	MECHANICAL SYMBOLS - GENERAL
	NEW PIPING, DUCTWORK, OR EQUIPMENT
	EXISTING PIPING, DUCTWORK, OR EQUIPMENT TO REMAIN
	EXISTING PIPING, DUCTWORK, OR EQUIPMENT TO BE REMOVED
	NEW EQUIPMENT
ER	EXISTING EQUIPMENT TO BE REMOVED
[_] _E	EXISTING EQUIPMENT TO REMAIN
[-] _{ERR}	EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED
RE	RELOCATED POSITION OF EXISTING EQUIPMENT
<u>s</u>	CONTINUATION FOR DUCTWORK OR PIPING
AHU-1	TYPE OF EQUIPMENT (AIR HANDLING UNIT)
7410	UNIT NUMBER
•	POINT OF CONNECTION (OF NEW WORK TO EXISTING WORK) OR POINT OF DISCONNECTION (TO REMOVE AND PATCH EXISTING WORK)
# >	DRAWING NOTE TAG
\triangle	REVISION SYMBOL
	SECTION DESIGNATION ON DRAWING WHERE SECTION IS CUT
A B	A — SECTION DESIGNATION B — DRAWING NO.
T	THERMOSTAT (HAS DISPLAY, OCCUPANT ADJUSTMENT, OR BOTH) TO BE WALL MOUNTED. REFER TO PLANS FOR LOCATION.
(TS)	TEMPERATURE SENSOR (HAS NO DISPLAY OR OCCUPANT ADJUSTMENT) TO BE WALL OR DUCT MOUNTED. REFER TO PLANS FOR LOCATION.
SD SD	DUCT MOUNTED SMOKE DETECTOR
M	ECHANICAL SYMBOLS - DUCTWORK

TS	TEMPERATURE BE WALL OR D	SENSOR (HAS NO DISPLAY OR OCCUPANT ADJUSTMENT) TO DUCT MOUNTED. REFER TO PLANS FOR LOCATION.
SD SD	DUCT MOUNTED	SMOKE DETECTOR
M	ECHANIC	AL SYMBOLS - DUCTWORK
18X12	18X12	DUCT SIZE (FIRST FIGURE INDICATES HORIZONTAL SIZE)
	18ø	ROUND DUCT DIAMETER
$\boxtimes \mapsto$		SUPPLY OR OUTSIDE AIR INTAKE DUCT UP
×	×	SUPPLY OUTSIDE AIR INTAKE DUCT DOWN
		RETURN OR EXHAUST DUCT UP
		RETURN OR EXHAUST DUCT DOWN
<u> </u>		ACOUSTICAL LINING IN DUCT
├		TRANSITION FROM RECTANGULAR TO ROUND OR OVAL DUCT
Ş AD S	EZ	ACCESS DOOR IN DUCT
<u> </u>	R	SLOPING RISE IN DUCT IN DIRECTION OF ARROW
▶ D		SLOPING DROP IN DUCT IN DIRECTION OF ARROW
<u></u>		MITERED ELBOW WITH TURNING VANES
`	ħ	RADIUS ELBOW (INNER RADIUS = WIDTH)
		DUCT SPLIT
<u> </u>		90° BRANCH TAP (USE 45° BOOT, OR CONICAL TAP FOR BRANCH SERVING A SINGLE DIFFUSER/REGISTER ONLY)
<u> </u>		45° BRANCH TAP
		SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) RADIUS ELBOW TYPE
$ \leftarrow $		SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) MITERED ELBOW TYPE WITH TURNING VANES
<u> </u>		SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) BULLHEAD TYPE
5	ŧIZZŢ	OFFSET (WITH RADIUS ELBOWS)
├ ┤ →		SUPPLY REGISTER
├	1	RETURN OR EXHAUST REGISTER
ŞL _{VD} Ş	- VD	VOLUME DAMPER
∫ 	FD	FIRE DAMPER W/DUCT ACCESS DOOR (FD/AD)
Ş <mark>d</mark> MŞ	→ M	MOTORIZED DAMPER W/DUCT ACCESS DOOR
FXC ⊱-IIII⊢-	FXC	FLEXIBLE CONNECTION
^		FLEXIBLE DUCT
<u>~</u>		

MODULAR LINEAR DIFFUSER WITH PLENUM

BRANCH TAKEOFF TO CEILING DIFFUSER/REGISTER

_						
	MECH	ANICAL S	YMBOLS - DUCTWORK (CONT.)		ME	CHANICAL SYMBOLS - PIPING
	+\(\)-	SUDDLY CEILIN	G DIFFUSER (4-WAY BLOW)		⊱ H/CWS —	DUAL-TEMPERATURE HOT/CHILLED WATER SUPPLY
1	+	SOLI CELLIN	O BILLOSEK (4 WAL BEOW)		5— H/CWR —	DUAL-TEMPERATURE HOT/CHILLED WATER RETURN
	- X-	SUPPLY CEILING	G DIFFUSER (3-WAY BLOW)		S—CHWS—	CHILLED WATER SUPPLY
				[S—CHWR—	CHILLED WATER RETURN
		SUPPLY CEILING	G DIFFUSER (2—WAY BLOW)		\$HWS\$	HOT WATER SUPPLY
-	—	SUPPLY CEILING	G DIFFUSER (1-WAY BLOW)		5HWR\$	HOT WATER RETURN
	CD-B(500)	DIFFUSER TYPE SCHEDULE.	AND CFM (CUBIC FEET PER MINUTE). REFER TO		⊱—LPS—-	LOW PRESSURE STEAM SUPPLY
		RETURN CEILIN	G GRILLE OR REGISTER		\$—_LPR——\$	LOW PRESSURE STEAM CONDENSATE RETURN
	VAV-B(500)		(CV, VAV, FP). DESIGNATION INDICATES TYPE, BOX I. QUANTITY (REFER TO SCHEDULES).		S	CONDENSATE DRAIN LINE (GRAVITY)
		TERMINAL BOX	WITH REHEAT COIL (CV, VAV, FP). DESIGNATION INDICATES		⊱—PD——	PUMPED DRAIN LINE
	VAV-B(500)	TYPE, BOX SIZ	E AND CFM. QUANTITY (REFER TO SCHEDULES).	▎ ┌		
	5 SA	> SA	SUPPLY AIR DUCT			MECHANICAL ABBREVIATION
	5	► RA	RETURN AIR DUCT	-	ACU	AIR CONDITIONING UNIT
	5— OA —-5	→ OA →	OUTSIDE AIR INTAKE DUCT	-		
1	, 04 —		COTSIDE AIN INTAKE DOCT		AD	ACCESS DOOR
	5EXH	EXH	EXHAUST DUCT		AHU	AIR HANDLING UNIT
1				ı I		

7				_	ATC	AUTOMATIC TEMPERATURE CONTROL
				l l	BMS	BUILDING MANAGEMENT SYSTEM
1	MI	ECHANIC	AL SYMBOL LIST - PIPING		BTU	BRITISH THERMAL UNIT
			DIRECTION OF FLOW IN PIPE	+ [CFM	CUBIC FEET PER MINUTE
		<u> </u>	DIRECTION OF FLOW IN FIFE	┨ [CV	CONSTANT VOLUME
	→		PITCH PIPE DOWN IN DIRECTION OF ARROW] [DX	DIRECT EXPANSION
4		\mathcal{L}	ELBOW TURNED UP		EAT	ENTERING AIR TEMPERATURE
				┨	ER	EXISTING EQUIPMENT TO REMOVED
\dashv	← ⇒	S	ELBOW TURNED DOWN		ERR	EXISTING EQUIPMENT TO REMOVED AND
'	≥ ⇒ →	S C S	BOTTOM PIPE CONNECTION	1	EWT	ENTER WATER TEMPERATURE
1	λ		BOTTOM PIPE CONNECTION]	FLA	FULL LOAD AMPS
	← ← ← ←		TOP PIPE CONNECTION		FPI	FIN PER INCH
	~			┨	FTR	FIN TUBE RADIATION
	├ ── ─		FLEXIBLE CONNECTION		GPM	GALLONS PER MINUTE
	. 3.			1	HX	HEAT EXCHANGER
7			BALL VALVE	╛	HZ	HERTZ
\dashv	$ \longleftarrow$		GATE VALVE		KW	KILOWATT
				┤├	LAT	LEAVING AIR TEMPERATURE
	├──		GLOBE VALVE		MBH	THOUSAND BTU PER HOUR
\dashv	→	<u> </u>	,	┪┞	MCA	MINIMUM CIRCUIT AMPS
_			CHECK VALVE (ARROW INDICATES FLOW DIRECTION)		NC	NORMALLY CLOSED
	. 4.			1	NIC	NOT IN CONTRACT
			AUTOMATIC THREE-WAY CONTROL VALVE		NK	NECK SIZE
\dashv		<u> </u>		┨	NO NO	NORMALLY OPEN
			AUTOMATIC TWO-WAY CONTROL VALVE		NTS	NOT TO SCALE
27				1	OED	OPEN END DUCT
7			PRESSURE REDUCING VALVE		PH	PHASE PER COLLARS INCL.
4	_	جد [ہے		1	PSI	POUND PER SQUARE INCH
	} ——→		PLUG VALVE		PSIA PSIG	POUNDS PER SQUARE INCH ABSOLUTE POUNDS PER SQUARE INCH GAUGE
			DUTTEDELY VALVE (MANUAL)	1	RE	RELOCATED POSITION OF EXISTING EQUI
1	<u></u>	مـرا •رايه	BUTTERFLY VALVE (MANUAL)	╛	RE:	REFER TO
	, ,		CIRCUIT SETTER/BALANCING VALVE		TYP	TYPICAL
4		مال الم	CINCOTT SETTENY BALANCING VALVE	╛┞	VN	VENT
	 		PIPE GUIDE			VOLTS
				╛┞	VFD	VARIABLE FREQUENCY DRIVE
	→		EXPANSION JOINT		WMS	WIRE MESH SCREEN
			EXTANSION CONT] L	***************************************	WINE MEST SONEEN
	→		CONCENTRIC REDUCER (ARROW INDICATES FLOW DIRECTION)			NEW YORK STATE CODES &
	—		ECCENTRIC REDUCER (ARROW INDICATES FLOW DIRECTION)			2020 BUILDING CODE OF NEW YORK STATE 2020 FIRE CODE OF NEW YORK STATE 2020 PLUMBING CODE OF NEW YORK STATE
	≥ —-		UNION		(2020 MECHANICAL CODE OF NEW YORK STATE 2020 FUEL GAS CODE OF NEW YORK STATE 2020 NYS UNIFORM CODE SUPPLEMENT NYS EDUCATION DEPARTMENT 1998 MANUAL OF I
			CAPPED PIPE			NEW YORK STATE ENERG
	\		"Y" TYPE STRAINER WITH BLOW DOWN VALVE		,	2020 ENERGY CONSERVATION CONSTRUCTION COI 2016 ASHRAE 90.1
-	<u></u>		PIPE SLEEVE			REFERENCED STAND

|-----

PIPE FLANGE

VALVE IN VERTICAL PIPE

MANUAL AIR VENT

THERMOMETER

├───────────────── | PIPE SENSOR WELL

PUMP

AUTOMATIC AIR VENT

PRESSURE GAUGE WITH SHUT OFF VALVE

NEW YORK STATE CODES & STANDARDS

RELOCATED POSITION OF EXISTING EQUIPMENT

MECHANICAL SYMBOLS - PIPING (CONT.)

MECHANICAL ABBREVIATIONS

EXISTING EQUIPMENT TO REMOVED AND RELOCATED

AUTOMATIC TEMPERATURE CONTROL

ATC

- 2020 FIRE CODE OF NEW YORK STATE
- 2020 PLUMBING CODE OF NEW YORK STATE 2020 MECHANICAL CODE OF NEW YORK STATE
- 2020 FUEL GAS CODE OF NEW YORK STATE 2020 NYS UNIFORM CODE SUPPLEMENT NYS EDUCATION DEPARTMENT 1998 MANUAL OF PLANNING STANDARDS

NEW YORK STATE ENERGY CODES

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE

REFERENCED STANDARDS

APPLICABLE REFERENCE STANDARDS SHALL BE AS REFERENCED BY ALL STATE CODES. THE LIST BELOW IS FOR QUICK REFERENCE AND DOES NOT INCLUDE ALL APPLICABLE REFERENCE STANDARDS.

> 2016 NPFA 13 — STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS 2016 NFPA 14 — STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS

 2016 NFPA 20 — STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION • 2017 NFPA 70 - NATIONAL ELECTRICAL CODE

2016 NFPA 72 — NATIONAL FIRE ALARM AND SIGNALING CODE

MECHANICAL DRAWING LIST

	MEST IN CONTROL DIO CONTROL DIO I
Sheet Number	Sheet Title
HS M001	COVER SHEET
HS M101	FIRST FLOOR VESTIBULE PART PLAN
HS M201	SCHEDULES
HS M301	DETAILS

MECHANICAL GENERAL NOTES

- THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF WORK AS WELL AS INDICATE GENERAL ARRANGEMENT OF EQUIPMENT. DUCTWORK AND PIPING. THE CONTRACTOR SHALL ADHERE TO THESE DRAWINGS AS CLOSELY AS POSSIBLE. HOWEVER, THE RIGHT IS RESERVED TO VARY THE RUNS OF DUCTWORK AND PIPING AND TO MAKE OFFSETS, WHERE NECESSARY, TO ACCOMMODATE CONDITIONS ARISING AT THE JOB SITE. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO WORK SHALL BE PERFORMED PRIOR TO RECEIPT OF EQUIPMENT, DUCTWORK, AND PIPING FABRICATION SHOP DRAWING APPROVAL.
- THE DRAWINGS AND SPECIFICATIONS SHALL BE INTERPRETED SO AS TO REQUIRE THE MOST SUBSTANTIAL AND COMPREHENSIVE PERFORMANCE OF THE WORK, CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND SUCH WORK SHALL BE PERFORMED BY THE CONTRACTOR WITHOUT EXTRA COST TO THE OWNER. IN THE CASE OF A DISCREPANCY WITHIN THE CONTRACT DOCUMENTS, THE WORST CASE OR HIGHEST COST SHALL APPLY FOR BIDDING PURPOSES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY VIA RFI PRIOR TO PERFORMING THE ASSOCIATED WORK.
- ANY MATERIAL, WORK, OR INCIDENTAL ACCESSORIES OR MINOR DETAILS NOT SHOWN BUT NECESSARY TO MAKE THE WORK COMPLETE IN ALL RESPECTS AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SHOWN ON THE DRAWINGS, SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- DUCT SIZES SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. WHERE ACOUSTICALLY LINED DUCT IS SPECIFIED, OUTER DUCT DIMENSIONS SHALL BE

INCREASED TO ACCOMMODATE LINING.

- WHERE WORK IS INDICATED TO BE BY OTHER CONTRACTORS, FOR EXAMPLE: "BY GENERAL CONSTRUCTION CONTRACTOR", THIS WORK IS NOT IN THE HVAC/MECHANICAL CONTRACT. EACH CONTRACTOR WILL BE RESPONSIBLE FOR CLOSE COORDINATION WITH OTHER CONTRACTORS' WORK.
- REFER TO APPROPRIATE SPECIFICATION SECTION FOR EQUIPMENT SELECTION PARAMETERS WHERE DRAWINGS DO NOT CONTAIN EQUIPMENT SCHEDULES.
- FOR AIR SYSTEMS, THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING BRANCH VOLUME DAMPERS FOR ALL SUPPLY. RETURN. AND EXHAUST BRANCH DUCTWORK, REGARDLESS IF VOLUME DAMPERS ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL VOLUME DAMPERS SHALL BE ADJUSTABLE HANDLE TYPE FOR LAY-IN ACCESSIBLE CEILING OR CABLE OPERATED FOR CONCEALED TYPE OF CEILING. ALL BRANCH DUCT VOLUME DAMPERS SERVING DIFFUSERS IN GYPSUM BOARD CEILINGS (OR OTHERWISE INACCESSIBLE) SHALL BE REMOTELY (CORD OR CABLE) OPERABLE THROUGH THE FACE OF THE DIFFUSER.
- INSTALL THERMOSTATS, FAN SPEED CONTROLLERS, AND OTHER ROOM OCCUPANT ADJUSTABLE CONTROLS WITH TOP OF DEVICE 4'-0" ABOVE FINISHED FLOOR OR AS DIRECTED OTHERWISE BY ARCHITECT. COORDINATE EXACT LOCATIONS WITH THE ARCHITECTURAL PLANS. DEVICE COLORS TO BE SELECTED BY THE ARCHITECT. MANUFACTURER'S LOGO SHALL NOT BE EXPOSED.
- WHERE PIPING CONNECTIONS FOR EQUIPMENT SUCH AS PUMPS, AC UNITS, COILS, ETC. DIFFER FROM THE LINE SIZE PIPING, IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FURNISH AND INSTALL THE NECESSARY REDUCER/EXPANDER FITTINGS TO ENABLE CONNECTION BETWEEN THE PIPING SYSTEM AND THE EQUIPMENT.
- O. PROVIDE UL LISTED AND LABELED FIRE DAMPERS AT ALL DUCT PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS, REGARDLESS IF FIRE DAMPERS ARE NOT SHOWN IN CONTRACT DOCUMENTS. PROVIDE 1-1/2 HOUR RATED FIRE DAMPERS AT WALLS/FLOORS WITH 2 HOUR OR LESS RATING. PROVIDE 3 HOUR RATED FIRE DAMPERS AT WALLS/FLOORS WITH 3 HOUR OR MORE RATING. ALL FIRE DAMPERS SHALL BE TYPE "B" WITH SHUTTER OUT OF AIRSTREAM. AND SHALL BE RATED FOR DYNAMIC AIRFLOW CONDITIONS 2,000 FT/MIN AND 4.0 IN-WC. PROVIDE ACCESS DOORS IN DUCTWORK, 18"x18" UNLESS OTHERWISE NOTED. COORDINATE WITH GENERAL CONTRACTOR FOR LOCATIONS AND SIZES OF ACCESS DOORS IN GENERAL CONSTRUCTION.
- . PROVIDE UL LISTED AND LABELED COMBINATION FIRE/SMOKE DAMPERS AT ALL DUCT PENETRATIONS THROUGH FIRE AND SMOKE RATED WALLS AND FLOORS, REGARDLESS IF FIRE DAMPERS ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE PROVIDED WITH AN END SWITCH FOR STATUS SIGNAL TO THE BMS AND FIRE SMOKE CONTROL PANEL. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE RATED FOR DYNAMIC AIRFLOW CONDITIONS 2,000 FT/MIN AND 4.0 IN-WC. PROVIDE ACCESS DOORS IN DUCTWORK. 18"x18" UNLESS OTHERWISE NOTED. COORDINATE WITH GENERAL CONTRACTOR FOR LOCATIONS AND SIZES OF ACCESS DOORS IN GENERAL CONSTRUCTION.
- 12. PROVIDE FIRESTOPPING FOR ALL DUCT, PIPE, AND CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS.
- 3. WHERE DUCTS AND PIPES PENETRATE FIRE AND/OR SMOKE RATED WALLS, LEAVE A MINIMUM OF 2 INCHES CLEAR ABOVE THE DUCTS AND PIPES, SUCH THAT THE MECHANICAL CONTRACTOR CAN SEAL THE WALL ABOVE THE DUCTS. DO NOT INSTALL FLEXIBLE DUCTWORK THROUGH FIRE AND/OR SMOKE RATED WALLS.
- 14. PROVIDE ESCUTCHEON PLATES WHERE DUCTS OR PIPES PENETRATE CEILINGS, WALLS, OR FLOORS WHERE EXPOSED TO VIEW IN FINISHED AREAS. ESCUTCHEONS FOR DUCTS SHALL BE CONSTRUCTED OF THE SAME MATERIAL AS DUCT. PIPE ESCUTCHEONS SHALL BE CHROME-PLATED BRASS.
- 15. THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING THERMOSTATS FOR ANY EQUIPMENT THAT REQUIRES CONTROL, SUCH AS VAV BOXES, FCU, FANS, HEATERS, FINNED TUBE RADIATION, RTU'S, ETC., REGARDLESS IF THERMOSTATS ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL THERMOSTATS SHALL BE DIRECT DIGITAL PROGRAMMABLE TYPE, UNLESS OTHERWISE NOTED. PROVIDE ONE THERMOSTAT FOR EACH FAN COIL UNIT, FAN UNIT, VAV, FPB, ENTRANCE HEATER, BASEBOARD RADIATION, ETC. THERMOSTAT LOCATIONS SHALL BE AS SHOWN ON PLANS AND/OR WHERE DIRECTED AND APPROVED BY THE ARCHITECT AND FNGINFFR.
- 16. ALL DUCTWORK AND PIPING REQUIRING FIRE RATING AND WHERE SHOWN ON PLANS SHALL BE PROVIDED WITH UL LISTED FIRE—RATED DUCT WRAP WITH APPROPRIATE FIRE RATING (1-HOUR, 2-HOUR, ETC.), UNLESS A FIRE-RATED ARCHITECTURAL ENCLOSURE IN THAT LOCATION IS SPECIFIED WITHIN DRAWINGS AND SPECIFICATIONS FOR ANOTHER TRADE.
- 17. ALL LINEAR DIFFUSERS ARE TO BE COORDINATED WITH ARCHITECTURAL PLANS FOR EXACT LENGTHS AND LOCATIONS. ACTIVE PLENUM SECTIONS SHALL BE OF THE SIZES AS SHOWN ON PLANS. EACH BRANCH TAP SERVING THE LINEAR DIFFUSER SHALL BE PROVIDED WITH A VOLUME DAMPER WHICH SHALL BE OPERABLE THROUGH THE DIFFUSER FACE. ACTIVE SUPPLY SECTION OF LINEAR DIFFUSER SHALL BE PROVIDED WITH PATTERN CONTROL DEVICES AND EQUALIZING GRIDS. ACTIVE OR INACTIVE RETURN SECTIONS SHALL NOT BE FURNISHED WITH PATTERN CONTROL OR EQUALIZING GRIDS.
- 18. BORDER TYPES AND METHOD OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES, AND REGISTERS SHALL BE COORDINATED WITH THE ARCHITECTURAL CEILING DETAILS AND SPECIFICATIONS.
- 19. REFER TO SPECIFICATIONS FOR ACOUSTIC LINING REQUIREMENTS NOT SHOWN ON THE
- 20. FOR WATER SYSTEMS: THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING BALL TYPE SHUT-OFF VALVES AND SEPARATE BALANCING VALVE FOR ALL BRANCH PIPING REGARDLESS IF VALVES ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL SHUT-OFF VALVES SHALL BE FULL PORT AND PRESSURE RATED FOR SYSTEM PRESSURE. THE BALANCING VALVE SHALL BE SIMILAR TO B&G CIRCUIT SETTER PLUS CALIBRATED BALANCE VALVE, UNLESS OTHERWISE
- 21. THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING SECONDARY DRAIN PANS FOR ALL AIR CONDITIONING CEILING HUNG EQUIPMENT REGARDLESS IF DRAIN PANS ARE NOT SHOWN IN CONTRACT DOCUMENTS. REFER TO DETAIL FOR INSTALLATION OF DRAIN PANS, IF NO DETAIL IS SHOWN. CONTRACTOR MUST REQUEST DRAIN PAN DETAIL THRU RFI PROCESS DURING BIDDING.
- 22. THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING CONDENSATE PIPING FOR ALL COOLING TYPE EQUIPMENT REGARDLESS IF CONDENSATE PIPING IS NOT SHOWN IN CONTRACT DOCUMENTS. ALL CONDENSATE PIPING SHALL BE INSULATED AND ROUTED TO NEAREST DRAIN OR JANITORS CLOSET. IF NO CONDENSATE PIPING IS SHOWN, CONTRACTOR MUST REQUEST CONDENSATE PIPING ROUTING THRU RFI PROCESS DURING BIDDING.
- 23. GENERAL NOTES, SYMBOLS, ABBREVIATIONS, AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
- 24. RELOCATE EXISTING WORK THAT INTERFERES WITH WORK OF THIS CONTRACT.
- 25. COORDINATE THIS WORK WITH THAT OF OTHER TRADES.
- 26. DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL. DIMENSIONS SHOWN IN ELEVATION ARE VERTICAL, EXCEPT IN WAY OF STRUCTURAL STEEL, DIMENSIONS ARE MEASURED PERPENDICULAR TO FLANGE.
- 27. PRODUCT INSTALLATION SHALL ADHERE TO MANUFACTURERS' RECOMMENDATIONS.
- 28. PROVIDE ACCESS PANELS IN DUCTS AND CEILINGS/SOFFITS/WALLS/FLOORS IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS FOR ALL CONCEALED EQUIPMENT THAT REQUIRES PERIODIC SERVICE, INCLUDING AIR CONDITIONING UNITS, FANS, CONDENSATE PUMPS, FIRE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS, AND DUCT MOUNTED SMOKE DETECTORS. MATCH FIRE RATING OF CEILING/SOFFIT/WALL/FLOOR WHERE APPLICABLE.
- 29. PROVIDE HANGERS, INSERTS, ANCHORS, SUPPLEMENTAL STEEL & SUPPORTS AS REQUIRED TO SUPPORT DUCTWORK, PIPING AND EQUIPMENT FROM STRUCTURE.
- 30. SCHEDULE WORK OF THIS SECTION TO AVOID INTERFERING WITH EXISTING OPERATIONS IN THE FACILITY.
- 31. COORDINATE ALL ROOF PENETRATIONS WITH THE WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS. COORDINATE ALL ROOF PENETRATION LOCATIONS WITH

MECHANICAL GENERAL NOTES (CONT.)

- THE OWNER. NOTIFY THE OWNER PRIOR TO STARTING WORK AND VERIFY COMPLIANCE WITH BOND AND WARRANTY OF THE ROOF.
- 32. RUN DUCTS AND PIPING CONCEALED, UNLESS OTHERWISE SPECIFIED, AND CLEAR OF CEILING INSERTS.
- 33. PROVIDE CLEARANCE IN FRONT OF ALL ELECTRIC CONTROL PANELS PER N.E.C. AND EQUIPMENT MANUFACTURERS' REQUIREMENTS.
 - 34. PRIOR TO SUBMISSION OF SHOP DRAWINGS. COORDINATE WITH ELECTRICAL CONTRACTOR TO VERIFY VOLTAGES AVAILABLE FOR MECHANICAL EQUIPMENT.
 - 35. MOTOR STARTERS AND VARIABLE FREQUENCY DRIVES FOR HVAC EQUIPMENT SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED/WIRED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED. COORDINATE AND VERIFY WITH ELECTRICAL CONTRACTOR PRIOR TO SHOP DRAWING SUBMISSION.
- 36. ALL DISCONNECT SWITCHES FOR HVAC EQUIPMENT SHALL BE FURNISHED, INSTALLED, AND WIRED BY THE ELECTRICAL CONTRACTOR, UNLESS INTEGRAL TO HVAC EQUIPMENT OR OTHERWISE NOTED. COORDINATE AND VERIFY WITH ELECTRICAL CONTRACTOR PRIOR TO SHOP DRAWING SUBMISSION.
- 37. USE FLAT TRANSVERSE SEAM FOR DUCTWORK WHERE SPACE AVAILABLE DICTATES.
- 38. BRANCH DUCTS TO INDIVIDUAL DIFFUSERS AND REGISTERS SHALL BE THE SAME SIZE AS THE DIFFUSER OR REGISTER NECK, UNLESS OTHERWISE NOTED.
- 39. ALL DUCTWORK AND PIPING SHALL BE INSTALLED TIGHT TO BOTTOM OF STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED OR ABSOLUTELY REQUIRED BY FIELD
- 40. DO NOT INSTALL DUCTWORK OR PIPING DIRECTLY UNDER AND PARALLEL TO THE WEB OF STRUCTURAL MEMBERS. OFFSET IN ORDER TO ALLOW FUTURE DUCTWORK AND PIPING TO CROSS OVER IN BETWEEN STRUCTURAL MEMBERS.
- 41. BRANCH DUCTS TO INDIVIDUAL DIFFUSERS AND REGISTERS SHALL BE PROVIDED WITH VOLUME DAMPERS, WHETHER OR NOT THE VOLUME DAMPERS ARE SHOWN ON PLAN.
- 42. VOLUME DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS SHALL BE CABLE OPERATED TYPE. WITH CABLE OPERATORS LOCATED IN ACCESSIBLE LOCATIONS AND CLEARLY LABELED FOR DIFFUSER OR REGISTER SERVED.
- 43. UNLESS OTHERWISE NOTED, ALL EXPOSED DUCTWORK IN FINISHED SPACES SHALL BE SPIRAL ROUND OR FLAT OVAL TYPE, WITH SOLID OUTER WALL, PERFORATED INNER
- WALL, AND 1 INCH THICK INTERSTITIAL ACOUSTICAL LINING. 44. CONDENSATE DRAIN (CD) AND CONDENSATE PUMP DISCHARGE (PD) PIPING SHALL BE
- RIGID COPPER, TYPE L, MINIMUM 3/4" NOMINAL PIPE SIZE, BRAZED OR SOLDERED, WITH 1" INSULATION, UNLESS OTHERWISE NOTED ON DRAWINGS. 45. NEW AND EXISTING PERMANENT HVAC AIR EQUIPMENT MAY BE USED BY CONTRACTORS
- DURING CONSTRUCTION FOR TEMPORARY HEATING, COOLING, AND VENTILATION, ONLY UNDER THE FOLLOWING CONDITIONS: 45.1. CONTRACTOR TO PROVIDE TEMPORARY FILTERS IN EACH UNIT DURING CONSTRUCTION, WHICH SHALL BE REPLACED WITH NEW CLEAN FILTERS AFTER
- GENERAL CONSTRUCTION IS COMPLETED. 45.2. CONTRACTOR TO PROVIDE FILTER FABRIC AT ALL RETURN AND EXHAUST REGISTERS, GRILLES, AND OPENINGS DURING CONSTRUCTION. 45.3. THE WARRANTY PERIOD FOR ALL EQUIPMENT SHALL NOT BEGIN UNTIL

CONSTRUCTION IS COMPLETED. IF THE EQUIPMENT MANUFACTURER'S

- WARRANTY PERIOD BEGINS WHILE THE UNIT USED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH EXTENDING THE WARRANTY TO PROVIDE THE FULL PERIOD OF COVERAGE TO THE OWNER. 45.4. IF NEW PERMANENT HVAC AIR EQUIPMENT INSTALLED UNDER THIS PROJECT WILL NOT BE OPERATED BY THE CONTRACTOR DURING CONSTRUCTION, ALL OPEN OR INCOMPLETE DUCTWORK SHALL BE CAPPED AIRTIGHT WITH WITH
- HEAVY POLYETHYLENE PLASTIC. AFTER THE INSTALLATION OF DUCTWORK. REGISTERS, GRILLES, AND DIFFUSERS. THE CONTRACTOR SHALL BLANK OFF ALL REGISTERS, GRILLES, AND DIFFUSERS WITH HEAVY POLYETHYLENE PLASTIC AND TAPE AIR TIGHT. IN AREAS THAT ARE UNDER CONSTRUCTION, UNTIL WORK IS COMPLETE IN THOSE AREAS. 45.5. IF THE ABOVE CONDITIONS ARE NOT MET, THE CONTRACTOR SHALL BE
- RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY HEATING, COOLING, AND VENTILATION EQUIPMENT. DUCTWORK. CONTROLS. PIPING. AND POWER AT
- 45.6. IF PERMANENT HVAC EQUIPMENT IS USED DURING CONSTRUCTION BUT NOT PROPERLY PROTECTED AS DESCRIBED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT DUST AND DEBRIS FROM DUCTWORK AND EQUIPMENT, AS WELL AS ANY NECESSARY REPAIR OR REPLACEMENT OF DAMAGED EQUIPMENT AT HIS OWN EXPENSE.
- 45.7. WHEN GENERAL CONSTRUCTION IS COMPLETE, VACUUM CLEAN ALL DIFFUSERS, REGISTERS, GRILLES, AND HVAC EQUIPMENT IN THE PROJECT AREA OR SERVING THE PROJECT AREA. REMOVE ANY CONSTRUCTION DEBRIS.

MECHANICAL DEMOLITION GENERAL NOTES

- DEMOLITION NOTES, SYMBOL LIST, AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
- . ALL PIPING IN WALLS AND FLOORS NOT TO BE REUSED WILL BE PLUGGED OR CAPPED, AND CUTTING AND PATCHING WILL BE PERFORMED TO RESTORE SURFACE TO ORIGINAL CONDITION BY THIS CONTRACTOR.
- AFTER REMOVING PIPE THROUGH THE FLOOR SLABS, PACK OPENING WITH APPROVED FIRE-RATED PACKING.
- THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF HVAC WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE OWNER/ENGINEER.
- THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING HVAC SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
- DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR, OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL
- THE CONTRACTOR SHALL REMOVE ALL DUCT AND PIPING SUPPORTS, ETC. FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING PIPING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL
- AND PROVIDE BYPASS CONNECTIONS NECESSARY. 3. ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERATION WORK SHALL BE

CONDITION.

- REAVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES. 9. PORTIONS OF PIPING AND DUCTWORK TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ACTIVE,
- 10. THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE. SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS.

SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED, AND RECONNECTED.

- 11. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE HVAC CONTRACTOR, AS DIRECTED BY THE
- 2. ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
- 13. THE SHUTDOWN OF EXISTING BUILDING HVAC SERVICES SHALL BE COORDINATED WITH WITH THE OWNER. MAKE ARRANGEMENTS AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO A SHUTDOWN.
- CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- 15. WHERE THE DEMOLITION OF EXISTING PNEUMATIC CONTROL EQUIPMENT. THERMOSTATS, OR TUBING IS INDICATED IN THE PLANS, THE CONTRACTOR SHALL CAP THE ENDS OF ALL EXISTING TO REMAIN PNEUMATIC LINES AIRTIGHT UNLESS OTHERWISE NOTED. IF ADDITIONAL PNEUMATIC LINES OR DEVICES ARE DISCOVERED BY THE CONTRACTOR INSIDE WALLS OR ABOVE CEILINGS DURING DEMOLITION, THE CONTRACTOR SHALL INFORM THE DESIGN TEAM PRIOR TO REMOVAL OF THESE LINES OR DEVICES.

EASTCHESTER UNION FREE

SCHOOL DISTRICT

2022 CAPITAL BOND PROJECT PHASE 2

HIGH SCHOOL

ARCHITECT $M \equiv M \wedge S$

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MEP CONSULTANT STANTEC 30 OAK STREET, SUITE 400

STAMFORD, CT 06905

BRIDGEWATER, MA 02324

NEW YORK, NY 10014

SECURITY CONSULTANT BUILDING TECHNOLOGY CONSULTING 992 BEDFORD STREET

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ISSUE	DAT

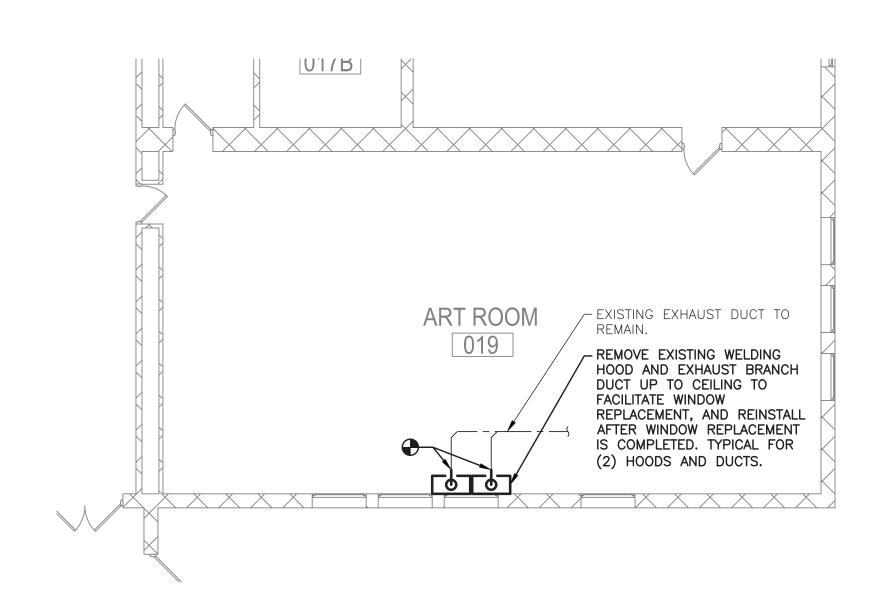
KEY PLAN

66-03-01-03-0-003-030 PROJECT NO.

MEMASI PROJECT NO. COVER SHEET

HS M001

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PART PLAN - BASEMENT LEVEL

1/8" = 1'-0"

NEW CONSTRUCTION NOTES - DUCTWORK:

- 1. BRANCH DUCTS TO INDIVIDUAL DIFFUSERS AND REGISTERS SHALL BE THE SAME SIZE AS THE DIFFUSER OR REGISTER NECK, UNLESS OTHERWISE NOTED.
- 2. ALL DUCTWORK SHALL BE INSTALLED TIGHT TO BOTTOM OF STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED OR ABSOLUTELY REQUIRED BY FIELD CONDITIONS.
- 3. DO NOT INSTALL DUCTWORK DIRECTLY UNDER AND PARALLEL TO THE WEB OF STRUCTURAL MEMBERS. OFFSET IN ORDER TO ALLOW FUTURE DUCTWORK AND
- PIPING TO CROSS OVER IN BETWEEN STRUCTURAL MEMBERS.

 4. BRANCH DUCTS TO INDIVIDUAL DIFFUSERS AND REGISTERS SHALL BE PROVIDED WITH
- 5. VOLUME DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS SHALL BE CABLE OPERATED TYPE, WITH CABLE OPERATORS LOCATED IN ACCESSIBLE LOCATIONS AND CLEARLY LABELED FOR DIFFUSER OR REGISTER SERVED.

VOLUME DAMPERS, WHETHER OR NOT THE VOLUME DAMPERS ARE SHOWN ON PLAN.

6. UNLESS OTHERWISE NOTED, ALL EXPOSED DUCTWORK IN FINISHED SPACES SHALL BE SPIRAL ROUND OR FLAT OVAL TYPE, WITH SOLID OUTER WALL, PERFORATED INNER WALL, AND 1 INCH THICK INTERSTITIAL ACOUSTICAL LINING.

NEW CONSTRUCTION NOTES - PIPING:

- 1. ALL PIPING SHALL BE INSTALLED TIGHT TO BOTTOM OF STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED OR ABSOLUTELY REQUIRED BY FIELD CONDITIONS.
- DO NOT INSTALL PIPING DIRECTLY UNDER AND PARALLEL TO THE WEB OF STRUCTURAL MEMBERS. OFFSET IN ORDER TO ALLOW FUTURE DUCTWORK AND

PIPING TO CROSS OVER IN BETWEEN STRUCTURAL MEMBERS.

3. CONDENSATE DRAIN (CD) AND CONDENSATE PUMP DISCHARGE (PD) PIPING SHALL BE RIGID COPPER, TYPE L, MINIMUM 3/4" NOMINAL PIPE SIZE, BRAZED OR SOLDERED, WITH 1" INSULATION, UNLESS OTHERWISE NOTED ON DRAWINGS.

EASTCHESTER UNION FREE SCHOOL DISTRICT

2022 CAPITAL BOND PROJECT PHASE 2

HIGH SCHOOL

ARCHITECT

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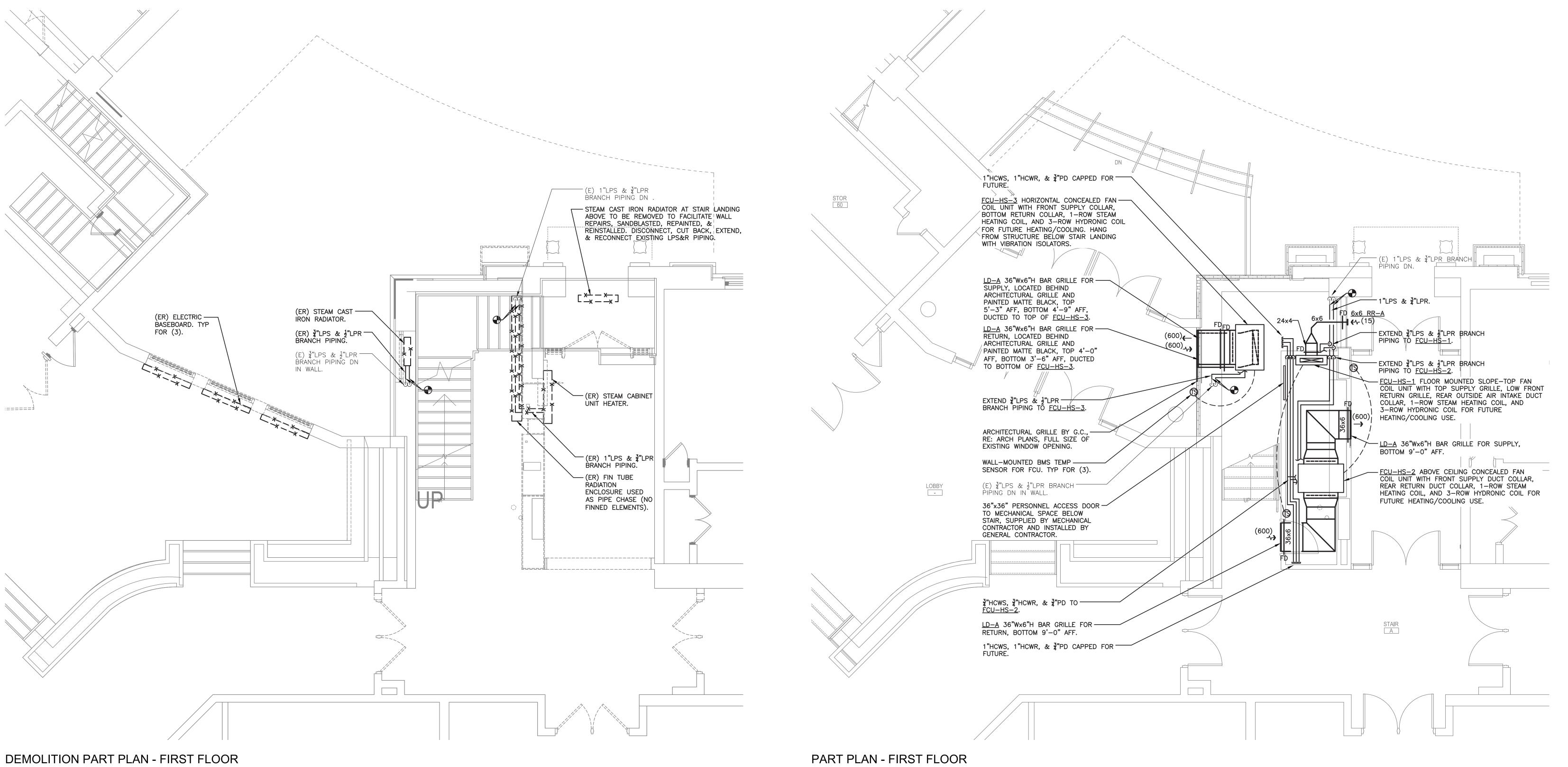
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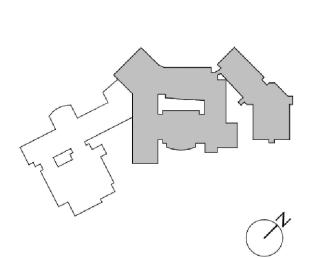
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KEY PLAN



PROJECT NO. 66-03-01-03-0-003

MEMASI PROJECT NO. 102-2

FIRST FLOOR
VESTIBULE PART
PLAN

HS M101

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									VENTILA	ATION SC	HEDULE						
AIR HAND	LING SYST	EM DATA			ROOM	DATA				OUTSIDE VENT	TILATION AIRFLO	W REQUIRED PI	ER THE	OUTSIDE VEN	ITILATION AIRFL	OW REQUIRED	PER THE NYSED 1998
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SYSTEM	AIRFLOW	VENTILATION				PEOPLE	AIRFLOW	OUTSIDE	VENTILATION	VENTILATION	DISTRIBUTION	OUTSIDE	VENTILATION AIRFLOW	VENTILATION	VENTILATION	OUTSIDE	VENTILATION AIRFLOW
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		(CFM)						AIRFLOW	PER PERSON	SQUARE FOOT		AIRFLOW	CODE REQUIREMENT	PER PERSON	SQUARE FOOT	AIRFLOW	NYSED REQUIREMENT
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	ATION	SUPPLY	RETU	RN OU	TSIDE S	UPPLY	MIN. E	ESP N	Ю.	HP	BHP FAI	DRIVE	STARTER	STARTER ST	EAM CHILL	ED HOT	DUAL	FLUID T	OT. SENS.	GPM E.	W.T. L.W.T	. E.A.T. E.	A.T. L.A.	Γ. L.A.T.	W.P.D. F	LUID MBH	GPM E.W.	.T. L.W.T.	E.A.T. L.	A.T. W.P.D	D. HEATII	NG STEAM	1 STE	EAM E.A.T	. L.A.T. V	OLTS PH	HZ MCA M	IOP	DISCO	NNECT		EMER. PR		DIMENSIO		(LBS)	TURER		
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	JOHOLALLD		COLL	AR								`-																												0025									

NOTES:

1. PROVIDE THE FOLLOWING FACTORY SUPPLIED FEATURES AND OPTIONS FOR ALL UNITS WITH OUTSIDE AIR INTAKE CONNECTIONS:

1.1. 2-POSITION OUTSIDE AIR MOTORIZED DAMPER AND ACTUATOR, "OPEN" POSITION FIELD ADJUSTIBLE FROM 0-50%.

2. PROVIDE THE FOLLOWING FACTORY SUPPLIED FEATURES AND OPTIONS FOR ALL FLOOR-MOUNTED UNITS:

2.2. SUB-BASE, 4" HIGH.

3. PROVIDE THE FOLLOWING FIELD SUPPLIED OPTIONS FOR ALL UNITS:

3.1. AUTOMATIC TEMPERATURE CONTROLS SUB-CONTRACTOR TO FURNISH AND FIELD-INSTALL BMS CONTROLS, CONTROL VALVES, AND CONTROL WIRING.

						REGIST	ER, GRILLE	. AND DIF	FUSER S	SCHEDULE					
DESIGNATION	SERVICE	TYPE	NOMINAL OVERALL DIMENSION (IN)	NECK SIZE (IN)	CFM RANGE	CONFIGURATION	BORDER	MATERIAL OF CONSTRUCTION	EQUALIZING	OPPOSED	FILTER RACK	FINISH COLOR	MANUFACTURER	MODEL	REMARKS
ER-A		CEILING OR SIDEWALL REGISTER	RE: PLAN	RE: PLAN	RE: PLAN	LOUVERED FACE, 1/2" BLADE SPACING, 35° FIXED DEFLECTION	LAY-IN OR SURFACE MOUNTED	ALUMINUM	NO	ONLY IF REGISTER IS MOUNTED TO EXPOSED SPIRAL DUCT	NO	WHITE , UNLESS OTHERWISE NOTED	TITUS	355FL	SEE NOTES BELOW
LD-A	SUPPLY	LINEAR DIFFUSER	RE: PLAN	RE: PLAN	RE: PLAN	EXTRUDED ALUMINUM BAR GRILLE WITH 1/8" BARS, 1/2" SPACING, 0° DEFLECTION	SURFACE MOUNTED WITH CONCEALED SCREW FASTENING	ALUMINUM	NO	NO	NO	WHITE FLANGES, BLACK PATTERN CONTROLLER & VISIBLE INTERNAL SURFACES	TITUS	CT-580	SEE NOTES BELOV

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

2. ALL FINISH COLORS ARE SUBJECT TO APPROVAL BY THE ARCHITECT. SUBMIT COLOR CHART FOR REVIEW.
3. COORDINATE BORDER TYPES WITH ARCHITECTURAL CEILING SPECIFICATIONS.

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2022 CAPITAL BOND PROJECT PHASE 2

HIGH SCHOOL

ARCHITECT

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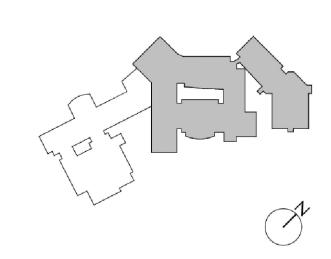
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BID SET	01/03/2023
ISSUE	DATE

KEY PLAN



PROJECT NO. 66-03-01-03-0MEMASI PROJECT NO. 1

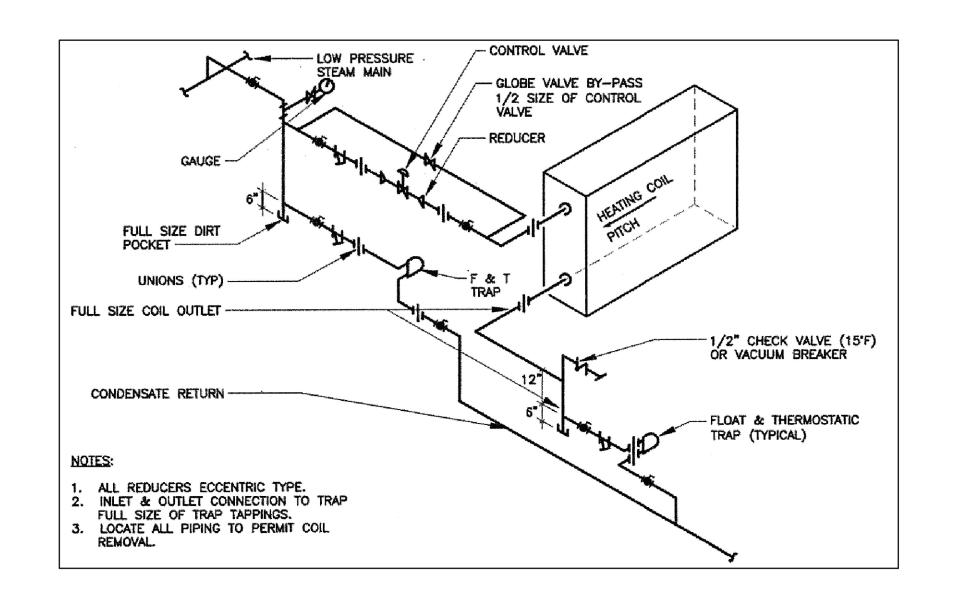
SCHEDULES

HS M201

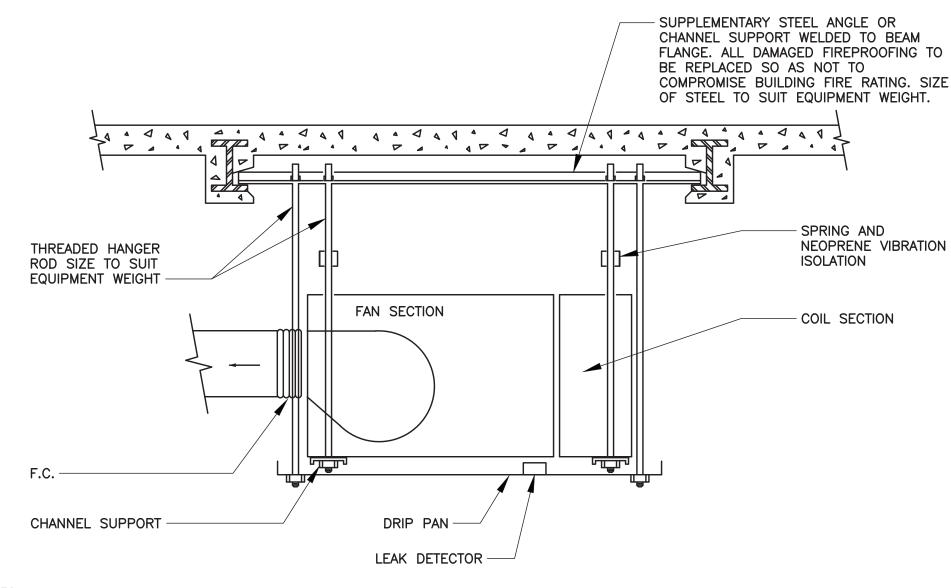
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TYPICAL DUCT HANGING DETAIL



STEAM COIL PIPING DETAIL

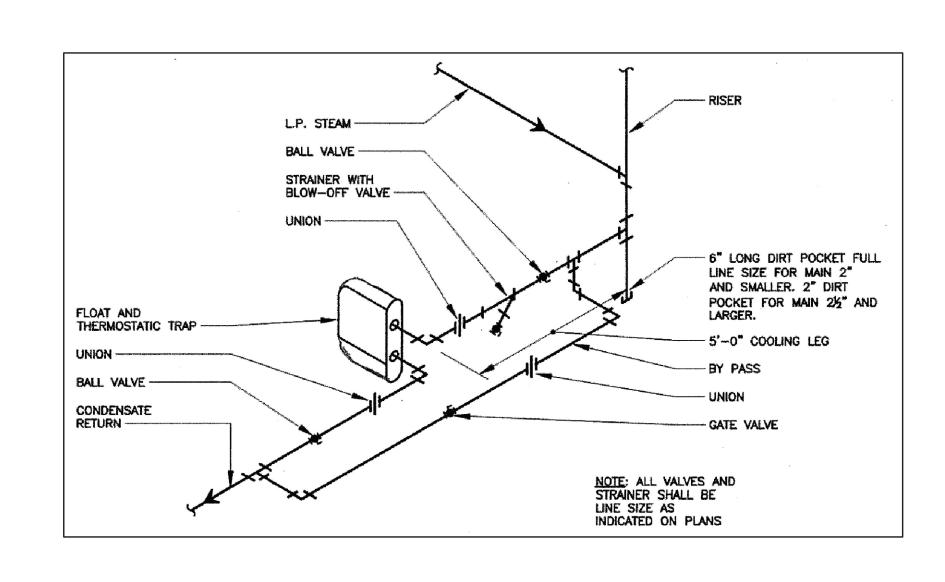


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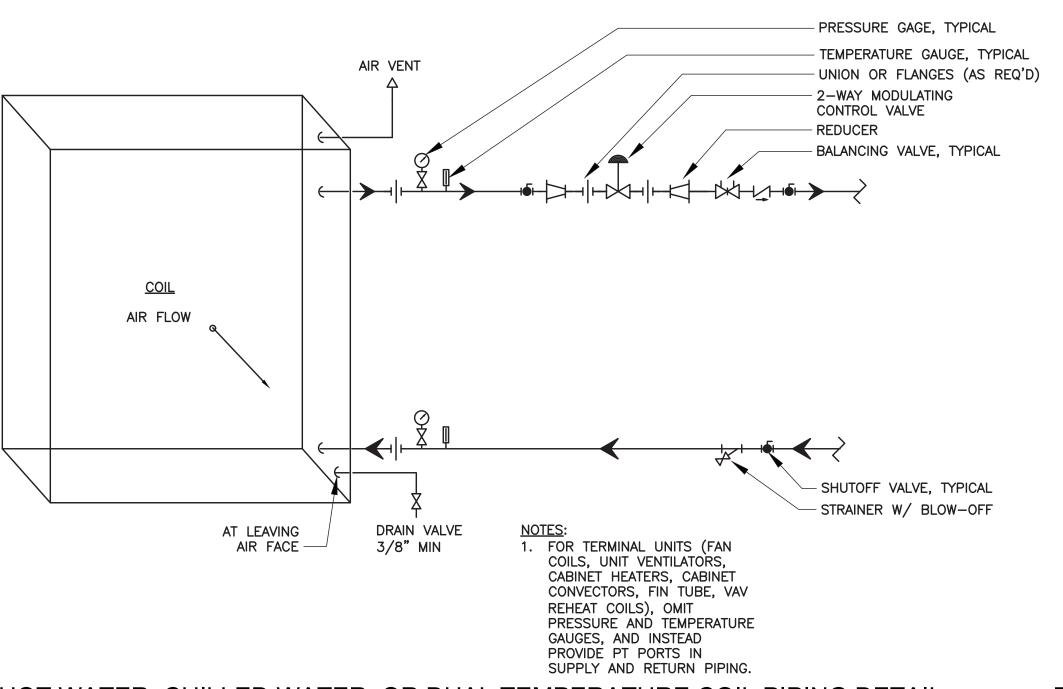
1. INCLUDE DRIP PAN AND LEAK DETECTOR FOR ALL CONCEALED HVAC UNITS WITH COOLING COILS (4—PIPE FAN COIL UNIT WITH HOT AND CHILLED WATER COILS, 2—PIPE FAN COIL UNIT WITH A DUAL—TEMPERATURE HOT/CHILLED WATER COIL, ETC.).

2. INCLUDE DRIP PAN AND LEAK DETECTOR FOR ALL CONCEALED HVAC UNITS WHICH ARE INTENDED FOR HEATING ONLY SERVICE, BUT WILL BE CONNECTED TO DUAL—TEMPERATURE HOT/CHILLED WATER PIPING (2—PIPE CABINET UNIT HEATERS WITH HOT WATER COIL, ETC.). THE DRIP PAN AND LEAK DETECTOR WILL BE UTILIZED AS A BACKUP TO BMS CONTROLS PROGRAMMED TO CLOSE THE CONTROL VALVE WHENEVER CHILLED WATER IS BEING CIRCULATED.

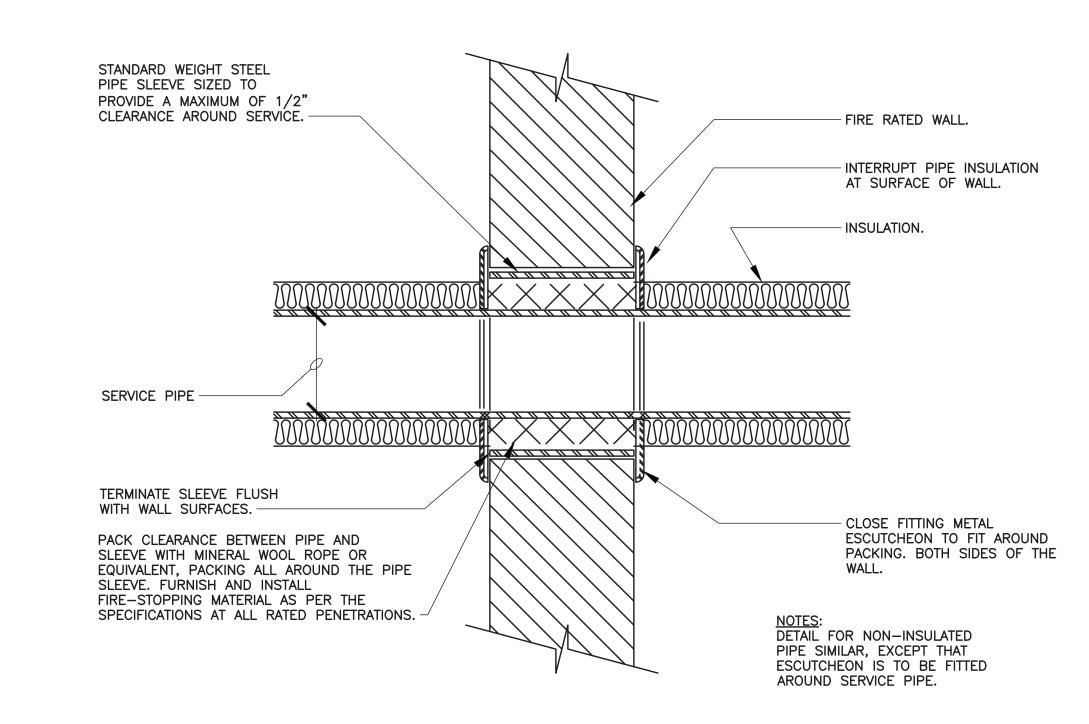
HVAC EQUIPMENT HANGING DETAIL



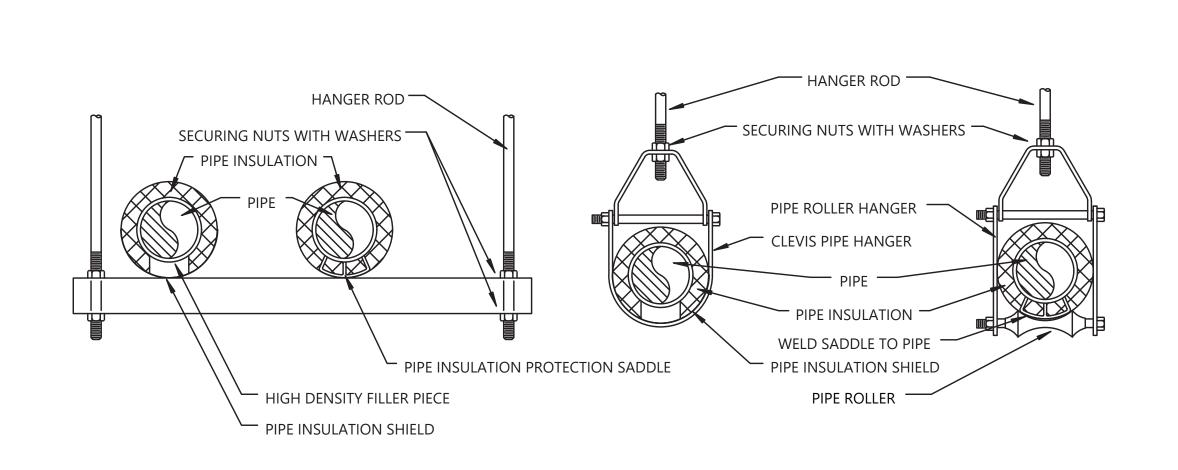
STEAM TRAP PIPING DETAIL



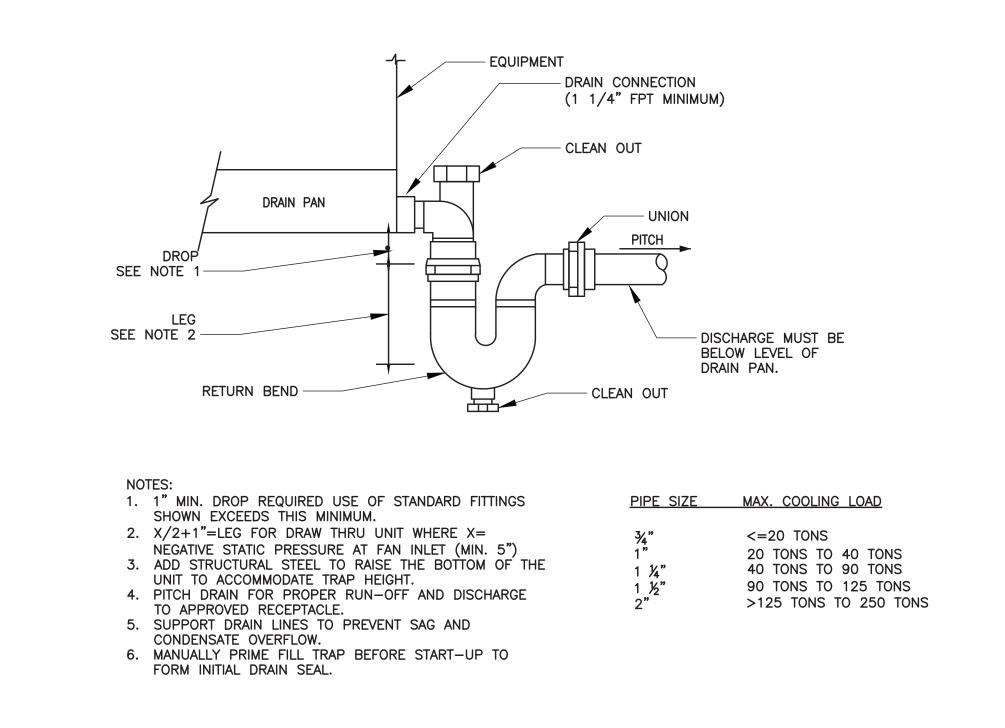
HOT WATER, CHILLED WATER, OR DUAL TEMPERATURE COIL PIPING DETAIL



DETAIL OF PIPE THROUGH RATED PARTITION OR FLOOR



PIPE HANGING DETAIL



TYPICAL CONDENSATE DRAIN PIPING DETAIL (DRAW THROUGH)

EASTCHESTER UNION FREE SCHOOL DISTRICT

2022 CAPITAL BOND PROJECT PHASE 2

HIGH SCHOOL

ARCHITECT

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BID SET 01/03/20		•
	BID SET	01/03/20

KEY PLAN

PROJECT NO. 66-03-01-03-0-003-030

MEMASI PROJECT NO. 102-2202

DETAILS

HS M301

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12/30/2022 1:00 AM Reiss, Jeremy U:\223030829\D_WORKING_FILES\00_MEP\02_CAD\PH/