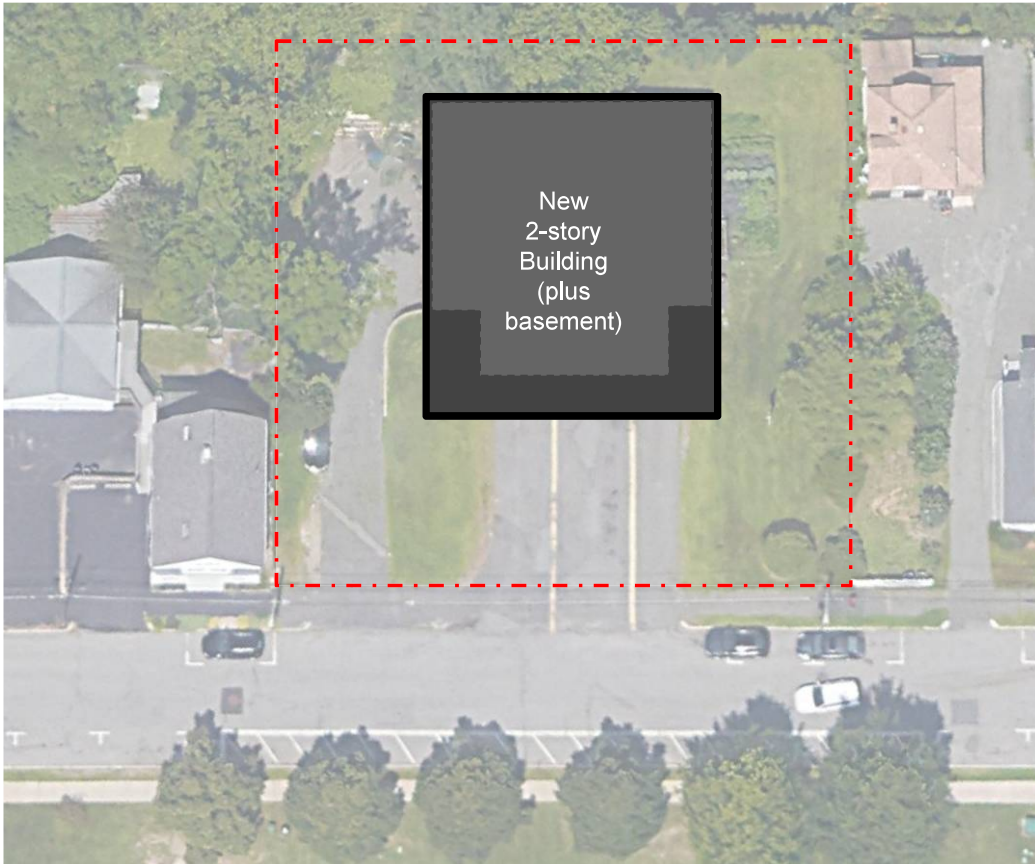
New Engine 2 with Central Fire Apparatus 206 Tremont Street

Demolish Existing Engine 2

New, Two-Story Engine 2 with a third bay for Central Fire Apparatus (20,000 SF)

NOTE: Engine 2 personnel relocates to Central Fire Station and Engine 3 during construction (about 18 months).

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Engine 3

278 East Foster Street

Demolish Existing Engine 3

New, Two-Story (plus basement) Engine 3 with a third bay (14,600 SF)

NOTE: Engine 3 personnel relocates to Central Fire Station and Engine 2 during construction (about 18 months).

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Conceptual Option 2

With a total of 59,000 GSF

DRAFT Confidential for Policy Development Only



New Police Station + Dispatch Center

Address to be determined

New, 3-Story Police Station
on Empty Site (20,000 SF)

NOTE: Police Station on W Foster Street remains in operation during construction (about 18 months).

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Central Fire Station

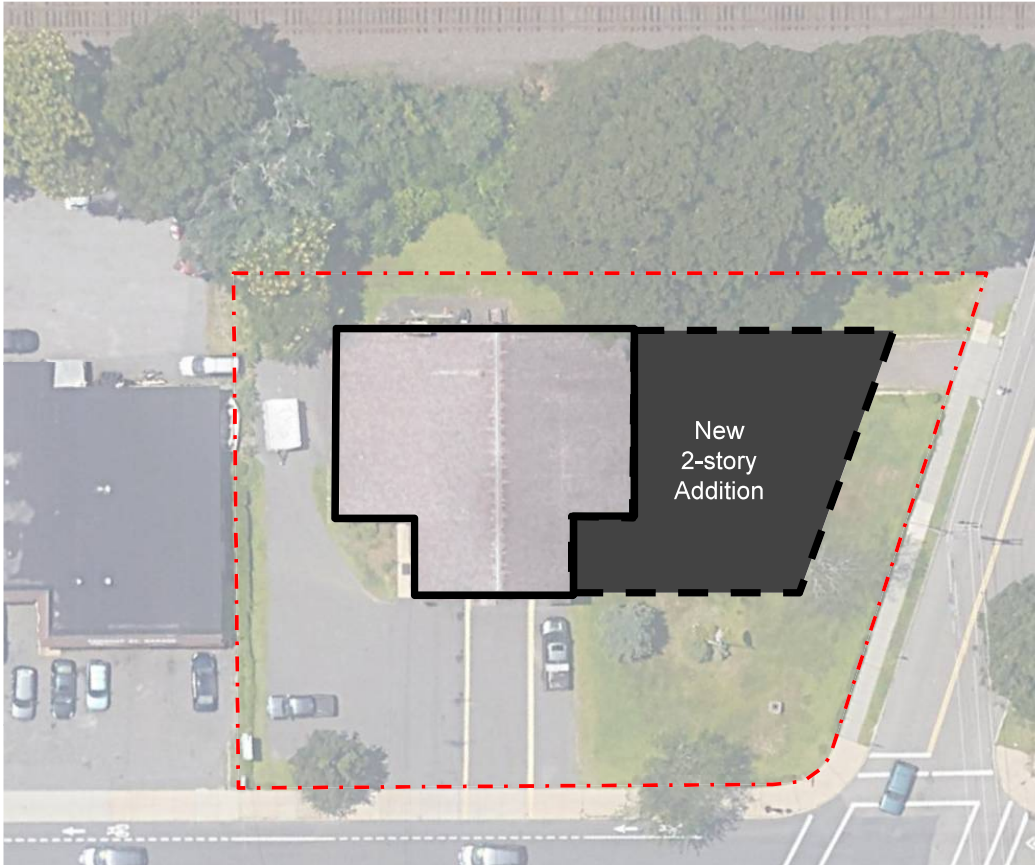
576 Main Street

Renovation (12,368 SF)

- Site improvements and replacement of site utilities.
- Roof and masonry repairs, new windows and exterior doors.
- Extensive structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades including new elevator.
- Reconfigured spaces on top floors.

NOTE: Central Fire Station personnel relocates to Engine 2 and Engine 3 during construction (about 15 months).

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Engine 2 + Addition for Central Fire Apparatus 206 Tremont Street

Renovation and Two-Story Addition (15,000 GSF)

- Site improvements.
- Building envelope upgrades.
- Structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades
- New addition with elevator.

NOTE: Engine 2 personnel relocates to Central Fire Station and Engine 3 during construction (about 18 months).

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Engine 3

278 East Foster Street

Renovation and Second Floor Addition (11,600 GSF)

- Site improvements, including improved drainage system.
- Masonry repairs and new windows.
- Structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades
- New second floor with add'l spaces

NOTE: Engine 2 personnel relocates to Central Fire Station and Engine 3 during construction (about 15 months).

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Conceptual Option 3

With a total of 54,600 GSF

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New Police Station + Dispatch Center

Address to be determined

Renovation of Existing Building (20,000 SF)

NOTE: Police Station on W Foster Street remains in operation during construction (about 18 months).

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Central Fire Station

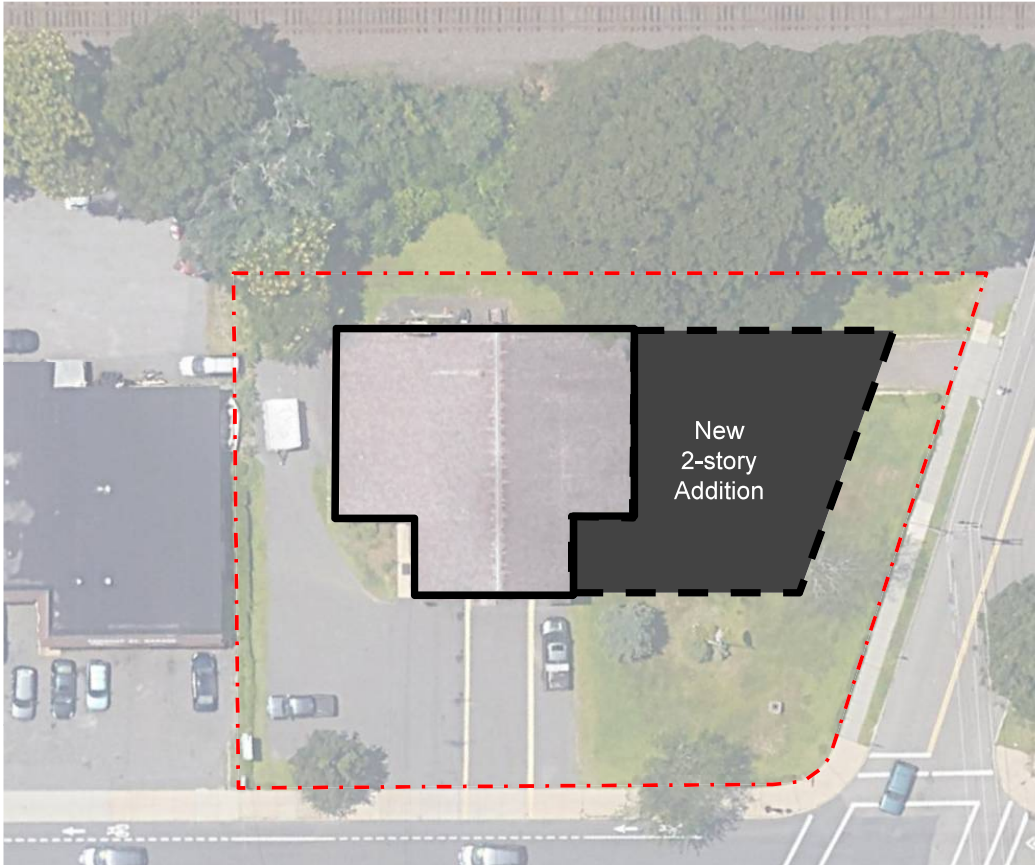
576 Main Street

Renovation (12,368 SF)

- Site improvements and replacement of site utilities.
- Roof and masonry repairs, new windows and exterior doors.
- Extensive structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades including new elevator.
- Reconfigured spaces on top floors.

NOTE: Central Fire Station personnel relocates to Engine 2 and Engine 3 during construction (about 15 months).

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Engine 2 + Addition for Central Fire Apparatus 206 Tremont Street

Renovation and Addition (15,000 GSF)

- Site improvements, including improved drainage system.
- Masonry repairs and new windows.
- Structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades
- New second floor with new spaces

NOTE: Engine 2 personnel relocates to Central Fire Station and Engine 3 during construction (about 18 months).



Engine 3

278 East Foster Street

Renovation (7,300 GSF)

- Site improvements, including improved drainage system.
- Masonry repairs and new windows.
- Structural, mechanical, electrical, plumbing, and fire protection systems' upgrades.
- Accessibility compliance upgrades

NOTE: Engine 2 personnel relocates to Central Fire Station and Engine 3 during construction (about 15 months).

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From: [Garipay, Mark](#)
To: [City Council](#)
Cc: [Foote, Kristin](#); [Ghobrial, Andrew](#)
Subject: Fwd: Library
Date: Saturday, August 20, 2022 8:01:20 AM

All,

Councilor Stewart and I had sent inquiries to the administration requesting an update on the library project, cost and final bid numbers. We received the following response that I thought I would share so we all have the information. It took me a while but I did and still do support the library project but I want to make sure we are kept informed during the project and that we do not have any surprises with additional fund request.

Sent from my iPhone

Begin forwarded message:

From: "Gaffey, Denise"
Date: August 15, 2022 at 6:08:01 PM EDT
To: "Garipay, Mark" , *Mayor Brodeur
 Dello Russo, Patrick"

Cc: "Stewart, Robert" , "Gardener, Linda"
Subject: RE: Library

Hi Mark and Robb,

Thank you both for your recent inquiries regarding the Library Project. I appreciate and share your concerns about the volatility in the construction industry at this time. Cost escalations have been dramatic, and scarcity and long lead times on certain items have created a lot of uncertainty. At times like this (although these conditions are unprecedented in many ways), the uncertainty can contribute to higher-than-expected bid prices as contractors try to hedge their bets on the future. We are hearing this from the experts in the field, including our design and project management team and our cost estimator, and we have been making adjustments to the project where we can in order to prepare.

In terms of cost estimates, we have had professional estimates done by PM & C, our cost estimator, at every stage of design. As the estimates have shown increasing costs, we have modified the scope and value engineered the project to remove items or change materials to less costly products or products that are more widely available. We have also removed some items from the base scope to be bid as alternates, which we will only award if the bids are favorable.

It is not possible to completely ease your concerns or to tell you that the appropriation that the Council approved will be adequate to cover the full costs of

Attachment: 22.08.19 LTR.MPL.PLANNING (INFO-2023-6 : Status of MPL construction)

the project given how unprecedented this situation is and how dramatically the market has changed since the authorization occurred last year. I can tell you that our recent cost estimate still has us on budget given the adjustments we have made; but we all remain concerned that, despite our best efforts, we could see high bids. Also, while we are doing everything we can to keep the scope of the project in line with the original estimate, we never had a lot of room for scope reductions because the new building will be only slightly larger in programming space than the existing building. We can't make the building smaller and meet the needs of the library or remain in compliance with the requirements of the grant funding agency.

What I can also assure you of is the fact that we are pursuing every opportunity to secure other sources of funds to offset potential cost increases, including applying for grants and incentive funds for our sustainability measures, securing ARPA funds for the HVAC upgrades, and fundraising.

The project is currently out to bid. We will have bids from General Contractors on September 14 and at that time we will have a clearer picture of where things stand with the construction budget. We have had strong interest in the project from contractors, which is a positive sign, and we hope that most if not all of the 11 firms we pre-qualified will bid on the project and provide competitive bids.

We look forward to providing an update on the project once the bids are in. In the meantime, do not hesitate to reach out to me if I can provide any additional information.

Best,
Denise

Denise M. Gaffey
Director and City Planner
Office of Planning and Community Development
City of Melrose
562 Main Street
Melrose, MA 02176
(781) 979-4194
dgaffey@cityofmelrose.org

From: Garipay, Mark <mgaripay@CityofMelrose.org>
Sent: Saturday, August 13, 2022 3:10 PM
To: *Mayor Brodeur <pbrodeur@CityofMelrose.org>; Gaffey, Denise <DGAFFEY@CityofMelrose.org>; Dello Russo, Patrick <PDelloRusso@CityofMelrose.org>
Subject: Library

Dear Mayor, Denise and Patrick,

I am growing more concerned regarding the state of the library project and I was hoping that you could assist me in easing these concerns.

Over the last 6 months we've seen dramatic cost escalations as well as significant increases in interest rates. These impacts are greater than anyone could have anticipated. I have witnessed this in my job trying to secure equipment and listening to my clients, many who supply the building industry. I know this unfortunate situation we find ourselves in will affect public and private construction costs and financing.

1. Have you received a new cost estimate for the project? If not, why not? Has our architectural firm or other professionals working on this project offered any opinions or expressed any concerns regarding the current project cost / contingency?
2. Is the current appropriation that the City Council approved adequate for the bid amount?
3. Has the interest rate used to calculate the project cost been adjusted? If it has what is the new rate being used and what is the dollar impact.

I look forward to the answers to these questions.

Thanks,
Mark

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