

Lincoln/Haney Engineering Associates, Inc.

Structural Engineering Consultants

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ADDENDUM #1

DATE: September 19, 2022

PROJECT: Abbott House Reroofing Project at Maine Maritime Academy, Castine, Maine, BGS Project 3449

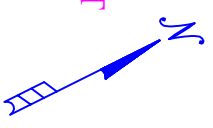
OWNER: Maine Maritime Academy
1 Pleasant Street
Castine, Maine 04420

BID DATE: September 29, 2022

The contract documents dated September 2, 2022 are modified in accordance with this addendum as follows:

DESCRIPTION	<u>Relating to Project Manual</u> 1. Independent Roof Services drawings Revise drawings R2, R4, R8, and R11 as shown on attached revised drawings. <u>Relating to Drawings</u> 1. Drawings S1 and S2 Revise drawings S1 and S2 as shown on attached revised drawings.
ATTACHMENTS	IRS drawings R2, R4, R8, and R11 and Lincoln/Haney Engineering drawings S1 and S2.

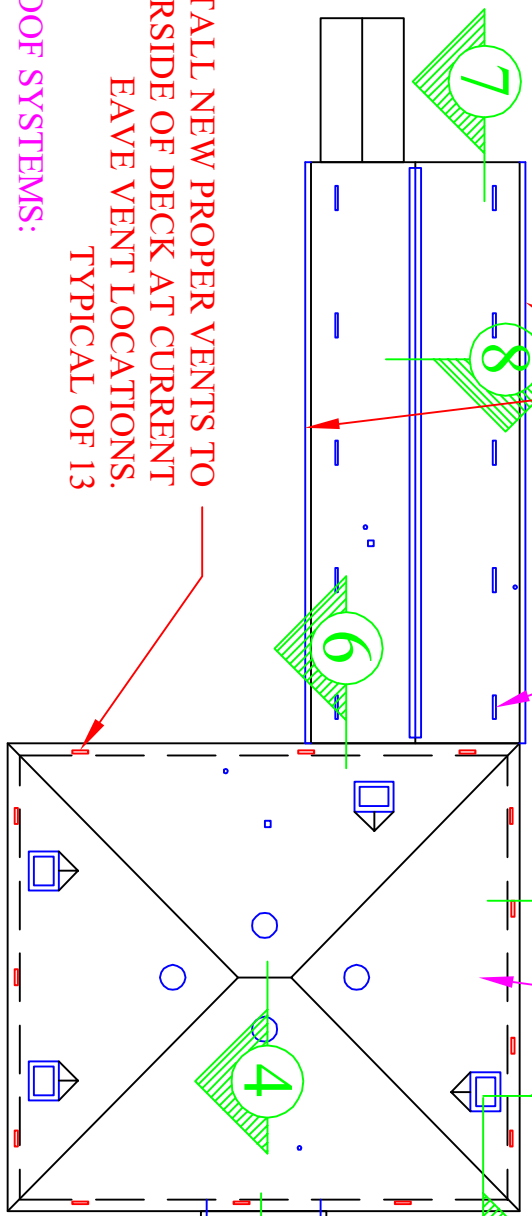
ENGINEER: By:	Lincoln/Haney Engineering Associates, Inc. Michael A. Cunningham, P.E., LEED AP
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AIRHAWK B-144 ATTIC VENT
TYPICAL OF 8

SHADOWHAWK LPG72BL
TYPICAL OF 10

NEW 0.032" WHITE ALUMINUM
5" K-STYLE GUTTER



INSTALL NEW 2x3
ALUMINUM
DOWNSPOUTS TO
EXISTING DRAINAGE
PIPES AT GRADE.

INSTALL NEW PROPER VENTS TO
UNDERSIDE OF DECK AT CURRENT
EAVE VENT LOCATIONS.
TYPICAL OF 13

PROPOSED ROOF SYSTEMS:
MAIN HOUSE, ELL, ELL SHED:
NEW ARCHITECTURAL SHINGLES
NEW ICE AND WATER SHIELD WHERE INDICATED / NEW SYNTHETIC UNDERLAYMENT
EXISTING WOOD DECK

CANOPY:
NEW MODIFIED BITUMEN ROLLED ROOFING
EXISTING WOOD DECK

REVISED FOR ADDENDUM #1 9-19-2022

LEGEND:

- PLUMBING VENT
- ◻ CHIMNEY
- ◻ ROOF JACK
- DOWNSPOUT
- ≡ RIDGE VENT
- ≡ SHADOWHAWK VENT
- AIRHAWK VENT

ABBOTT HOUSE CASTINE, MAINE	
INDEPENDENT ROOF SERVICES POWNAI, MAINE	SCALE: 1/16" = 1'
DATE: 09-02-22	FILE NAME: MMA
TITLE: PROPOSED ROOF PLAN	
DATE: 09-02-22	DRAWING#: R2

NEW ARCHITECTURAL SHINGLES
NEW GRACE ICE AND WATER SHIELD
EXISTING WOOD DECK

NEW STARTER SHINGLE

NEW DRIP EDGE

EXISTING WOOD GUTTER

NEW BLOCKING
AS NECESSARY

REMOVE EXISTING DOWNSPOUT
DROPS AND COVER HOLES WITH
3"x3" WHITE ALUMINUM PATCH.

REVISED FOR ADDENDUM #1 9-19-2022

ABBOTT HOUSE
CASTINE, MAINE

INDEPENDENT ROOF SERVICES
POWNA, MAINE

SCALE:
3"=1'

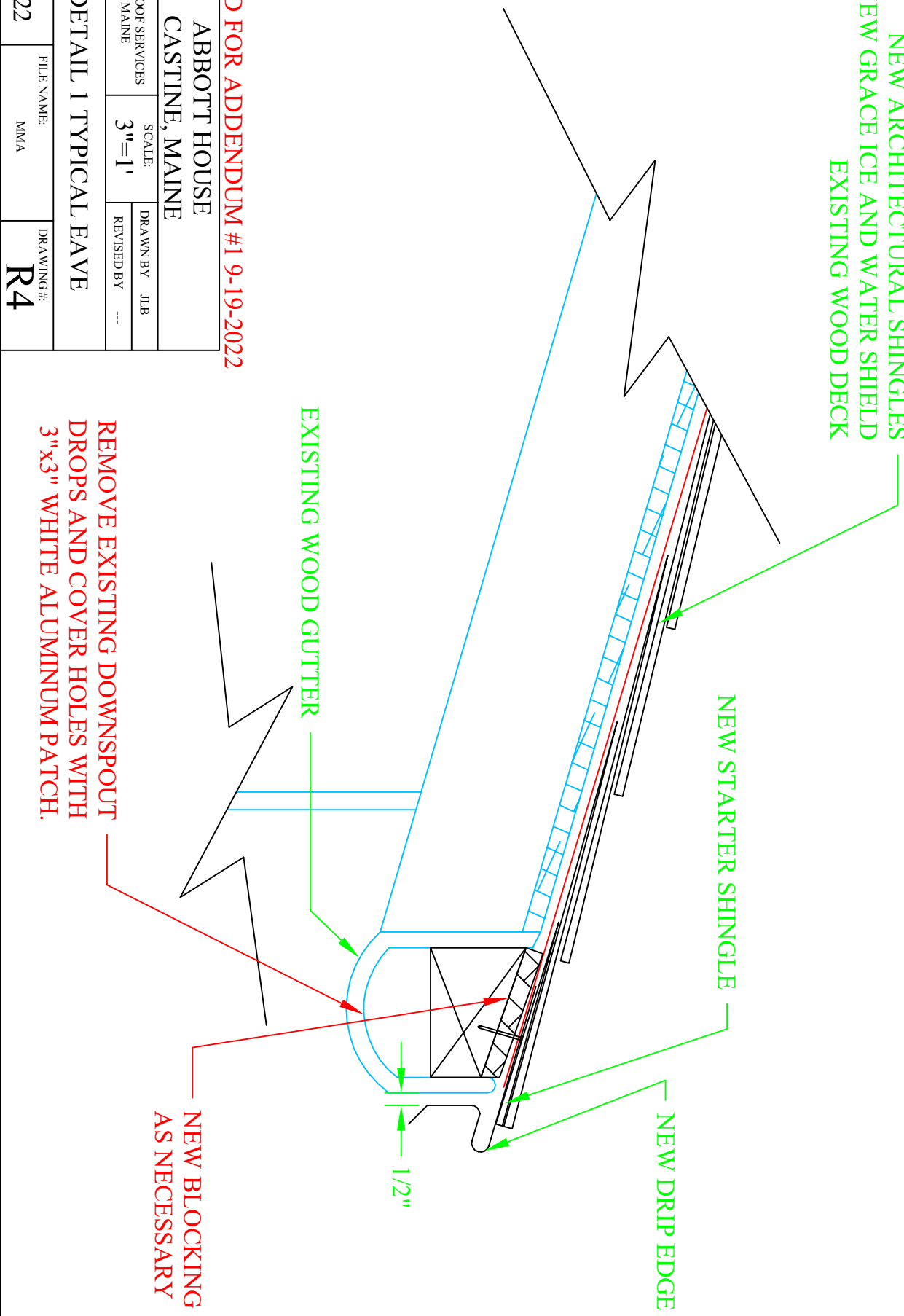
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REVISED BY ...

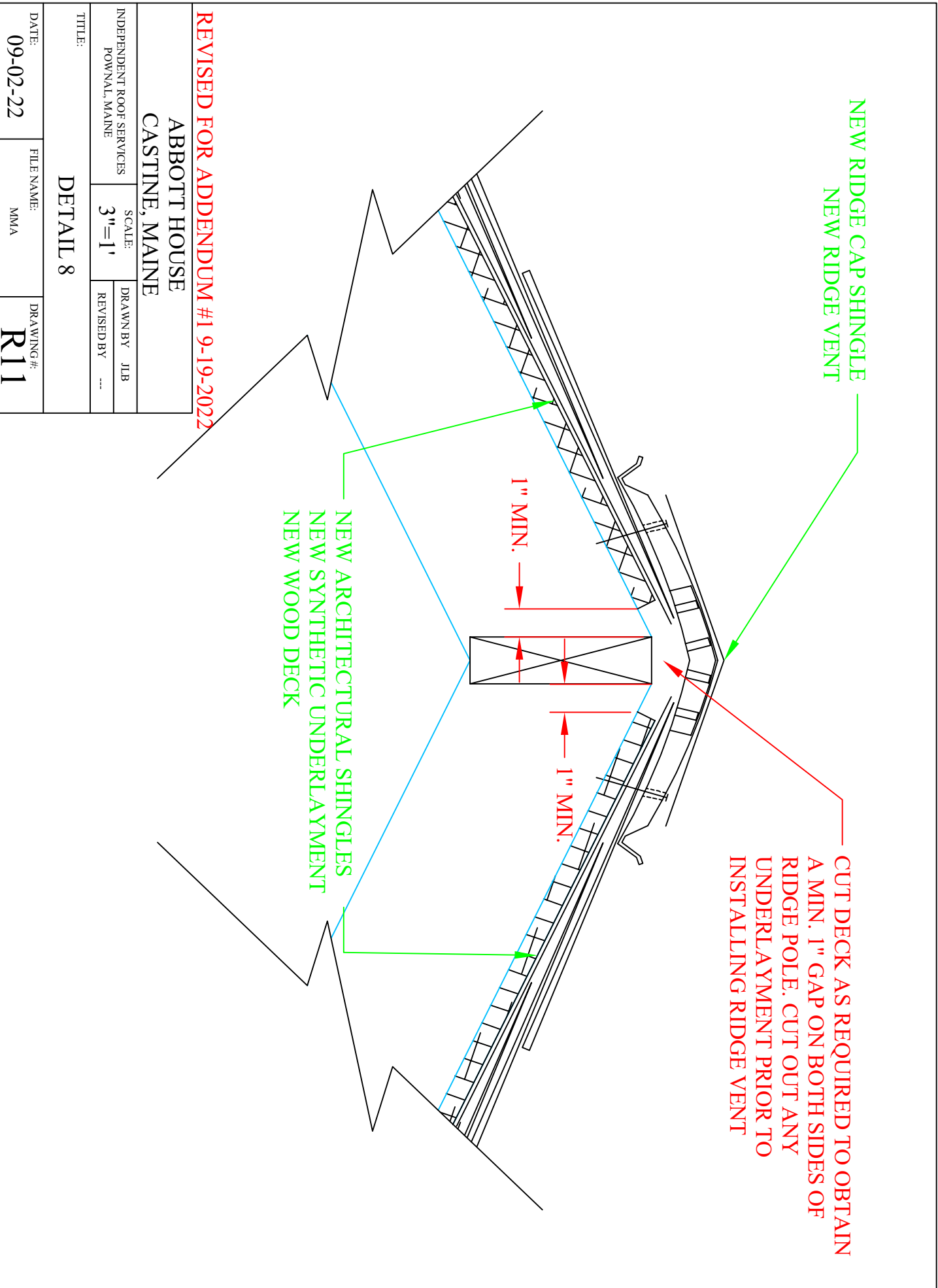
DETAIL 1 TYPICAL EAVE

DATE:
09-02-22

FILE NAME:
MMA

DRAWING #:
R4





NEW RIDGE CAP SHINGLE
NEW RIDGE VENT

CUT DECK AS REQUIRED TO OBTAIN
A MIN. 1" GAP ON BOTH SIDES OF
RIDGE POLE. CUT OUT ANY
UNDERLAYMENT PRIOR TO
INSTALLING RIDGE VENT

1" MIN.

1" MIN.

NEW ARCHITECTURAL SHINGLES
NEW SYNTHETIC UNDERLAYMENT
NEW WOOD DECK

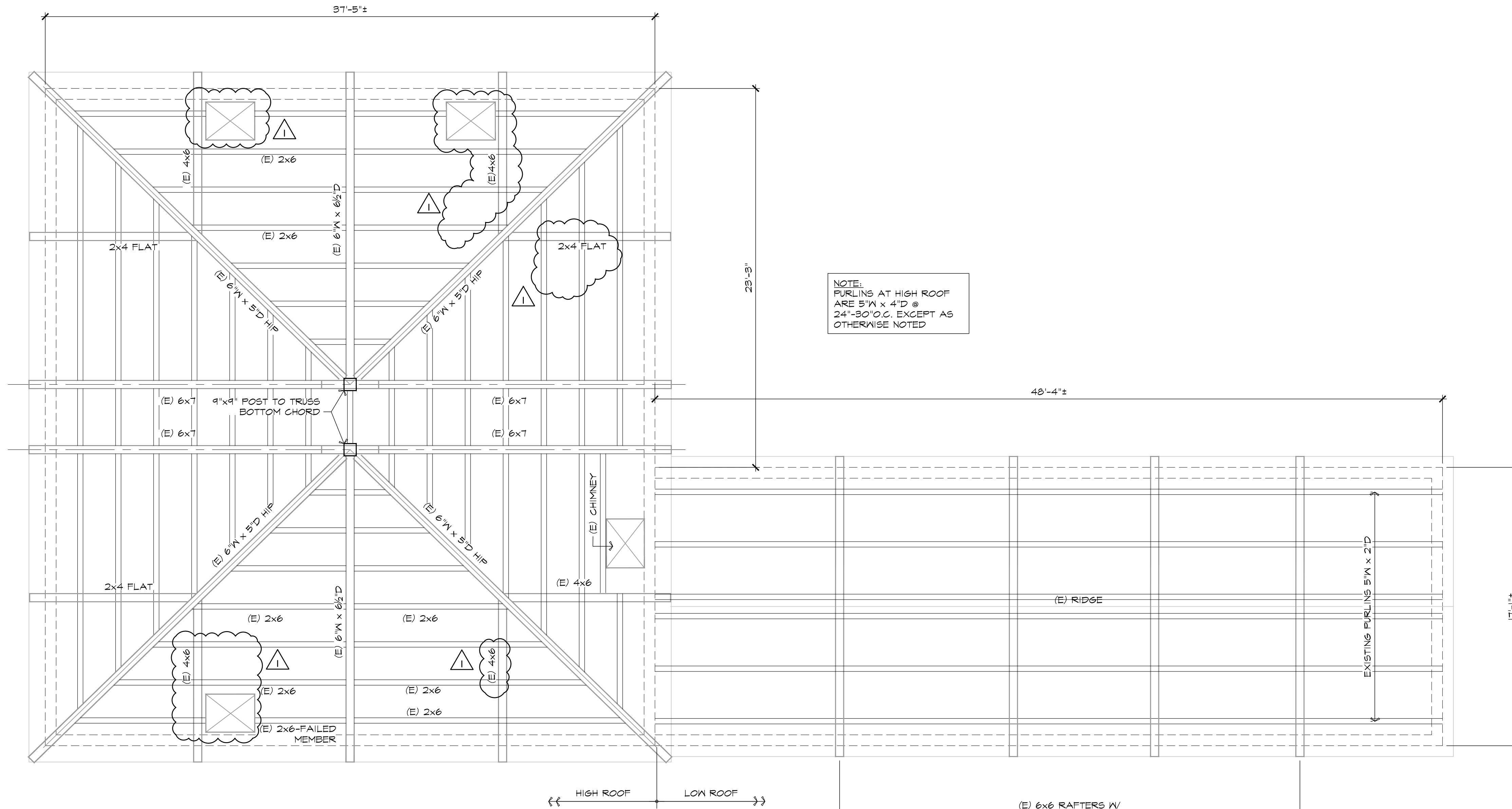
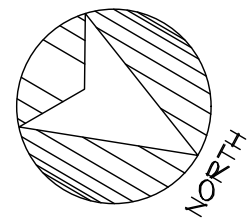
REVISED FOR ADDENDUM #1 9-19-2022

ABBOTT HOUSE
CASTINE, MAINE

INDEPENDENT ROOF SERVICES POWNA, MAINE	SCALE: 3"=1'	DRAWN BY JLB
		REVISED BY ...

DETAIL 8

DATE: 09-02-22	FILE NAME: MMA	DRAWING #: R11
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ROOF FRAMING EXISTING CONDITIONS PLAN

1/4"±1'-0"

GENERAL NOTES:

1. MODIFICATIONS TO ROOF FRAMING ARE DESIGNED FOR LOADINGS SPECIFIED IN THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE AND THE 2010 EDITION OF MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE7-10. ALTERATIONS ARE DESIGNED TO SUPPORT DEAD LOADS OF EXISTING AND NEW COMPONENTS AND SNOW LOADS AS FOLLOWS:
 - A. GROUND SNOW LOAD $P_g = 60$ PSF.
 - B. EXPOSURE FACTOR $C_e = 1.0$.
 - C. IMPORTANCE FACTOR $I_s = 1.0$.
 - D. THERMAL FACTOR $C_t = 1.1$ TYPICALLY EXCEPT THAT $C_t = 1.2$ AT ROOF OVERHANGS.
 - E. FLAT ROOF SNOW LOAD $P_f = 46.2$ PSF.
 - F. UNBALANCED AND DRIFTED SNOW IN ACCORDANCE WITH ASCE7-10.
2. DIMENSIONS INDICATED ON THE DRAWINGS AND OTHER EXISTING CONDITIONS INFORMATION ARE APPROXIMATE, PROVIDED FOR PRICING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND OTHER EXISTING CONDITIONS PRIOR TO PERFORMING AFFECTED AREAS OF THE WORK.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE BUILDING FROM DAMAGE DUE TO WATER INTRUSION, REMOVAL OF ROOF DECK, AND OTHER ACTIVITIES DURING CONSTRUCTION. TO THAT END, DECK REMOVAL ON ANY DAY SHALL BE LIMITED TO WHAT CAN BE REINSTALLED BEFORE LEAVING FOR THE DAY. THE ROOF SHALL HAVE WEATHER PROTECTION AT THE CLOSE OF EACH WORKDAY. THE CONTRACTOR SHALL MONITOR WEATHER CONDITIONS THROUGHOUT THE WORKDAY AND RESPOND TO ANY CHANGES IN WEATHER TO PROVIDE PROTECTION OF EXISTING INTERIORS THROUGHOUT THE WORKDAY AS WARRANTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS OF ANY DAMAGES THAT OCCUR AS A RESULT OF THE CONTRACTOR'S OPERATIONS DURING THE CONSTRUCTION PERIOD.

- A. THE CONTRACTOR SHALL EXERCISE CAUTION IN LOADING THE ATTIC FLOOR/CEILING JOISTS WITH CONSTRUCTION MATERIALS AND EQUIPMENT. ANY DAMAGE CAUSED BY THE USE OF THE ATTICS AS A WORKING PLATFORM SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 4. CONDUCT LOCALIZED DEMOLITION IN SUCH FASHION TO MINIMIZE DISTURBANCE OF ADJACENT AREAS. ANY AREAS AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE RETURNED TO CONDITION AS EXISTED PRIOR TO CONSTRUCTION.
 5. AT THE HOUSE HIGH ROOF, REMOVAL OF ROOF DECK IS INDICATED AROUND THE PERIMETER FOR ACCESS TO STRUCTURE AND FOR LOADING MATERIALS INTO THE ATTIC. ADDITIONAL ROOF DECK REMOVAL IS ACCEPTABLE AS WARRANTED TO PERFORM SPECIFIED REINFORCEMENTS. TEMPORARY PROTECTION AND PERMANENT ROOF SHEATHING INSTALLATION SHALL COMPLY WITH NOTES AND SPECIFICATIONS AS STATED FOR OTHER AREAS.
 6. WHERE WIRING AND SIMILAR EXISTING CONDITIONS OBSTRUCT THE SPECIFIED ALTERATIONS, TEMPORARILY RELOCATE THOSE ITEMS. DO NOT DISCONNECT ANY COMPONENT WITHOUT APPROVAL BY THE OWNER. REINSTALL AS APPROVED BY THE OWNER.
 7. AT SOME LOCATIONS, IT WILL BE NECESSARY TO DISCONNECT FRAMING MEMBERS FROM SUPPORTS IN ORDER TO INSTALL SPECIFIED REINFORCEMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING STABILITY OF DISCONNECTED MEMBERS UNTIL FINAL CONNECTIONS ARE COMPLETED.
- WOOD FRAMING NOTES**
1. @LVLA DESIGNATES LAMINATED VENEER LUMBER. PROVIDE BOISE CASCADE VERSA-LAM 2.0 3100 FRAMING, WHERE MEMBERS THICKER THAN 1-3/4" ARE SPECIFIED, PROVIDE SINGLE MEMBERS FABRICATED TO THE SPECIFIED THICKNESS. JOINING MULTIPLE MEMBERS TO ATTAIN THE SPECIFIED THICKNESS IS NOT ACCEPTABLE UNLESS SPECIFICALLY APPROVED AS A SUBSTITUTION.
 2. NEW DIMENSION LUMBER SHALL BE #2 GRADE OR BETTER

- SPRUCE-PINE-FIR GRADED UNDER NLGA RULES.
3. WHERE NAILS ARE SPECIFIED, PROVIDE FASTENERS WITH THE FOLLOWING MINIMUM DIMENSIONS:
 - A. 10D NAILS USED FOR FASTENING ROOF SHEATHING = 0.148" DIAMETER X 3A
 - B. 10D NAILS USED FOR FRAMING = 0.124" DIAMETER X 2-3/8"
 - C. 16D NAILS = 0.148" X 3-1/4"
 - D. 8D NAILS = 0.113" DIAMETER X 2-3/8"
 4. PROVIDE FASTENERS FOR CONNECTING WOOD FRAMING AS INDICATED, WHERE NOT INDICATED, COMPLY WITH TABLE 2304.10.1 IN THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE.
 5. INSTALL TOENAILS AT AN ANGLE 30 DEGREES FROM THE AXIS OF THE SUPPORTED MEMBER. INSTALL WITH THE TIP LOCATED AT A DISTANCE OF 1/3 OF THE NAIL LENGTH FROM THE END OF THE SUPPORTED MEMBER.
 6. LAG SCREWS SHALL COMPLY WITH ANSI/ASME B18.2.1. FOR 5/8" DIAMETER LAG SCREWS, THE MAXIMUM PILOT HOLE FOR THE THREADED PORTION OF THE SCREW SHALL BE 70% OF THE SHANK DIAMETER.
 7. WHERE PROPRIETARY CONNECTORS ARE SPECIFIED, INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. USE ALL SPECIFIED FASTENERS WITHOUT SUBSTITUTION UNLESS OTHERWISE NOTED ON THE DRAWINGS. WHERE MORE THAN ONE FASTENER SPECIFICATION EXISTS, INSTALL THE MAXIMUM FASTENING UNLESS OTHERWISE NOTED.
 8. BOLTS SPECIFIED FOR CONNECTING TIMBER MEMBERS AND FOR CONNECTING TIMBER MEMBERS TO STEEL SHALL BE ASTM A307 BOLTS. INSTALL WITH DRILLED HOLES 1/16" LARGER THAN THE BOLT DIAMETER.
- ROOF DECK NOTES**
1. HIGH ROOF - AT AREAS WHERE AN EXISTING BOARD SHEATHING IS REMOVED, INFILL WITH APA RATED STURDI-FLOOR WITH THICKNESS TO MATCH EXISTING DECK. INSTALL WITH LONG DIMENSION

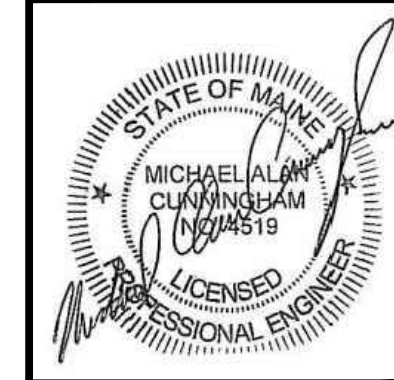
- PERPENDICULAR TO SUPPORTS. FASTEN TO SUPPORTS WITH 10D NAILS AT 6" ON CENTER.
2. LOW ROOF - COVER ENTIRE ROOF SURFACE W/ APA RATED SHEATHING. PROVIDE 1/2" THICKNESS WITH SPAN RATING 40/20, EXPOSURE 1.
 - A. LAY PANELS WITH THE LONG DIMENSION PERPENDICULAR TO SUPPORTS AND THE SHORT DIMENSIONS STAGGERED.
 - B. FASTEN TO SUPPORTS WITH 10D NAILS, SPACE NAILS AT 6" ON CENTER AT SUPPORTED PANEL EDGES AND AT 12" ON CENTER AT INTERMEDIATE SUPPORTS.
- STRUCTURAL STEEL NOTES**
1. ALL STEEL WORK SHALL CONFORM TO THE 14TH EDITION OF THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, ANSI/AISC 360-10.
 2. SUBMIT SHOP DRAWINGS FOR STRUCTURAL STEEL COMPONENTS, NOTE THAT ALL DIMENSIONS FOR MEMBER LENGTHS AND CONNECTIONS MUST BE DERIVED FROM FIELD MEASUREMENTS OF EXISTING CONSTRUCTION.
 3. ALL WELDING SHALL BE DONE BY A WELDER CERTIFIED BY THE AMERICAN WELDING SOCIETY FOR THE WELDING PROCEDURE AND POSITIONS UTILIZED.
 4. ALL WELDING SHALL BE IN COMPLIANCE WITH AWS D11.1 STRUCTURAL WELDING - STEEL BY THE AMERICAN WELDING SOCIETY, LATEST EDITION.
 5. NO FIELD WELDING IS PERMITTED IN THE ATTIC.
 6. BOLTS USED TO CONNECT STEEL FRAMING MEMBERS SHALL BE IN COMPLIANCE WITH THE 2004 EDITION OF THE SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS.
 7. BOLTS USED TO CONNECT STEEL FRAMING MEMBERS SHALL BE ASTM A325 BOLTS. INSTALL TO SNUG-TIGHT CONDITION UNLESS OTHERWISE INDICATED.
 8. STRUCTURAL STEEL ANGLES, CHANNELS, AND PLATES SHALL BE ASTM A36.

NO.	DATE	REVISION
1	4/14/22	APPENDUM No.1

Reroofing of the Abbott House
at Maine Maritime Academy
BGS PROJECT #3449
Castine, Maine

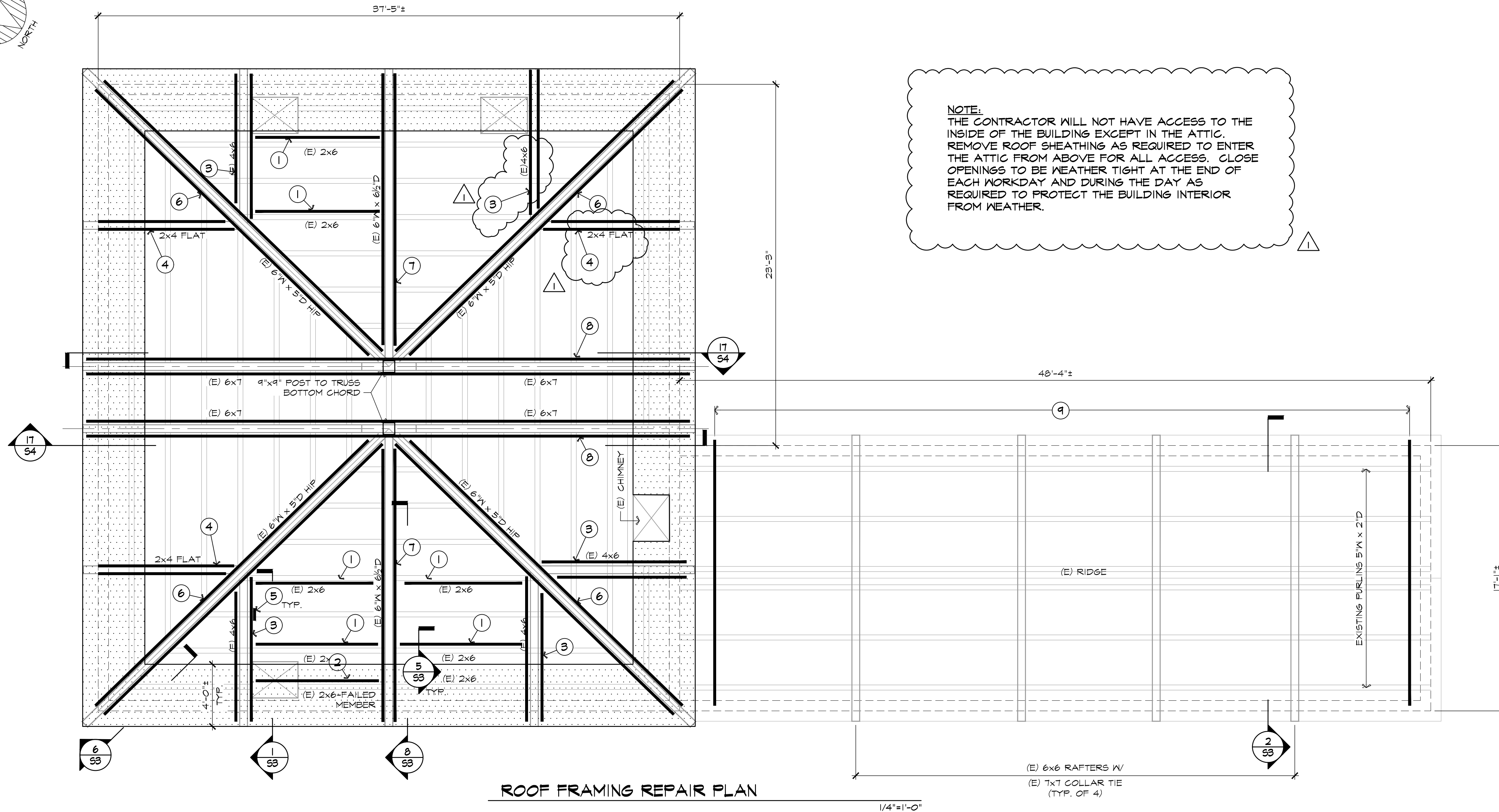
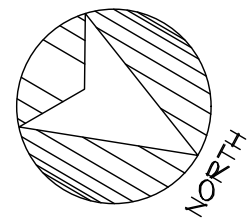
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MAC
4-2-22
2022.056

ROOF FRAMING EXISTING CONDITIONS PLAN



Lincoln / Haney
Engineering Associates, Inc.
14 Maine Street, Suite 306A
Brunswick, Maine 04011
Phone: 207-729-1061 Fax: 207-729-2941

S1



ROOF FRAMING REPAIR PLAN

1/4"=1'-0"

LEGEND

- ① SISTER 4x6 TO EXISTING 2x6 PURLINS. SEE DETAIL 5/53.
- ② REPLACE FAILED 2x6 PURLIN WITH NEW 4x6. CONNECT ENDS TO SUPPORTS WITH SIMPSON STRONG-TIE U46 HANGERS. FASTEN TO ROOF DECK WITH 10d NAILS @ 6" ON CENTER.
- ③ ADD (2) 2x6, SISTER (1) 2x6 TO EACH SIDE OF EXISTING 4" X 6" MEMBER. IT WILL BE NECESSARY TO TEMPORARILY SUPPORT AND CUT BACK EXISTING CONNECTED PURLINS IN ORDER TO INSTALL SISTERED MEMBERS. CUT PURLINS TO FIT AGAINST SISTERED MEMBERS. SEE DETAIL 1/53.
- ④ REMOVE EXISTING 2x4 MEMBERS AND 2x4 SUPPORTING VERTICAL MEMBERS. CUT EXISTING PURLINS AS REQUIRED TO INSTALL VERSA-LAM 2.0 3100 3-1/2" X 5-1/2" BETWEEN SPANS. CONNECT TO EXISTING PURLINS AND REINFORCED EXISTING PURLINS AS FOLLOWS:
 - A. EXISTING 5" WIDE X 4" DEEP - PROVIDE 2X2 LEDGER FASTENED TO NEW LVL'S W/ (6) 16d NAILS. FASTEN EXISTING PURLIN WITH (2) SIMPSON STRONG-TIE H3 HURRICANE TIES.
 - B. COMBINED SECTION EXISTING 2x6 WITH NEW 4x6 - SIMPSON STRONG-TIE U66 HANGER.
 - C. NEW 4x6 REPLACEMENT FOR FAILED 2x6 - SIMPSON STRONG-TIE U46.
- ⑤ INSTALL NEW 2X2 LEDGER TO REINFORCED 4X6. FASTEN TO REINFORCED MEMBER W/(6) 16d NAILS. FASTEN PURLIN TO LEDGER W/(2) SIMPSON STRONG-TIE H3 HURRICANE TIES.
- ⑥ REMOVE EXISTING 1 1/2" BOARD ROOF DECK AS REQUIRED TO INSTALL NEW FRAMING AND SPECIFIED EAVE CONNECTIONS. REPLACE WITH APA RATED STURDI-FLOOR, THICKNESS TO MATCH EXISTING.
- ⑦ REINFORCE EXISTING 6" WIDE X 5" DEEP HIP MEMBERS W/(2) STEEL L6X4X1/2. REFER TO DETAIL 3/53, SECTION 8/53.
- ⑧ REINFORCE EXISTING 6" WIDE X 6-1/2" PURLIN SUPPORT W/(2) STEEL L6X3-1/2 X 1/2. REFER TO DETAILS 8/53, 9/53, & 10/53.
- ⑨ REINFORCE EXISTING TRUSS ASSEMBLY AS INDICATED IN DETAIL 15/54.
- ⑩ REMOVE EXISTING ROOF DECK AND FRAMING FOR ENTIRE LOW ROOF. LEAVE CEILING FRAMING AND EXISTING TRUSS BOTTOM CHORD IN PLACE. RECONSTRUCT ROOF FRAMING AS SHOWN IN SECTION 9. INSTALL ROOF DECK APA RATED SHEATHING, 3/8" THICK, EXPOSURE 1, WITH SPAN RATING 40/20. REFER TO DECKING NOTES FOR INSTALLATION REQUIREMENTS.

	REVISION	
	DATE	4/19/22
	NO.	APPENDUM No.1
Reroofing of the Abbott House at Maine Maritime Academy BGS PROJECT #3449 Castine, Maine		
DRAWN BY MAC	CHECKED BY MAC	ISSUE DATE 4-2-22
		PROJ. NO. 2022.056
ROOF FRAMING REPAIR PLAN		
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S2		