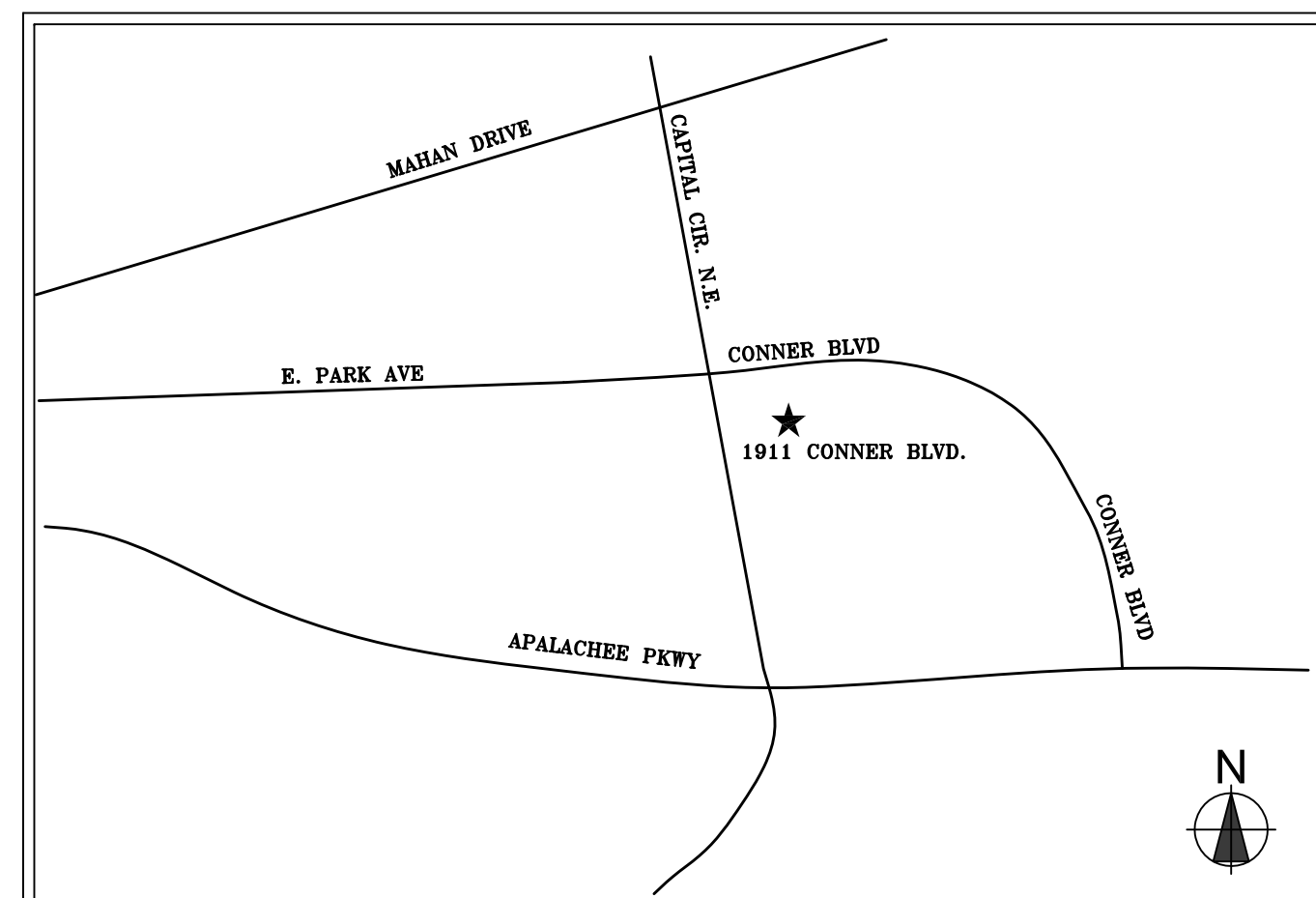




FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

ROOFTOP HVAC REPLACEMENT DOYLE CONNER LAB ADMINISTRATION BUILDING TALLAHASSEE, FLORIDA

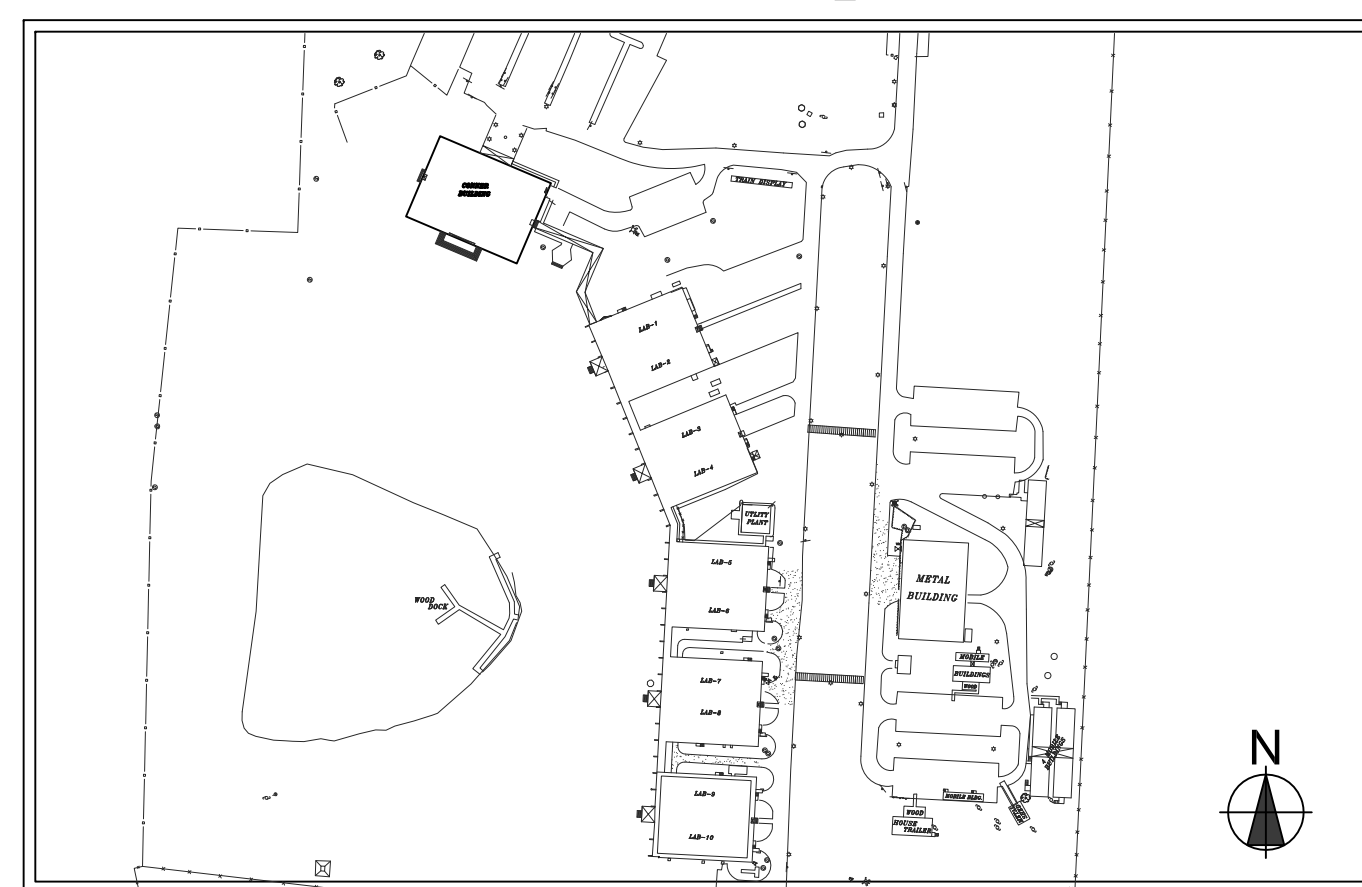
Vicinity Map



CONSTRUCTION DOCUMENTS

November 10, 2017

Site Map



**McGinniss & Fleming
Engineering, Inc.**

Mechanical • Electrical • Fire Protection • Plumbing

1401 Miccosukee Road, Suite 200
Tallahassee, Florida 32308
Phone: (850) 681-6424

www.mfe-inc.com

EB-0005990

Index of Drawings:

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- M2.0 MECHANICAL - BUILDING ROOF PLAN DEMOLITION
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- M3.0 MECHANICAL - SECOND FLOOR NEW WORK PLAN
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- E1.1 ELECTRICAL - GENERAL NOTES AND LEGEND
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EQUIPMENT INSTALLATION

GENERAL EQUIPMENT INSTALLATION REQUIREMENTS

INSTALL UNIT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CONTRACTORS ARE REQUIRED TO HAVE EQUIPMENT INSTALLATION INSTRUCTIONS ON SITE FOR ALL EQUIPMENT THAT IS ON SITE.

ALL EQUIPMENT SHALL BE SECURED TO PADS OR BUILDING STRUCTURE. INSURE THAT PROPER ACCESS TO THE UNIT IS MAINTAINED. DO NOT RUN PIPING IN FRONT OF ACCESS PANELS.

INSTALL MISCELLANEOUS DEVICES SHIPPED LOOSE.

COORDINATE CONTROLS AND POWER WIRING INSTALLATION.

START-UP ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

CLEAN FACTORY-FINISHED SURFACES. REPAIR ANY MARRED OR SCRATCHED SURFACES WITH MANUFACTURER'S TOUCH-UP PAINT. TURNOVER ANY SPECIAL TOOLS PROVIDED BY THE EQUIPMENT MANUFACTURER.

WATER PIPE INSTALLATION

GENERAL PIPING INSTALLATION:

ALL MECHANICAL SYSTEMS PIPING WILL BE SCHEDULE 40, ASTM A 53, SEAMLESS BLACK STEEL PIPE. STEEL FLANGES WILL CONFORM TO ANSI B16.5. STEEL FITTING WILL CONFORM TO ASTM A 234. THREADED FITTINGS WILL CONFORM TO ANSI B16.3, CLASS 150.

SUPPORT 4" PIPING AT NO MORE THAN 14" ON CENTER. SUPPORT 6" AND 8" PIPE AT NO MORE THAN 17" ON CENTER.

INSTALL PIPING PARALLEL TO WALLS. SLOPE PIPING AT 1/4" PER 40 FEET BACK TOWARDS PUMPS OR TO DRAINAGE POINTS. INSTALL DRAINS AT ANY LOW POINT THAT WILL TRAP OVER 5 GALLONS OF WATER. LEAK TEST ALL PIPING IN ACCORDANCE WITH NORMAL PRACTICE BUT NO LESS THAN 1.5 TIMES OPERATING PRESSURE AND NOT LESS THAN 150 PSI.

HYDRONIC DEVICES:

INSTALL MISCELLANEOUS DEVICES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE SCHEMATIC DIAGRAMS.

COORDINATE WITH THE CONTROL PROVIDER AND MAKE PIPING PREPARATIONS FOR BAS CONTROL DEVICES.

INSTALL VALVES, INSTRUMENTATION AND DEVICES AS INDICATED ON THE SCHEMATIC DIAGRAMS. INSTALL DEVICES SHIPPED LOOSE WITH THE AIR HANDLERS. LOCATE AND ORIENT VALVES FOR EASY ACCESS AND MAINTENANCE. INSTALL ALL GAUGES AND THERMOMETERS AS NEAR TO EYE LEVEL AS PRACTICAL.

INSTALL METERS TO CONFORM TO MANUFACTURER'S RECOMMENDATIONS FOR UP AND DOWN STREAM STRAIGHT LENGTHS OF PIPE. INSTALL BACKFLOW PREVENTERS WITH PRESSURE TEST PORTS VERTICAL TO AVOID ACCUMULATION OF TRASH. INSTALL COMPRESSION TANKS, SHOT FEEDERS, AND MISCELLANEOUS DEVICES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE SCHEMATIC DIAGRAMS.

TAKE CARE TO PROTECT EXISTING PIPING FROM INTRODUCTION OF FOREIGN DEBRIS. CLEAN NEW PIPING OF LOOSE SCALE, RUST AND WELD SPATTER. REMOVE TIGHTLY ADHERING DEBRIS WITH WIRE BRUSH OR BY GRINDING AS NECESSARY. PROTECT SYSTEM CONTROL VALVES AND CIRCULATE SYSTEM FLUID AT THE GREATEST FLOW POSSIBLE. CLEAN SYSTEM STRAINERS. PROVIDE INITIAL CHEMICAL TREATMENT.

INSTALL BLOWDOWN PIPING WITH VALVE FOR ALL STRAINERS.

WELDED PIPE:

WELDING WILL BE PERFORMED IN ACCORDANCE WITH ANSI B3.1.1 CODE FOR PRESSURE PIPING. BEVEL PIPE WITH WALL THICKNESS OVER 5/16". SHOP OR FIELD BEVELING WILL BE IN ACCORDANCE WITH RECOGNIZED STANDARDS. REMOVE DIRT, SCALE AND OTHER FOREIGN MATTER FROM PIPING BEFORE TYING IN SECTIONS. SET JOINTS TRUE AND SQUARE WITH NO MORE THAN 1/16 INCH SEPARATION. WELDS WILL INCLUDE A ROOT BEAD, ONE OR MORE FILLER LAYERS AND A FINAL COVER PASS. ROOT BEAD WILL PROVIDE FOR COMPLETE PENETRATION INTO THE ROOT OF THE JOINT. WELDERS SHALL PROVIDE IDENTIFYING MARK AT EACH WELD.

ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS ADEQUATELY FAMILIAR WITH WELDING SAFETY PRACTICES INCLUDING NFPA 51B. PROTECT BUILDING FINISHES FROM WELD SPATTER WITH FIRE RETARDANT SHIELDS. MAINTAIN A FIRE EXTINGUISHER AT HAND AT ALL TIMES WHEN WELDING. PROVIDE ADEQUATE VENTILATION FOR WELDING OPERATIONS.

INSULATION

GENERAL INSULATION INSTALLATION:

ALL INSULATION SHALL BE INSTALLED BY PROFESSIONAL INSULATORS WITH ADEQUATE EXPERIENCE AND ABILITY TO INSURE A SUCCESSFUL JOB. INSTALL INSULATION PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT INSULATION SERVES ITS INTENDED PURPOSE.

PROVIDE COMPOSITE MECHANICAL INSULATION (INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES) HAVING FLAME SPREAD INDEX OF 25 OR LESS, AND SMOKE DEVELOPED INDEX OF 50 OR LESS, AS TESTED BY ASTM E 84 (NFPA 255) METHODS.

VAPOR BARRIER SHALL BE MAINTAINED COMPLETE AND CONTINUOUS. GAPS AND OPENINGS IN COLD PIPE OR DUCT INSULATION VAPOR BARRIER WILL NOT BE TOLERATED.

INSULATION IS NOT TO BE INSTALLED UNTIL THE PIPING SYSTEMS HAVE BEEN CHECKED AND FOUND FREE OF ALL LEAKS. SURFACES SHALL BE CLEAN AND DRY BEFORE ATTEMPTING TO APPLY INSULATION.

RATED PARTITIONS SHALL BE PENETRATED ONLY WITH INSULATION MATERIALS AND TECHNIQUES UL LISTED TO MAINTAIN RATED ASSEMBLY. ANY QUESTIONS SHALL BE REFERRED TO THE ENGINEER.

PIPE INSULATION

WATER PIPE INSULATION:

INSULATE CHILLED WATER PIPING WITH 1-1/2" THICKNESS OF CELLULAR GLASS PIPE INSULATION; ASTM C 552, K=0.38, 8 PCF DENSITY, PITTSBURGH CORNING FOAMGLASS.

MECHANICAL ROOM JACKET: ALUMINUM JACKETING 0.016" THICKNESS WITH BANDS AND SEAL OF SAME PRODUCT. CHILDERS PRODUCTS OR EQUAL.

APPLY BEDDING MASTIC TO THE ENTIRE PIPE SURFACE, INSIDE OF INSULATION AND ALL JOINTS OF INSULATION. STAGGER JOINTS AND BUTT INSULATION FIRMLY TOGETHER. INSULATION SECTIONS SHALL BE SECURED IN PLACE WITH 16 GAUGE COPPER WIRES OR PLASTIC TIES OR FIBERGLASS REINFORCED TAPE SPACED APPROXIMATELY 9" ON CENTER. APPLY A HEAVY COAT OF VAPOR BARRIER FINISH TO THE EXTERIOR SURFACE OF THE INSULATION. EMBED A LAYER OF FABRIC MEMBRANE IN THE VAPOR BARRIER FINISH, OVERLAPPING SEAMS AT LEAST 2". APPLY A FINAL COAT OF VAPOR BARRIER FINISH AT LEAST 1/8" THICK AND FINISH SMOOTH.

PROVIDE HANGER OR PIPE SUPPORT SHIELDS OF 12 GAUGE GALVANIZED STEEL OVER OR EMBEDDED IN THE INSULATION. SHIELDS SHALL EXTEND HALFWAY UP THE PIPE INSULATION COVER AND AT LEAST 6" ON EACH SIDE OF THE HANGER. SECURELY FASTEN SHIELD WITH STRAPS AT EACH END.

ROOF TOP UNIT SCHEDULE - EXISTING. Table with columns: DESIGNATION, BASE BID OR ALTERNATE, AREAS SERVED, MANUFACTURER, UNIT MODEL, CONFIGURATION, SUPPLY AIR, VENTILATION AIR, MAX COOLING COIL FACE VELOCITY, CC ENTERING AIR CONDITIONS, CC LEAVING AIR CONDITIONS, UNIT TOTAL COOLING CAPACITY, UNIT LATENT COOLING CAPACITY, UNIT SENSIBLE COOLING CAPACITY, COOLING COIL NUMBER OF ROWS, COOLING EFFICIENCY (EER), REFRIGERANT, NUMBER COMPRESSORS/TYPE, HEATING + REHEATING CAPACITY, FUEL TYPE, HEATING COIL ENT. AIR TEMPERATURE, HEATING COIL LEAVING AIR TEMP., HEATING NUMBER OF STAGES, EXTERNAL STATIC, FAN BRAKE HORSEPOWER, FAN MOTOR HORSEPOWER, ELECTRICAL CHARACTERISTICS, MCAM/MOCP, CABINET DIMENSIONS (LXWXH), UNIT WEIGHT, APPLICABLE NOTES, NOTES.

BUILDING/ZONE PRESSURIZATION SCHEDULE. Table with columns: TOTAL EXHAUST IN ZONE, TOTAL OUTSIDE AIR IN ZONE, DIFFERENCE: +664 CFM (POSITIVE), NOTES.

GENERAL NOTES:

- FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED TO COMPLETE ALL WORK SHOWN ON THE CONTRACT DRAWINGS.
- ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE CODE STANDARDS INCLUDING: NFPA 70, NATIONAL ELECTRIC CODE; NFPA 90 A, AIR CONDITIONING & VENTILATION SYSTEMS; NFPA 101, LIFE SAFETY CODE; FLORIDA BUILDING CODE BUILDING (2014); FLORIDA BUILDING CODE MECHANICAL (2014); FLORIDA BUILDING CODE PLUMBING (2014); FLORIDA FIRE PREVENTION CODE (2012 EDITION); STATE AND LOCAL CODES AND ORDINANCES.
- SHOULD CONFLICT OCCUR BETWEEN PROJECT SPECIFICATIONS & DRAWING NOTES, THE DRAWING NOTES WILL TAKE PRECEDENCE.
- THE CONTRACTOR IS EXPECTED TO PROVIDE PROFESSIONAL WORK PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS AND BEST PRACTICES.
- THE WORK SHALL BE COMPLETE, FULLY OPERATIONAL, AND SUITABLE IN EVERY WAY FOR THE SERVICE REQUIRED.
- DRAWINGS INDICATE SCOPE AND DO NOT SHOW ALL DETAILS. DEVICES AND INCIDENTAL MATERIALS NECESSARY TO ACCOMPLISH THE WORK. THEREFORE, IT SHALL BE UNDERSTOOD THAT SUCH DEVICES AND INCIDENTAL MATERIALS REQUIRED SHALL BE FURNISHED AT NO COST TO THE OWNER.
- CONTRACTORS SHALL TAKE INTO ACCOUNT FIELD CONDITIONS AND COORDINATE IN ORDER TO AVOID CONFLICTS WITH EXISTING CONDITIONS AND INTERFERENCE BETWEEN TRADES.
- EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS FOR PROPER OPERATION, MAINTENANCE, AND SERVICE. IF CHANGES TO THE CONTRACT DOCUMENTS ARE NECESSARY TO AVOID CONFLICTS, THE CONTRACTOR IS RESPONSIBLE FOR REQUESTING CLARIFICATION IN A TIMELY FASHION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEFICIENCIES ASSOCIATED WITH WORK PERFORMED BEFORE OBTAINING WRITTEN CLARIFICATION.
- CONTRACTOR SHALL FOLLOW ALL LAWS AND ORDINANCES REGARDING REFRIGERANT RECOVERY, FILLING, AND RECYCLING OPERATIONS.
- CONTRACTOR SHALL VERIFY HVAC SYSTEM DUCT SIZES, PIPE SIZES, SERVICE, AND FLOW DIRECTION PRIOR TO COMMENCING WORK. ADVISE THE ENGINEER IN WRITING IF MATERIALLY DIFFERENT THAN SHOWN.
- THE CONTRACTOR SHALL TAKE DUE CARE DURING ALL PHASES OF WORK TO PROTECT BUILDING FINISHES, FURNISHINGS, EQUIPMENT, ETC. THE CONTRACTOR SHALL BEAR ALL COSTS TO REPAIR ANY DAMAGED ITEMS, FINISHES, ETC. RESULTING FROM HIS OR HIS SUBCONTRACTORS' WORK.
- THE CONTRACTOR SHALL PROVIDE DAILY CLEANUP OF HIS WORK AFFECTED AREAS. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL THOROUGHLY CLEAN SPACES THAT WERE OCCUPIED BY TEMPORARY WORK AND TEMPORARY FACILITIES. REMOVE ALL DEBRIS, RUBBISH, AND EXCESS MATERIAL FROM THE SITES.
- REPAIR DAMAGES CAUSED BY INSTALLATION OR USE OF TEMPORARY FACILITIES. THIS INCLUDES HARDSCAPING, LANDSCAPING, FINISHES, ETC.
- THE CONTRACTOR SHALL DELIVER TO THE OWNER, UPON SUBSTANTIAL COMPLETION OF THE WORK, TWO COPIES OF DESCRIPTIVE LITERATURE RELATED TO THE EQUIPMENT INSTALLED UNDER THIS CONTRACT, INCLUDING PARTS LISTS, WIRING DIAGRAMS, MAINTENANCE AND OPERATION MANUALS AND WARRANTIES CUSTOMARILY SUPPLIED BY MANUFACTURERS FOR EQUIPMENT INCORPORATED IN THIS WORK.
- THE CONTRACTOR SHALL LABEL NEW EQUIPMENT AND ANCILLARY SYSTEMS INCLUDED IN THE SCOPE OF THIS PROJECT.
- THE CONTRACTOR SHALL GIVE PHYSICAL DEMONSTRATION AND VERBAL INSTRUCTIONS FOR PROPER OPERATION AND MAINTENANCE OF EQUIPMENT TO THE OWNER OR HIS DESIGNATED REPRESENTATIVE. SCHEDULE THESE DEMONSTRATIONS AND INSTRUCTIONS AT THE OWNER'S CONVENIENCE.

NEW AIR HANDLING UNIT SCHEDULE. Table with columns: DESIGNATION, BUILDING LOCATION, AREAS SERVED, MANUFACTURER, UNIT MODEL, CONFIGURATION, SUPPLY AIR (DESIGN / MAX.), VENTILATION AIR (DESIGN), MAX COOLING COIL FACE VELOCITY, CC ENTERING AIR CONDITIONS, CC LEAVING AIR CONDITIONS, UNIT TOTAL COOLING CAPACITY, UNIT LATENT COOLING CAPACITY, UNIT SENSIBLE COOLING CAPACITY, CHILLED WATER FLOW RATE, CHILLED WATER TEMP ENT/LEAV, CHILLED WATER PRESSURE DROP (MAX), CHILLED WATER COIL ROWS, CHILLED WATER COIL FINS PER INCH, DESIGN HEATING SUPPLY AIR, HEATING COIL CAPACITY, HC AIR TEMPERATURE DIFFERENTIAL, HC LEAVING AIR TEMPERATURE, HOT WATER FLOW RATE, HOT WATER TEMP ENT/LEAVING, HOT WATER PRESSURE DROP (MAX), HOT WATER COIL ROWS/FIN SPACING, 30% FILTER STATIC (CLEAN/DIRTY), HEATING COIL STATIC, COOLING COIL STATIC, EXTERNAL STATIC, TOTAL STATIC PRESSURE DROP, AHU FAN BRAKE HORSEPOWER, AHU FAN MOTOR HORSEPOWER, AHU ELECTRICAL CHARACTERISTICS, CABINET DIMENSIONS (LXWXH), FAN DISCHARGE POSITION, APPLICABLE NOTES, NOTES.

VARIABLE FREQUENCY DRIVE SCHEDULE. Table with columns: DESIGNATION, LOCATION, SERVICE, DRIVE RATED HORSEPOWER CAPACITY (MIN), DRIVE MOTOR FULL LOAD AMPACITY (MIN), DRIVE AMBIENT OPERATING TEMP (MAX), MOTOR ELECTRICAL SERVICE, SPEED CONTROL SIGNAL, DRIVE EFFICIENCY (MINIMUM AT FULL LOAD), POWER FACTOR (MINIMUM), BYPASS TYPE, NEC SERVICE DISCONNECTING MEANS, ENCLOSURE TYPE, BASIS OF DESIGN MANUFACTURER/MODEL, APPLICABLE NOTES, NOTES.

HVAC SYMBOLS/LEGEND. Table with columns: DESIGNATION, DESCRIPTION. Includes symbols for air diffusers, dampers, filters, ductwork, and flow directions.

PIPING SYMBOLS/LEGEND. Table with columns: DESIGNATION, DESCRIPTION. Includes symbols for valves, flanges, reducers, tees, elbows, and pipe fittings.

INSTRUMENTATION & CONTROLS LEGEND. Table with columns: DESIGNATION, DESCRIPTION. Includes symbols for thermometers, gauges, switches, sensors, and actuators.

ABBREVIATIONS. Table with columns: ABBREVIATION, DESCRIPTION. Lists abbreviations for floor levels, equipment, materials, and units.



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FL. DEPT. OF AGRICULTURE & CONSUMER SERVICES

DATE: November 10, 2017

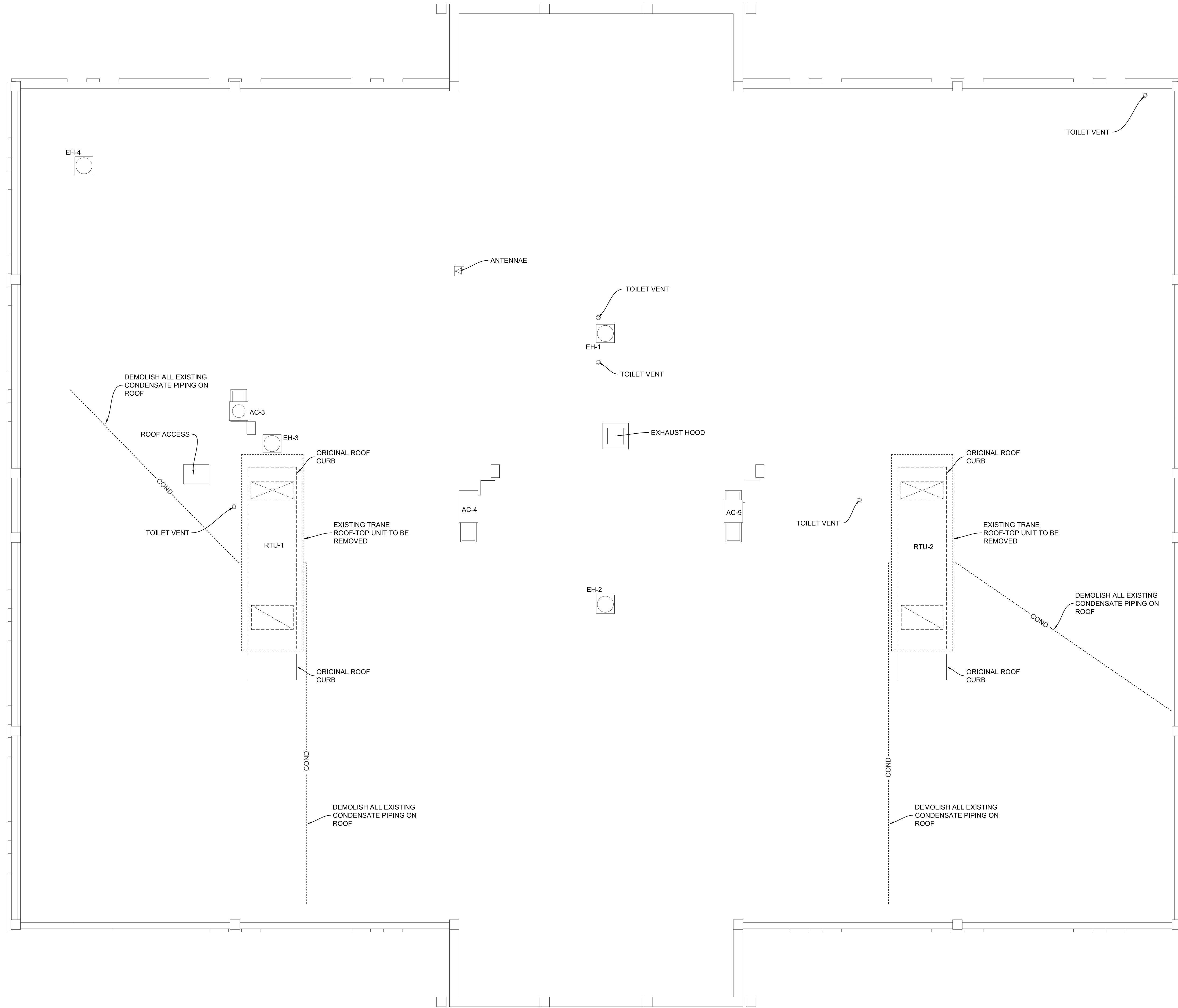
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SUBMITTAL: CONSTRUCTION DOCUMENTS

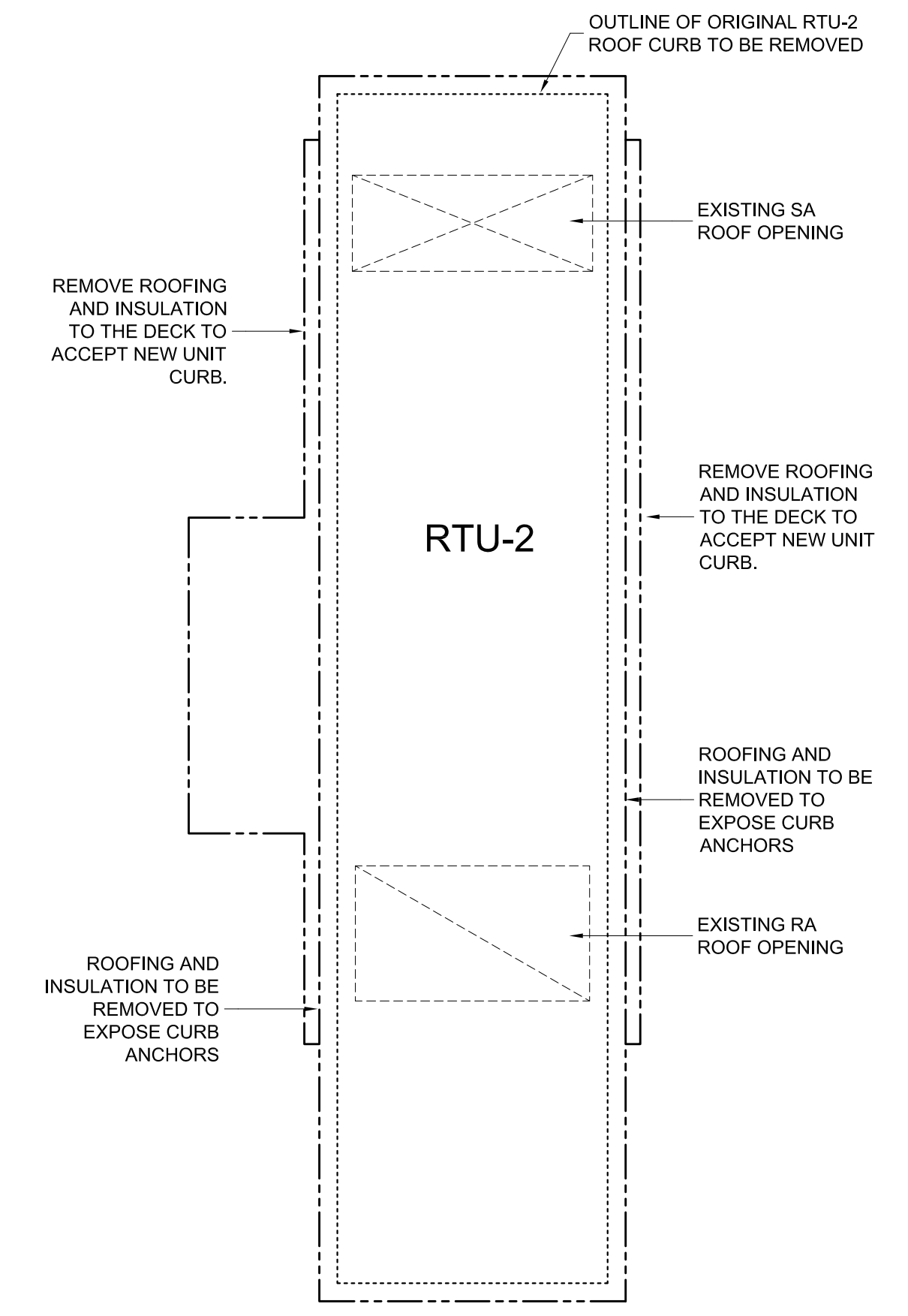
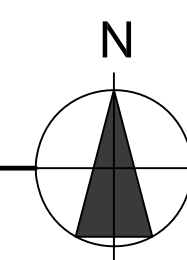
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SHEET: M1.0

JOB NUMBER: 1712



BUILDING ROOF PLAN - EXISTING CONDITIONS / DEMOLITION
 SCALE: 1/8" = 1'-0"



BUILDING ROOF PLAN - DEMOLITION
 SCALE: 1/4" = 1'-0"



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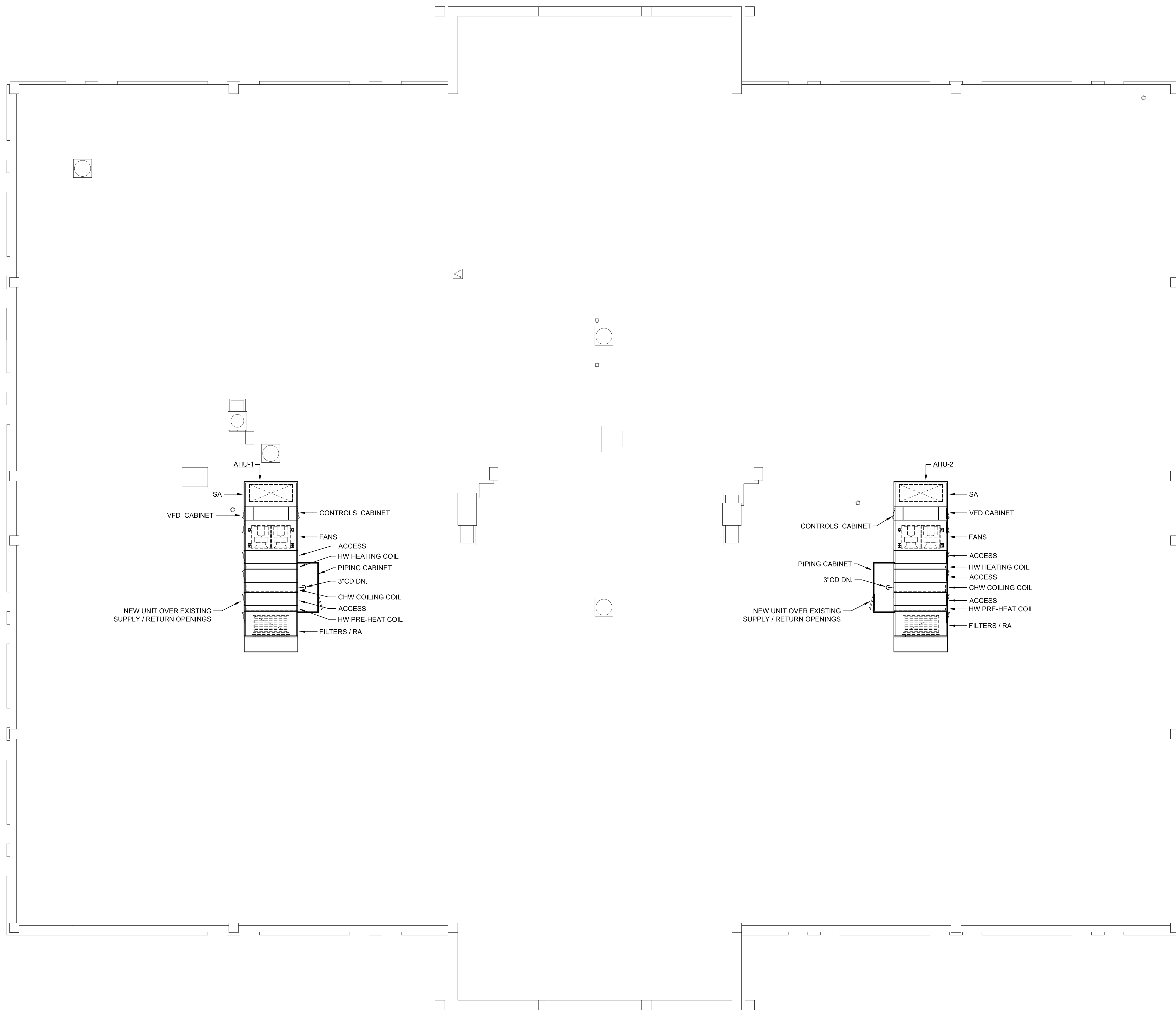
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 DEMOLITION

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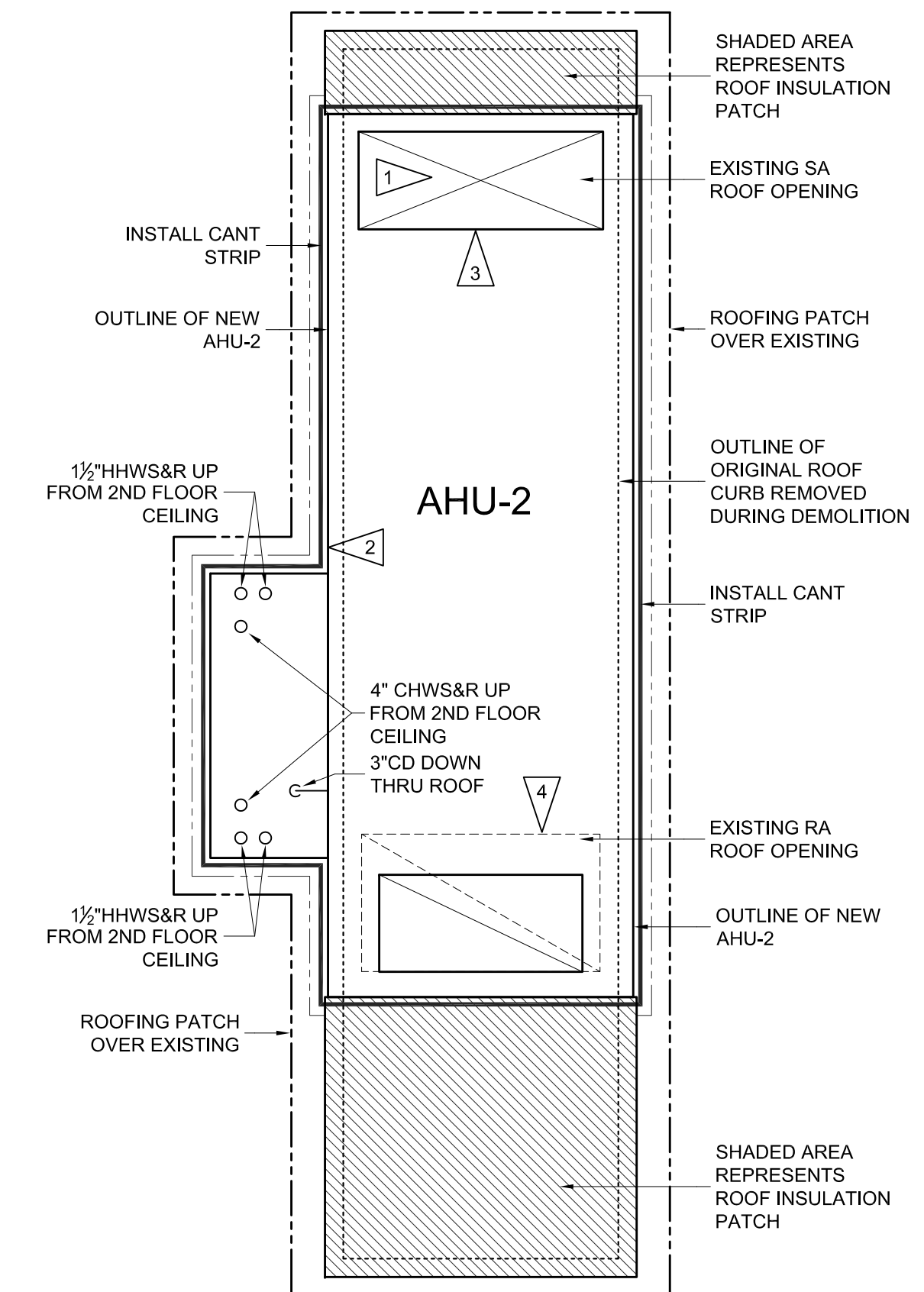
M2.0

JOB NUMBER:

1712



- DRAWING KEY NOTES**
- 1 SET NEW UNIT SUCH THAT EXISTING SUPPLY AIR DUCTWORK ALIGNS WITH UNIT SUPPLY AIR OPENING
 - 2 SET NEW ROOF CURB ADAPTER PER MANUFACTURER'S RECOMMENDATION AND ROOF CURB DETAIL
 - 3 TRANSITION SUPPLY AIR OPENING TO EXISTING DUCTWORK WITHIN THE ROOF CURB
 - 4 TRANSITION RETURN AIR OPENING TO EXISTING DUCTWORK WITHIN THE ROOF CURB



AHU INSTALLATION & ROOF REPAIRS
SCALE: 1/4" = 1'-0"



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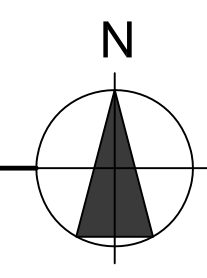
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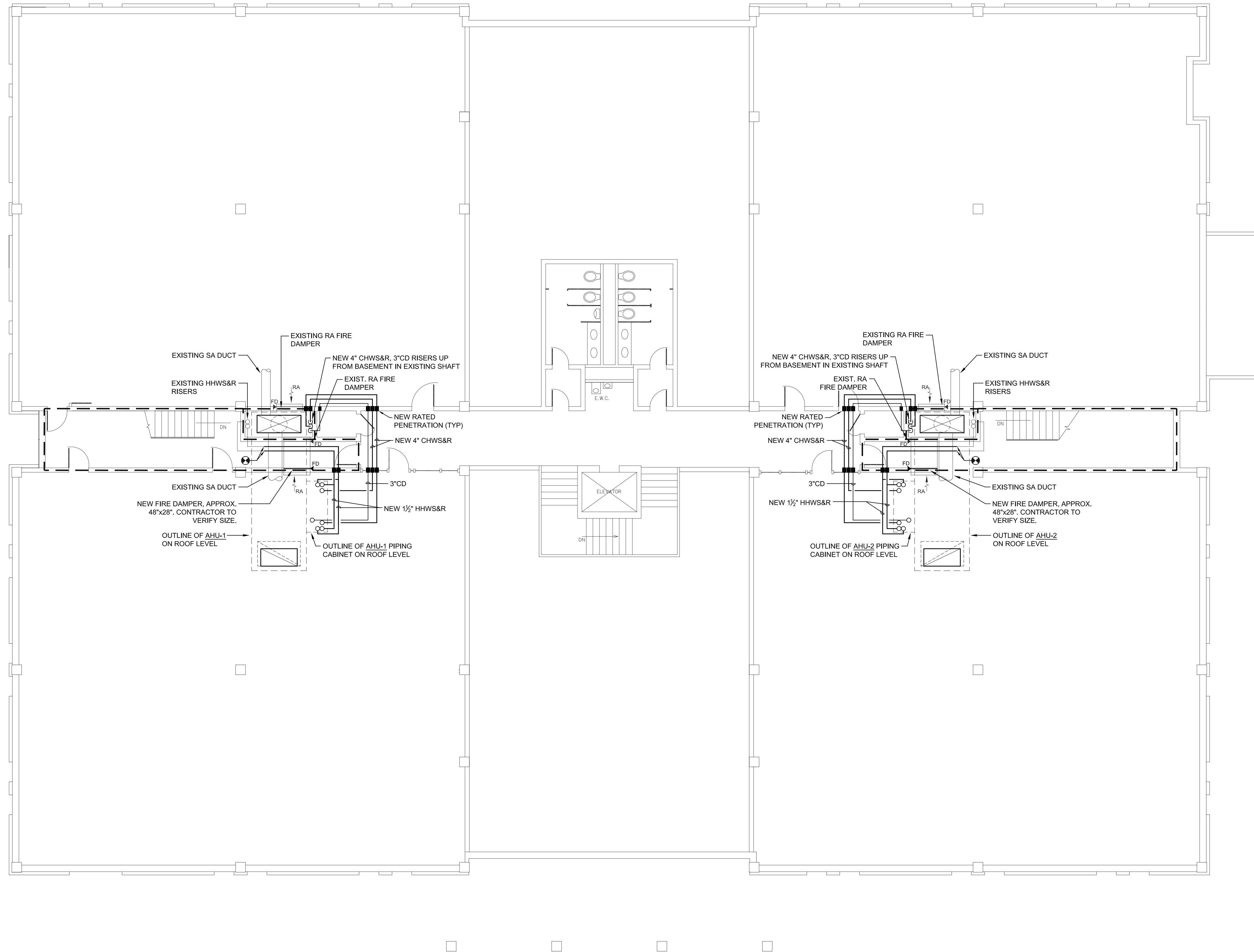
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NEW WORK

SHEET:
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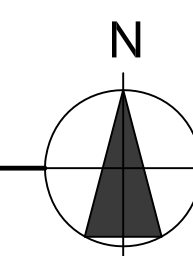
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1712

BUILDING ROOF PLAN - NEW WORK
SCALE: 1/8" = 1'-0"





SECOND FLOOR PLAN - NEW WORK
 SCALE: 1/8" = 1'-0"



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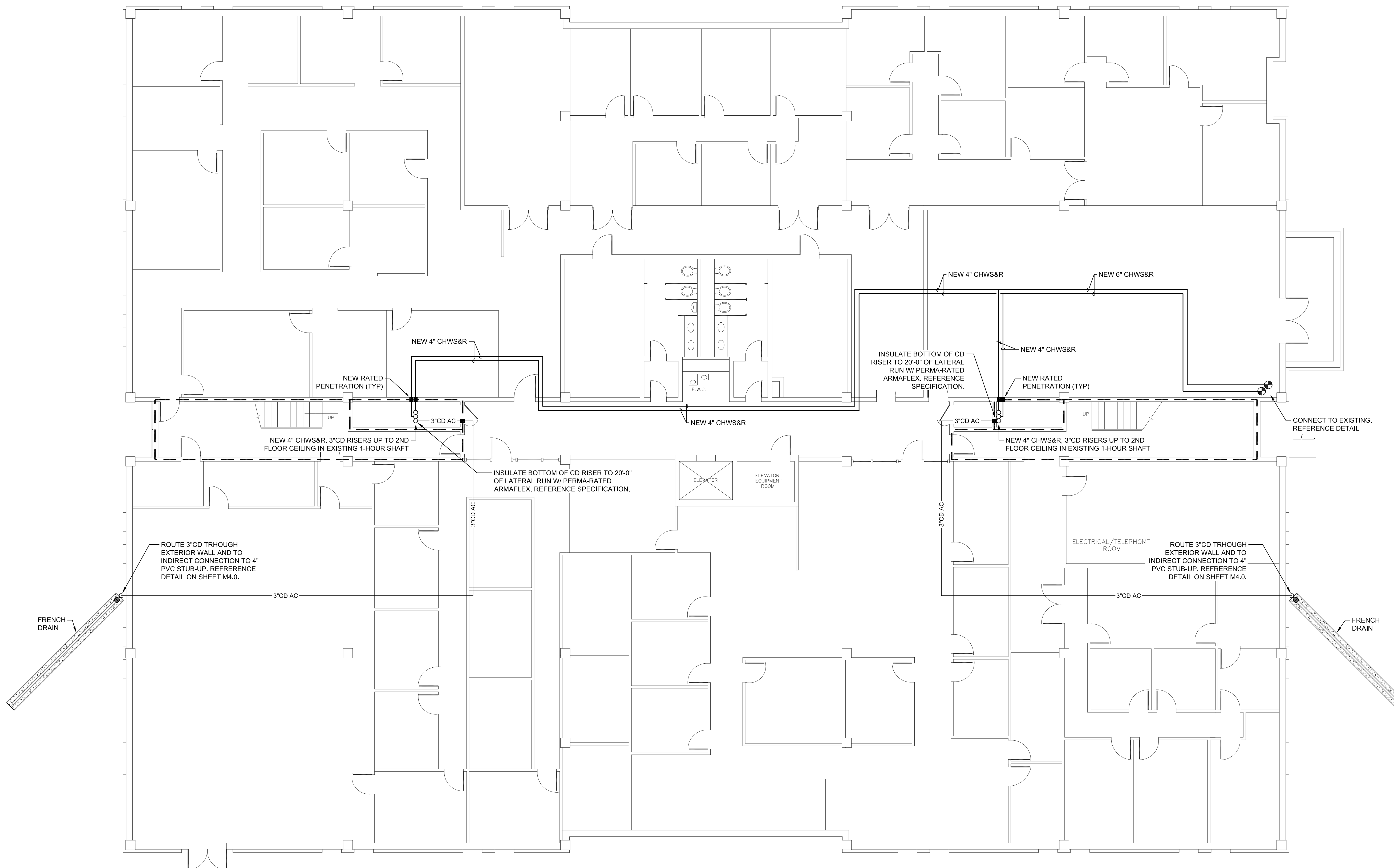
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 MECHANICAL
 SECOND FLOOR
 NEW WORK

SHEET:
M3.0

JOB NUMBER:

1712



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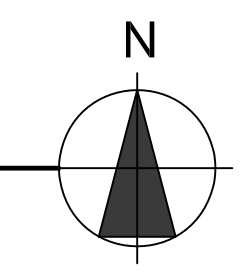
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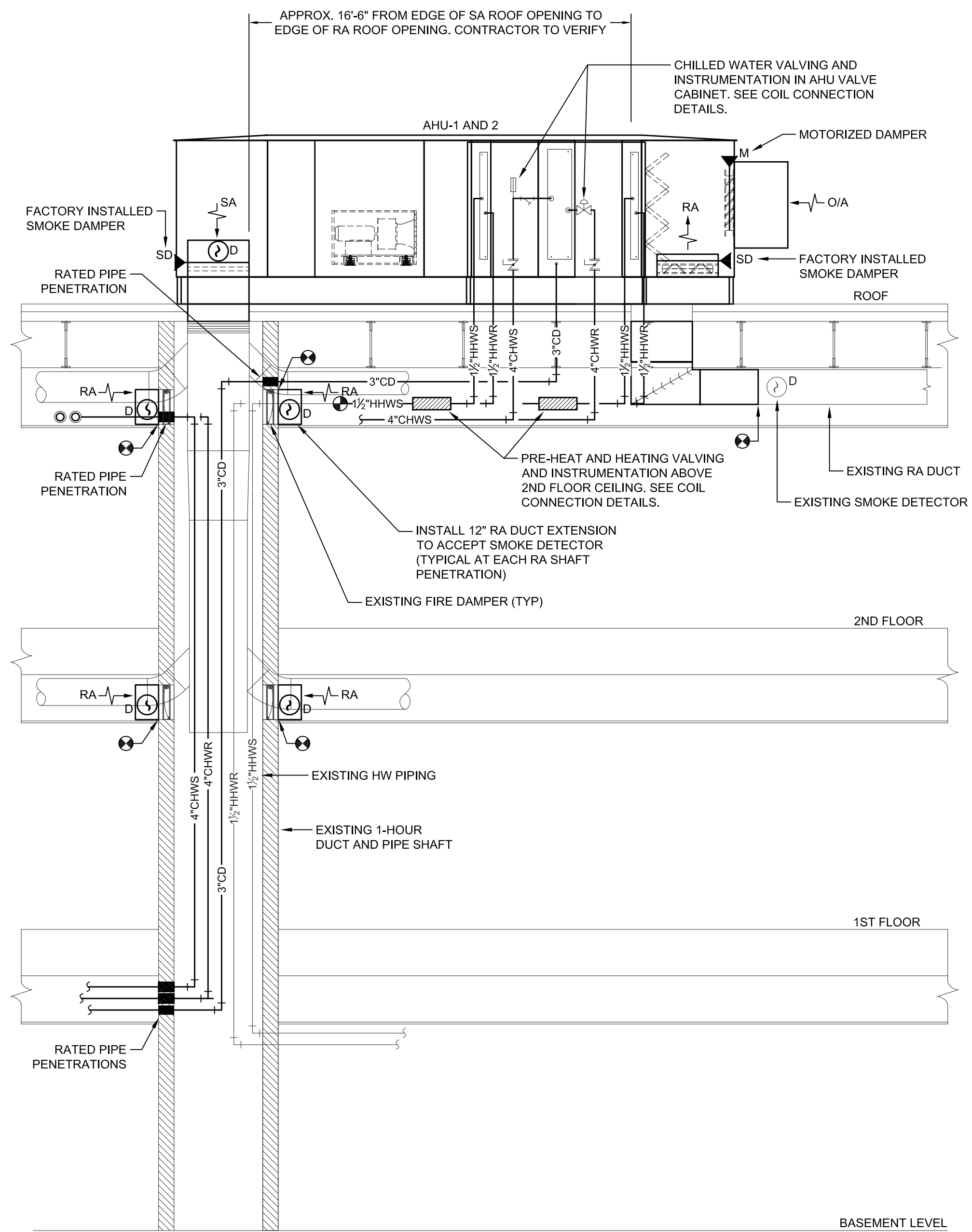
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 NEW WORK

SHEET:
M3.1

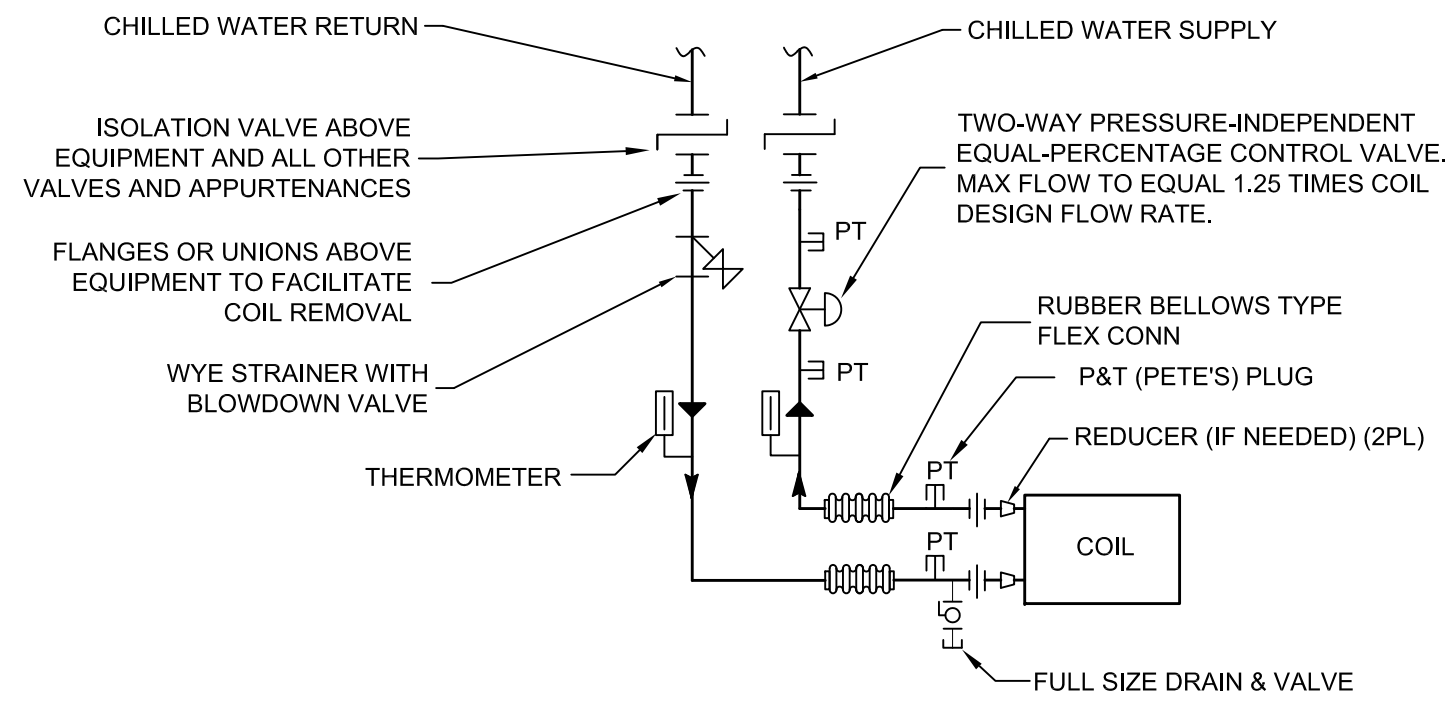
BASEMENT FLOOR PLAN - NEW WORK
 SCALE: 1/8" = 1'-0"



JOB NUMBER: 1712



TYPICAL MECHANICAL BUILDING SECTION
SCALE: 1/4" = 1'-0"

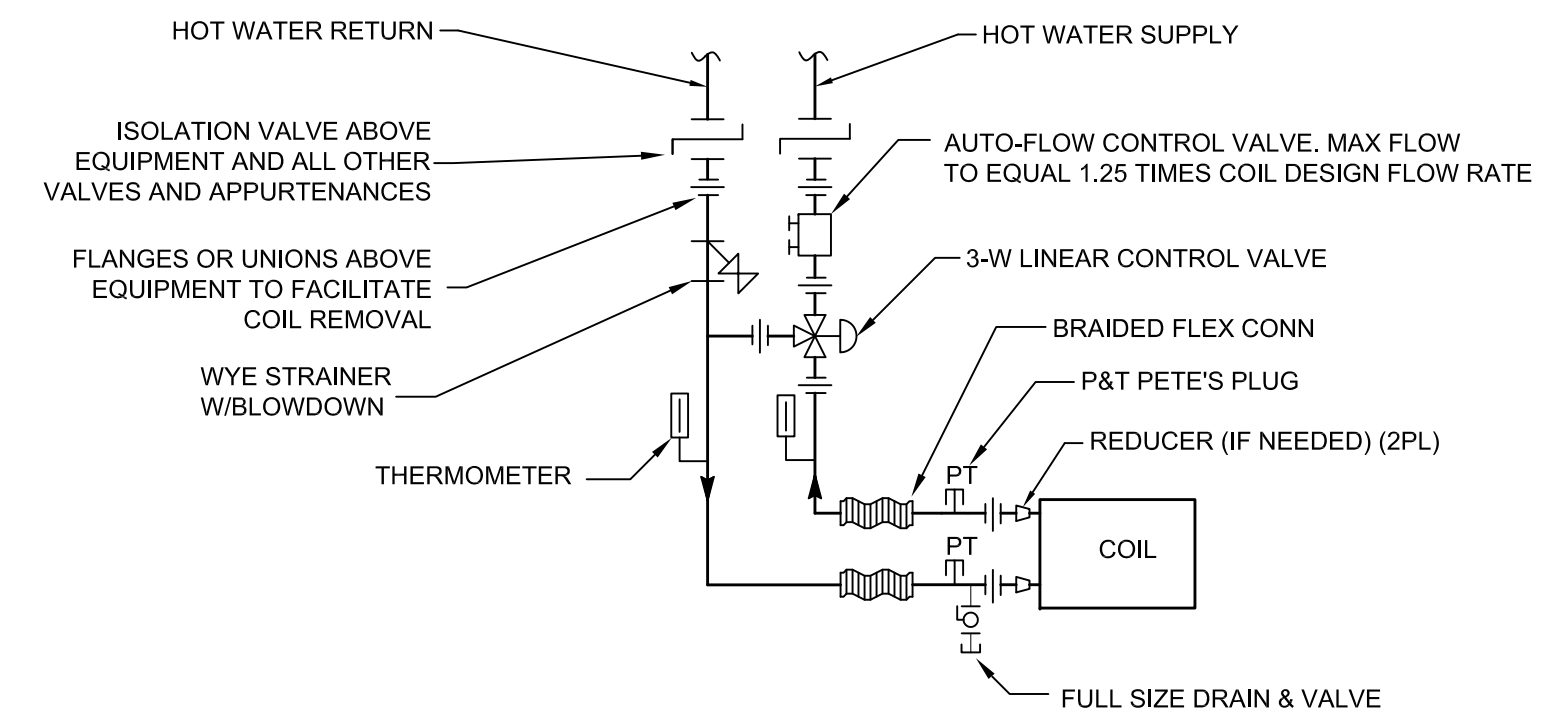


TYPICAL COOLING COIL CONNECTION DETAIL

SCALE: NONE

NOTES:

1. SEE AHU COIL BRANCH/RUNOUT PIPING SCHEDULE FOR PIPE SIZING, UOS
2. USE DIELECTRIC UNIONS/FLANGES TO ISOLATE DISSIMILAR MATERIALS.
3. SUPPORT PIPING FROM STRUCTURE - NO WEIGHT SHALL BEAR ON EQUIPMENT.
4. PROVIDE FOAM INSULATION AT CONTROL VALVES, UNIONS, APPURTENANCES, ETC.

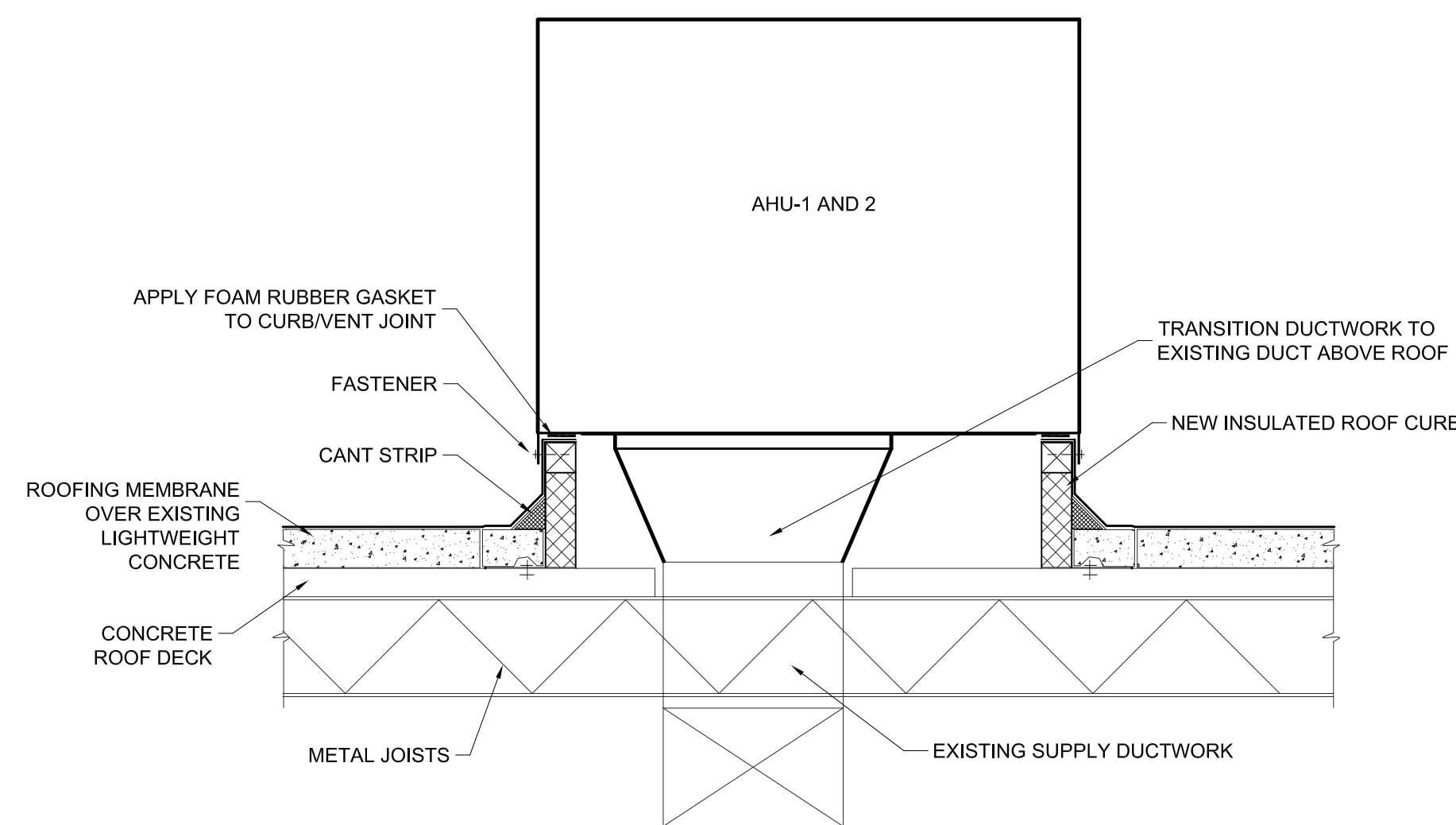


TYPICAL HEATING COIL CONNECTION DETAIL

SCALE: NONE

NOTES:

1. SEE AHU COIL BRANCH/RUNOUT PIPING SCHEDULE FOR SIZES.
2. USE DIELECTRIC UNIONS/FLANGES TO ISOLATE DISSIMILAR MATERIALS.
3. SUPPORT PIPING FROM STRUCTURE - NO WEIGHT SHALL BEAR ON EQUIPMENT.
4. PROVIDE ACCESS TO CONTROL VALVES, UNIONS, APPURTENANCES, ETC. VIA FOAM INSULATION.

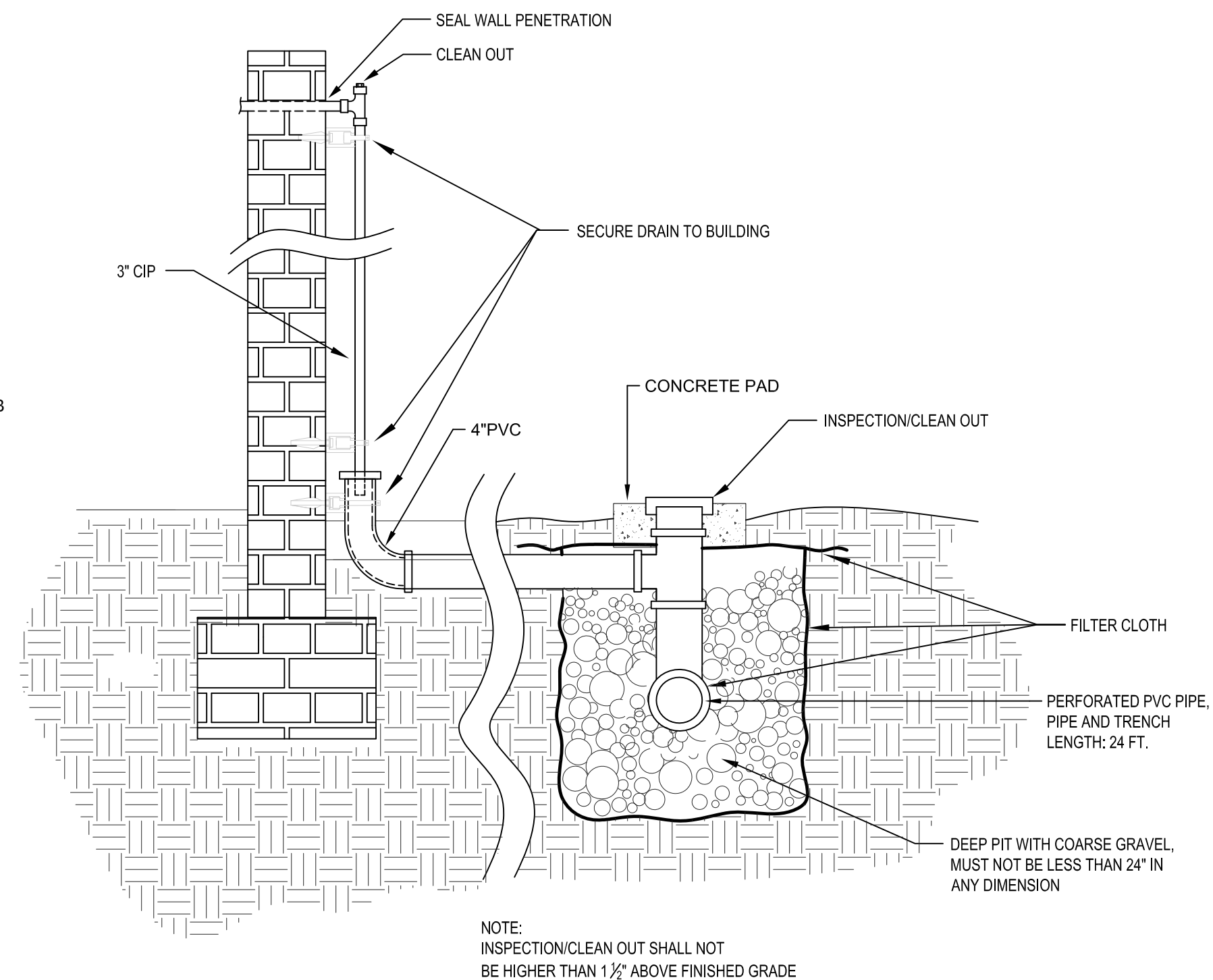


AHU ROOF CURB DETAIL

SCALE: NONE

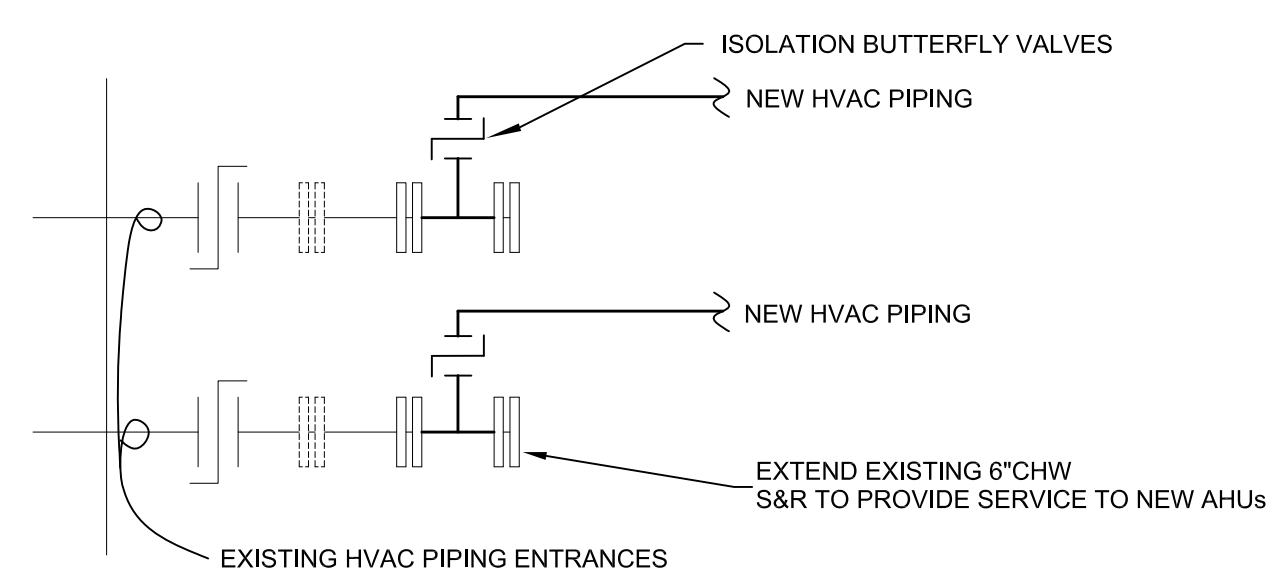
NOTES:

1. SECURE CURB TO ROOF DECK WITH 1/4" DIAMETER ANCHOR BOLTS, 2' O.C. OR AS DIRECTED BY THE MANUFACTURER TO COMPLY WITH THE UNIT'S WIND LOAD CAPABILITY.

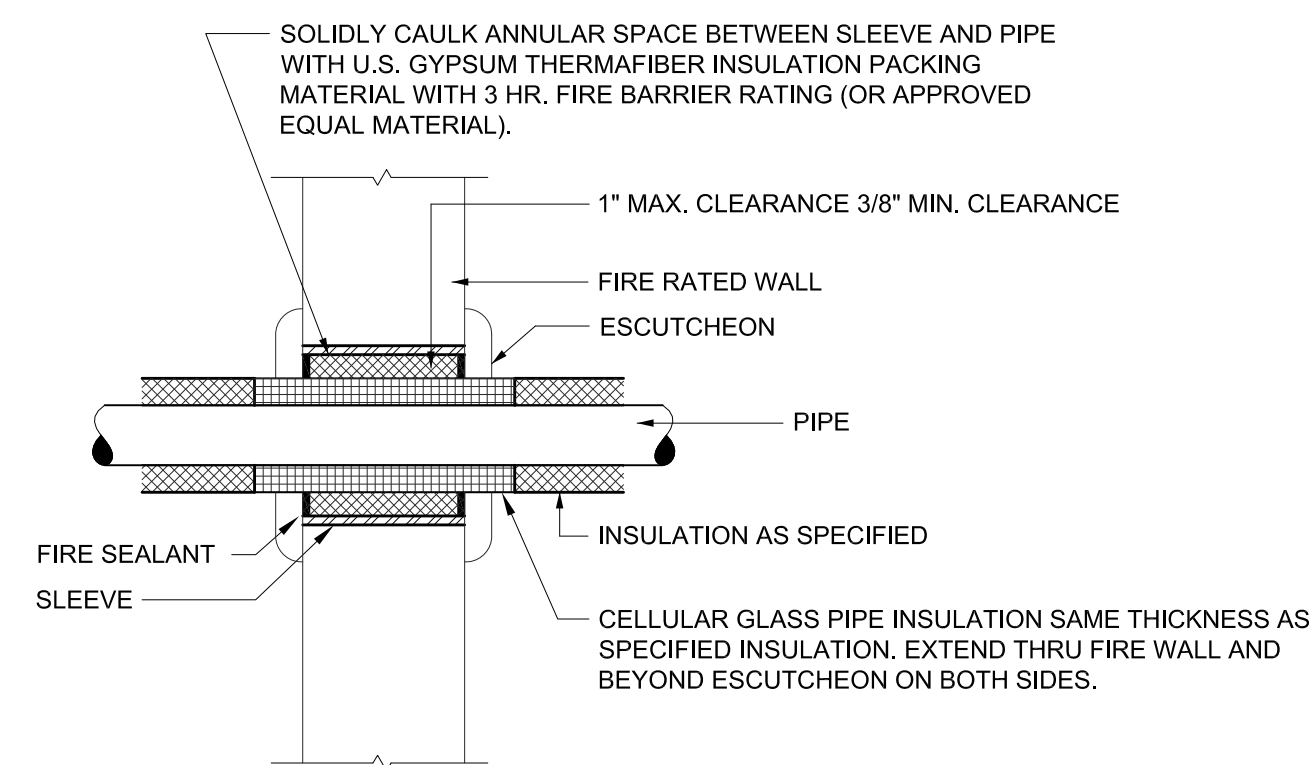


FRENCH DRAIN DETAIL

SCALE: NONE



NEW CHW MAIN CONNECTIONS TO ROOFTOP AHUs
SCALE: NONE

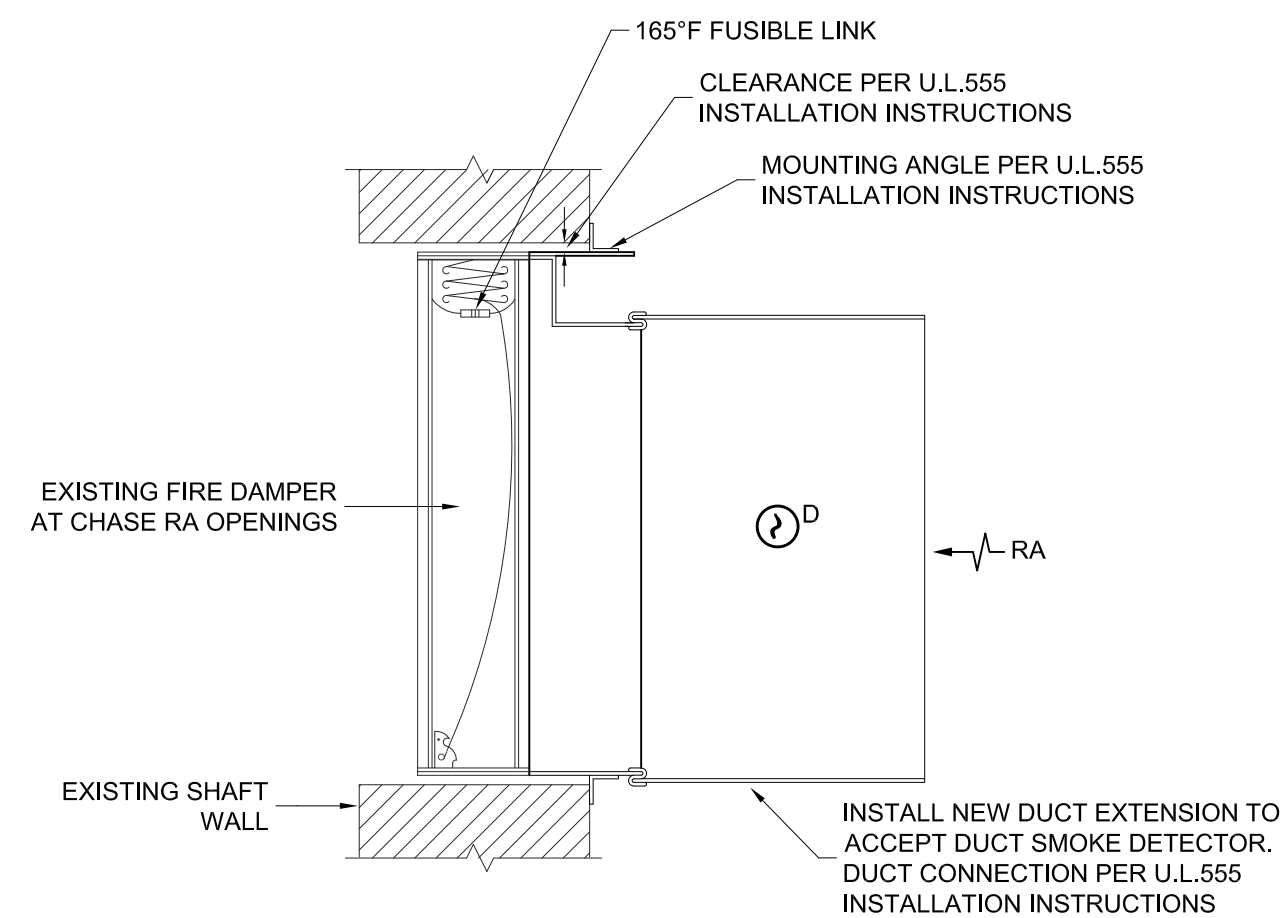


FIRE-RATED WALL PENETRATION

SCALE: NONE

NOTES:

1. SUBMIT MANUFACTURER'S UL LISTED APPROVAL FOR WALL SYSTEM AND RATING TO ARCHITECT/ENGINEER FOR REVIEW/APPROVAL.
2. SEE PLAN FOR WALL RATINGS.
3. INSTALL PRODUCTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND RATING.



RETURN AIR DUCT EXTENSION

SCALE: NONE



McGinniss & Fleming
Engineering, Inc.

Mechanical • Electrical • Fire Protection • Plumbing

1401 Miccosukee Road - Suite 200
Tallahassee, Florida 32308

CA #05090

ROOFTOP HVAC REPLACEMENT
DOYLE CONNER LAB ADMIN BUILDING
TALLAHASSEE, FLORIDA

FL. DEPT. OF AGRICULTURE &
CONSUMER SERVICES

DATE:
November 10, 2017

DESIGNED BY:
PJM

DRAWN BY:
TEP

SUBMITTAL:
CONSTRUCTION DOCUMENTS

SHEET TITLE:
MECHANICAL
DETAILS

SHEET:

M4.0

JOB NUMBER:

1712