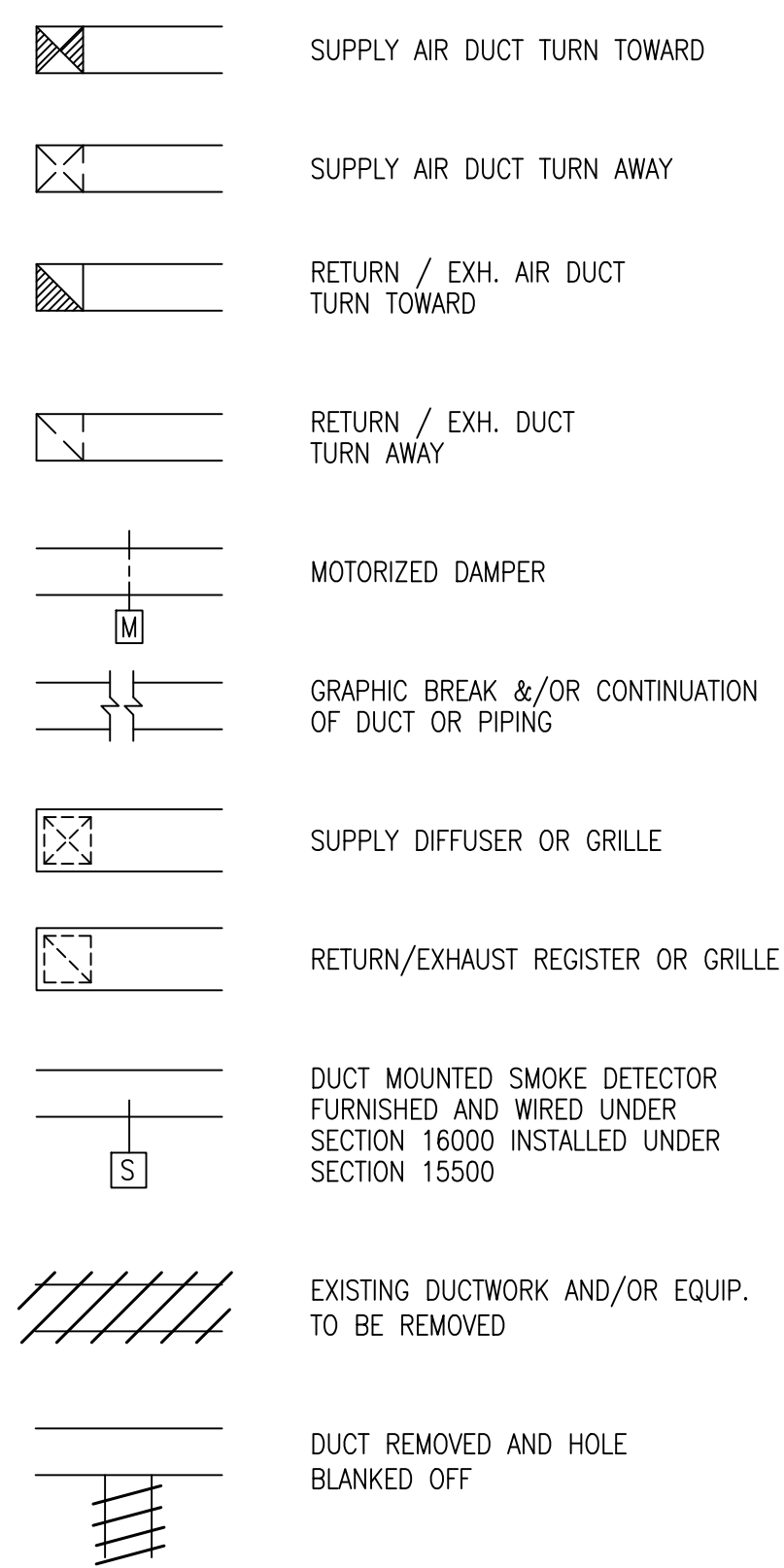


GENERAL MECHANICAL NOTES

APPLICABLE TO ALL DRAWINGS

- THE HVAC CONTRACTOR SHALL INVESTIGATE AVAILABLE SPACE FOR ALL EQUIPMENT IN CEILINGS BEFORE SUBMISSION OF SHOP DRAWINGS.
- ADEQUATE SIZE ACCESS PANELS SHALL BE FURNISHED AND INSTALLED FOR ALL EQUIPMENT REQUIRING SERVICE, MAINTENANCE AND REPLACEMENT FOR THE BALANCING OF VALVES AND FOR THE OPERATION OF HVAC SYSTEMS AS PER THE SPECIFICATIONS.
- DUCT SIZES INDICATED ON THE DRAWINGS ARE TO BE NET FREE AREA. ALL DUCTWORK SHALL BE CONSTRUCTED, INSTALLED AND SEALED (CLASS A), PER THE LATEST SMACNA REQUIREMENTS.
- PARTICULAR ATTENTION SHOULD BE PAID TO ADDITIONAL NOTES SHOWN ON THE INDIVIDUAL DRAWINGS.
- THE DUCTWORK AND PIPING SYSTEMS SHOWN ON THE DRAWINGS ARE SHOWN DIAGRAMMATICALLY WITHOUT EVERY OFFSET AND TRANSITION REQUIRED TO INSTALL THE WORK. OBVIOUS OFFSETS AND TRANSITIONS, AS RELATED TO HVAC, ARE SHOWN WHERE POSSIBLE WITHOUT AFFECTING THE CLARITY OF THE DRAWINGS.
- ALL PIPING AND DUCTWORK SHALL BE RUN ABOVE THE CEILINGS UNLESS NOTED OTHERWISE.
- ALL THERMOSTATS TO BE MOUNTED ABOVE LIGHT SWITCHES ON SAME CENTERLINE, 4"-0" ABOVE FINISHED FLOOR WHERE APPLICABLE, OR OTHERWISE NOTED. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- ALL MATERIALS INSTALLED IN THIS WORK SHALL BE NEW UNLESS SPECIFICALLY NOTED FOR RE-USE.
- ALL WORK PERFORMED SHALL BE GUARANTEED FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER. UNLESS SUCH DEFECTS ARE CLEARLY THE RESULT OF MISUSE OF EQUIPMENT BY PERSONS NOT UNDER THE CONTROL OF THE CONTRACTOR.
- THE HVAC CONTRACTOR SHALL OBTAIN INSTALLATION INSTRUCTIONS ON EACH PIECE OF EQUIPMENT TO BE FURNISHED WHICH THE HVAC CONTRACTOR IS REQUIRED TO INSTALL OR TO WHICH FINAL CONNECTIONS ARE TO BE MADE UNDER THE HVAC CONTRACT. THE HVAC CONTRACTOR SHALL INSTALL AND MAKE FINAL CONNECTIONS PER THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. THE CONTRACTOR SHALL DEMONSTRATE TO THE OWNER THAT THE INSTALLED EQUIPMENT OPERATES AS DESIGNED.
- ALL WORK UNDER THIS SECTION SHALL BE COORDINATED WITH ALL OTHER TRADES BEFORE INSTALLATION IS MADE.
- COORDINATE ALL MOTORS, STARTERS, DISCONNECT AND SMOKE DETECTOR REQUIREMENTS WITH ELECTRICAL SUBCONTRACTOR FOR ALL EQUIPMENT REQUIRING SAME.
- ALL HVAC EQUIPMENT SHALL BE INSTALLED, COORDINATED WITH ALL TRADES, IN SUCH A WAY SO THAT LIGHTS, CONDUITS, SPRINKLERS, SUPPLY AND/OR DRAIN PIPING DO NOT BLOCK ACCESS TO UNITS AND RELATED ACCESSORIES.
- THE HVAC CONTRACTOR SHALL FURNISH ALL SUPPORT STEEL REQUIRED FOR THE INSTALLATION OF HVAC EQUIPMENT, UNLESS OTHERWISE INDICATED.
- THE HVAC CONTRACTOR SHALL FIELD MEASURE ALL DUCT RUNS PRIOR TO FABRICATING DUCTWORK. FURNISH AND INSTALL ALL DUCT TRANSITIONS, ELBOWS, FITTINGS AND OFFSETS REQUIRED TO ACCOMMODATE FIELD CONDITIONS.
- THE HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RIGGING AND STAGING REQUIRED FOR THE INSTALLATION OF THE HVAC SYSTEMS.
- HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHEETMETAL TRANSITIONS AT AIR TERMINAL UNITS, FANS, COILS AND OTHER SIMILAR HVAC EQUIPMENT.
- HVAC EQUIPMENT WITH FANS TO BE PROVIDED WITH FLEXIBLE CONNECTIONS ON INLET AND DISCHARGE OF FAN TO DUCTWORK.

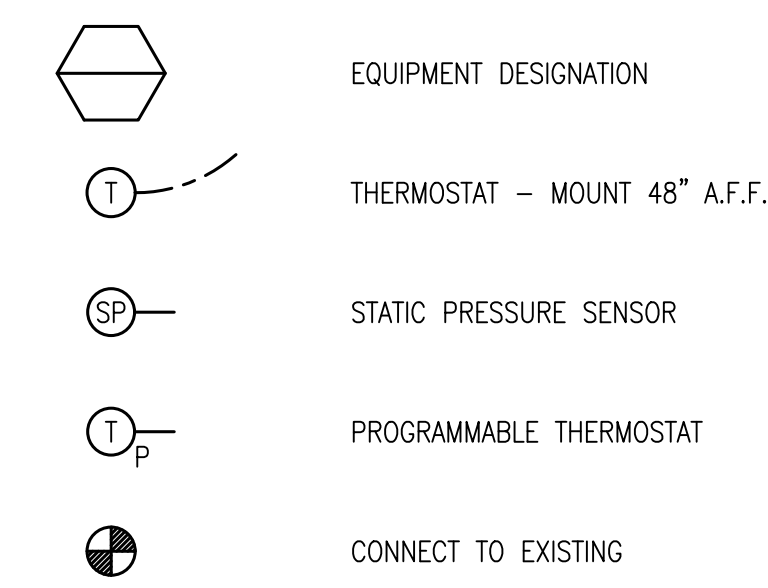
SHEETMETAL



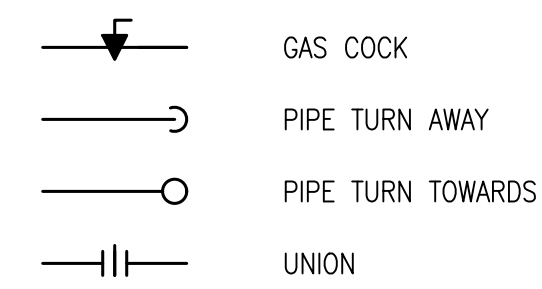
ABBREVIATIONS

AHU	AIR HANDLING UNIT	LAT	LEAVING AIR TEMP. DEGREES F.
AP	ACCESS PANEL	LWT	LEAVING WATER TEMP. DEGREES F.
ATC	AUTOMATIC TEMPERATURE CONTROL CONTRACTOR	MAX	MAXIMUM
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
DB	DRY BULB TEMP. DEGREES F.	OA	OUTSIDE AIR
E	EXHAUST AIR DEVICE	PD	PRESSURE DROP (FEET OF WATER)
EAT	ENTERING AIR TEMP. DEGREES F.	R	RETURN AIR DEVICE
EC	ELECTRICAL CONTRACTOR	RF	RETURN FAN
EWT	ENTERING WATER TEMP. DEGREES F.	RH	REHEAT COIL
GC	GENERAL CONTRACTOR (HVAC CONTRACTOR)	S	SUPPLY AIR DEVICE
GPM	GALLONS PER MINUTE	VFD	VARIABLE FREQUENCY DRIVE
HVAC	HEATING, VENTILATING & AIR CONDITIONING CONTRACTOR	WB	WET BULB TEMP. DEGREES F.

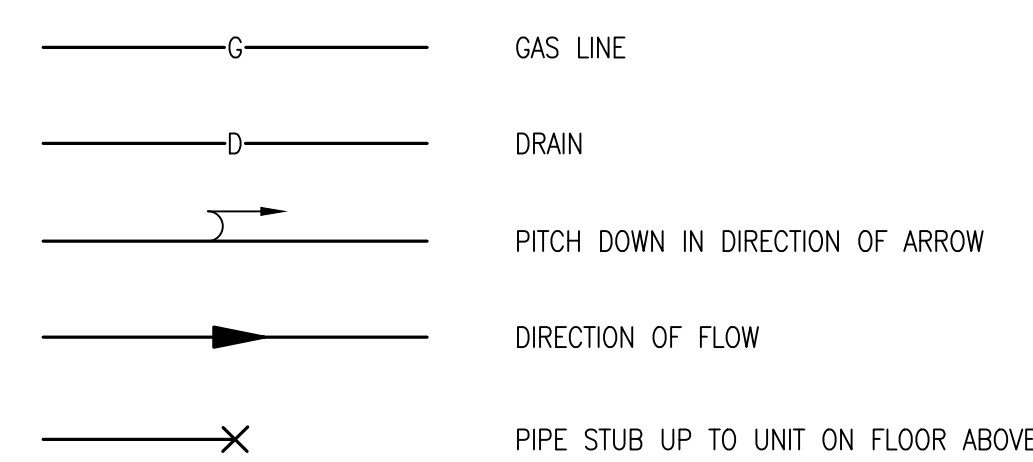
GENERAL



VALVES



PIPING



DRAWING LIST

M-1	MECHANICAL DETAILS, LEGEND & GENERAL NOTES
M-2	SECOND FLOOR MECHANICAL PART PLAN
M-3	ROOF MECHANICAL PART PLAN

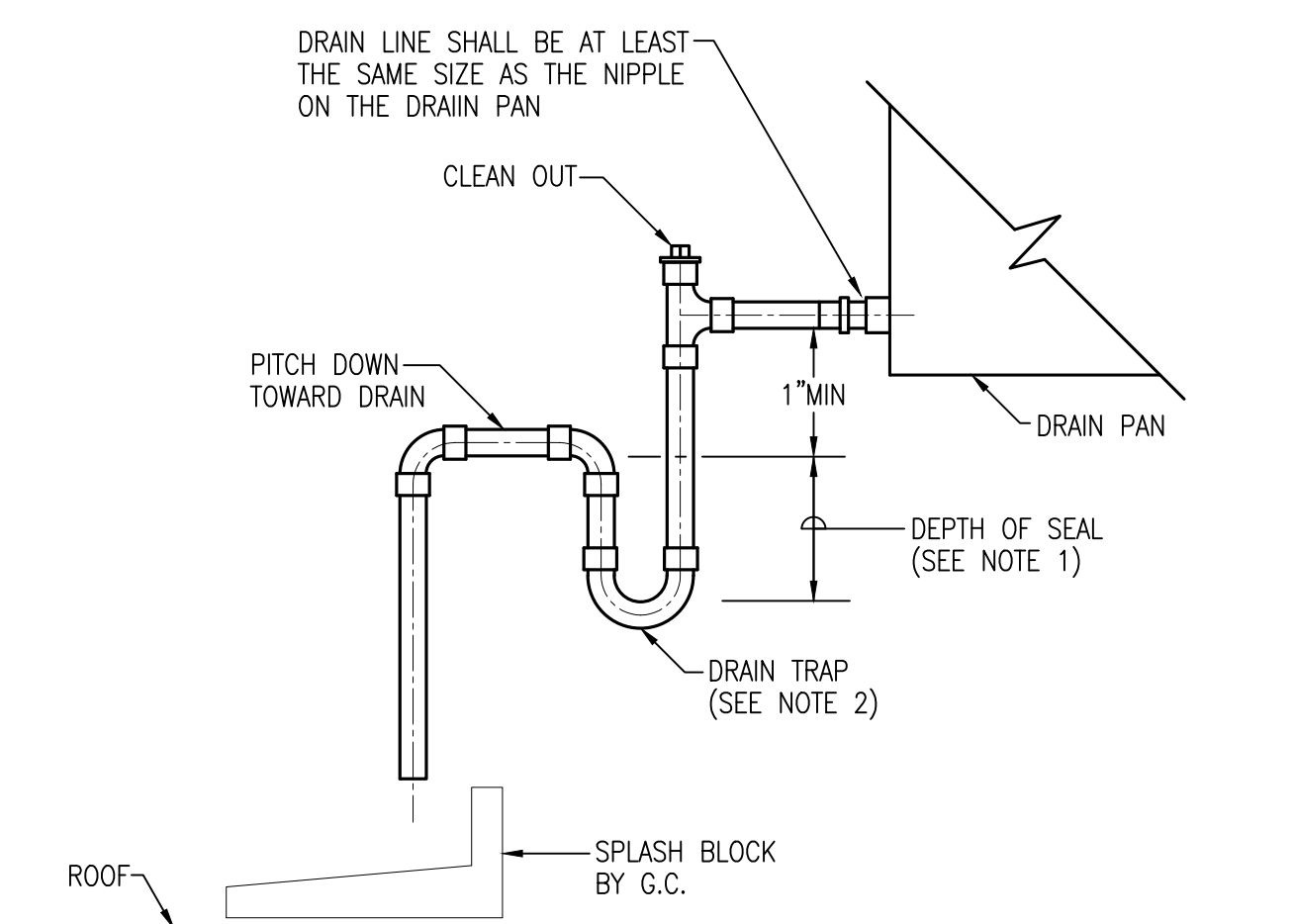
PACKAGED ROOFTOP UNIT SCHEDULE

ITEM	MFG'R	MODEL	SERVICE	CFM		SUPPLY FAN DATA					EXH. FAN HP	COOLING COIL DATA				CONDENSER FAN DATA			AMBIENT DATA		COMPRESSOR DATA			FILTER DATA		GAS FURNACE HEATING DATA				ELECTRICAL DATA				REMARKS		
				SUP. AIR	O.A. (MIN.)	E.S.P. ("WC)	H.P.	RPM	DRIVE	TYPE		MBH	EAT	LAT	QTY.	HP (EA)	REFRIG.	DESIGN OA DB/WB	QTY.	TYPE	RLA EA	TYPE	THICK	MBH INPUT	MBH OUTPUT	EAT	LAT	MCA	V	Ø	Hz	MOCP				
				TOTAL	SENS	DB	WB	DB	WB																											
RTU-3	TRANE	SXHLF40	SERVING	8500	4465	1.0"	10.0	800	BELT	FC	N/A	408.87	258.03	85	69	53.1	51.19	4	1.0	R-410A	91/73	2	-	37.3/31.3	MERV 8	2"	798.0	755.0	(4)	(4)	195.42	208	3	60	225.0	(1)(4)
RTU-5	TRANE	4YCC4030A1	TV A/V ROOM	800	150	0.5"	0.5	1050	DIRECT	FC	N/A	28.2	-	78.8	64.8	-	-	1	0.16	R-410A	91/73	1	-	14.1	MERV 8	2"	70.0	56.0	55.25	115.25	22.6	208	1	60	35.0	(1)(2)(3)
RTU-6	TRANE	4YCC4024A1	READING ROOMS	750	60	0.5"	0.33	1050	DIRECT	FC	N/A	24.6	-	76.6	63.5	-	-	1	0.08	R-410A	91/73	1	-	12.8	MERV 8	2"	60.0	48.0	62.56	122.56	19.1	208	1	60	25.0	(1)(2)(3)
RTU-10	TRANE	YHC0923ELA	MEDIA CENTER	3000	500	0.5"	2.75	1121	DIRECT	BC PLENUM	N/A	87.85	62.75	78.0	66.0	57.79	56.05	1	0.75	R-410A	91/73	2	-	15.9/10.0	MERV 8	2"	120.0	96.0	56.67	86.30	42.0	208	1	60	50.0	(1)(2)(3)

- UNIT SHALL BE PROVIDED WITH FACTORY MOUNTED BACNET DDC UNIT CONTROLLER, COMPARATIVE ENTHALPY ECONOMIZER AND POWERED EXHAUST FAN.
- UNIT SHALL BE PROVIDED WITH CURB ADAPTER TO SUIT INSTALLATION OF NEW UNIT ON EXISTING ROOFTOP UNIT CURB.
- UNIT SHALL BE PROVIDED WITH STAINLESS STEEL HEAT EXCHANGER.
- UNIT SHALL BE PROVIDED WITH INTEGRAL BOILER, HOT WATER COIL, LOW WATER FLOW PROTECTION, PUMP, AIR SCOOP, VENT, EXPANSION TANK, & SELF-CONTAINED GLYCOL LOOP. UNIT SHALL PROVIDE THE FOLLOWING PERFORMANCE:

RTU-3 HOT WATER COIL SCHEDULE

ITEM	MFG'R	MODEL	L.	H.	FACE AREA	ROWS	CFM	FACE VEL.	E.A.T.	L.A.T.	E.W.T.	L.W.T.	GPM	MBH	WATER P.D.	AIR P.D.	REMARKS
HC	SUPER RAD. COILS	25.5x63-2R-0.625/156	-	-	11.2	2	8500	761.9	40.0	102.9	180	159.2	57.6	583.17	6.7"	0.32"	



- NOTE:
- THE DEPTH OF THE SEAL SHALL BE A MINIMUM OF THE ROOFTOP AIR HANDLING UNIT'S TOTAL STATIC PRESSURE IN INCHES OF WATER PLUS 3".
 - MANUALLY PRIME FILL TRAP PRIOR TO START-UP OF UNIT.

ROOFTOP AIR HANDLING UNIT COOLING COIL DRAIN TRAP DETAIL

N.T.S.

Notes:

North Arrow

Keyplan

OTTOSON MIDDLE SCHOOL RTU REPLACEMENT
 63 ACTON ST
 ARLINGTON, MA 02476

Notes:

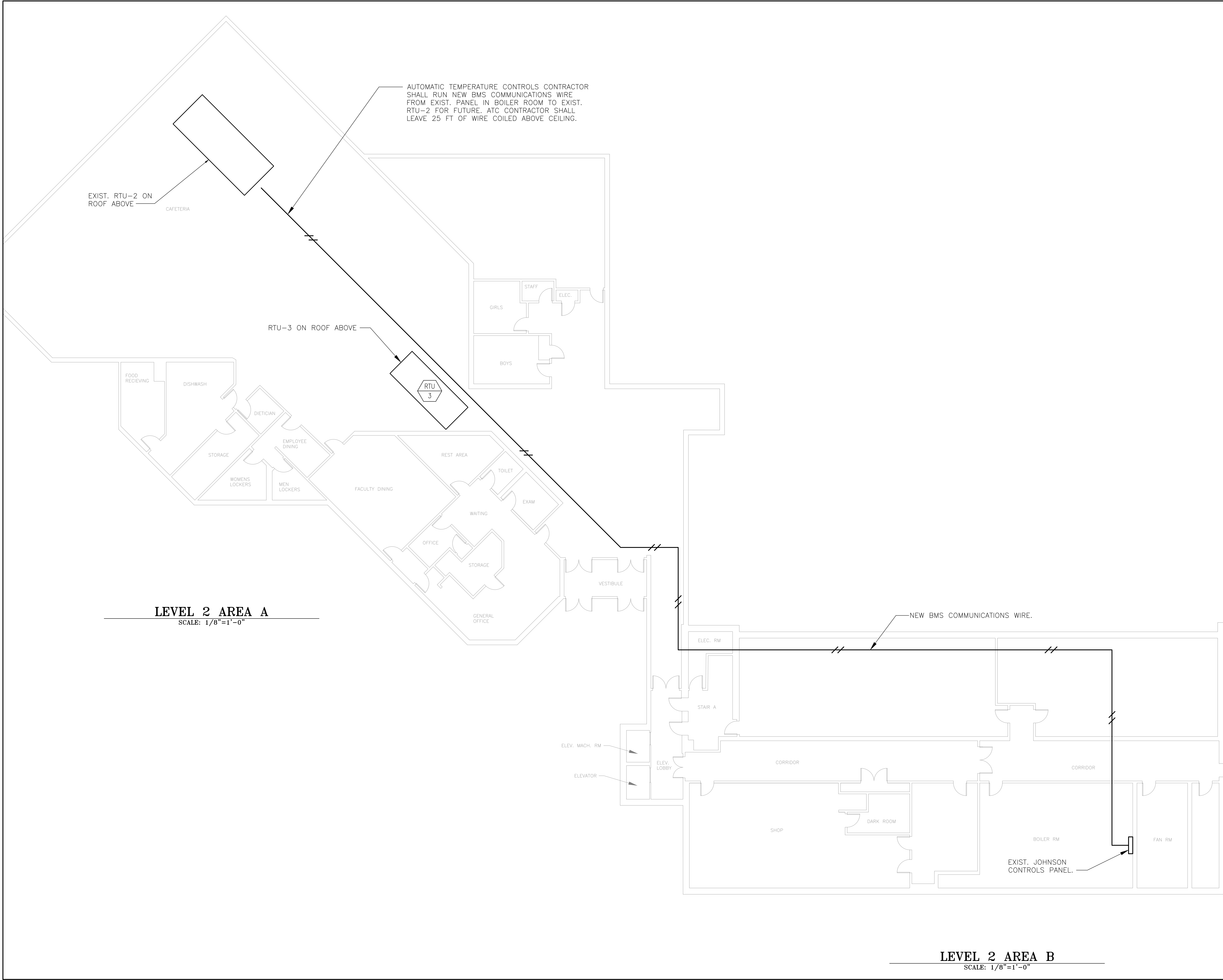
North Arrow

Keyplan

Drawing Name:
SECOND FLOOR MECHANICAL PART PLAN

Scale: As Noted
 Job No: -
 Drawn By: JEM
 Date: January 21, 2021

Drawing Number:
M-2



LEVEL 2 AREA A
 SCALE: 1/8"=1'-0"

LEVEL 2 AREA B
 SCALE: 1/8"=1'-0"

OTTOSON MIDDLE SCHOOL RTU REPLACEMENT

63 ACTON ST
 ARLINGTON, MA 02476

Notes:

North Arrow

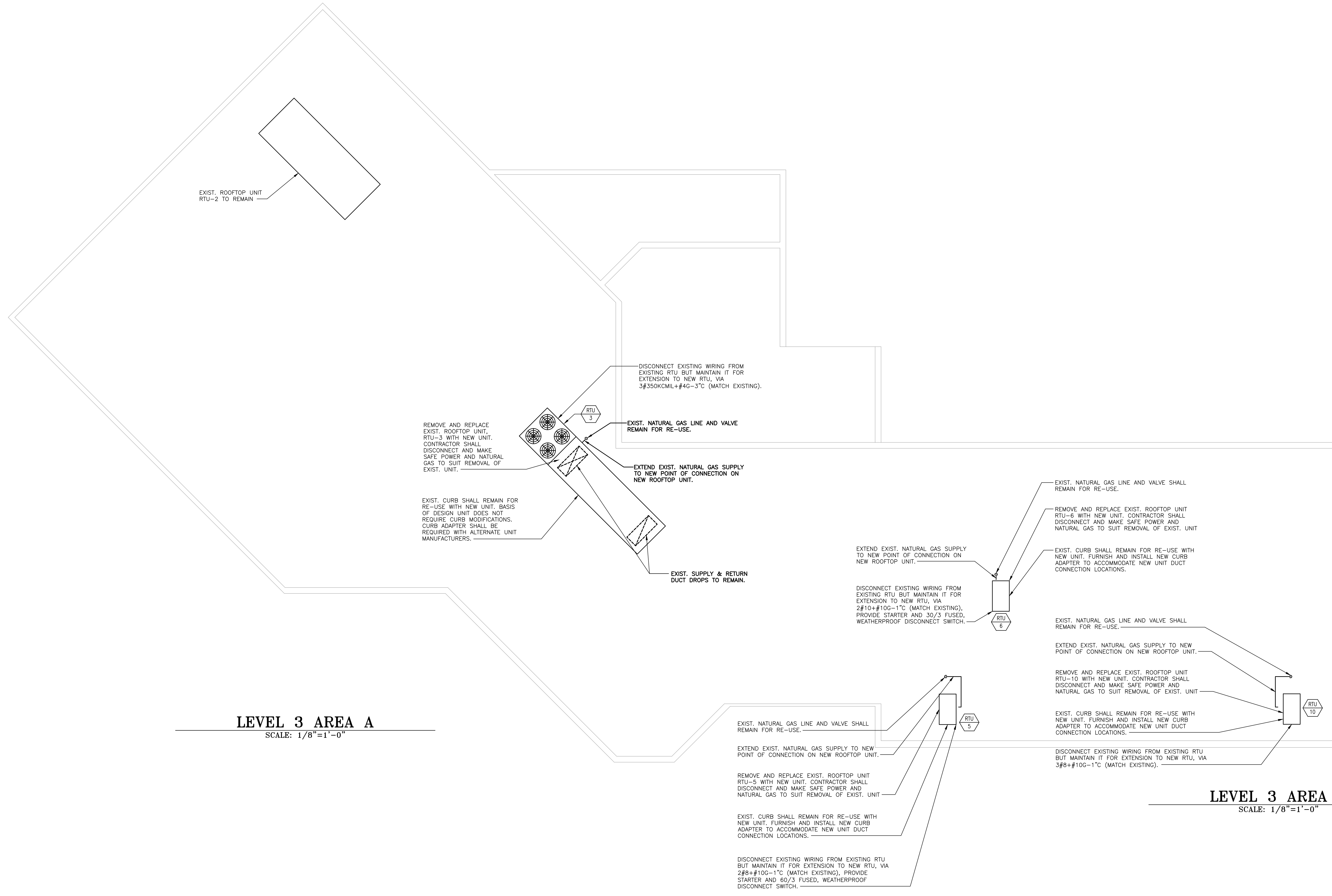
Keyplan

Drawing Name:

ROOF MECHANICAL PART PLAN

Scale: As Noted
 Job No: -
 Drawn By: JEM
 Date: January 21, 2021

Drawing Number:
M-3



LEVEL 3 AREA A
 SCALE: 1/8"=1'-0"

LEVEL 3 AREA B
 SCALE: 1/8"=1'-0"