

## GENERAL NOTES

- REMOVAL & RELOCATION OF CERTAIN EXISTING WORK SHALL BE NECESSARY FOR THE PERFORMANCE OF THE NEW WORK SHOWN HEREIN. ALL EXISTING CONDITIONS ARE NOT COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE & MAKE ALL NECESSARY CHANGES BASED ON EXISTING CONDITIONS AS REQUIRED FOR PROPER DEMOLITION OF EXISTING WORK & SHALL INCLUDE ALL MATERIALS & LABOR FOR SAME IN HIS BID PRICE. NO ALLOWANCE WILL BE MADE FOR FAILURE TO DO SO.
- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL VISIT THE PREMISES OF THE PROPOSED WORK & SHALL CAREFULLY EXAMINE THE ENGINEERING DRAWINGS, EXISTING CONDITIONS & LIMITATIONS THEREOF. VERIFY ACTUAL LOCATIONS WHERE THE NEW PIPING WILL BE ROUTED, COORDINATE WITH NEW & EXISTING WORK & PROVIDE CLEARANCE. W/ BUILDING STRUCTURE, OTHER SERVICES, ETC.. THE CONTRACTOR SHALL INCLUDE ALL COSTS WHATSOEVER WHICH ARE INCURRED AS A RESULT OF LIMITATIONS OF THE EXISTING & NEW CONDITIONS. LATER CLAIMS FOR EXTRA LABOR, EQUIPMENT, MATERIALS, ETC. REQUIRED DUE TO DIFFICULTIES WHICH COULD HAVE BEEN FORESEEN WILL NOT BE CONSIDERED AS EXTRA WORK.
- INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATING, MAINTENANCE & REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES OF MAGNITUDE WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.
- INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHEN NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN CRATED SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AREAS AVAILABLE. ASCERTAIN FROM BUILDING OWNER AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH THE BUILDING.
- COORDINATE THE EXACT SIZE & LOCATION OF NEW OPENINGS WITH EXISTING STRUCTURE. PATCH / INSULATE AS REQUIRED. CONTRACTOR SHALL FIRESTOP ALL PENETRATIONS FROM NEW PIPING, CONDUIT, DUCTWORK, ETC. THROUGH EXISTING OR NEW FIRE / SMOKE BARRIERS. REFER TO SPECIFICATION SECTION 230680 FOR FURTHER DETAILS.
- IT IS THE INTENT OF THIS CONTRACT FOR REMAINING SYSTEMS TO BE LEFT IN GOOD WORKING ORDER, READY FOR OPERATION. COORDINATE ANY REQUIRED SYSTEM SHUTDOWNS WITH OWNER 48 HOURS IN ADVANCE. EXISTING SYSTEM SHUTDOWNS WILL NOT BE PERMITTED IF THEY INTERFERE WITH THE DAILY OPERATIONS OF THE BUILDING. CONTRACTOR WILL BE REQUIRED TO TAKE PROPER PRECAUTIONS AGAINST DAMAGING OR DISRUPTING BUILDING SYSTEMS, WIRING, PIPING OR CONTROL TUBING. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AT THE CONTRACTORS COST AS A PART OF THIS CONTRACT.
- THE CONTRACTOR SHALL REPAIR / RESTORE TO ORIGINAL CONDITION ANY EXISTING EQUIPMENT OR MATERIALS DAMAGED IN THE PROCESS OF INSTALLATION, OR DEMOLITION TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE. CONTRACTOR SHALL MAKE REPAIRS USING THE SAME OR EQUIVALENT MATERIALS. WORK WILL BE PERFORMED AT THE CONTRACTORS COST.
- CONTRACTOR SHALL INCUR ANY COSTS OR BURDENS ASSOCIATED WITH LOST OR STOLEN EQUIPMENT / MATERIALS.
- DURING THE LIFE OF THE CONTRACT PERIOD, CONTRACTOR SHALL REMOVE ALL RUBBISH / EXCESS MATERIAL ACCUMULATED AS A RESULT OF HIS OPERATIONS ON A DAILY BASIS. ALL AREAS / EQUIPMENT AFFECTED UNDER THIS CONTRACT SHALL BE KEPT CLEAN OF DUST / DEBRIS. ALL AREAS SHALL RECEIVE A FINAL CLEANING PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
- PROVIDE FOR LEGAL REMOVAL / DISPOSAL OF ALL RUBBISH / DEBRIS FROM THE BUILDING & SITE. PROTECT ALL WORK NOT SLATED FOR DEMOLITION.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO SCHEDULING THE WORK. WORK SHALL BE PERFORMED IN PROPER SEQUENCE, AS AGREED TO BY ALL TRADES. ANY COSTS INCURRED BY THE OWNER DUE TO IMPROPER SEQUENCING OF WORK WILL BE PAID FOR BY THIS CONTRACTOR.
- CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY ALL FEES, CONNECTION CHARGES, ETC. ASSOCIATED WITH THE WORK UNDER THEIR CONTRACT.
- PAINT / TOUCH UP ALL SURFACES MARKED AS A RESULT OF THE PERFORMANCE OF THE CONTRACT WORK.
- THE MECHANICAL CONTRACTOR SHALL REFER TO / REVIEW ALL OTHER TRADE DRAWINGS IN THE BID PACKAGE & SHALL BE RESPONSIBLE FOR / PREFORM ALL WORK INDICATED AS (M.C.) MECHANICAL WORK AS A PART OF THE BASE BID UNLESS SPECIFICALLY NOTED OTHERWISE.
- SUBSTITUTED EQUIPMENT OF GREATER OR LARGER POWER, DIMENSIONS, CAPACITIES & RATINGS MAY BE FURNISHED PROVIDED THAT SAID EQUIPMENT IS APPROVED IN WRITING PRIOR TO ORDER. ANY CONNECTING MECHANICAL SERVICES, ELECTRICAL SERVICES, BASES, STRUCTURAL APURTMENTANCES, ETC. REQUIRED TO BE INCREASED DUE TO THE USE OF SAID EQUIPMENT WILL BE PAID FOR IN FULL BY THE MECHANICAL CONTRACTOR, INCLUDING ANY ADDITIONAL REQUIRED ENGINEERING FEES.
- EACH PIECE OF EQUIPMENT SHALL BE PROVIDED WITH A PERMANENT TYPE LAMINATED, BLACK FINISH, WHITE CORE, PHENOLIC NAMEPLATE. NAMEPLATES SHOULD INDICATE THE NAME & NUMBER OF THE UNIT, UNIT VOLTAGE, & ANY INTERLOCK REFERENCE. STARTERS / DISCONNECT SWITCHES SHOULD ALSO BE EQUIPPED WITH AN IDENTICAL NAMEPLATE WITH THE SAME INFORMATION.
- "ATTIC STOCK" - UPON COMPLETION OF THE PROJECT, MECHANICAL CONTRACTOR SHALL COMPLETELY REMOVE / DISPOSE OF FILTERS USED DURING CONSTRUCTION & START-UP PROCEDURES. INSTALL NEW FILTERS IN ALL EQUIPMENT, SERV-13 OR BETTER UPON TURN OVER OF THE PROJECT TO THE OWNER. IN ADDITION, PROVIDE (1) COMPLETE SETS OF FILTERS FOR EACH PIECE OF EQUIPMENT & TURN OVER TO OWNER.
- MECHANICAL CONTRACTOR SHALL PROVIDE (1) SPARE MOTOR FOR EACH SIZE MOTOR USED ON THE PROJECT. IN INSTANCES WHERE MORE THAN TEN OF THE SAME MOTOR ARE USED, MECHANICAL CONTRACTOR SHALL PROVIDE (1) SPARE MOTOR FOR EVERY TEN MOTORS OF A GIVEN SIZE USED ON THE PROJECT.
- MAINTENANCE MANUAL - UPON COMPLETION OF THE PROJECT, THE MECHANICAL CONTRACTOR SHALL PROVIDE A BINDER CONTAINING THE OPERATIONS & MAINTENANCE MANUALS FOR EACH NEW PIECE OF EQUIPMENT INSTALLED UNDER THIS PROJECT. THE FIRST SECTION OF THE MAINTENANCE MANUAL SHALL CONTAIN A LIST OF EACH PIECE OF EQUIPMENT, COMPLETE WITH INFORMATION SHOWING APPROPRIATE REPLACEMENT FILTER SIZES / TYPES, APPROPRIATE REPLACEMENT BELT SPECIFICATIONS, REPLACEMENT MOTOR SPECIFICATIONS, REPLACEMENT BEARING SPECIFICATIONS, VOLTAGES OF UNIT, ETC. THIS SHALL SERVE AS A WRITTEN DATABASE, DESCRIBING ALL MAINTENANCE INFORMATION FOR EACH NEW PIECE OF EQUIPMENT USED.
- WHERE THE INSTALLATION OF MECHANICAL SYSTEMS REQUIRES REMOVAL / MODIFICATIONS TO EXISTING CEILINGS, MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE MODIFICATION / REMOVAL / REINSTALLATION OF CEILING MATERIALS AS A PART OF THEIR CONTRACT UNLESS SPECIFICALLY NOTED OTHERWISE. WORK TO INCLUDE RE-FRAMING GRIDS / CUTTING PLASTER OR SHEET ROCK CEILINGS WHEN REQUIRED FOR EQUIPMENT INSTALLATION. UPON COMPLETION OF ALL WORK, BUILDING CEILINGS SHALL BE RETURNED TO ORIGINAL OR BETTER THAN ORIGINAL CONDITION. MECHANICAL CONTRACTOR WILL BE RESPONSIBLE FOR THE DOCUMENTATION OF EXISTING CONDITIONS PRIOR TO THE START OF WORK.

## FIRESTOPPING NOTES

- ALL PENETRATIONS RELATED TO MECHANICAL WORK THROUGH FIRE RATED WALLS, FLOORS OR OTHER STRUCTURES SHALL BE FIRE STOPPED AS REQUIRED TO MAINTAIN THE RATING OF THE WALL BY MECHANICAL CONTRACTOR. IT IS ASSUMED THAT ALL WALLS IN THE CONSTRUCTION CARRY A MINIMUM FIRE RATING OF 1 HR. IT SHOULD BE ASSUMED THAT ALL MACHINE ROOM WALLS / BOILER ROOM WALLS / ELECTRIC ROOM WALLS CARRY A RATING OF 2 HR. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE REVIEW OF THE ARCHITECTURAL DRAWINGS IN ORDER TO DETERMINE FIRE RATINGS OF ALL WALLS / PARTITIONS RELATED TO WORK UNDER THIS CONTRACT.
- MECHANICAL CONTRACTOR SHALL REVIEW THE COMPLETE ARCHITECTURAL SET OF DRAWINGS IN ORDER TO DETERMINE WHERE DUCT PENETRATIONS THROUGH RATED BARRIERS / DUCTS PENETRATING SAID RATED BARRIERS SHALL BE EQUIPPED WITH A UL LISTED FUSIBLE LINK TYPE FIRE DAMPER, RATED FOR SERVICE FOR WHICH IT IS BEING USED. FIRE DAMPERS SHALL BE PROVIDED & INSTALLED BY THE MECHANICAL CONTRACTOR, COMPLETE W/ DUCT ACCESS DOORS DIRECTLY ADJACENT TO THE DAMPER, POSITIONED FOR EASY REPLACEMENT OF THE LINK.
- MECHANICAL CONTRACTOR SHALL REVIEW THE COMPLETE ARCHITECTURAL SET OF DRAWINGS IN ORDER TO DETERMINE WHERE DUCT PENETRATIONS THROUGH RATED BARRIERS OCCUR BETWEEN SEPARATE SMOKE ZONES. DUCTS PENETRATING SAID FIRE / SMOKE BARRIERS SHALL BE EQUIPPED WITH A UL LISTED COMBINATION FIRE / SMOKE DAMPER, RATED FOR SERVICE FOR WHICH IT IS BEING USED. FIRE / SMOKE DAMPERS SHALL BE PROVIDED & INSTALLED BY THE MECHANICAL CONTRACTOR, COMPLETE W/ DUCT ACCESS DOORS DIRECTLY ADJACENT TO THE DAMPER. DAMPER ACTUATOR & RELATED WIRING SHALL BE PROVIDED & INSTALLED BY THE ELECTRICAL CONTRACTOR. COORDINATE DAMPER INSTALLATIONS W/ E.C. TO VERIFY PROPER CLEARANCES TO ASSURE PROPER DAMPER OPERATION.
- MECHANICAL CONTRACTOR SHALL PROVIDE A FULL SET OF AS-BUILT DRAWINGS SHOWING EACH DAMPER LOCATION, TYPE OF DAMPER, ACCESS DOOR LOCATIONS, ETC.
- CONTRACTOR SHALL REFER TO SPECIFICATION SECTION 230680 FOR FURTHER DETAILS REGARDING FIRESTOPPING MATERIALS & METHODS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRODUCTS TO BE USED. FIRESTOP MATERIALS OTHER THAN THE PRODUCTS SPECIFIED SHALL INCLUDE FULL TECHNICAL DATA WITH SHOP DRAWINGS TO DEMONSTRATE EQUALITY WITH THE SPECIFIED FIRESTOPPING MATERIALS.

## GENERAL INSTRUMENTATION NOTES

- AT A MINIMUM, PROVIDE THERMOMETERS / WELLS AT THE FOLLOWING LOCATIONS:
    - AT INLETS & OUTLET OF EACH THREE FIVE VALVE UNIT VENTILATORS / CABINET UNIT HEATER INSTALLATIONS EXCEPTED.
    - AT INLET & OUTLET OF EACH HYDRONIC BOILER, CHILLER OR COOLING TOWER.
    - AT INLET & OUTLET OF EACH HYDRONIC COIL OR AIR HANDLING UNITS & BUILT-UP CENTRAL SYSTEMS.
    - THERMOMETERS SHALL HAVE 9" SCALE W/ THE ABILITY TO ANGLE THE UNIT FOR BETTER VIEWING.
  - AT A MINIMUM, PROVIDE LIQUID FILLED PRESSURE GAUGES / WELLS AT THE FOLLOWING LOCATIONS:
    - AT SUCTION & DISCHARGE OF EACH PUMP.
    - FOR EACH MAKEUP WATER LINE.
    - BEFORE & AFTER ALL PRESSURE REDUCING VALVES.
    - AT ACCESSIBLE HIGH POINT OF ALL HYDRONIC PIPING SYSTEMS.
    - AT ALL EXPANSION / COMPRESSION TANKS.
- THERMOMETERS SHALL BE "WINTERS" #TIN SERIES OR EQUAL, DUAL SCALE / LEAD FREE BRASS THERMOWELL.
- PRESSURE GAUGES SHALL BE FULL STAINLESS STEEL / LIQUID FILLED & SHALL BE 4" DIA. MINIMUM, W/ PRESSURE SNUBBER ("WINTERS" #PFO SERIES OR EQUAL). PROVIDE GAUGES W/ PRESSURE RANGES APPROPRIATE FOR ACCURATE MEASUREMENT / READING OF THE GAUGE.

## EQUIPMENT VENTING NOTES

- MECHANICAL CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER VENTING OF ALL NEWLY INSTALLED HYDRONIC PIPING SYSTEMS. AUTOMATIC AIR VENTS SHALL BE INSTALLED AT EVERY HIGH POINT IN THE PIPING SYSTEM WHERE AIR CAN COLLECT. PROVIDE COIL IN RISER PRIOR TO AUTOMATIC AIR VENT. NEW AIR VENTS SHALL BE "TACO" #HY-VENT OR EQUIVALENT.
- MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL NEW AUTOMATIC AIR VENT FOR EACH AIR HANDLING UNIT COIL OR DUCT MOUNTED COIL. INSTALL SHUT-OFF COCK PRIOR TO VENT TIE-IN.
- MECHANICAL CONTRACTOR SHALL PROVIDE NEW MANUAL AIR VENTS FOR ALL UNIT VENTILATOR COILS, CONVEYCTORS, FAN COIL UNITS, FAN TUBE RADIATORS, ETC. MANUAL VENTS SHALL BE "TACO" #417 COIN VENT OR EQUIVALENT. PROVIDE SHUT-OFF COCK PRIOR TO VENT. AM CON VENT DISCHARGE IN AN APPROPRIATE MANNER AS TO FACILITATE THE CAPTURE OF BLED WATER WHILE PERFORMING SYSTEM BLEEDING OPERATIONS.

## ELECTRICAL WORK & TEMPERATURE CONTROL WIRING UNDER MECHANICAL CONTRACT

- MECHANICAL CONTRACTOR SHALL PROVIDE ALL STARTERS & DISCONNECT SWITCHES REQUIRED FOR ALL NEW MECHANICAL EQUIPMENT. STARTER / DISCONNECT SWITCH INSTALLATION TO BE PERFORMED UNDER THE ELECTRICAL CONTRACT. COORDINATE WORK W/ ELECTRICAL CONTRACTOR PRIOR TO START OF WORK. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR POWER WIRING FROM DISCONNECT SWITCH TO MOTOR STARTERS & TO ALL EQUIPMENT LINE VOLTAGE LOADS.
- POWER WIRING REQUIRED FOR CONTROLS SHALL BE PERFORMED UNDER THE MECHANICAL CONTRACT UNLESS SPECIFICALLY NOTED OTHERWISE ON THE ELECTRICAL DRAWINGS. MECHANICAL CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED ELECTRICIAN (PER NEC REQUIREMENTS) TO PERFORM ANY & ALL ELECTRICAL WORK.

## VENTILATION CODE SCHEDULE

Room Number	Occupancy Classification	Occupancy Density (People Per 1000SF)	People Outdoor Airflow Rate in Breathing Zone, Rp (CFM/Person)	Area Outdoor Airflow Rate in Breathing Zone, Ra (CFM/SF)	Exhaust Airflow Rate (CFM/SF)	Area (SF)	Number of People (Pz)	Ventilation in Breathing Zone, Vbz (CFM)	Zone Air Distribution Effectiveness, Ez	Corrected Zone Outdoor Airflow CFM, Voz	Exhaust Air CFM Required	Actual Exhaust CFM	DESIGN OUTSIDE AIRFLOW
Gymnasium	Gym, stadium, arena (play area)	7	20	0.18	0	9526	67	3055	1	3055	0		3100
Gymnasium Spec. area	Spectator area	150	7.5	0.06	0	4074	612	4835	1	4835	0		4900
New Fitness Center 12	Health club/aerobics room	40	20	0.06	0	2430	98	2106	1	2106	0		2150
New Office 03	Office space	5	5	0.06	0	114	1	12	1	12	0		15
New Office 02	Office space	5	5	0.06	0	206	2	23	1	23	0		25
New Fitness Center Corridor 01	Corridor	0	0	0.06	0	764	0	46	1	46	0		50
New Stairwell 6	Stairs	0	0	0.06	0	528	0	32	1	32	0		35
New G Toilet 04	NONE	0	0	0	0	265	0	0	1	0	0	200	200
New B Toilet 06	NONE	0	0	0	0	270	0	0	1	0	0	200	200
New Jan. Closet 14	Janitor Closet	0	0	0	1	56	0	0	1	0	56	75	75
New Jan. Closet 05	Janitor Closet	0	0	0	1	36	0	0	1	0	36	50	50
New Sprinkler room 7	NONE	0	0	0	0	43	0	0	1	0	0		
New Storage 17	Storage room	0	0	0.12	0	197	0	24	1	24	0		25
New Storage 13	Storage room	0	0	0.12	0	121	0	15	1	15	0		20
New Concession/Storage	Kitchenette	0	0	0	0.3	329	0	0	1	0	99		100
New Vestibule	Main entry lobby	10	5	0.06	0	91	1	11	1	11	0		15
New Gender Neutral Toilet 08	NONE	0	0	0	0	68	0	0	1	0	0	50	50
New Gender Neutral Toilet 09	NONE	0	0	0	0	68	0	0	1	0	0	50	50
New Stairwell A	Stairs	0	0	0.06	0	199	0	12	1	12	0		15
New Office 13	Office space	5	5	0.06	0	325	2	30	1	30	0		30
G Toilet 15	NONE	0	0	0	0	66	0	0	1	0	0	50	50
B toilet 16	NONE	0	0	0	0	66	0	0	1	0	0	50	50
165 New Classroom	Classroom (age 9 plus)	35	10	0.12	0	1060	38	508	0.9	565	0		500
166 Classroom	Classroom (age 9 plus)	35	10	0.12	0	1307	46	617	1	620	0		650
167 Bloomberg Classroom	Classroom (age 9 plus)	35	10	0.12	0	908	32	429	1	429	0		450
157 Art Classroom	Art classroom	20	10	0.18	0.7	1805	37	695	1	695	1264	1275	1275

## BOILER ROOM and PIPING NOTES

- THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING & EQUIPMENT, & INDICATE THE REQUIRED SIZE / POINTS OF TERMINATION OF THE PIPING & SUGGEST PROPER ROUTING OF SAME. IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, RISERS, DROPS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER THAT IT WILL CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM & KEEP OPENINGS / PASSAGEWAYS CLEAR WITHOUT FURTHER CONSTRUCTION OR COST.
- ALL FLOOR MOUNTED BOILER ROOM EQUIPMENT SHALL BE INSTALLED ON A LEVEL, REINFORCED CONCRETE HOUSEKEEPING PAD, 4" THICK MIN. UNLESS OTHERWISE NOTED. ALL HOUSEKEEPING PADS SHALL BE INSTALLED BY THE MECHANICAL CONTRACTOR. PADS SHALL BE REINFORCED W/ WELDED WIRE MESH & SHALL BE POURED USING 3,000 PSI CONCRETE.
- MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL ALL REQUIRED STRUCTURAL SUPPORT FOR ALL PIPING SYSTEMS & EQUIPMENT AS REQUIRED. PIPING SYSTEMS SHALL BE EQUIPPED WITH EXPANSION COMPENSATORS AT THE INTERVALS REQUIRED. PROVIDE PIPING GUIDES / ANCHORS AS REQUIRED.
- MECHANICAL CONTRACTOR SHALL PROPERLY INSULATE ALL NEW PIPING SYSTEMS & EQUIPMENT. REFER TO SPECIFICATION SECTION 230700 FOR FURTHER DETAILS REGARDING INSULATION REQUIREMENTS. UPON COMPLETION OF INSULATION WORK, MECHANICAL CONTRACTOR SHALL PROPERLY LABEL EACH PIPING RUN SHOWING THE TYPE OF FLUID CARRIED & DIRECTION OF FLOW. PIPE IDENTIFICATION MARKERS SHALL BE INSTALLED EVERY 20 FEET IN THE PIPING RUNS.
- ALL VALVES WITHIN PIPING SYSTEMS SHALL BE TAGGED USING A 1-1/2" DIA. BRASS TAG. PROVIDE A LEGEND LISTING VALVE #, TYPE OF VALVE, SERVICE TYPE, & LOCATION OF VALVE. KEY VALVES TO AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT.
- MECHANICAL CONTRACTOR SHALL SUBMIT (3) SETS OF OPERATING MANUALS FOR EACH PIECE / TYPE OF MECHANICAL EQUIPMENT.
- MECHANICAL CONTRACTOR SHALL PROVIDE & INSTALL ALL WIRING & DEVICES AS REQUIRED TO CONTROL THE BOILER ROOM EQUIPMENT AS DESCRIBED IN THE SEQUENCE OF OPERATIONS LISTED IN THE PROJECT MANUAL. REFER TO SPECIFICATION SECTION 230900 FOR FURTHER DETAILS.

## DUCTWORK NOTES

- PROVIDE ALL NEW DUCTWORK AS SHOWN AND SPECIFIED UNDER SPECIFICATION SECTION 233113, AND IN CONFORMANCE WITH "SMACNA" SPECIFICATIONS.
- IF A DUCT ELBOW IS SHOWN TO BE RADIOUS, THEN RADIOUS ELBOWS SHALL BE INSTALLED. SQUARE ELBOWS MAY NOT BE SUBSTITUTED WHERE RADIOUS ELBOWS ARE SHOWN. WHERE SQUARE ELBOWS ARE SHOWN, TURNING VANES SHALL BE INSTALLED UPON APPROVAL BY THE ENGINEER.
- PROVIDE DUCT LINING IN ALL DUCTWORK THAT IS CONVEYING BELOW AMBIENT TEMPERATURE AIR & IS NOT INSULATED. PROVIDE LINING IN SUPPLY & RETURN AIR DUCTWORK FROM AIR HANDLING EQUIPMENT TO 20 FEET AWAY FROM THE UNITS). IN ADDITION, INCLUDE LINING IN ANY OTHER DUCT SPECIFICALLY SHOWN OR SPECIFIED TO BE EQUIPPED WITH LINING. REFER TO SPECIFICATION SECTION 233113 & 230710 FOR FURTHER INFORMATION.
- WHERE FLEXIBLE DUCTWORK IS USED, LENGTHS MAY NOT EXCEED 4 FEET TOTAL IN ANY ONE RUN OF FLEXIBLE DUCTWORK. FLEXIBLE DUCTWORK SHALL BE RATED IN ACCORDANCE WITH UL 181, CLASS 1. REFER TO SPECIFICATION SECTION 233113 FOR FURTHER INFORMATION.
- MECHANICAL CONTRACTOR SHALL PROVIDE A BUTTERFLY TYPE VOLUME DAMPER WITH LOCKING QUADRANT HANDLE PRIOR TO EACH AIR OUTLET SHOWIN. INSTALL DAMPER AT LEAST 5 FEET AWAY FROM AIR OUTLET WHEREVER POSSIBLE.
- MECHANICAL CONTRACTOR SHALL PROVIDE FLEXIBLE DUCT CONNECTIONS WHERE DUCT SYSTEMS CONNECT TO EQUIPMENT. REFER TO SPECIFICATION SECTION 233113 FOR FURTHER INFORMATION.
- ALL DUCTWORK DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS UNLESS OTHERWISE NOTED.

## TESTING and BALANCING NOTES

- MECHANICAL CONTRACTOR WILL BE REQUIRED TO PERFORM ALL EQUIPMENT & SYSTEM TESTING / BALANCING REQUIRED UNDER THIS CONTRACT. PROVIDE A FULL REPORT DETAILING ALL DESIGN & ACTUAL CONDITIONS FOR ALL AIR & HYDRONIC SYSTEMS SHOWN ON THE DRAWINGS. REFER TO SPECIFICATION SECTIONS 230593 & 230680 FOR FURTHER DETAILS.
- UPON NOTICE OF COMPLETION OF WORK BY THE CONTRACTOR, OWNER WILL OBTAIN THE SERVICES OF AN INDEPENDENT TESTING & BALANCING CONTRACTOR TO VERIFY THE RESULTS OF THE TESTING & BALANCING REPORT SUBMISSION. INDEPENDENT TESTING AGENCY SHALL SELECT A RANDOM NUMBER OF MEASUREMENTS TO BE CHECKED. MEASUREMENTS WILL BE CHECKED IN THE SAME MANNER AS ORIGINALLY MEASURED. NUMBER OF VERIFICATION MEASUREMENTS SHALL BE APPROXIMATELY 25% OF THE TOTAL MEASUREMENTS FOR THE PROJECT.
- IF MORE THAN 10% OF THE VERIFICATION TESTING SHOWS DEVIATIONS OF 10% OR MORE / SOUND LEVEL OF 2dB DIFFERENT THAN THAT ORIGINALLY MEASURED, THE ORIGINAL REPORT WILL BE REJECTED. ALL SYSTEMS WILL THEN BE REQUIRED TO BE COMPLETELY RE-TESTED, WITH A SECOND REPORT SUBMITTED. IN THE EVENT THAT THE ORIGINAL REPORT IS REJECTED, ALL SYSTEMS SHALL BE READJUSTED & TESTED, NEW CERTIFIED REPORTS SUBMITTED, AND NEW VERIFICATION TESTS MADE, AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS INVOLVED WITH THE VERIFICATION TESTS.

## ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
B.D.	BACKDRAFT DAMPER
CWS	COLD WATER SUPPLY
CFM	CUBIC FEET OF AIR PER MINUTE
D.	DEEP / DEPTH
DIA.-/	DIAMETER
F&T	FLOAT & THERMOSTATIC
FM	FEET PER MINUTE
FSD	FIRE / SMOKE DAMPER - DUCT MOUNTED
FLEX	FLEXIBLE
FO	FLAT OVAL DUCTWORK
GA	GALLONS
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H.	HIGH
H.C.	HANDICAPPED
HWS	HEATING SYSTEM HOT WATER SUPPLY
HWR	HEATING SYSTEM HOT WATER RETURN
HP	HORSEPOWER
ID.	INSIDE DIAMETER
KW	KILOWATT
L.	LONG
LAT.	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MIN	MINIMUM
MBH	BTU x 1,000
MFR.	MANUFACTURER
M.H.	MANHOLE
MISC.	MISCELLANEOUS
MTD.	MOUNTED
G	NATURAL GAS
N.I.C.	NOT IN CONTRACT
No. / #	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.A.	OUTSIDE AIR
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.S. & Y	OUTSIDE SCREW & YOKE
PE	PNEUMATIC / ELECTRIC
PREFAB	PREFABRICATED
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
R.A.	RETURN AIR
REQD.	REQUIRED
RPM	REVOLUTIONS PER MINUTE
S.A.	SUPPLY AIR
SCH.	SCHEDULE
S.P.	STATIC PRESSURE
STD.	STANDARD
T	TEMPERATURE
TRV	THERMAL EXPANSION VALVE
TYF.	TYPICAL
VOL.	VOLUME
V.D.	VOLUME DAMPER
VOL.	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
W.	WIDE
WB.	WET BULB TEMPERATURE
WTD	WATER TEMPERATURE DROP
WTR	WATER TEMPERATURE RISE
WPD	WATER PRESSURE DROP
ST or STM	STEAM
EXIST.	EXISTING

## MECHANICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
	RECTANGULAR GALVANIZED DUCTWORK - DIMENSIONS W' x H'
	NEW SUPPLY DUCTWORK TO RISE UP
	NEW SUPPLY DUCTWORK TO DROP DOWN
	NEW RETURN DUCTWORK TO RISE UP
	NEW RETURN DUCTWORK TO DROP DOWN
	TRANSITION IN DUCTWORK
	FIRE DAMPER INSTALLED IN DUCTWORK
	VOLUME DAMPER IN DUCT W/ LOCKING QUADRANT HANDLE
	ROUND DUCTWORK TO RISE UP
	ROUND DUCTWORK TO DROP DOWN
	FLAT OVAL DUCT WORK
	RECTANGULAR TO ROUND DUCT TRANSITION
	ELBOW IN DUCTWORK w/ TURNING VANES
	ELBOW IN DUCTWORK (RADIUS x 1.5 x D)
	45 DEG. TAKEOFF FITTING
	90 DEG. TAKEOFF w/ BELLMOUTH FITTING
	FLEXIBLE DUCTWORK TO DIFFUSER (4 FT. MAX. RUN)
	4-WAY PATTERN CEILING DIFFUSER
	3-WAY PATTERN CEILING DIFFUSER
	2-WAY PATTERN CEILING DIFFUSER (90 DEG. / OPPOSING PATTERN)
	CEILING RETURN AIR REGISTER
	LINEAR SLOT DIFFUSER
	ROOF MOUNTED EXHAUST FAN

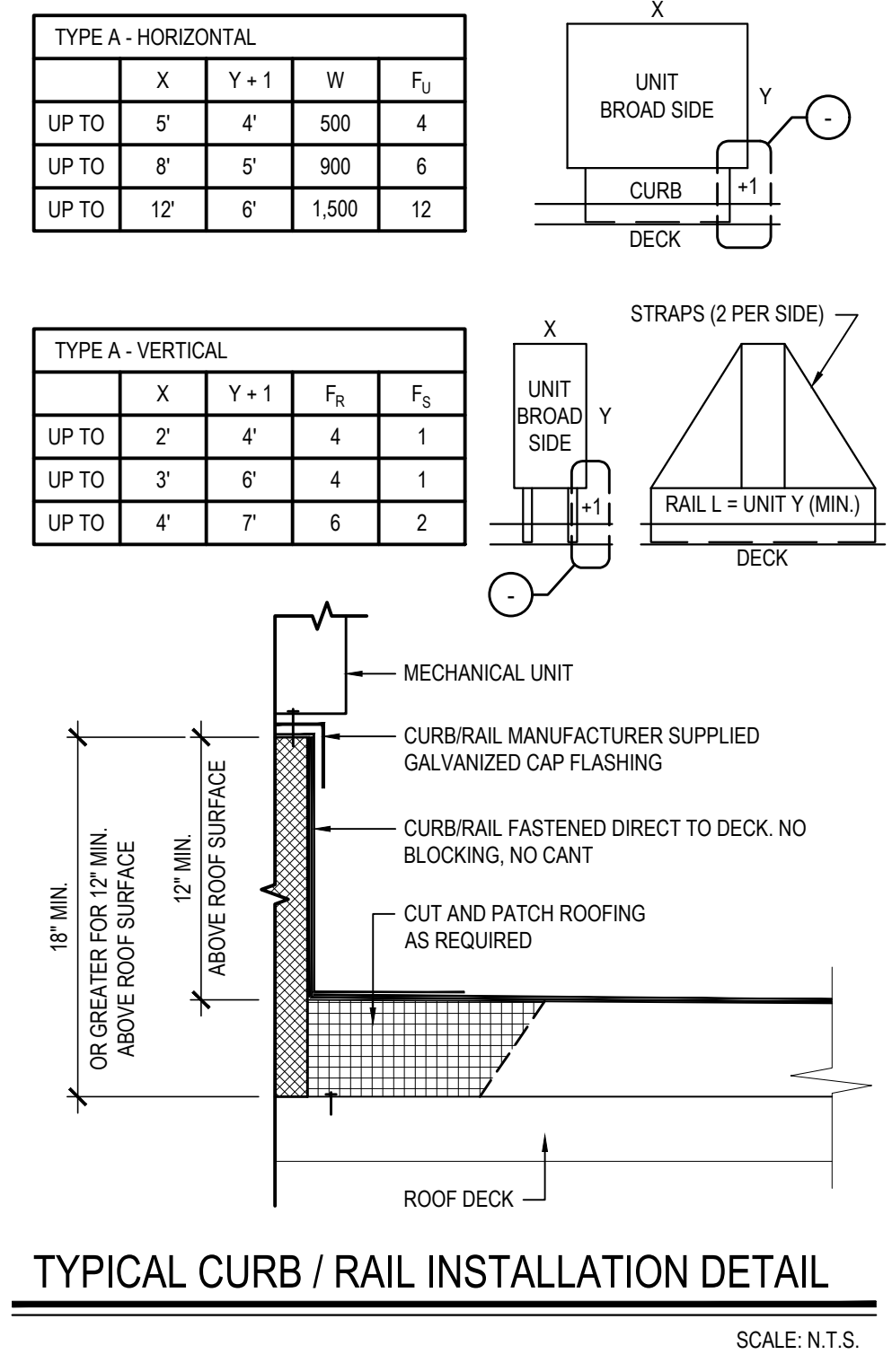
## ROOFTOP UNIT ANCHORING

BASED ON 140 MPH WIND (50 PSF) AND 200 LB SHEAR AND PULL-OUT FOR FASTENERS.

W = WEIGHT OF UNIT IN LBS.  
F<sub>U</sub> = MINIMUM QUANTITY OF FASTENERS FOR UNIT TO CURB AND CURB TO DECK  
F<sub>D</sub> = MINIMUM QUANTITY OF FASTENERS FOR RAIL TO DECK. (UNIT TO RAIL SHOULD BE WITH THE MANUFACTURER PROVIDED TAGS)  
F<sub>S</sub> = MINIMUM QUANTITY OF 3/4" DIA. SHEET SCREWS PER STRAP ANCHOR POINT. STRAPS SHALL BE 12GA. x 1/2" ALUMINUM.

FASTENERS SHALL BE:

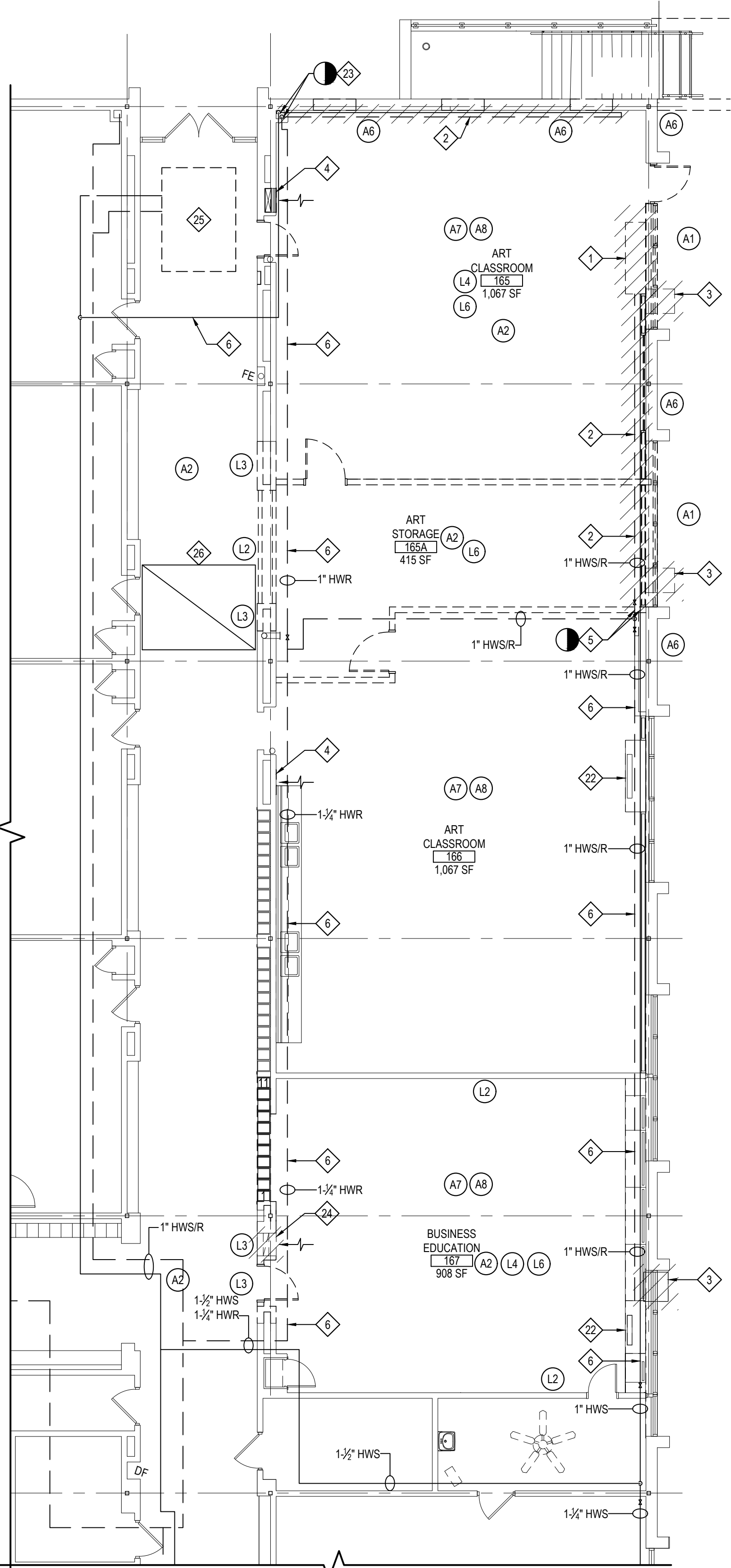
- UNIT TO CURB/RAIL - 3/4" DIA. SHEET METAL SCREWS
- CURB/RAIL TO METAL DECK - 3/4" DIA. SHEET METAL SCREWS
- CURB/RAIL TO CONCRETE - 1/2" DIA. TAPCONS
- CURB/RAIL TO TECTUM DECK - 3/4" DIA. TOGGLE BOLTS



## PIPING SYMBOL LEGEND

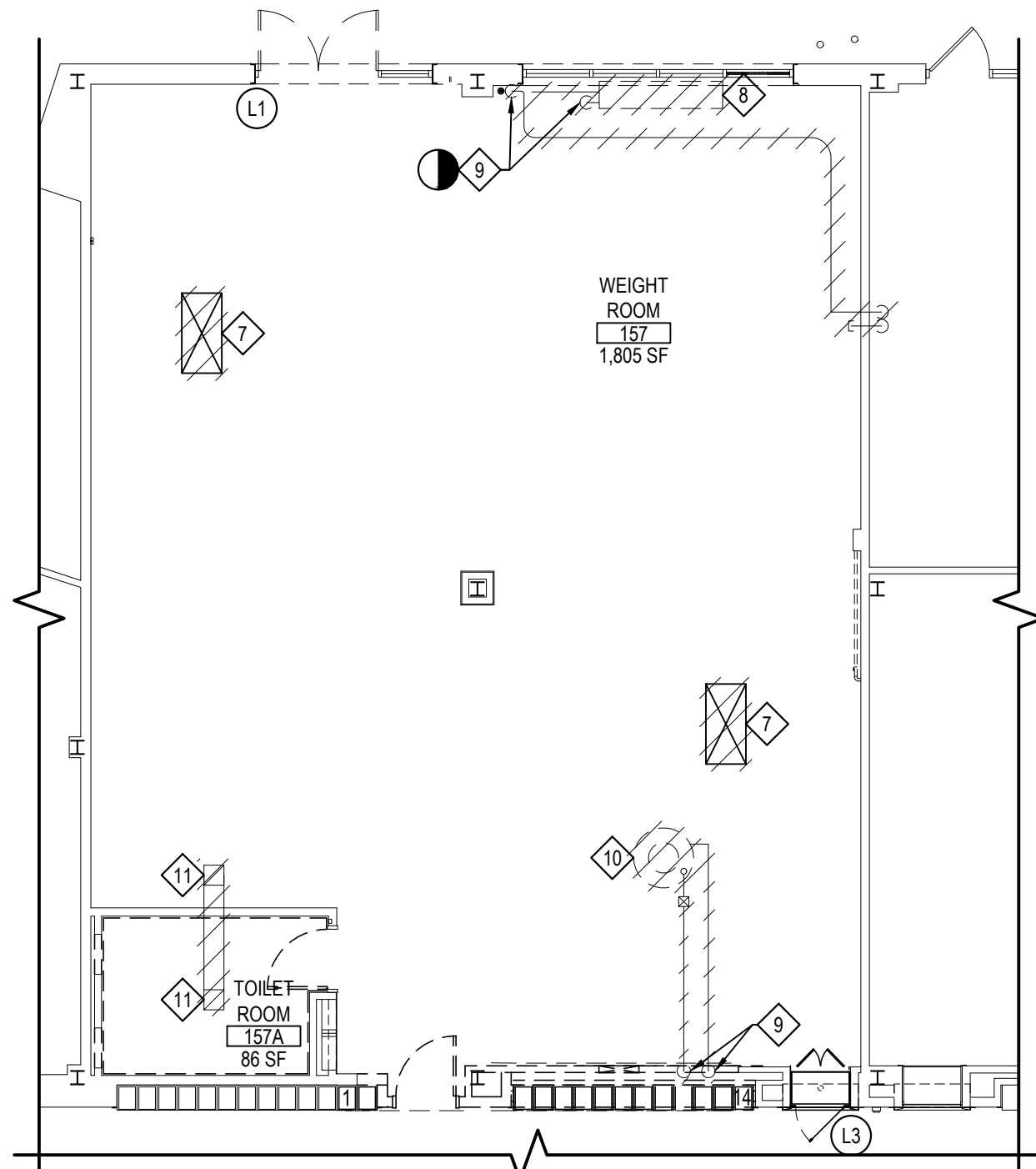
SYMBOL	DESCRIPTION
	PIPING TO RISE UP
	PIPING TO DROP DOWN
	PIPING ANCHOR
	PIPING GUIDE
	DOMESTIC COLD WATER SUPPLY PIPING
	HEATING SYSTEM SUPPLY PIPING
	HEATING SYSTEM RETURN PIPING
	CHILLED WATER SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	CONDENSER WATER SUPPLY PIPING
	CONDENSER WATER RETURN PIPING
	CONDENSATE DRAINAGE PIPING
	FUEL OIL SUPPLY PIPING
	FUEL OIL RETURN PIPING
	LOW PRESSURE NATURAL GAS PIPING
	ELEVATED PRESSURE NATURAL GAS PIPING
	GAS COCK ("L" INDICATES LOCK SHIELD)
	DIRT LEG IN PIPING
	LIQUEFIED PETROLEUM GAS PIPING
	VENT PIPING
	LINEAR EXPANSION COMPENSATOR
	EXPANSION LOOP IN PIPING
	UNION IN PIPING
	PIPING STRAINER (w/ BLOWDOWN VALVE)
	REDUCER / INCREASER FITTINGS IN PIPING
	ECCENTRIC REDUCER IN PIPING
	THERMOMETER
	PRESSURE GAUGE
	FULL PORT BALL VALVE
	GATE VALVE
	SWING CHECK VALVE
	3-WAY VALVE (MIXING)
	CIRCUIT SETTER
	TRIPLE DUTY VALVE
	WAFER VALVE
	PLUG / CAP IN PIPING
	PNEUMATIC CONTROL VALVE OPERATOR
	ELECTRIC CONTROL VALVE OPERATOR
	AUTOMATIC AIR VENT
	EXISTING PIPING
	DDC TEMPERATURE SENSOR & WELL IN PIPING
	DDC PRESSURE SENSOR IN PIPING
	LOW PRESSURE STEAM PIPING
	CONDENSATE RETURN PIPING
	THERMOSTATIC STEAM TRAP IN PIPING
	THERMOSTAT (D = DDC / P = PNEUMATIC)
	DDC TEMPERATURE SENSOR
	EXISTING THERMOSTAT (D = DDC / P = PNEUMATIC)





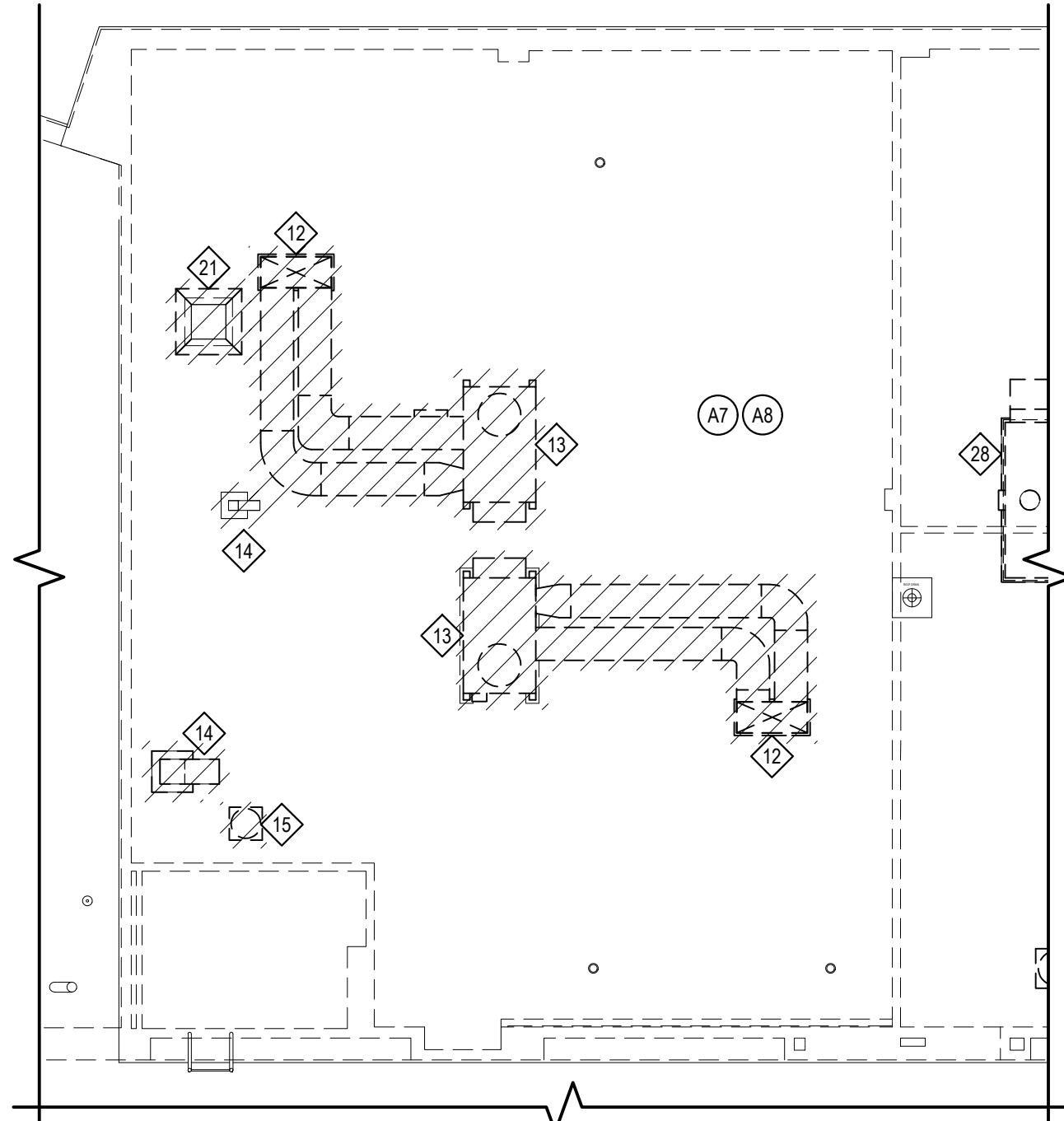
PARTIAL FIRST FLOOR MECHANICAL DEMOLITION PLAN - ART CLASSROOM 165, ART STORAGE 165A & BUSINESS EDUCATION 167

SCALE: 1/8" = 1'-0"



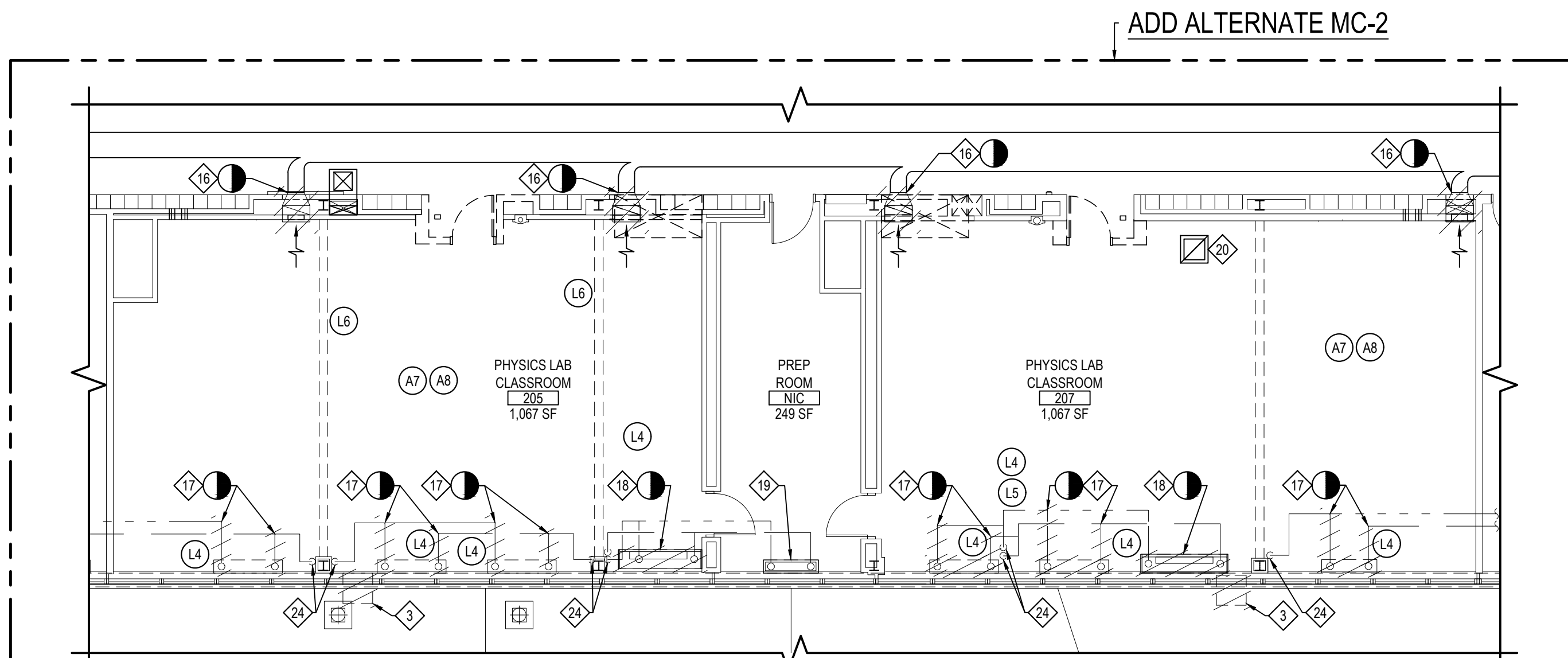
PARTIAL FIRST FLOOR MECHANICAL DEMOLITION PLAN - WEIGHT ROOM 157

SCALE: 1/8" = 1'-0"



PARTIAL ROOF MECHANICAL DEMOLITION PLAN - WEIGHT ROOM 157

SCALE: 1/8" = 1'-0"



PARTIAL SECOND FLOOR MECHANICAL DEMOLITION PLAN - PHYSICS LAB CLASSROOM 205 & PHYSICS LAB CLASSROOM 207

NOTES: 1. ALL PIPING SHOWN IS LOCATED IN THE CEILING BELOW

SCALE: 1/8" = 1'-0"

#### HAZARDOUS MATERIALS NOTES

- OWNER HAS EMPLOYED AN ENVIRONMENTAL CONSULTANT TO PERFORM DESIGN/PHASE INSPECTION AND TESTING FOR ASBESTOS, LEAD AND / OR PCBs. SUCH REPORTS ARE CONTAINED IN THE PROJECT MANUAL AND MAY CONTAIN ADDITIONAL REQUIREMENTS BEYOND THOSE SHOWN IN THE CONSTRUCTION DRAWINGS AND DIVISION 1 RELATED SPECIFICATIONS.
- CONSTRUCTION DRAWINGS INDICATE EXTENT OF HAZARDOUS MATERIALS REMOVALS, WHICH MAY BE ASSUMED OR CONFIRMED POSITIVE. CONTRACTOR SHALL VERIFY QUANTITIES OF SUCH MATERIALS AND ACCOUNT FOR THEM IN THE BID.
- CONTRACTOR SHALL EMPLOY A PROPERLY CREDENTIALLED HAZARDOUS MATERIALS SUBCONTRACTOR AS REQUIRED FOR THE SCOPE OF WORK AT HAND.
- ASBESTOS ABATEMENT SHALL BE PERFORMED IN ACCORDANCE WITH NYS INDUSTRIAL CODE RULE 56.
- REMOVAL OF LEAD CONTAINING CONSTRUCTION MATERIALS SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL HUD REGULATIONS AND THE EPA'S RRP RULE. THE WORK OF THIS PROJECT IS NOT INTENDED TO BE A LEAD ABATEMENT.
- WHERE WORK INVOLVES LEAD CONTAINING CONSTRUCTION MATERIALS, WIPE TESTS WILL BE PERFORMED UPON FINAL CLEANING. FAILURE WILL REQUIRE RE-CLEANING BY THE CONTRACTOR.
- PCB REMOVALS SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL EPA REGULATIONS AS ENFORCED BY NYS DEC. IF SUCH MATERIALS ALSO CONTAIN ASBESTOS, THEN SUCH MATERIALS SHALL BE HANDLED AND DISPOSED OF PER BOTH NYS DEC AND NYS ICR 56.
- CONTRACTOR SHALL COORDINATE HAZARDOUS MATERIALS REMOVAL ACTIVITIES WITH THE OWNER'S ENVIRONMENTAL CONSULTANT FOR APPROPRIATE PROJECT MONITORING.
- IF ANY SUSPECT MATERIALS ARE DISCOVERED DURING DEMOLITION THAT ARE OUTSIDE OF THE IDENTIFIED SCOPE OF WORK, THE CONTRACTOR SHALL CEASE REMOVAL AND NOTIFY THE ARCHITECT.
- THE FOLLOWING HAZARDOUS MATERIAL REMOVAL KEY NOTES CORRESPOND TO THE CONSTRUCTION DRAWINGS:

- A1 ASBESTOS CONTAINING OLDER GREY WINDOW CAULK.
- A2 ASBESTOS CONTAINING MUD JOINT PACKING - CEILING PLENUM.
- A3 ASBESTOS CONTAINING SOFFIT JOINT COMPOUND FOR INFORMATION PURPOSE ONLY.
- A4 ASBESTOS CONTAINING DUCT INSULATION
- A5 ASBESTOS CONTAINING JOINT COMPOUND TO CEILING GYPSUM BOARD
- A6 ASBESTOS CONTAINING WATERPROOFING MEMBRANE (IN BUILDING CAVITY BEHIND EXTERIOR FACE OF BRICK).
- A7 ASBESTOS CONTAINING ROOF TAR
- A8 ASBESTOS CONTAINING ROOF TAR PAPER ABOVE TECTUM DECKING
- L1 LEAD CONTAINING BROWN METAL DOOR CASING PAINT.
- L2 LEAD CONTAINING BEIGE CORK WALL BOARD.
- L3 LEAD CONTAINING CERAMIC WALL TILE.
- L4 LEAD CONTAINING PAINTED METAL WALL VENTS.
- L5 LEAD CONTAINING BEIGE PAINTED PLASTER WALLS.
- L6 LEAD CONTAINING PAINTED METAL STRUCTURAL BEAM.

#### KEYED NOTES:

- EXISTING HOT WATER UNIT VENTILATOR TO BE DEMOLISHED AND REMOVED INCLUDING BUT NOT LIMITED TO UNIT, PIPING, CONTROLS, DUCTWORK, AND FRESH AIR LOUVER. M.C. SHALL TAKE CARE TO MAINTAIN EXISTING CONTROL LOOPS, HOT WATER LOOPS, WIRING, AND TUBING SERVING ALL OTHER EQUIPMENT DURING THE DEMOLITION
- EXISTING HOT WATER PIPING AND FIN TUBE RADIATION TO BE DEMOLISHED AND REMOVED. M.C. SHALL TAKE CARE TO MAINTAIN EXISTING HOT WATER LOOP
- EXISTING THRU THE WINDOW AIR CONDITIONING UNIT TO BE UNINSTALLED AND HANDED OVER TO THE FACILITY.
- EXISTING RELIEF AIR GRILLE AND RELIEF AIR DUCTWORK TO REMAIN.
- DISCONNECT EXISTING HOT WATER BRANCH PIPING FROM HOT WATER PIPING MAIN. SEAL OPENING CREATED WATER TIGHT. M.C. SHALL TAKE CARE TO MAINTAIN HOT WATER LOOP.
- EXISTING HOT WATER PIPING TO REMAIN.
- EXISTING CONCENTRIC DIFFUSER TO BE DEMOLISHED AND REMOVED.
- EXISTING STEAM UNIT VENTILATOR TO BE DEMOLISHED AND REMOVED INCLUDING BUT NOT LIMITED TO UNIT, PIPING, CONTROLS, DUCTWORK AND FRESH AIR LOUVER.
- EXISTING STEAM AND CONDENSATE PIPING TO BE DEMOLISHED BACK TO BEHIND WALL OUTSIDE OF SCOPE OF WORK. CAP AND SEAL WATER TIGHT. M.C. SHALL TAKE CARE TO MAINTAIN EXISTING STEAM AND CONDENSATE LOOP.
- EXISTING CEILING HUNG STEAM UNIT HEATER TO BE DEMOLISHED AND REMOVED. DEMOLISH HEATER, STEAM, AND CONDENSATE PIPING AS SHOWN.
- EXISTING CEILING MOUNTED EXHAUST FAN AND DUCTWORK TO BE DEMOLISHED AND REMOVED.
- EXISTING DUCT PENETRATIONS THROUGH THE ROOF TO BE DEMOLISHED AND REMOVED. G.C. SHALL PATCH AND FILL ROOF TO MATCH EXISTING. COORDINATE ALL ROOF WORK WITH ROOF MANUFACTURER, ROOF MAY BE UNDER WARRANTY. M.C. AND G.C. SHALL TAKE CARE NOT TO VOID WARRANTY.
- EXISTING ROOFTOP AC UNIT TO BE DEMOLISHED AND REMOVED. DEMOLISH AND REMOVE EQUIPMENT AND EQUIPMENT RAILS. COORDINATE ELECTRICAL DISCONNECT WITH E.C. G.C. SHALL PATCH AND FILL ROOF TO MATCH EXISTING. COORDINATE ALL ROOF WORK WITH ROOF MANUFACTURER, ROOF MAY BE UNDER WARRANTY. M.C. AND G.C. SHALL TAKE CARE NOT TO VOID WARRANTY.
- EXISTING GOOSENECK TO BE DEMOLISHED AND REMOVED. G.C. SHALL PATCH AND FILL ROOF TO MATCH EXISTING. COORDINATE ALL ROOF WORK WITH ROOF MANUFACTURER, ROOF MAY BE UNDER WARRANTY. M.C. AND G.C. SHALL TAKE CARE NOT TO VOID WARRANTY.
- EXISTING ROOFTOP VENTILATOR TO BE DEMOLISHED AND REMOVED. G.C. SHALL PATCH AND FILL ROOF TO MATCH EXISTING. COORDINATE ALL ROOF WORK WITH ROOF MANUFACTURER, ROOF MAY BE UNDER WARRANTY. M.C. AND G.C. SHALL TAKE CARE NOT TO VOID WARRANTY.
- EXISTING RELIEF AIR DUCTWORK TO BE DISCONNECTED. REMOVE DUCTWORK TO POINT SHOWN. REMOVE EXISTING RELIEF AIR GRILLE. PATCH WALL TO MATCH EXISTING. COORDINATE G.C. TO PATCH WALL.
- EXISTING STEAM RADIATOR TO BE REMOVED. DISCONNECT STEAM AND CONDENSATE PIPING FROM PIPING IN CEILING BELOW AS SHOWN. COORDINATE STEAM SYSTEM SHUT DOWN WITH FACILITY A MINIMUM OF 72 HOURS PRIOR TO SHUTDOWN.
- EXISTING STEAM UNIT VENTILATOR TO BE DEMOLISHED AND REMOVED INCLUDING BUT NOT LIMITED TO UNIT, PIPING, CONTROLS, DUCTWORK, AND FRESH AIR LOUVER. M.C. SHALL TAKE CARE TO MAINTAIN EXISTING CONTROL LOOPS, STEAM AND CONDENSATE LOOPS, WIRING, AND TUBING SERVING ALL OTHER EQUIPMENT DURING THE DEMOLITION
- EXISTING STEAM RADIATOR TO REMAIN.
- EXISTING DUCT UP TO EXHAUST FAN ON ROOF TO REMAIN. FAN SWITCH ON WALL TO BE RELOCATED. COORDINATE WITH E.C.
- EXISTING ROOFTOP VENTILATOR/EXHAUST FAN TO BE DEMOLISHED AND REMOVED.
- EXISTING UNIT VENTILATOR AND FINNED TUBE RADIATION TO REMAIN.
- DISCONNECT EXISTING HOT WATER PIPING FROM HOT WATER MAINS.
- EXISTING STEAM AND CONDENSATE PIPING DOWN FROM FIRST FLOOR TO CRAWL SPACE BELOW.
- EXISTING CEILING MOUNTED UNIT VENTILATOR TO REMAIN.
- EXISTING RELIEF AIR DUCT UP TO FAN ON ROOF TO REMAIN.

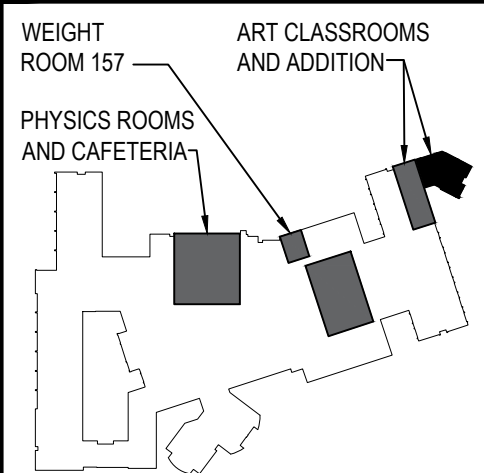
#### ADD ALTERNATE MC-2

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REV.	DATE	ITEM

#### NOTICE

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#### KEY PLAN

NOT TO SCALE

GARDEN CITY UNION FREE SCHOOL DISTRICT  
ADDITIONS AND ALTERATIONS  
GARDEN CITY HIGH SCHOOL  
GARDEN CITY, NASSAU COUNTY, NEW YORK

PROJECT

MECHANICAL DEMOLITION PART PLANS

DWG TITLE

DRAWING BY: PLH  
CHECK BY:

#### NOTICE

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ARCHITECTS  
LANDSCAPE ARCHITECTS  
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244 EAST MAIN STREET  
PATCHOGUE  
NEW YORK 11772  
T. 631.475.0349  
F. 631.475.0361

187 WOLF ROAD, STE. 205  
ALBANY  
NEW YORK 12205  
T. 518.621.7650  
F. 518.621.7655

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SED No: 28-02-18-03-0-007-034

DISTRICT: GARDEN CITY UNION FREE SCHOOL DISTRICT

PROJECT: GARDEN CITY HIGH SCHOOL ADDITIONS AND ALTERATIONS

DWG TITLE: MECHANICAL DEMOLITION PART PLANS

SCALE: AS NOTED

DATE: MARCH 6, 2025

BID PICK-UP: MARCH 6, 2025

FILE No: 24-145

M1.01



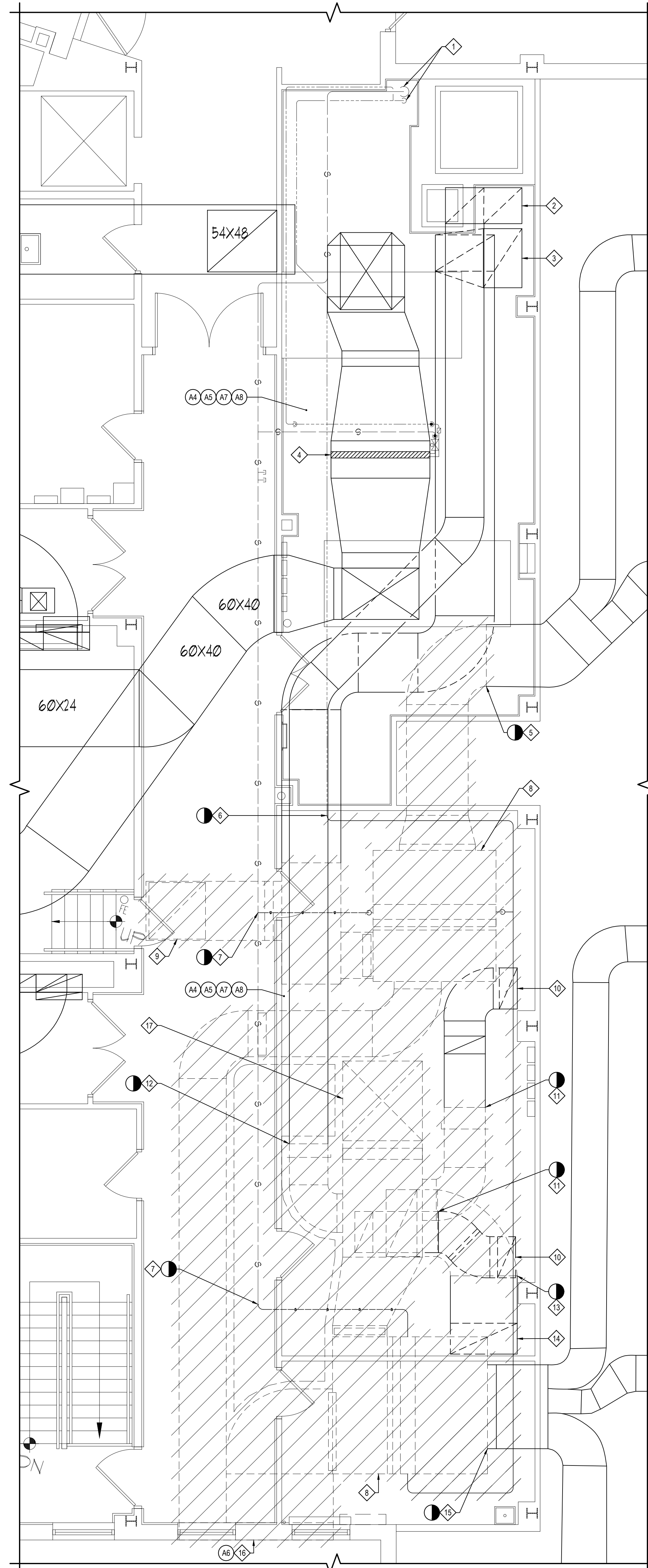
## HAZARDOUS MATERIALS NOTES

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(A3) ASBESTOS CONTAINING SOFFIT JOINT COMPOUND FOR INFORMATION PURPOSE ONLY.  
(A4) ASBESTOS CONTAINING DUCT INSULATION  
(A5) ASBESTOS CONTAINING JOINT COMPOUND TO CEILING GYPSUM BOARD  
(A6) ASBESTOS CONTAINING WATERPROOFING MEMBRANE (IN BUILDING CAVITY BEHIND EXTERIOR FACE OF BRICK).  
(A7) ASBESTOS CONTAINING ROOF TAR  
(A8) ASBESTOS CONTAINING ROOF TAR PAPER ABOVE TECTUM DECKING  
(L1) LEAD CONTAINING BROWN METAL DOOR CASING PAINT.  
(L2) LEAD CONTAINING BEIGE CORK WALL BOARD.  
(L3) LEAD CONTAINING CERAMIC WALL TILE.  
(L4) LEAD CONTAINING PAINTED METAL WALL VENTS.  
(L5) LEAD CONTAINING BEIGE PAINTED PLASTER WALLS.  
(L6) LEAD CONTAINING PAINTED METAL STRUCTURAL BEAM.

## KEYED NOTES:

- 1 8" LPS AND 4" LPC DOWN TO REMAIN.  
2 28x30 EXISTING RETURN AIR DUCT DOWN TO REMAIN.  
3 30x46 EXISTING RETURN AIR DUCT DOWN TO REMAIN.  
4 EXISTING DUCTWORK AND STEAM COIL SERVING AUDITORIUM TO REMAIN.  
5 EXISTING 48x24 SUPPLY AIR DUCTWORK TO BE DISCONNECTED AS SHOWN. M.C. SHALL DISCONNECT AND REMOVE AS MUCH DUCTWORK AS NECESSARY TO FACILITATE INSTALLATION OF NEW SUPPLY AIR DUCTWORK AND NEW DUCT MOUNTED STEAM HEATING COIL.  
6 EXISTING LPC PIPING TO BE DISCONNECTED AT POINT SHOWN AND REMOVED. REMOVE ALL CONDENSATE PIPING DOWNSTREAM OF POINT SHOWN. INCLUDING BUT NOT LIMITED TO PIPING, FITTINGS, STEAM TRAPS, ETC.  
7 EXISTING LPS PIPING TO BE DISCONNECTED AT POINT SHOWN. COORDINATE STEAM SYSTEM SHUTDOWN WITH FACILITY A MINIMUM OF 72 HOURS PRIOR TO COMMENCEMENT OF WORK.  
8 EXISTING H&V UNIT TO BE DEMOLISHED AND REMOVED IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO UNIT, PIPING, FAN, COIL, HANGERS AND SUPPORTS  
9 44x44 RELIEF AIR DUCT UP TO FAN ON ROOF, ALL TO BE DEMOLISHED AND REMOVED INCLUDING BUT NOT LIMITED TO DUCTWORK, FAN, CONTROLS AND SUPPORTS. G.C. SHALL PATCH AND REPAIR ROOF TO MATCH EXISTING. COORDINATE WITH G.C. TO NOT VOID ROOF WARRANTY.  
10 14x32 RETURN AIR DUCT DOWN, TO REMAIN.  
11 EXISTING 32x14 RETURN AIR DUCTWORK TO BE DISCONNECTED AS SHOWN. M.C. SHALL DISCONNECT AND REMOVE AS MUCH DUCTWORK AS NECESSARY TO FACILITATE INSTALLATION OF NEW.  
12 EXISTING 30x28 RETURN AIR DUCTWORK TO BE DISCONNECTED AS SHOWN. M.C. SHALL DISCONNECT AND REMOVE AS MUCH DUCTWORK AS NECESSARY TO FACILITATE INSTALLATION OF NEW.  
13 EXISTING 52x24 RETURN AIR DUCTWORK TO BE DISCONNECTED AS SHOWN. M.C. SHALL DISCONNECT AND REMOVE AS MUCH DUCTWORK AS NECESSARY TO FACILITATE INSTALLATION OF NEW.  
14 52x24 RETURN AIR DUCT DOWN, TO REMAIN.  
15 EXISTING 65x34 SUPPLY AIR DUCTWORK TO BE DISCONNECTED AS SHOWN. M.C. SHALL DISCONNECT AND REMOVE AS MUCH DUCTWORK AS NECESSARY TO FACILITATE INSTALLATION OF NEW SUPPLY AIR DUCTWORK AND NEW DUCT MOUNTED STEAM COIL.  
16 EXISTING 120"x72" FRESH AIR LOUVER AND SCREEN TO BE DEMOLISHED AND REMOVED. COORDINATE WITH G.C. TO PATCH HOLE TO MATCH EXISTING WALL.  
17 60x62 RELIEF AIR DUCT UP TO EXHAUST FAN ON ROOF, ALL TO BE DEMOLISHED AND REMOVED INCLUDING BUT NOT LIMITED TO DUCTWORK, FAN, CONTROLS AND SUPPORT. G.C. SHALL PATCH AND REPAIR ROOF TO MATCH EXISTING. COORDINATE WITH G.C. TO NOT VOID ROOF WARRANTY.



SECOND FLOOR & UPPER LEVEL MECHANICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

ADD ALTERNATE MC-1

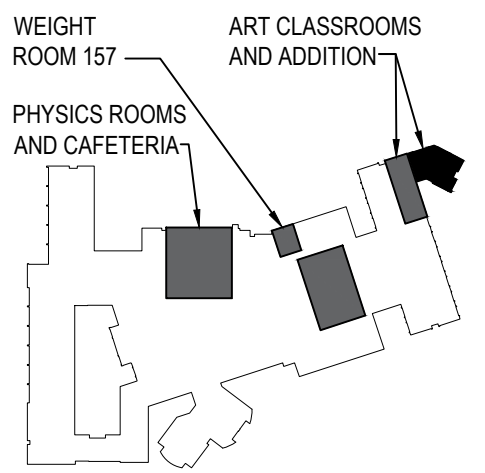
## ADD ALTERNATE MC-1

THE MECHANICAL CONTRACTOR SHALL STATE THE COMPLETE PRICE TO BE ADDED TO THE BASE BID TO PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED INCLUDING ALL DEMOLITION AND REMOVALS SHOWN ON THIS DRAWING. REFER TO MECHANICAL SCHEDULES, DETAILS, AND SPECIFICATIONS FOR MORE INFORMATION. THIS ENTIRE DRAWING SHALL BE PART OF ADD ALTERNATE MC-1

REV.	DATE	ITEM

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## KEY PLAN

NOT TO SCALE

PROJECT  
GARDEN CITY UNION FREE SCHOOL DISTRICT  
ADDITIONS AND ALTERATIONS  
GARDEN CITY HIGH SCHOOL  
GARDEN CITY, NASSAU COUNTY, NEW YORK

DWG TITLE  
MECHANICAL DEMOLITION PLANS  
ADD ALTERNATE MC-1

DRAWING BY: PLH  
CHECK BY:

## NOTICE

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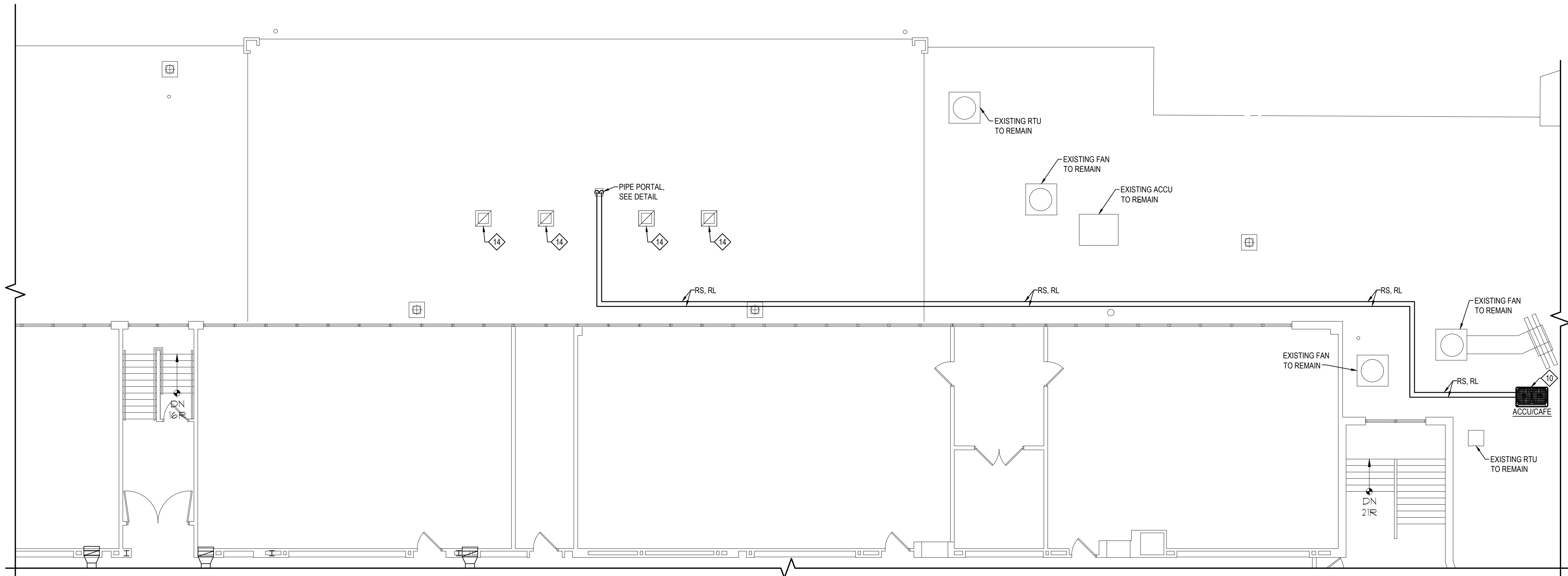
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PATCHOGUE | ALBANY  
NEW YORK 11772 | NEW YORK 12205  
T. 631.475.0349 | T. 518.621.7650  
F. 631.475.0361 | F. 518.621.7655

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SED No.	28-02-18-03-0-007-034
DISTRICT	GARDEN CITY UNION FREE SCHOOL DISTRICT
PROJECT	GARDEN CITY HIGH SCHOOL ADDITIONS AND ALTERATIONS
DWG TITLE	MECHANICAL DEMOLITION PLANS
SCALE	AS NOTED
DATE	MARCH 6, 2025
BID PICK-UP	MARCH 6, 2025
FILE No.	24-145

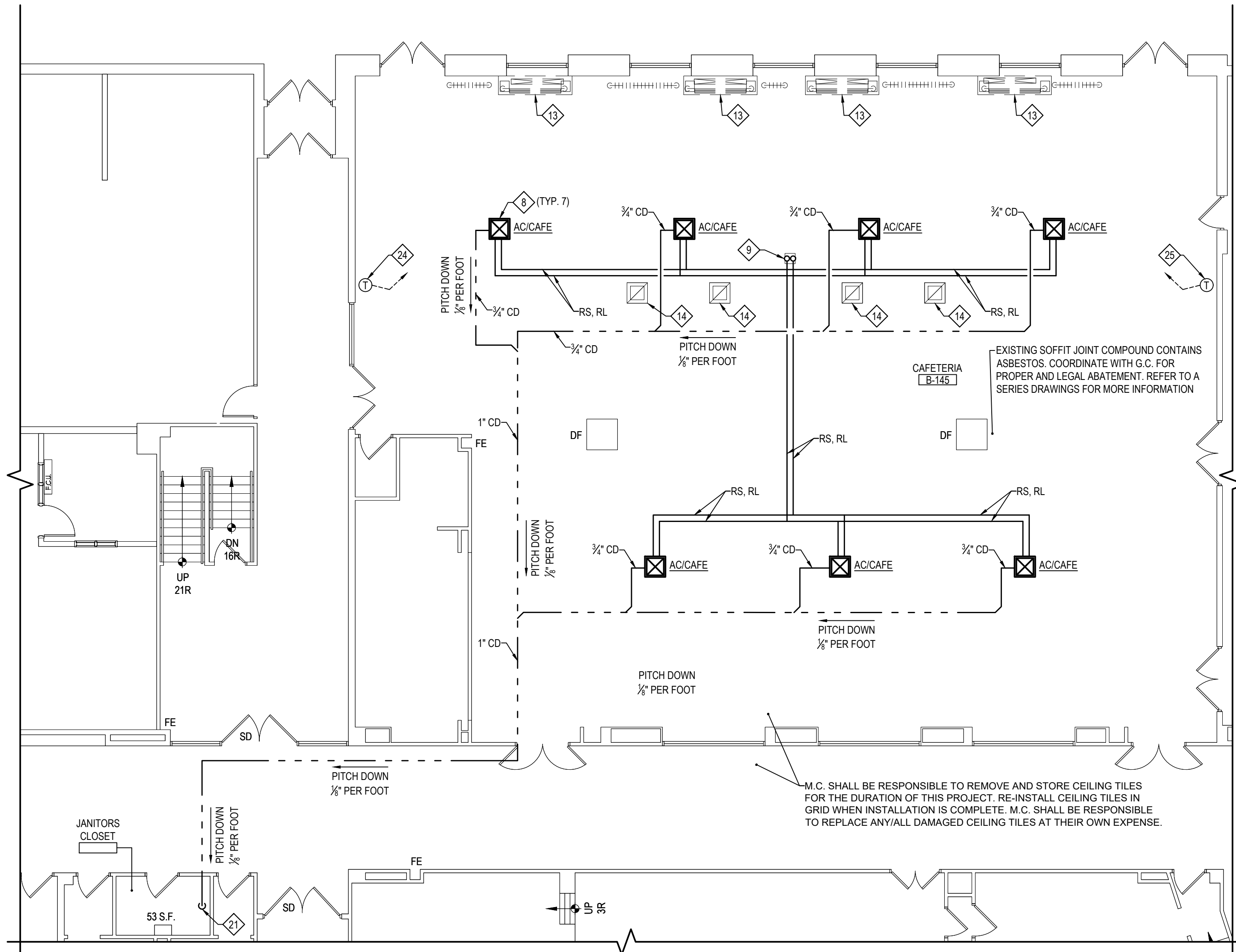
M1.02



CAFETERIA ROOF NEW WORK MECHANICAL PLAN - ADD ALTERNATE MC-1

NOTE: EXISTING COLUMN GRID LAYOUT IS PER PART PLAN, NOT CONNECTED OVERALL.

SCALE: 1/4" = 1'-0"



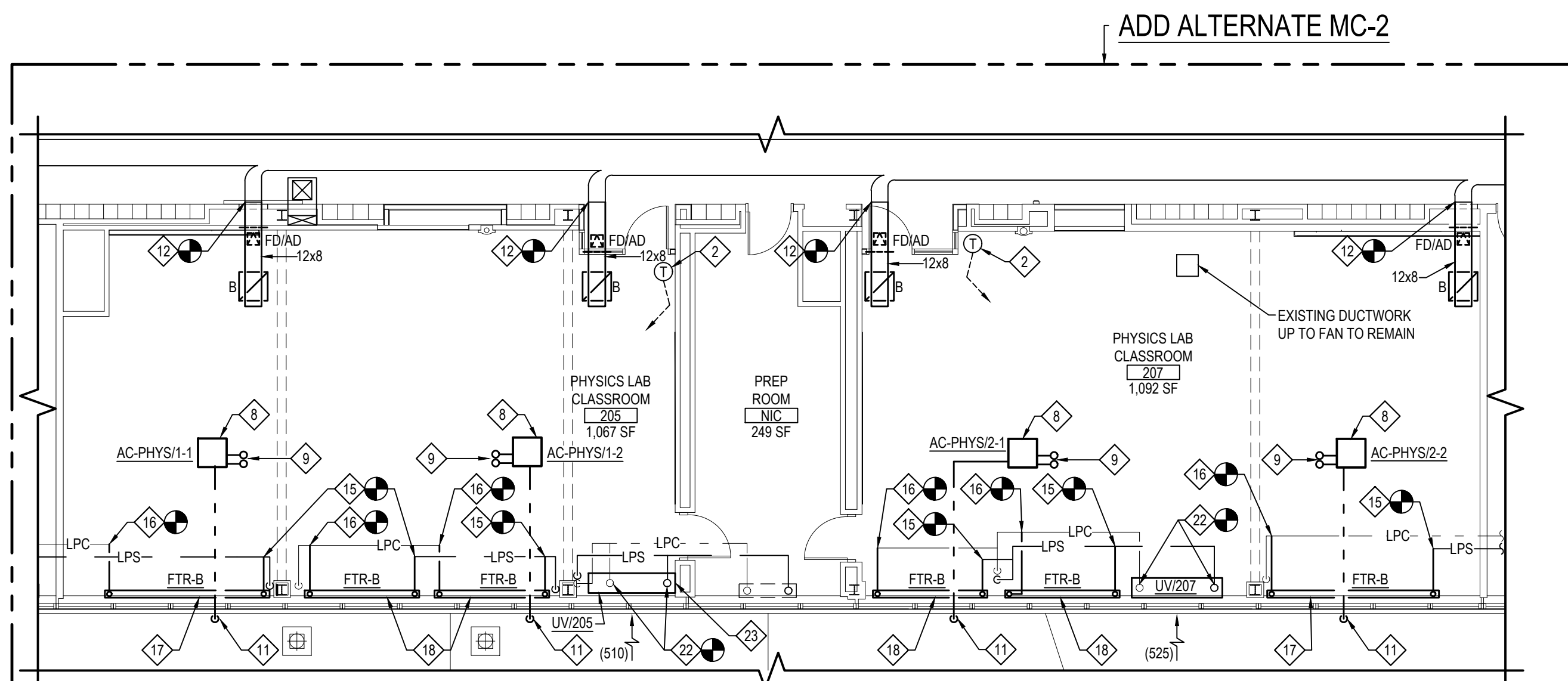
FIRST FLOOR CAFETERIA NEW WORK MECHANICAL PLAN

NOTE: M.C. SHALL BE RESPONSIBLE TO REMOVE AND STORE CEILING TILES FOR THIS AREA DURING THE DURATION OF THIS PROJECT. RE-INSTALL CEILING TILES IN GRID WHEN INSTALLATION IS COMPLETE. M.C. SHALL BE RESPONSIBLE TO REPLACE ANY/ALL DAMAGED CEILING TILES AT THEIR OWN EXPENSE.

SCALE: 1/8" = 1'-0"

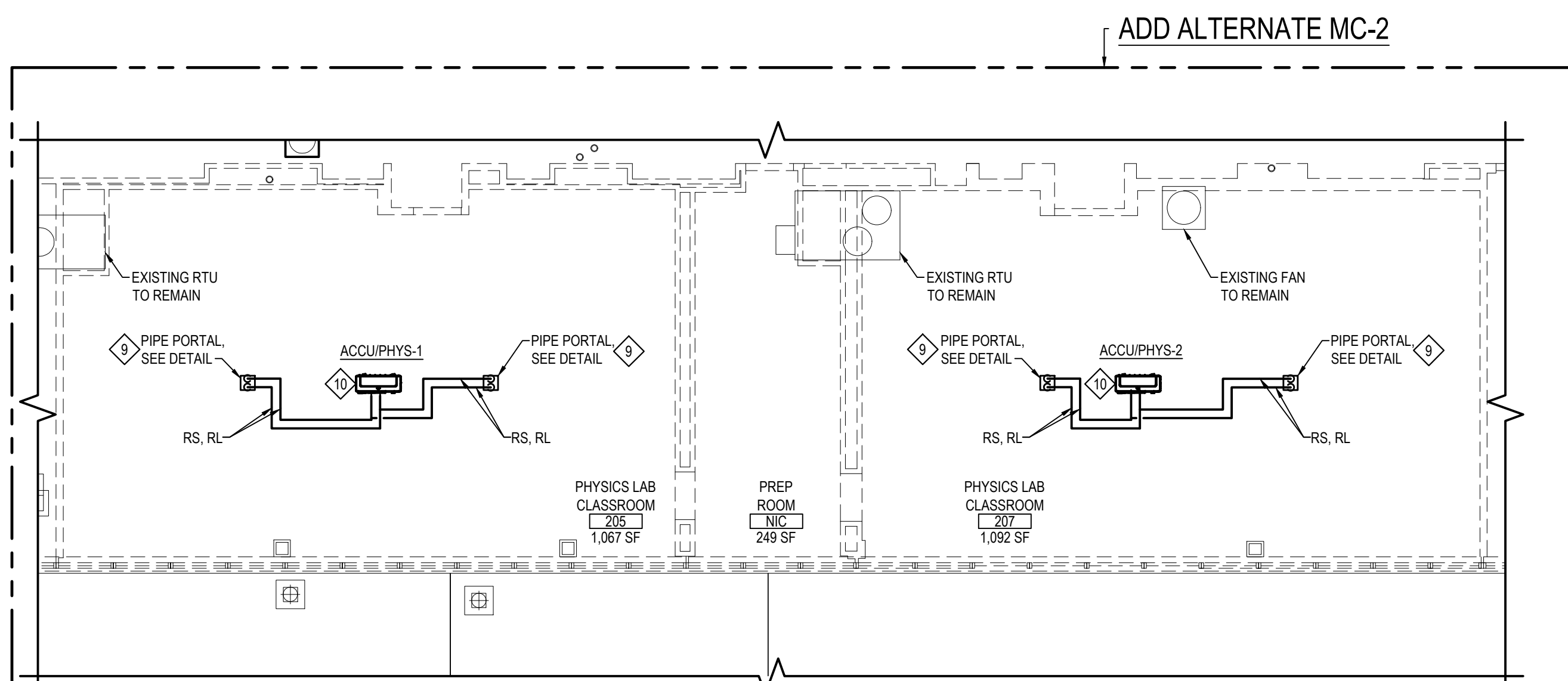
#### ADD ALTERNATE MC-2

THE MECHANICAL CONTRACTOR SHALL STATE THE COMPLETE PRICE TO BE ADDED TO THE BASE BID TO PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED INCLUDING ALL DEMOLITION AND REMOVALS, AS INDICATED ON THIS DRAWING. REFER TO MECHANICAL SCHEDULES, DETAILS, AND SPECIFICATIONS FOR MORE INFORMATION.



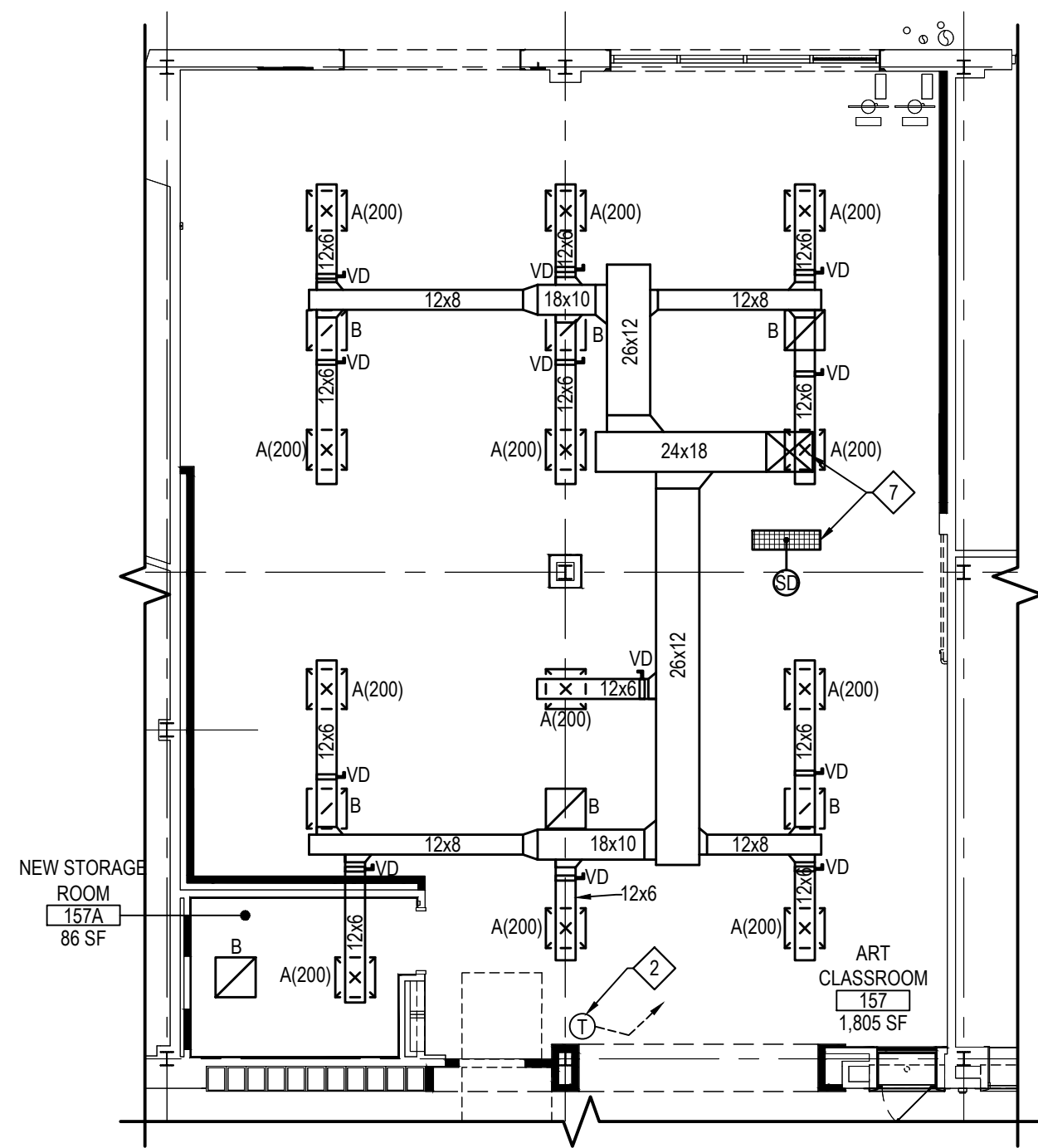
PARTIAL SECOND FLOOR MECHANICAL NEW WORK PLAN - PHYSICS LAB CLASSROOM 205 & PHYSICS LAB CLASSROOM 207

SCALE: 1/8" = 1'-0"



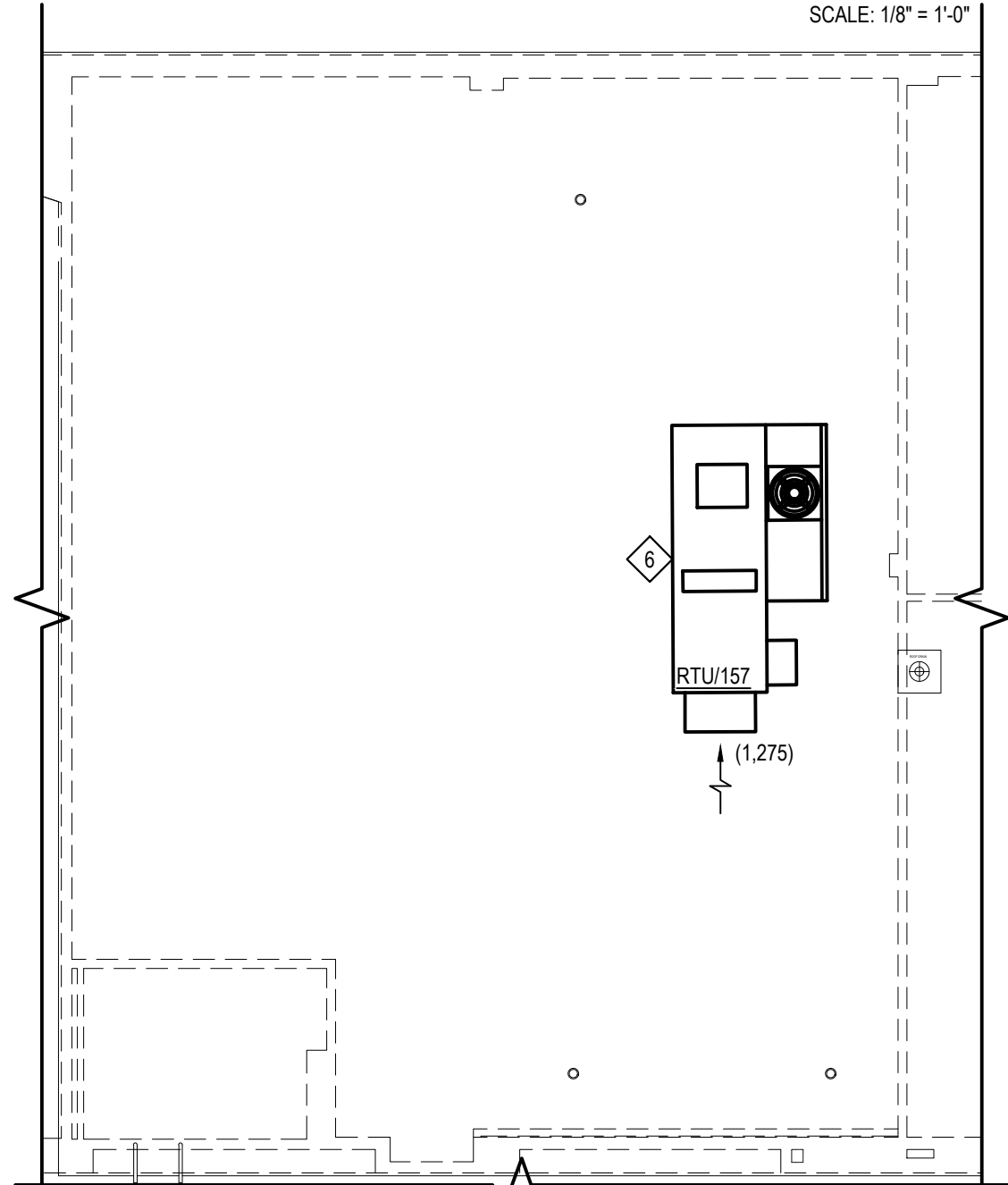
PARTIAL ROOF MECHANICAL NEW WORK PLAN - PHYSICS LAB CLASSROOM 205 & PHYSICS LAB CLASSROOM 207

SCALE: 1/8" = 1'-0"



PARTIAL FIRST FLOOR MECHANICAL NEW WORK PLAN - NEW ART ROOM 157

SCALE: 1/8" = 1'-0"



PARTIAL ROOF MECHANICAL NEW WORK PLAN - NEW ART ROOM 157

SCALE: 1/8" = 1'-0"

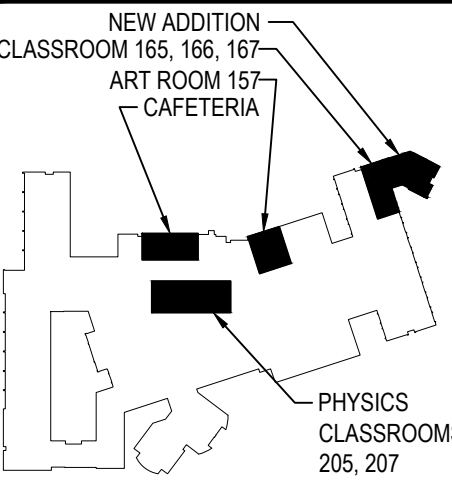
#### KEYED NOTES:

- 1 28x24 SUPPLY AIR DUCT AND 41x12 RETURN AIR DUCT UP TO RTU ON ROOF.
- 2 WALL MOUNTED TEMPERATURE AND HUMIDITY SENSOR TO BE TIED INTO BUILDING BMS AND UNIT CONTROL.
- 3 28x24 SUPPLY AIR DUCT UP TO RTU ON ROOF.
- 4 41x12 RETURN AIR DUCT UP TO RTU ON ROOF.
- 5 28x24 SUPPLY AIR DUCT AND 41x12 RETURN AIR DUCT UP TO RTU ON ROOF.
- 6 ROOFTOP AIR HANDLING UNIT TO BE MOUNTED ON MANUFACTURER PROVIDED EQUIPMENT CURB. M.C. SHALL TAKE CARE TO MAINTAIN MINIMUM 10' CLEARANCE BETWEEN FRESH AIR INTAKES AND ANY EXHAUSTS/VENTS.
- 7 28x24 SUPPLY AIR DUCT AND 41x12 RETURN AIR DUCT UP TO RTU ON ROOF. M.C. SHALL PROVIDE AND MOUNT TO DUCT, DUCT MOUNTED SMOKE DETECTOR IN RETURN AIR DUCT ROOF PENETRATION. E.C. SHALL WIRE BACK TO FACP.
- 8 NEW CASSETTE TYPE AIR CONDITIONING UNIT. REFER TO DETAILS FOR INSTALLATION REQUIREMENTS.
- 9 REFRIGERANT PIPING THROUGH ROOF TO ACCU. REFER TO MANUFACTURER'S INSTALLATION GUIDELINES FOR PIPE SIZES. REFER TO DETAILS FOR PENETRATION INFORMATION.
- 10 NEW ROOF MOUNTED AIR COOLED CONDENSING UNIT (ACCU) TO BE INSTALLED ON EQUIPMENT RAILS ON ROOF. RAILS TO BE PROVIDED BY M.C. AND INSTALLED BY G.C. REFER TO DETAILS FOR INSTALLATION REQUIREMENTS.
- 11 1" COPPER CONDENSATE DRAIN, LINE THROUGH WALL. EXTEND 6" OFF WALL AND PROVIDE ELBOW TURNED DOWN WITH SCREEN AT DISCHARGE POINT. DRAIN PIPING FROM NEW EQUIPMENT. PIPING SHALL BE INSTALLED WITH A SLOPE OF 1/8" PER 12" OF RUN, DOWN AWAY FROM EQUIPMENT. ALL CONDENSATE DRAIN PIPING SHALL BE TYPE K HARD COPPER. LINE SIZE SHALL BE AS SHOWN ON DRAWINGS AND NOT LESS THAN 3/4" INTERNAL DIAMETER. REFER TO NYS PLUMBING CODE SECTION 314 FOR FULL INFORMATION. G.C. SHALL MAKE PENETRATION WITH M.C. PRESENT.
- 12 CONNECT NEW 12x8 RELIEF AIR DUCTWORK TO EXISTING RELIEF AIR DUCTWORK. INSTALL ABOVE CEILING AND PROVIDE NEW RELIEF AIR GRILLE.
- 13 EXISTING UNIT VENTILATOR TO REMAIN.
- 14 EXISTING RELIEF AIR GRILLE/VENTILATOR TO REMAIN.
- 15 CONNECT NEW 1-1/2" LPS PIPING TO EXISTING STEAM PIPING IN CEILING BELOW. ROUTE NEW PIPING UP THRU FLOOR TO NEW FINNED TUBE RADIATOR IN PHYSICS CLASSROOM. COORDINATE WITH G.C. TO CUT NEW PENETRATIONS FOR NEW LPS AND LPC PIPING.
- 16 CONNECT NEW 1" LPC PIPING TO EXISTING LPC PIPING IN CEILING BELOW. ROUTE NEW PIPING UP THRU FLOOR TO NEW FINNED TUBE RADIATOR IN PHYSICS CLASSROOM. COORDINATE WITH G.C. TO CUT NEW PENETRATIONS FOR NEW LPS AND LPC PIPING.
- 17 NEW 14' LONG STEAM HEAT FINNED TUBE RADIATION, MANUFACTURER ZEHNDER-RITTLING, MODEL 1-14AC-2-34CX4-40 OR APPROVED EQUAL, SINGLE ROW, 1-1/4" COPPER ELEMENT WITH ALUMINUM FINS, 40 FINS PER INCH, CONTINUOUS TOE KICK INTAKE GRILLE AND TOP OUTLET GRILLE SHALL BE PROVIDED IN CASEWORK BY CASEWORK CONTRACTOR. COORDINATE WITH M.C.
- 18 NEW 96' LONG STEAM HEAT FINNED TUBE RADIATION, MANUFACTURER ZEHNDER-RITTLING, MODEL 1-14AC-2-34CX4-40 OR APPROVED EQUAL, SINGLE ROW, 1-1/4" COPPER ELEMENT WITH ALUMINUM FINS, 40 FINS PER INCH, CONTINUOUS TOE KICK INTAKE GRILLE AND TOP OUTLET GRILLE SHALL BE PROVIDED IN CASEWORK BY CASEWORK CONTRACTOR. COORDINATE WITH M.C.
- 19 NOT USED.
- 20 NOT USED.
- 21 1" CONDENSATE LINE DOWN TO FLOOR SINK. TERMINATE IN AIR GAP.
- 22 CONNECT NEW LPS AND LPC PIPING TO NEW UV. NEW PIPE SIZE TO MATCH EXISTING. REFER TO DETAILS FOR UV PIPE CONNECTION DETAIL.
- 23 NEW STEAM HEAT, UNIT VENTILATOR. REFER TO SCHEDULE FOR MORE INFORMATION. PROVIDE NEW FRESH AIR LOUVER. COORDINATE WITH G.C. TO MODIFY EXISTING PENETRATION.
- 24 WALL MOUNTED TEMPERATURE AND HUMIDITY SENSOR TO BE TIED INTO BUILDING BMS AND UNIT CONTROL. SENSOR SHALL CONTROL THE 3 AC/CAFÉ UNITS NEAREST THE BUILDING CORRIDOR.
- 25 WALL MOUNTED TEMPERATURE AND HUMIDITY SENSOR TO BE TIED INTO BUILDING BMS AND UNIT CONTROL. SENSOR SHALL CONTROL THE 4 AC/CAFÉ UNITS NEAREST THE WINDOWS.

REV.	DATE	ITEM

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#### KEY PLAN

NOT TO SCALE

GARDEN CITY UNION FREE SCHOOL DISTRICT  
ADDITIONS AND ALTERATIONS  
GARDEN CITY HIGH SCHOOL  
GARDEN CITY, NASSAU COUNTY, NEW YORK

PROJECT  
DRAWING BY: PLH  
CHECK BY:

MECHANICAL NEW WORK PART PLANS

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**BBS**  
ARCHITECTS  
LANDSCAPE ARCHITECTS  
ENGINEERS

244 EAST MAIN STREET PATCHOGUE, NEW YORK 11772  
T. 631.475.0349 F. 631.475.0361  
187 WOLF ROAD, STE. 205 ALBANY, NEW YORK 12205  
T. 518.621.7650 F. 518.621.7655

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#### SED No.

28-02-18-03-0-007-034

#### DISTRICT

GARDEN CITY UNION FREE SCHOOL DISTRICT

#### PROJECT

GARDEN CITY HIGH SCHOOL, ADDITIONS AND ALTERATIONS

#### DWG TITLE

MECHANICAL NEW WORK PART PLANS

#### SCALE:

AS NOTED

#### DATE:

MARCH 6, 2025

#### BID PICK-UP:

MARCH 6, 2025

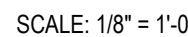
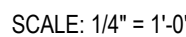
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24-145

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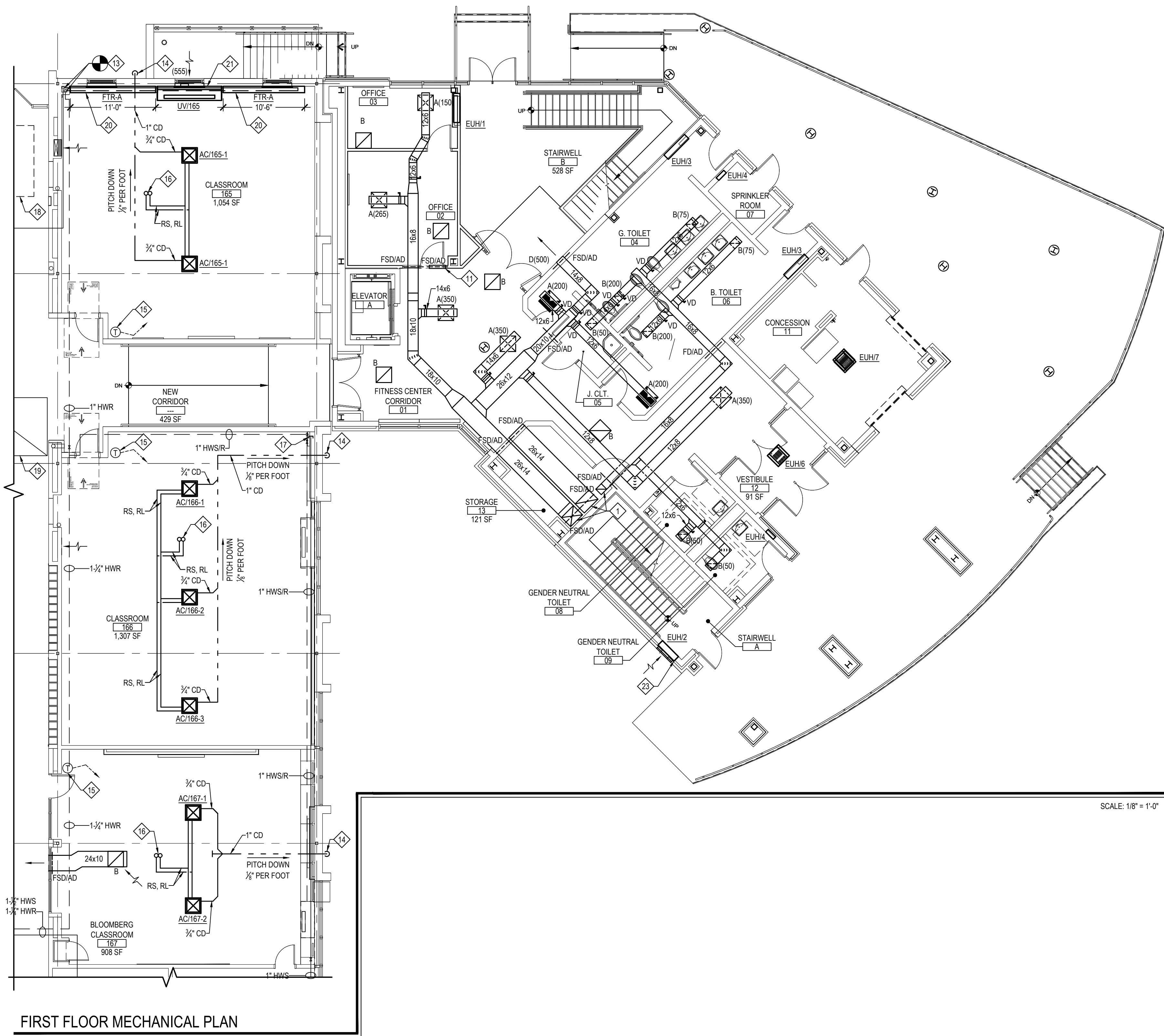


- 1 8" LPS AND 4" LPC DOWN TO REMAIN.
- 2 28x20 EXISTING RETURN AIR DUCT DOWN TO REMAIN.
- 3 30x46 EXISTING RETURN AIR DUCT DOWN TO REMAIN.
- 4 EXISTING DUCTWORK AND STEAM COIL SERVING AUDITORIUM TO REMAIN.
- 5 NEW 48x24 SUPPLY AIR DUCTWORK TO BE RECONNECTED AS SHOWN.
- 6 CONNECT NEW 3" LPC PIPING TO BE EXISTING PIPING AT POINT SHOWN.
- 7 NEW 6" LPS PIPING TO BE CONNECTED TO EXISTING PIPING AT POINT SHOWN. COORDINATE STEAM SYSTEM SHUTDOWN WITH FACILITY A MINIMUM OF 72 HOURS PRIOR TO COMMENCEMENT OF WORK.
- 8 NEW DUCT MOUNTED STEAM HEATING COIL. REFER TO DETAILS FOR INSTALLATION REQUIREMENTS.
- 9 NEW 40x24 RETURN AIR DUCTWORK UP TO RTU ON ROOF ABOVE. REFER TO DETAILS FOR PENETRATION INFORMATION.
- 10 14x22 RETURN AIR DUCT DOWN. TO REMAIN.
- 11 CONNECT EXISTING 32x14 RETURN AIR DUCTWORK TO NEW RETURN AIR DUCTWORK AS SHOWN. PROVIDE NEW VOLUME DAMPER. VERIFY SIZE IN FIELD. NEW DUCTWORK TO MATCH EXISTING.
- 12 CONNECT EXISTING 30x28 RETURN AIR DUCTWORK TO NEW RETURN AIR DUCTWORK AS SHOWN. PROVIDE NEW VOLUME DAMPER. VERIFY SIZE IN FIELD. NEW DUCTWORK TO MATCH EXISTING.
- 13 CONNECT EXISTING 52x24 RETURN AIR DUCTWORK TO NEW RETURN AIR DUCTWORK AS SHOWN. PROVIDE NEW VOLUME DAMPER. VERIFY SIZE IN FIELD. NEW DUCTWORK TO MATCH EXISTING.
- 14 52x24 RETURN AIR DUCT DOWN. TO REMAIN.
- 15 NEW 65x34 SUPPLY AIR DUCTWORK TO BE RECONNECTED TO EXISTING SUPPLY AIR DUCTWORK AS SHOWN.
- 16 NEW 40x24 RETURN AIR DUCTWORK UP TO RTU ON ROOF ABOVE. PROVIDE DUCT MOUNTED SMOKE DAMPER TO BE TIED INTO FA SYSTEM. REFER TO DETAILS FOR PENETRATION INFORMATION.
- 17 NEW 64x28 RETURN AIR DUCTWORK UP TO RTU ON ROOF ABOVE. PROVIDE DUCT MOUNTED SMOKE DAMPER TO BE TIED INTO FA SYSTEM. REFER TO DETAILS FOR PENETRATION INFORMATION.
- 18 NEW 64x28 SUPPLY AIR DUCTWORK UP TO RTU ON ROOF ABOVE. REFER TO DETAILS FOR PENETRATION INFORMATION.
- 19 NEW CUSTOM AIR HANDLING UNIT TO BE INSTALLED ON STEEL DUNNAGE. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION. COORDINATE INSTALLATION WITH G.C.
- 20 40x24 SUPPLY AND RETURN AIR DUCTWORK DOWN THROUGH ROOF TO FLOOR BELOW. REFER TO DETAILS FOR MORE INFORMATION. COORDINATE FRAMING WITH G.C. ALL EXTERIOR DUCTWORK SHALL BE EXTERNALLY LINED WITH WEATHER PROOFING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- 21 64x28 SUPPLY AND RETURN AIR DUCTWORK DOWN THROUGH ROOF TO FLOOR BELOW. REFER TO DETAILS FOR MORE INFORMATION. COORDINATE FRAMING WITH G.C. ALL EXTERIOR DUCTWORK SHALL BE EXTERNALLY LINED WITH WEATHER PROOFING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- 22 EXISTING ROOFTOP AIR HANDLING UNIT TO REMAIN.
- 23 EXISTING EXHAUST FAN TO REMAIN.
- 24 WALL TO BE INFILLED BY G.C.



THE MECHANICAL CONTRACTOR SHALL STATE THE COMPLETE PRICE TO BE ADDED TO THE BASE BID TO PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED INCLUDING ALL DEMOLITION AND REMOVALS, SHOWN ON THIS DRAWING. REFER TO MECHANICAL SCHEDULES, DETAILS, AND SPECIFICATIONS FOR MORE INFORMATION. THIS ENTIRE DRAWING SHALL BE PART OF ADD ALTERNATE MC-1

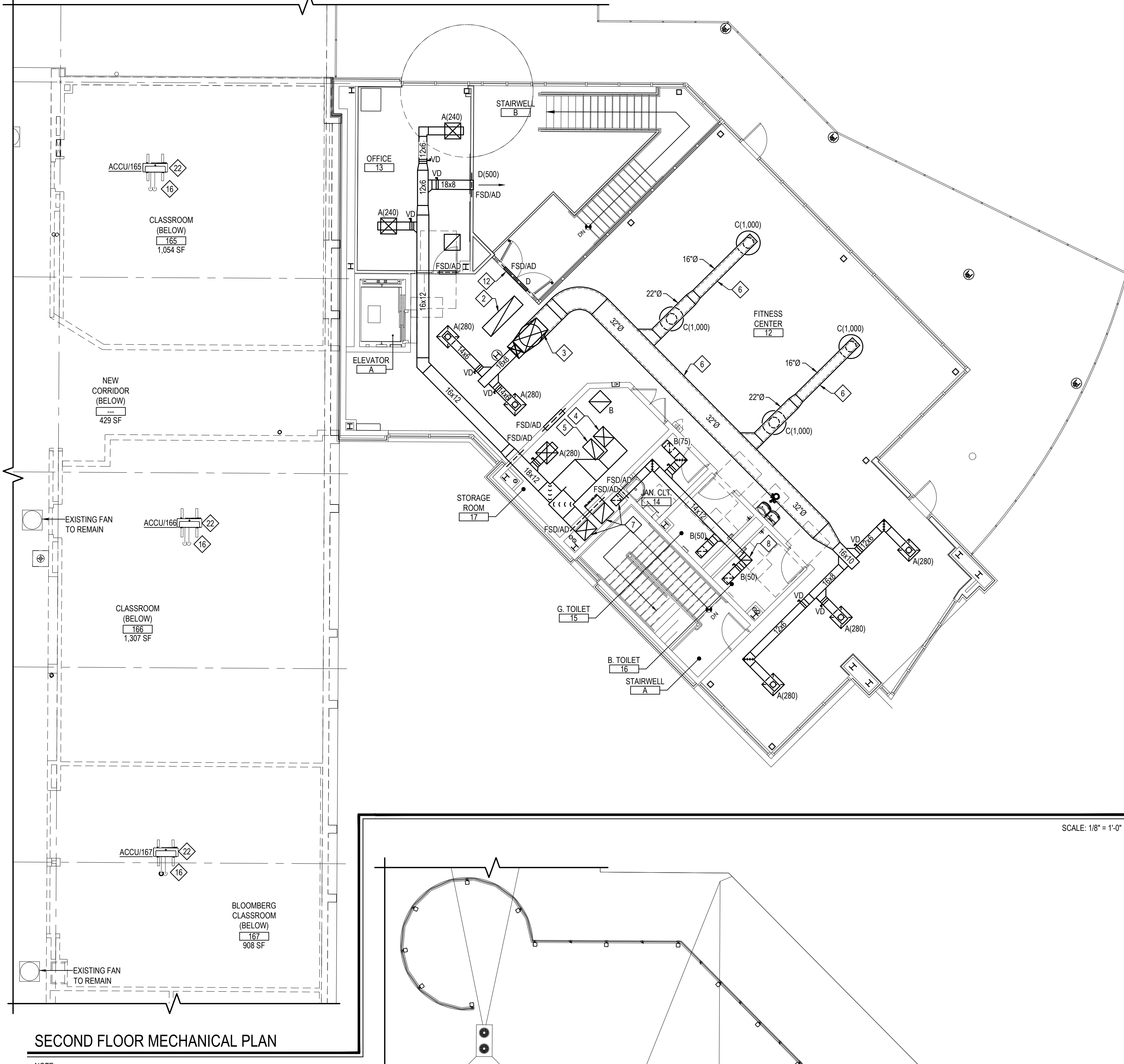
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FIRST FLOOR MECHANICAL PLAN

NOTE:

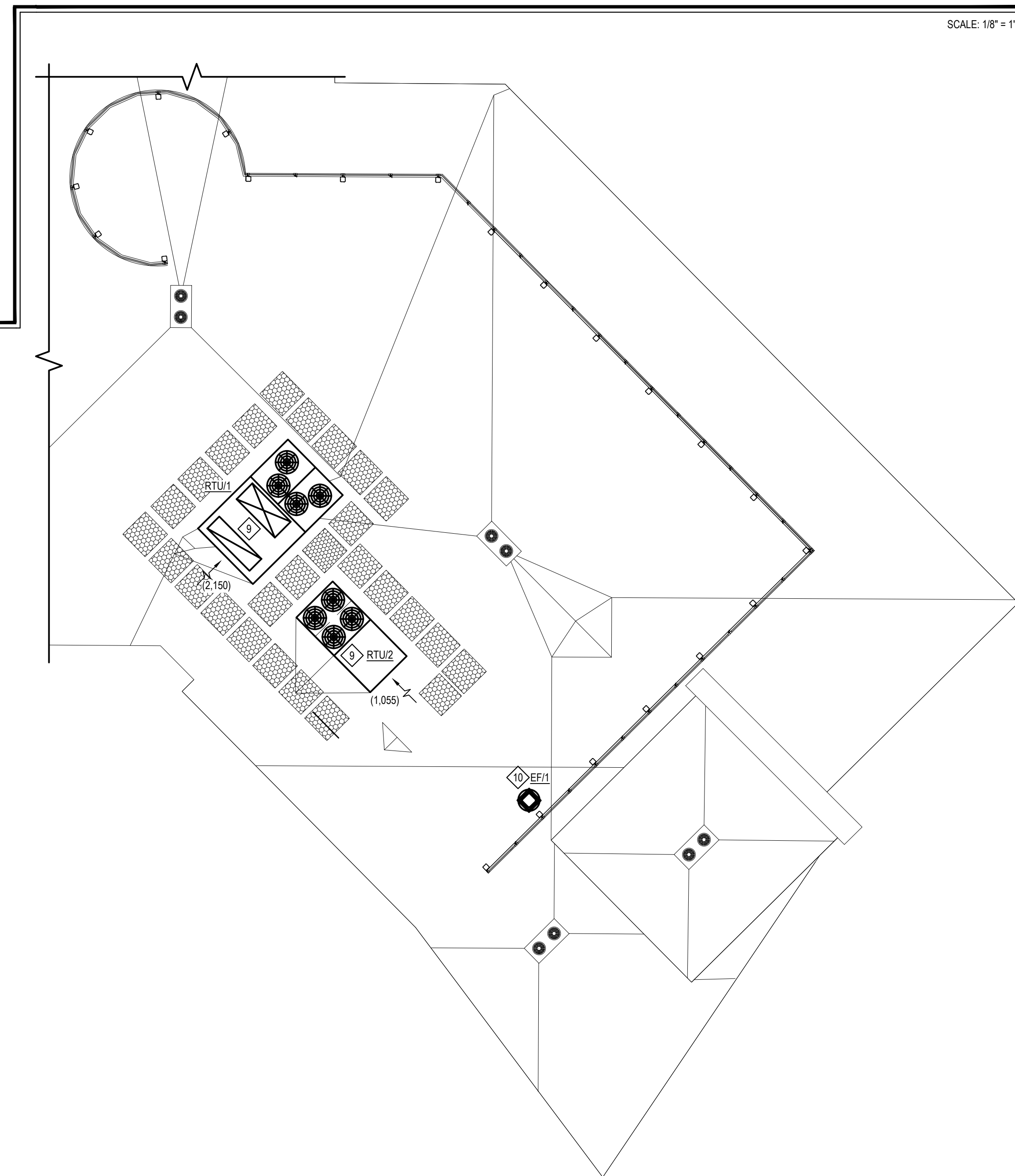
SCALE: 1/8" = 1'-0"



SECOND FLOOR MECHANICAL PLAN

NOTE:

SCALE: 1/8" = 1'-0"



ROOF MECHANICAL PLAN

NOTE:

SCALE: 1/8" = 1'-0"

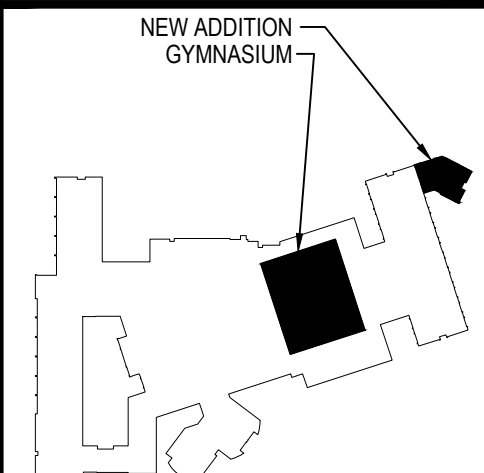
KEYED NOTES:

- 1 26x14 SUPPLY AIR DUCT, 26x14 RETURN AIR DUCT AND 12x12 EXHAUST AIR DUCT UP IN ARCHITECTURAL CHASE TO FLOOR ABOVE.
- 2 48x14 RETURN AIR DUCT UP TO RTU ABOVE. M.C. SHALL PROVIDE AND MOUNT TO DUCT, DUCT MOUNTED SMOKE DETECTOR. E.C. SHALL WIRE BACK TO FACP.
- 3 44x18 SUPPLY AIR DUCT UP TO RTU ON ROOF ABOVE.
- 4 24x21 SUPPLY AIR DUCT UP TO RTU ON ROOF ABOVE.
- 5 28x18 RETURN AIR DUCT UP TO RTU ON ROOF ABOVE. M.C. SHALL PROVIDE AND MOUNT TO DUCT, DUCT MOUNTED SMOKE DETECTOR. E.C. SHALL WIRE BACK TO FACP.
- 6 EXPOSED SPIRAL DUCTWORK TO BE INTERNALLY LINED IN ITS ENTIRETY. EXPOSED SPIRAL DUCTWORK SHALL BE PAINTED BY G.C. COORDINATE WITH G.C. M.C. SHALL PREP THE DUCTWORK FOR PAINTING
- 7 26x14 SUPPLY AIR DUCT, 26x14 RETURN AIR DUCT AND 12x12 EXHAUST AIR DUCT DOWN IN ARCHITECTURAL CHASE TO FLOOR BELOW.
- 8 12x12 EXHAUST AIR DUCT UP TO FAN ON ROOF ABOVE.
- 9 NEW PACKAGED ROOFTOP UNIT (RTU). INSTALL ON MANUFACTURER PROVIDED EQUIPMENT CURB. PROVIDE SOUND ATTENUATION AT CURB. SEE DETAILS FOR MORE INFORMATION. REFER TO DETAILS FOR COMPLETE INSTALLATION AND INSTRUCTIONS ON SECURING UNIT TO ROOF.
- 10 NEW MUSHROOM STYLE EXHAUST FAN. INSTALL ON MANUFACTURER'S PROVIDED ROOF CURB. REFER TO DETAILS FOR INSTALLATION REQUIREMENTS AND INFORMATION.
- 11 24x10 TRANSFER OPENING INSTALLED ABOVE DOOR. G.C. TO CUT OPENING. M.C. SHALL PROVIDE AND INSTALL FIRE SMOKE DAMPER
- 12 48x12 TRANSFER AIR GRILLE INSTALLED ABOVE DOOR. G.C. TO CUT OPENING. M.C. SHALL PROVIDE AND INSTALL FIRE SMOKE DAMPER
- 13 CONNECT NEW 1" HOT WATER SUPPLY AND 1" HOT WATER RETURN PIPING TO EXISTING HOT WATER PIPING.  
1" COPPER CONDENSATE DRAIN LINE THROUGH WALL. EXTEND 6" OFF WALL AND PROVIDE ELBOW TURNED DOWN WITH SCREEN AT DISCHARGE POINT. DRAIN PIPING FROM NEW EQUIPMENT, PIPING SHALL BE INSTALLED WITH A SLOPE OF 1/8" PER 12" OF RUN, DOWN AWAY FROM EQUIPMENT. ALL CONDENSATE DRAIN PIPING SHALL BE TYPE K HARD COPPER. LINE SIZE SHALL BE AS SHOWN ON DRAWINGS AND NOT LESS THAN 3/2" INTERNAL DIAMETER. REFER TO NYS PLUMBING CODE SECTION 314 FOR FULL INFORMATION. G.C. SHALL MAKE PENETRATION WITH M.C. PRESENT
- 14 WALL MOUNTED TEMPERATURE AND HUMIDITY SENSOR TO BE TIED INTO BUILDING BMS AND UNIT CONTROL.
- 15 REFRIGERANT PIPING THROUGH ROOF TO ACCU. REFER TO MANUFACTURER'S INSTALLATION GUIDELINES FOR PIPE SIZES. REFER TO DETAILS FOR PENETRATION INFORMATION.
- 16 NEW 1" HOT WATER LINE. CONNECT HWS TO HWR TO MAINTAIN HOT WATER LOOP. COORDINATE WITH G.C. TO REPAIR WALL.
- 17 EXISTING CEILING MOUNTED UNIT VENTILATOR TO REMAIN (NIC)
- 18 EXISTING RELIEF AIR DUCT UP TO FAN ON ROOF TO REMAIN (NIC)

- 20 NEW HOT WATER FINNED TUBE RADIATION. REFER TO SCHEDULE FOR MORE INFORMATION. M.C. SHALL PROVIDE AND INSTALL UV MANUFACTURER PROVIDED SHELVING. SHELVING SHALL HAVE CONTINUOUS TOE KICK INTAKE. GRILLE AND CONTINUOUS UPPER OUTLET GRILLE.
- 21 NEW HOT WATER UNIT VENTILATOR WITH NEW O.A. GRILLE. REFER TO DETAILS FOR CONNECTION INFORMATION AND SCHEDULES FOR EQUIPMENT INFORMATION. COORDINATE O.A. LOUVER PENETRATIONS WITH G.C.
- 22 NEW ROOF MOUNTED AIR COOLED CONDENSING UNIT (ACCU) TO BE INSTALLED ON EQUIPMENT RAILS ON ROOF. RAILS TO BE PROVIDED BY M.C. AND INSTALLED BY G.C. REFER TO DETAILS FOR INSTALLATION REQUIREMENTS.
- 23 NEW RECESSED ELECTRIC UNIT HEATER. PROVIDE FRESH AIR LOUVER. G.C. TO CUT OPENING FOR LOUVER. COORDINATE SIZE WITH G.C.

REV.	DATE	ITEM

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KEY PLAN  
NOT TO SCALE

PROJECT  
GARDEN CITY UNION FREE SCHOOL DISTRICT  
ADDITIONS AND ALTERATIONS  
GARDEN CITY HIGH SCHOOL  
GARDEN CITY, NASSAU COUNTY, NEW YORK

DWG TITLE  
ADDITION MECHANICAL NEW WORK PART PLANS  
GYM ROOF NEW WORK PLAN

DRAWING BY: PLH  
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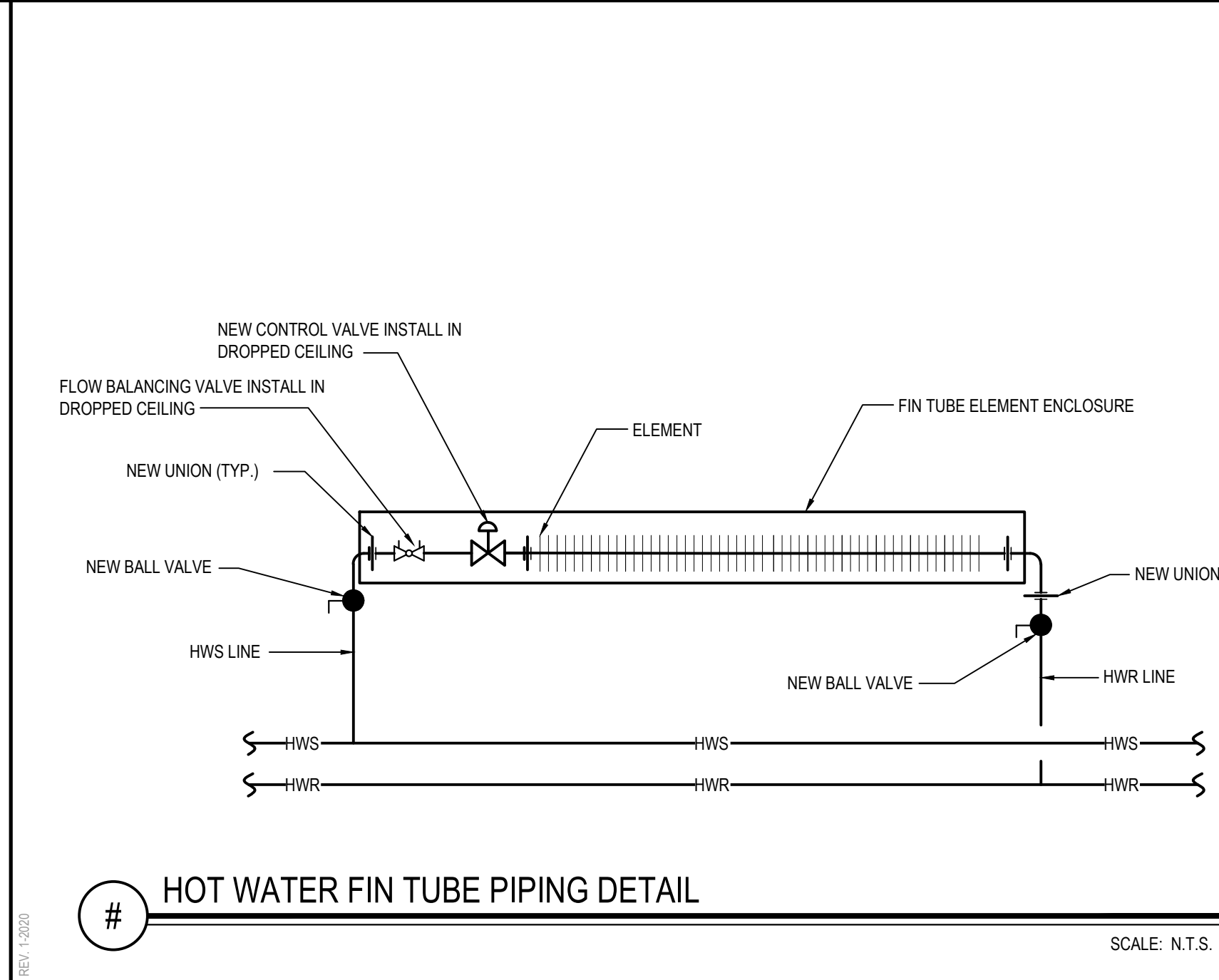
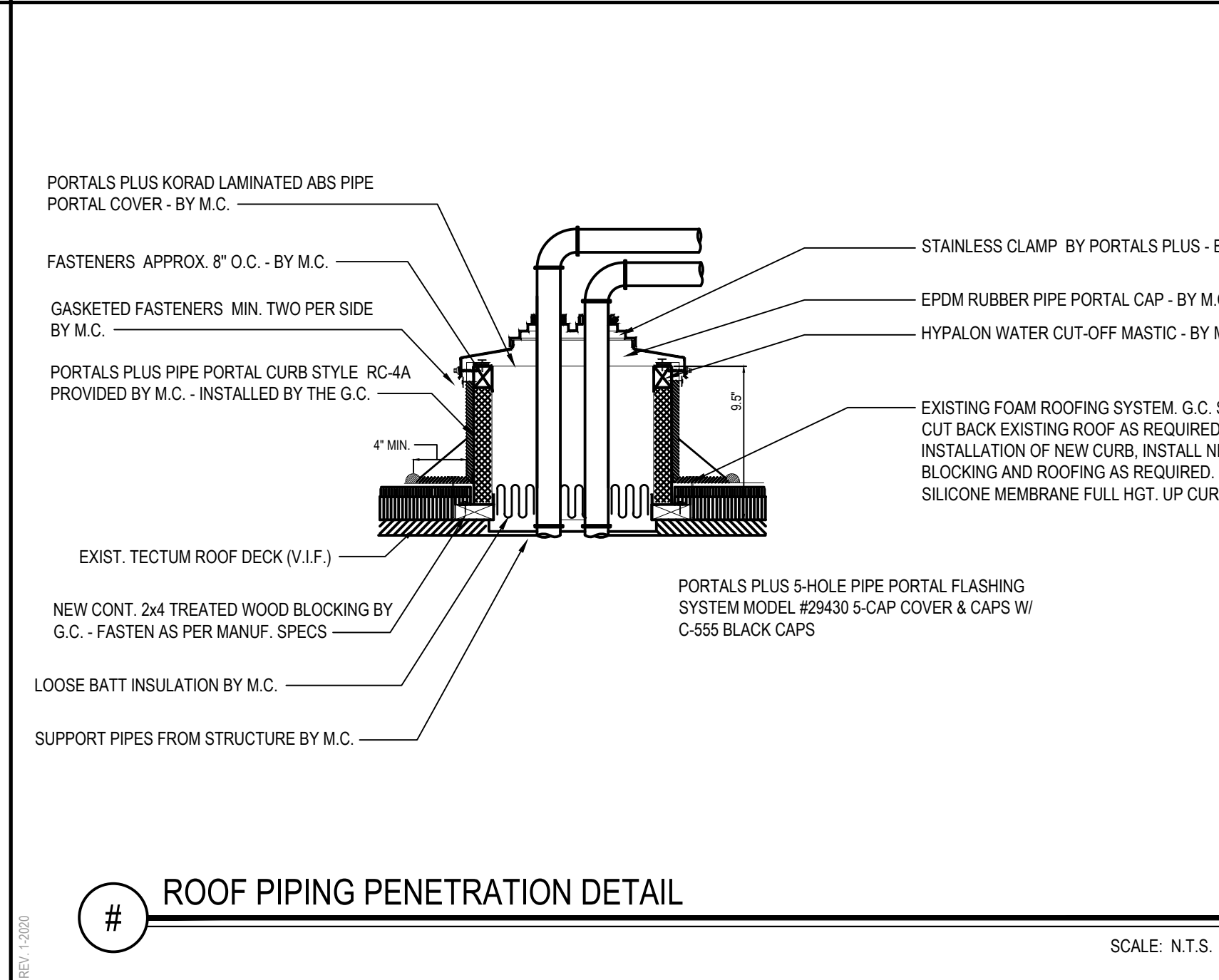
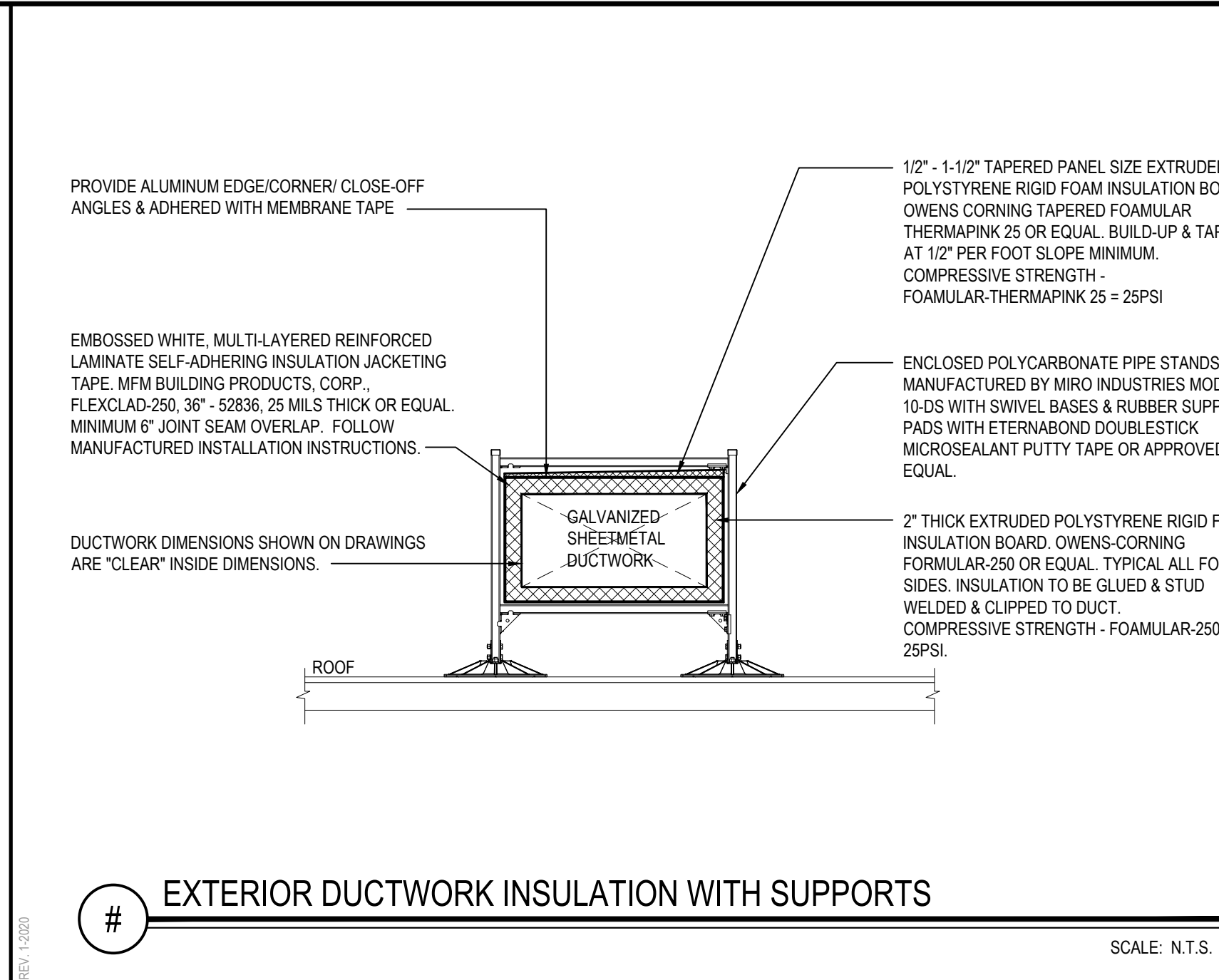
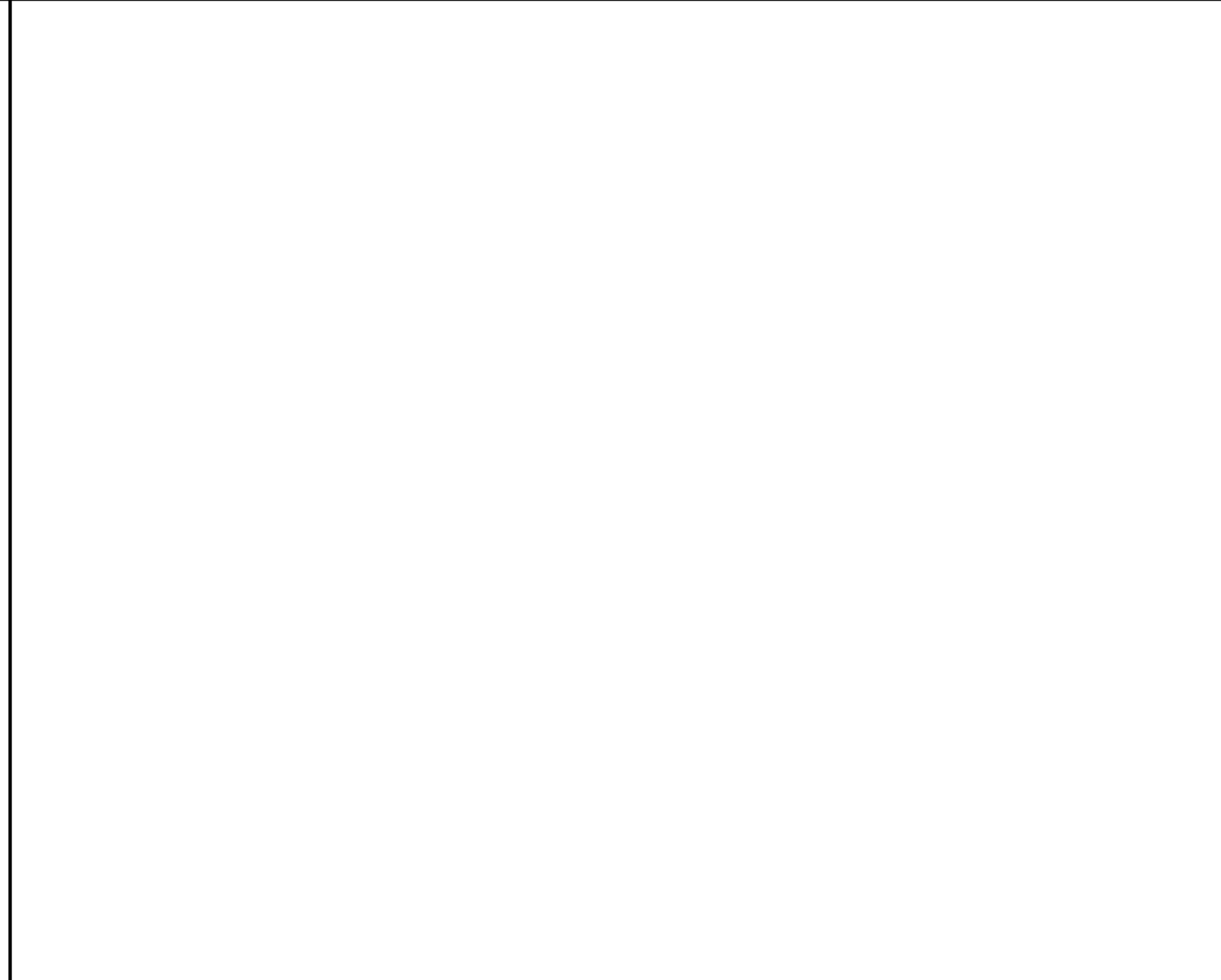
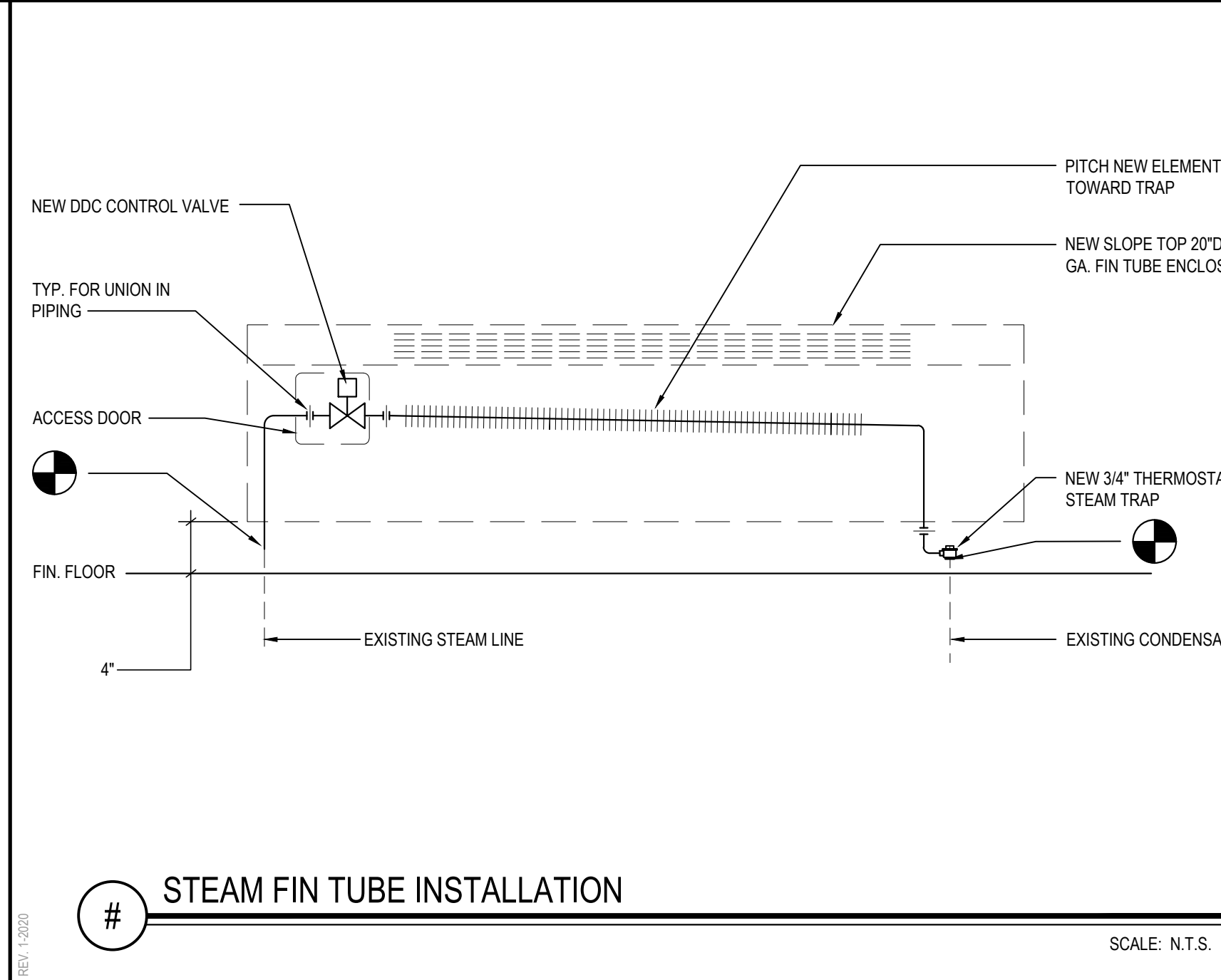
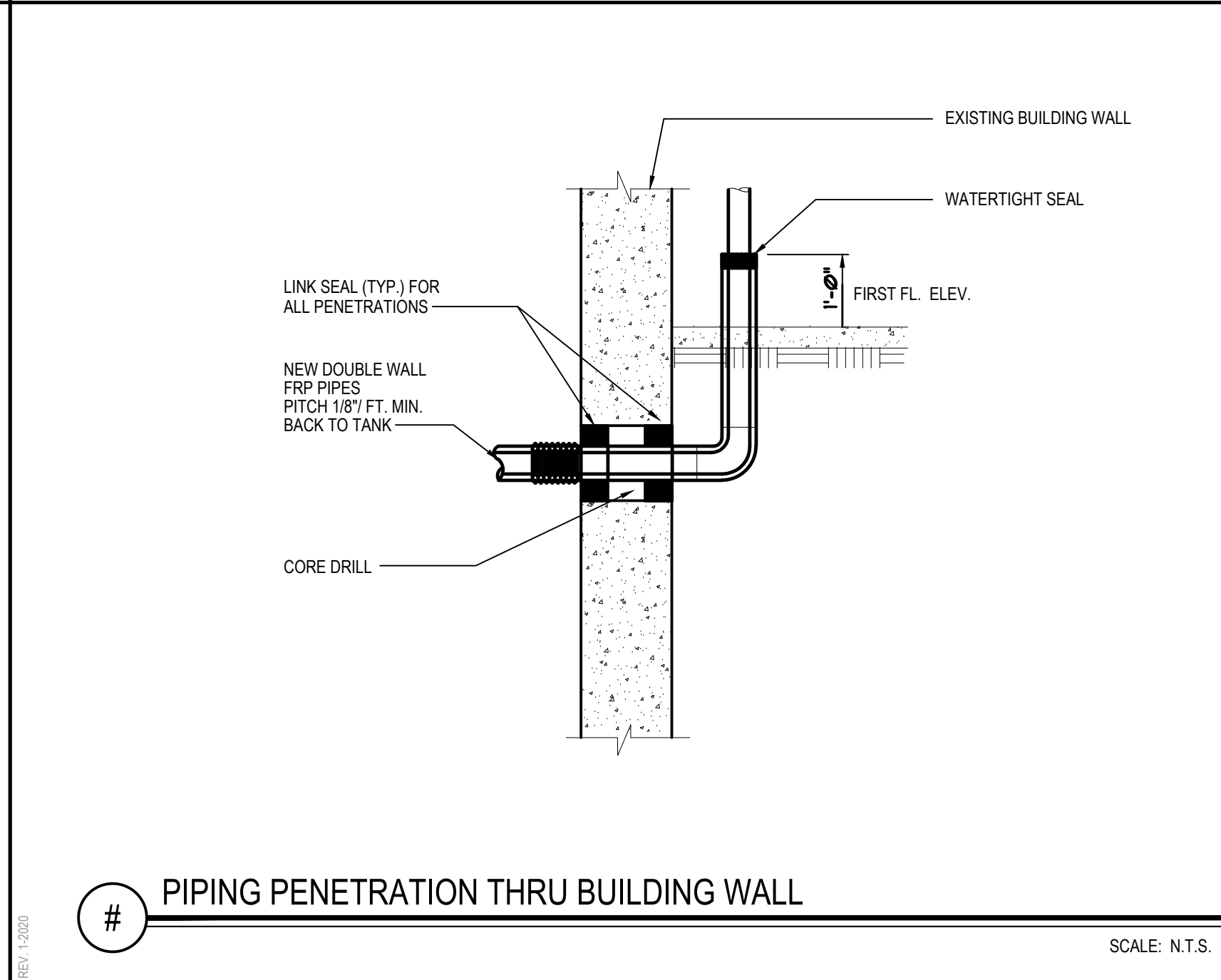
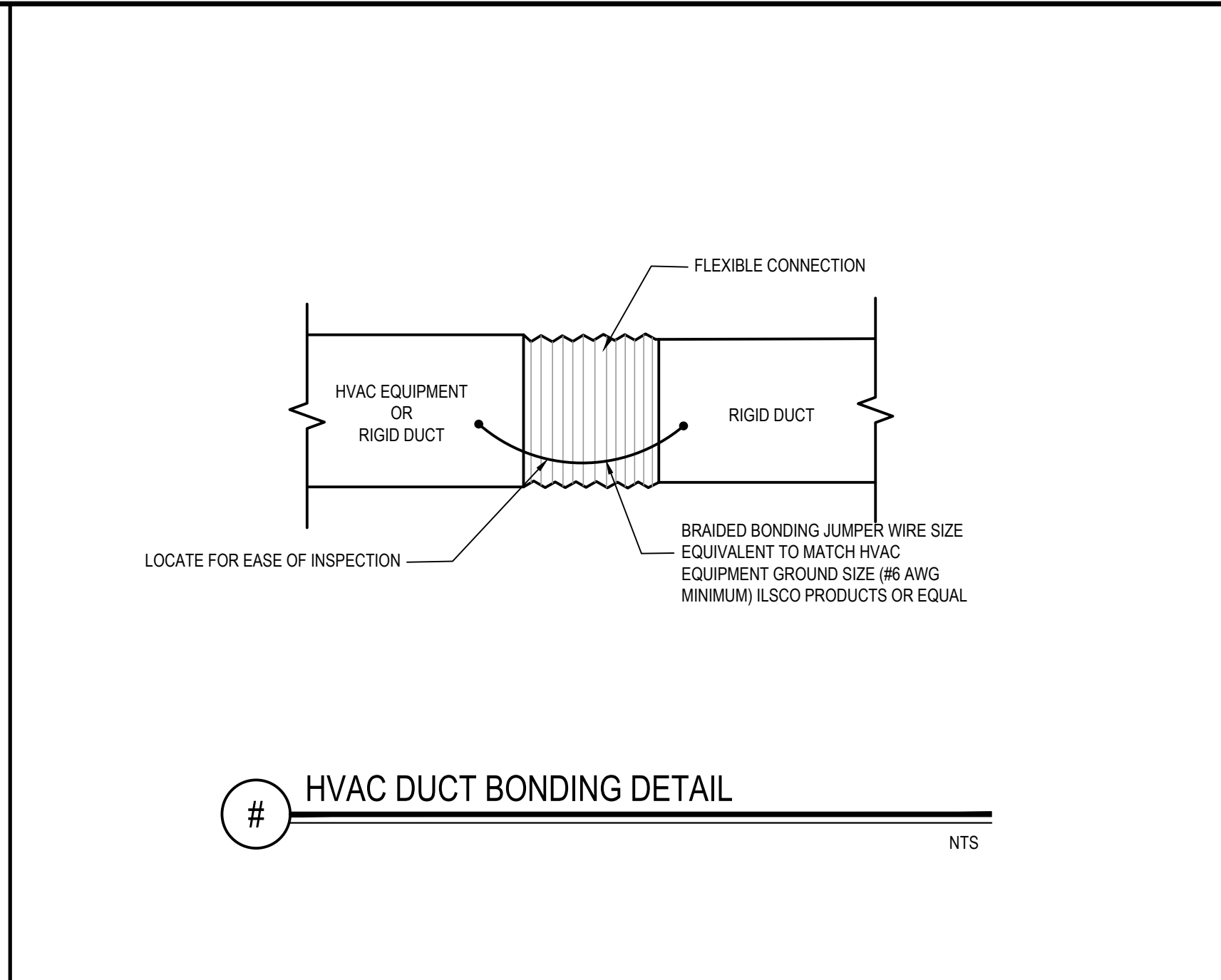
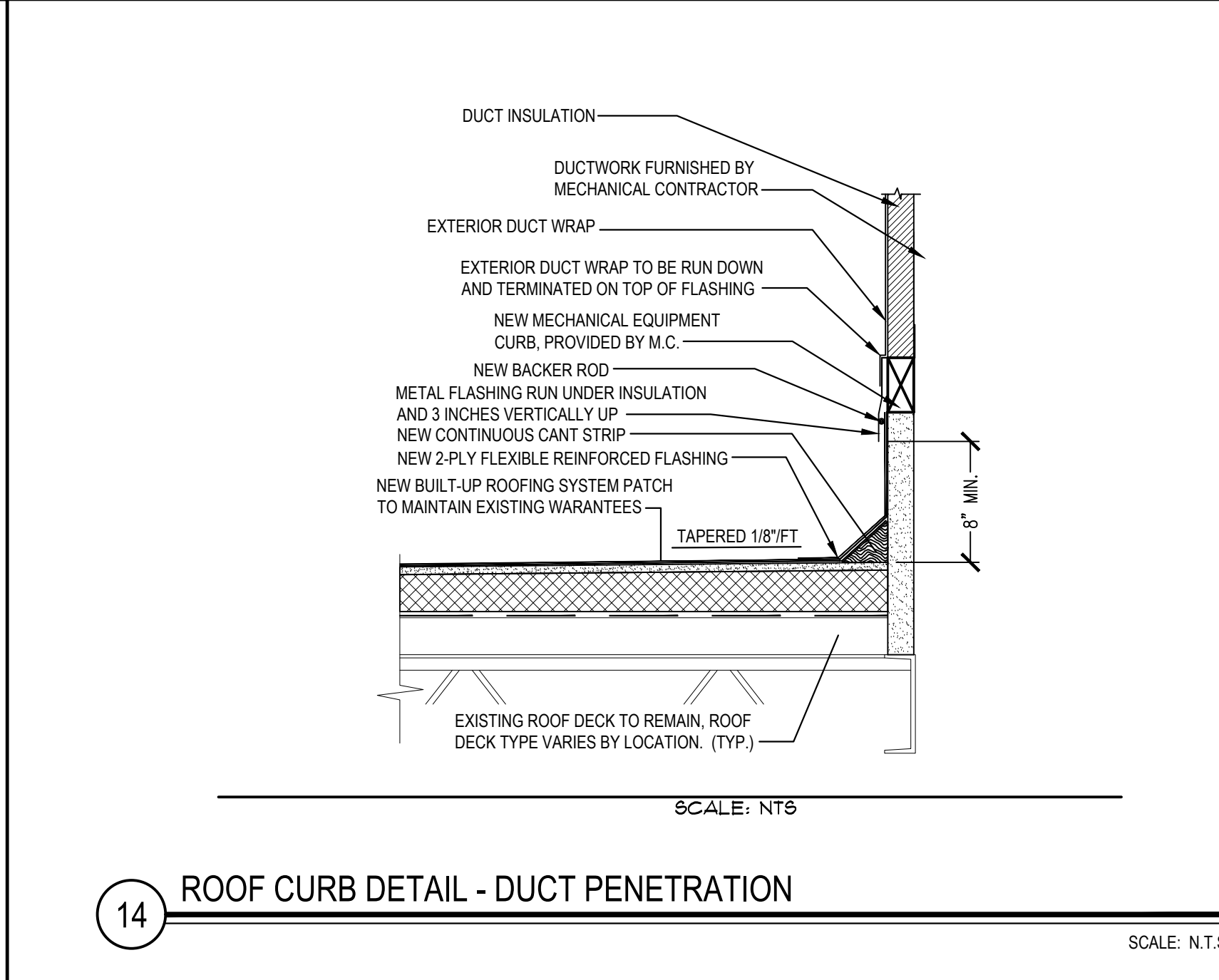
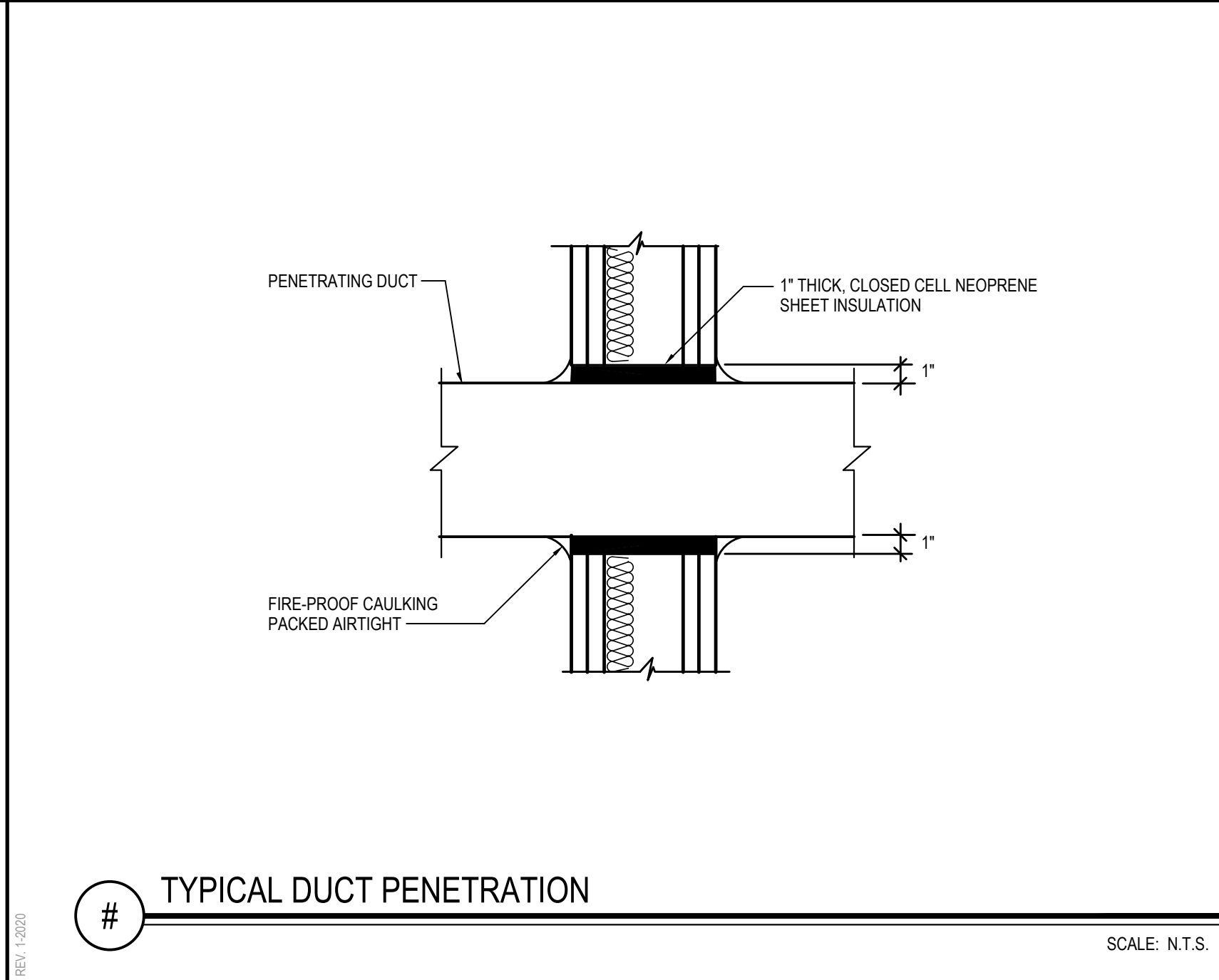
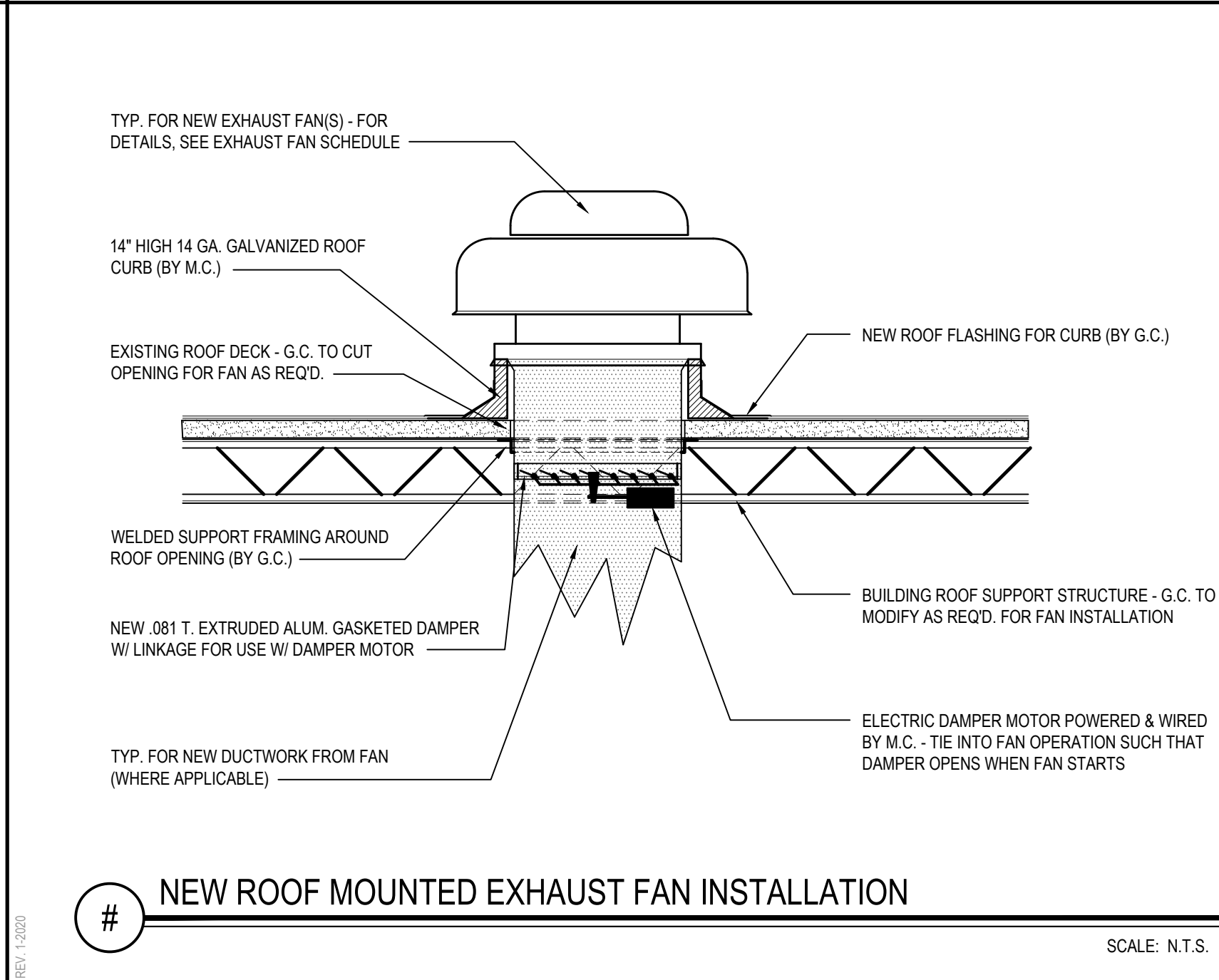
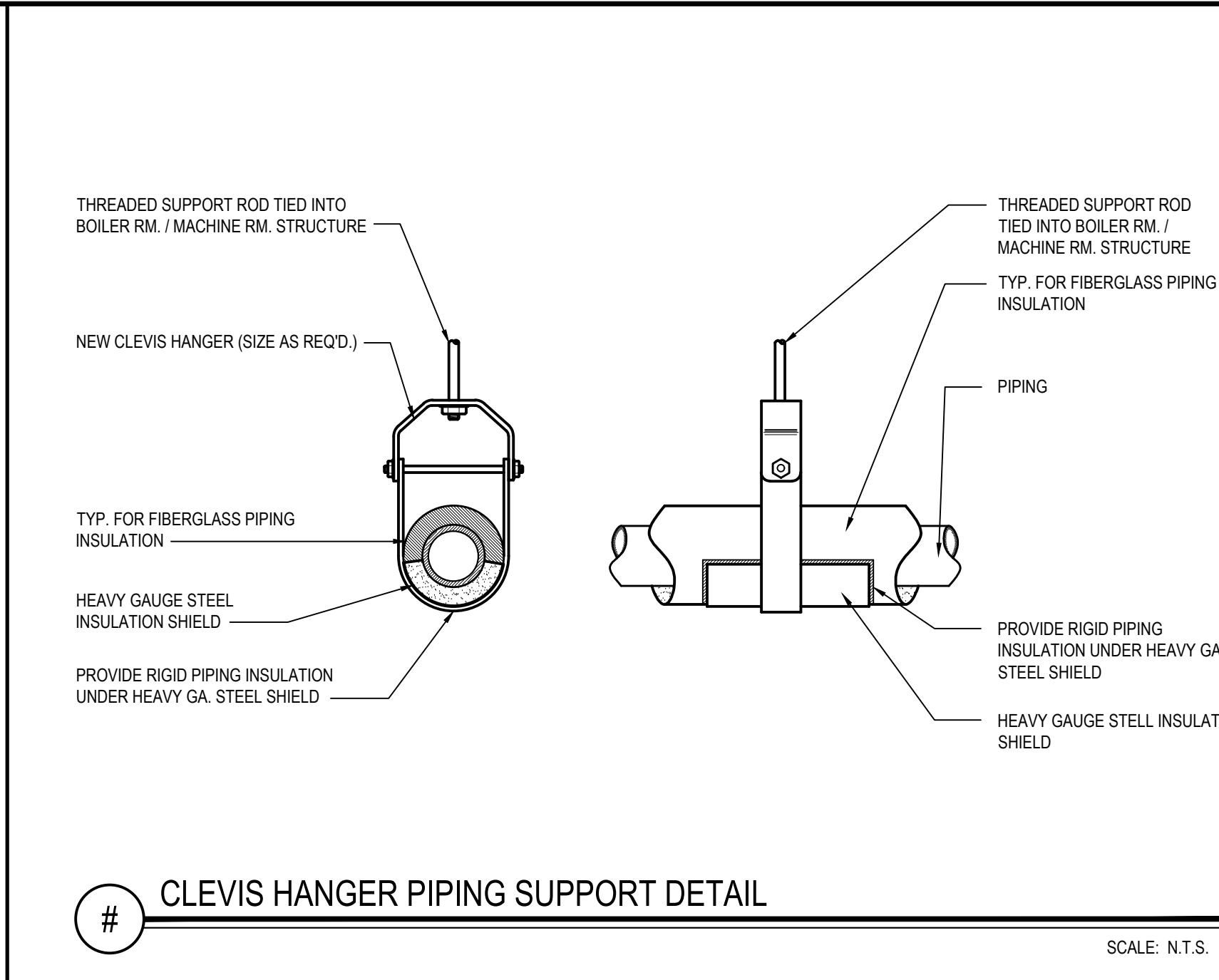
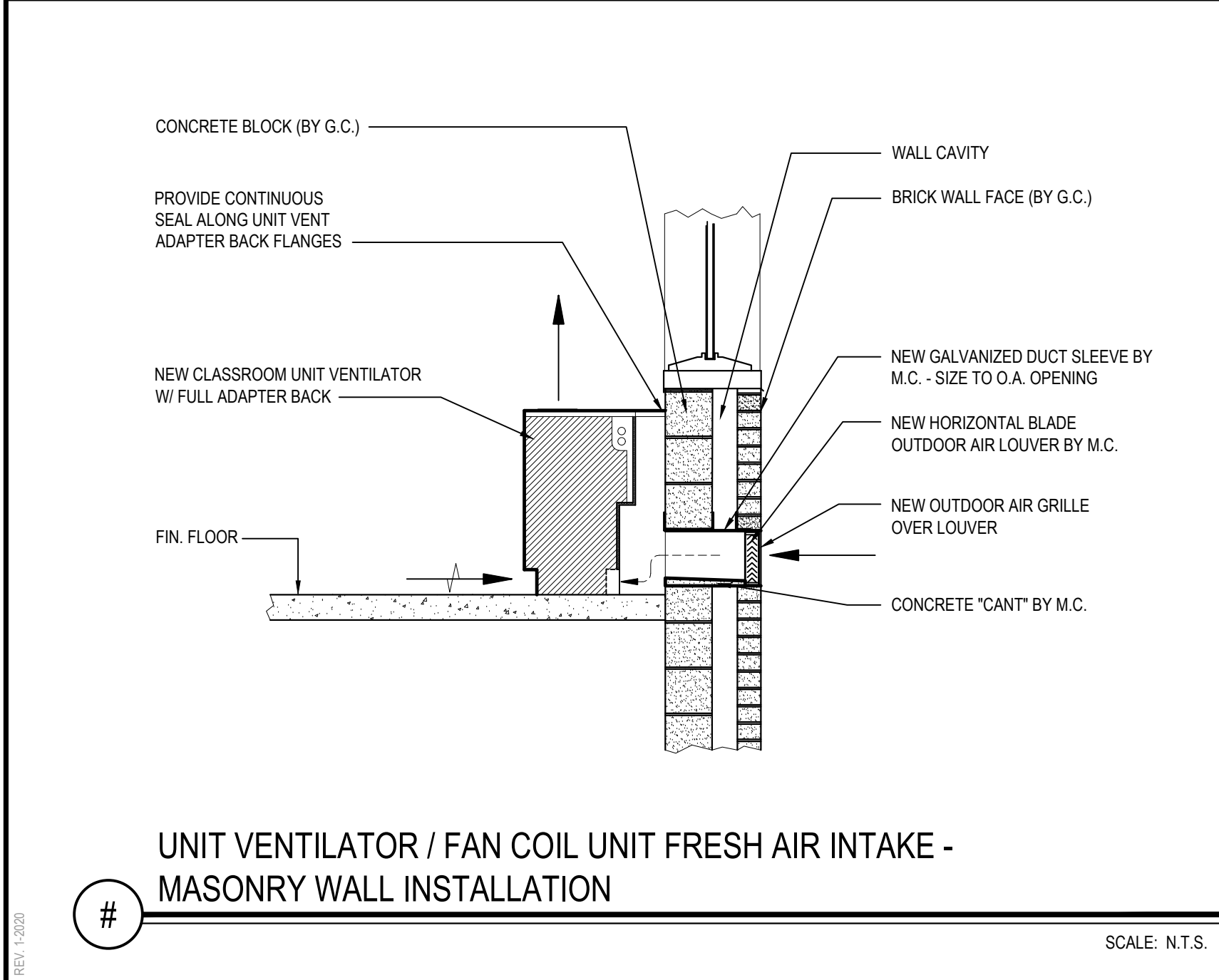
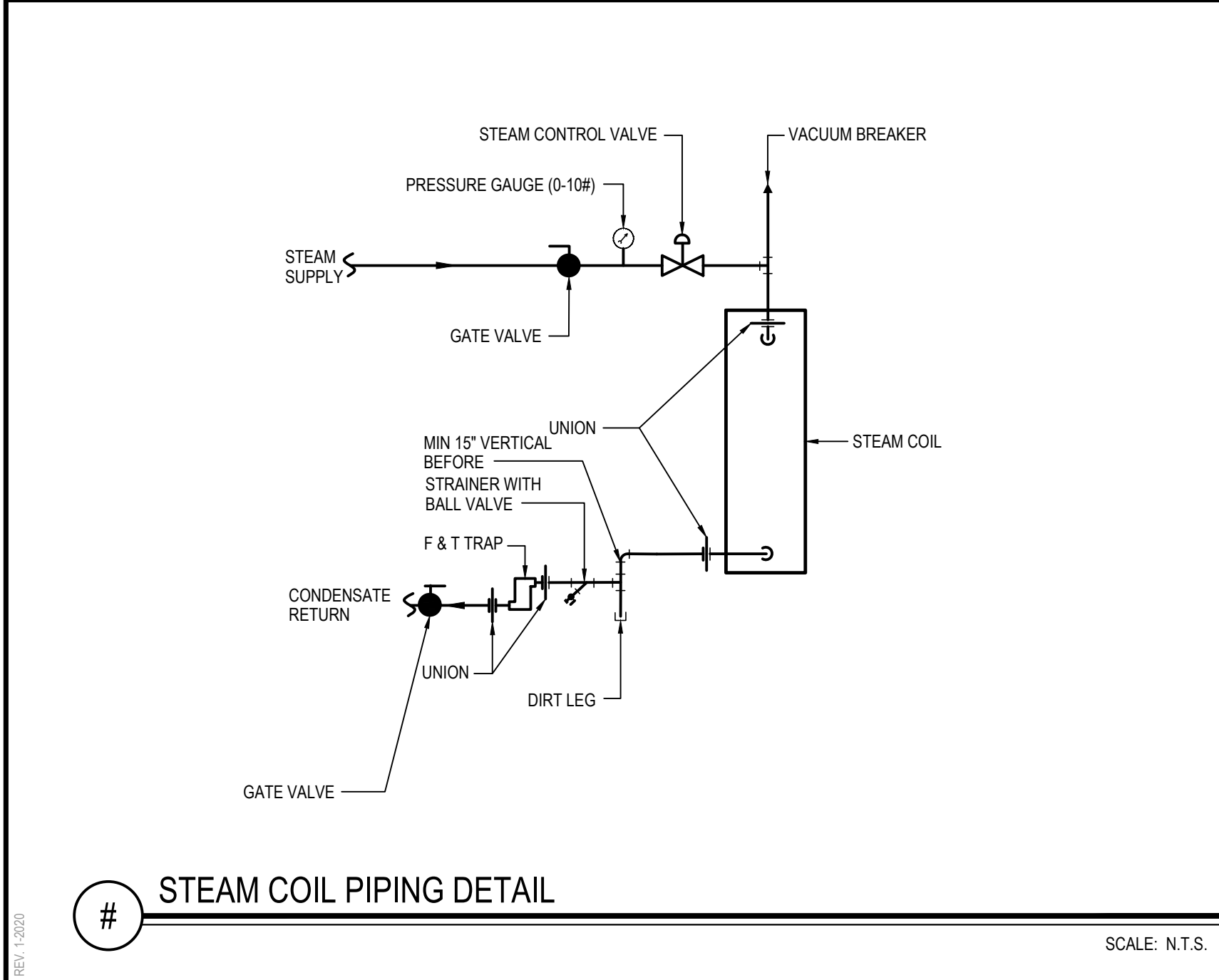
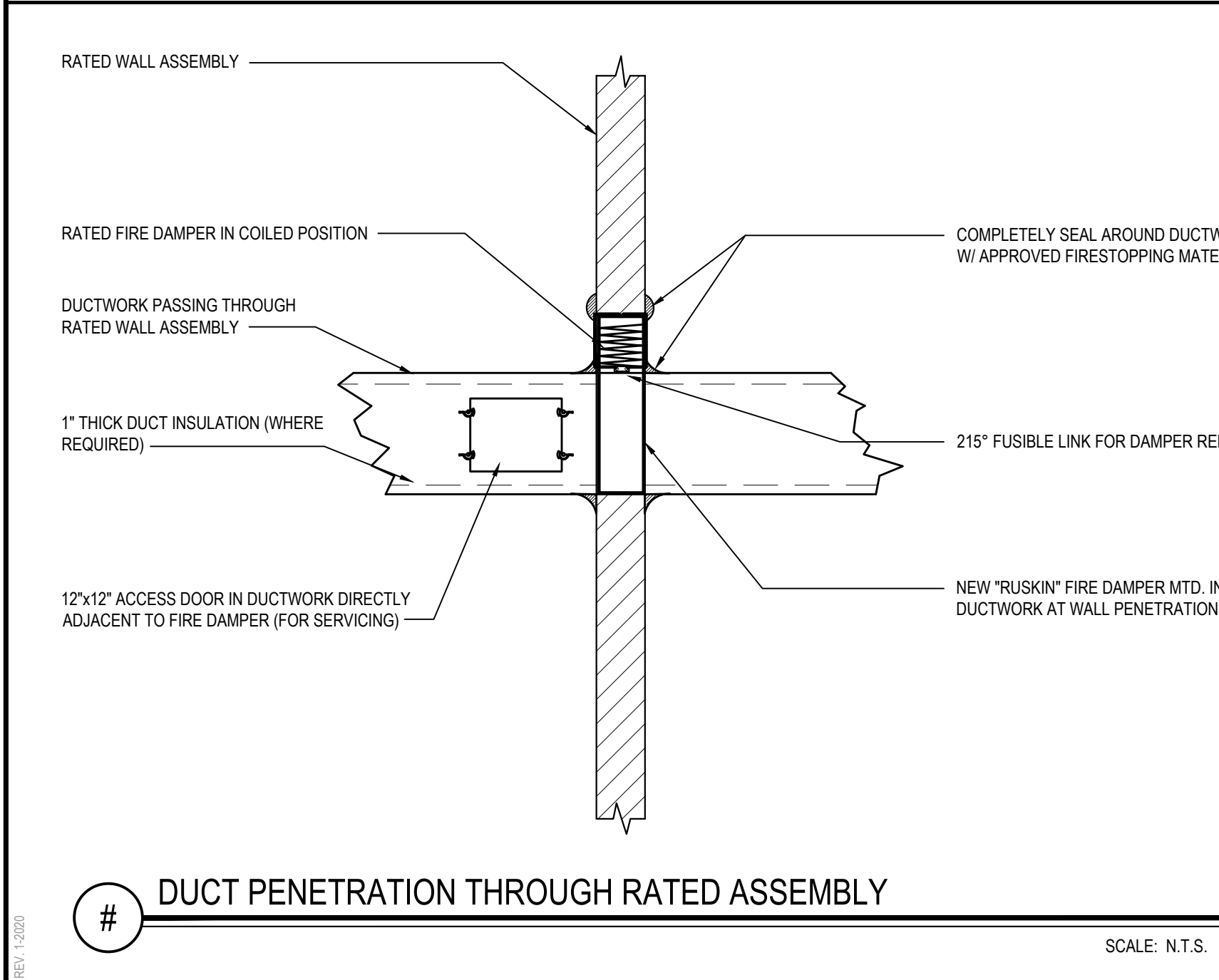
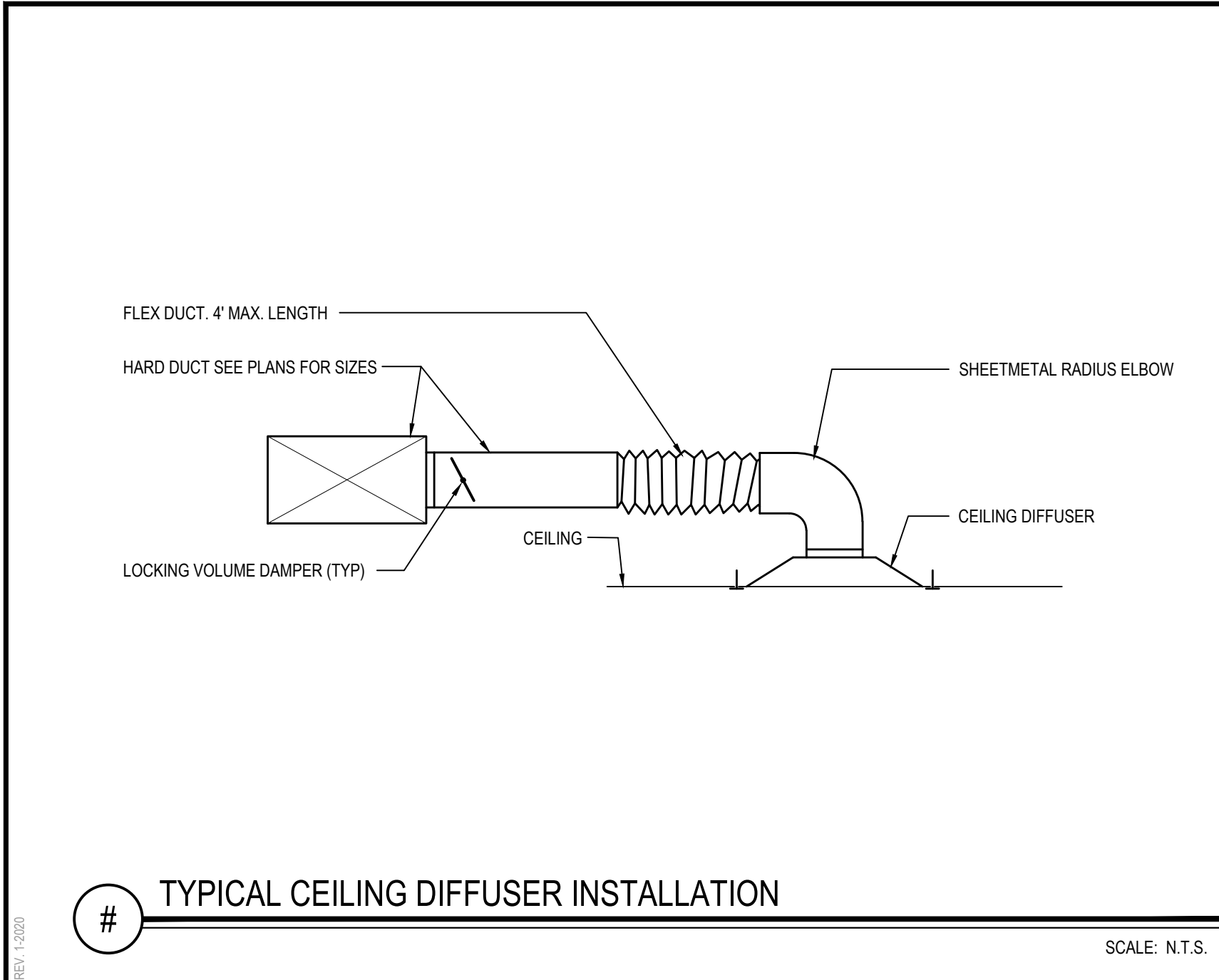
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ARCHITECTS  
LANDSCAPE ARCHITECTS  
ENGINEERS  
244 EAST MAIN STREET  
PATCHOGUE  
NEW YORK 11772  
F. 631.475.0349  
F. 631.475.0361  
187 WOLF ROAD, STE. 205  
ALBANY  
NEW YORK 12205  
T. 518.621.7650  
F. 518.621.7655  
www.BBSARCHITECTURE.com

SED No: 28-02-18-03-0-007-034  
DISTRICT: GARDEN CITY UNION FREE SCHOOL DISTRICT  
PROJECT: GARDEN CITY HIGH SCHOOL ADDITIONS AND ALTERATIONS  
DWG TITLE: ADDITION & GYM ROOF MECH NEW WORK PLANS  
SCALE: AS NOTED  
DATE: MARCH 6, 2025  
BID PICK-UP: MARCH 6, 2025  
FILE No: 24-145

M2.03





REV.	DATE	ITEM

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KEY PLAN

NOT TO SCALE

GARDEN CITY UNION FREE SCHOOL DISTRICT  
ADDITIONS AND ALTERATIONS  
GARDEN CITY HIGH SCHOOL  
GARDEN CITY, NASSAU COUNTY, NEW YORK

MECHANICAL DETAILS

PROJECT

DWG TITLE

DRAWING BY: PLH

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BBS  
ARCHITECTS  
LANDSCAPE ARCHITECTS  
ENGINEERS

244 EAST MAIN STREET  
PATCHOGUE  
NEW YORK 11772  
T: 631.475.0349  
F: 631.475.0361

100 GREAT OAKS BLVD.  
SUITE 115, ALBANY  
NEW YORK 12203  
T: 518.621.7650  
F: 518.621.7655

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SED No: 28-02-18-03-0-007-034

DISTRICT: GARDEN CITY UNION FREE SCHOOL DISTRICT

PROJECT: GARDEN CITY HIGH SCHOOL ADDITIONS AND ALTERATIONS

DWG TITLE: MECHANICAL DETAILS

SCALE: AS NOTED

DATE: MARCH 6, 2025

BID PICK-UP: MARCH 6, 2025

FILE No: 24-145

M3.01