

PROJECT DESIGN CONDITIONS:

SEASON	VALUE	UNITS	DESCRIPTION	SOURCE
ASHRAE WEATHER STATION: MANCHESTER, NEW HAMPSHIRE				
WINTER	-17.3	°F	OA TEMP	ASHRAE EXTREME ANNUAL DESIGN CONDITIONS (50 YR)
	72.0	°F	INDOOR TEMP	2015 IECC SECTION 302.1
SUMMER	91.1	°F	OA DRY-BULB TEMP	2013 ASHRAE FUNDAMENTALS, CHAPTER 14, COOLING 0.4% 2015 IECC SECTION 302.1
	71.9	°F	OA WET-BULB TEMP	2013 ASHRAE FUNDAMENTALS, CHAPTER 14, COOLING 0.4%
	75.0	°F	INDOOR TEMP	2015 IECC SECTION 302.1

COOLING ONLY ROOF TOP UNIT SCHEDULE (RTU)

MARK	MAKE	MODEL	NOM TONS	SUPPLY (CFM)	ESP (IN. WC)	OA (CFM)	COOLING (BASED ON MAX OCC OA)							ELECTRICAL			NOTES	
							TOTAL (MBH)	SENSIBLE (MBH)	EFFICIENCY (ARI EER)	EDB	EWB	LDB	LWB	BHP	VOLT/PH	MCA		MOCP
RTU-1	CARRIER	50HC-D24CFA5-2FFC0	20	8,000	1.00	1,050	240.0	191.0	11.8	77.1	63.7	54.8	53.5	6.38	208/3	98.4	125	1,2

NOTES:
 1. ECONOMIZER, 7 DAY PROGRAMMABLE THERMOSTAT, NON-FUSED DISCONNECT, POWER EXHAUST
 2. PROVIDE BACNET INTERFACE TO TIE INTO EXISTING BUILDING MANAGEMENT SYSTEM

TO IS OF EXISTING RTU AND DUCT

NEW RETURN DUCT WILL TRANSITION TO THE SAME SIZE AS EXISTING DUCT AND WILL ENTER BUILDING THROUGH EXISTING PENETRATION.

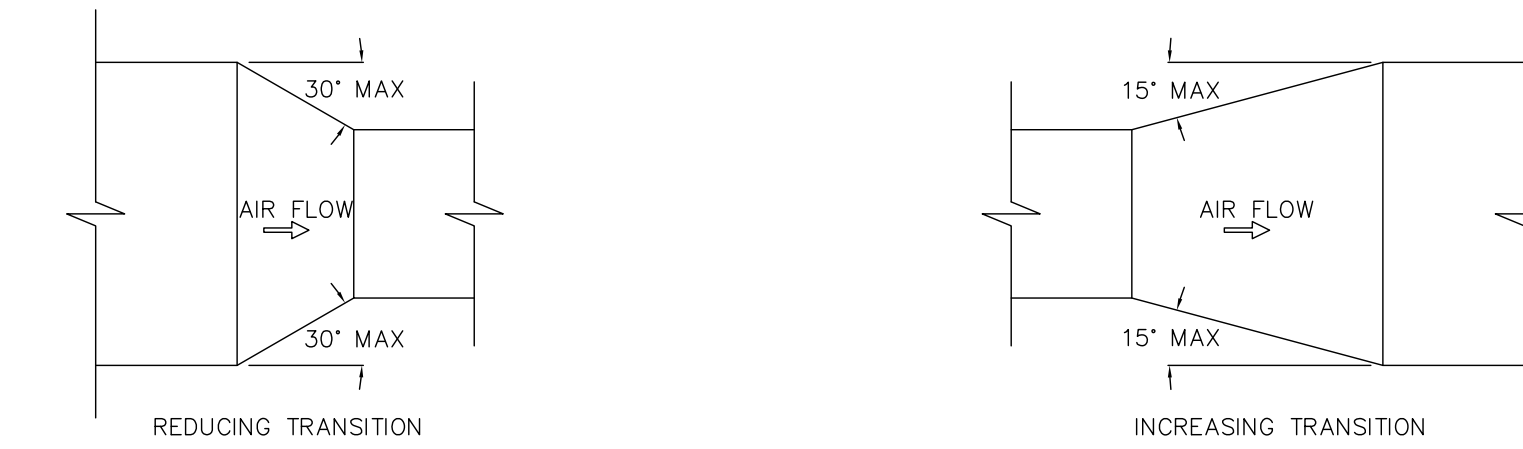
EXISTING SUPPLY DUCT TO REMAIN. REWRAP DUCT IN INSULATION WITH INSTALLED MINIMUM OF R-12 SIMILAR TO 2.5" THICK HUNTER H-SHIELD POLYISO OR JOHN MANSVILLE 814. 3" THICK FIBERGLASS INSULATION BOARD WITH FSK JACKET. SLOPE TOP TO SHED WATER AND COVER WITH VENTURECLAD 1577CW-E EMBOSSED ALUMINUM INSULATION JACKETING TAPE OR EQUIVALENT.

NEW RTU WILL HAVE RETURN DUCT ORIGINATE AT THIS END. RELIEF HOOD WILL BE FIELD-MOUNTED TO RETURN DUCT AS INDICATED ON M-1

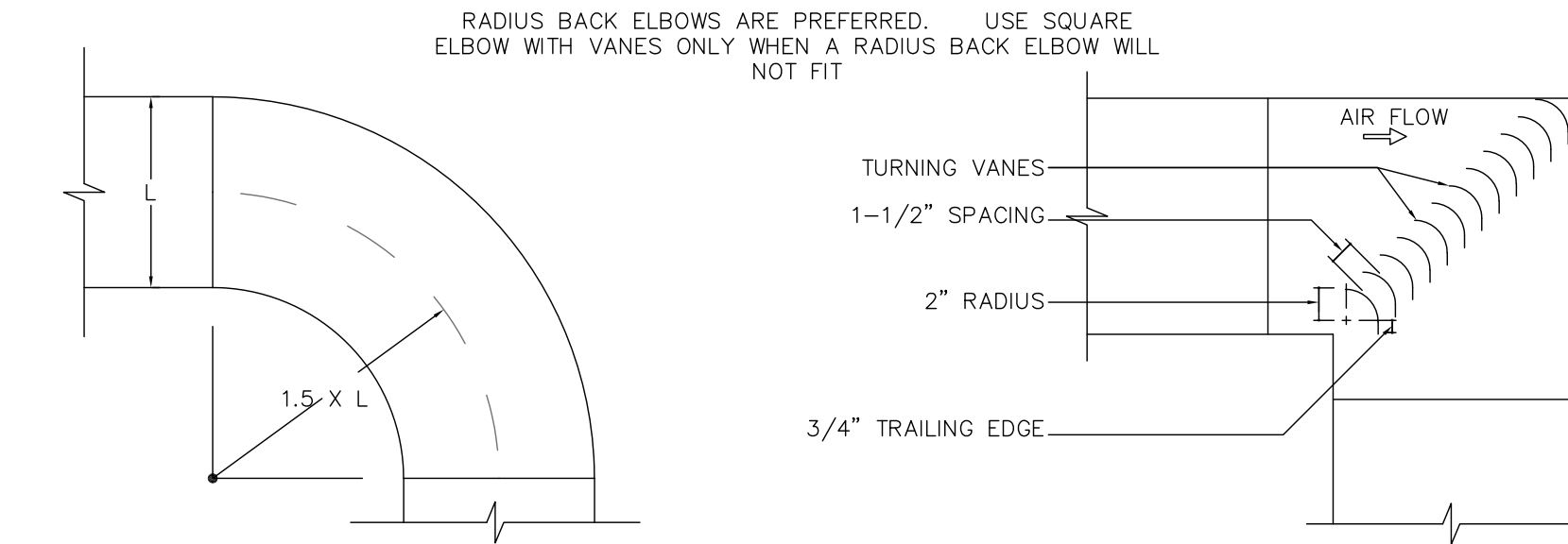
SCRAPE / WIRE BRUSH EXISTING FRAME. TREAT WITH RUST INHIBITOR AND REPAINT.



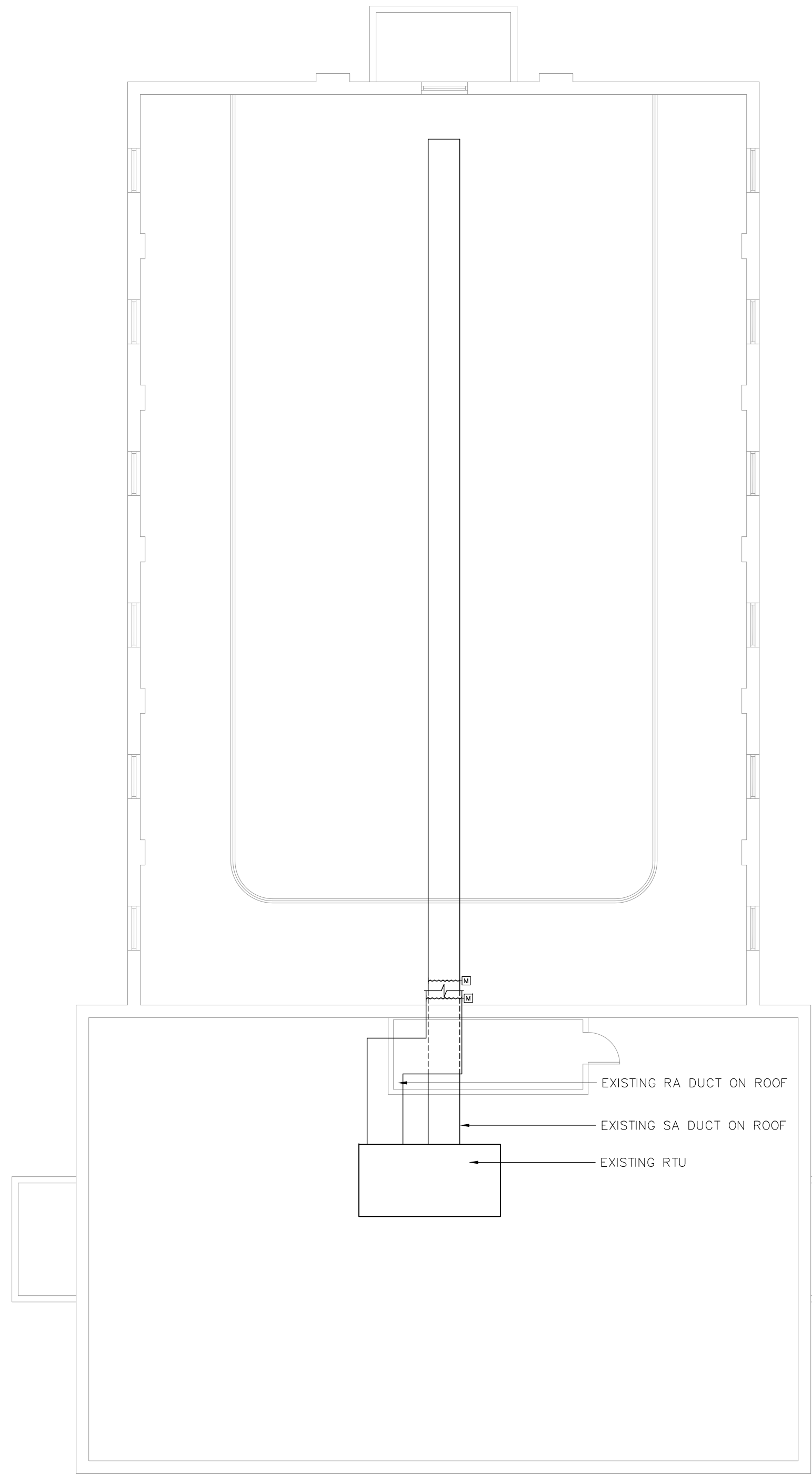
3 EXISTING RTU AND DUCT NOT TO SCALE



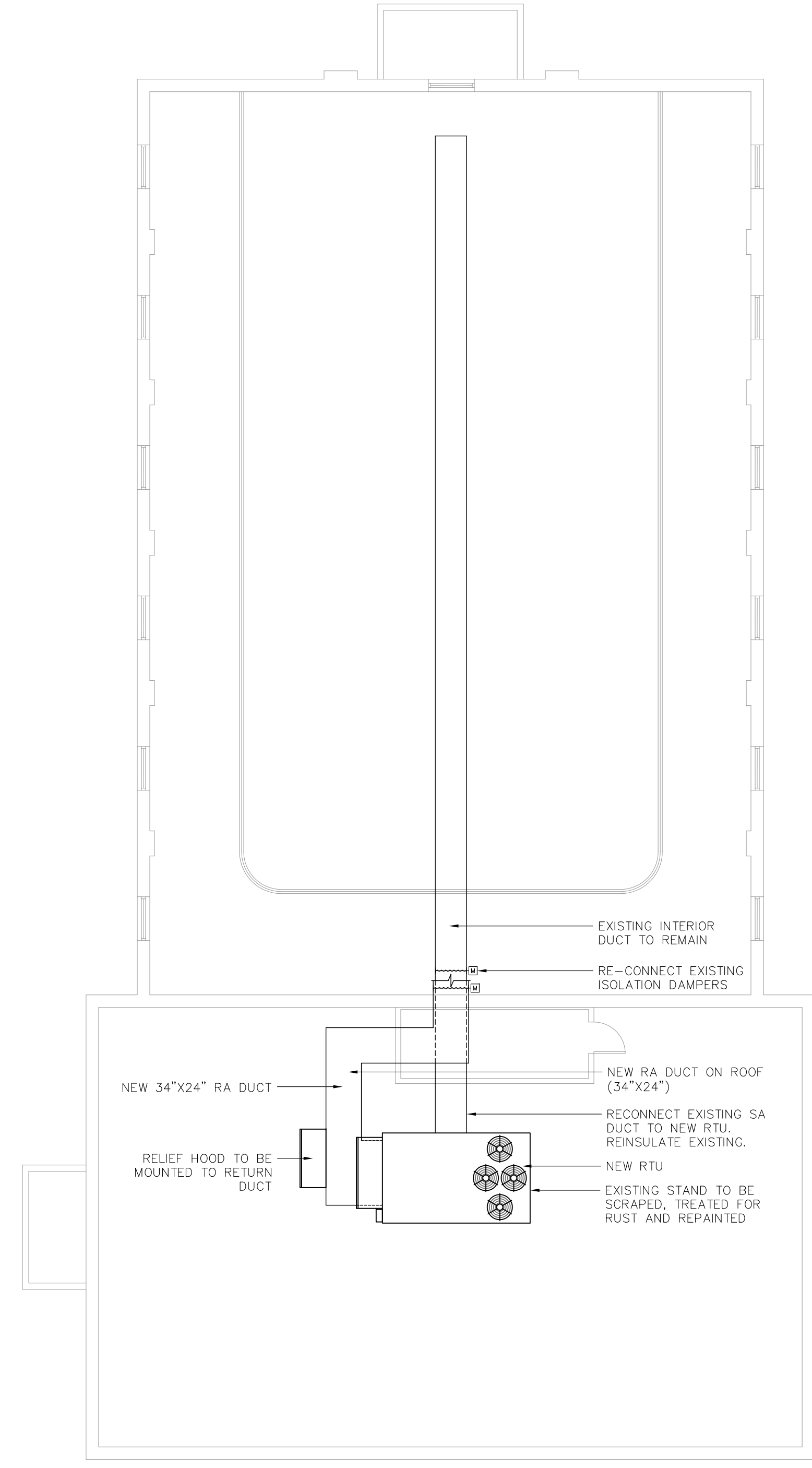
4 TYPICAL DUCT TRANSITION NOT TO SCALE



5 TYPICAL RECTANGULAR ELBOW NOT TO SCALE



1 EXISTING ROOF TOP UNIT 1/8" = 1'-0"

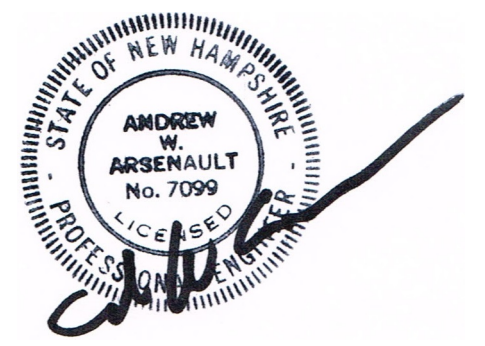


2 PROPOSED ROOFTOP UNIT 1/8" = 1'-0"



THE PROJECT MANAGER FOR THIS PROJECT IS NOTED BELOW. PLEASE REFER ALL QUESTIONS, SUBMITTALS AND CORRESPONDENCE TO THE PROJECT MANAGER.

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PROJECT:
 VETERAN'S MEMORIAL HALL
 RTU REPLACEMENT
 31 WEST BROADWAY
 DERRY, NEW HAMPSHIRE

FOR:
 TOWN OF DERRY
 DERRY, NEW HAMPSHIRE

EXISTING AND PROPOSED ROOFTOP UNIT PLANS

REVISIONS:

DESIGNED BY: DCM
 DRAWN BY: MRM
 CHECKED BY: AWA
 DDM JOB #: 20072
 SCALE: AS NOTED

DATE: 07/09/2020

M-1

