

AIR DISTRIBUTION SCHEDULE									
TAG	DESCRIPTION	MANUFACTURER	MODEL	FRAME	CFM	NECK SIZE	FACE SIZE	MAX NC	REMARKS
(A)	SQ. PLAQUE SUPPLY	PRICE	SPD AS	LAY-IN	126-225	8" x 8"	24"x24"	30	1,2
(B)	SQ. PLAQUE SUPPLY	PRICE	SPD AS	LAY-IN	226-350	10" x 10"	24"x24"	30	1,2
(C)	PERFORATED RETURN	PRICE	APDDR	LAY-IN	0-1,000	22"x22"	24"x24"	30	1,2
(D)	SIDEWALL SUPPLY	PRICE	620	SURFACE	400	14"x10"	16"x12"	30	1,2,3,4
(E)	SIDEWALL SUPPLY	PRICE	620	SURFACE	500	18"x10"	20"x12"	30	1,2,3,4
(F)	LOUVERED RETURN	PRICE	630	SURFACE	600	16"x16"	18"x18"	30	1,2
(G)	PERFORATED SUPPLY	PRICE	AFDC	LAY-IN	400-950	12" x 12"	24"x24"	30	1,2

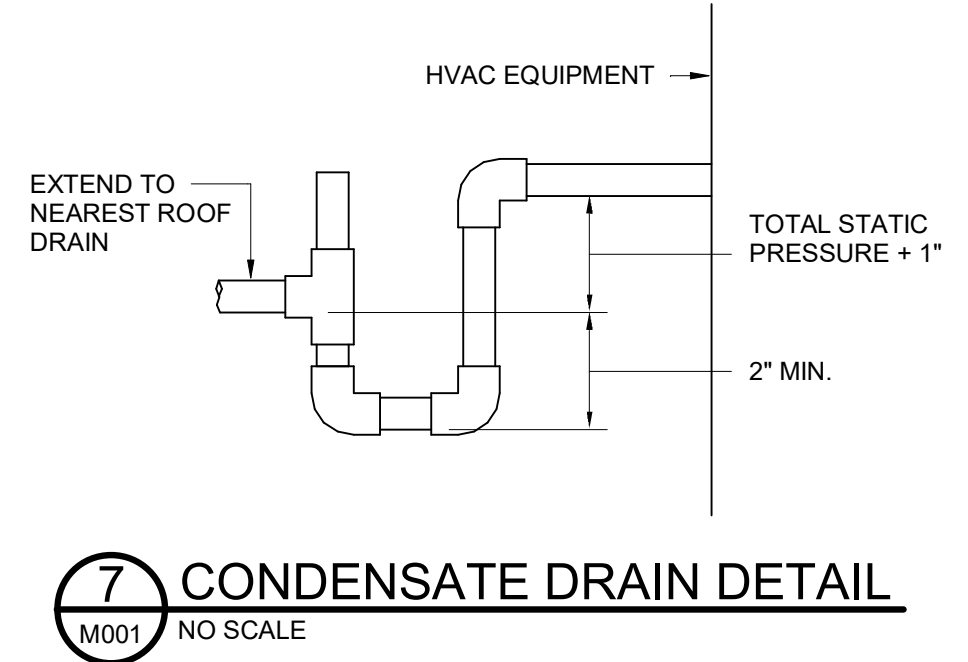
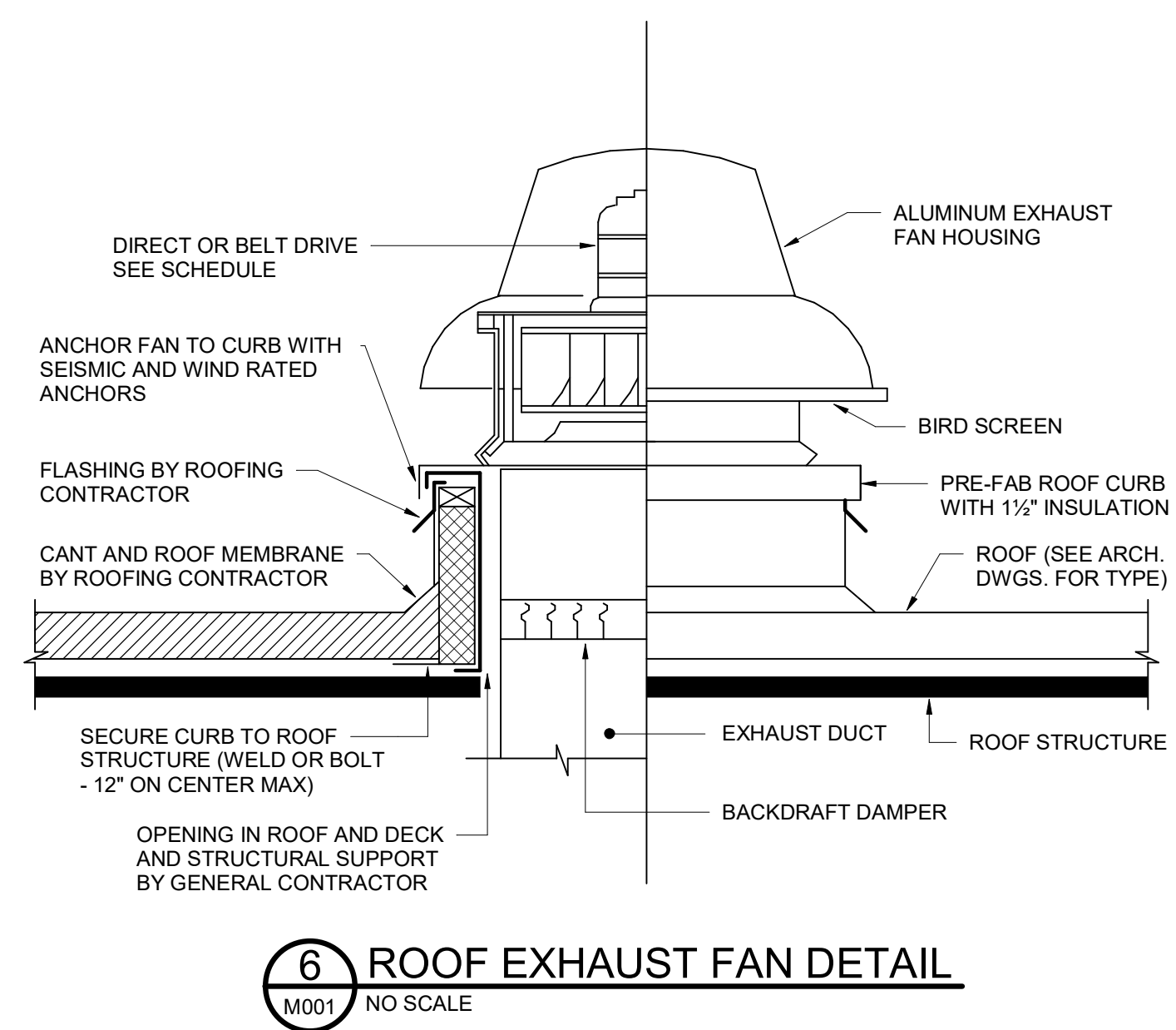
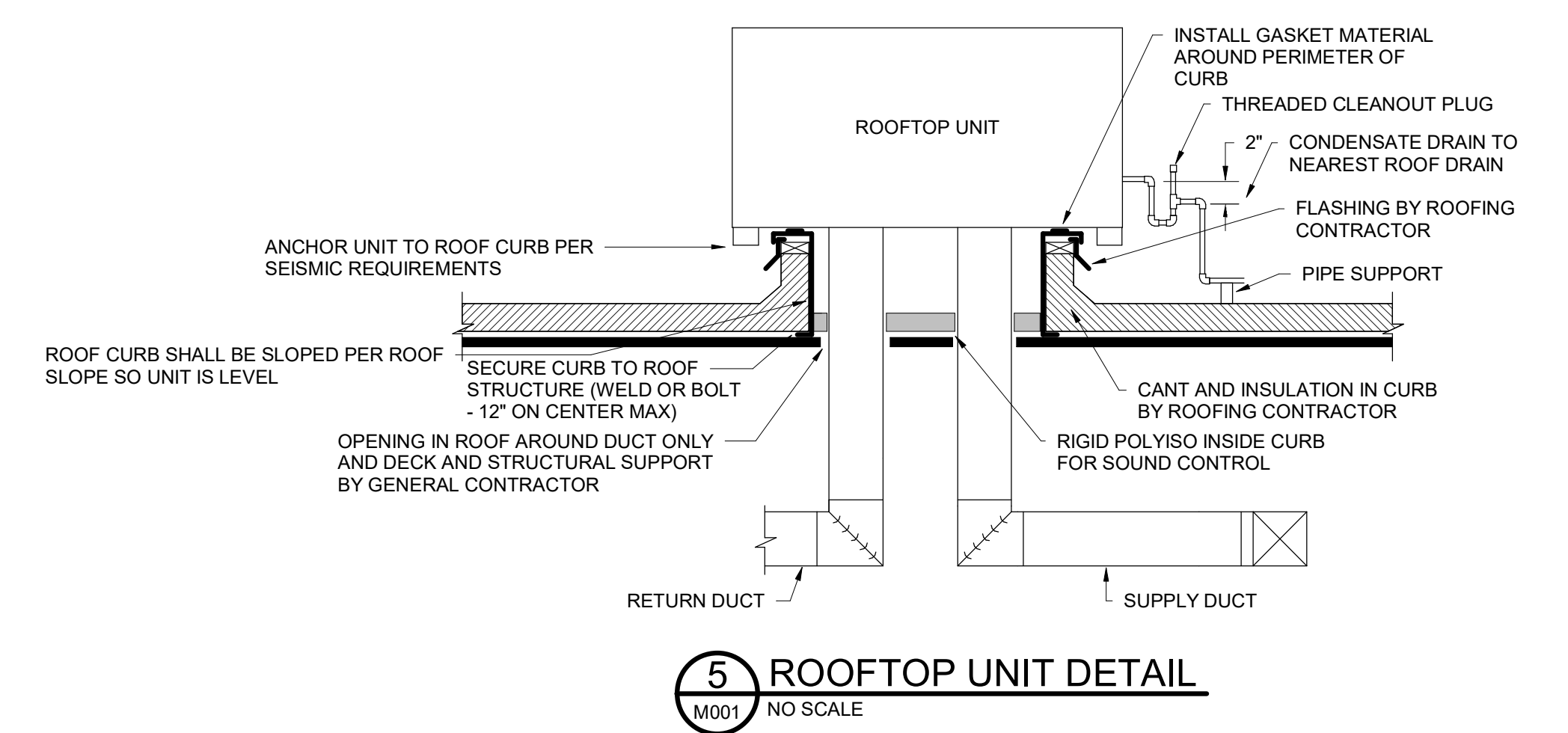
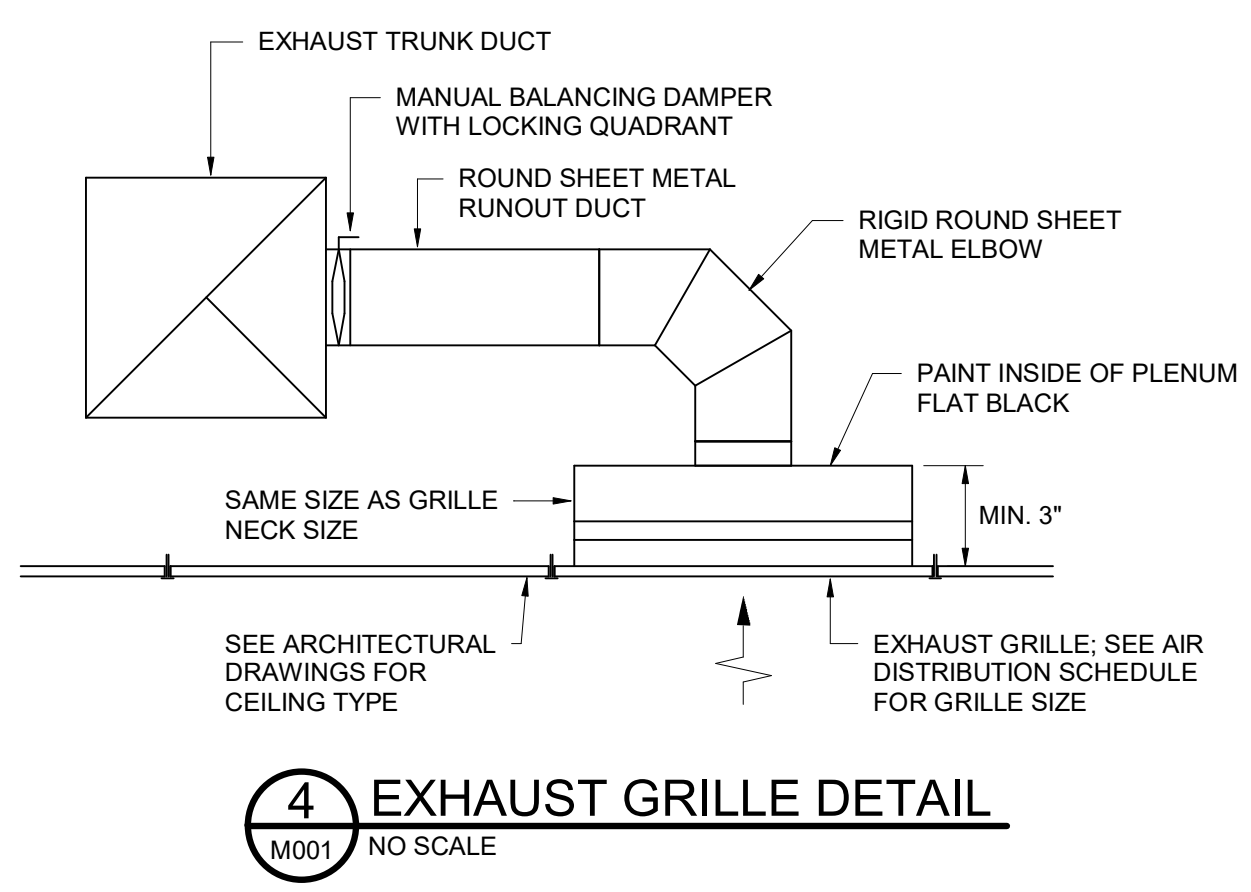
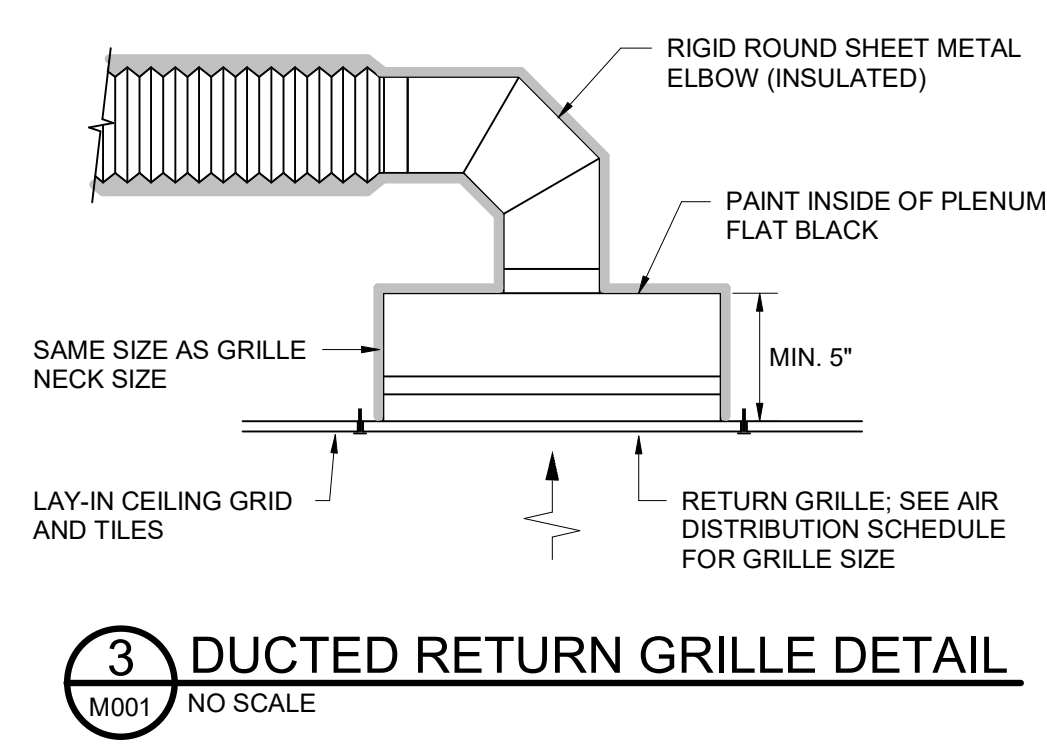
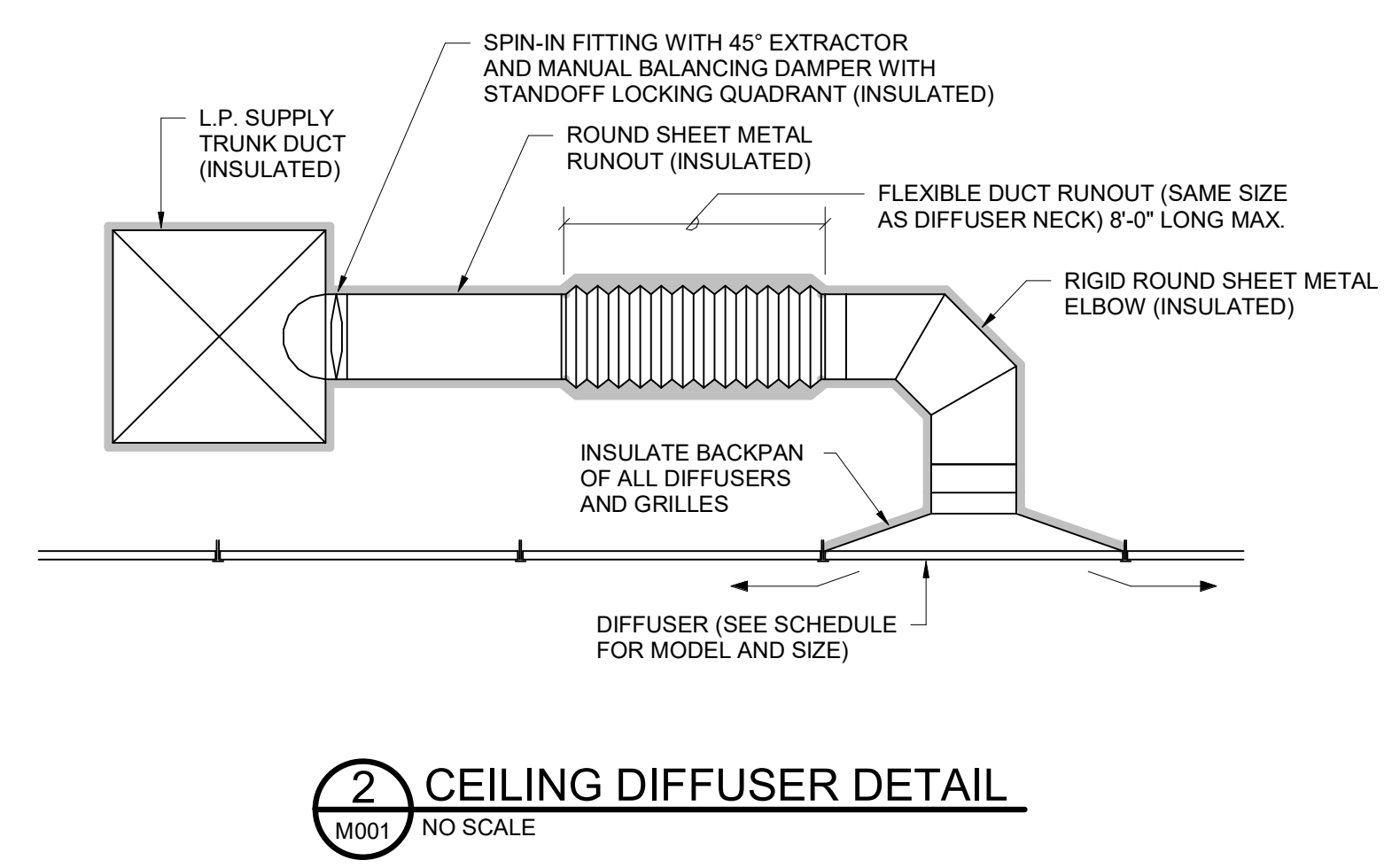
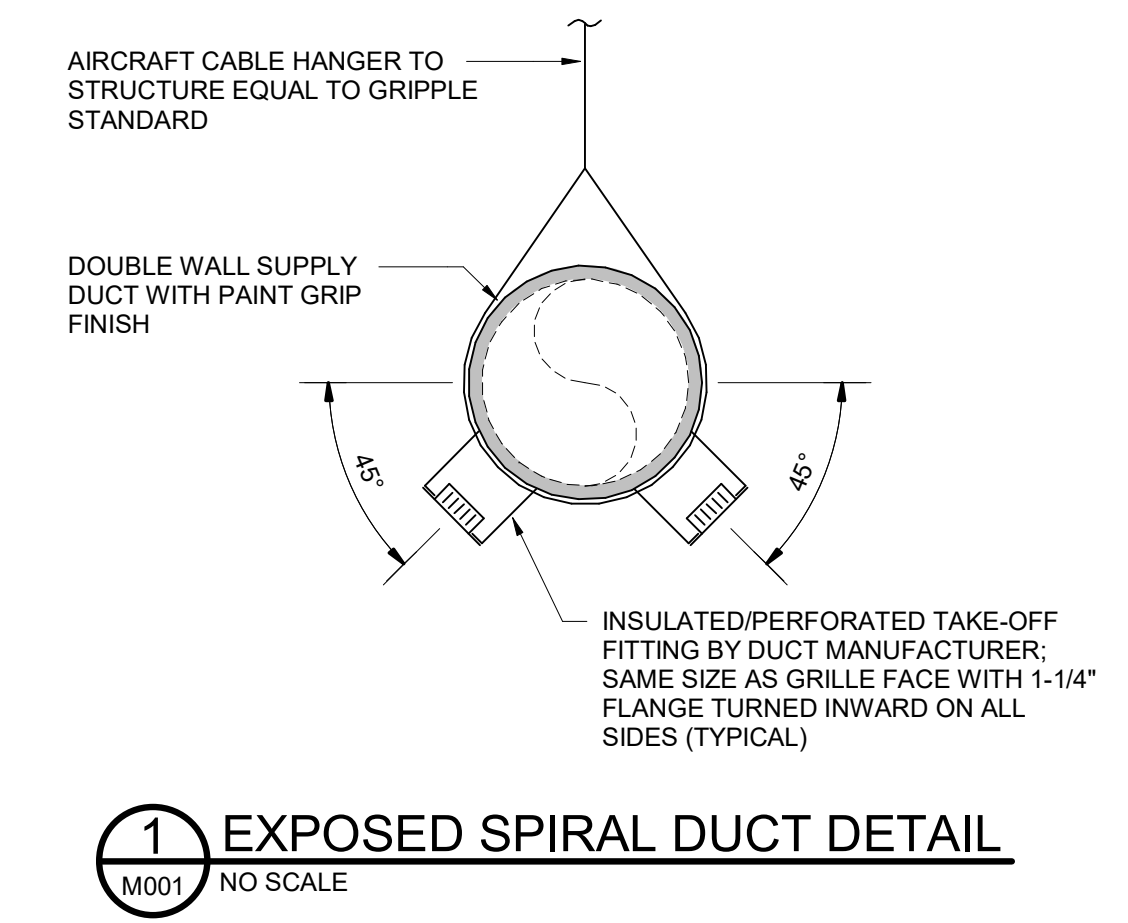
- PROVIDE WITH STANDARD WHITE FINISH.
- PROVIDE ALUMINUM OR ALUMINIZED STEEL CONSTRUCTION.
- PROVIDE WITH OPPOSED BLADE DAMPER.
- PROVIDE WITH DOUBLE DEFLECTION BLADES AND FRONT BLADES PARALLEL WITH SHORT DIMENSION.

ROOFTOP HEAT PUMP SCHEDULE										
TAG	TRANE MODEL	COOLING CAP. MBH @ 80/67/55 TOTAL/SENSIBLE	HTG. CAP. MBH @ 47°F	AUX. HT. KW	AIRFLOW CFM	OUTDOOR AIR CFM	ESP IN. W.G.	INDOOR FAN H.P.	SEER/ HSPF/ EER/ COP	REMARKS
RTU-32	WSC036	39.3/29.3	36.0	6.0	1200	380	0.4	0.75	14.3/8.0	1,2,3,4,6
RTU-33	WSC036	39.3/29.3	36.0	6.0	1200	380	0.4	0.75	14.3/8.0	1,2,3,4,6
RTU-34	WSC036	39.3/29.3	36.0	6.0	1200	380	0.4	0.75	14.3/8.0	1,2,3,4,6
RTU-35	WSC036	39.3/29.3	36.0	6.0	1200	380	0.4	0.75	14.3/8.0	1,2,3,4,6
RTU-36	4WCC024	24.8/18.5	22.0	3.76	800	100	0.4	0.33	14.0/8.0	1,2,6
RTU-37	WSC048	49.8/39.3	46.8	8.0	1600	440	0.4	1.0	14.3/8.2	1,2,3,4,6
RTU-38	WSC092	95.3/74.6	87.5	18.0	3000	670	0.4	1.0	**11.3/3.4	1,2,3,4,5,6
RTU-39	WSC120	118.1/87.0	105.4	18.0	3000	500	0.1	2.75	**11.0/3.4	2,3,5,6,7

- PROVIDE WITH CERTIFIED SEISMIC ROOF CURB.
- PROVIDE WITH MOTORIZED OUTSIDE AIR DAMPER, HINGED ACCESS DOORS, THROUGH THE BASE ELECTRICAL CONNECTIONS, HAIL GUARD, FOIL FACED INSULATION, BACNET INTERFACE AND CONVENIENCE RECEPTACLE.
- PROVIDE WITH HOT GAS REHEAT FOR HUMIDITY CONTROL.
- PROVIDE CO2 SENSOR FOR DEMAND CONTROL VENTILATION.
- INSTALL DUCT SMOKE DETECTOR WIRED TO SHUT DOWN THE UNIT.
- PROVIDE STARTUP BY A FACTORY TRAINED TECHNICIAN FROM THE UNIT MANUFACTURER.
- PROVIDE WITH CERTIFIED SEISMIC ADAPTER CURB.

FAN SCHEDULE							
TAG	GREENHECK MODEL NO.	TYPE	CFM	ESP	MOTOR H.P.	SONES (MAX.)	REMARKS
EF-1	G-080-VG	ROOFTOP	240	0.500	1/10	8.2	1,2
EF-2	G-080-VG	ROOFTOP	200	0.500	1/10	7.9	1,3
EF-2 DW	G-080-VG	ROOFTOP	900	0.500	1/4	9.8	1,4

- CENTRIFUGAL ROOF FAN COMPLETE WITH 12" ROOF CURB, BACKDRAFT DAMPER, BIRDSCREEN, DISCONNECT SWITCH, AND ECM SPEED CONTROL.
- INTERLOCK WITH LIGHT SWITCH, WIRED BY ELECTRICAL CONTRACTOR.
- FURNISH COOLING THERMOSTAT, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
- INTERLOCK WITH DISHWASHER FAN CONTROL.



GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE, 2009 INTERNATIONAL ENERGY CONSERVATION CODE, AND 2008 SMACNA HVAC DUCT CONSTRUCTION STANDARD. ALL LOCAL CODES OR REQUIREMENTS SHALL APPLY.
- VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
- DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION, ETC.
- DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
- ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
- THIS CONTRACTOR SHALL COORDINATE STEEL OPENINGS AND EQUIPMENT SUPPORT WITH STEEL SHOP DRAWINGS TO CONFIRM DIMENSIONS MATCH WITH EQUIPMENT SUPPLIED.
- ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS, ROOFS AND PARTITIONS.
- ALL MECHANICAL ITEMS EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED. PROVIDE PIPE PORTALS AS REQUIRED FOR CONDUIT OR TUBING PENETRATIONS THROUGH THE ROOF. COORDINATE WITH ROOFING CONTRACTOR.
- ALL PIPING IS SHOWN DIAGMATICALLY. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
- EXTEND ALL DRAIN LINES AS INDICATED - SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED PER STATIC PRESSURE REQUIREMENTS.
- ALL WATER PIPING SHALL PITCH DOWN IN DIRECTION OF FLOW ONE-INCH PER FIFTY FEET WITH MANUAL AIR VENTS AT ALL HIGH POINTS AND 3/4-INCH DRAIN VALVES WITH STANDARD HOSE CONNECTION AT ALL LOW POINTS.
- MINIMUM PIPE SIZE SHALL BE 3/4-INCH UNLESS INDICATED OTHERWISE.
- ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
- FIRE DAMPERS SHALL BE INSTALLED WHERE SHOWN ON PLANS. IN ALL FIRE PARTITIONS, BLADES SHALL BE LOCATED OUT OF AIRSTREAM.
- TURNING VANES SHALL BE PROVIDED AT ALL DUCTWORK ELBOWS AND CHANGES OF DIRECTION TO PROVIDE EVEN FLOW THROUGH DUCT SYSTEM.
- EXHAUST DUCTS FROM DISHWASHER HOODS SHALL BE WELDED TO PROVIDE WATERTIGHT JOINTS. DUCT SHALL BE SLOPED 1/4-INCH PER FOOT MINIMUM BACK TO THE CONDENSATE HOOD AND DRAIN PIPED TO FLOOR DRAIN.
- PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE FULL SPACE FOR COIL REMOVAL AND REPLACEMENT FOR ALL HOT WATER AND CHILLED WATER AIR HANDLING UNITS.
- THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
- REMOVAL AND REPLACEMENT OF CEILING, AS REQUIRED FOR INSTALLATION OF NEW WORK, SHALL BE DONE BY GENERAL CONTRACTOR.
- THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONTROL WIRING. DIVISION 26 WILL PROVIDE AND INSTALL ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL AND ALL CONTROL WIRING SHALL BE ROUTED IN EMT CONDUIT.
- LOCATE ALL SPACE CONTROL INSTRUMENTS 4'-0" ABOVE FINISHED FLOOR. COORDINATE LOCATIONS WITH ARCHITECTURAL ELEVATIONS TO AVOID ITEMS INCLUDING BUT NOT LIMITED TO CUSTOM FINISHES, FIXED CASEWORK, FURNITURE, AND DOOR SWINGS. IN THE EVENT OF CONFLICTS IN THE FIELD, THE CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE A/E FOR FINAL APPROVAL OF LOCATION.
- CORRECT SETTINGS ON ALL BALANCING FITTINGS SHALL BE PERMANENTLY MARKED. PROVIDE ORANGE FLAGGING RIBBON ON EACH DAMPER HANDLE FOR EASY IDENTIFICATION.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED.
- ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
- THE HVAC SYSTEMS SHALL NOT BE OPERATED DURING HEAVY CONSTRUCTION OPERATIONS INCLUDING MASONRY, GYPSUM BOARD SANDING, HEAVY CLEANUP ACTIVITIES, OR OTHER ACTIVITIES THAT CREATE AIRBORNE PARTICLES OR DEBRIS. ALL SYSTEMS SHALL BE CLEAN OF CONSTRUCTION DEBRIS, DUST AND DIRT AT FINAL COMPLETION. DUCT CLEANING AND UNIT/COIL CLEANING SHALL BE PERFORMED IF REQUIRED. IF EQUIPMENT OPERATES DURING CONSTRUCTION PROVIDE FILTER MEDIA OVER ALL RETURN GRILLES AND RETURN DUCT OPENINGS TO PROTECT DUCTS AND EQUIPMENT.

LEGEND	
SYMBOL	DESCRIPTION
— D —	DRAIN LINE
(A) 100	TYPE 'A' DIFFUSER, 100 CFM
(T)	THERMOSTAT
FD	FIRE DAMPER
FSD	COMBINATION FIRE/SMOKE DAMPER W/ 120V ACTUATOR
[Symbol]	RECTANGULAR SUPPLY DUCTWORK
[Symbol]	RETURN AND FRESH AIR DUCTWORK
[Symbol]	EXHAUST DUCTWORK
48x24	48"x24" RECTANGULAR DUCT
AFF	ABOVE FINISHED FLOOR
[Symbol]	CONNECTION POINT OF NEW TO EXISTING

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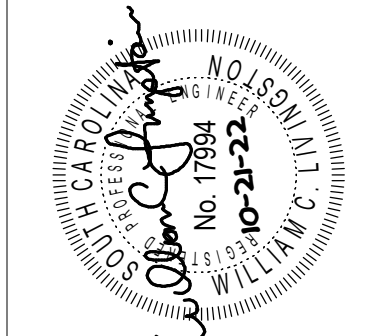
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412 Meeting Street
West Columbia
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BETHANY ELEMENTARY SCHOOL ADDITIONS
CLOVER SCHOOL DISTRICT
CLOVER, SOUTH CAROLINA

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NO. 05/15/23
DATE: 05/15/23
DRAWN BY: JKB
CHECKED BY: WCL
COMM NO: 21025
DATE: OCTOBER 21, 2022
SHEET TITLE: DETAILS, NOTES, SCHEDULES, AND LEGEND
SHEET NO: M001



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CLOVER SCHOOL DISTRICT
CLOVER, SOUTH CAROLINA

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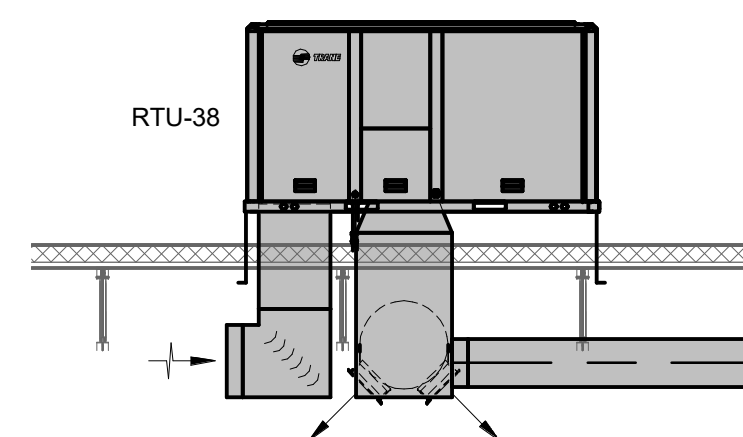
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1	ADDENDUM #3	12/08/22
2	DISH WASH REVISIONS	05/15/23

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 DATE: OCTOBER 21, 2022
 SHEET TITLE: FLOOR PLANS - HVAC

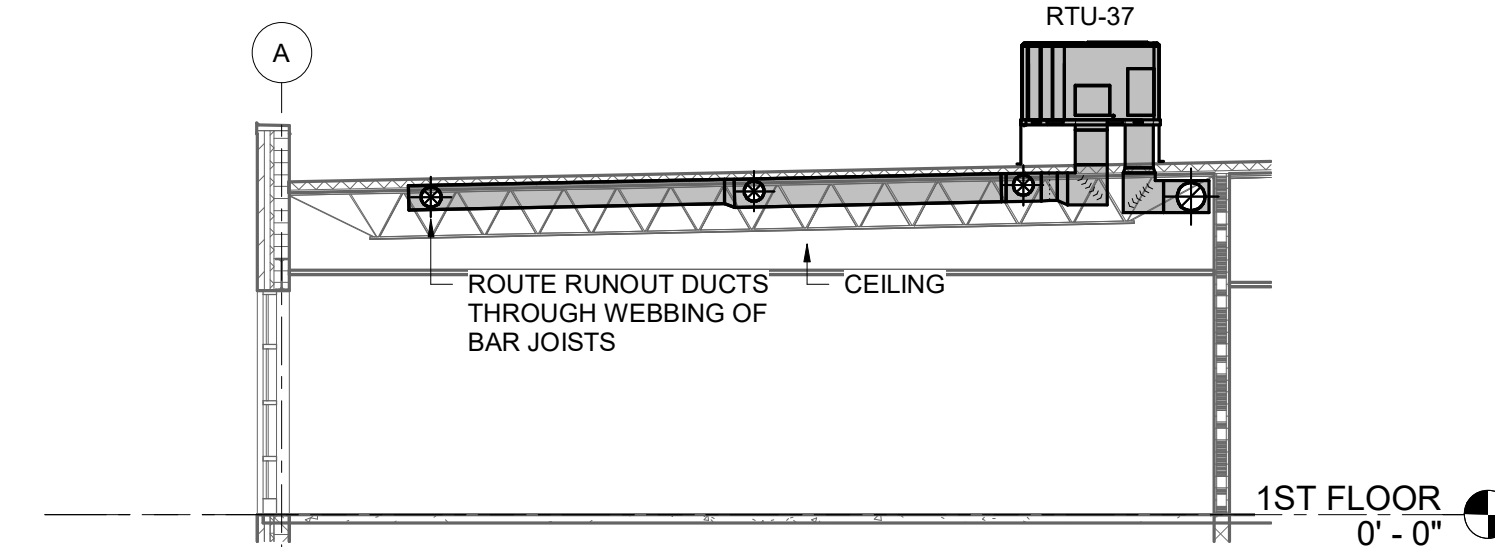
SHEET NO: M101

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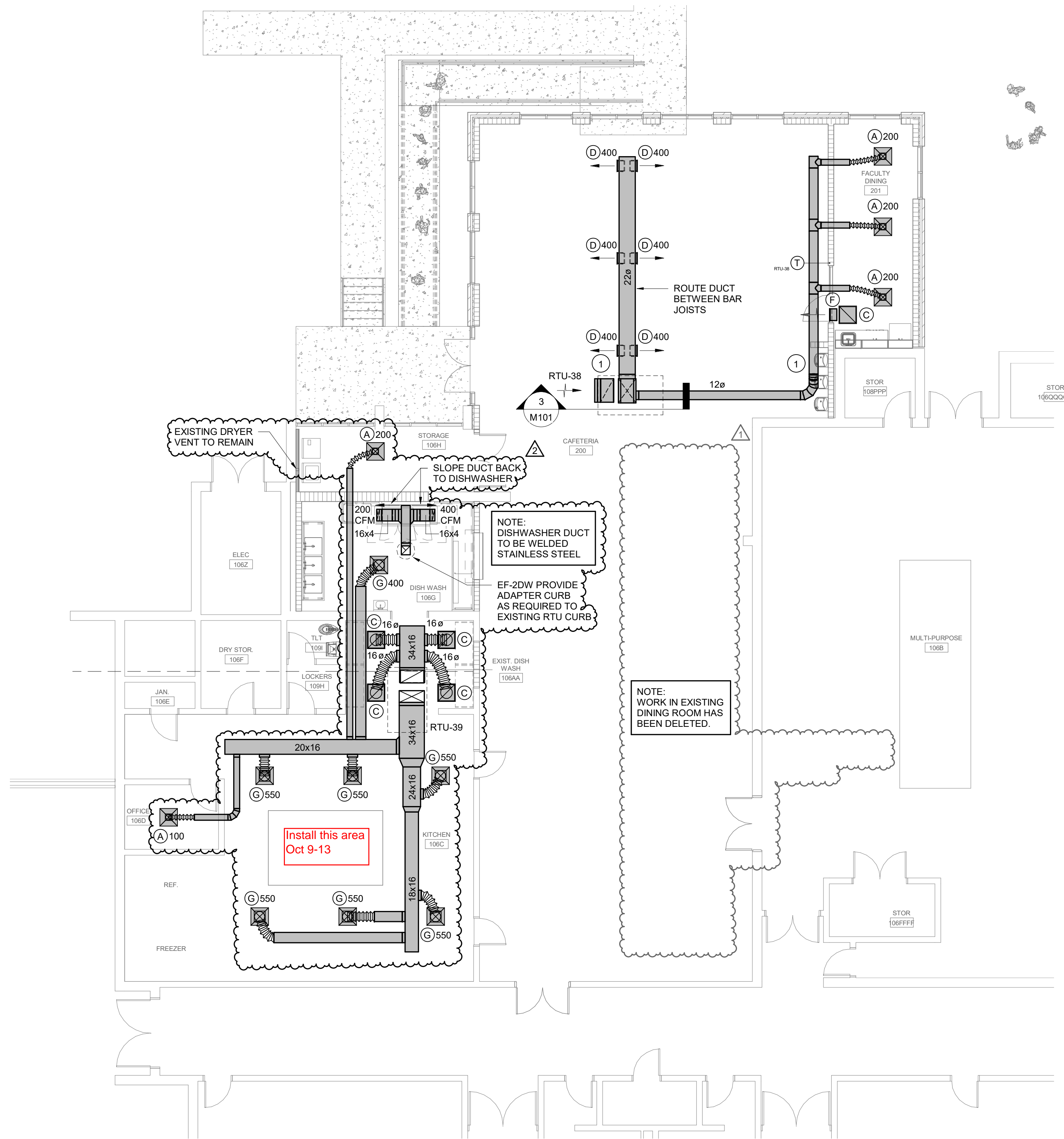
- 1 EXPOSED DUCT SHALL BE DOUBLE WALL WITH PAINT GRIP FINISH.



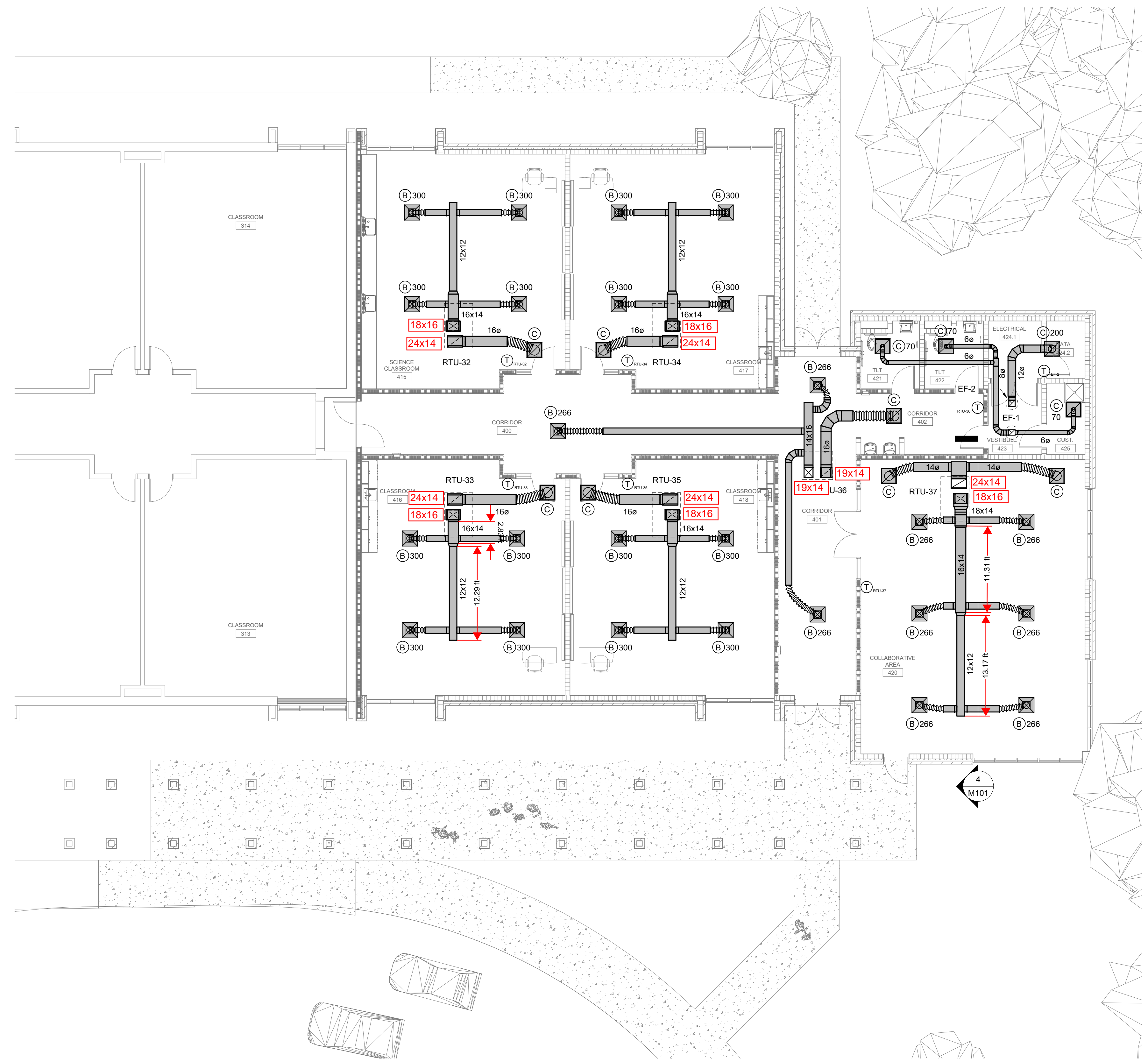
3 SECTION
M101 1/4" = 1'-0"



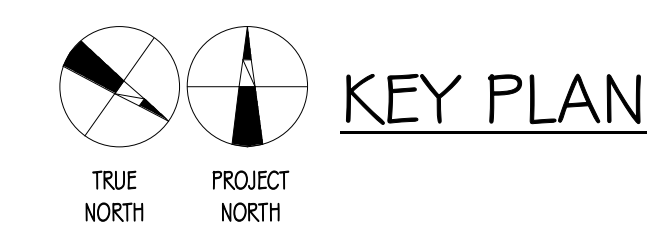
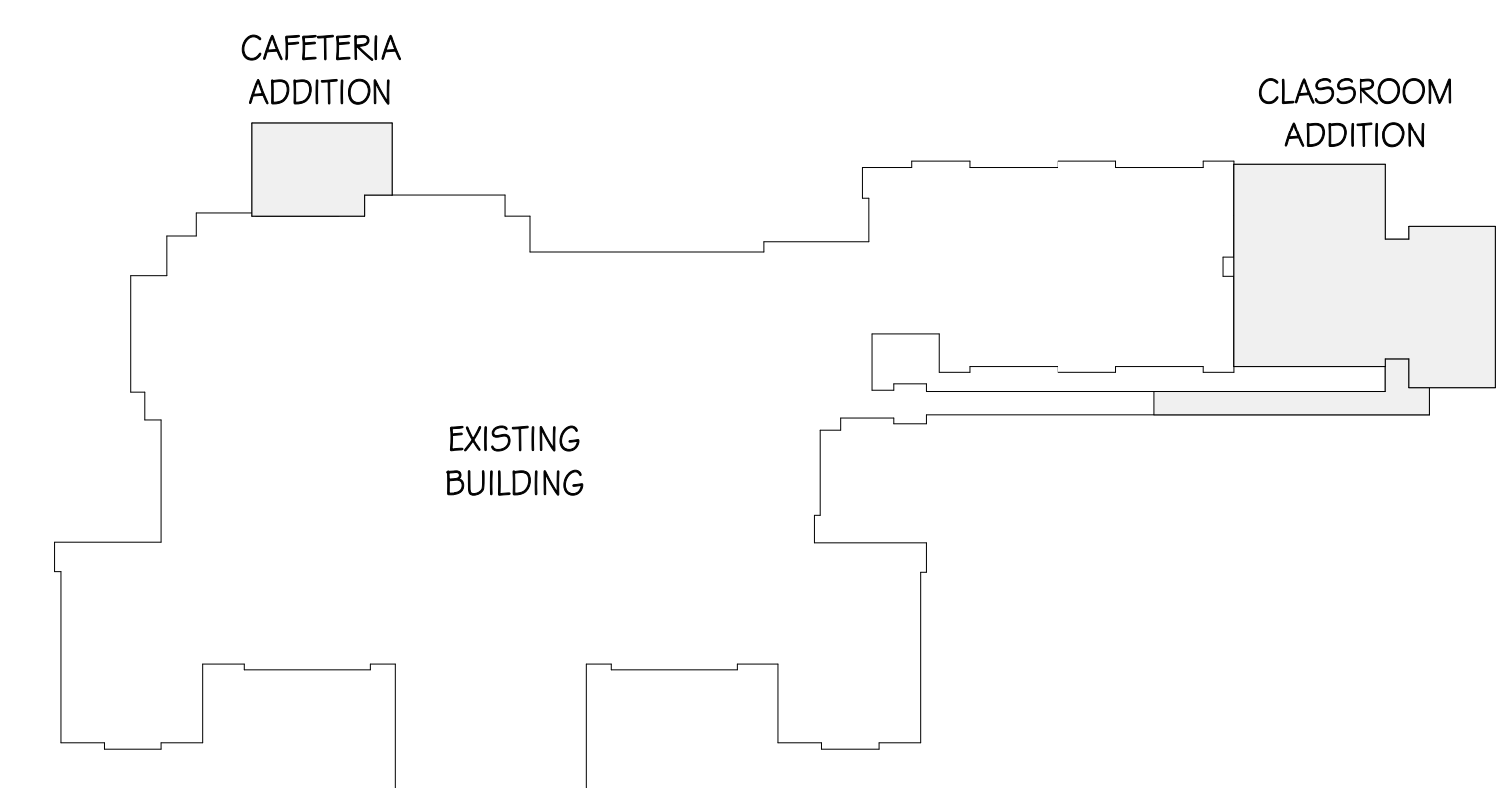
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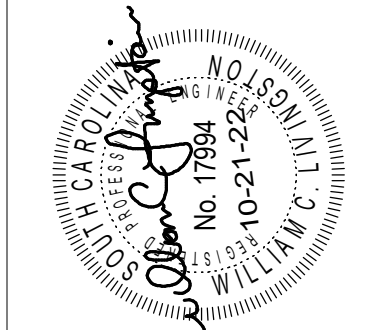
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M101 1/8" = 1'-0"



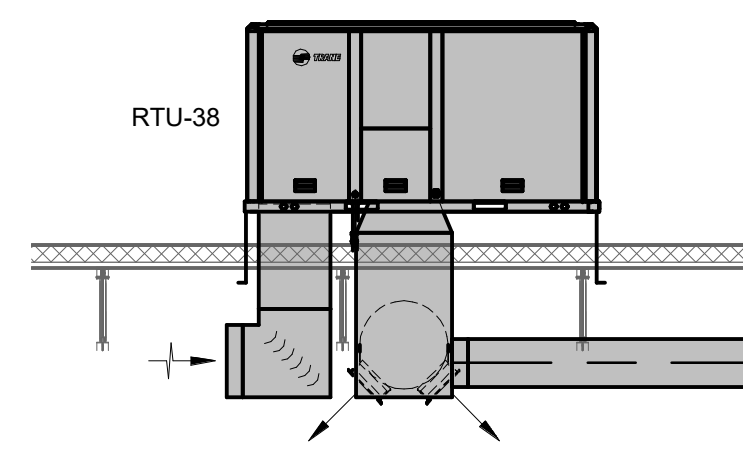
2 CLASSROOM ADDITION FLOOR PLAN - HVAC
M101 1/8" = 1'-0"



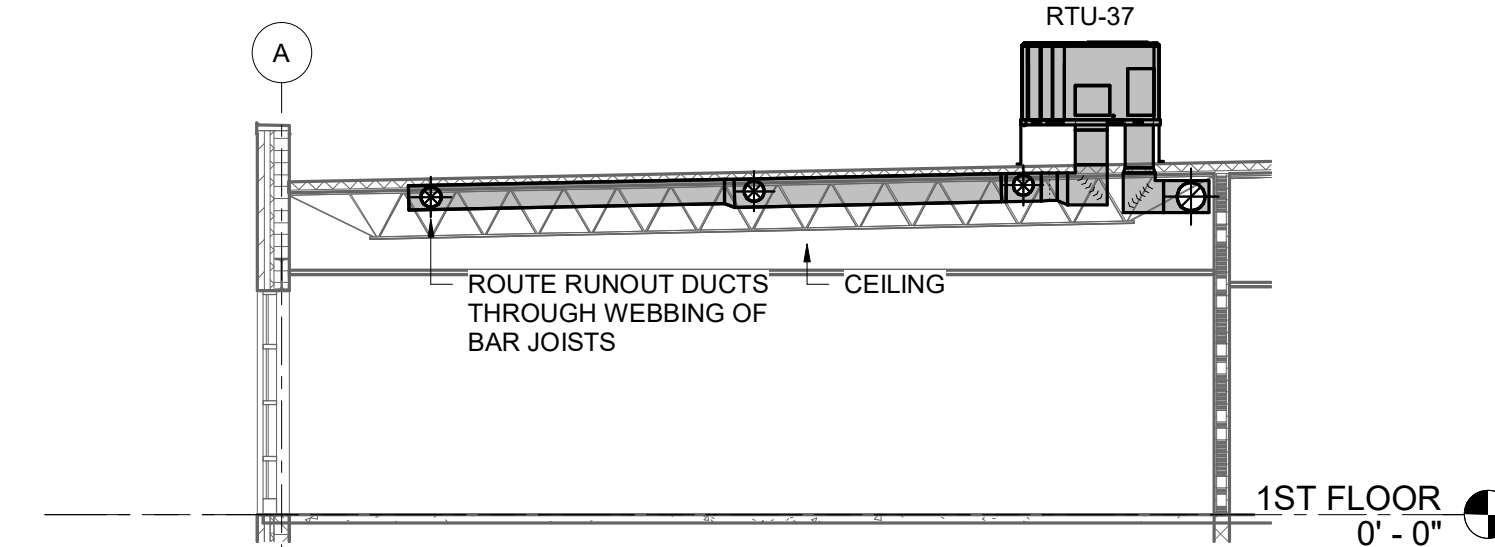
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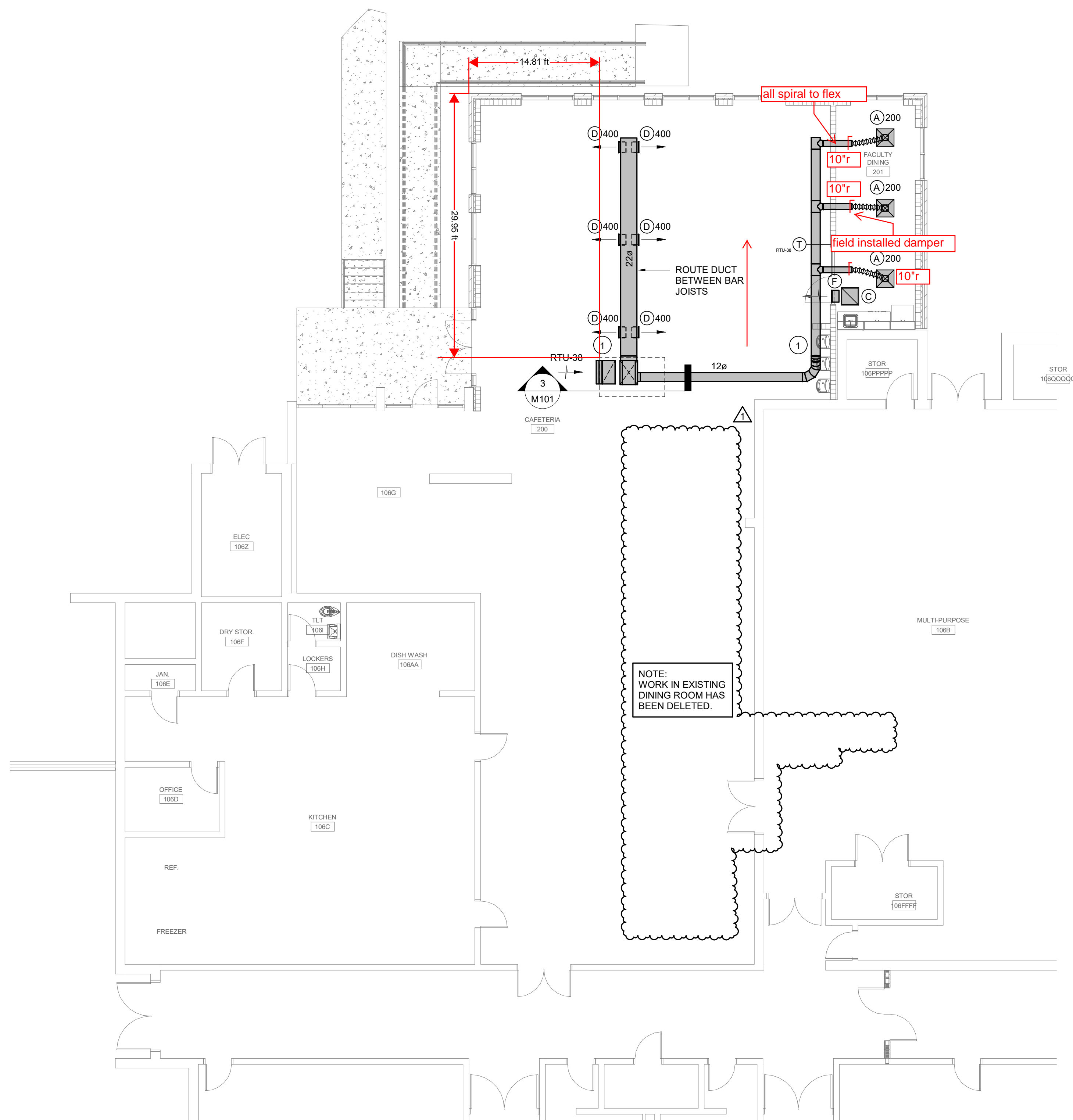
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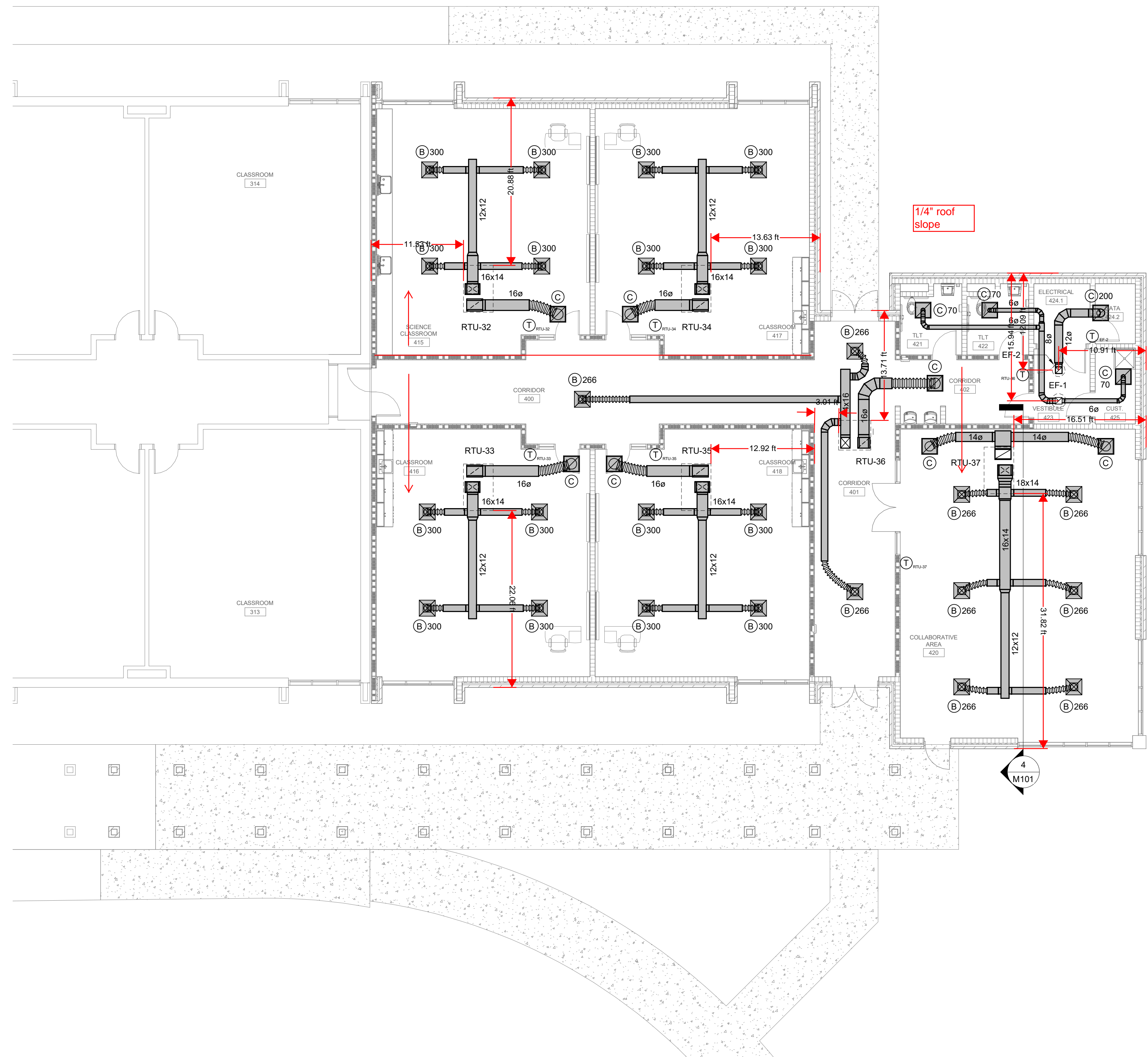
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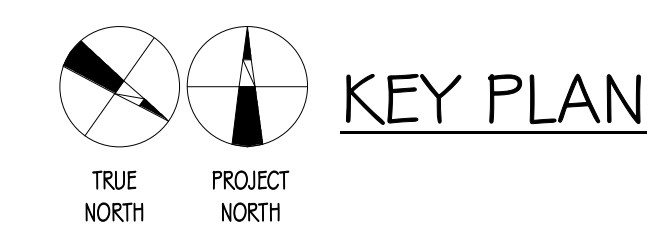
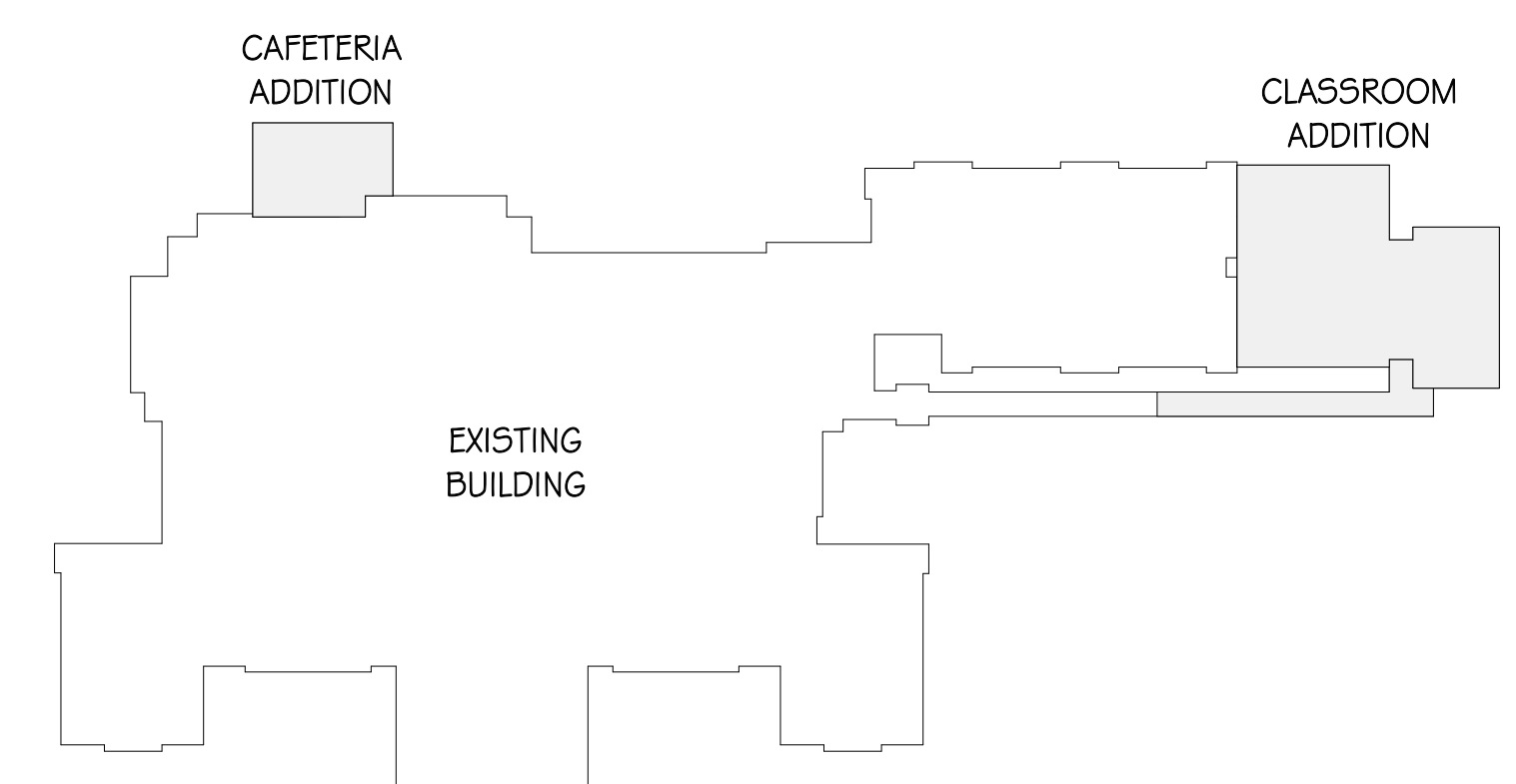
4 SECTION
M101 1/8" = 1'-0"



1 CAFETERIA ADDITION FLOOR PLAN - HVAC
M101 1/8" = 1'-0"



2 CLASSROOM ADDITION FLOOR PLAN - HVAC
M101 1/8" = 1'-0"



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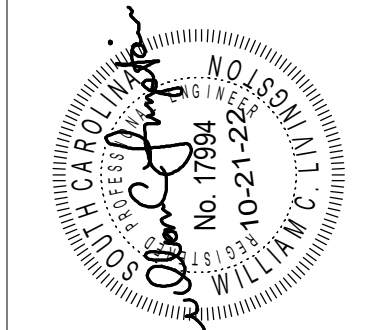
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CLOVER SCHOOL DISTRICT
CLOVER, SOUTH CAROLINA**

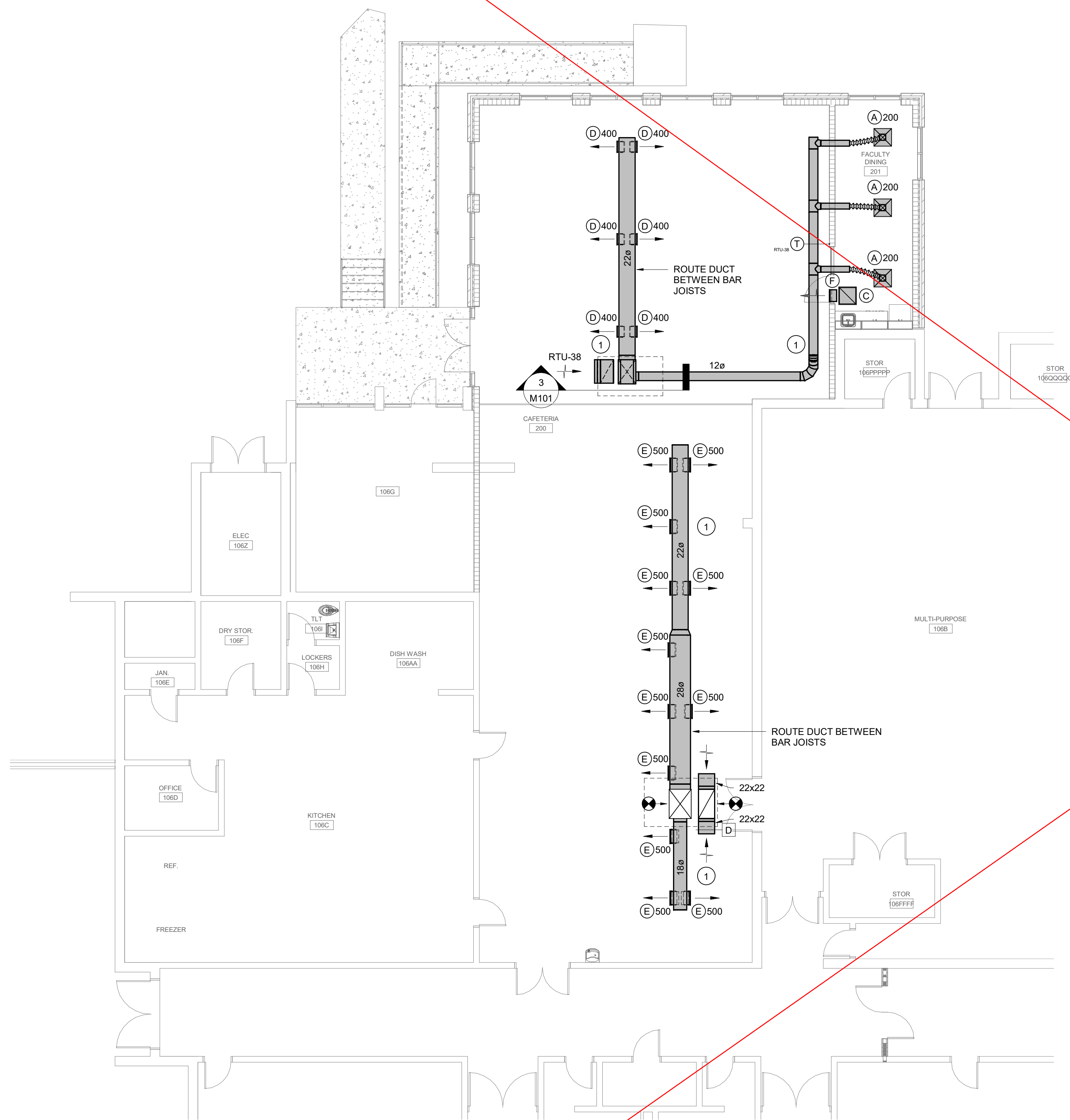
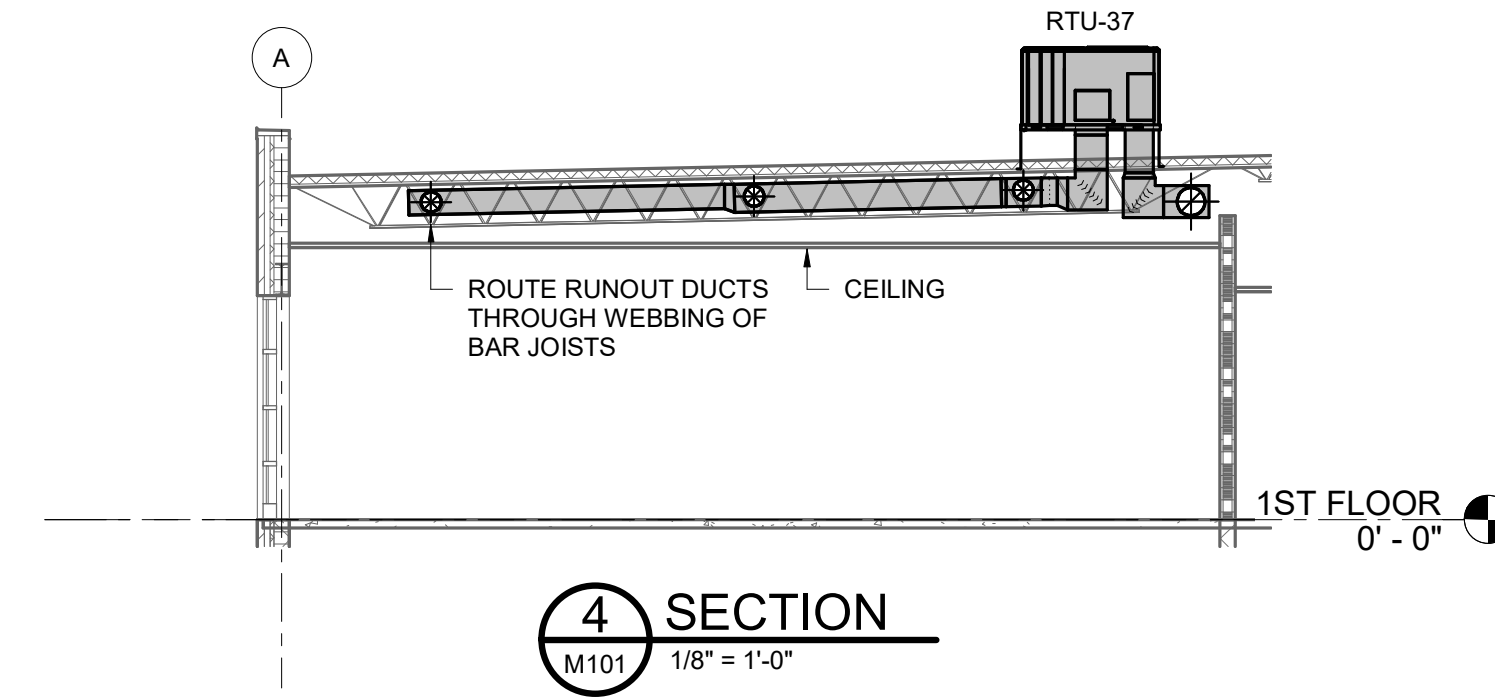
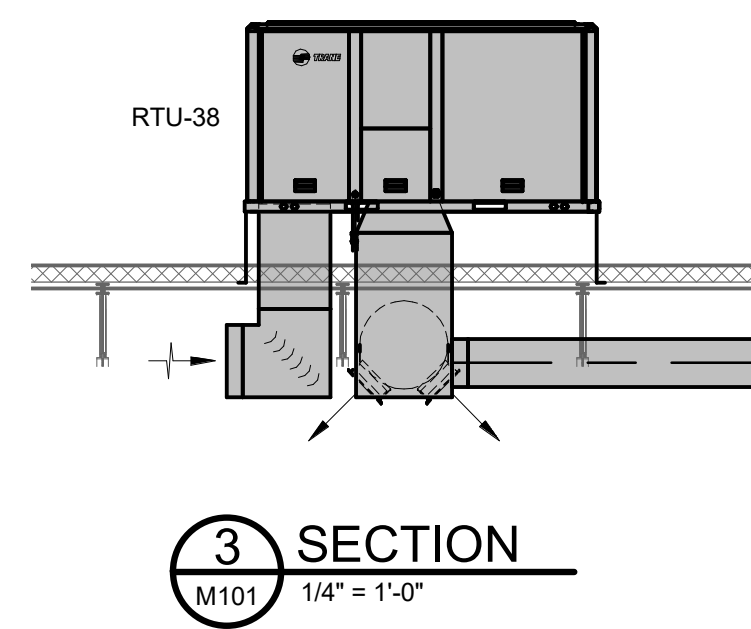
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1	ADDENDUM #3	12/08/22

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SHEET TITLE: **FLOOR PLANS - HVAC**

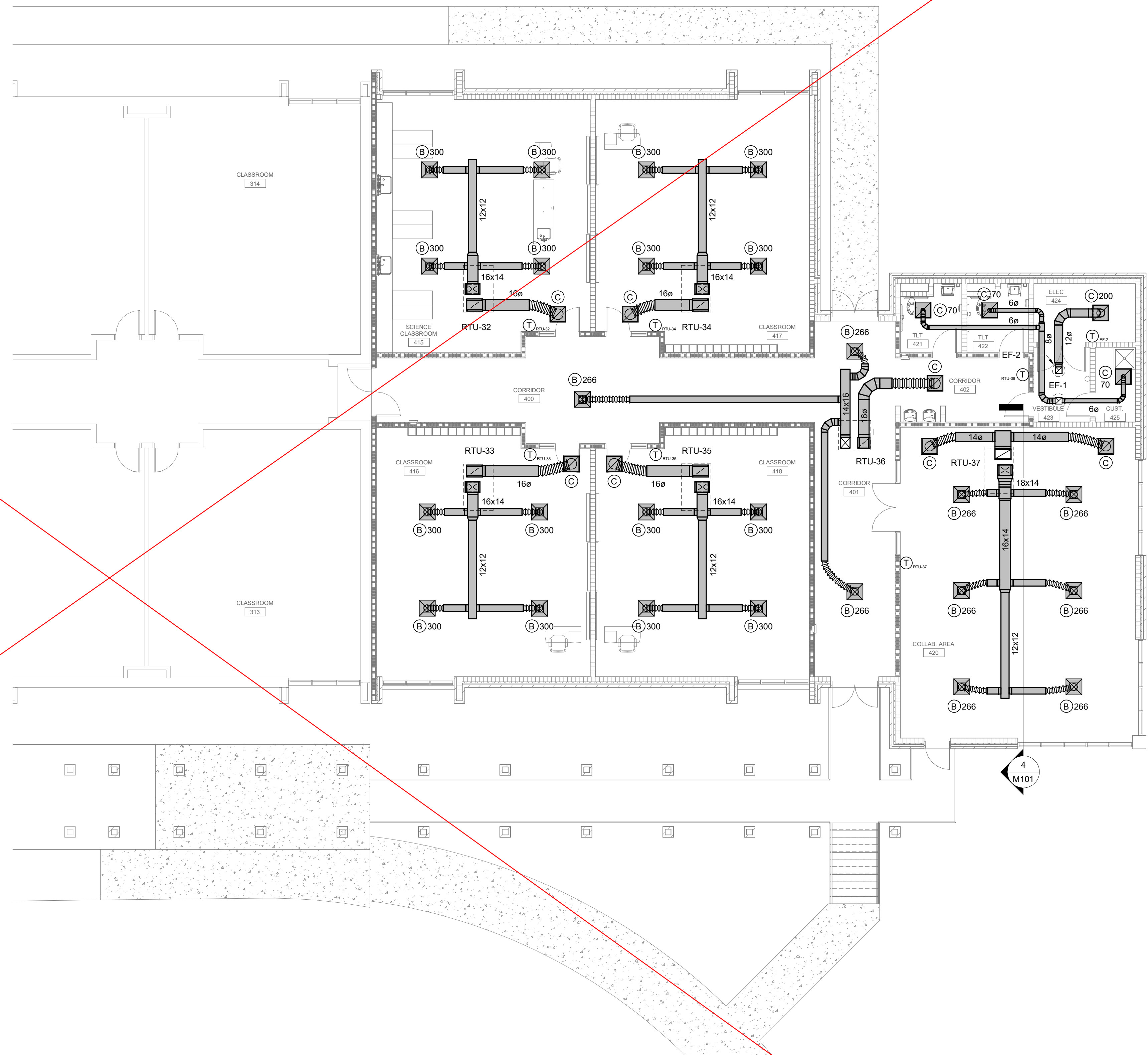
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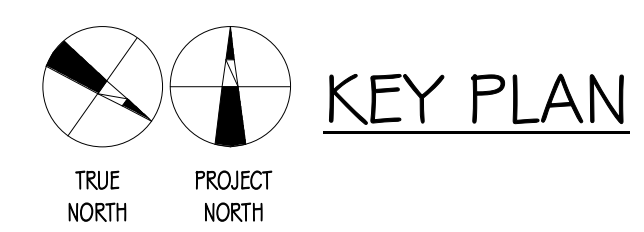
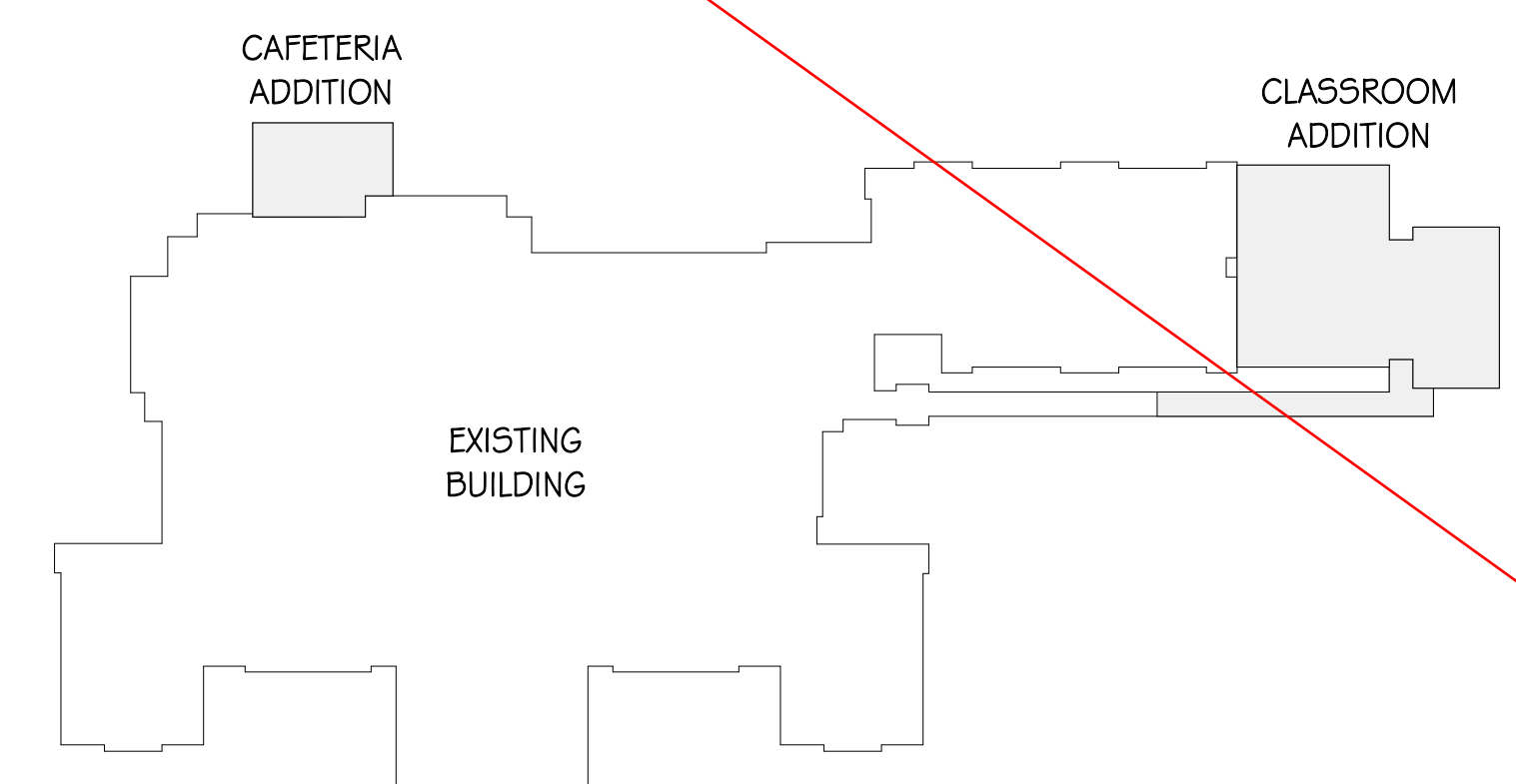
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① CAFETERIA ADDITION FLOOR PLAN - HVAC
M101 1/8" = 1'-0"



② CLASSROOM ADDITION FLOOR PLAN - HVAC
M101 1/8" = 1'-0"



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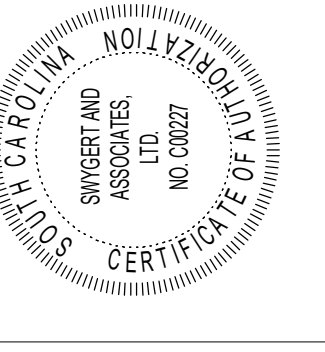
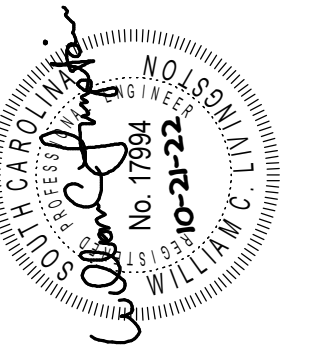
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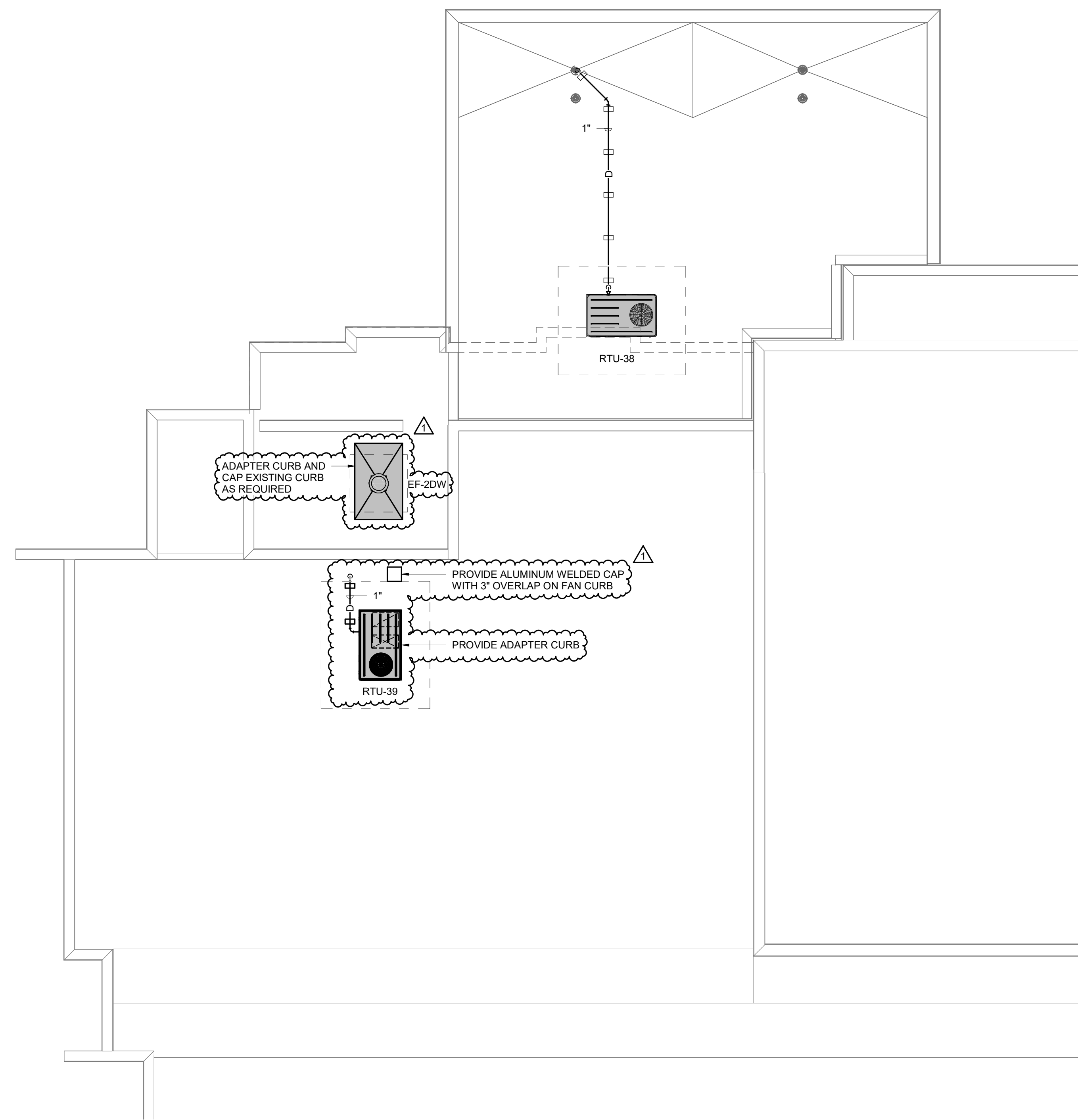
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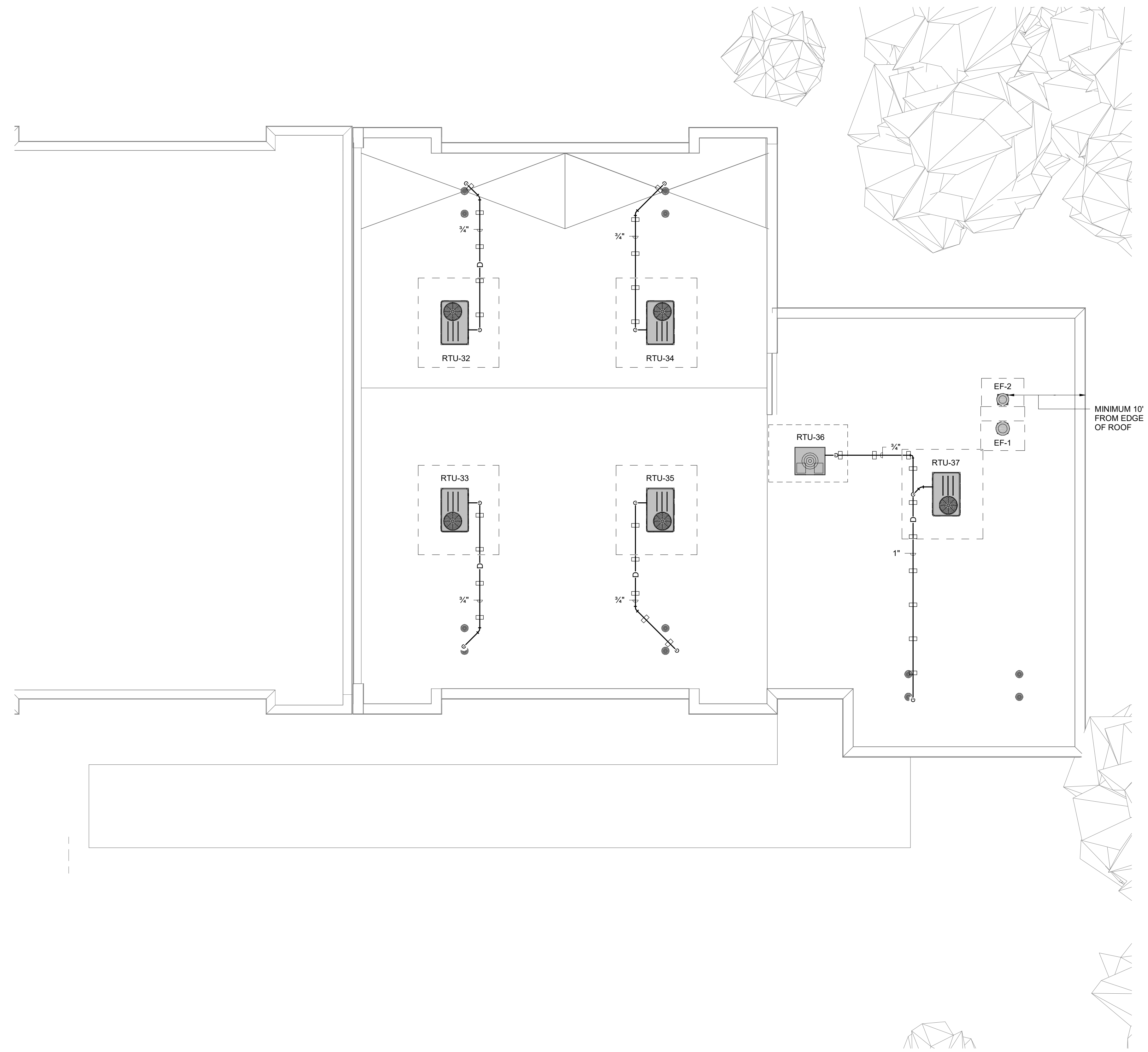
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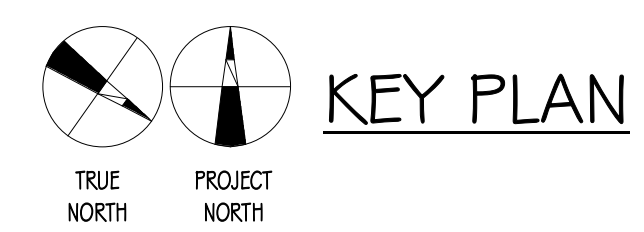
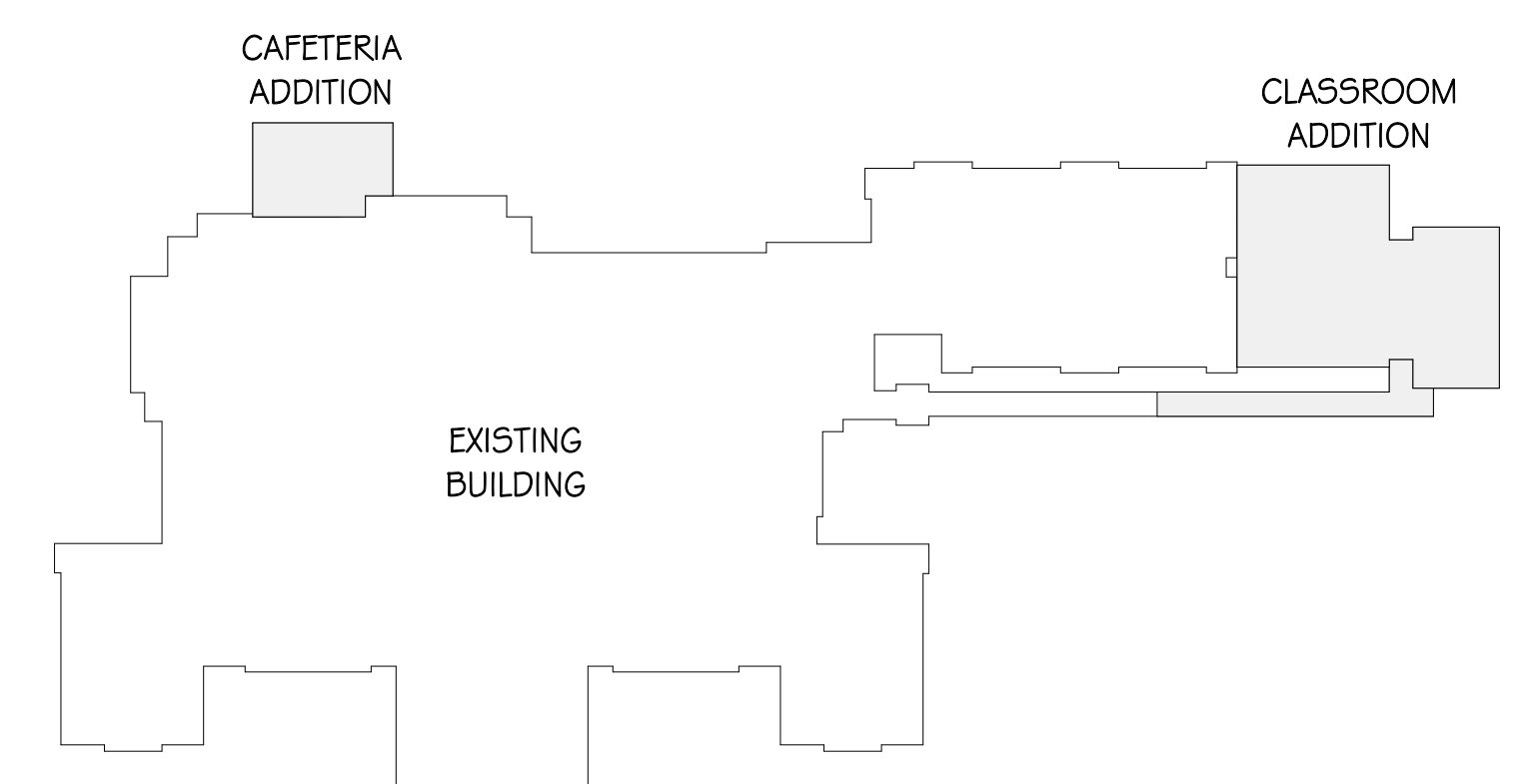
M201



1 CAFETERIA ADDITION ROOF PLAN - HVAC
M201 1/8" = 1'-0"



2 CLASSROOM ADDITION ROOF PLAN - HVAC
M201 1/8" = 1'-0"



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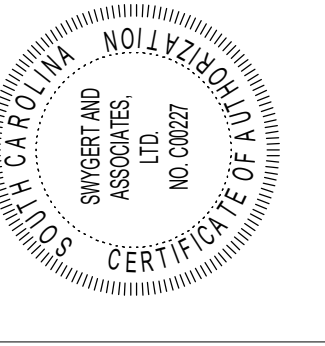
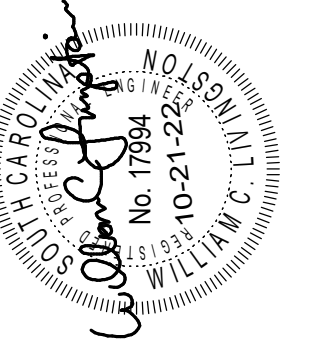
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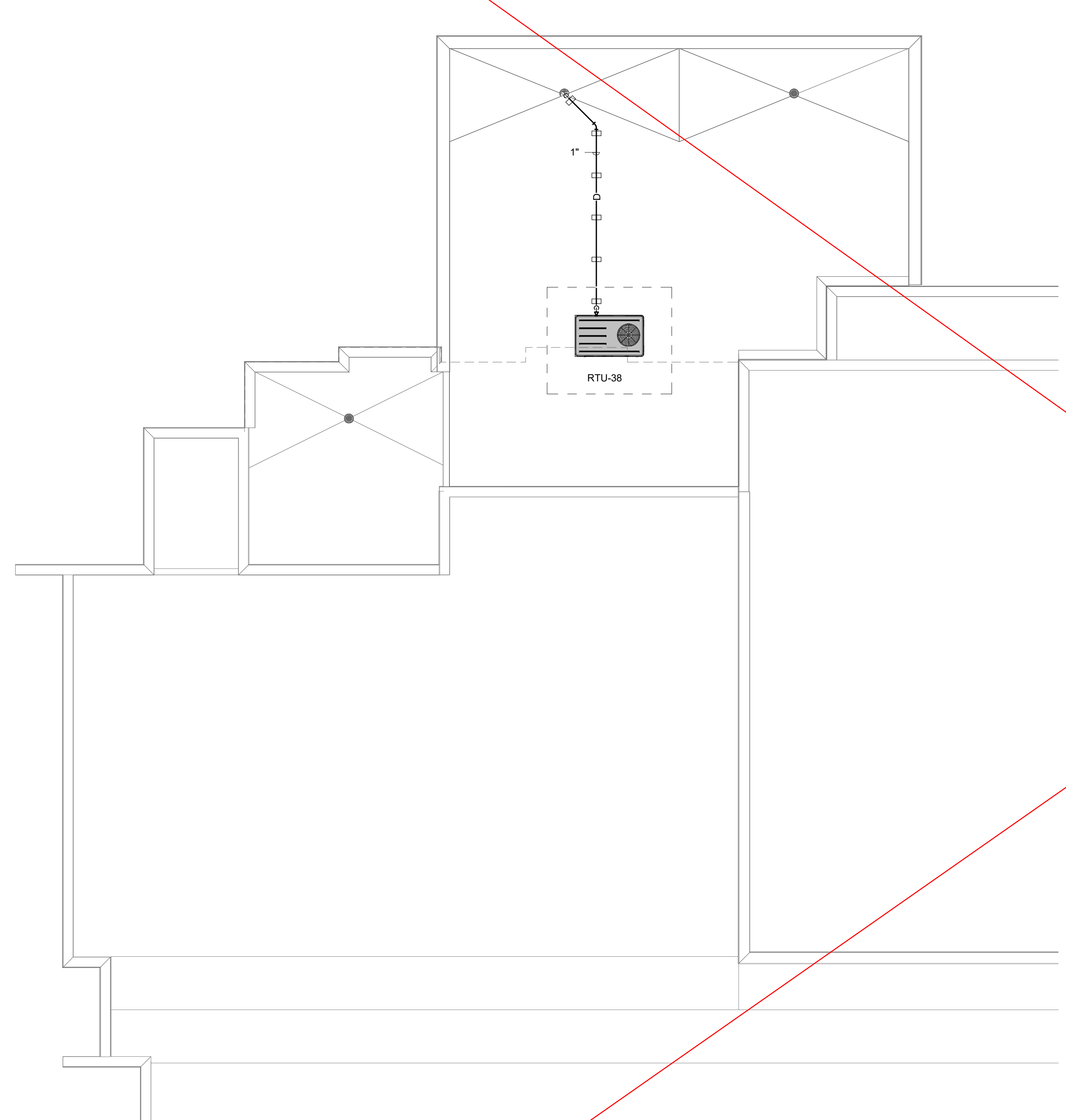
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CLOVER, SOUTH CAROLINA

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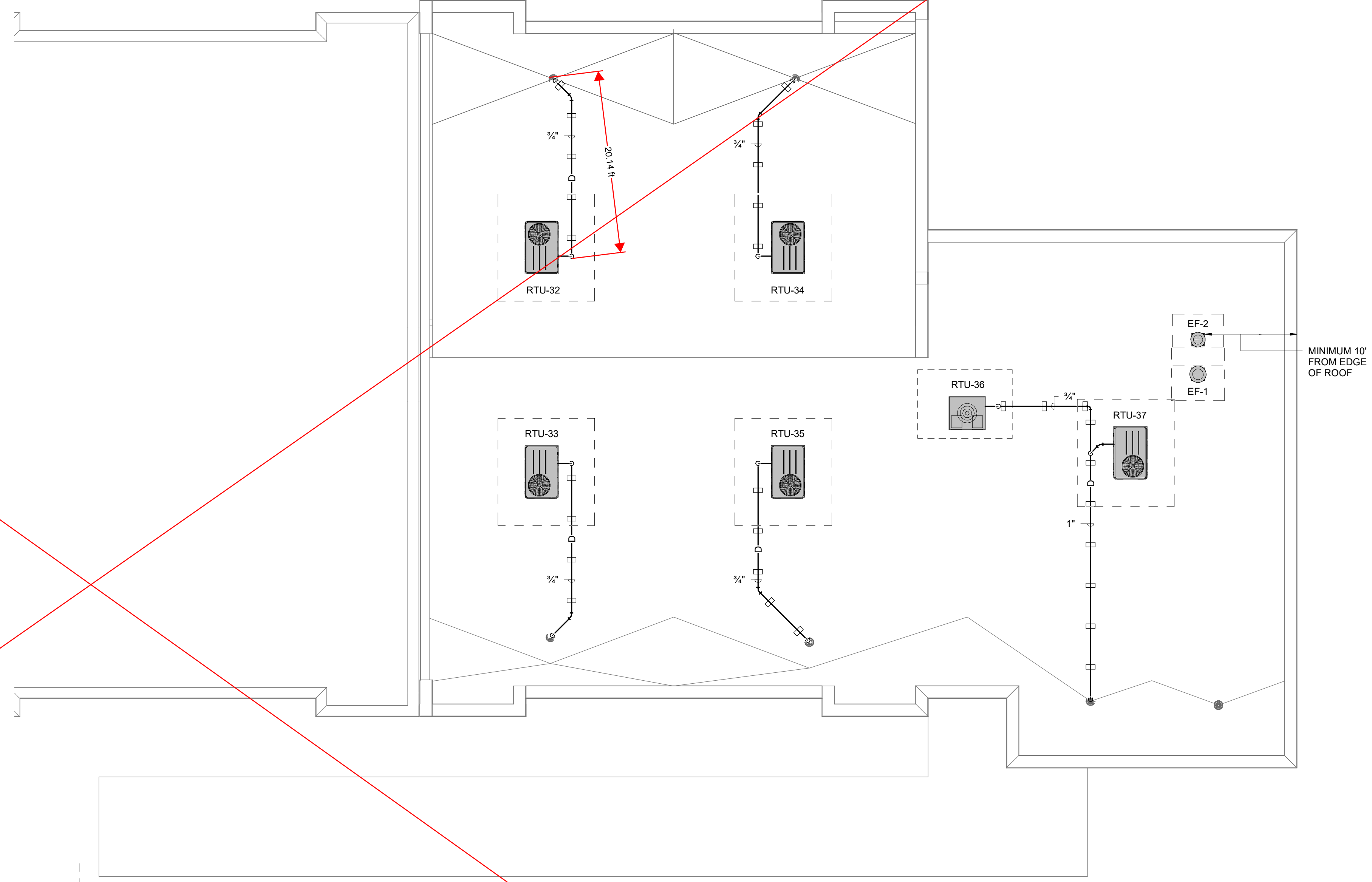
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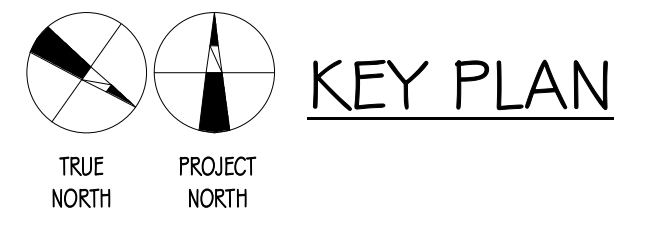
M201



1 CAFETERIA ADDITION ROOF PLAN - HVAC
M201 1/8" = 1'-0"

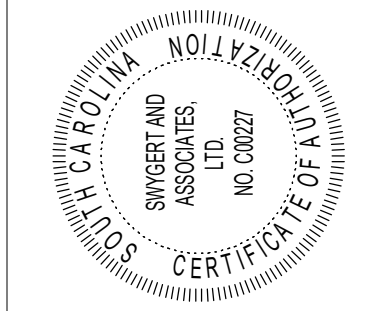
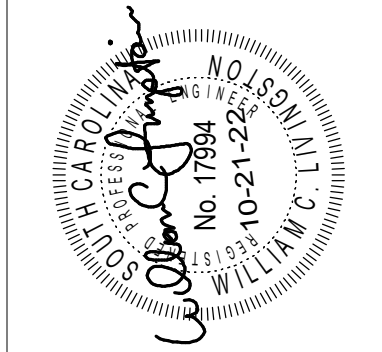


2 CLASSROOM ADDITION ROOF PLAN - HVAC
M201 1/8" = 1'-0"



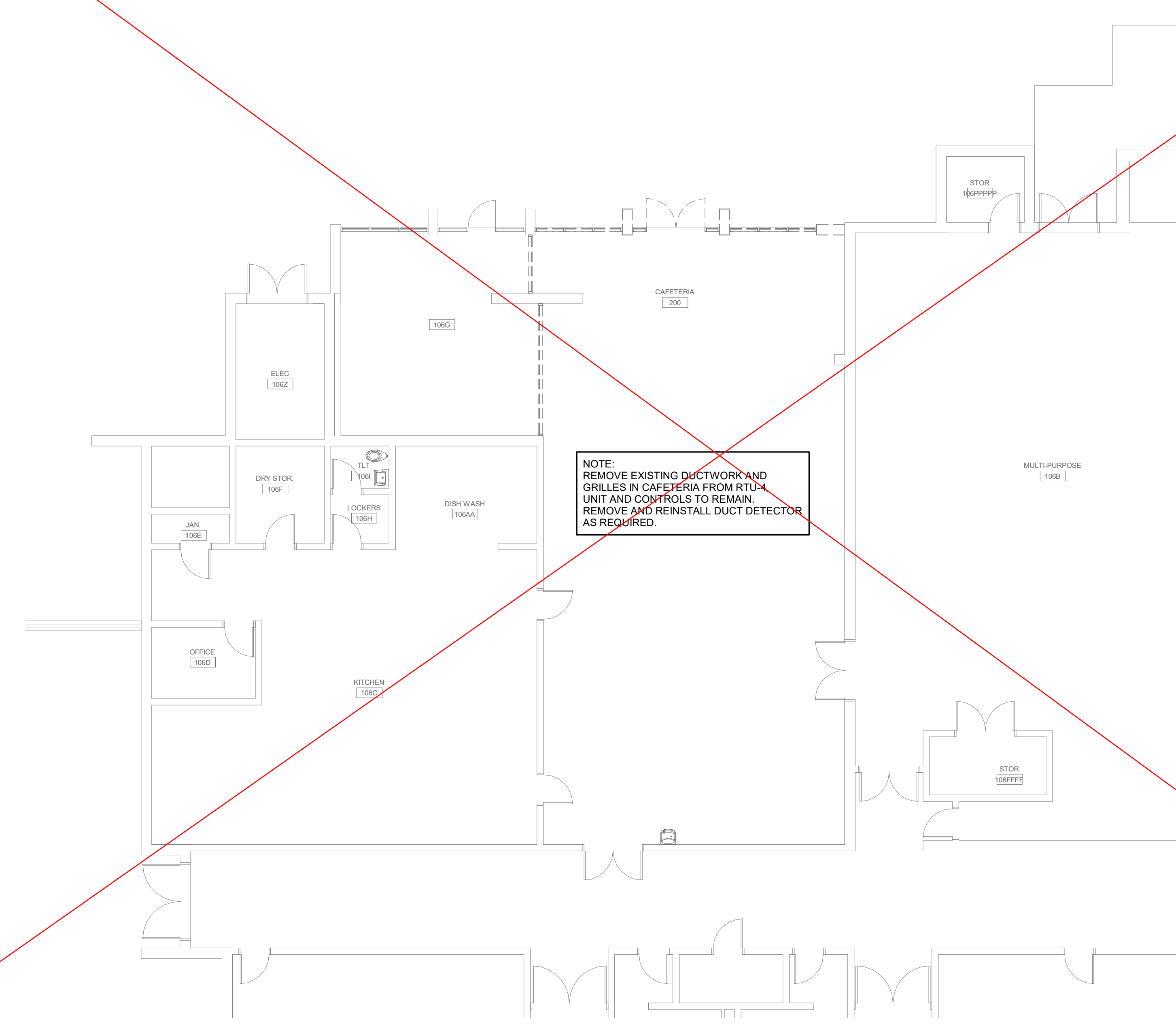
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 DBA Swygart & Assoc., Ltd. Telephone: (803) 791-9300
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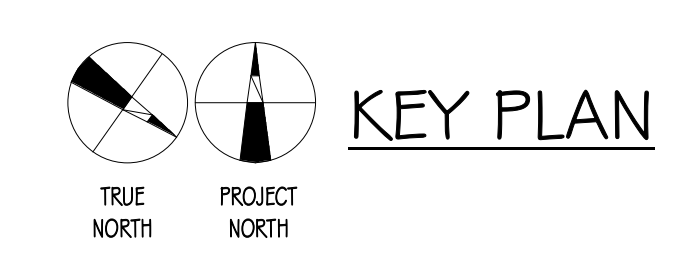
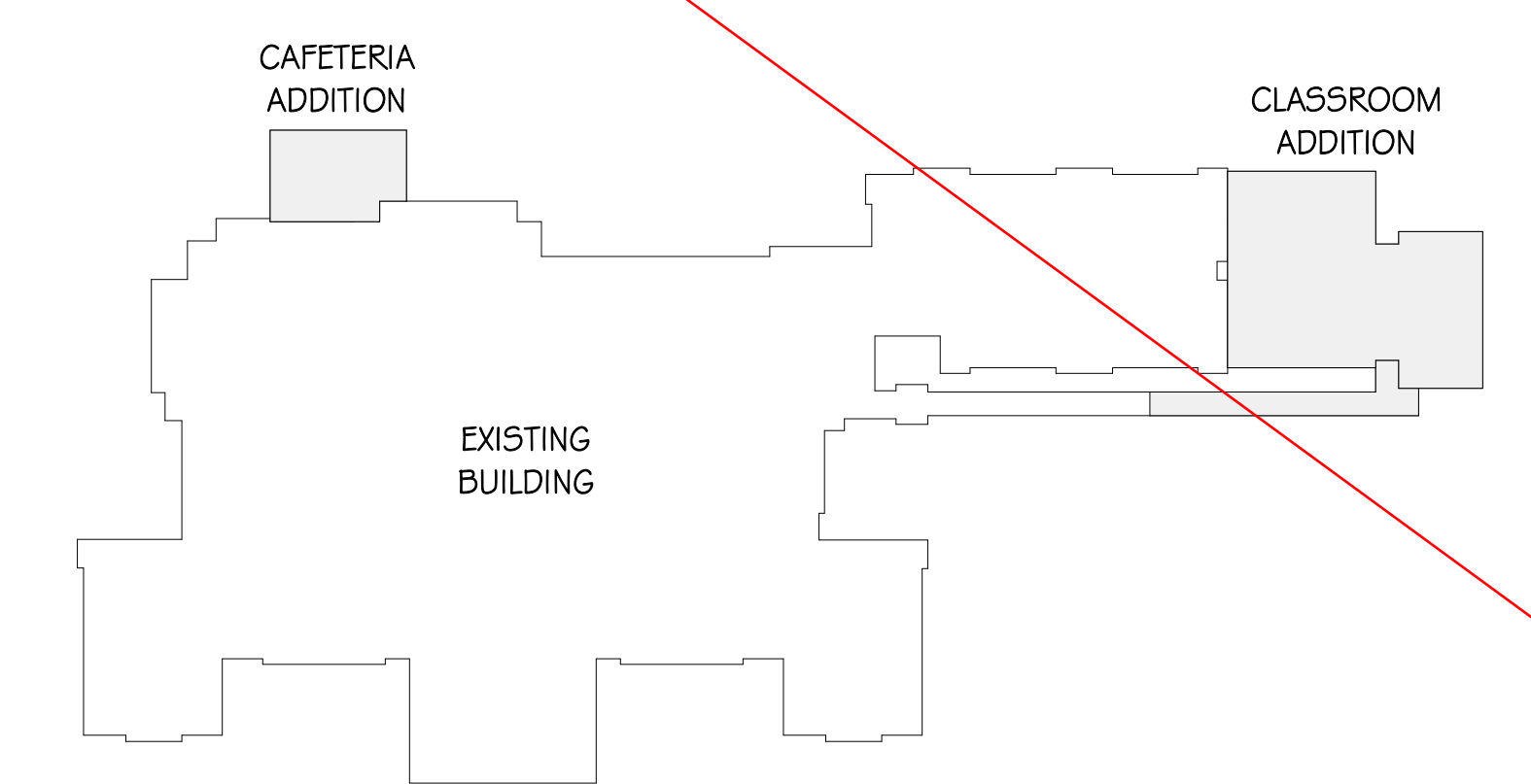


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**BETHANY ELEMENTARY SCHOOL ADDITIONS
CLOVER SCHOOL DISTRICT
CLOVER, SOUTH CAROLINA**



1 CAFETERIA DEMOLITION PLAN - HVAC
MD101 1/8" = 1'-0"



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No	Description	Date

DRAWN BY: **JKB**
 CHECKED BY: **WCL**
 COMM NO: **21025**
 DATE: **OCTOBER 21, 2022**
 SHEET TITLE: **DEMOLITION PLANS - HVAC**

SHEET NO: **MD101**

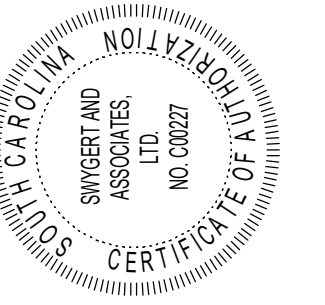
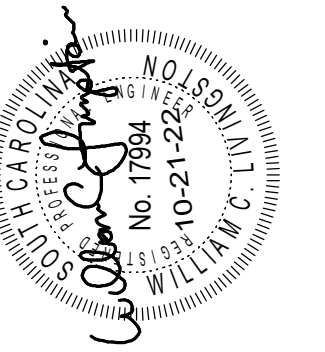
Jumper

Carter

Sease

ARCHITECTS

412 Meeting Street
West Columbia
South Carolina



BETHANY ELEMENTARY SCHOOL ADDITIONS
CLOVER SCHOOL DISTRICT
CLOVER, SOUTH CAROLINA

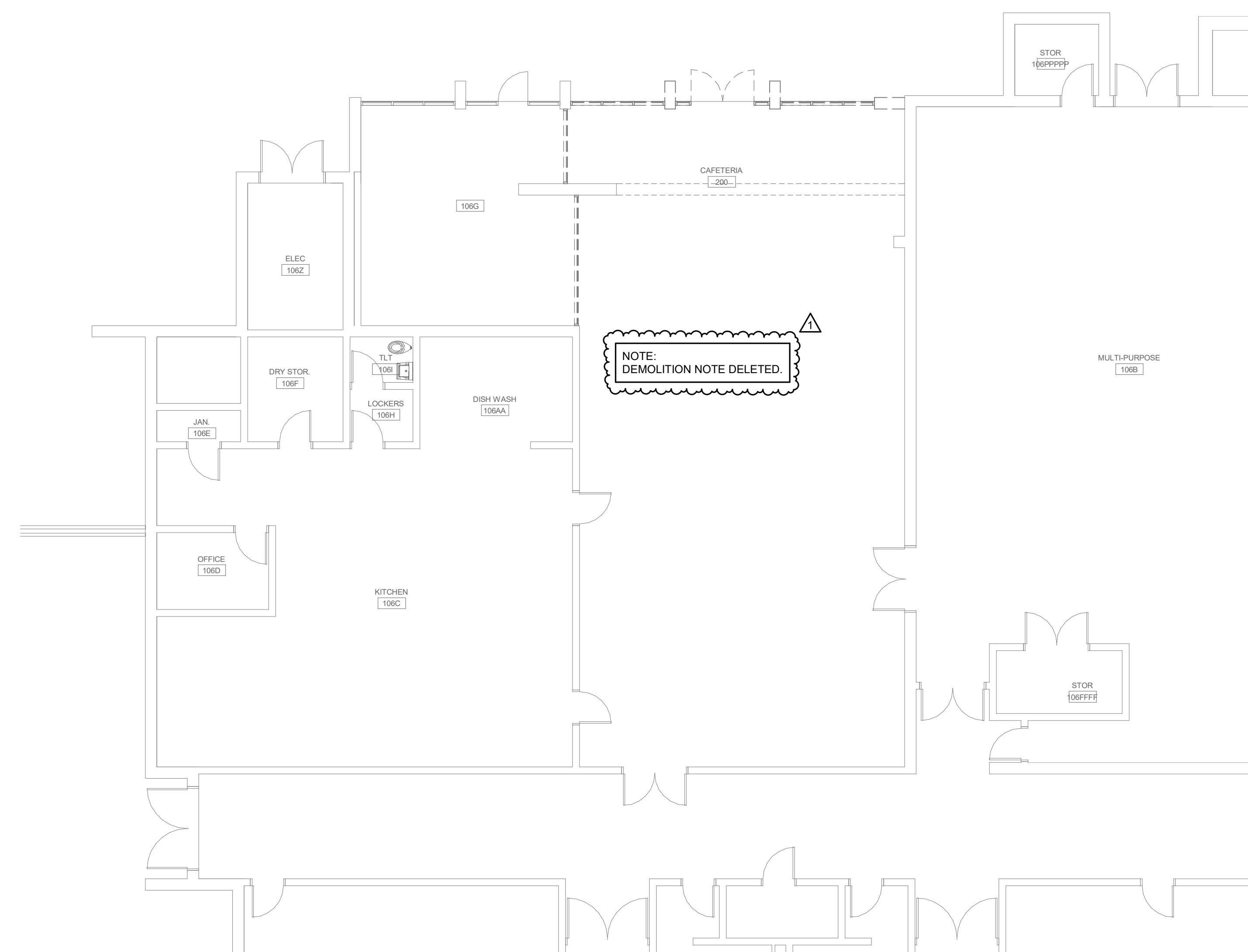
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No	Description	Date
1	ADDENDUM #3	12/08/22

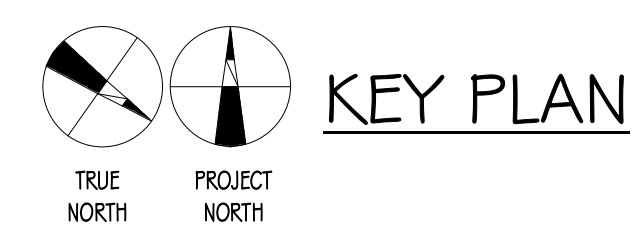
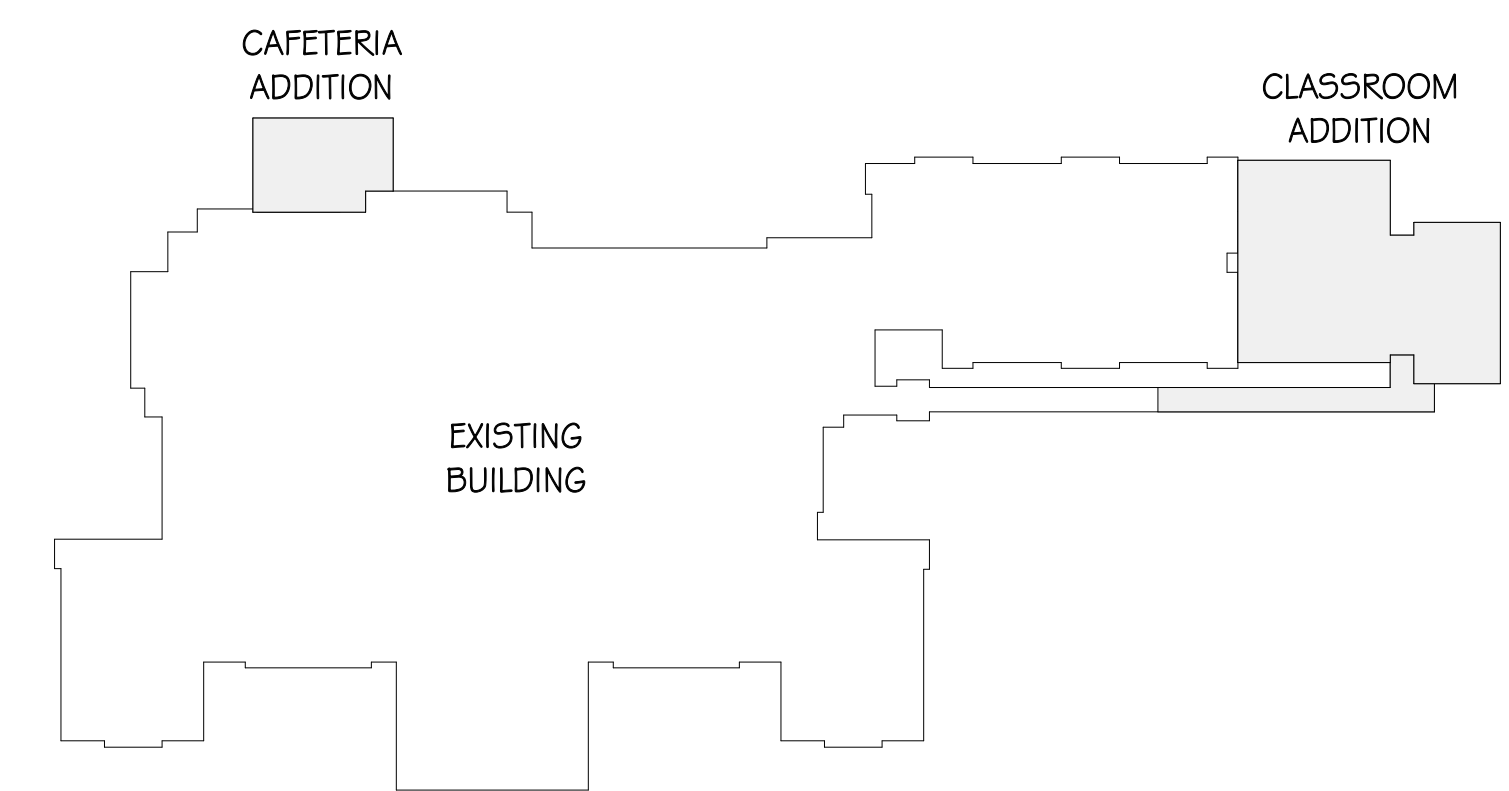
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 COMM NO: 21025
 DATE: OCTOBER 21, 2022
 SHEET TITLE: DEMOLITION PLANS - HVAC

SHEET NO:

MD101



1 CAFETERIA DEMOLITION PLAN - HVAC
MD101 1/8" = 1'-0"



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