GENERAL NOTES:

A. ALL WORK SHALL BE INSTALLED WITHIN STRICT COMPLIANCE OF THE ***2024 OHIO*** BUILDING CODE AND THE ***2024 OHIO*** MECHANICAL CODE.

B. DO NOT SCALE THE DRAWINGS. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET, FITTING, AND COMPONENT. DO NOT USE THE PLANS FOR THE EXACT LOCATION OF EQUIPMENT, FIXTURES, DUCTWORK, OR PIPING. ARCHITECTURAL ITEMS SUCH AS WALLS AND OVERALL DIMENSIONS OF BUILDING COMPONENTS ARE TO BE OBTAINED FROM ARCHITECTURAL DRAWINGS WHEN AVAILABLE.

C. ALL WORK IS TO BE ACCOMPLISHED WITHIN STRICT COMPLIANCE WITH THE PROJECT SCHEDULE AND THE PROJECT PHASING REQUIREMENTS.

D. PRIOR TO BID, THE MECHANICAL CONTRACTOR SHALL PERFORM A DETAILED WALK-THROUGH FIELD INSPECTION REVIEWING EXISTING CONDITIONS, STRUCTURE, DEVICE/EQUIPMENT LOCATIONS, AND SHALL MAKE ALL NECESSARY ALLOWANCES FOR ALL REQUIRED DEMOLITION AND NEW WORK PER CONSTRUCTION DOCUMENTATION.

E. WHERE CONFLICTS EXIST AMONG DRAWINGS, SPECIFICATIONS AND EQUIPMENT SCHEDULES, THE MORE STRINGENT SHALL APPLY.

F. CONTRACTOR SHALL CAREFULLY COORDINATE DUCTWORK AND PIPING PATHWAYS AND LOCATIONS WITH OTHER TRADES AND EXISTING CONDITIONS. ALL DUCTWORK AND PIPING SHALL BE INSTALLED AS TIGHT TO THE STRUCTURE AS POSSIBLE. CONNECTIONS TO THE SUPPLY AIR DEVICES MAY BE MADE WITH FLEXIBLE DUCTWORK. REFER TO THE DETAIL DRAWINGS FOR FLEXIBLE DUCT CONNECTIONS. ALL CONDITIONS SHALL BE FIELD VERIFIED BEFORE ORDERING EQUIPMENT OR FABRICATED MATERIAL.

G. CONTRACTOR SHALL PROVIDE ALL ROOF OR WALL NON-COMBUSTIBLE FRAMING AS REQUIRED TO INSTALL EQUIPMENT, PIPING AND DUCTWORK. COORDINATE NEW WORK WITH OTHER TRADES PRIOR TO BEGINNING CONSTRUCTION. NO WORK IS TO BE INSTALLED OR FABRICATED UNTIL AFTER THE PROJECT COORDINATION HAS BEEN APPROVED BY THE OWNER'S REPRESENTATIVE.

H. INSTALL A MANUAL BALANCE DAMPER IN ALL BRANCH DUCTS, INCLUDING ALL SUPPLY AND EXHAUST GRILLES.

I. INSTALL A SHUT OFF VALVE IN ALL PIPING BRANCHES.

J. ALL SQUARE THROATED ELBOWS SHALL HAVE AIRFOIL TURNING VANES AND SHALL ONLY BE USED WHEN RADIUS ELBOWS WILL NOT FIT.

K. ALL ROUND BRANCH DUCT CONNECTIONS SHALL BE MADE WITH BELLMOUTH FITTINGS OR ANGLED TEES. STRAIGHT SPIN-IN TAP COLLARS SHALL NOT BE ACCEPTABLE.

L. ALL DAMPERS AND CONTROL COMPONENTS THAT ARE LOCATED ABOVE CEILINGS SHALL BE INSTALLED WHERE COMPLETELY ACCESSIBLE. CONTRACTOR SHALL PROVIDE ACCESS PANELS AS REQUIRED.

M. ALL VALVES AND CONTROL COMPONENTS THAT ARE LOCATED ABOVE CEILINGS SHALL BE INSTALLED WHERE COMPLETELY ACCESSIBLE. CONTRACTOR SHALL PROVIDE ACCESS PANELS WHERE REQUIRED.

N. ALL NEW VARIABLE AIR VOLUME TERMINAL UNITS ARE TO BE INSTALLED WHERE COMPONENTS ARE COMPLETELY ACCESSIBLE. CONTRACTOR SHALL COORDINATE TO PROVIDE THE VAV UNIT WITH A CONTROL ENCLOSURE AND PIPE CONNECTIONS ON THE MOST ACCESSIBLE SIDE OF THE UNIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE CORRECT LEFT TO RIGHT HAND CONFIGURATION. REFER TO THE APPLICABLE DETAIL FOR ADDITIONAL REQUIREMENTS.

O. UNLESS OTHERWISE NOTED, ALL DUCTWORK SHALL BE FABRICATED FROM GALVANIZED STEEL METAL, INSTALLED IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS FOR GAUGE, REINFORCEMENT, AND SUPPORT; 2" W.G. PRESSURE CLASS FOR ALL DUCTWORK. ALL JOINTS AND SEAMS SHALL BE SEALED AND FASTENED AND MADE AIRTIGHT IN ACCORDANCE OF CHAPTER 13 OF THE ***OBC***

P. CONTRACTOR SHALL TAKE OVERALL CFM MEASUREMENTS ON ALL EXISTING DUCTWORK TO REMAIN PRIOR TO COMMENCING ANY WORK. INFORMATION GATHERED SHALL BE UTILIZED FOR REBALANCING SYSTEM. CONTRACTOR SHALL REBALANCE ALL SYSTEMS AT THE CONCLUSION OF THE PROJECT.

Q. CONTRACTOR TO VERIFY EXISTING SUPPLY AND RETURN PIPING SYSTEM, SIZE, AND PIPE TYPE PRIOR TO MAKING CONNECTIONS.

R. DUCTWORK CONNECTION TO DIFFUSER TO BE THE SAME SIZE AS THE DIFFUSER NECK SIZE.

S. DUCTWORK AND PIPING SHALL BE SUPPORTED INDEPENDENT OF CEILING, CONDUIT, PLUMBING, ETC.

T. IN AREAS WHERE CEILINGS ARE NOT BEING REPLACED, AND CONTRACTOR HAS WORK ABOVE CEILINGS, CONTRACTOR SHALL PATCH AND REPAIR CEILINGS TO MATCH EXISTING.

U. CONTRACTOR SHALL COORDINATE ALL REQUIRED WALL PENETRATIONS FOR DUCT AND PIPE WITH GENERAL CONTRACTOR PRIOR TO CONSTRUCTION OF NEW WALLS. ALL DUCT AND PIPE PENETRATIONS SHALL BE IN COMPLIANCE WITH THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED FOR DUCT AND PIPE PENETRATIONS THROUGH WALLS.

V. CONTRACTOR SHALL COORDINATE ALL REQUIRED ROOF OPENINGS FOR PIPING AND DUCTWORK WITH THE GENERAL CONTRACTOR.

W. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL STEEL FRAMING AS REQUIRED TO INSTALL ROOF MOUNTED EQUIPMENT CURBS.

X. CONTRACTOR SHALL INSTALL ALL PIPING, VALVES, INSULATION, SUPPORTS, ETC. AS INDICATED OR AS REQUIRED TO ALLOW OPERATION AND USE OF ALL AREAS AND ALL SYSTEMS REQUIRED FOR OCCUPIED USE DURING CONSTRUCTION.

Y. UL LISTED FIRESTOPPING SHALL BE USED AT ANY PENETRATION THROUGH A FIRE RATED ASSEMBLY. REFER TO ARCHITECTURAL CONSTRUCTION DOCUMENTS FOR LOCATIONS OF RATED ASSEMBLIES. CONTRACTOR SHALL USE UL LISTED FIRESTOP SYSTEM METHODS FOR "THROUGH-PENETRATION ASSEMBLIES." TYPICAL OF ALL FIRE RATED WALLS.

MECHANICAL LEGEND: (not all may apply)

GENERAL ABBREVIATIONS:

AAD	AUTOMATIC AIR DAMPER	CA	COMPRESSED AIR	EC	ELECTRICAL CONTRACTOR	GPH	GALLONS PER HOUR	MOCP	MAX OVERCURRENT PROTECTION	RCP	RECIRCULATION PUMP	TI	TEMPERATURE INDICATOR
AAV	AUTOMATIC AIR VENT	CAF	COMBUSTION AIR FAN	EDH	ELECTRIC DUCT HEATER	GPM	GALLONS PER MINUTE	MUW	MAKEUP WATER	RD	ROOF DRAIN	TMV	THERMOSTATIC MIXING VALVE
AB	AIR BLENDER	CCW	COUNTER CLOCKWISE	EF	EXHAUST FAN					REF	REFERENCE	TSP	TOTAL STATIC PRESSURE
AC*	AIR CONDITIONING UNIT	CD	CEILING DIFFUSER	EL	ELEVATION	HORIZ	HORIZONTAL	N/A	NOT APPLICABLE	REQ'D	REQUIRED	TSTAT	THERMOSTAT
ACC	AIR COOLED CONDENSER	CFM	CUBIC FEET PER MINUTE	ELEC	ELECTRIC/ELECTRICAL	HP	HORSEPOWER	NC	NORMALLY CLOSED / NOISE CRITERIA	REV	REVISE(D) (ION)	TXV	THERMAL EXPANSION VALVE
ACCU	AIR COOLED CONDENSING UNIT	CHV	CHECK VALVE	EG	EXHAUST GRILLE	HR	HOUR	NG	NATURAL GAS	RG	RETURN GRILLE	TYP	TYPICAL
AD	ACCESS DOOR	CH	CHILLER	EQ	EQUAL	HT	HEAT TRACE	NIC	NOT IN CONTRACT	RH	RELATIVE HUMIDITY	TW	TEMPERED WATER
ADD'L	ADDITIONAL	CHWP	CHILLED WATER PUMP	EQUIP	EQUIPMENT	HVAC	HEATING, VENTILATING AND A/C	NO	NORMALLY OPEN	RM	ROOM		
ADJ	ADJUSTABLE	CHWR	CHILLED WATER RETURN	EQUIV	EQUIVALENT	HWP	HOT WATER PUMP	NOM	NOMINAL	RPM	REVOLUTIONS PER MINUTE	UG,UDG	UNDERGROUND
AF	AIR FILTER	CHWS	CHILLED WATER SUPPLY	ER	EXHAUST REGISTER	HWR	HOT WATER RETURN	NTS	NOT TO SCALE	RR	RETURN REGISTER	UH	UNIT HEATER
AFF	ABOVE FINISHED FLOOR	CI	CAST IRON	ERV	ENERGY RECOVERY VENTILATOR	HWS	HOT WATER SUPPLY			RTU	ROOFTOP UNIT	UON	UNLESS OTHERWISE NOTED
AHU	AIR HANDLING UNIT	CO	CLEANOUT	ESP	EXTERNAL STATIC PRESSURE	HX	HEAT EXCHANGER	OA	OUTSIDE AIR	RV	RELIEF VENT	UNO	UNLESS NOTED OTHERWISE
ALT	ALTERNATE	COL	COLUMN	ET	EXPANSION TANK			OAH	OUTSIDE AIR HOOD				
ALUM	ALUMINUM	CONN	CONNECTION	EWT	ENTERING WATER TEMPERATURE	IA	INSTRUMENT AIR	OAL	OUTSIDE AIR LOUVER	S(A)	SUPPLY AIR	VA	VENTILATION AIR
AMP)	AMPERE	CU	CONDENSING UNIT	EXCL	EXCLUDING	IE	INVERT ELEVATION	OC	ON CENTER	SCHED	SCHEDULE	VAC	VACUUM
AP	ACCESS PANEL	CUH	CABINET UNIT HEATER	EXIST	EXISTING	IN	INCH	OCC	OCCUPANCY SENSOR	SCHWP	SECONDARY CHILLED WATER PUMP	VAV	VARIABLE AIR VOLUME
APPROX	APPROXIMATE	CU FT	CUBIC FEET	EXP	EXPANSION			OPG	OPENING	SD	SUCTION DIFFUSER	VD	VOLUME DAMPER
ARCH	ARCHITECTURAL)	CU IN	CUBIC INCH			KEC	KITCHEN EQUIPMENT CONTRACTOR	OS&Y	OUTSIDE SCREW AND YOKE	SECT	SECTION	VERT	VERTICAL
AUTO	AUTOMATIC	CW	CLOCKWISE	°F	DEGREE FAHRENHEIT	KH	KITCHEN HOOD	OZ	OUNCE	SF	SUPPLY FAN	VFD	VARIABLE FREQUENCY DRIVE
AVG	AVERAGE	CWP	CONDENSING WATER PUMP	FD	FLOOR DRAIN	KV	KITCHEN VENT			SG	SUPPLY GRILLE	VOL	VOLUME
		CWS	CONDENSING WATER SUPPLY	FF	FINISHED FLOOR	KW	KILOWATT	PC	PLUMBING CONTRACTOR	SHWP	SECONDARY HOT WATER PUMP	VRAC	VARIABLE REFRIGERANT FLOW TERMINAL UNIT
BAS	BUILDING AUTOMATION SYSTEM	CWR	CONDENSING WATER RETURN	FH	FIRE HYDRANT			PCHWP	PRIMARY CHILLED WATER PUMP	SHT	SHEET	VRF	VARIABLE REFRIGERANT FLOW
BBD	BALANCED BACKRAFT DAMPER			FL	FLOOR	LAT	LEAVING AIR TEMPERATURE	PERIM	PERIMETER	SL	SOUND LINING	VRHP	VARIABLE REFRIGERANT FLOW HEAT PUMP
BE	BOTTOM ELEVATION	DB	DRY BULB TEMPERATURE	FLA	FULL LOAD AMPS	LB	POUND	PF	PRE-FILTER	SM	SURFACE MOUNT		
BFP	BACKFLOW PREVENTER	DDC	DIRECT DIGITAL CONTROL	FOB	FLAT ON BOTTOM	LD	LINEAR DIFFUSER	PH	PHASE	SPEC	SPECIFICATIONS	W/	WITH
BHP	BRAKE HORSEPOWER	DET	DETAIL	FOR	FUEL OIL RETURN	LWT	LEAVING WATER TEMPERATURE	PHWP	PRIMARY HOT WATER PUMP	SPT	STATIC PRESSURE TRANSMITTER	W/O	WITHOUT
BLDG	BUILDING	DIA	DIAMETER	FOS	FUEL OIL SUPPLY			PI	PRESSURE INDICATOR	SQ FT/SF	SQUARE FOOT (FEET)	WB	WET BULB TEMPERATURE
BLR	BOILER	DN	DOWN	FOT	FLAT ON TOP	MAT'L	MATERIAL	PLBG	PLUMBING	SQ IN	SQUARE INCHES	WC	WATER COLUMN
BOD	BOTTOM OF DUCT	DPR	DAMPER	FPC	FIRE PROTECTION CONTRACTOR	MAV	MANUAL AIR VENT	PRESS	PRESSURE	SR	SUPPLY REGISTER	WG	WATER GAUGE
BOP	BOTTOM OF PIPE	DPT	DEW POINT TEMPERATURE	FPM	FEET PER MINUTE	MAX	MAXIMUM	PRV	PRESSURE REDUCING VALVE	SS	STAINLESS STEEL	WP	WEATHER-PROOF
BOT	BOTTOM	DR	DRAIN	FPVAV	FAN POWERED VAV	MBH	BTU'S PER HOUR, THOUSAND	PS	PRESSURE SWITCH	STD	STANDARD		
BP	BOOSTER PUMP	DWG	DRAWING	FS	FLOOR SINK	MC	MECHANICAL CONTRACTOR	PSD	PLENUM SLOT DIFFUSER	STL	STEEL	XP	EXPLOSION-PROOF
BTU	BRITISH THERMAL UNIT			FTR	FIN TUBE RADIATION	MCA	MINIMUM CIRCUIT AMPACITY	PSI	POUND PER SQUARE INCH	STRUCT	STRUCTURAL		
BTUH	BTUS PER HOUR	EA	EACH / EXHAUST AIR			MECH	MECHANICAL	PSIA	POUND PER SQUARE INCH ABSOLUTE				
BV	BALL VALVE	EAH	EXHAUST AIR HOOD	GA	GAUGE	MFG(R)	MANUFACTURER	PSIG	POUND PER SQUARE INCH GAUGE	TCC	TEMPERATURE CONTROL CONTRACTOR		
BWV	BACKWATER VALVE	EAL	EXHAUST AIR LOUVER	GALV	GALVANIZED	MIN	MINIMUM	PVC	POLYVINYL CHLORIDE	TCV	TEMPERATURE CONTROL VALVE		
		EAT	ENTERING AIR TEMPERATURE	GC	GENERAL CONTRACTOR	MISC	MISCELLANEOUS			TE	TOP ELEVATION		

MECHANICAL SYMBOLS:

BALANCING VALVE
A = AUTOMATIC
M = MANUAL CALIBRATED

CIRCUIT SENSOR (VENTURI)

GATE VALVE

BALANCING VALVE

BUTTERFLY VALVE

GLOBE VALVE

BALL VALVE

CHECK VALVE

PLUG VALVE

GAS COCK

TEMPERATURE REGULATING VALVE

PRESSURE RELIEF VALVE

RELIEF VALVE

STRAINER

3-WAY VALVE

END CAP

UNION

FLANGED CONNECTION

REDUCER

PRESSURE-TEMPERATURE TEST STATION (PTTS)

THERMOMETER

AIR VENT
(A = AUTOMATIC, M = MANUAL)

WATER FLOW TRANSMITTER

SUPPLY DIFFUSER

RETURN DIFFUSER

EXHAUST DIFFUSER

PLENUM SLOT DIFFUSER

DUCT TAP

AIR FLOW DIRECTION

OPPOSED BLADE DAMPER

PARALLEL BLADE DAMPER

FIRE DAMPER

SMOKE DAMPER

COMBINATION FIRE / SMOKE DAMPER

DUCT SMOKE DETECTOR

TEMPERATURE TRANSMITTER

BALANCED BACKDRAFT DAMPER

AUTOMATIC AIR DAMPER

MANUAL DAMPER

STATIC PRESSURE TRANSMITTER

CONTROL SYMBOL
(A = ANALOG, D = DIGITAL,
I = INPUT, O = OUTPUT)

EQUIP # T — THERMOSTAT

EQUIP # H — HUMIDISTAT

EQUIP # CO — CARBON MONOXIDE SENSOR

EQUIP # CO_2 — CARBON DIOXIDE SENSOR

FLEXIBLE DUCT

FLEXIBLE PIPE

POINT OF CONNECTION / REMOVAL

DUCT SLOPE UP IN THE DIRECTION OF AIR FLOW

DUCT SLOPE DOWN IN THE DIRECTION OF AIR FLOW

S-12"x8" — RECTANGULAR DUCT SIZE
(S = SUPPLY, R = RETURN,
E = EXHAUST, OA = OUTSIDE AIR

S-12"ø — ROUND DUCT SIZE
(S = SUPPLY, R = RETURN,
E = EXHAUST, OA = OUTSIDE AIR

xG#
CFM — AIR GRILLE
DESIGNATION, SIZE, AND CFM
(S = SUPPLY, R = RETURN,
E = EXHAUST, OA = OUTSIDE AIR)

INSULATED DUCTWORK
(DIMENSIONS INDICATED ARE SHEET METAL DIMENSIONS)

DUCT TURN UP / DOWN

PIPE ELBOW UP

PIPE ELBOW DOWN

PIPE TEE DOWN

NEW DUCT OR PIPING

EXISTING DUCT OR PIPING TO REMAIN

EXISTING DUCT OR PIPING TO BE REMOVED

CHWR - CHILLED WATER RETURN

HWR - HOT WATER RETURN

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STATE OF OHIO
ROBERT J. COURTIER
62185
REGISTERED
PROFESSIONAL ENGINEER

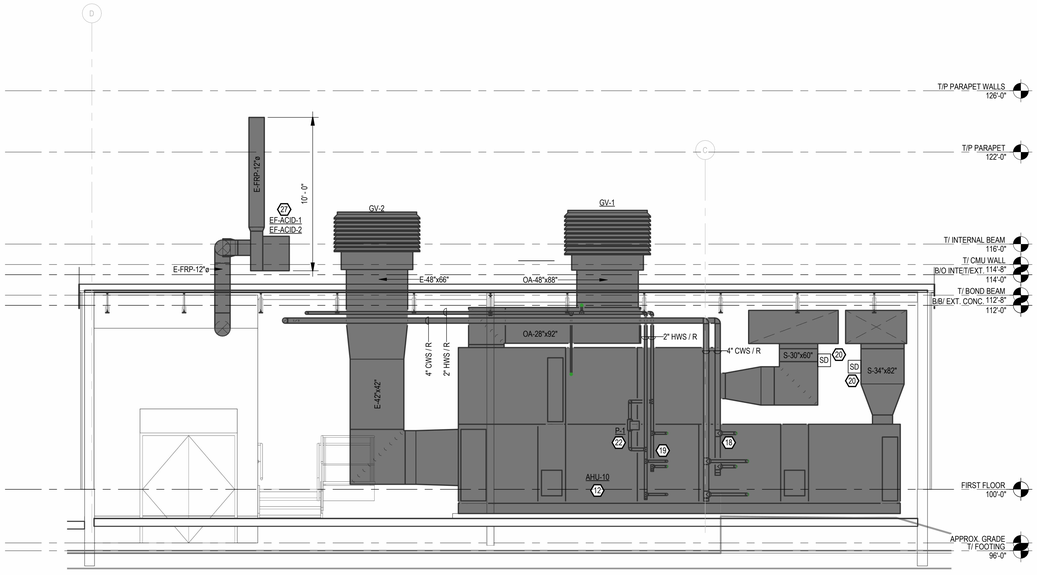
ISSUED		DATE
1	GMP/PERMIT RESPONSE	01/10/2025

SHEET TITLE
MECHANICAL LEGEND & ABBREVIATIONS

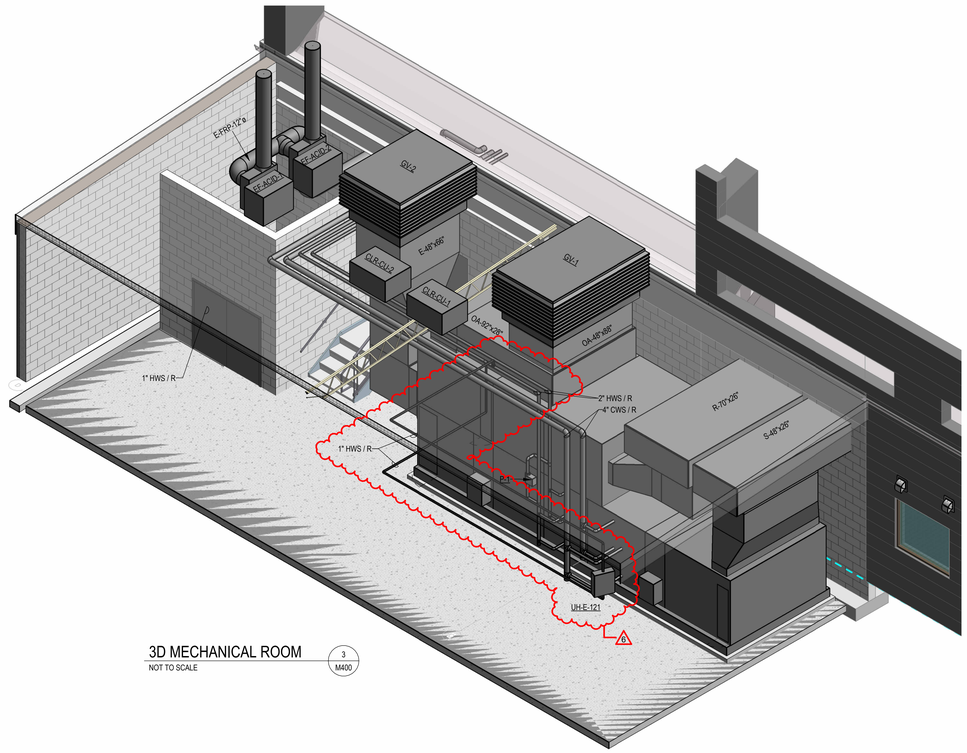
SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
M000

3/3/2025, 9:41:23 AM



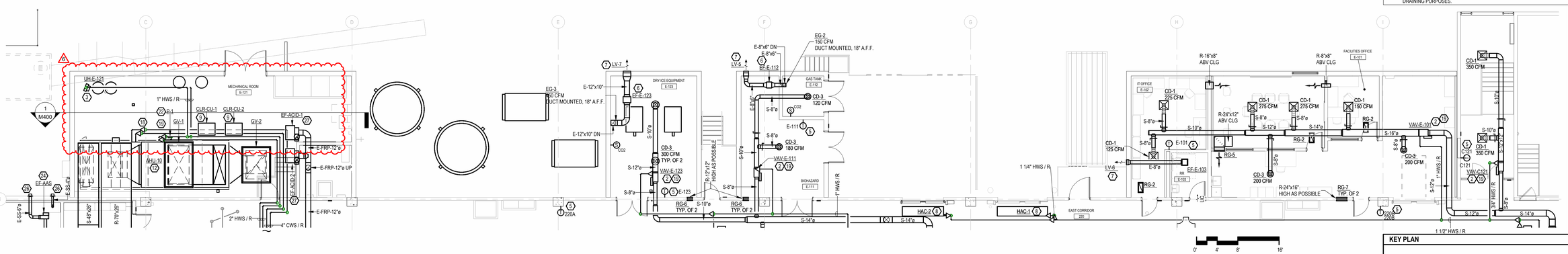
MECHANICAL ROOM SECTION
1/4" = 1'-0"
1 M400



3D MECHANICAL ROOM
NOT TO SCALE
3 M400

CODED NOTES (NOT ALL MAY APPLY):

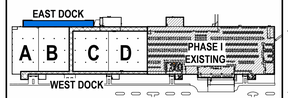
1. PROVIDE NEW VERTICAL VAV TERMINAL UNIT WITH HOT WATER REHEAT COIL SUSPENDED SECURELY FROM ADJACENT WALL. REFER TO SECTION VIEW FOR MORE DETAIL.
2. PROVIDE NEW VAV TERMINAL UNIT WITH HOT WATER REHEAT COIL SUSPENDED SECURELY FROM STRUCTURE ABOVE.
3. PROVIDE NEW HOT WATER UNIT HEATER SUSPENDED SECURELY FROM STRUCTURE ABOVE.
4. PROVIDE NEW HOT WATER CABINET UNIT HEATER IN PLACE OF EXISTING. CONTRACTOR TO COORDINATE ANY ADDITIONAL FRAMING AND FINISH REQUIREMENTS OF EXISTING OPENING TO ACCOMMODATE NEW CABINET UNIT HEATER SIZE.
5. NEW THERMOSTAT. MOUNT AT APPROXIMATELY 5 '-0" AFF. COORDINATE EXACT LOCATION IN FIELD. IF NOTATED "STACKED" MULTIPLE THERMOSTATS SHALL BE INSTALLED VERTICALLY IN AN ORDERLY FASHION.
6. PROVIDE NEW INLINE EXHAUST FAN SUSPENDED FROM STRUCTURE PER MANUFACTURERS INSTALLATION GUIDELINES. FAN MUST REMAIN ACCESSIBLE FOR SERVICING.
7. PROVIDE NEW WALL LOUVER. COORDINATE MOUNTING REQUIREMENTS WITH EXISTING WALL. REFER TO SCHEDULE FOR MORE INFORMATION. THE HVAC CONTRACTOR IS TO PROVIDE A 24 INCH DEEP EXTERNALLY INSULATED SHEET METAL PLENUM FOR THE LOUVER THAT IS SEALED WATER-TIGHT AND PITCHED ON THE BOTTOM FOR GRAVITY DRAINAGE BACK THROUGH THE LOUVER.
8. PROVIDE NEW HOT WATER HEATED AIR CURTAIN. COORDINATE INSTALLATION LOCATION WITH OVERHEAD DOOR ASSEMBLY AND INSTALL PER MANUFACTURERS GUIDELINES.
9. WALK IN COOLER EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO REFRIGERATION DRAWINGS OR SELECTION FOR INFORMATION. INSTALLED AND PROVIDED BY OTHERS. GC TO PROVIDE EQUIPMENT ROOF SUPPORT CURB PER DETAIL.
10. EXISTING VAV TERMINAL UNIT TO BE RELOCATED TO NEW LOCATION AS SHOWN IN DRAWING.
11. EXTEND AND CONNECT NEW DUCTWORK TO THE EXISTING DUCTWORK AS REQUIRED. EXISTING DUCT INSULATION IS TO BE REPAIRED AS NECESSARY AT THE POINT OF CONNECTION (IF REQUIRED).
12. PROVIDE NEW INTERIOR AIR HANDLING UNIT MOUNTED ON 6 " HOUSEKEEPING PAD (SEE DETAIL). REFER TO SCHEDULE AND DETAILS FOR MORE INFORMATION.
13. PROVIDE CEILING MOUNTED EXHAUST FAN. FAN TO RUN CONTINUOUSLY.
14. NEW AIR-COOLED CONDENSING UNIT LOCATED ON ROOF. INSTALL AT APPROXIMATE LOCATION AS SHOWN. THE CONDENSING UNIT IS TO BE INSTALLED ON EQUIPMENT SUPPORT CURBS (SEE DETAIL). THE UNIT IS TO BE RIGIDLY SECURED TO THE SUPPORT CURBS WHICH ARE TO BE RIGIDLY SECURED TO THE ROOF STRUCTURE. REFER TO MANUFACTURER 'S MANUALS FOR ADDITIONAL REQUIREMENTS.
15. MOUNT NEW WALL MOUNTED FAN COIL UNIT ABOVE DOOR. INSTALL ALL REFRIGERANT PIPING PER MANUFACTURER 'S GUIDELINES. ROUTE CONDENSATE PIPING TO NEARBY MOP SINK AND INDIRECTLY DISCHARGE.
16. SUPPLY DRUM LOUVER TO BE ROTATED ON DUCT AT 45° TOWARD THE FLOOR. TYPICAL IN FREEZER/COOLER AREAS.
17. PROVIDE 1"x1" WIRE MESH SCREEN OVER RETURN DUCT OPENING.
18. CONNECT CWS/R PIPING TO AHU COIL AS REQUIRED. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
19. CONNECT HWS/R PIPING TO COIL AS REQUIRED. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
20. PROVIDE DUCT MOUNTED SMOKE DETECTOR AND TIE INTO FIRE ALARM SYSTEM.
21. EXISTING THERMOSTAT TO BE RELOCATED TO THIS LOCATION. MOUNT AT APPROXIMATELY 5 '-0" AFF. COORDINATE EXACT LOCATION IN FIELD. IF NOTATED "STACKED" MULTIPLE THERMOSTATS SHALL BE INSTALLED VERTICALLY IN AN ORDERLY FASHION.
22. PROVIE COIL RUNAROUND INLINE PUMP FOR FREEZE PROTECTION. REFER TO DETAILS AND SCHEDULE FOR MORE INFORMATION.
23. STUB EXHAUST DUCT DOWN THROUGH CEILING IN THE APPROXIMATE LOCATION OF FUTURE LAB EQUIPMENT AND CAP AS REQUIRED FOR FUTURE CONNECTION.
24. PROVIDE NEW CENTRIFUGAL EXHAUST FAN BELOW ROOF SUPPORTED FROM STRUCTURE AS REQUIRED AND EXTEND DISCHARGE DUCTWORK OUT EXTERIOR WALL. INTERLOCK FAN OPERATION WITH SWITCH ON WALL NEAR SPECTROMETER. REFER TO ELECTRICAL DRAWINGS. FAN SHALL BE PROVIDED BY THE MANUFACTURER OF THE SPECTROMETER AS A FACTORY OPTION.
25. STUB EXHAUST DUCT DOWN THROUGH CEILING IN THE APPROXIMATE LOCATION OF FUTURE LAB EQUIPMENT, REDUCE TO 2-1/2" CONNECTION, AND CAP AS REQUIRED FOR FUTURE CONNECTION.
26. PROVIDE STAINLESS STEEL EXHAUST WALL VENT CAP WITH BACKDRAFT DAMPER.
27. PROVIDE NEW FIBERGLASS CENTRIFUGAL EXHAUST FAN LOCATED ON ROOF (REFER TO DETAIL). INSTALL AT APPROXIMATE LOCATION AS SHOWN AND MAINTAIN 10'-0" FROM THE EDGE OF ROOF. THE EXHAUST FAN IS TO BE INSTALLED ON EQUIPMENT SUPPORT CURBS (SEE DETAIL). THE UNIT IS TO BE RIGIDLY SECURED TO THE SUPPORT CURBS WHICH ARE TO BE RIGIDLY SECURED TO THE ROOF STRUCTURE. REFER TO MANUFACTURER'S MANUALS FOR ADDITIONAL REQUIREMENTS.
28. PROVIDE NEW BALL VALVE WITH CAP AND HOSE CONNECTION FOR DRAINING PURPOSES.



EAST DOCK OFFICE & EAST DOCK MECHANICAL PLAN
1/8" = 1'-0"
2 M400

0' 4' 8' 16'

KEY PLAN



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ANDREW J. ZOZIER
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REGISTERED
PROFESSIONAL ENGINEER

ISSUED	DATE
1 GMP/PERMIT RESPONSE	01/10/2025
2 ADDENDUM #1	01/24/2025
3 ADDENDUM #2	02/10/2025
4 BULLETIN #1	04/04/2025
5 BULLETIN #2	06/09/2025
6 BULLETIN #3	07/18/2025

SHEET TITLE
ENLARGED MECH PLAN - PROPOSED NEW DOCK

SCALE	COMM. No.
As indicated	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
M400

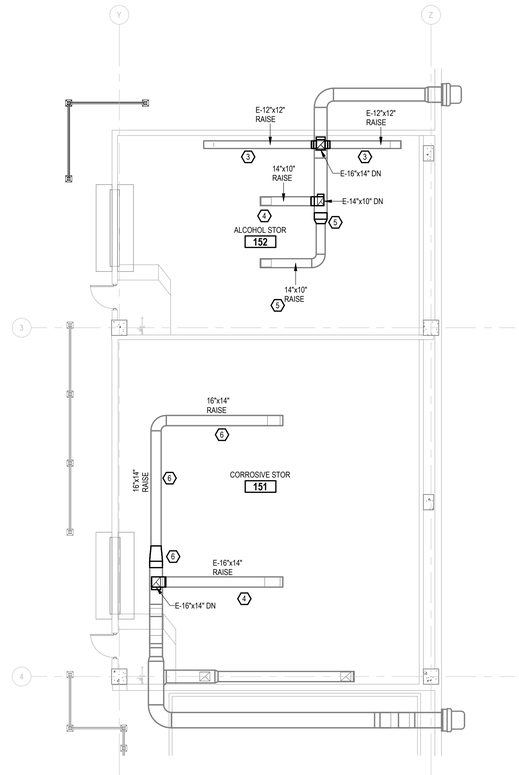
7/18/2025 11:38 AM

CODED NOTES:

1. PROVIDE NEW HOT WATER CABINET UNIT HEATER IN PLACE OF EXISTING. CONTRACTOR TO COORDINATE ANY ADDITIONAL FRAMING AND FINISH REQUIREMENTS OF EXISTING OPENING TO ACCOMMODATE NEW CABINET UNIT HEATER SIZE.
2. CONNECT HWS/R PIPING AS REQUIRED TO CABINET UNIT HEATER. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
3. RAISE PORTION OF EXISTING EXHAUST DUCT AS HIGH AS POSSIBLE. CONNECT INTO VERTICAL 14X16 DUCT, ROUTE DOWN, AND CONNECT TO TOP OF EXISTING DUCT MAIN.
4. RAISE PORTION OF EXISTING EXHAUST DUCT AS HIGH AS POSSIBLE AND CONNECT INTO TOP OF EXISTING MAIN. COORDINATE TO NOT OBSTRUCT LIGHTING .
5. DISCONNECT FROM E-20x12 AND RAISE E-14x10 AS HIGH AS POSSIBLE WITH OGEE FITTING
6. DISCONNECT FROM E-20x18 AND RAISE E-16x14 AS HIGH AS POSSIBLE WITH OGEE FITTING
7. NEW THERMOSTAT. MOUNT AT APPROXIMATELY 5 '-0" AFF. COORDINATE EXACT LOCATION IN FIELD. IF NOTATED "STACKED" MULTIPLE THERMOSTATS SHALL BE INSTALLED VERTICALLY IN AN ORDERLY FASHION.

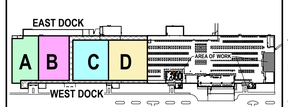
PHASE 1 MECHANICAL ALTERATIONS - W3 VESTIBULE
1/8" = 1'-0"

PHASE 1 MECHANICAL ALTERATIONS - W4 VESTIBULE
1/8" = 1'-0"



PHASE 1 MECHANICAL ALTERATIONS - HAZARDOUS STORAGE
1/8" = 1'-0"

KEY PLAN



elevar DESIGN GROUP
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Solvita
349 SOUTH MAIN STREET
DAYTON, OH 45402-2715
P: (937) 461-3220

SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2
950 FORRER BLVD
KETTERING, OHIO 45420
SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
ANDREW J. SOLLMEIER
62185
REGISTERED PROFESSIONAL ENGINEER

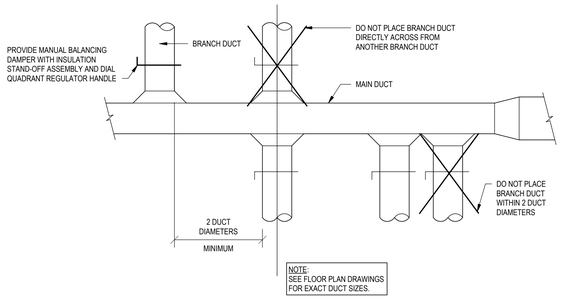
	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025

SHEET TITLE
ENLARGED MECHANICAL PLANS - PHASE 1 ALTERATIONS

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

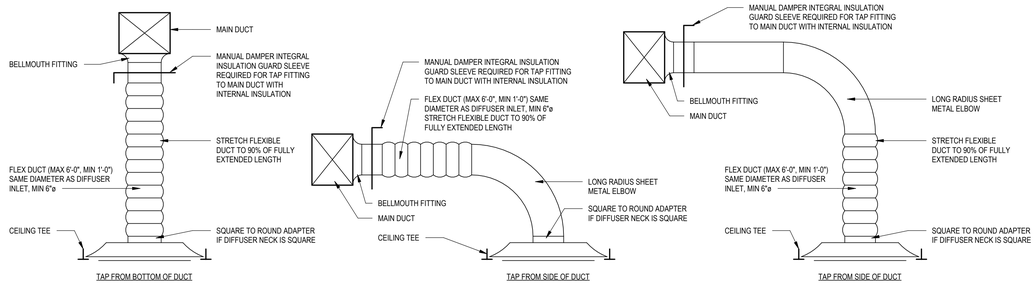
SHEET#
M401

3/3/2025 10:41:39 AM



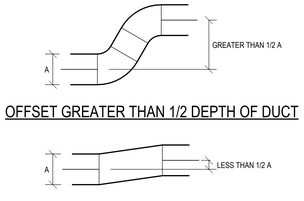
BRANCH DUCT CONNECTIONS

NOT TO SCALE — 1 / M500



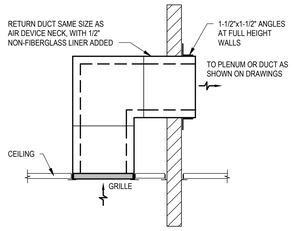
CEILING DIFFUSER CONNECTIONS

NOT TO SCALE — 2 / M500



DUCT OFFSET

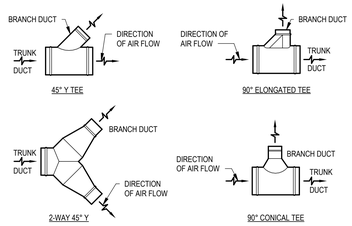
NOT TO SCALE — 3 / M500



NOTES:
1. SUPPORT SOUND ATTENUATING PLENUM FROM STRUCTURE ABOVE.
2. COORDINATE GRILLE LOCATION WITH STEEL, CEILING GRID, LIGHTS, SUPPLY DIFFUSRES, AND OTHER TRADES.
3. WHERE WALLS EXTEND TO THE DECK, SEAL WALL OPENING WITH 1-1/2" ANGLE FRAMING.

RETURN TRANSFER DUCT

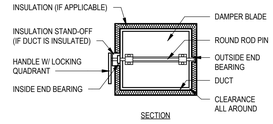
NOT TO SCALE — 4 / M500



NOTE: PROVIDE BALANCING DAMPER AT ALL BRANCH TAKE-OFFS

ROUND DUCT BRANCH TAKE-OFF

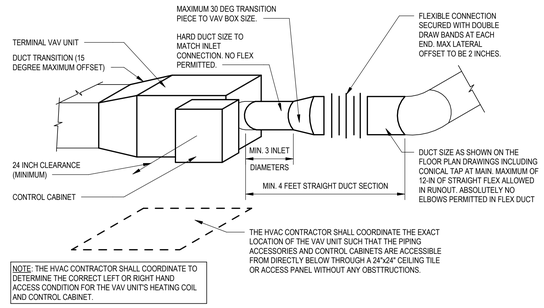
NOT TO SCALE — 5 / M500



NOTE: RECTANGULAR, SINGLE-BLADE DAMPER SHOWN. INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE AND ROUND DAMPERS.

VOLUME DAMPER

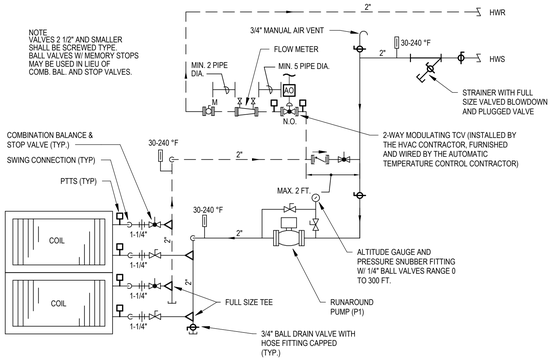
NOT TO SCALE — 6 / M500



NOTE: THE HVAC CONTRACTOR SHALL COORDINATE TO DETERMINE THE CORRECT LEFT OR RIGHT HAND ACCESS CONDITION FOR THE VAV UNIT'S HEATING COIL AND CONTROL CABINET.

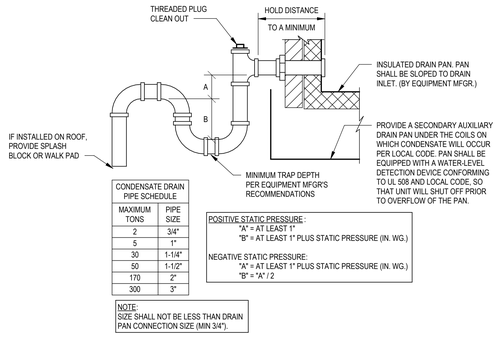
VAV UNIT INSTALLATION

NOT TO SCALE — 7 / M500



AIR HANDLING UNIT - PREHEAT HEATING COILS

NOT TO SCALE — 8 / M500



CONDENSATE DRAIN PIPE SCHEDULE	
MAXIMUM TONS	PIPE SIZE
2	3/4"
5	1"
30	1-1/4"
50	1-1/2"
170	2"
300	3"

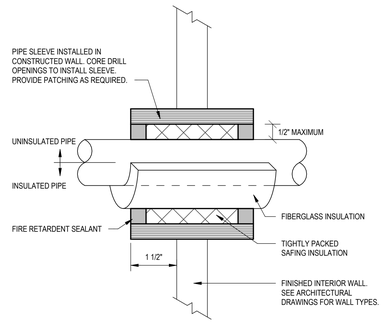
POSITIVE STATIC PRESSURE :
"A" = AT LEAST 1"
"B" = AT LEAST 1" PLUS STATIC PRESSURE (IN. WG.)

NEGATIVE STATIC PRESSURE:
"A" = AT LEAST 1" PLUS STATIC PRESSURE (IN. WG.)
"B" = "A" / 2

NOTE: SIZE SHALL NOT BE LESS THAN DRAIN PAN CONNECTION SIZE (MIN 3/4").

CONDENSATE DRAIN PIPE

NOT TO SCALE — 9 / M500



WALL PIPING PENETRATION

NOT TO SCALE — 10 / M500

PART 1 - VERTICAL DUCTS

MAXIMUM SIDE OF RECTANGULAR DUCT	METAL STRAP OR ANGLE BRACKET	MAXIMUM DIAMETER OF ROUND DUCTS	STRAPS
24"	1" x 1/8" (STRAP)[1]	10"	0.047" (NO. 18 GAGE) GALVANIZED STEEL 2" WIDE[1]
36"	1" x 1" x 1/8" ANGLE[1]	20"	0.058" (NO. 18 GAGE) GALVANIZED STEEL 2" WIDE[1]
48"	1 1/8" x 1 1/8" x 1/8" ANGLE[1]	40"	1/8" STEEL x 1 1/2"[1]
60"	1 1/2" x 1 1/2" x 1/8" ANGLE[1]	60"	1/8" STEEL x 2"[1]
OVER 60"	2" x 2" x 1/8" ANGLE[1]	OVER 60"	3/16" STEEL x 2"[1]

PART 2 - HORIZONTAL DUCTS

18"	1" x 18 GAGE[2]	10"	SAME GAGE AS GALVANIZED STEEL DUCT, 1" WIDE OR (NO. 18 GAGE GALVANIZED STEEL WIRE) ON 10' CENTERS
30"	1" x 18 GAGE[2]		
48"	1" x 1/8"[2]	20"	SAME GAGE AS GALVANIZED STEEL DUCT, 1" WIDE OR (NO. 8 GAGE GALVANIZED STEEL WIRE) TIED TO 1" GALVANIZED STEEL BAND AROUND DUCT ON 10' CENTERS
60"	1" x 1/8"[2]	40"	
80"	1" x 1/8"[2]	60"	SAME GAGE AS GALVANIZED STEEL DUCT, 1 1/2" WIDE ON 6' CENTERS
		OVER 60"	SAME GAGE AS GALVANIZED STEEL DUCT, 1 1/2" WIDE ON 4" CENTERS

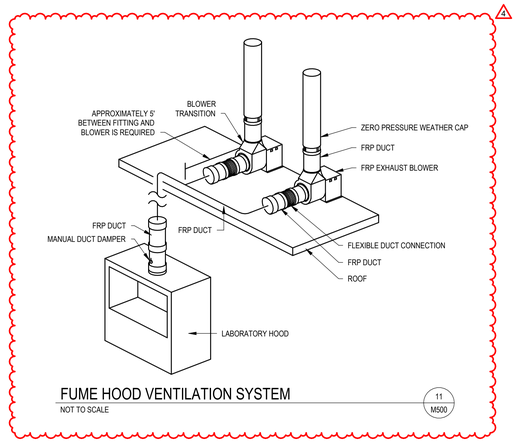
PART 3 - HORIZONTAL DUCTS: TRAPEZE - TYPE SUPPORTS

MAXIMUM DIAMETER OF ROUND DUCT OR SIDE OF RECTANGULAR DUCT	HORIZONTAL SUPPORT ANGLE[3]	HANGER
36"	1 1/2" x 1 1/2" x 1/8"	1/4" ROUND ROD OR 1" x 1" x 1/8" ANGLE
48"	2" x 2" x 1/8"	1/4" ROUND ROD OR 1" x 1" x 1/8" ANGLE
60"	2" x 2" x 1/8"	5/16" ROUND ROD OR 1" x 1" x 1/8" ANGLE
84"	2" x 2" x 1/8"	3/8" ROUND ROD OR 1" x 1" x 1/8" ANGLE

1. SPACED VERTICALLY NOT MORE THAN 12 FEET ON CENTERS
2. SPACED HORIZONTALLY NOT MORE THAN 10 FEET ON CENTERS
3. SPACED NOT MORE THAN 8 FEET ON CENTERS

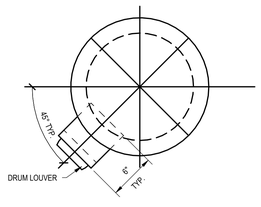
DUCT SUPPORT SCHEDULE

1/2" = 1'-0" — 15 / M500



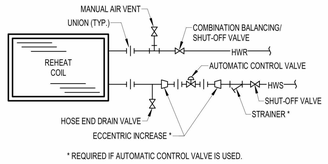
FUME HOOD VENTILATION SYSTEM

NOT TO SCALE — 11 / M500



OPEN AREA DUCT - TYPICAL SECTION

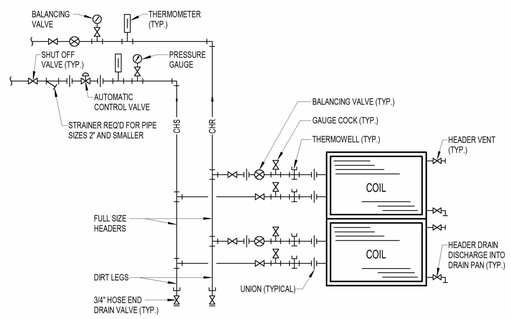
NOT TO SCALE — 12 / M500



* REQUIRED IF AUTOMATIC CONTROL VALVE IS USED.

VAV BOX REHEAT COIL PIPING DIAGRAM

NOT TO SCALE — 13 / M500



CHILLED WATER COIL PIPING DETAIL (MULTIPLE COIL 2-WAY VALVE)

NOT TO SCALE — 14 / M500

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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2
950 FORRER BLVD
KETTERING, OHIO 45420
SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO — ZACHARY J. GOZIER — 62185 — REGISTERED PROFESSIONAL ENGINEER

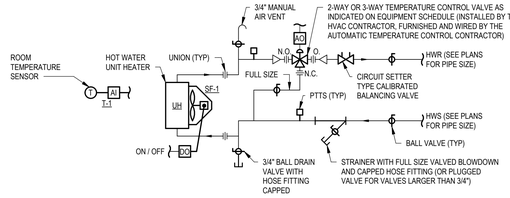
ISSUED		DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #2	06/09/2025

SHEET TITLE
MECHANICAL DETAILS

SCALE	COMM. No.
As indicated	E-12497
DRAWN BY ELEVAR	DATE 01/10/2025

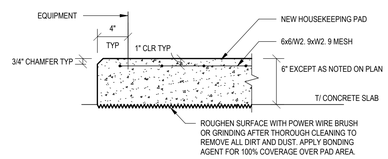
SHEET#
M500

ROOF MOUNTED AIR HOOD CURB — 4 / M501
3" = 1'-0"

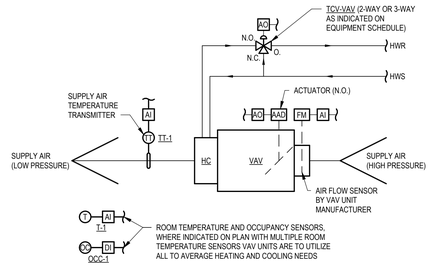


NOTES:
1. PROVIDE 8" OF CLEARANCE AT PTTS FOR INSERTION OF TEST DEVICES.
2. SHUT-OFF VALVES, STRAINERS, BALANCING VALVES, AND UNIONS/FLANGES SHALL BE FULL PIPE SIZE. PIPING TO COIL CONNECTIONS SHALL NOT BE SMALLER THAN COIL CONNECTION SIZE.
3. SEE FLOOR PLANS FOR SIZES OF BRANCH PIPING TO HEATING COILS.
4. THE COIL ISOLATION SHUT-OFF VALVES ARE TO BE SEPARATE VALVES, IN DEPENDENTLY INSTALLED, AND NOT INCLUDED IN COMBINATION VALVE PACKAGES.
5. CABINET HEATER CONTROLS AND PIPING ARRANGEMENTS SIMILAR.
6. AIR CURTAIN CONTROLS AND PIPING ARRANGEMENTS SIMILAR.

UNIT HEATER - HOT WATER — 3 / M501
1/2" = 1'-0"



INDOOR CONCRETE PAD — 1 / M501
NOT TO SCALE

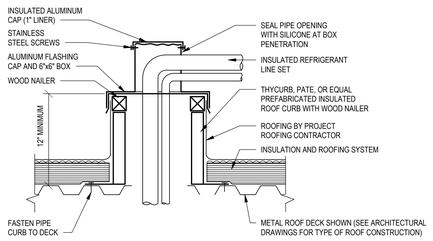


VAV UNITS - HOT WATER REHEAT — 2 / M501
NOT TO SCALE

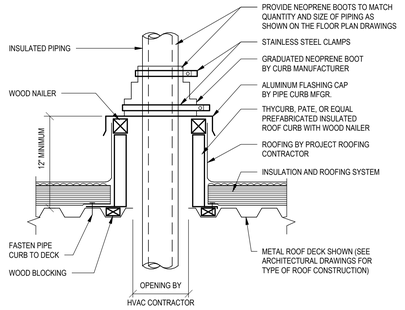
NOTE:
ATTACH EQUIPMENT WITH GALVANIZED LAG BOLTS SET IN ELASTOMERIC SEALANT.

ALL ROUND DUCTWORK AND PIPING ARE TO HAVE PREFABRICATED SADDLE SUPPORTS SECURED TO TOP OF EQUIPMENT SUPPORT.

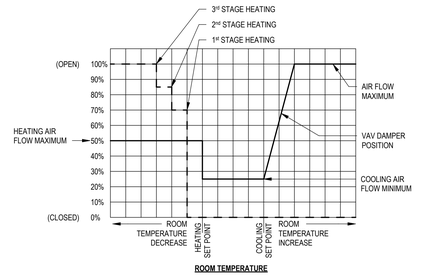
ROOF SUPPORT CURB — 5 / M501
2" = 1'-0"



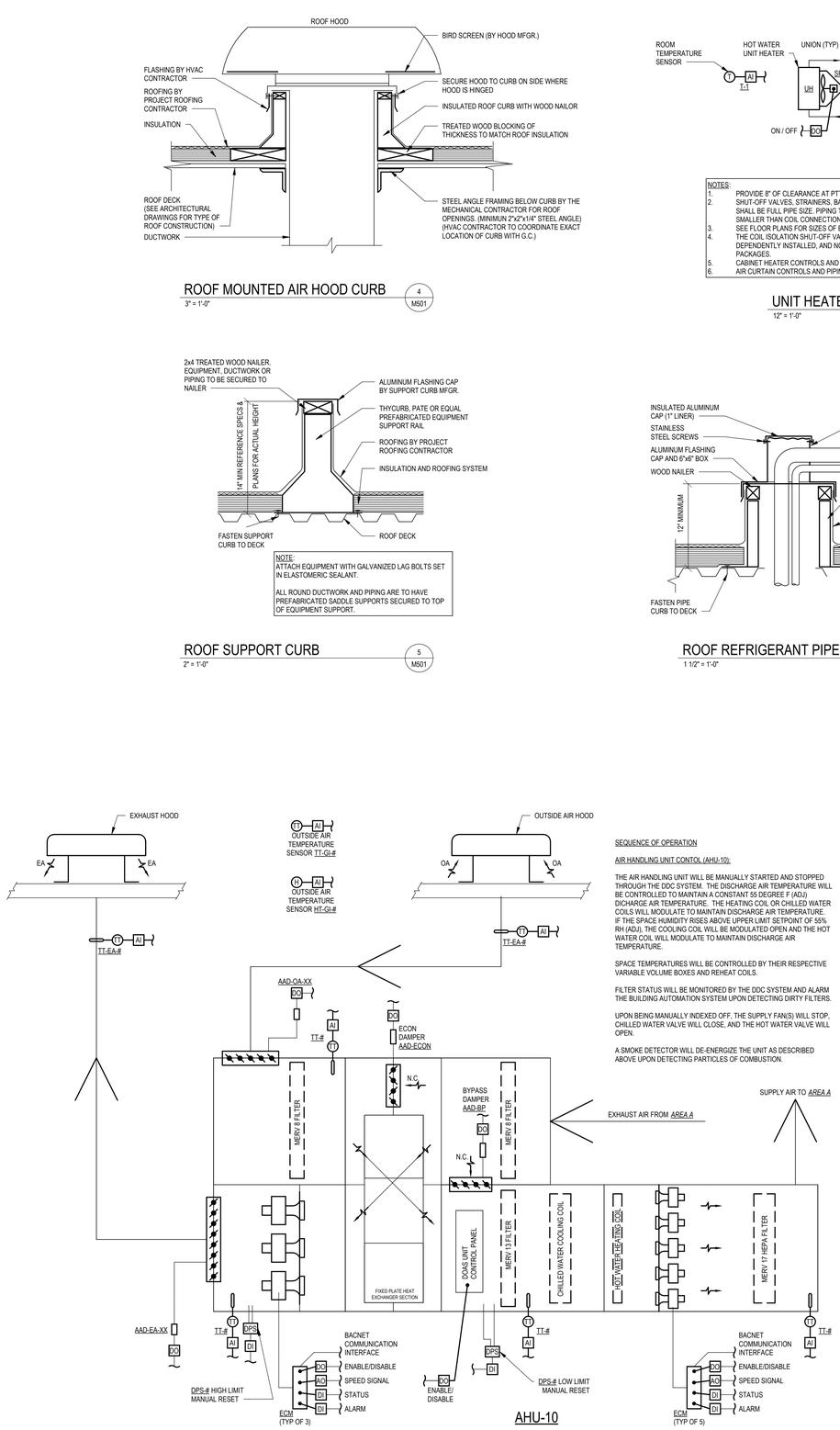
ROOF REFRIGERANT PIPE CURB — 6 / M501
1 1/2" = 1'-0"



ROOF PIPE CURB — 7 / M501
1 1/2" = 1'-0"



VAV UNIT CONTROL SEQUENCE DIAGRAM — 8 / M501
1/2" = 1'-0"



SEQUENCE OF OPERATION

AIR HANDLING UNIT CONTOL (AHU-10):

THE AIR HANDLING UNIT WILL BE MANUALLY STARTED AND STOPPED THROUGH THE DDC SYSTEM. THE DISCHARGE AIR TEMPERATURE WILL BE CONTROLLED TO MAINTAIN A CONSTANT 55 DEGREE F (ADJ) DICHARGE AIR TEMPERATURE. THE HEATING COIL OR CHILLED WATER COILS WILL MODULATE TO MAINTAIN DISCHARGE AIR TEMPERATURE. IF THE SPACE HUMIDITY RISES ABOVE UPPER LIMIT SETPOINT OF 55% RH (ADJ), THE COOLING COIL WILL BE MODULATED OPEN AND THE HOT WATER COIL WILL MODULATE TO MAINTAIN DISCHARGE AIR TEMPERATURE.

SPACE TEMPERATURES WILL BE CONTROLLED BY THEIR RESPECTIVE VARIABLE VOLUME BOXES AND REHEAT COILS.

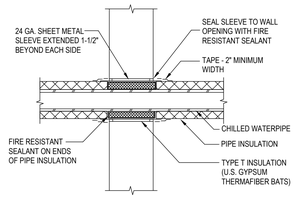
FILTER STATUS WILL BE MONITORED BY THE DDC SYSTEM AND ALARM THE BUILDING AUTOMATION SYSTEM UPON DETECTING DIRTY FILTERS.

UPON BEING MANUALLY INDEXED OFF, THE SUPPLY FAN(S) WILL STOP. CHILLED WATER VALVE WILL CLOSE, AND THE HOT WATER VALVE WILL OPEN.

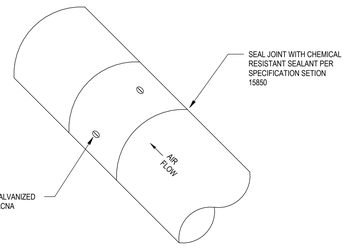
A SMOKE DETECTOR WILL DE-ENERGIZE THE UNIT AS DESCRIBED ABOVE UPON DETECTING PARTICLES OF COMBUSTION.

AHU-10

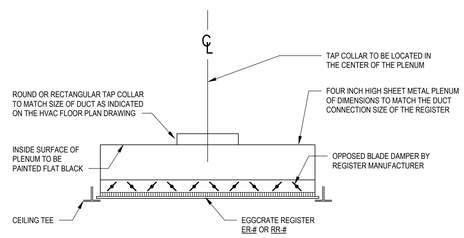
DEDICATED OUTDOOR AIR UNIT — 11 / M501
NOT TO SCALE



INSULATED PIPE THROUGH FIRE RATED WALL — 15 / M501
NOT TO SCALE

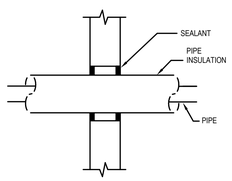


FUME EXHAUST JOINT DETAIL — 13 / M501
NOT TO SCALE

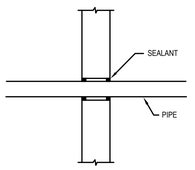


SIDE VIEW

EXHAUST AND RETURN REGISTER PLENUM — 9 / M501
1/2" = 1'-0"

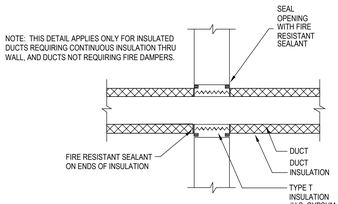


A WITH PIPE INSULATION

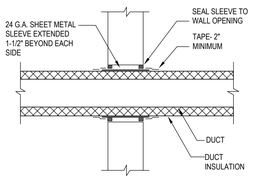


B WITHOUT PIPE INSULATION

PIPE THROUGH NON-RATED INTERIOR WALL — 12 / M501
1/2" = 1'-0"

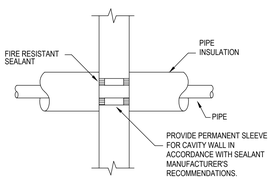


FIRE RATED WALL

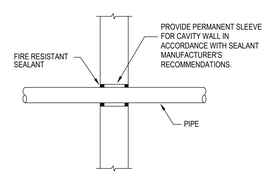


NON-RATED WALL

DUCT PENETRATION THROUGH INTERIOR WALL — 14 / M501
NOT TO SCALE



A WITH PIPE INSULATION
HOT WATER OR STEAM



B WITHOUT PIPE INSULATION

PIPE THROUGH FIRE RATED INTERIOR WALL — 10 / M501
NOT TO SCALE

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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
ROZIER
62185
REGISTERED
PROFESSIONAL ENGINEER

ISSUED		DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025

SHEET TITLE
MECHANICAL DETAILS

SCALE	COMM. No.
As indicated	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
M501

3/3/2025 10:41:5 AM

DEDICATED OUTSIDE AIR SYSTEM SCHEDULE

UNIT	AREA SERVED	DUCTWORK CONFIGURATION	BASIS OF DESIGN		WEIGHT (LB)	ADDITIONAL ACCESSORIES
			MFGR	MODEL NO.		
AHU-10	MICRO LAB		DAIKIN	VISION	11,519	HEPA MERV 17 FILTER AT SUPPLY, DISCONNECT SWITCH AT EACH FAN SECTION,

DOAS FAN ARRAY

AIR STREAM	TOTAL AIR FLOW (CFM)	NUMBER OF FANS	AIR FLOW PER FAN (CFM)	SPEED (RPM)	TSP (IN-WC)	ESP (IN-WC)	ELECTRICAL DATA SINGLE CONNECTION		
							V / PH	MCA	MOCP
RETURN	15,740	3	5,247	1,530	3.64	1.00	460 / 3	22.17 A	25 A
SUPPLY	15,250	5	3,050	3,330	7.62	2.00	460 / 3	41.66 A	50 A

DOAS ENERGY RECOVERY DEVICE

ENERGY RECOVERY DEVICE TYPE	AIR STREAM	DEVICE APD (IN-WC)	AIR FLOW (CFM)	SUMMER					WINTER					
				EAT (°F) DB	EAT (°F) WB	LAT (°F) DB	LAT (°F) WB	EFFECTIVENESS	TOTAL ENERGY RECOVERED	EAT (°F) DB	EAT (°F) WB	LAT (°F) DB	LAT (°F) WB	EFFECTIVENESS	TOTAL ENERGY RECOVERED
CORE	SUPPLY	0.69	15,250	90.0	77.0	80.2	69.6	53.6%	457,063 Btu/h	0.0	-1.0	45.9	38.1	61.3%	928,628 Btu/h
	EXHAUST	1.49	15,740	75.0	62.0	84.8	70.7			70.0	55.0	24.1	24.1		

DOAS HEATING / COOLING COILS

COIL TYPE	AIR TEMPERATURES (°F) ENTERING DB	ENTERING WB	LEAVING DB	LEAVING WB	APD (IN-WC)	FACE VELOCITY (FPM)	CAPACITY TOTAL (BTUH)	CAPACITY SENSIBLE (BTUH)	# COILS	# ROWS	FLUID DATA TYPE	FLOW (GPM)	TEMPS (°F) ENT	TEMPS (°F) LEAV	WPD (FT-WC)	ADDITIONAL ACCESSORIES
CHILLED WATER	80.2	69.6	52.2	52.0	1.00	484	825,610	459,564	2	8	WATER	136.6	45	5701	16.7	
HOT WATER	46.0		70.7		0.13	500	405,716		2	1	WATER	19.7	180	138.8	1.3	

EXHAUST FAN SCHEDULE

FAN SHALL BE ORDERED AS ACCESSORY TO LAB EQUIPMENT IT SERVES.

TAG	AREA SERVED	TYPE	CFM	ESP	WEIGHT	RPM	WATTS	FLA	VOLTS / PHASE	MODEL	MANUFACTURER	NOTES
EF-1	207, 208 RESTROOM	INLINE	150 CFM	0.500 in-wg	30 lb	1459	44	1.5 A	115/1/60	CSP-A390-VG	GREENHECK	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-2	211, 212 RESTROOM	INLINE	150 CFM	0.500 in-wg	30 lb	1459	44	1.5 A	115/1/60	CSP-A390-VG	GREENHECK	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-3	213, 214 RESTROOM	INLINE	200 CFM	0.500 in-wg	30 lb	742	53	1.5 A	115/1/60	CSP-A390-VG	GREENHECK	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-205	205 RESTROOM	CEILING	100 CFM	0.500 in-wg	17 lb	950	19.4	0.2 A	115/1/60	SP-A110	GREENHECK	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-AAS	AGILENT AA SPECTROMETER	CENTRIFUGAL	200 CFM	0.630 in-wg	20 lb	1300	51	0.7 A	115/1/60	1810000200	AGILENT	INTERLOCK WITH SWITCH ON WALL NEAR SPECTROMETER
EF-ACID-1	115 CALCIUM RESIDUAL	ROOF	769 CFM	0.750 in-wg	242 lb	1750	966	2.1 A	460/3/60	A42-0-12--F100FG FQHT	HARTZELL	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-ACID-2	115 CALCIUM RESIDUAL	ROOF	769 CFM	0.750 in-wg	242 lb	1750	966	2.1 A	460/3/60	A42-0-12--F100FG FQHT	HARTZELL	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-E-103	E-103 RESTROOM	CEILING	100 CFM	0.500 in-wg	17 lb	950	19.4	0.2 A	115/1/60	SP-A110	GREENHECK	FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS
EF-E-112	E-112 GAS TANK	INLINE	150 CFM	0.500 in-wg	30 lb	1459	44	1.5 A	115/1/60	CSP-A390-VG	GREENHECK	INTERLOCK WITH CO2 SENSOR FOR ACTIVATION
EF-E-123	E-123 DRY ICE EQUIPMENT	INLINE	450 CFM	0.500 in-wg	30 lb	1329	428	1.7 A	115/1/60	CSP-A690-VG	GREENHECK	INTERLOCK WITH CO2 SENSOR FOR ACTIVATION

LOUVER SCHEDULE

NOTE: LOUVERS AND BRICK VENTS ARE TO BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR. THIS SCHEDULE IS SHOWN FOR REFERENCE ONLY TO DOCUMENT THE MINIMUM PERFORMANCE REQUIREMENTS.

DESIGNATION	FUNCTION	MOUNTING	BLADE TYPE	DIMENSIONS W	DIMENSIONS H	DIMENSIONS D	AREA	FREE AREA	DESIGN AIR FLOW	DESIGN VELOCITY	PRESSURE DROP AT DESIGN AIR FLOW (IN WC)	FINISH	BASIS OF DESIGN MFGR.	BASIS OF DESIGN MODEL NO.	ACCESSORIES	COMMENTS
LV-1	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	12"	12"	4"	1 SF	0.3 SF	150 CFM	500 FPM	0.03	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION
LV-2	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	12"	12"	4"	1 SF	0.3 SF	100 CFM	333 FPM	0.02	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION
LV-3	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	12"	12"	4"	1 SF	0.3 SF	225 CFM	750 FPM	0.08	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION
LV-4	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	12"	12"	4"	1 SF	0.3 SF	100 CFM	333 FPM	0.02	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION
LV-5	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	12"	12"	4"	1 SF	0.3 SF	75 CFM	250 FPM	0.01	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION
LV-6	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	12"	12"	4"	1 SF	0.3 SF	100 CFM	333 FPM	0.02	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION
LV-7	EXHAUST	CHANNEL FRAME	EXTRUDED 45 DEGREE STATIONARY DRAINABLE	18"	18"	4"	2.3 SF	0.3 SF	450 CFM	1500 FPM	0.31	BAKED ENAMEL - COLOR BY OWNER	POTTORFF	EDD-445		ALUMINUM CONSTRUCTION

UNIT HEATER SCHEDULE - HOT WATER

DESIGNATION	UNIT TYPE	AIR FLOW CFM	EAT (Deg. F)	EWT (Deg. F)	LAT (Deg. F)	LWT (Deg. F)	CAPACITY DATA BTU / HR	CAPACITY DATA GPM	WPD (IN WG)	ELECTRICAL DATA VOLTS / PH / HZ	ELECTRICAL DATA FLA	ELECTRICAL DATA HP	BASIS OF DESIGN MFGR.	BASIS OF DESIGN MODEL NO.	ACCESSORIES
CUH-1	RECESSED	500	60	140	127.0	114.6	36,301	2.86	1.3	115/1/60	1.05	.05	MODINE	CW006	
CUH-2	RECESSED	500	60	140	127.0	114.6	36,301	2.86	1.3	115/1/60	1.05	.05	MODINE	CW006	
CUH-3	RECESSED	500	60	140	127.0	114.6	36,301	2.86	1.3	115/1/60	1.05	.05	MODINE	CW006	
CUH-4	RECESSED	500	60	140	127.0	114.6	36,301	2.86	1.3	115/1/60	1.05	.05	MODINE	CW006	
CUH-5	RECESSED	500	60	140	127.0	114.6	36,301	2.86	1.3	115/1/60	1.05	.05	MODINE	CW006	
UH-202E	HORIZONTAL	395	60	200	90.3	180.5	13,050	1.3	0.06	115 / 1 / 60	0.8	16 WATT	STERLING	HS-18	FAN GUARD, HORIZONTAL DISCHARGE LOUVER
UH-E-121	HORIZONTAL	900	60	200	104.4	180.7	43,600	4.4	2.04	115 / 1 / 60	1.4	1/20	STERLING	HS-60	FAN GUARD, HORIZONTAL DISCHARGE LOUVER

SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE

DESIGNATION	AREA SERVED	CONFIGURATION	WEIGHT	RATED AIR FLOW (CFM)	NOMINAL COOLING CAPACITY (BTU/H)	NOMINAL HEATING CAPACITY (BTU/H)	TOTAL COOLING CAPACITY (BTU/H)	HEATING CAPACITY ENTERING AIR TEMP	HEATING CAPACITY TOTAL (BTU/H)	ESTIMATED COOLING COIL LAT	ESTIMATED HEATING COIL LAT	ELECTRICAL DATA V / PH	ELECTRICAL DATA MCA / MOCP	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL #	ACCESSORIES
FCU-1	IDF 206	WALL MOUNTED	46 lb	635	24,000	29,000	14,557.6	77	12,638.3	51.7	110.9	208/1/60	1	MITSUBISHI	PKA-A24KA7	
FCU-2	IDF 218	WALL MOUNTED	33.1 lb	335	12,000	14,000	12,000	70	12,638.3	51.7	106.3	208/1/60	1	MITSUBISHI	PKA-A12HA7	

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

DESIGNATION	UNIT SERVED	WEIGHT	NOMINAL COOLING CAPACITY	NOMINAL HEATING CAPACITY	DESIGN COOLING OUTDOOR TEMP	DESIGN HEATING OUTDOOR TEMP	TOTAL COOLING CAPACITY	TOTAL HEATING CAPACITY	ELECTRICAL DATA V / PH / HZ	ELECTRICAL DATA MCA	ELECTRICAL DATA MOCP	SEER	EER	HEATING COP	BASIS OF DESIGN MFG	BASIS OF DESIGN MODEL #	ACCESSORIES
CU-1	FCU-1	210 lb	24000.0 Btu/h	24000.0 Btu/h	95	5	24,000 Btu/h	26000.0 Btu/h	208/1/60	17 A	25 A	19.5	12.65	1.9	MITSUBISHI	PUZ-HA2NHA1	
CU-2	FCU-2	98 lb	12000.0 Btu/h	12000.0 Btu/h	95	5	12,000 Btu/h	14000.0 Btu/h	208/1/60	11 A	15 A	21.1	13	2.31	MITSUBISHI	PUZ-A12NKA7	

AIR CURTAIN SCHEDULE - HOT WATER

DESIGNATION	UNIT TYPE	AIR FLOW CFM	EAT (Deg. F)	LAT (Deg. F)	EWT (Deg. F)	LWT (Deg. F)	CAPACITY DATA BTU / HR	CAPACITY DATA GPM	ELECTRICAL DATA VOLTS / PH / HZ	ELECTRICAL DATA AMPERAGE	ELECTRICAL DATA HP X MOTOR QTY	BASIS OF DESIGN MFGR.	BASIS OF DESIGN MODEL NO.	WEIGHT	Comments and Accessories
HAC-1	HOT WATER HEATED DOOR UNIT	4757	65	100.7	180	140.0	185	10.38	460/3/60	6	3/4 X 3	POWERED AIRE	ETA-3-120HW	406.00 lbf	NON-FUSED DISCONNECT SWITCH, SM226 MAGNETIC DOOR SWITCH,HOA SWITCH PANEL
HAC-2	HOT WATER HEATED DOOR UNIT	3514	65	101.2	180	140.0	139	7.44	460/3/60	4	3/4 X 2	POWERED AIRE	ETA-2-96HW	306.00 lbf	NON-FUSED DISCONNECT SWITCH, SM226 MAGNETIC DOOR SWITCH,HOA SWITCH PANEL
HAC-3	HOT WATER HEATED DOOR UNIT	1757	65	101.5	180	140.0	70	3.8	460/3/60	2	3/4 X 1	POWERED AIRE	ETA-2-48HW	145.00 lbf	NON-FUSED DISCONNECT SWITCH, SM226 MAGNETIC DOOR SWITCH,HOA SWITCH PANEL
HAC-4	HOT WATER HEATED DOOR UNIT	1757	65	101.5	180	140.0	70	3.8	460/3/60	2	3/4 X 1	POWERED AIRE	ETA-2-48HW	145.00 lbf	NON-FUSED DISCONNECT SWITCH, SM226 MAGNETIC DOOR SWITCH,HOA SWITCH PANEL

AIR HOOD SCHEDULE

DESIGNATION	FUNCTION	THROAT / ROOF OPENING DIMENSIONS LENGTH	THROAT / ROOF OPENING DIMENSIONS WIDTH	CURB DIMENSIONS LENGTH	CURB DIMENSIONS WIDTH	HOUSING HEIGHT (NOT INCLUDING 12" CURB)	THROAT FREE AREA	AIR FLOW	NECK VELOCITY	SP DROP (IN-WC)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NO.	WEIGHT W/O ACCESSORIES	ACCESSORIES	NOTES
GV-1	INTAKE	88"	48"	96"	56"	35"	29.33 SF	15000 CFM	511 FPM	0.047	GREENHECK	WIH-48x88	298.00 lbf	BIRD SCREEN, 12" ROOF CURB	
GV-2	EXHAUST	66"	48"	74"	56"	31"	22 SF	15000 CFM	682 FPM	0.071	GREENHECK	WRH-48x66	243.00 lbf	BIRD SCREEN, 12" ROOF CURB	

AIR DEVICE SCHEDULE

DESIGNATION	TYPE	SIZE	CONSTRUCTION MATERIAL	FINISH COLOR	BASIS OF DESIGN MFGR.	BASIS OF DESIGN MODEL NO.	ACCESSORIES	COMMENTS
CD-1	SQUARE PLAQUE FACE	24 X 24	STEEL	WHITE	TITUS	OMNI		
CD-2	SQUARE LAMINAR FLOW	24 X 24	STEEL	WHITE	TITUS	TLF		
CD-3	ADJUSTABLE ROUND CONE	SEE PLAN	STEEL	WHITE	TITUS	TMRA		<varies>
SG-1	DOUBLE DEFLECTION GRILLE	12 X 8	ALUMINIUM	WHITE	TITUS	S300	AIR SCOOP	SPIRAL DUCT MOUNTED EXPOSED
SR-1	ADJUSTABLE DRUM SUPPLY LOUVER	18 X 4	ALUMINIUM	WHITE	TITUS	SDL	AIR SCOOP	SPIRAL DUCT MOUNTED EXPOSED
SR-2	ADJUSTABLE DRUM SUPPLY LOUVER	30 X 4	ALUMINIUM	WHITE	TITUS	SDL	AIR SCOOP	SPIRAL DUCT MOUNTED EXPOSED
SR-3	ADJUSTABLE DRUM SUPPLY LOUVER	36 X 4	ALUMINIUM	WHITE	TITUS	SDL	AIR SCOOP	SPIRAL DUCT MOUNTED EXPOSED
RG-1	SIGHT-PROOF EGGCRATE GRILLE	24 X 24	STEEL	WHITE	TITUS	45		
RG-2	SIGHT-PROOF EGGCRATE GRILLE	24 X 12	STEEL	WHITE	TITUS	45		
RG-3	SIGHT-PROOF EGGCRATE GRILLE	24 X 6	STEEL	WHITE	TITUS	45		
RG-4	35° DEFLECTION GRILLE	30 X 16	STEEL	WHITE	TITUS	350		WALL MOUNTED
RG-5	35° DEFLECTION GRILLE	24 X 12	STEEL	WHITE	TITUS	350		WALL MOUNTED
RG-6	35° DEFLECTION GRILLE	12 X 12	STEEL	WHITE	TITUS	350		<varies>
RG-7	35° DEFLECTION GRILLE	24 X 16	STEEL	WHITE	TITUS	350		<varies>
EG-1	SIGHT-PROOF EGGCRATE GRILLE	12 X 12	STEEL	WHITE	TITUS	45		
EG-2	LOUVERED BLADE - DOUBLE DEFLECTION	6 X 6	STEEL	WHITE	TITUS	350RS		DUCT MOUNTED, 18" A.F.F.
EG-3	LOUVERED BLADE - DOUBLE DEFLECTION	12 X10	STEEL	WHITE	TITUS	350RS		DUCT MOUNTED, 18" A.F.F.

PUMP SCHEDULE

DESIGNATION	SERVES	TYPE	FLUID / TEMP	FLOW (GPM)	TDH (FT)	RPM	ELECTRICAL DATA V / PH / HZ	ELECTRICAL DATA FLA	ELECTRICAL DATA HP	CONNECTION SIZE INLET	BASIS OF DESIGN MFG	BASIS OF DESIGN MODEL	ACCESSORIES
P-1	AHU-10 - HOT WATER COIL	COIL RUNAROUND PUMP	WATER / 180°F	20	15	3,300	115/1/60	2 A	1/6	1 1/2"	BELL & GOSSETT	PL-45	

VAV SCHEDULE - HOT WATER

DESIGNATION	AREA SERVED ROOM NUMBER(S)	INLET SIZE	MAX. COOL CFM	HEATING CFM	MIN. COOL CFM	CAPACITY	COIL TYPE	HEATING FLUID	FLOW	EAT (°F)	LAT (°F)	EWT (°F)	LWT (°F)	TCV TYPE	COMMENTS
(PH1)VAV-130A	EXISTING AREA	10"	1050 CFM	525 CFM	263 CFM	22,000 Btu/h	HOT WATER	WATER	2.2 GPM	55	93.9	180	159.5	2-WAY	
(PH1)VAV-130B	EXISTING AREA	10"	1050 CFM	525 CFM	263 CFM	22,000 Btu/h	HOT WATER	WATER	2.2 GPM	55	93.9	180	159.5	2-WAY	
(PH1)VAV-130C	EXISTING AREA	10"	1050 CFM	525 CFM	263 CFM	22,000 Btu/h	HOT WATER	WATER	2.2 GPM	55	93.9	180	159.5	2-WAY	
(PH1)VAV-130D	EXISTING AREA	10"	1050 CFM	525 CFM	263 CFM	22,000 Btu/h	HOT WATER	WATER	2.2 GPM	55	93.9	180	159.5	2-WAY	
(PH1)VAV-130E	EXISTING AREA	10"	1050 CFM	525 CFM	263 CFM	22,000 Btu/h	HOT WATER	WATER	2.2 GPM	55	93.9	180	159.5	2-WAY	
(PH1)VAV-130F	EXISTING AREA	10"	1050 CFM	525 CFM	263 CFM	22,000 Btu/h	HOT WATER	WATER	2.2 GPM	55	93.9	180	159.5	2-WAY	
(PH1)VAV-C103	W2 CORRIDOR	8"	600 CFM	600 CFM	150 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	101.4	180	159.5	2-WAY	
(PH1)VAV-C110	W2 CORRIDOR	10"	720 CFM	720 CFM	180 CFM	35,000 Btu/h	HOT WATER	WATER	3.5 GPM	55	100.1	180	159.5	2-WAY	
(RELO)VAV-8-10	POST PROCESSING	40"	4375 CFM	2188 CFM	1312 CFM	45,000 Btu/h	HOT WATER	WATER	4.5 GPM	55	95	180	126.8	2-WAY	
(RELO)VAV-8-11	POST PROCESSING	40"	3800 CFM	1900 CFM	1140 CFM	55,000 Btu/h	HOT WATER	WATER	5.5 GPM	55	95	180	126.8	2-WAY	
(RELO)VAV-8-12	POST PROCESSING	40"	4375 CFM	2188 CFM	1312 CFM	45,000 Btu/h	HOT WATER	WATER	4.5 GPM	55	95	180	126.8	2-WAY	
(RELO)VAV-8-13	POST PROCESSING	40"	4375 CFM	2188 CFM	1312 CFM	45,000 Btu/h	HOT WATER	WATER	4.5 GPM	55	95	180	126.8	2-WAY	
(RELO)VAV-8-14	POST PROCESSING	40"	4375 CFM	2188 CFM	1312 CFM	45,000 Btu/h	HOT WATER	WATER	4.5 GPM	55	95	180	126.8	2-WAY	
VAV-200.1	W1 VESTIBULE	8"	660 CFM	330 CFM	165 CFM	10,000 Btu/h	HOT WATER	WATER	1 GPM	55	83.1	180	159.5	2-WAY	
VAV-200.2	W2 VESTIBULE	6"	330 CFM	165 CFM	83 CFM	5,000 Btu/h	HOT WATER	WATER	0.5 GPM	55	83.1	180	159.5	2-WAY	
VAV-201	W1 CORRIDOR	8"	675 CFM	675 CFM	169 CFM	35,000 Btu/h	HOT WATER	WATER	3.5 GPM	55	103.1	180	159.5	2-WAY	
VAV-202A	WEST CORRIDOR	10"	960 CFM	960 CFM	240 CFM	50,000 Btu/h	HOT WATER	WATER	5 GPM	55	103.3	180	159.5	2-WAY	
VAV-202B	WEST CORRIDOR	10"	850 CFM	850 CFM	213 CFM	44,000 Btu/h	HOT WATER	WATER	4.5 GPM	55	104.1	180	159.5	2-WAY	
VAV-203	CAFETERIA	12"	1800 CFM	900 CFM	450 CFM	40,000 Btu/h	HOT WATER	WATER	4 GPM	55	96.2	180	159.5	2-WAY	5
VAV-204	CONFERENCE ROOM	12"	1320 CFM	660 CFM	330 CFM	35,000 Btu/h	HOT WATER	WATER	3.2 GPM	55	100	180	159.5	2-WAY	
VAV-218	SHARED CONFERENCE	12"	1400 CFM	700 CFM	350 CFM	32,000 Btu/h	HOT WATER	WATER	3.2 GPM	55	97.4	180	159.5	2-WAY	4
VAV-220A	EAST CORRIDOR	8"	675 CFM	675 CFM	169 CFM	35,000 Btu/h	HOT WATER	WATER	3.5 GPM	55	103.1	180	159.5	2-WAY	
VAV-220B	EAST CORRIDOR	10"	720 CFM	720 CFM	180 CFM	35,000 Btu/h	HOT WATER	WATER	3.5 GPM	55	100.1	180	159.5	2-WAY	
VAV-220C	CORRIDOR	10"	720 CFM	720 CFM	180 CFM	40,000 Btu/h	HOT WATER	WATER	4 GPM	55	106.5	180	159.5	2-WAY	
VAV-A-100A	MICRO LAB OPEN FLOOR	16"	2400 CFM	2400 CFM	2400 CFM	80,000 Btu/h	HOT WATER	WATER	8 GPM	55	85.9	180	159.5	2-WAY	
VAV-A-100B	MICRO LAB OPEN FLOOR	16"	2400 CFM	2400 CFM	2400 CFM	80,000 Btu/h	HOT WATER	WATER	8 GPM	55	85.9	180	159.5	2-WAY	
VAV-A-100C	MICRO LAB OPEN FLOOR	16"	2640 CFM	2640 CFM	2640 CFM	80,000 Btu/h	HOT WATER	WATER	8 GPM	55	83.1	180	159.5	2-WAY	
VAV-A-100D	MICRO LAB OPEN FLOOR	16"	2640 CFM	2640 CFM	2640 CFM	80,000 Btu/h	HOT WATER	WATER	8 GPM	55	83.1	180	159.5	2-WAY	
VAV-A-101	CULTURE RECEIVING AND CHECK-IN	10"	1050 CFM	1050 CFM	1050 CFM	35,000 Btu/h	HOT WATER	WATER	3.5 GPM	55	85.9	180	159.5	2-WAY	
VAV-A-103	HUDDLE	6"	300 CFM	300 CFM	300 CFM	10,000 Btu/h	HOT WATER	WATER	1 GPM	55	85.9	180	159.5	2-WAY	
VAV-A-104	OFFICES	10"	800 CFM	800 CFM	800 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	89.8	180	159.5	2-WAY	
VAV-A-111	HOOD ROOMS	12"	1210 CFM	1210 CFM	1210 CFM	40,000 Btu/h	HOT WATER	WATER	4 GPM	55	85.6	180	159.5	2-WAY	
VAV-A-115	CALCIUM	10"	850 CFM	850 CFM	850 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	87.7	180	159.5	2-WAY	
VAV-A-118	AIRLOCK AND RECIEVING	10"	960 CFM	960 CFM	960 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	84	180	159.5	2-WAY	
VAV-B-100A	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100B	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100C	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100D	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100E	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100F	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100G	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-100H	TISSUE RECEIVING	16"	3250 CFM	1625 CFM	813 CFM	38,000 Btu/h	HOT WATER	WATER	3.8 GPM	55	76.7	180	159.5	2-WAY	
VAV-B-102	TISSUE RECEIVING	10"	1125 CFM	450 CFM	270 CFM	21,000 Btu/h	HOT WATER	WATER	2.1 GPM	55	98.3	180	159.5	2-WAY	
VAV-B-110	CT SCAN VESTIBULE	8"	510 CFM	255 CFM	128 CFM	11,000 Btu/h	HOT WATER	WATER	1.1 GPM	55	95	180	159.5	2-WAY	
VAV-C121	EAST ENTRY	8"	700 CFM	350 CFM	175 CFM	13,000 Btu/h	HOT WATER	WATER	1.3 GPM	55	89.4	180	159.5	2-WAY	
VAV-C-100A	DISTRIBUTION FLOOR	16"	2775 CFM	1388 CFM	694 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	75	180	159.5	2-WAY	
VAV-C-100B	DISTRIBUTION FLOOR	16"	2775 CFM	1388 CFM	694 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	75	180	159.5	2-WAY	
VAV-C-100C	DISTRIBUTION FLOOR	16"	2775 CFM	1388 CFM	694 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	75	180	159.5	2-WAY	
VAV-C-100D	DISTRIBUTION FLOOR	16"	2775 CFM	1388 CFM	694 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	75	180	159.5	2-WAY	
VAV-C-100E	DISTRIBUTION FLOOR	16"	2040 CFM	1020 CFM	510 CFM	33,000 Btu/h	HOT WATER	WATER	3.3 GPM	55	85	180	159.5	2-WAY	
VAV-C-100F	DISTRIBUTION FLOOR	16"	2040 CFM	1020 CFM	510 CFM	33,000 Btu/h	HOT WATER	WATER	3.3 GPM	55	85	180	159.5	2-WAY	
VAV-C-100G	DISTRIBUTION FLOOR	16"	2040 CFM	1020 CFM	510 CFM	33,000 Btu/h	HOT WATER	WATER	3.3 GPM	55	85	180	159.5	2-WAY	
VAV-C-100H	DISTRIBUTION FLOOR	12"	1680 CFM	840 CFM	420 CFM	25,000 Btu/h	HOT WATER	WATER	2.5 GPM	55	82.6	180	159.5	2-WAY	
VAV-C-100I	DISTRIBUTION FLOOR	12"	1680 CFM	840 CFM	420 CFM	25,000 Btu/h	HOT WATER	WATER	2.5 GPM	55	82.6	180	159.5	2-WAY	
VAV-C-100J	DISTRIBUTION FLOOR	16"	2470 CFM	1235 CFM	618 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	77.5	180	159.5	2-WAY	
VAV-C-100K	DISTRIBUTION FLOOR	16"	2470 CFM	1235 CFM	618 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	77.5	180	159.5	2-WAY	
VAV-C-100L	DISTRIBUTION FLOOR	16"	2470 CFM	1235 CFM	618 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	77.5	180	159.5	2-WAY	
VAV-C-100M	DISTRIBUTION FLOOR	16"	2470 CFM	1235 CFM	618 CFM	30,000 Btu/h	HOT WATER	WATER	3 GPM	55	77.5	180	159.5	2-WAY	
VAV-C-100N	DISTRIBUTION FLOOR	10"	800 CFM	400 CFM	200 CFM	17,000 Btu/h	HOT WATER	WATER

VENTILATION SCHEDULE - (DOAS SYSTEM)

ROOM NAME	ROOM NUMBER	AREA (SF)	OCCUPANCY CATEGORY	MAX. NUMBER OF OCCUPANTS (PER 1000 SF)	OUTDOOR AIR PER OCC. (CFM)	OUTDOOR AIR PER FL AREA (CFM/SF)	DESIGN NUMBER OF PEOPLE	ACTUAL NUMBER OF PEOPLE	BREATHING ZONE OUTDOOR AIRFLOW (CFM) (Equation 6-1)	ZONE AIR DISTRIBUTION EFFECTIVENESS (Table 6-4)	ZONE OUTDOOR AIRFLOW (CFM) (Equation 6-2)	DESIGN SUPPLY AIR (CFM)	EXHAUST REQUIREMENTS					
													NO. OF FIXTURES	EA PER FIXTURE	EA PER SF	REQUIRED EA (CFM)	ACTUAL EA (CFM)	CONTINUOUS EXHAUST
MICRO LAB OPEN FLOOR	A-100	10,193	Science Laboratory	25	10	0.18	255	34	2175	80%	2719	10080	0	0	1	10193	11400	Yes
CULTURE RECEIVING AND CHECK-IN	A-101	780	Office Space	5	5	0.06	4	4	67	80%	84	600	1	0	0	0	300	Yes
AIR LOCK	A-102	311	Corridor	0	0	0.06	0	0	19	80%	23	450	0	0	0	0	0	No
TRAINING	A-103	208	Office Space	5	5	0.06	1	5	37	80%	47	200	0	0	0	0	200	Yes
OFFICES	A-104	981	Office Space	5	5	0.06	5	12	119	80%	149	800	0	0	0	0	800	Yes
CORRIDOR	A-109	78	Office Space	5	5	0.06	0	0	5	80%	6	100	0	0	0	0	100	Yes
PPE ROOM	A-110	431	Science Laboratory	25	10	0.18	11	1	88	80%	109	400	0	0	1	431	690	Yes
SPECIALTY HOOD ROOM	A-111	180	Science Laboratory	25	10	0.18	4	1	42	80%	53	210	0	0	1	180	180	Yes
ASEPTIC HOOD ROOM	A-112	178	Science Laboratory	25	10	0.18	4	1	42	80%	53	200	0	0	1	178	180	Yes
ASEPTIC HOOD ROOM	A-113	178	Science Laboratory	25	10	0.18	4	1	42	80%	53	200	0	0	1	178	180	Yes
ASEPTIC HOOD ROOM	A-114	178	Science Laboratory	25	10	0.18	4	1	42	80%	53	200	0	0	1	178	180	Yes
CALCIUM RESIDUAL	A-115	443	Science Laboratory	25	10	0.18	11	1	90	80%	112	400	0	0	1	443	630	Yes
CULTURE DISCARD & WASTE	A-116	460	Science Laboratory	25	10	0.18	11	2	103	80%	128	400	0	0	1	460	950	Yes
AIRLOCK	A-117	468	Corridor	0	0	0.06	0	0	28	80%	35	260	0	0	0	0	0	No
SUPPLIES RECEIVING & QUARANTINE	A-118	263	Science Laboratory	25	10	0.18	7	1	57	80%	72	300	0	0	1	263	900	Yes
TOTALS:		15,331					323	64				14800				12505	16690	

VENTILATION SCHEDULE - (VAV SYSTEM)- AHU-9

ROOM NAME	ROOM NUMBER	AREA (SF)	OCCUPANCY CATEGORY	MAX. NUMBER OF OCCUPANTS (PER 1000 SF)	OUTDOOR AIR PER OCC. (CFM)	OUTDOOR AIR PER FL AREA (CFM/SF)	DESIGN NUMBER OF PEOPLE	ACTUAL NUMBER OF PEOPLE	BREATHING ZONE OUTDOOR AIRFLOW (CFM) (Equation 6-1)	ZONE AIR DISTRIBUTION EFFECTIVENESS (Table 6-4)	MINIMUM PRIMARY AIRFLOW (CFM) (Equations 6-2 & 9)	ACTUAL MINIMUM AIRFLOW (CFM)	DESIGN SUPPLY AIR (CFM)	ACTUAL OA (CFM)	EXHAUST REQUIREMENTS					
															NO. OF FIXTURES	EA PER FIXTURE	EA PER SF	REQUIRED EA (CFM)	ACTUAL EA (CFM)	CONTINUOUS EXHAUST
W1 VESTIBULE	200.1	309	Corridor	0	0	0.06	0	0	19	80%	35	139	660	52	0	0	0	0	0	No
W2 VESTIBULE	200.2	131	Corridor	0	0	0.06	0	0	8	80%	15	69	330	26	0	0	0	0	0	No
WEST CORRIDOR	201	6,348	Corridor	0	0	0.06	0	0	381	80%	502	544	3060	242	0	0	0	0	0	No
CAFETERIA	203	579	Break Room - Other	25	5	0.06	14	24	155	80%	290	378	1800	143	0	0	0	0	0	No
CONFERENCE ROOM	204	353	Conference Room	50	5	0.06	18	16	115	80%	212	277	1320	105	0	0	0	0	0	No
JANITOR'S	205	35	Janitor Closet, Trash, Recycling (Dry Materials)	2	5	0.06	0	0	2	80%	4	11	50	4	0	0	1	35	75	No
UNISEX RR	207	53	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
UNISEX RR	208	52	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
UNISEX RR	211	59	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
UNISEX RR	212	59	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
UNISEX RR	213	54	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
UNISEX RR	214	54	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
EAST/WEST CORRIDOR	215	2,263	Corridor	0	0	0.06	0	0	136	80%	255	273	1300	103	0	0	0	0	0	No
MOTHER'S ROOM	216	55	Office Space	5	5	0.06	0	1	8	80%	16	21	100	8	0	0	0	0	0	No
JANITOR'S ROOM	217	68	Janitor Closet, Trash, Recycling (Dry Materials)	2	5	0.06	0	0	4	80%	8	17	50	4	0	0	1	68	75	No
SHARED CONFERENCE	219	596	Conference Room	50	5	0.06	30	16	116	80%	217	294	1400	111	0	0	0	0	0	No
EAST CORRIDOR-1	220.1	3,836	Corridor	0	0	0.06	0	0	230	80%	432	462	2200	174	0	0	0	0	0	No
TISSUE RECEIVING	B-100	16,443	Storage, Occupiable (Dry Materials)	5	5	0.06	82	40	1187	80%	2225	4759	22660	1796	0	0	0	0	0	No
SUPPLY	B-101	239	Storage Room	0	0	0.12	0	1	29	80%	54	58	275	22	0	0	0	0	0	No
TRAINING	B-102	253	Office Space	5	5	0.06	1	4	35	80%	66	74	350	28	0	0	0	0	0	No
OFFICE	B-103	290	Office Space	5	5	0.06	1	2	27	80%	51	63	300	24	0	0	0	0	0	No
WINDOW PASS-THRU	B-104	91	Corridor	0	0	0.06	0	0	5	80%	10	21	100	8	0	0	0	0	0	No
CT SCAN VESTIBULE	B-110	97	Office Space	5	5	0.06	0	1	11	80%	20	44	210	17	0	0	0	0	0	No
CT SCAN	B-111	60	Office Space	5	5	0.06	0	2	14	80%	25	32	150	12	0	0	0	0	0	No
CT SCAN	B-112	61	Office Space	5	5	0.06	0	2	14	80%	26	32	150	12	0	0	0	0	0	No
OFFICE	B-114	212	Office Space	5	5	0.06	1	1	18	80%	33	53	250	20	0	0	0	0	0	No
HUDDLE	B-115	91	Conference Room	50	5	0.06	5	4	25	80%	48	63	300	24	0	0	0	0	0	No
HUDDLE	B-116	90	Conference Room	50	5	0.06	5	4	25	80%	48	53	250	20	0	0	0	0	0	No
DISTRIBUTION OPEN FLOOR	C-100	19,536	Storage, Occupiable (Dry Materials)	5	5	0.06	98	40	1372	80%	2573	6416	30550	2422	0	0	0	0	0	No
HUDDLE ROOM	C-105	122	Conference Room	50	5	0.06	6	4	27	80%	51	53	250	20	0	0	0	0	0	No
STANDARD MANAGER OFFICE	C-109	108	Office Space	5	5	0.06	1	1	11	80%	21	32	150	12	0	0	0	0	0	No
CUSTOMER SERVICE SETUP	C-110	135	Office Space	5	5	0.06	1	1	13	80%	25	32	150	12	0	0	0	0	0	No
HOT DESK/TRAINING AREA	C-111	122	Office Space	5	5	0.06	1	4	27	80%	51	63	300	24	0	0	0	0	0	No
SUPERVISOR'S DESK	C-112	215	Office Space	5	5	0.06	1	2	23	80%	43	47	225	18	0	0	0	0	0	No
FACILITIES OFFICE	E-101	120	Office Space	5	5	0.06	1	1	12	80%	23	32	150	12	0	0	0	0	0	No
IT OFFICE	E-102	271	Office Space	5	5	0.06	1	4	36	80%	68	74	350	28	0	0	0	0	75	No
RR	E-103	61	Toilet Room - Public	0	0	0.00	0	0	0	80%	0	0	0	0	1	70	0	70	75	No
FACILITIES MULTIPURPOSE	E-104	308	Conference Room	50	5	0.06	15	8	58	80%	110	116	550	44	0	0	0	0	0	No
FACILITIES WORKSHOP	E-105	650	Office Space	5	5	0.06	3	5	64	80%	120	189	900	71	0	0	0	0	0	No
BIOHAZARD	E-111	302	Storage, Occupiable (Dry Materials)	5	5	0.06	2	0	18	80%	34	38	180	14	0	0	0	0	0	No
GAS TANK	E-112	63	Storage, Occupiable (Dry Materials)	5	5	0.06	0	0	4	80%	7	25	120	10	0	0	1	63	75	No
DRY-ICE EQUIPMENT	E-123	307	Storage Room	0	0	0.12	0	0	37	80%	69	126	600	48	0	0	0	0	0	No
PICK-UP	W-200	524	Storage Room	0	0	0.12	0	0	63	80%	118	126	600	48	0	0	0	0	0	No
DROP-OFF	W-201	238	Storage Room	0	0	0.12	0	0	29	80%	54	58	275	22	0	0	0	0	0	No
TOTALS:		55,112					298	188				15247	72605	5755				656	825	

VENTILATION SCHEDULE - (VAV SYSTEM)- AHU-8

ROOM NAME	ROOM NUMBER	AREA (SF)	OCCUPANCY CATEGORY	MAX. NUMBER OF OCCUPANTS (PER 1000 SF)	OUTDOOR AIR PER OCC. (CFM)	OUTDOOR AIR PER FL AREA (CFM/SF)	DESIGN NUMBER OF PEOPLE	ACTUAL NUMBER OF PEOPLE	BREATHING ZONE OUTDOOR AIRFLOW (CFM) (Equation 6-1)	ZONE AIR DISTRIBUTION EFFECTIVENESS (Table 6-4)	MINIMUM PRIMARY AIRFLOW (CFM) (Equations 6-2 & 9)	ACTUAL MINIMUM AIRFLOW (CFM)	DESIGN SUPPLY AIR (CFM)	ACTUAL OA (CFM)	EXHAUST REQUIREMENTS					
															NO. OF FIXTURES	EA PER FIXTURE	EA PER SF	REQUIRED EA (CFM)	ACTUAL EA (CFM)	CONTINUOUS EXHAUST
EAST CORRIDOR-2	220-2	2,713	Corridor	0	0	0.06	0	0	163	80%	305	326	1550	217	0	0	0	0	0	No
EXISTING CORRIDOR	C-103	982	Corridor	0	0	0.06	0	0	59	80%	110	116	550	77	0	0	0	0	0	No
POST PROCESSING	D-100	19,011	Storage, Occupiable (Dry Materials)	5	5	0.06	95	50	1391	80%	2608	4321	20575	2878	0	0	0	0	0	No
OFFICE	D-102	626	Office Space	5	5	0.06	3	8	78	80%	145	168	800	112	0	0	0	0	0	No
QC WORKSTATION	D-119	105	Office Space	5	5	0.06	1	1	11	80%	21	26	125	17	0	0	0	0	0	No
TOTALS:		23,437					99	59				4956	23600	3301				0	0	

NOTE:
1. The design number of people shown for each room is the estimated maximum for each room per ASHRAE 62.1. The actual number of people is based on either the actual estimated occupancy.
2. The ventilation air calculations for this schedule are based on ASHRAE 62.1.

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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2
950 FORRER BLVD
KETTERING, OHIO 45420
SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
BOZIER
62185
REGISTERED
PROFESSIONAL ENGINEER

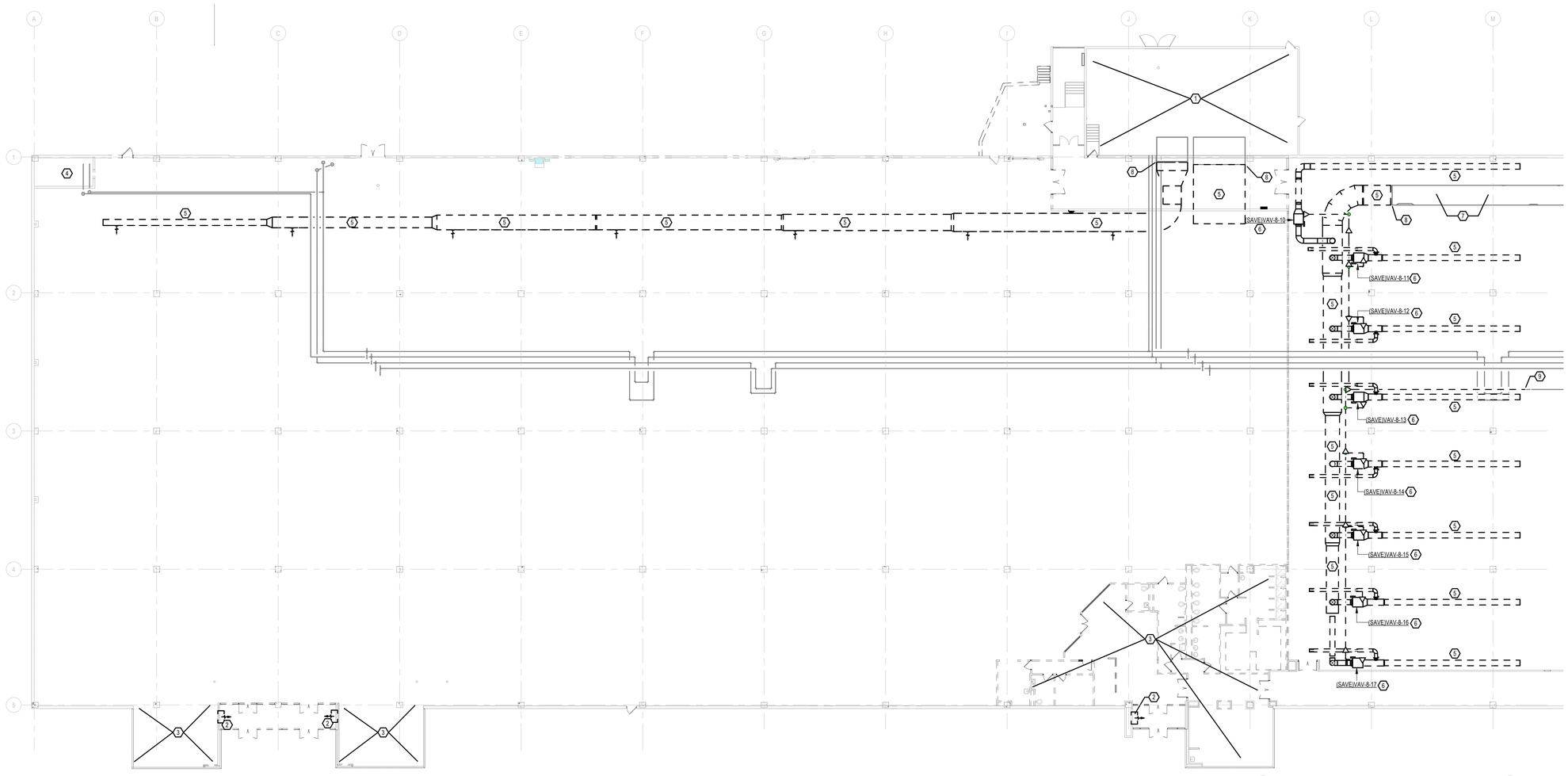
	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #2	06/09/2025

SHEET TITLE
MECHANICAL VENTILATION SCHEDULES

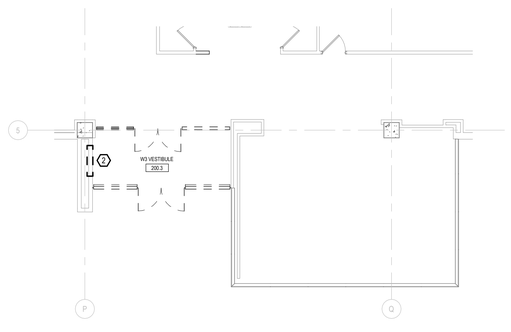
SCALE	COMM. No.
12" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
M620

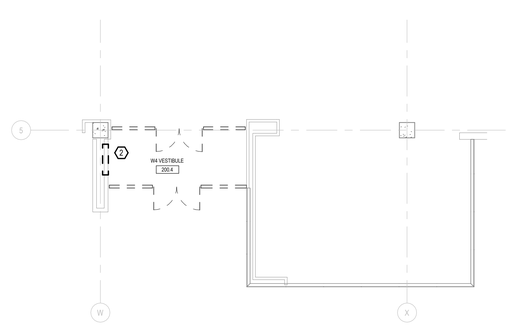
6/6/2025 2:47:18 PM



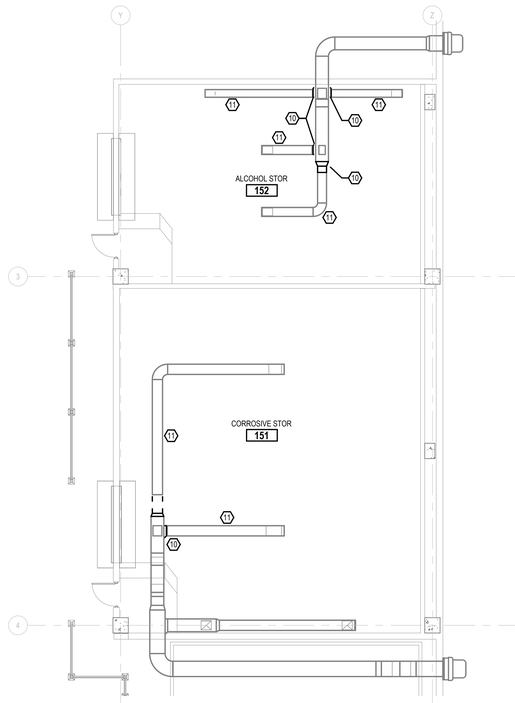
FIRST FLOOR MECHANICAL DEMOLITION PLAN
1/16" = 1'-0"
1 MD111
0' 4' 8' 16'



PHASE 1 MECHANICAL DEMOLITION PLAN - W3 VESTIBULE
1/8" = 1'-0"
2 MD111
0' 4' 8' 16'



PHASE 1 MECHANICAL DEMOLITION PLAN - W4 VESTIBULE
1/8" = 1'-0"
3 MD111
0' 4' 8' 16'

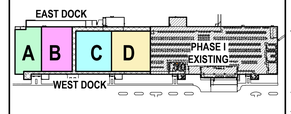


PHASE 1 MECHANICAL DEMOLITION PLAN - HAZARDOUS STORAGE
1/8" = 1'-0"
4 MD111
0' 4' 8' 16'

CODED NOTES:

1. EXISTING AHU-9 TO REMAIN. CONTRACTOR TO VERIFY WORKING CONDITION OF UNIT AND COMPONENTS AND PROVIDE SERVICE AS REQUIRED AND ENSURE UNIT IS FUNCTIONING AS INTENDED.
2. EXISTING RECESSED CABINET UNIT HEATER TO BE DEMOLISHED AND IS TO BE REPLACED WITH NEW UNIT OF EQUAL PERFORMANCE AND SIZE (SEE NEW WORK PLAN). EXISTING PIPING CONNECTIONS TO BE CAPPED TEMPORARILY AND MAINTAINED FOR REUSE.
3. ALL EXISTING MECHANICAL EQUIPMENT AND ASSOCIATED DUCTWORK, CONTROLS, HOT WATER PIPING, AIR DEVICES, ETC. IN THIS AREA TO BE DEMOLISHED U.N.O. CONTRACTOR SHALL FIEDL VERIFY EXTENTS OF DEMOLITION PRIOR TO WORK.
4. EXISTING UNIT HEATER IN RISER ROOM TO REMAIN AND SHALL STAY FULLY FUNCTIONAL DURING CONSTRUCTION.
5. DEMOLISH DUCTWORK AND AIR DEVICES AS INDICATED.
6. EXISTING VAV BOX AND ASSOCIATED CONTROL COMPONENTS (T-STAT ETC.) TO BE REMOVED AND SAVED FOR REUSE (SEE NEW WORK PLAN). CONTRACTOR TO DEMOLISH EXISTING HOT WATER BRANCH PIPING AS REQUIRED AND CAP AT MAIN. PREP EXISTING PIPING FOR RECONNECTION TO NEW VAVS (SEE NEW WORK PLAN).
7. EXISTING DUCT MAIN TO BE RAISED TO ALLOW FOR NEW OVERHEAD DOOR INSTALLATION. REFER TO NEW WORK PLAN FOR MORE DETAIL.
8. STOP DEMOLITION AT THIS POINT. PREP DUCTWORK END FOR RECONNECTION. SEE NEW WORK PLAN.
9. STOP DEMOLITION AT THIS POINT. PREP PIPE END FORE RECONNECTION. SEE NEW WORK PLAN.
10. DISCONNECT EXISTING DUCTWORK FROM EXHAUST MAIN AND CAP AT MAIN. RETAIN PORTION OF BRANCH DUCT TO RAISE (SEE NEW WORK).
11. SECTION OF EXISTING DUCTWORK TO BE RAISED. SEE NEW WORK PLAN.

KEY PLAN



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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2
950 FORRER BLVD
KETTERING, OHIO 45420
SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
BOZIER
62185
REGISTERED
PROFESSIONAL ENGINEER

	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025

SHEET TITLE
FIRST FLOOR MECHANICAL DEMO PLANS

SCALE	COMM. No.
As indicated	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MD111

3/3/2025 10:41:55 AM

SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA

2900 COLLEGE DRIVE, KETTERING, OHIO 45420

ISSUED	DATE
1 GMP/PERMIT SET	01/10/2025
2 ADDENDUM #1	01/24/2025
3 ADDENDUM #2	02/10/2025
4 BULLETIN #2	06/09/2025

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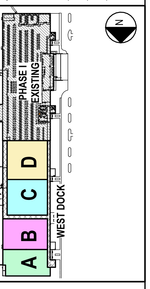
elevar DESIGN GROUP
555 CARR ST.
CINCINNATI, OH 45203
P: (513) 721-0600 F: (513) 721-0611

SHEET TITLE
SHEET METAL PLAN
- PHASE 2 OVERALL

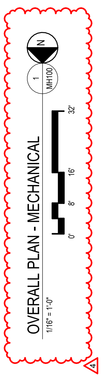
SCALE	COMM. No.
1/16" = 1'-0"	E-18997
DRAWN BY	APP.
ELEVAR	01/10/2025

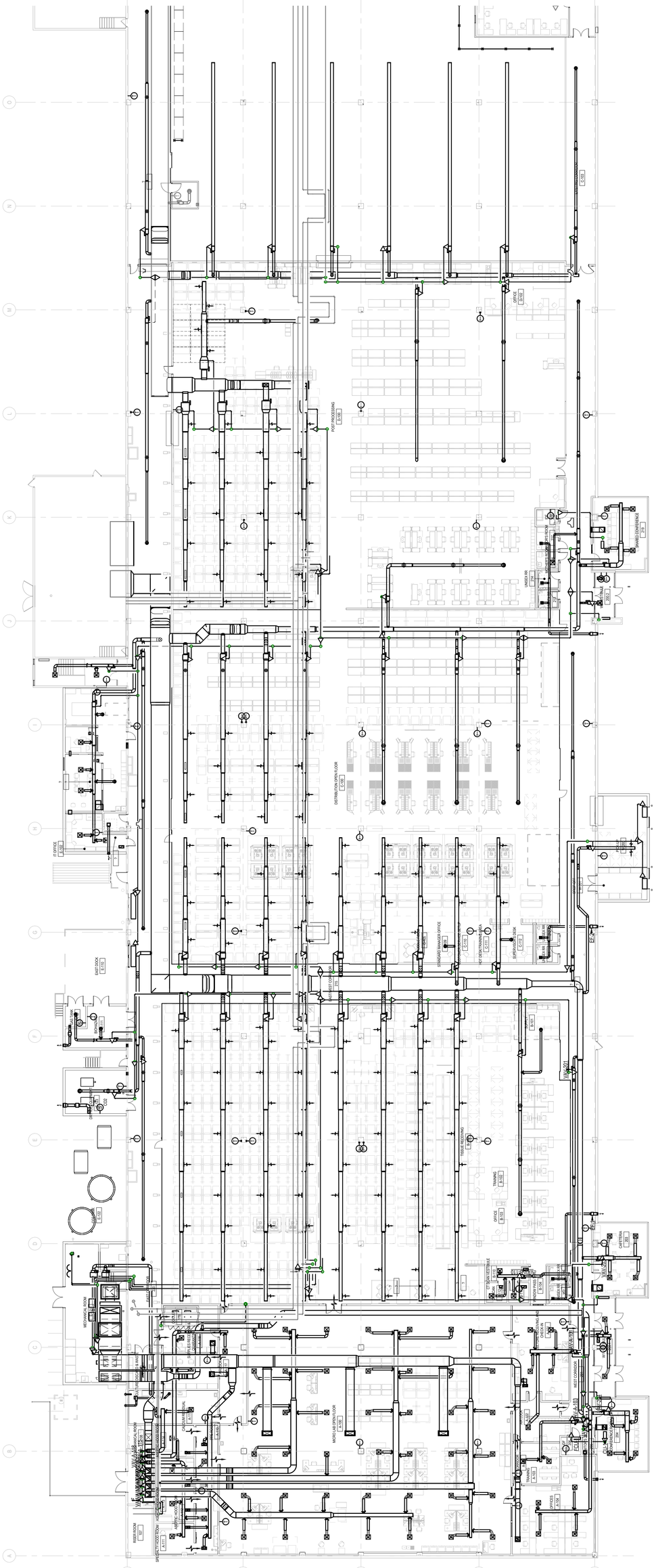
SHEET
MH100

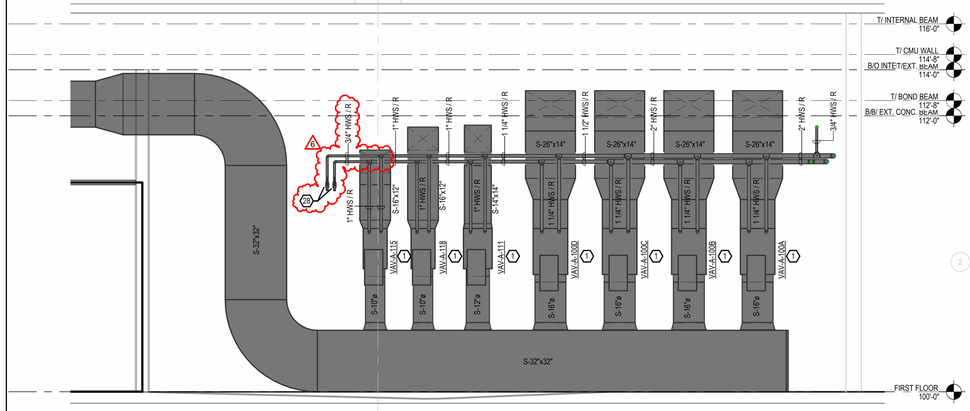
KEY PLAN



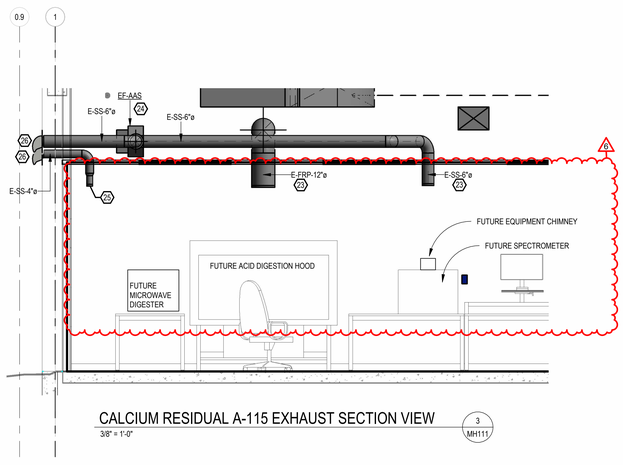
OVERALL PLAN - MECHANICAL
1/16" = 1'-0"



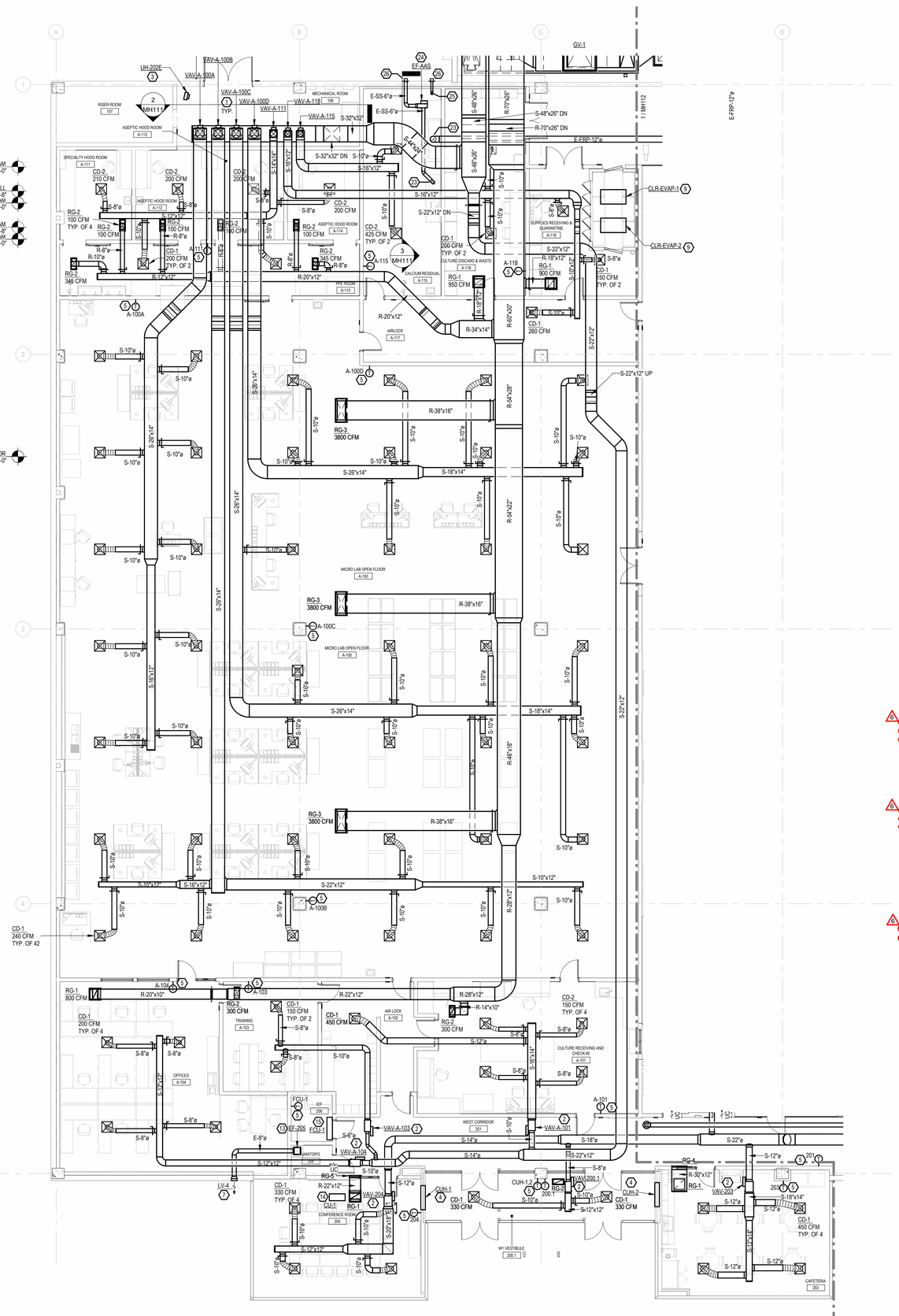




MECHANICAL ROOM 108 SECTION VIEW
3/8" = 1'-0"
2 / MH111



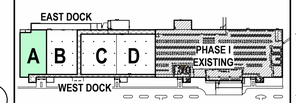
CALCIUM RESIDUAL A-115 EXHAUST SECTION VIEW
3/8" = 1'-0"
3 / MH111



CODED NOTES (NOT ALL MAY APPLY):

1. PROVIDE NEW VERTICAL VAV TERMINAL UNIT WITH HOT WATER REHEAT COIL SUSPENDED SECURELY FROM ADJACENT WALL. REFER TO SECTION VIEW FOR MORE DETAIL.
2. PROVIDE NEW VAV TERMINAL UNIT WITH HOT WATER REHEAT COIL SUSPENDED SECURELY FROM STRUCTURE ABOVE.
3. PROVIDE NEW HOT WATER UNIT HEATER SUSPENDED SECURELY FROM STRUCTURE ABOVE.
4. PROVIDE NEW HOT WATER CABINET UNIT HEATER IN PLACE OF EXISTING. CONTRACTOR TO COORDINATE ANY ADDITIONAL FRAMING AND FINISH REQUIREMENTS OF EXISTING OPENING TO ACCOMMODATE NEW CABINET UNIT HEATER SIZE.
5. NEW THERMOSTAT. MOUNT AT APPROXIMATELY 5 '-0" AFF. COORDINATE EXACT LOCATION IN FIELD. IF NOTATED "STACKED" MULTIPLE THERMOSTATS SHALL BE INSTALLED VERTICALLY IN AN ORDERLY FASHION.
6. PROVIDE NEW IN-LINE EXHAUST FAN SUSPENDED FROM STRUCTURE PER MANUFACTURERS INSTALLATION GUIDELINES. FAN MUST REMAIN ACCESSIBLE FOR SERVICING.
7. PROVIDE NEW WALL LOUVER. COORDINATE MOUNTING REQUIREMENTS WITH EXISTING WALL. REFER TO SCHEDULE FOR MORE INFORMATION. THE HVAC CONTRACTOR IS TO PROVIDE A 24 INCH DEEP EXTERNALLY INSULATED SHEET METAL PLENUM FOR THE LOUVER THAT IS SEALED WATER-TIGHT AND PITCHED ON THE BOTTOM FOR GRAVITY DRAINAGE BACK THROUGH THE LOUVER.
8. PROVIDE NEW HOT WATER HEATED AIR CURTAIN. COORDINATE INSTALLATION LOCATION WITH OVERHEAD DOOR ASSEMBLY AND INSTALL PER MANUFACTURERS GUIDELINES.
9. WALK IN COOLER EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO REFRIGERATION DRAWINGS OR SELECTION FOR INFORMATION. INSTALLED AND PROVIDED BY OTHERS. GC TO PROVIDE EQUIPMENT ROOF SUPPORT CURB PER DETAIL.
10. EXISTING VAV TERMINAL UNIT TO BE RELOCATED TO NEW LOCATION AS SHOWN IN DRAWING.
11. EXTEND AND CONNECT NEW DUCTWORK TO THE EXISTING DUCTWORK AS REQUIRED. EXISTING DUCT INSULATION IS TO BE REPAIRED AS NECESSARY AT THE POINT OF CONNECTION (IF REQUIRED).
12. PROVIDE NEW INTERIOR AIR HANDLING UNIT MOUNTED ON 6 " HOUSEKEEPING PAD (SEE DETAIL). REFER TO SCHEDULE AND DETAILS FOR MORE INFORMATION.
13. PROVIDE CEILING MOUNTED EXHAUST FAN. FAN TO RUN CONTINUOUSLY.
14. NEW AIR-COOLED CONDENSING UNIT LOCATED ON ROOF. INSTALL AT APPROXIMATE LOCATION AS SHOWN. THE CONDENSING UNIT IS TO BE INSTALLED ON EQUIPMENT SUPPORT CURBS (SEE DETAIL). THE UNIT IS TO BE RIGIDLY SECURED TO THE SUPPORT CURBS WHICH ARE TO BE RIGIDLY SECURED TO THE ROOF STRUCTURE. REFER TO MANUFACTURER 'S MANUALS FOR ADDITIONAL REQUIREMENTS.
15. MOUNT NEW WALL MOUNTED FAN COIL UNIT ABOVE DOOR. INSTALL ALL REFRIGERANT PIPING PER MANUFACTURER 'S GUIDELINES. ROUTE CONDENSATE PIPING TO NEARBY MOP SINK AND INDIRECTLY DISCHARGE.
16. SUPPLY DRUM LOUVER TO BE ROTATED ON DUCT AT 45° TOWARD THE FLOOR. TYPICAL IN FREEZER/COOLER AREAS.
17. PROVIDE 1"x1" WIRE MESH SCREEN OVER RETURN DUCT OPENING.
18. CONNECT CWS/R PIPING TO AHU COIL AS REQUIRED. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
19. CONNECT HWS/R PIPING TO COIL AS REQUIRED. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
20. PROVIDE DUCT MOUNTED SMOKE DETECTOR AND TIE INTO FIRE ALARM SYSTEM.
21. EXISTING THERMOSTAT TO BE RELOCATED TO THIS LOCATION. MOUNT AT APPROXIMATELY 5 '-0" AFF. COORDINATE EXACT LOCATION IN FIELD. IF NOTATED "STACKED" MULTIPLE THERMOSTATS SHALL BE INSTALLED VERTICALLY IN AN ORDERLY FASHION.
22. PROVIE COIL RUNAROUND INLINE PUMP FOR FREEZE PROTECTION. REFER TO DETAILS AND SCHEDULE FOR MORE INFORMATION.
23. STUB EXHAUST DUCT DOWN THROUGH CEILING IN THE APPROXIMATE LOCATION OF FUTURE LAB EQUIPMENT AND CAP AS REQUIRED FOR FUTURE CONNECTION.
24. PROVIDE NEW CENTRIFUGAL EXHAUST FAN BELOW ROOF SUPPORTED FROM STRUCTURE AS REQUIRED AND EXTEND DISCHARGE DUCTWORK OUT EXTERIOR WALL. INTERLOCK FAN OPERATION WITH SWITCH ON WALL NEAR SPECTROMETER. REFER TO ELECTRICAL DRAWINGS. FAN SHALL BE PROVIDED BY THE MANUFACTURER OF THE SPECTROMETER AS A FACTORY OPTION.
25. STUB EXHAUST DUCT DOWN THROUGH CEILING IN THE APPROXIMATE LOCATION OF FUTURE LAB EQUIPMENT. REDUCE TO 2-1/2" CONNECTION, AND CAP AS REQUIRED FOR FUTURE CONNECTION.
26. PROVIDE STAINLESS STEEL EXHAUST WALL VENT CAP WITH BACKDRAFT DAMPER.
27. PROVIDE NEW FIBERGLASS CENTRIFUGAL EXHAUST FAN LOCATED ON ROOF (REFER TO DETAIL). INSTALL AT APPROXIMATE LOCATION AS SHOWN AND MAINTAIN 10'-0" FROM THE EDGE OF ROOF. THE EXHAUST FAN IS TO BE INSTALLED ON EQUIPMENT SUPPORT CURBS (SEE DETAIL). THE UNIT IS TO BE RIGIDLY SECURED TO THE SUPPORT CURBS WHICH ARE TO BE RIGIDLY SECURED TO THE ROOF STRUCTURE. REFER TO MANUFACTURER'S MANUALS FOR ADDITIONAL REQUIREMENTS.
28. PROVIDE NEW BALL VALVE WITH CAP AND HOSE CONNECTION FOR DRAINING PURPOSES.

KEY PLAN



AREA A SHEET METAL PLAN - MICRO LAB
1/8" = 1'-0"
1 / MH112
1 / MH111
0' 4' 8' 16'

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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2
950 FORRER BLVD
KETTERING, OHIO 45420
SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
BRIAN C. OZIER
62185
REGISTERED
PROFESSIONAL ENGINEER

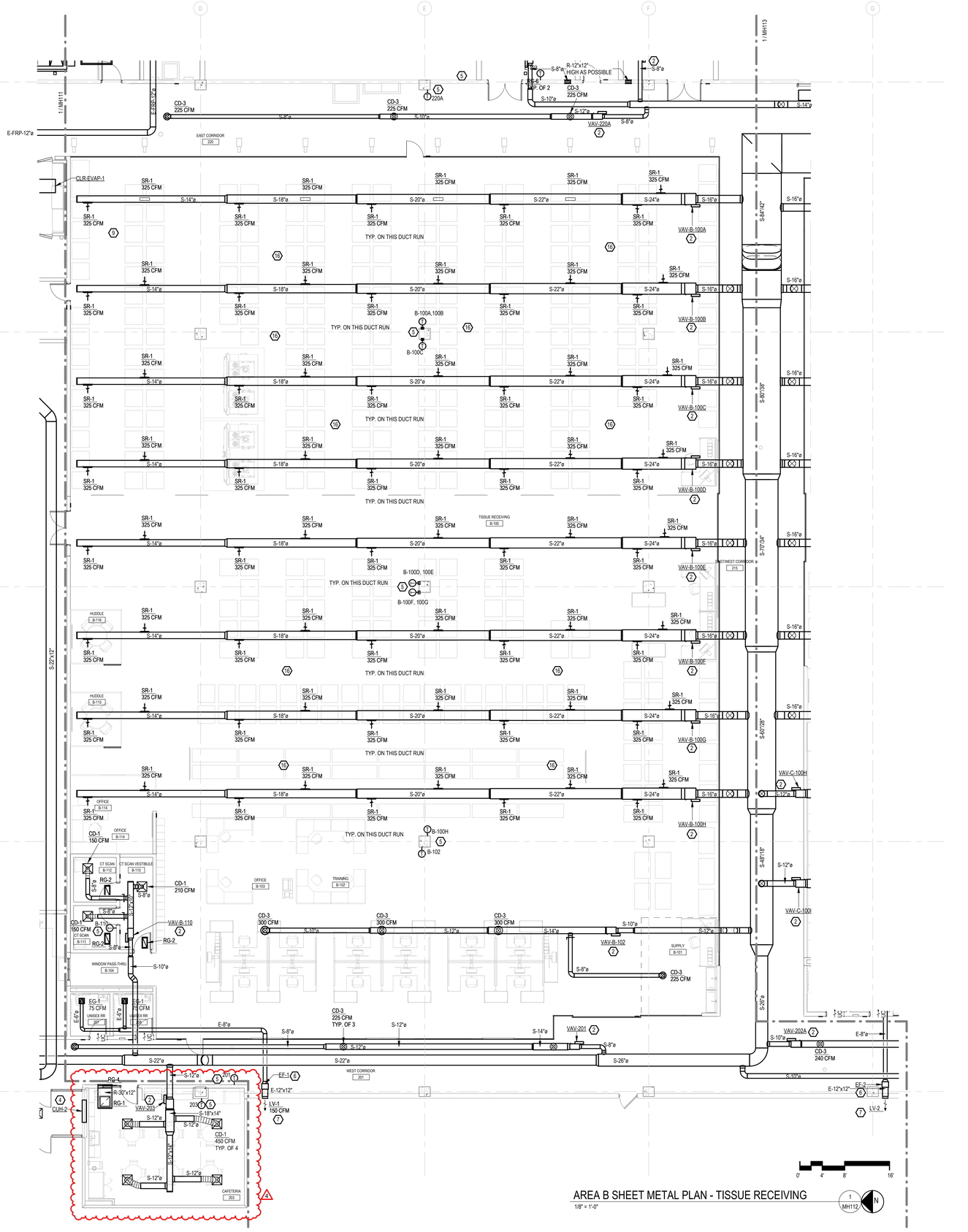
	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #1	04/04/2025
5	BULLETIN #2	06/09/2025
6	BULLETIN #3	07/18/2025

SHEET TITLE
ENLARGED SHEET METAL PLAN - AREA A

SCALE	COMM. No.
As indicated	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MH111

7/15/2025 11:29:06 AM



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4

24. PROVIDE NEW CENTRIFUGAL EXHAUST FAN BELOW ROOF SUPPORTED FROM STRUCTURE AS REQUIRED AND EXTEND DISCHARGE DUCTWORK OUT EXTERIOR WALL. INTERLOCK FAN OPERATION WITH SWITCH ON WALL NEAR SPECTROMETER. REFER TO ELECTRICAL DRAWINGS. FAN SHALL BE PROVIDED BY THE MANUFACTURER OF THE SPECTROMETER AS A FACTORY OPTION.
25. EXTEND EXHAUST DUCT DOWN TO LAB EQUIPMENT AND CONNECT AS REQUIRED PER MANUFACTURER'S GUIDELINES. EQUIPMENT COMES INTEGRAL WITH EXHAUST FAN AND HOSE. REDUCE TO 2-1/2" CONNECTION AND CONNECT HOSE TO EXHAUST STUB THROUGH CEILING.
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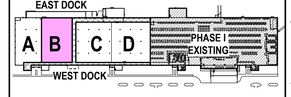
KEY PLAN



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Solvita
349 SOUTH MAIN STREET
DAYTON, OH 45402-2715
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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
BRIAN C. ZOZIER
62185
REGISTERED PROFESSIONAL ENGINEER

	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #2	06/09/2025

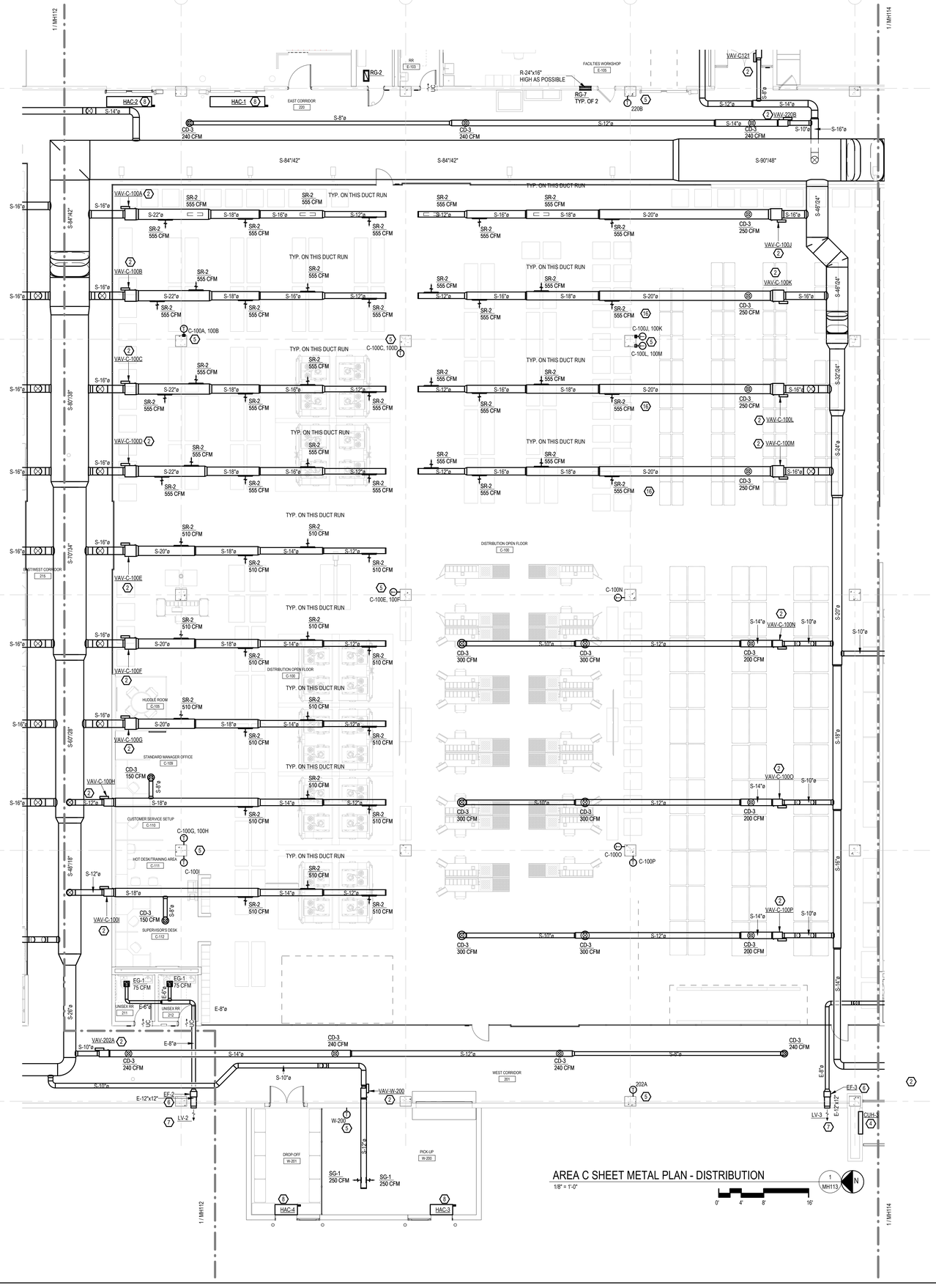
SHEET TITLE
ENLARGED SHEET METAL PLAN - AREA B

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MH112

elevar DESIGN GROUP

6/6/2025 2:48:57 PM



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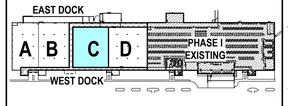
KEY PLAN



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STATE OF OHIO
BOZIER
62185
REGISTERED
PROFESSIONAL ENGINEER

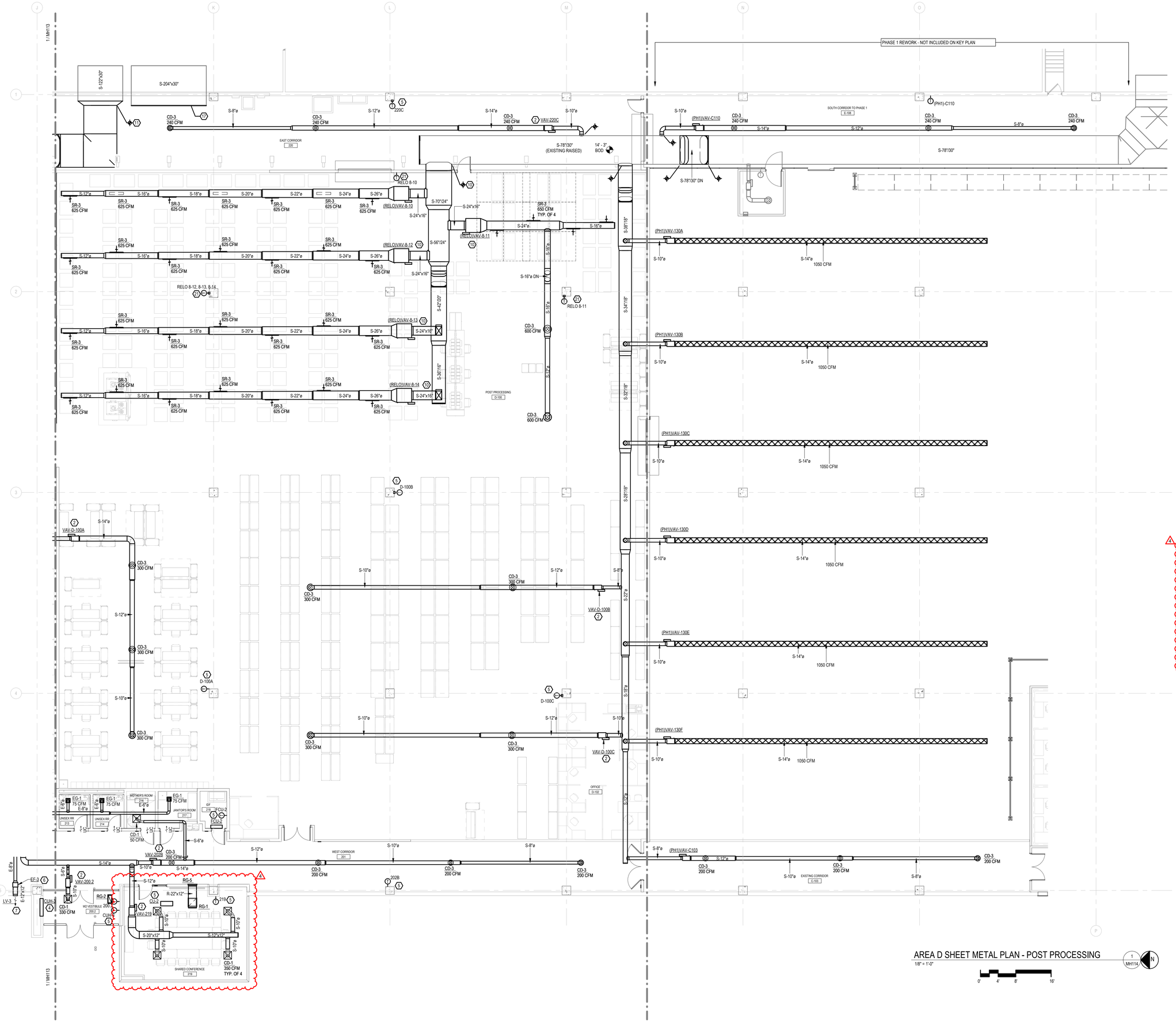
	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025

SHEET TITLE
ENLARGED SHEET METAL PLAN - AREA C

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET #
MH113

3/3/2025 10:42:49 AM



AREA D SHEET METAL PLAN - POST PROCESSING

1/8" = 1'-0"

0' 4' 8' 16'

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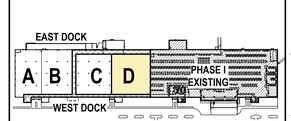
9. WALK IN COOLER EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO REFRIGERATION DRAWINGS OR SELECTION FOR INFORMATION. INSTALLED AND PROVIDED BY OTHERS. GC TO PROVIDE EQUIPMENT ROOF SUPPORT CURB PER DETAIL. 4
10. EXISTING VAV TERMINAL UNIT TO BE RELOCATED TO NEW LOCATION AS SHOWN IN DRAWING.
11. EXTEND AND CONNECT NEW DUCTWORK TO THE EXISTING DUCTWORK AS REQUIRED. EXISTING DUCT INSULATION IS TO BE REPAIRED AS NECESSARY AT THE POINT OF CONNECTION (IF REQUIRED).
12. PROVIDE NEW INTERIOR AIR HANDLING UNIT MOUNTED ON 6 " HOUSEKEEPING PAD (SEE DETAIL). REFER TO SCHEDULE AND DETAILS FOR MORE INFORMATION.
13. PROVIDE CEILING MOUNTED EXHAUST FAN. FAN TO RUN CONTINUOUSLY.
14. NEW AIR-COOLED CONDENSING UNIT LOCATED ON ROOF. INSTALL AT APPROXIMATE LOCATION AS SHOWN. THE CONDENSING UNIT IS TO BE INSTALLED ON EQUIPMENT SUPPORT CURBS (SEE DETAIL). THE UNIT IS TO BE RIGIDLY SECURED TO THE SUPPORT CURBS WHICH ARE TO BE RIGIDLY SECURED TO THE ROOF STRUCTURE. REFER TO MANUFACTURER 'S MANUALS FOR ADDITIONAL REQUIREMENTS.
15. MOUNT NEW WALL MOUNTED FAN COIL UNIT ABOVE DOOR. INSTALL ALL REFRIGERANT PIPING PER MANUFACTURER 'S GUIDELINES. ROUTE CONDENSATE PIPING TO NEARBY MOP SINK AND INDIRECTLY DISCHARGE.
16. SUPPLY DRUM LOUVER TO BE ROTATED ON DUCT AT 45° TOWARD THE FLOOR. TYPICAL IN FREEZER/COOLER AREAS.
17. PROVIDE 1"x1" WIRE MESH SCREEN OVER RETURN DUCT OPENING.
18. CONNECT CWS/R PIPING TO AHU COIL AS REQUIRED. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
19. CONNECT HWS/R PIPING TO COIL AS REQUIRED. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
20. PROVIDE DUCT MOUNTED SMOKE DETECTOR AND TIE INTO FIRE ALARM SYSTEM.
21. EXISTING THERMOSTAT TO BE RELOCATED TO THIS LOCATION. MOUNT AT APPROXIMATELY 5 '-0" AFF. COORDINATE EXACT LOCATION IN FIELD. IF NOTATED "STACKED" MULTIPLE THERMOSTATS SHALL BE INSTALLED VERTICALLY IN AN ORDERLY FASHION.
22. PROVIE COIL RUNAROUND INLINE PUMP FOR FREEZE PROTECTION. REFER TO DETAILS AND SCHEDULE FOR MORE INFORMATION.
23. EXTEND EXHAUST DUCT DOWN TO LAB EQUIPMENT AND CONNECT AS REQUIRED PER MANUFACTURER'S GUIDELINES. 4
24. PROVIDE NEW CENTRIFUGAL EXHAUST FAN BELOW ROOF SUPPORTED FROM STRUCTURE AS REQUIRED AND EXTEND DISCHARGE DUCTWORK OUT EXTERIOR WALL. INTERLOCK FAN OPERATION WITH SWITCH ON WALL NEAR SPECTROMETER. REFER TO ELECTRICAL DRAWINGS. FAN SHALL BE PROVIDED BY THE MANUFACTURER OF THE SPECTROMETER AS A FACTORY OPTION.
25. EXTEND EXHAUST DUCT DOWN TO LAB EQUIPMENT AND CONNECT AS REQUIRED PER MANUFACTURER'S GUIDELINES. EQUIPMENT COMES INTEGRAL WITH EXHAUST FAN AND HOSE. REDUCE TO 2-1/2" CONNECTION AND CONNECT HOSE TO EXHAUST STUB THROUGH CEILING.
26. PROVIDE STAINLESS STEEL EXHAUST WALL VENT CAP WITH BACKDRAFT DAMPER.
27. PROVIDE NEW FIBERGLASS CENTRIFUGAL EXHAUST FAN LOCATED ON ROOF (REFER TO DETAIL). INSTALL AT APPROXIMATE LOCATION AS SHOWN AND MAINTAIN 10'-0" FROM THE EDGE OF ROOF. THE EXHAUST FAN IS TO BE INSTALLED ON EQUIPMENT SUPPORT CURBS (SEE DETAIL). THE UNIT IS TO BE RIGIDLY SECURED TO THE SUPPORT CURBS WHICH ARE TO BE RIGIDLY SECURED TO THE ROOF STRUCTURE. REFER TO MANUFACTURER'S MANUALS FOR ADDITIONAL REQUIREMENTS.

KEY PLAN



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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
ANDREW J. SCHNEIER
62185
REGISTERED PROFESSIONAL ENGINEER

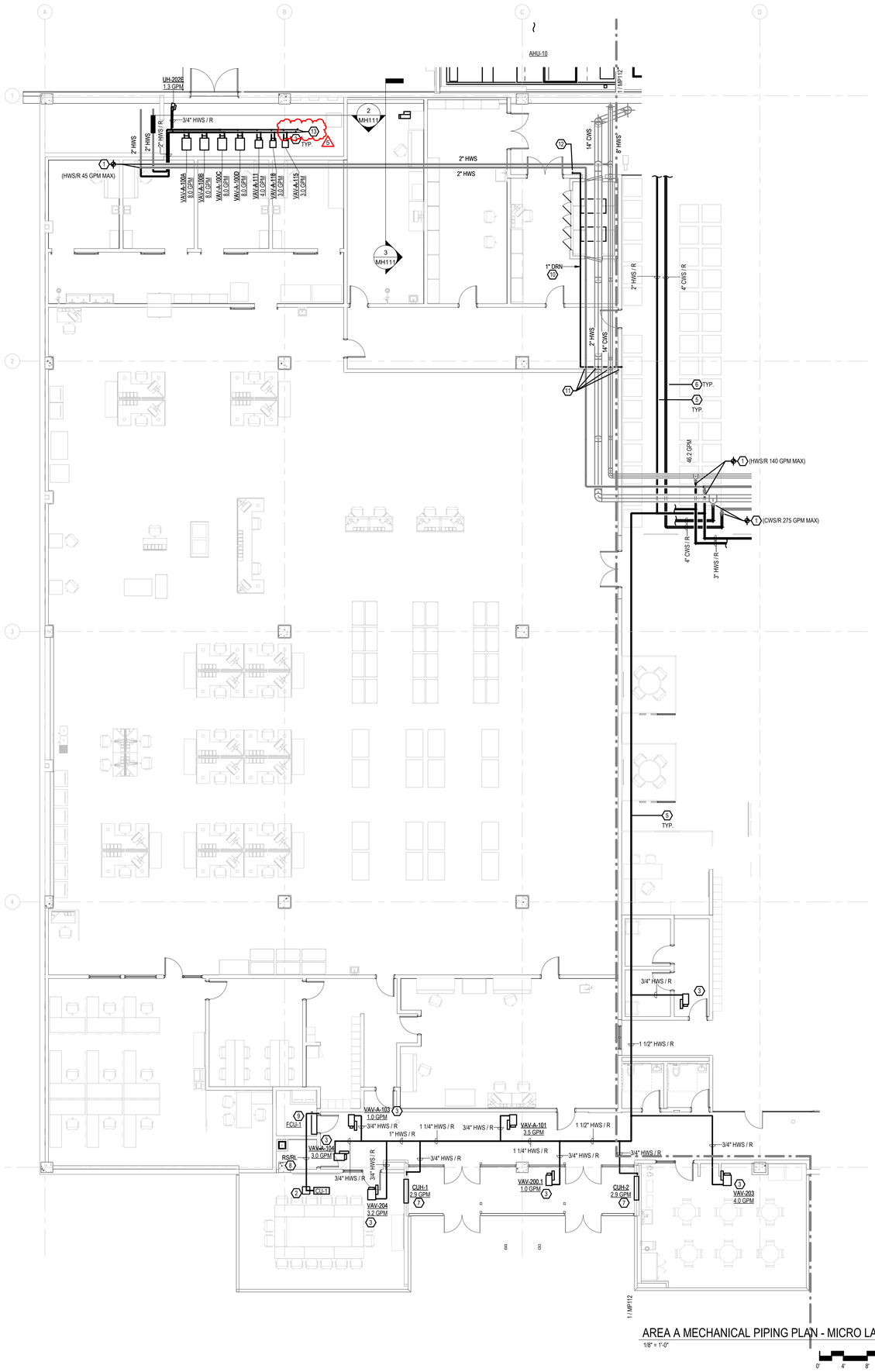
	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #2	06/09/2025

SHEET TITLE
ENLARGED SHEET METAL PLAN - AREA D

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MH114

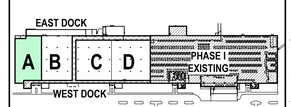
6/6/2025 7:49:09 PM



CODED NOTES (NOT ALL MAY APPLY):

1. EXTEND AND CONNECT NEW PIPING TO EXISTING AS REQUIRED.
2. THE NEW REFRIGERANT PIPING IS TO PENETRATE THE ROOF THROUGH NEW PIPE CURB ASSEMBLY (SEE DETAIL). COORDINATE EXACT LOCATION IN FIELD.
3. CONNECT HWS/R PIPING AS REQUIRED TO VAV BOX REHEAT COIL, REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
4. CONNECT HWS/RPIPING AS REQUIRED TO AIR CURTAIN HOT WATER COIL, REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
5. HWS/R PIPING SHOWN AS SINGLE LINE. PIPES SHALL RUN PARALLEL TO EACH OTHER. COORDINATE EXACT ROUTING IN FIELD.
6. CWS/R PIPING SHOWN AS SINGLE LINE. PIPES SHALL RUN PARALLEL TO EACH OTHER. COORDINATE EXACT ROUTING IN FIELD.
7. CONNECT HWS/R PIPING AS REQUIRED TO CABINET UNIT HEATER. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
8. THE NEW REFRIGERANT PIPING IS TO BE INSTALLED OF SIZE AND PER ALL REQUIREMENTS OF THE HEAT PUMP MANUFACTURER. THE PIPE (OR TUBING) SIZE AND ALL REFRIGERANT PIPING COMPONENTS ARE TO BE PROVIDED AS RECOMMENDED BY THE HEAT PUMP MANUFACTURER. ALL EXTERIOR REFRIGERANT PIPE INSULATION IS TO BE COVERED WITH THE PROTECTIVE FINISH THAT IS SPECIFIED TO AVOID DAMAGE FROM UV RAYS.
9. THE NEW CONDENSATE DRAIN PIPING IS TO BE ROUTED WITH A MINIMUM SLOPE OF 1/8 INCH PER FOOT FOR GRAVITY FLOW. EXTEND TO AN INDIRECT CONNECTION AT THE NEARBY FLOOR DRAIN OR MOP SINK.
10. THE NEW DRAIN PIPING IS TO BE ROUTED WITH A MINIMUM SLOPE OF 1/8 INCH PER FOOT FOR GRAVITY FLOW.
11. TIE INTO EXISTING DRAIN VALVES AT LOW POINT OF EXISTING PIPING AS REQUIRED.
12. DROP DRAIN PIPING ALONG WALL AND TERMINATE INTO A 1" BALL VALVE WITH REMOVABLE PLUG AND HOSE CONNECTION. BALL VALVE TO BE LOCATED AT AN ACCESSIBLE LOCATION APPROXIMATELY 6'-0" A.F.F.
13. PROVIDE NEW BALL VALVE WITH CAP AND HOSE CONNECTION FOR DRAINING PURPOSES.

KEY PLAN



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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA

2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
JOSHUA J. COZIER
62185
REGISTERED PROFESSIONAL ENGINEER

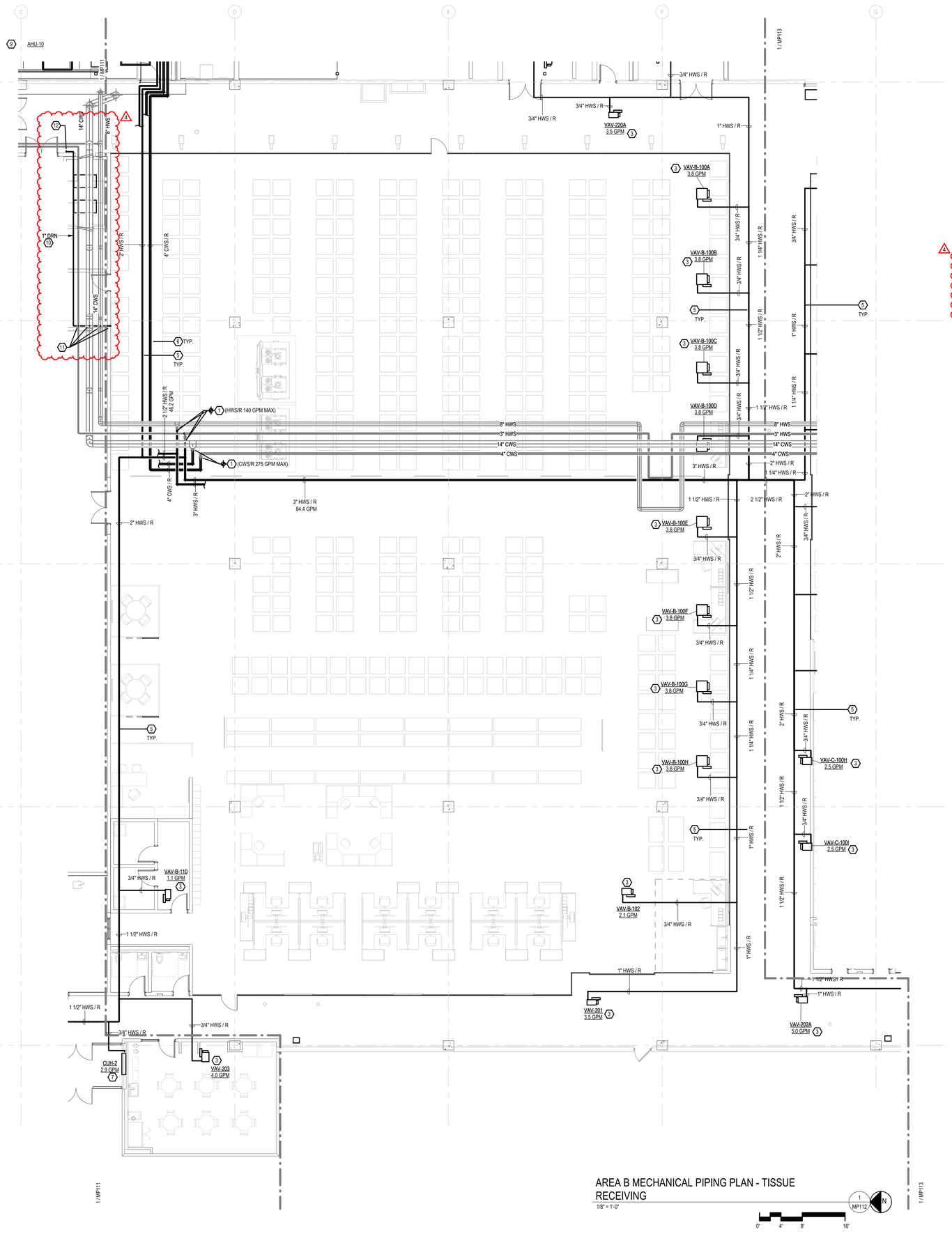
	ISSUED	DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #2	06/09/2025
5	BULLETIN #3	07/18/2025

SHEET TITLE
ENLARGED MECHANICAL PIPING PLAN - AREA A

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MP111

7/15/2025 11:29:12 AM



AREA B MECHANICAL PIPING PLAN - TISSUE RECEIVING

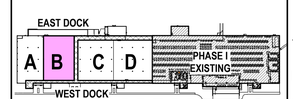
1/8" = 1'-0"

0' 4' 8' 16'

CODED NOTES (NOT ALL MAY APPLY):

1. EXTEND AND CONNECT NEW PIPING TO EXISTING AS REQUIRED.
2. THE NEW REFRIGERANT PIPING IS TO PENETRATE THE ROOF THROUGH NEW PIPE CURB ASSEMBLY (SEE DETAIL). COORDINATE EXACT LOCATION IN FIELD.
3. CONNECT HWS/R PIPING AS REQUIRED TO VAV BOX REHEAT COIL, REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
4. CONNECT HWS/RPIPING AS REQUIRED TO AIR CURTAIN HOT WATER COIL, REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
5. HWS/R PIPING SHOWN AS SINGLE LINE. PIPES SHALL RUN PARALLEL TO EACH OTHER. COORDINATE EXACT ROUTING IN FIELD.
6. CWS/R PIPING SHOWN AS SINGLE LINE. PIPES SHALL RUN PARALLEL TO EACH OTHER. COORDINATE EXACT ROUTING IN FIELD.
7. CONNECT HWS/R PIPING AS REQUIRED TO CABINET UNIT HEATER. REFER TO PIPING DIAGRAMS FOR MORE INFORMATION.
8. THE NEW REFRIGERANT PIPING IS TO BE INSTALLED OF SIZE AND PER ALL REQUIREMENTS OF THE HEAT PUMP MANUFACTURER. THE PIPE (OR TUBING) SIZE AND ALL REFRIGERANT PIPING COMPONENTS ARE TO BE PROVIDED AS RECOMMENDED BY THE HEAT PUMP MANUFACTURER. ALL EXTERIOR REFRIGERANT PIPE INSULATION IS TO BE COVERED WITH THE PROTECTIVE FINISH THAT IS SPECIFIED TO AVOID DAMAGE FROM UV RAYS.
9. THE NEW CONDENSATE DRAIN PIPING IS TO BE ROUTED WITH A MINIMUM SLOPE OF 1/8 INCH PER FOOT FOR GRAVITY FLOW. EXTEND TO AN INDIRECT CONNECTION AT THE NEARBY FLOOR DRAIN OR MOP SINK.
10. THE NEW DRAIN PIPING IS TO BE ROUTED WITH A MINIMUM SLOPE OF 1/8 INCH PER FOOT FOR GRAVITY FLOW.
11. TIE INTO EXISTING DRAIN VALVES AT LOW POINT OF EXISTING PIPING AS REQUIRED.
12. DROP DRAIN PIPING ALONG WALL AND TERMINATE INTO A 1" BALL VALVE WITH REMOVABLE PLUG AND HOSE CONNECTION. BALL VALVE TO BE LOCATED AT AN ACCESSIBLE LOCATION APPROXIMATELY 6'-0" A.F.F.

KEY PLAN



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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA
2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
BRIAN J. BOEHMER
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REGISTERED
PROFESSIONAL ENGINEER

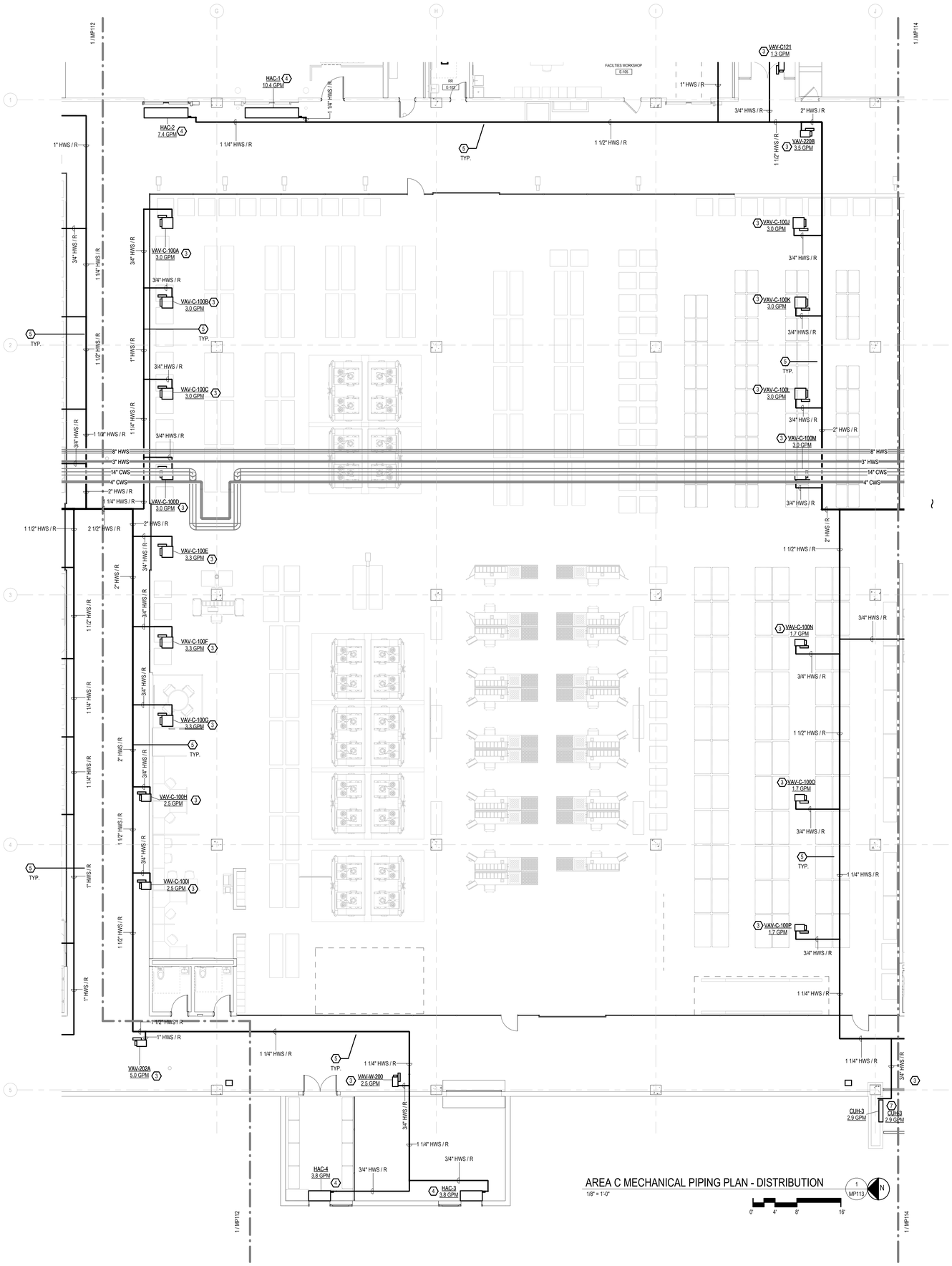
ISSUED		DATE
1	CMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025
3	ADDENDUM #2	02/10/2025
4	BULLETIN #2	06/09/2025

SHEET TITLE
ENLARGED MECHANICAL PIPING PLAN - AREA B

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MP112

6/5/2025 2:45:26 PM



AREA C MECHANICAL PIPING PLAN - DISTRIBUTION

1/8" = 1'-0"

0' 4' 8' 16'

CODED NOTES (NOT ALL MAY APPLY):

1. EXTEND AND CONNECT NEW PIPING TO EXISTING AS REQUIRED.
2. THE NEW REFRIGERANT PIPING IS TO PENETRATE THE ROOF THROUGH NEW PIPE CURB ASSEMBLY (SEE DETAIL). COORDINATE EXACT LOCATION IN FIELD.
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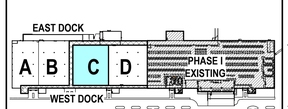
9. THE NEW CONDENSATE DRAIN PIPING IS TO BE ROUTED WITH A MINIMUM SLOPE OF 1/8 INCH PER FOOT FOR GRAVITY FLOW. EXTEND TO AN INDIRECT CONNECTION AT THE NEARBY FLOOR DRAIN OR MOP SINK.

KEY PLAN



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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
KETTERING, OHIO 45420

SOLVITA

2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
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ISSUED		DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025

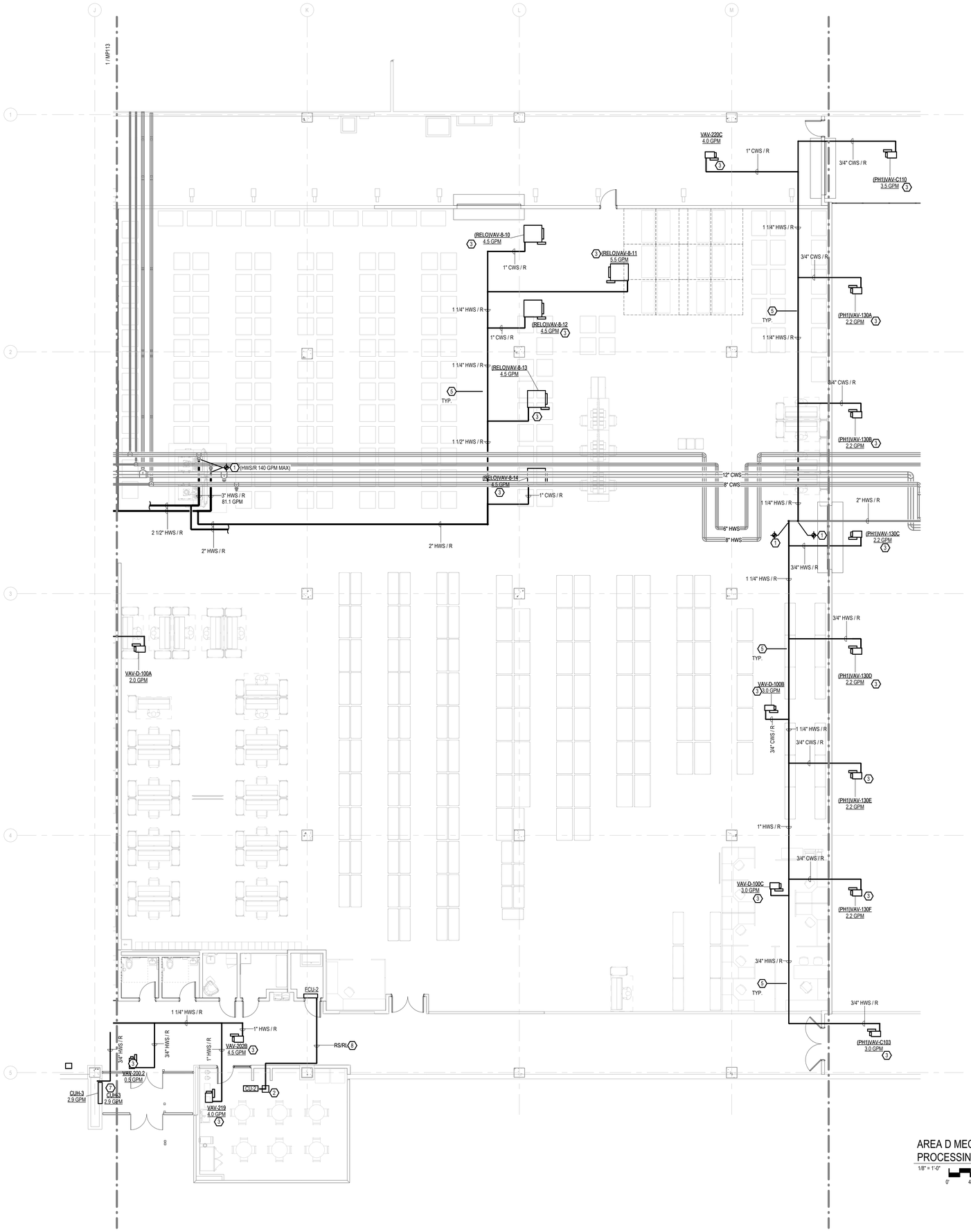
SHEET TITLE
ENLARGED MECHANICAL PIPING PLAN - AREA C

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MP113

elevar DESIGN GROUP

3/3/2025 10:43:18 AM



AREA D MECHANICAL PIPING PLAN - POST PROCESSING

1/8" = 1'-0"

0' 4' 8' 16'

1 / MP114

CODED NOTES (NOT ALL MAY APPLY):

1. EXTEND AND CONNECT NEW PIPING TO EXISTING AS REQUIRED.
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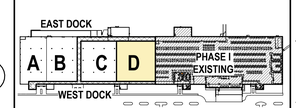
KEY PLAN



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SOLVITA - 950 FORRER BLVD RENOVATION - PHASE 2

950 FORRER BLVD
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SOLVITA

2900 COLLEGE DRIVE, KETTERING, OHIO 45420

STATE OF OHIO
ZACHARY J. BOZIER
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REGISTERED PROFESSIONAL ENGINEER

ISSUED		DATE
1	GMP/PERMIT RESPONSE	01/10/2025
2	ADDENDUM #1	01/24/2025

SHEET TITLE
ENLARGED MECHANICAL PIPING PLAN - AREA D

SCALE	COMM. No.
1/8" = 1'-0"	E-12497
DRAWN BY	DATE
ELEVAR	01/10/2025

SHEET#
MP114

3/3/2025 10:43:24 AM