GENERAL DEMOLITION NOTES

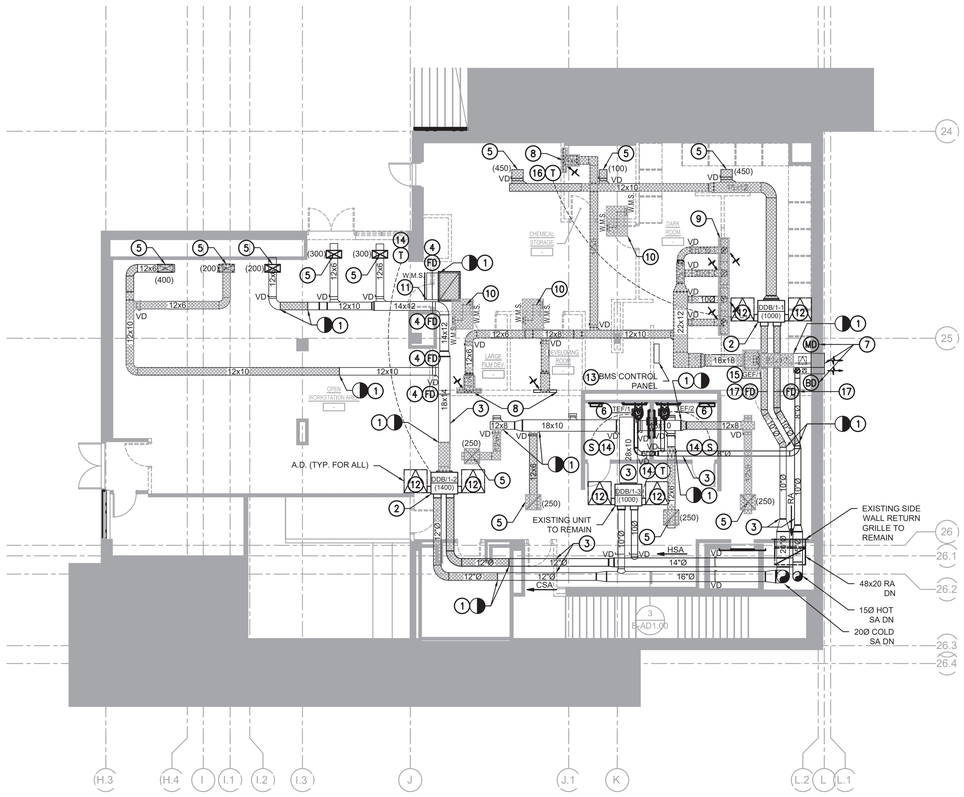
1. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VISIT THE AND VERIFY AND BECOME FAMILIAR WITH RELATIVE LOCATIONS AND EXISTING CONDITIONS. SUBMITTED BIDS WILL BE INTERPRETED TO MEAN THE CONTRACTOR VISITED THE SITE, AND ALL COST AND CHARGES MADE NECESSARY BY THE EXISTING CONDITIONS ARE INCLUDED.
2. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, AND SERVICES FOR THE PROPER EXECUTION OF DEMOLITION WORK. ANY LABOR, MATERIAL, EQUIPMENT AND SERVICE NECESSARY SHALL BE PROVIDED AS IF CALLED FOR.
3. PROVIDE LADDERS, TOOLS AND OTHER EQUIPMENT AND SERVICES FOR THE MECHANICAL WORK. REMOVE IT UPON COMPLETION OF WORK.
4. WORK SHALL CONFORM TO THE LATEST EDITION OF ALL APPLICABLE LAWS, CODES AND REGULATIONS HAVING JURISDICTION.
5. SECURE ALL PERMITS, INSPECTIONS AND CERTIFICATED REQUIRED, AND PAY ALL FEES OR CHARGES FOR THE SAME.
6. WHEN WORK INVOLVES ASBESTOS, PCB OR OTHER TOXIC MATERIALS, CONTRACTOR SHALL NOTIFY OWNER WHO WILL RETAIN AN INDUSTRIAL HYGIENIST TO ESTABLISH STANDARD PROCEDURES FOR WORKING WITH/OR REMOVING TOXIC MATERIALS.
7. PROVIDE SUITABLE WRAPPING AND OTHER PROTECTION NECESSARY TO PREVENT DAMAGE TO MECHANICAL EQUIPMENT AND MATERIAL. REMOVE ALL SUCH PROTECTIVE DEVICES WHEN THEIR USE BECOMES UNNECESSARY.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF ALL EXISTING STRUCTURAL ELEMENTS DURING ALL PHASES OF HIS/HER WORK.
9. PROVIDE WEATHER TIGHT AND SECURE CLOSURES FOR ANY BUILDING OPENING LEFT OVERNIGHT. THE CONTRACTOR IS RESPONSIBLE FOR ANY BREACHED OF SECURITY OR DAMAGE CAUSED AS A RESULT OF INSUFFICIENT PROTECTION.
10. PROVIDE APPROPRIATE SEPARATION BETWEEN THE CONSTRUCTION AREA AND ADJACENT OCCUPIED SPACES TO PREVENT MIGRATION OF DUST, ODORS AND SUBSTANCES HAZARDOUS TO HUMAN HEALTH.
11. AT ALL TIMES KEEP PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL AND RUBBISH CAUSED BY AGENTS AND EMPLOYEES OF THE CONTRACTOR. RUBBISH IS TO BE REMOVED FROM THE SITE BY THE GENERAL CONTRACTOR; THE MECHANICAL CONTRACTOR SHALL ON A WEEKLY BASIS GATHER THE RUBBISH HE CREATED AND PILE IT AT THE LOCATION DESIGNATED BY THE GENERAL CONTRACTOR. IN THE EVENT OF DISPUTE OR REFUSAL TO COMPLY WITH REQUIREMENTS OF THE ABOVE PARAGRAPHS, THE OWNER SHALL HAVE THE OPTION OF REMOVING SUCH RUBBISH FROM THE PREMISES, AND BACK-CHARGING THE CONTRACTOR FOR DOING SUCH WORK.
12. REMOVED EQUIPMENT AND MATERIAL NOT DESIRED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL PROMPTLY REMOVED FROM THE SITE. EQUIPMENT AND MATERIAL DESIRED BY THE OWNER SHALL BE DELIVERED BY THE CONTRACTOR TO LOCATION DESIGNATED BY THE OWNER. OWNER WILL TAG OR OTHERWISE INDICATE THE EQUIPMENT AND MATERIAL HE DESIRES TO KEEP.
13. PROVIDE SUITABLE FIRE RATED PATCHING FOR MECHANICAL SYSTEMS AND EQUIPMENT OPENINGS CREATED BY DEMOLITION.
14. EXISTING MECHANICAL WORK THAT IS TO REMAIN, WHEN EXISTING STRUCTURE IN WHICH IT IS INSTALLED IS TO BE REMOVED, SHALL BE TEMPORARY SUPPORTED IN PLACE.
15. ALL EXISTING DEVICES AND CONTROLS INDICATED TO BE RELOCATED SHALL BE REMOVED WITH CARE AND STORED UNTIL RE-INSTALLATION.
16. REMOVAL OF EQUIPMENT, DUCTWORK, AND PIPING SHALL INCLUDE REMOVAL OF ALL ASSOCIATED VALVES, FITTINGS, HANGERS, SUPPORTS, CONTROLS, AND APPURTENANCES.
17. INFILL ALL OPENINGS LEFT BY REMOVED DUCTWORK AND PIPING. COORDINATE THIS WORK WITH GENERAL CONTRACTOR.
18. CAN AND SEAL AIR TIGHT, OPENINGS IN EXISTING DUCTWORK TO REMAIN LEFT BY REMOVAL OF DUCT BRANCHES. CAP FLUSH TO EDGE OF MAIN DUCT. REMOVAL OF ALL EXISTING DUCT COLLARS FROM EXISTING DUCTS TO REMAIN AND CAP FLUSH TO EDGE OF MAIN DUCT.
19. PLUG ALL TAPS AT MAINS WHERE BRANCH PIPING HAS BEEN REMOVED. WHERE EXISTING VALES ARE TO REMAIN, THE VALVES SHALL BE CLOSED AND CAPPED.

KEY NOTES

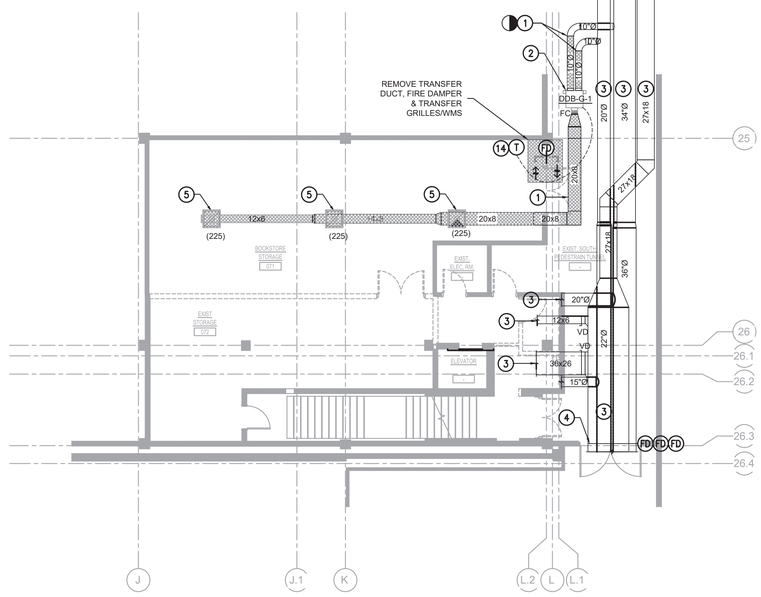
1. REMOVE EXISTING DUCTWORK UP TO POINT OF DISCONNECTION. PROVIDE AIR TIGHT CAP FOR FUTURE USE/DURING CONSTRUCTION.
2. EXISTING AHU AND ALL ASSOCIATED ACCESSORIES TO REMAIN AND TO BE RELOCATED. RELOCATE EXISTING UNIT AND ACCESSORIES TO AVOID ANY CONFLICT WITH NEW WALLS (SEE DWG M101 FOR NEW LOCATION). PROVIDE A REPORT TO THE CLIENT'S REPRESENTATIVE AND/OR EOR TO INFORM THE STATUS OF THE EXISTING UNIT AND ITS WORKING CONDITIONS PREVIOUS TO ANY DEMO WORK. IF CONTRACTOR FAIL TO PROVIDE REPORT, CONTRACTOR SHOULD BE RESPONSIBLE FOR ANY UNIT DAMAGED AFTER DEMO WORK HAS BEGUN.
3. EXISTING DUCTWORK TO REMAIN.
4. EXISTING FIRE DAMPER AND ACCESS DOOR TO REMAIN.
5. CONTRACTOR TO TAKE READINGS OF SA FLOW (CFM VALUE) PRIOR TO DEMOLITION WORK. PROVIDE PRE-CONSTRUCTION AIR BALANCING REPORT TO EOR.
6. EXISTING TOILET EXHAUST FAN , DUCTWORK AND ASSOCIATED ACCESSORIES TO REMAIN.
7. EXISTING EA PLENUM, MOTORIZED DAMPER, BACK-DRAFT DAMPER AND OUTDOOR LOUVER TO REMAIN. MOTORIZED TO BE LEFT IN NORMALLY CLOSED POSITION.
8. REMOVED EXISTING CONCEALED DUCT ALONG WITH SIDEWALL AIR TERMINAL.
9. REMOVED EXISTING DUCT ALONG WITH CEILING AIR TERMINAL.
10. REMOVE EXISTING TRANSFER AIR DUCT/GRILLES.
11. EXISTING TRANSFER DUCT, FIRE DAMPER AND ACCESSORIES TO REMAIN.
12. EQUIPMENT SERVICE ACCESS SHALL BE MAINTAINED AT AT TIMES (BEFORE AND AFTER CONSTRUCTION).
13. EXISTING BMS CONTROL PANEL SHALL BE RELOCATED. VERIFY IN FIELD IF CONTROL PANEL CAN BE RELOCATED WITHOUT AFFECTING ITS PERFORMANCE. REPORT TO CLIENT'S REPRESENTATIVE AND EOR FIELD CONDITIONS FOR APPROVAL BEFORE ANY REMOVAL. PROVIDE TEMPORARY SUPPORT AND PROTECT PANEL AS REQUIRED DURING CONSTRUCTION. SEE PROPOSED NEW LOCATION ON DWG BM-101.
14. RELOCATE EXISTING THERMOSTAT TO NEW LOCATION SHOWN ON DWG. BM-101. EXTEND WIRING CONTROL TO ACHIEVE A COMPLETE INSTALLATION. PROTECT THERMOSTAT/SENSOR DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE.
15. REMOVE EXISTING GENERAL EXHAUST FAN GEF/1 AND ALL ASSOCIATED ACCESSORIES.
16. RELOCATE EXISTING THERMOSTAT TO NEW LOCATION SHOWN ON DWG. BM-101. EXTEND WIRING CONTROL TO ACHIEVE A COMPLETE INSTALLATION. PROTECT THERMOSTAT/SENSOR DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE.
17. REMOVE EXISTING FIRE DAMPERS ALONG WITH DUCTWORK AND ASSOCIATED ACCESSORIES.

CONTROL EXISTING DEVICES/WIRING PHASING DEMOLITION NOTES

1. DURING THE EXECUTION OF THE WORK, REQUIRED RELOCATION OF EXISTING EQUIPMENT AND SYSTEMS IN THE EXISTING AREAS WHERE NEW WORK AND CONNECTIONS ARE SCHEDULED TO BE MADE SHALL BE PERFORMED BY EACH CONTRACTOR AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE JOB CONDITIONS AND AS DETERMINED BY THE GC/CM IN CLOSE COOPERATION WITH THE ARCHITECT AND OWNER'S DESIGNATED REPRESENTATIVE TO FACILITATE THE INSTALLATION OF THE NEW SYSTEMS AND COMPLETION OF THIS CONTRACT. THE OWNER WILL REQUIRE THE CONTINUOUS OPERATION OF ALL EXISTING SYSTEMS WHILE DEMOLITION AND RELOCATION WORK OF NEW TIE-INS ARE BEING PERFORMED. OUTAGES REQUIRED FOR CONSTRUCTION PURPOSES SHALL BE SCHEDULED FOR THE SHORTEST PRACTICAL PERIODS OF TIME, IN COORDINATION WITH THE OWNER'S DESIGNATED REPRESENTATIVE FOR SPECIFIC, MUTUALLY AGREEABLE PERIODS OF TIME AFTER EACH OF WHICH THE INTERRUPTION SHALL CEASE AND SERVICE SHALL BE RESTORED. THIS PROCEDURE SHALL BE REPEATED TO SUIT THE OWNER'S WORKING SCHEDULE AS MANY TIMES AS REQUIRED UNTIL ALL WORK IS COMPLETED.
2. PRIOR TO ANY DEACTIVATION AND RELOCATION, CAPPING, VALVING, TIE-IN OR DEMOLITION WORK, CONSULT THE DRAWINGS AND ARRANGE A CONFERENCE WITH THE ARCHITECT AND THE OWNER'S REPRESENTATIVE IN THE FIELD TO INSPECT EACH OF THE ITEMS TO BE DEACTIVATED, REMOVED OR RELOCATED. CARE SHALL BE TAKEN TO PROTECT ALL EQUIPMENT DESIGNATED TO BE RELOCATED AND REUSED. GIVE NOTICE TO ALL PARTIES, WITH A MINIMUM OF (5) WORKING DAYS IN ADVANCE.
3. ALL DRAINING OF EXISTING SYSTEMS, FILLING AND VENTING REQUIRED TO REMOVE AND RELOCATE EXISTING PIPING SYSTEMS SHALL BE INCLUDED AND PROVIDED UNDER THIS CONTRACT AS REQUIRED TO PERFORM THE VARIOUS EQUIPMENT OR PIPING RELOCATIONS OR NEW TIE-INS.
4. EXCEPT AS OTHERWISE NOTED, ALL DEACTIVATION, SAFE CAPPING, VALVING, ETC., OF SYSTEMS DESIGNATED TO BE DEMOLISHED SHALL BE PROVIDED BY EACH TRADE, AS APPLICABLE, AND ALL DEMOLITION, REMOVAL AND DISPOSAL OF DEMOLISHED MATERIALS SHALL BE PERFORMED BY THE GC / CM. ALL EQUIPMENT SCHEDULED TO BE REMOVED SHALL BE INSPECTED BY THE OWNER, AND, IF HE DECIDES THAT SUCH EQUIPMENT IS TO BE SALVAGED, EACH CONTRACTOR SHALL DELIVER SAID EQUIPMENT TO AN AREA WITHIN THE SITE BOUNDARIES AS DETERMINED BY THE OWNER AND ARCHITECT.
5. THE PHASING OF THE WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE GC / CM CONSTRUCTION SCHEDULE. THE NEW SYSTEMS WILL BE INSTALLED AND COMPLETELY COMMISSIONED PRIOR TO OCCUPANCY. COORDINATE REQUIREMENTS FOR TEMPORARY HEAT OR REROUTING OF EXISTING SERVICES AS REQUIRED TO ACCOMPLISH THE CONSTRUCTION SCHEDULE.
6. FOR CONTROLS DEVICES & WIRING RELATED DEMOLITION SCOPE OF WORK, SEE KEY NOTES 2, 13,14 & 16 IN THIS DWG.



1 MECHANICAL - UPPER LEVEL PART PLAN DEMOLITION WORK
1/8" = 1' 0"



2 MECHANICAL - LOWER LEVEL PART PLAN DEMOLITION WORK
1/8" = 1' 0"

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REVISIONS

ISSUE

MECHANICAL - UPPER & LOWER LEVEL PART PLANS DEMOLITION WORK

GOODY CLANCY PROJECT NUMBER: 24006

FILE NAME:

DRAWN:	AA, PE	DATE:	01/10/2025
CHECKED:	MM, PE	SCALE:	AS NOTED

DRAWING NO.:

DM101

HVAC DESIGN CRITERIA

COOLING & HEATING SYSTEM CAPACITY IS BASED ON THE FOLLOWING DESIGN CONDITIONS. (AS PER THE LATEST ASHRAE STANDARD 170)

INSIDE AMBIENT DESIGN PARAMETERS:		OUTSIDE AMBIENT DESIGN PARAMETERS:	
SUMMER:	72°F(DB)/55% RH	SUMMER:	95°F(DB)/75°F(WB)
WINTER:	70°F(DB)/30% RH	WINTER:	13.5°F(DB)

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE THE WORK SHOWN ON THESE DRAWINGS WITH ALL OTHER TRADES.
2. ALL WORK TO COMPLY WITH THE PROVISIONS OF THE:
   LOCAL BUILDING CODE
   LOCAL ENERGY CODE
   NFPA
   ASHRAE
3. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS OF THE SITE AND/OR BUILDING.
4. UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, SECURE AND PAY FOR THE REQUIRED CONSTRUCTION PERMIT(S), FEES, LICENSES AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK. APPLICATION FOR CONSTRUCTION PERMITS SHALL BE PROCESSED THRU THE DOB.
5. COORDINATION OF ALL WORK UNDER THIS CONTRACT SHALL BE MAINTAINED TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE WORK/PROJECT.
6. PERFORM ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS PARTS FIT TOGETHER PROPERLY WITHOUT COMPROMISING THE QUALITY OF THE WORK.
7. ADEQUATELY BRACE AND PROTECT ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, WRECKAGE, COLLAPSE, DISTORTIONS AND ALL ALIGNMENTS ACCORDING TO CODES AND STANDARDS OF GOOD PRACTICE.
8. PATCH REPAIR ALL FLOORS, WALLS, CEILINGS, ETC. DAMAGED OR EXPOSED DUE TO WORK OR REMOVALS AND FINISH TO MATCH ADJOINING SURFACES.
9. WHERE MANUFACTURER'S NAMES AND PRODUCT NUMBERS ARE INDICATED ON THE DRAWINGS IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHING OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS. ALL MANUFACTURED PRODUCTS ARE TO BE ENGINEER/ARCHITECT APPROVED. ALL PRODUCTS MUST BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR APPROVAL.
10. FIRE STOPPING SHALL BE INSTALLED AT ALL PENETRATIONS OF FIRE RATED CONSTRUCTION AS PER SPECIFICATIONS.
11. ADDITIONAL NOTES WHICH ARE APPLICABLE TO THIS PROJECT MAY BE FOUND THROUGHOUT THE CONTRACT DRAWINGS.
12. NO DOB VIOLATIONS ARE BEING CORRECTED IN THIS APPLICATION.
13. THE CONTRACTOR SHALL, UNLESS OTHERWISE PROVIDED IN THE CONTRACT DOCUMENTS, SECURE AND PAY FOR REQUIRED INSPECTIONS, PERMIT(S), FEES, LICENSE AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
14. ALL NEW EQUIPMENT SHALL BE SET OR MOUNTED ON A LEVEL BASE CAPABLE OF SUPPORTING AND DISTRIBUTING THE WEIGHT CONTAINED THEREON. ALL EQUIPMENT SHALL BE SECURED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

NYS ENERGY CODE 2020 (IECC 2018)

TO THE BEST OF APPLICANT KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT PLANS AND APPLICATIONS ARE IN COMPLIANCE WITH THE NYS ENERGY CODE 2020 (BASED ON IECC 2018).

MECHANICAL DRAWING LIST

MECHANICAL GENERAL NOTES

1. THE WORK TO BE DONE UNDER THESE SPECIFICATIONS AND THE DRAWINGS CONSISTS OF PROVIDING ALL EQUIPMENT, MATERIALS, LABOR AND SERVICES AND PERFORMING ALL OPERATIONS TO COMPLETE THE MECHANICAL CONSTRUCTION WORK FOR THIS PROJECT. ANY WORK NOT SPECIFICALLY COVERED BY THESE SPECIFICATIONS OR INDICATED ON THE MECHANICAL/ELECTRICAL/PLUMBING PLANS, BUT NECESSARY TO COMPLETE OR PERFECT ANY PART OF THIS INSTALLATION IN A SUBSTANTIAL MANNER, SHALL BE PROVIDED WITHOUT EXTRA COST TO THE OWNER.
2. THE TERM "FURNISH" SHALL MEAN TO OBTAIN AND SUPPLY TO THE JOB SITE. THE TERM "INSTALL" SHALL MEAN TO FIX IN POSITION AND CONNECT FOR USE. THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL. THE TERM "MECHANICAL WORK" OR "WORK" SHALL MEAN ALL LABOR, MATERIAL, EQUIPMENT, SCAFFOLDING, RIGGING, TOOLS, SUPERVISION, SERVICES AND OTHER INCIDENTALS NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT, MATERIALS AND LABOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM AS INDICATED ON THE DESIGN DOCUMENTS.
4. ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER AND SHALL BE DONE IN ACCORDANCE WITH GOOD TRADE PRACTICE AND IN CONFORMANCE WITH APPLICABLE MANUFACTURERS RECOMMENDATIONS.
5. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT, GENERAL CHARACTER, LOCATION AND ARRANGEMENT OF THE WORK UNDER THIS CONTRACT. WHERE JOB CONDITIONS REQUIRE MINOR CHANGES OR ADJUSTMENTS IN THE INDICATED LOCATIONS OR ARRANGEMENT OF THE WORK, SUCH CHANGES SHALL BE PROVIDED WITHOUT EXTRA COST THE CONTRACTOR SHALL RE-INSTALL EQUIPMENT THAT HAS INADEQUATE OR UNSAFE ACCESSIBILITY.
6. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AT THE SITE AND NOTIFY THE OWNER/ENGINEER OF ANY DISCREPANCIES PRIOR TO AWARDING OF BID.
7. COORDINATE HVAC SYSTEM INSTALLATION WITH EXISTING CONDITIONS. CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND INVESTIGATE REQUIREMENTS FOR HVAC SYSTEM INSTALLATION. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. ALL CHANGES MADE IN THE FIELD SHALL BE RECORDED ON AS-BUILT DRAWINGS, SHOP DRAWINGS, AND MAINTENANCE MANUALS. PROVIDE FINAL AS-BUILT CONDITIONS IN AUTOCAD FORMAT.
9. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PER SPECS PRIOR TO PURCHASING OR INSTALLING EQUIPMENT AND SYSTEMS INDICATED ON CONTRACT DOCUMENTS. PRIOR TO SUBMITTAL, CONTRACTOR SHALL VERIFY THAT ADEQUATE SPACE EXISTS FOR THE SUBMITTED EQUIPMENT. SHOP DRAWINGS MUST BE REVIEWED BY ARCHITECT/ENGINEER.
10. CONTRACTOR SHALL OBTAIN ALL PERMITS, INSPECTIONS AND APPROVALS PRIOR TO CONSTRUCTION, AND PAY ALL RELATED FEES. OWNER WILL HIRE AND PAY FOR EXPEDITOR FEES. ALL PERMIT FEES ARE BY CONTRACTOR.
11. ALL MATERIALS, EQUIPMENT AND INSTALLATIONS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE BUILDING AND MECHANICAL CODES, SMACNA, UL, MANUFACTURERS' RECOMMENDATIONS, AND TO THE REQUIREMENTS OF FEDERAL, STATE AND LOCAL REGULATORY AGENCIES AND AUTHORITIES HAVING JURISDICTION.
12. IN THE ABSENCE OF OTHER SPECIFIC INSTRUCTIONS, ALL WORK AND MATERIALS SUPPLIED SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF THEIR ACCEPTANCE BY THE OWNER.
13. CONTRACTOR SHALL NOT CONCEAL ANY WORK UNTIL INSPECTED BY MECHANICAL INSPECTOR AND/OR ARCHITECT /ENGINEER. CONTRACTOR SHALL NOTIFY A/E OF A SCHEDULED INSPECTION TIME WITHIN 72 HOURS.
GENERAL CONTRACTOR SHALL NOT CONCEAL WORK UNTIL APPROVED, REGARDLESS OF SCHEDULE.
14. REFER TO SPECIFICATIONS ON DRAWINGS, DETAILS AND EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
15. ALL EQUIPMENT, PIPING AND VALVES SHALL HAVE SPECIFIED IDENTIFICATION LABELS AND AS INDICATED.
16. CONTRACTOR AND HIS SUBCONTRACTORS SHALL WORK WITH A FULL SET OF LATEST MECHANICAL DRAWINGS. IT IS CONTRACTOR'S RESPONSIBILITY TO OBTAIN THESE DRAWINGS FROM GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY OTHER TRADES DUE TO SUBSTITUTION OF OTHER THAN SCHEDULED EQUIPMENT. WHEN EQUIPMENT FURNISHED IS DIFFERENT THAN INDICATED, THE COST OF ADDITIONAL ELECTRICAL SERVICE, STRUCTURAL AND RELATED WORK SHALL BE PAID BY THIS CONTRACTOR.
18. EACH TRADE CONTRACTOR SHALL RECEIVE ALL DRAWINGS AND SPECIFICATION SECTIONS ISSUED AS PART OF THE OVERALL BID PACKAGE. ALL CONTRACTORS ARE TO RECEIVE, REVIEW, AND COORDINATE ALL OF THEIR WORK AS SHOWN OR REFERENCED ON THE OTHER TRADE DOCUMENTS. ALL WORK SHOWN OR REFERENCED ON THE OTHER TRADE DOCUMENTS SHALL BE INCLUDED AS PART OF THE OVERALL PROJECT SCOPE FOR THAT PARTICULAR DISCIPLINE AND TRADE.
19. SCHEDULE THE WORK UNDER THIS CONTRACT WITH WORK OF OTHER TRADES AS NOT TO DELAY THE OVERALL PROGRESS OF THE PROJECT.
20. PRIOR TO EQUIPMENT STARTUP, CONTRACTOR SHALL PERFORM THE SPECIFIED STARTUP AND COMMISSIONING PROCEDURES.
21. NOTIFY ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO PURCHASING EQUIPMENT AND PRIOR TO CUTTING OPENINGS.
22. REVIEW ALL DISCIPLINES DRAWINGS INCLUDING ARCHITECTURAL AND STRUCTURAL, AND COORDINATE IN FIELD ALL WORK WITH OTHER TRADES AND WITH EXISTING CONDITIONS PRIOR TO INSTALLATION OF ANY WORK. REPORT ALL CONFLICTS IMMEDIATELY TO ARCHITECT AND/OR ENGINEER.
23. VERIFY THE ACTUAL LOCATIONS AND EXACT DIMENSIONS OF ALL EQUIPMENT, CASEWORK, DEVICES, FIXTURES, SWITCHES, SENSORS, ETC. DURING FIELD VISITS AND PRIOR TO PERFORMING ANY ROUGH-IN WORK FOR THE UTILITIES AND DUCTWORK. REPORT DISCREPANCIES IMMEDIATELY TO ARCHITECT AND/OR ENGINEER.
24. ALL ADJUSTABLE THERMOSTATS AND TEMPERATURE SENSORS SHALL BE MOUNTED 46" ABOVE FINISHED FLOOR.
25. COORDINATE LOCATION OF ALL WALL, FLOOR AND ROOF OPENINGS WITH STRUCTURAL AND OTHER TRADES.
26. COORDINATE THE LOCATIONS OF ALL EQUIPMENT AND REGISTERS WITH THE LATEST ARCHITECTURAL DRAWINGS PRIOR TO PERFORMING AND ROUGH-IN WORK FOR THE UTILITIES.
27. SCHEDULE ALL WORK, CUTTING AND BUILDING SERVICE INTERRUPTIONS WITH BUILDING OWNER AND CONSTRUCTION MANAGER PRIOR TO COMMENCING WITH THE WORK.
28. ANY CHANGES AND/OR MODIFICATIONS MUST BE REVIEWED AND APPROVED BY THE ENGINEER AND/OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
29. PROVIDE ALL ROOFING OPENINGS AND FLASHINGS REQUIRED FOR THE INSTALLATION OF ROOF MOUNTED EQUIPMENT.
30. ALL MATERIALS AND EQUIPMENT INSTALLED IN RETURN AIR PLENUMS SHALL BE NON-COMBUSTIBLE AND UL APPROVED FOR USE IN A RETURN AIR PLENUM SPACE. ALL WIRING SHALL BE NON COMBUSTIBLE OR SHALL BE ENCLOSED IN METAL CONDUIT OR PROTECTED BY A SHEET METAL COVER SECURED WITH METAL FASTENERS.
31. INSULATION, FITTINGS, COVERS AND FINISHES IN RETURN AIR PLENUM SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50.
32. PROVIDE ACCESS PANELS AS REQUIRED FOR ALL VALVES, DAMPERS, CONTROLS, OR OTHER EQUIPMENT.
33. ALL ROOFING WORK SHALL BE PERFORMED BY AUTHORIZED ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY.
34. SUPPORT ALL EQUIPMENT, PIPING AND DUCTWORK FROM BUILDING STRUCTURE TO PROVIDE A VIBRATION FREE INSTALLATION. OTHERWISE ADHERE TO THE DETAILS IN THE CONTRACT DOCUMENTS. NOTIFY ARCHITECT AND/OR STRUCTURAL ENGINEER OF ALL WEIGHTS AND METHODS OF SUPPORT. PROVIDE DETAILS TO COORDINATE CONCRETE PADS AND STEEL PLATFORMS REQUIRED FOR MECHANICAL WORK.
35. CUTTING AND PATCHING AS REQUIRED AND WHERE NECESSARY TO ACCOMMODATE NEW WORK AND THE REPAIR OF EXISTING WORK.
36. CONTRACTOR SHALL PROTECT ALL SURFACES DURING RIGGING AND CONSTRUCTION INCLUDING BUT NOT LIMITED TO THE LOBBY AND HALLWAY FLOORS AND WALLS. CONTRACTOR SHALL RESTORE ALL SURFACES (WALLS, CEILINGS, FLOORS AND ROOFS) THAT ARE DAMAGED BY THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER.
37. REMOVE ALL TRASH, DEBRIS AND DEMOLITION MATERIAL FROM PREMISES AT THE END OF EACH DAY.
38. PROVIDE ACCESS PANELS IN NON LAY-IN-CEILINGS FOR SERVICE AND MAINTENANCE OF ALL CONCEALED EQUIPMENT AND DEVICES, SUCH AS HEAT PUMPS, ELECTRIC DUCT HEATERS, COILS, SMOKE DETECTORS, BALANCING DAMPERS AND FIRE DAMPERS.
39. ALL DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.
40. COORDINATE LOCATION OF NEW DUCTWORK, AIR DEVICES AND EQUIPMENT WITH LIGHT FIXTURES, SPRINKLER PIPING AND HYDRONIC PIPING.
41. SHEETMETAL FITTINGS SHOWN SHALL BE PROVIDED. NO SUBSTITUTES WILL BE ALLOWED WITHOUT PRIOR CONSENT FROM ENGINEER.
42. PROVIDE BALANCING DAMPERS IN ALL DUCT BRANCHES TO AIR DEVICES.
43. EQUIPMENT INDICATED ON THE DRAWINGS, TOGETHER WITH ITS BASE AND /OR SUPPORT, DUCTWORK CONNECTIONS, SERVICE CLEARANCES, WALL, FLOOR AND ROOF PENETRATIONS, AND ELECTRICAL REQUIREMENTS IS BASED ON THE MODEL INDICATED IN THE SCHEDULES. IF CONTRACTOR FURNISHES AN EQUIVALENT SUBSTITUTION, THE CONTRACTOR SHALL MAKE THE REQUIRED MODIFICATIONS IN THE WORK WITHOUT THE CHANGE IN CONTRACT AMOUNT.
44. DUCTWORK SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH ELECTRICAL CONTRACTOR DUCTWORK SHALL NOT COVER OR LIMIT ACCESS TO EXISTING J-BOXES.
45. INSTALLATION OF WORK SHALL PROVIDE REASONABLE ACCESSIBILITY FOR OPERATION, INSPECTION AND MAINTENANCE OF EQUIPMENT AND ACCESSORIES. PROVIDE CLEARANCES REQUIRED BY MANUFACTURERS AND APPLICABLE CODES.
46. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT AND PIPE TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
47. PROVIDE VIBRATION ISOLATION FOR ROTATING, REVOLVING OR RECIPROCATING EQUIPMENT, INCLUDING DUCTWORK CONNECTIONS TO THIS EQUIPMENT TO PREVENT TRANSMISSION OF NOISE AND VIBRATION TO BUILDING STRUCTURE AND OCCUPIED SPACES. VIBRATION ISOLATION DEVICES SHALL INCLUDE SPRING VIBRATION ISOLATORS, NEOPRENE PADDING AND DUCT /PIPE FLEXIBLE CONNECTIONS.
48. PROVIDE FLEXIBLE CONNECTIONS AT ALL FANS INLET AND OUTLET CONNECTIONS.
49. EFFECTIVELY PROTECT ALL MATERIALS AND EQUIPMENT FROM DUST, DIRT AND DAMAGE UNTIL FINAL ACCEPTANCE CLOSE ALL DUCT AND EQUIPMENT OPENINGS DURING CONSTRUCTION WITH SUITABLE PROTECTIVE COVERING BEFORE, DURING AND FOLLOWING INSTALLATION.
50. REMOVE TEMPORARY AIR FILTERS AND PROVIDE NEW FLLTERS IN ALL AIR CONDITIONING EQUIPMENT WITHIN THE SCOPE OF WORK UPON COMPLETION OF CONSTRUCTION AND BEFORE BALANCING.
51. CONTROL WIRE AND CONDUIT SHALL COMPLY WITH NEC AND ELECTRICAL SPECIFICATIONS.
52. ALL SERVICES TO EXISTING BUILDINGS SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED.
53. PROVIDE SELECTIVE CEILING DEMOLITION TO PLACE NEW DUCTWORK AND DIFFUSERS. REPLACE DAMAGED CEILING TILES AND GRIDS RESULTING FROM DEMOLITION. NEW CEILING TILES SHALL MATCH WITH EXISTING.
54. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS AND COORDINATION WITH ALL OTHER TRADES, INCLUDING BUT NOT LIMITED TO STRUCTURAL, LIGHTING, ELECTRICAL, PLUMBING, AND OTHER EXISTING AND NEW WORK. VERIFY ALL EXISTING CONDITIONS IN FIELD PRIOR TO PURCHASING EQUIPMENT. ALL DISCREPANCIES OR POTENTIAL PROBLEMS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO BIDDING. PROVIDE ADDITIONAL MATERIALS AND LABOR TO RELOCATE OR REPLACE MECHANICAL WORK AS REQUIRED TO ALLOW SPACE FOR THE WORK OF ALL TRADES.
55. THE WORK INCLUDES CONNECTION TO AN EXISTING MECHANICAL, ELECTRICAL, FIRE ALARM, AND CONTROL SYSTEMS ON THE PROJECT. CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ANY LABOR AND MATERIALS NECESSARY TO UNCOVER, TRACE, TEST, FIELD VERIFY, AND MEASURE ANY EXISTING EQUIPMENT OR SYSTEMS THAT ARE AFFECTED BY THE WORK UNDER THIS CONTRACT.
56. THE DRAWINGS INDICATE APPROXIMATE LOCATIONS BASED UPON INFORMATION OBTAINED WITHOUT REMOVING CEILING TILES OR WALLS. THEREFORE, THE CONTRACTOR SHALL INCLUDE IN THEIR BID CONTINGENCY COSTS TO ADDRESS CONFLICTS BETWEEN DESIGN AND EXISTING CONDITIONS.
57. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS RELATED TO REMOVING AND REPLACING ALL CEILINGS AS REQUIRED FOR THE MECHANICAL AND ELECTRICAL WORK ON THIS PROJECT.
58. THE CONTRACTOR SHALL INCLUDE IN THE BID THE RELOCATION OF ANY EXISTING JUNCTION BOXES (OF ANY KIND) THAT WILL BE INACCESSIBLE DUE TO THE WORK IN THIS PROJECT.
59. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL LOG ALL EXISTING EQUIPMENT AND TRACE ELECTRICAL, FIRE ALARM, AND CONTROL CIRCUITS THAT SERVE SUCH EQUIPMENT.
60. THE CONTRACTOR SHALL INCLUDE IN THEIR BID COSTS REQUIRED TO RELOCATE EXISTING CONDUITS OF ANY KIND IN ORDER TO INSTALL NEW EQUIPMENT, DUCTWORK, AND PIPING. .
61. SEISMIC REQUIREMENTS AS SPECIFICATIONS.

DUCT SYMBOLS

- NEW WORK
- RETURN DUCTWORK
- REMOVE EXISTING DUCTWORK
- A.D. OR — ACCESS DOOR (SIZES VARY AS SHOWN ON DRAWINGS)
- INDICATES SUPPLY AIR
- INDICATES EXHAUST AIR
- FD — FIRE DAMPER
- SFD — COMBINATION FIRE-SMOKE DAMPER
- S — SMOKE DAMPER
- VD — VOLUME DAMPER AND ACCESS DOOR
- MD — MOTORIZED DAMPER AND ACCESS DOOR
- DOOR UNDERCUT
- POINT OF DISCONNECTION
- POINT OF NEW CONNECTION

CONTROL SYMBOLS

- CONTROL VALVE
- PNEUMATIC THERMOSTAT
- DP — ELECTRO-PNEUMATIC SWITCH
- SW — MANUAL SWITCH
- T — DIGITAL THERMOSTAT
- CO_2 — CARBON DIOXIDE SENSOR
- SD — DUCT SMOKE DETECTOR

ABBREVIATIONS

A.D.- ACCESS DOOR
A.A.D. - AUTOMATIC AIR OPERATED LOUVER DAMPER
C.F.M. - CUBIC FEET PER MINUTE
C.C. - COOLING COIL
C.O.D. - CLEAN OUT DOOR
D.N. - DRAIN
(E) - EXISTING
EA. - EXHAUST AIR (CFM)
EX. - EXHAUST
F.D. - FIRE DAMPER
GR. - GRILLE (WITH VOLUME DAMPER)
M.A.D. - MANUAL AIR OPERATED LOUVER DAMPER
MUA - MAKE-UP AIR (CFM)
O.A.I. - OUTSIDE AIR INTAKE (FRESH AIR INLET)
RA. - RETURN AIR (CFM)
SA. - SUPPLY AIR (CFM)
TA. - TRANSFER AIR (CFM)
VENT. - VENTILATION
WMS - WIRE MESH SCREEN

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BOOKSTORE PSYCHOLOGY SWING SPACE FOR CONSTRUCTION

REVISIONS

ISSUE

MECHANICAL - SYMBOLS, LEGEND & NOTES

GOODY CLANCY PROJECT NUMBER: 24006
FILE NAME:
DRAWN: AA, PE | DATE: 01/10/2025
CHECKED: MM, PE | SCALE: N.T.S.
DRAWING NO.:

M001

CEILING MOUNTED SUPPLY AIR DIFFUSERS SCHEDULE

TAG	CFM RANGE	NECK SIZE INCHES	MAX. DUCT VELOCITY FPM	NOMINAL LOUVERED AREA SIZE W X H INCHES	MAX. NOISE RATING. NC	MANUFACTURER	MODEL NO.	LOCATION	REMARKS
CD-1	0-100	6ø	500	24X24	<20	ANEMOSTAT	EPL	CEILING MOUNTED	SEE NOTES 1 TO 3
CD-2	101-175	8ø	500	24X24	<20	ANEMOSTAT	EPL	CEILING MOUNTED	SEE NOTES 1 TO 3
CD-3	0-120	6ø	600	12X12	20	ANEMOSTAT	EPL	CEILING MOUNTED	SEE NOTES 1 TO 3

NOTES:

1. ALL DIFFUSERS SHALL BE PROVIDED WITH BACKPAN FOR FULL LOUVERED FACE APPEARANCE; NO EXCEPTIONS.
2. CONTRACTOR SHALL COORDINATE DIFFUSER'S FRAME TYPE WITH APPROVED CEILING TYPE.
3. CONTRACTOR SHALL COORDINATE DIFFUSER'S COLOR WITH ARCHITECT.

CEILING MOUNTED RETURN/EXHAUST AIR GRILLES SCHEDULE

TAG	CFM RANGE	NOMINAL SIZE WxH INCHES	MAX DUCT VELOCITY FPM	CORE AREA (SQ.FT)	MAX NOISE RAITING NC	MANUFACTURER	MODEL NO.	REMARKS
CR-1	0-150	8x8	300	0.37	<20	TITUS	3FL-45	SEE NOTES 1 TO 3
CR-2	151-264	12x12	300	0.88	<20	TITUS	3FL-45	
CR-3	0-1500	24x24	400	3.75	32	TITUS	3FL-45	

NOTES
1. CONTRACTOR SHALL COORDINATE REGISTER'S COLOR WITH ARCHITECT.
2. FOR SHEET ROCK APPLICATION PROVIDE PLASTER FRAME.
3. CONTRACTOR SHALL COORDINATE REGISTER'S BORDER TYPE WITH APPROVED CEILING TYPE.

WALL MOUNTED RETURN AIR GRILLES & REGISTERS SCHEDULE

TAG	CFM RANGE	NOMINAL SIZE W X H INCHES	MAXIMUM DUCT VELOCITY FPM	CORE AREA (SQ.FT)	MAX. NOISE RATING. NC	MANUFACTURER	MODEL NO.	REMARKS
TG-1	0-148	8X8	400	0.37	22	TITUS	3FL-45	SEE NOTES 1 TO 3
TG-2	149-228	12X8	400	0.57	24	TITUS	3FL-45	SEE NOTES 1 TO 3
TG-3	229-728	24X12	400	1.82	29	TITUS	3FL-45	SEE NOTES 1 TO 3

NOTES:

1. CONTRACTOR SHALL COORDINATE GRILLE'S COLOR WITH ARCHITECT.
2. CONTRACTOR SHALL COORDINATE GRILLE'S FRAME TYPE WITH APPROVED CEILING TYPE.
3. GRILLE LAYOUT IS FOR CONTINUOUS RUN (APPEARANCE), PROVIDE GRILLES WITH CONCEALED KEY-WAYS AND ALIGNMENT STRIPS FOR EXACT ALIGNMENT AND CLEAN, NEAT APPEARANCE.

FAN SCHEDULE

			EXTERNAL			OPER.	MOTOR									TOTAL WEIGHT	
TAG	QTY.	CFM	SP (in. wg)	FRPM	MCA	BHP	WATTS	DBA	SONES	DRIVE TYPE	VOLTS	PHASE	HERTZ	MANUFACTURER	MODEL	LBS	REMARKS
MDFX-1	1	100	0.125	650	0.3	0.04	30		2.5	DIRECT	115	1	60 CYCLE	GREENHECK	SP-B110ES	10	SEE NOTES 1, 2, 3, 4 & 6
MDFX-2	1	100	0.125	650	0.3	0.04	30	-	2.5	DIRECT	115	1	60 CYCLE	GREENHECK	SP-B110ES	10	SEE NOTES 1, 2, 3, 5 & 6

NOTES: -

1. REFER TO SPECIFICATIONS FOR ADDITIONAL FAN REQUIREMENTS.
2. REFER TO SPECIFICATIONS FOR VIBRATION ISOLATION.
3. ALL FANS SHALL BE PROVIDED WITH DISCONNECT SWITCH.
4. INTERLOCK MDFX-1 WITH THERMOSTAT. THERMOSTAT SETPOINT TO 80F (ADJUSTABLE).
5. INTERLOCK MDFX-2 WITH THERMOSTAT. THERMOSTAT SETPOINT TO 80F (ADJUSTABLE).
6. PROVIDE OPERATION AND MAINTENANCE MANUALS AS PER 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE (2018 IECC AMENDED).

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE (2018 IECC AMENDED).

TO THE BEST OF APPLICANT KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT PLANS AND APPLICATIONS ARE IN COMPLIANCE WITH THE NYS ENERGY CODE 2020 (BASED ON IECC 2018).

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BOOKSTORE PSYCHOLOGY SWING SPACE FOR CONSTRUCTION

REVISIONS

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MECHANICAL - EQUIPMENT SCHEDULES

GOODY CLANCY PROJECT NUMBER: 24006

FILE NAME:

DRAWN: AA, PE | DATE: 01/10/2025

CHECKED: MM, PE | SCALE: N.T.S.

DRAWING NO.:

M002

NEW WORK NOTES

1. PROVIDE COMPLETE AND PROPERLY FUNCTIONING HVAC SYSTEM FOR THIS PROJECT. CONTRACTOR SHALL VISIT THE PROJECT SITE, EXAMINE THESE PLANS AND ALL EXISTING DRAWINGS RELATING TO THE AREA OF WORK AND REPORT ANY DISCREPANCIES OR OMISSIONS IN THIS PLAN SET TO THE ENGINEER FOR A RESOLUTION AND CLARIFICATION PRIOR TO SUBMISSION FOR BIDS.
2. RISES AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC., ARE INDICATED FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENT FOR THESE ITEMS.
3. ALL DUCT DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS. ACCOUNT FOR INSULATION THICKNESS FOR COORDINATION WITH OTHER TRADES.
4. PROVIDE ALL 90-DEGREE SQUARE ELBOW WITH DOUBLE RADIUS TURNING VANES UNLESS OTHERWISE INDICATED. PROVIDE ACCESS DOORS UPSTREAM OF ALL ELBOWS WITH TURNING VANES.
5. LOCATE ALL MECHANICAL EQUIPMENT (RTU'S, RETURN/EXHAUST FANS, DUCTWORK) FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS, CONTROLS, AND VALVING.
6. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING UNITS , FANS, AND OTHER EQUIPMENT THAT REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
7. CONTROL WIRING OF SMOKE DETECTORS IS BY THE AWARDED GENERAL CONTRACTOR.
8. SAFETY DEVICES SHALL BE HARDWIRED TO THE FAN STARTER CIRCUIT, IN ADDITION TO THE DDC SYSTEM.
9. UNLESS OTHERWISE NOTED, ALL DUCTWORK IS OVERHEAD, TIGHT TO THE UNDERSIDE OF AN EXISTING DUCTWORK OR STRUCTURE, WITH SPACE FOR INSULATION IF REQUIRED .
10. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
11. PROVIDE ACCESS DOORS IN DUCTWORK TO PROVIDE ACCESS FOR ALL SMOKE DETECTORS, FIRE DAMPERS, VOLUME DAMPERS, COILS AND OTHER ITEMS LOCATED IN THE DUCTWORK THAT REQUIRE SERVICE AND/ OR INSPECTION.
12. PROVIDE ACCESS DOORS IN DUCTWORK FOR THE OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL FANS, VALVES, AND MECHANICAL EQUIPMENT.
13. ALL DUCTS SHALL BE GROUNDED ACROSS FLEXIBLE CONNECTIONS WITH FLEXIBLE COPPER GROUNDING STRAPS.
14. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.
15. SEE SPECIFICATIONS FOR DUCTWORK GAUGES, BRACING, HANGERS, AND OTHER REQUIREMENTS.
16. DIVISION 26 FIRE ALARM CONTRACTOR SHALL FURNISH FIRE ALARM COMPLIANT SMOKE DETECTOR TO THE SHEET METAL CONTRACTOR FOR FIELD DUCTWORK INSTALLATION, AS APPLICABLE. DIVISION 16 CONTRACTOR SHALL PROVIDE ALL SIGNAL AND CONTROL POWER WIRING.
17. SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 1 THROUGH 4.
18. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION DOCUMENTS TO THE BUILDING OWNER WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY. THOSE DOCUMENTS INCLUDE: DRAWINGS, MANUALS, AND SYSTEM BALANCING REPORTS.
19. HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS. AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN TOLERANCES PROVIDED IN PRODUCT SPECIFICATIONS. TEST AND BALANCING ACTIVITIES SHALL INCLUDE AIR SYSTEM BALANCING. CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPY OF TESTING AND BALANCING OF AIR REPORT.
20. DUCT RUNNING THROUGH FIRE-RATED CORRIDORS WALLS SHALL BE AT LEAST 0.019 IN THICK.

(#) KEY NOTES

1. PROVIDE SEAL AIR TIGHT DUCT END CAP.
2. PROVIDE NEW SA DUCTWORK FROM NEW AIR TERMINALS TO EXISTING MAIN DUCTS. PROVIDE SEAL AIR TIGHT CONNECTIONS.
3. RE-LOCATE EXISTING BMS CONTROL PANEL. EXTEND CONTROL WIRING AS REQUIRED TO ACHIEVE FULL CONTROL OF EXISTING UNITS. RELOCATION SHALL BE PERFORMED ONLY AFTER CLIENTS' REPRESENTATIVE AND EOR APPROVAL.
4. PROVIDE NEW RA DUCTWORK BETWEEN CEILING RETURN GRILLE AND TRANSFER GRILLE ABOVE CEILING GRID. RA DUCT SIZE TO MATCH TRANSFER GRILLE SIZE. SEE DETAIL ON DWG M501.
5. PROVIDE THERMOSTAT 80°F SET POINT (ADJUSTABLE). INTERLOCK MDFX WITH THERMOSTAT.
6. COORDINATE LOCATION AND INSTALLATION OF AIR TERMINALS WITH RF HVAC WAVEGUIDE, RF ENCLOSURE LAYOUT AND RF SHIELDING CONSTRUCTION GUIDELINES FOR HVAC. CONNECTIONS MUST BE MADE WITH FLEXIBLE DUCT. SYSTEMS DESIGNED TO BE CONNECTED TO A SOUND BOOTH SHOULD BE DESIGNED FOR AN NC 30-35 ENVIRONMENT. PROVIDE 6" COLLAR CONNECTION TO SUPPLY SILENCER ABOVE RF ENCLOSURE.
7. RE-LOCATE EXISTING AHU AND ASSOCIATED ACCESSORIES AND EXTEND CONTROL WIRING FROM THERMOSTAT. PROVIDE NEW DUCTWORK TO MATCH EXISTING SIZE FROM AHU TO EXISTING DUCTWORK (ALL DUCTWORK CONNECTIONS TO BE AIR SEAL TIGHT). PROVIDE FLEXIBLE CONNECTIONS BETWEEN NEW DUCTWORK AND EXISTING AHU. PROVIDE A COMPLETE AND FUNCTIONAL INSTALLATION. RELOCATION SHALL BE PERFORMED ONLY AFTER CLIENTS' REPRESENTATIVE AND EOR APPROVAL.
8. PROVIDE A 32X16 WALL PENETRATION FOR ACCESS TO EXISTING AHU. PROVIDE FIRE DAMPER AND SLEEVE TO MATCH OPENING SIZE.
9. PROVIDE SA DUCTWORK FROM EXISTING AHU TO MAIN DUCTS. PROVIDE SEAL AIR TIGHT CONNECTIONS.
10. PROVIDE NEW DUCT WITH FIRE DAMPER AND ACCESS DOOR. PROVIDE SEAL AIR TIGHT CONNECTIONS. SEE DETAILS FOR FIRE DAMPER AND ACCESS DOOR ON DWG M501.

AIR BALANCING NOTES

1- EXISTING PRE-CONSTRUCTION AIR BALANCING REPORT SHALL BE PROVIDED PREVIOUSLY TO ANY MODIFICATION TO THE EXISTING DUCTWORK SYSTEM.

2- BALANCE NEW AND EXISTING AIR TERMINALS WITH FLOW AIR CAPACITIES SHOWN ON PLAN.

CONTROL DEVICES/WIRING NEW WORK NOTES & PECIFICATIONS

1. THE AUTOMATED TEMPERATURE CONTROL (ATC) CONTRACTOR SHALL PROVIDE ALL CONTROL AND INTERLOCK WIRING FOR ALL SYSTEMS PROVIDED UNDER THE HVAC CONTRACTS.
2. ALL CONTROL WIRING SHALL BE INSTALLED IN CONDUIT AND IN ACCORDANCE WITH THE RESPECTIVE EQUIPMENT MANUFACTURER'S REQUIREMENTS, AND ALL CONNECTIONS SHALL BE PROVIDED BY THE ATC CONTRACTOR. ALL CONDUIT AND WIRING PROVIDED BY THESE CONTRACTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 26 OF THE SPECIFICATIONS.
3. PROVIDE BACNET PROGRAMMABLE THERMOSTATS AS FOLOOWS:
   a. 7-DAY PROGRAMMABLE THERMOSTATS SHALL BE USED IN ALL BUILDING AREAS7-DAY PROGRAMMABLE THERMOSTATS SHALL HAVE A LOCAL DISPLAY AND ALLOW FOR 7-DAY SCHEDULE CONFIGURATION WITH LOCAL BUTTONS.
   b. 7-DAY PROGRAMMABLE THERMOSTAT SHALL PROVIDE A 7-DAY PROGRAMMING CLOCK, UP TO THREE HEAT OR COOL OUTPUTS, FAN OUTPUT, ALLOW REMOTE TEMPERATURE SENSOR INPUT AND PROVIDE A DISPLAY IN DEGREE F.
   c. THERMOSTAT SHALL BE POWERED FROM 24 VAC.
   d. THERMOSTAT SHALL INCORPORATE BACNET STANDARD PROFILES.
   e. ACCEPTABLE MANUFACTURERS INCLUDE DISTECH EC-STAT, SCHNEIDER ELECTRIC, HONEYWELL, JOHNSON CONTROLS, AND VICONICS.
4. TEMPERATURE SENSORS AND THERMOSTATS SHALL REQUIRE NO FIELD CALIBRATIONS.
5. TEMPERATURE SENSOR AND THERMOSTATS ASSEMBLIES SHALL BE READILY ACCESSIBLE AND ADAPTABLE TO EACH TYPE OF APPLICATION IN SUCH MANNER AS TO ALLOW FOR QUICK, EASY REPLACEMENT AND SERVICING WITHOUT SPECIAL TOOLS OR SKILLS.
6. FOR CONTROLS DEVICES & WIRING RELATED NEW SCOPE OF WORK, SEE KEY NOTES 3, 5 & 7 IN THIS DWG.

(FD) FIRE DAMPER NOTES

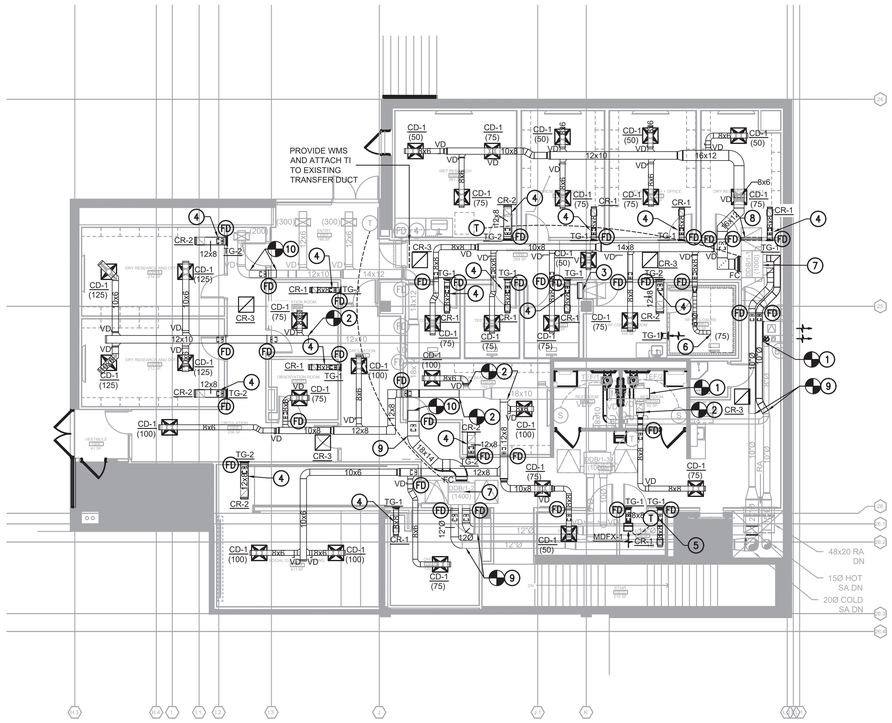
1- PROVIDE NEW FIRE DAMPER WITH ACCESS DOOR IN ALL LOCATIONS SHOWN IN THIS PLAN.

2- FOR FIRE DAMPER AND ACCESS DOOR DETAILS, REFER TO DETAILS SHOWN ON DWG. M501

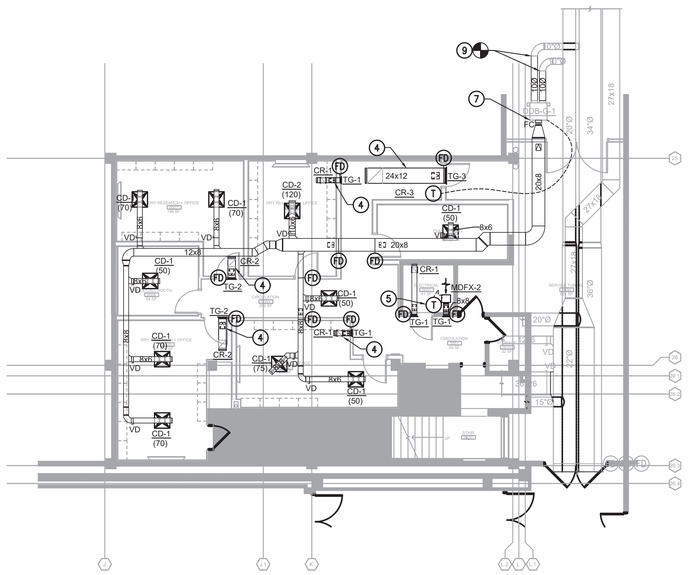
SEQUENCE OF OPERATIONS:

1- EXISTING DUAL DUCT BOX TERMINALS (SEQUENCE OF OPERATION BASED ON ORIGINAL DESIGN INTENT)
   a. THE DUAL DUCT BOX SHALL SEQUENCE AS CONSTANT VOLUME DISCHARGE & BLENDING SYSTEM . IT SHALL MODULATE ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES WITH LOCAL OVERRIDE OPTION PER ZONE.
      OCCUPIED MODE: THE UNIT SHALL MAINTAIN
      - A 72°F (ADJ.) COOLING SETPOINT
      - A 70°F (ADJ.) HEATING SETPOINT

      UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN
      - A 85°F (ADJ.) COOLING SETPOINT.
      - A 65°F (ADJ.) HEATING SETPOINT.
2- EXHAUST FAN:
   a. THE EXHAUST FAN SHALL BE INTERLOCKED WITH THE THERMOSTAT AND SHALL OPERATE ENABLED TO MAINTAIN A 80°F (ADJ.) SETPOINT. UPON CALL TO START, THE EXHAUST FAN MOTORIZED SHALL BE ENERGIZED AND START OPERATION.



1 MECHANICAL - UPPER LEVEL PART PLAN NEW WORK
1/8" = 1' 0"



2 MECHANICAL - LOWER LEVEL PART PLAN NEW WORK
1/8" = 1' 0"

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MECHANICAL - UPPER & LOWER LEVEL PART PLANS NEW WORK

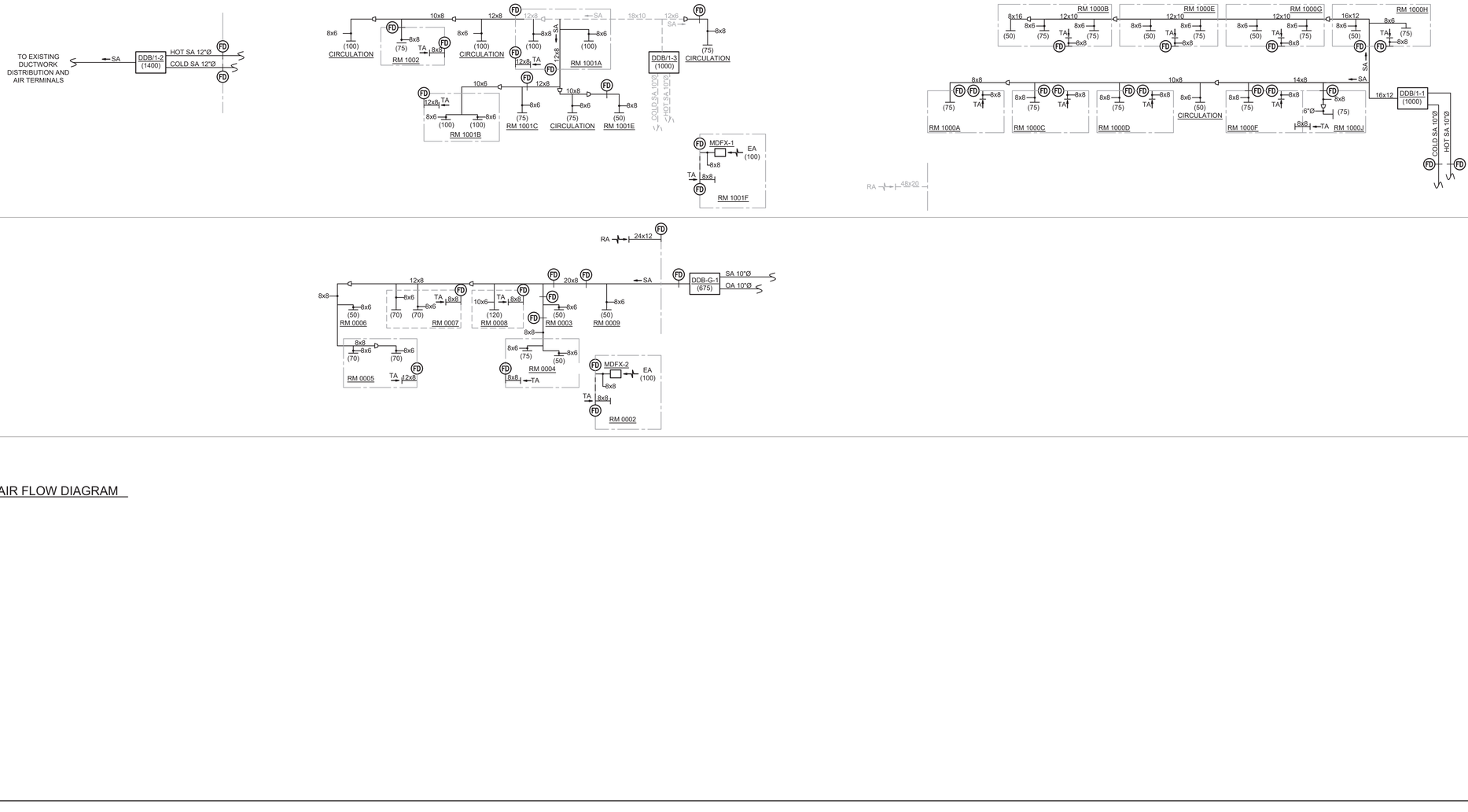
GOODY CLANCY PROJECT NUMBER: 24006

FILE NAME:

DRAWN: AA, PE	DATE: 01/10/2025
CHECKED: MM, PE	SCALE: AS NOTED

DRAWING NO.:

M101



UPPER LEVEL

LOWER LEVEL

1 MECHANICAL - AIR FLOW DIAGRAM
N.T.S.

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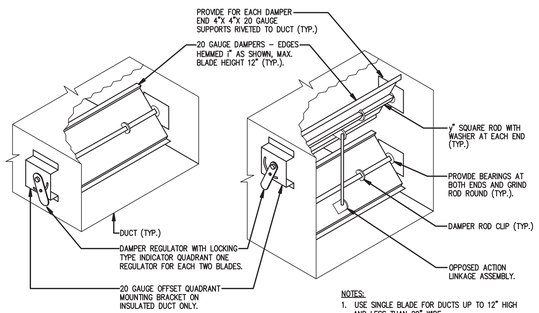
MECHANICAL - AIR FLOW DIAGRAM

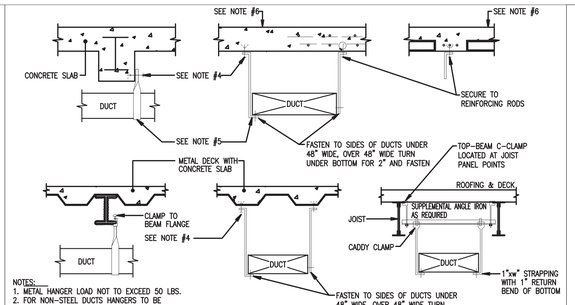
GOODY CLANCY PROJECT NUMBER: 24006	
FILE NAME:	
DRAWN: AA, PE	DATE: 01/10/2025
CHECKED: MM, PE	SCALE: N.T.S.
DRAWING NO.:	

M401



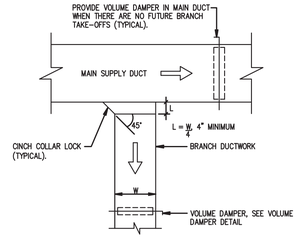
NOTES:
1. USE SINGLE BLADE FOR DUCTS UP TO 12" HIGH AND LESS THAN 29" WIDE.
2. USE MULTIPLE BLADES FOR DUCTS GREATER THAN OR EQUAL TO 29" AND/OR OVER 12" HIGH.

1. LOW PRESSURE BALANCING DAMPER
NOT TO SCALE



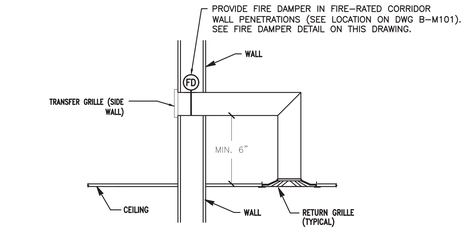
NOTES:
1. METAL HANGER LOAD NOT TO EXCEED 50 LBS.
2. FOR NON-STEEL DUCTS HANGERS TO BE ISOLATED TO PREVENT GALVANIC ACTION.
3. HANGERS SHALL BE SAME MATERIALS AS DUCTWORK BEING SUPPORT.
4. EXPANSION BOLT MINIMUM SIZE ¼" (B.S.&A. FILE #390-58-SM OR #480-64-SM OR #481-64-SM) FOR STONE CONCRETE ONLY.
5. w" x 1" GALVANIZED IRON HANGERS 8'-0" ON ON CENTER FOR DUCTS 4 SQ. FT. AND UNDER, 4'-0"ON CENTER FOR DUCTS OVER 4 SQ. FT. IN AREA.
6. IN CINDER CONCRETE SLABS OR IN REPUBLIC ARCH. USE APPROVE SCISSOR TYPE HANGER HOOK (B.S.&A. FILE #A-61-63 SM).

2. TYPICAL DUCT HANGING DETAILS
NOT TO SCALE



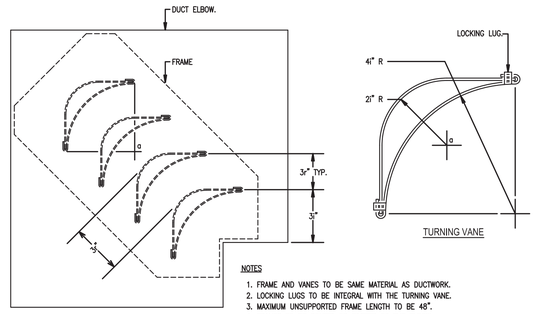
NOTES:
1. SEE PLANS FOR DUCT SIZES.

3. TYPICAL RECTANGULAR SUPPLY DUCTWORK -BRANCH DUCT CONNECTIONS
NOT TO SCALE



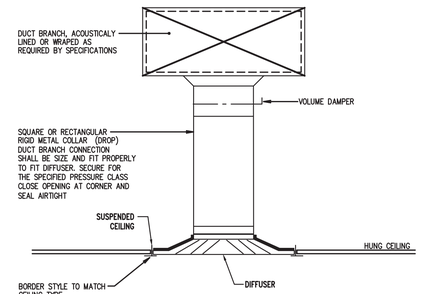
NOTES:
- TYPICAL IN TRANSFER DUCT BETWEEN INTERIOR SPACE AND CORRIDOR
- DUCT SIZE TO MATCH TRANSFER GRILLE SIZE. SEE AIR TERMINAL SCHEDULES ON DWG. M002.
- PROVIDE FIRE DAMPER AS SHOWN ON PLAN M101.
- FIRE DAMPER TO MATCH DUCT SIZE AS PER NOTE ABOVE.

4 TRANSFER DUCT DETAIL
NOT TO SCALE

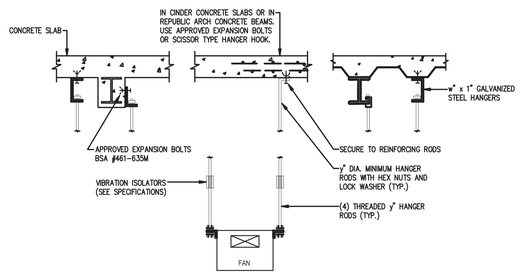


NOTES
1. FRAME AND VANES TO BE SAME MATERIAL AS DUCTWORK.
2. LOCKING LUGS TO BE INTEGRAL WITH THE TURNING VANE.
3. MAXIMUM UNSUPPORTED FRAME LENGTH TO BE 48".
4. FRAMES TO BE BOLTED OR RIVETED TO THE ELBOW.
5. VANES AND FRAMES TO BE SAME GAUGE AS THE ELBOW. (MINIMUM 20 GAUGE)
6. SQUARE ELBOWS ARE TO BE USED ONLY WHEN SPECIFICALLY INDICATED ON THE DESIGN DRAWINGS.

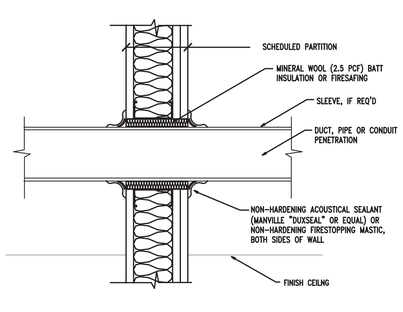
5. MITERED ELBOWS WITH DOUBLE THICKNESS TURNING VANES
NOT TO SCALE



6. TYPICAL RIGID DIFFUSER CONNECTION TO DUCTWORK
NOT TO SCALE

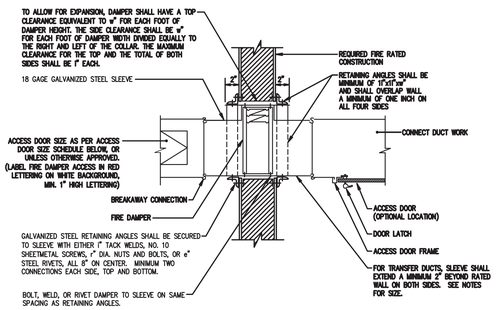


7. INLINE CABINET FAN HANGING SUPPORT DETAIL
NOT TO SCALE



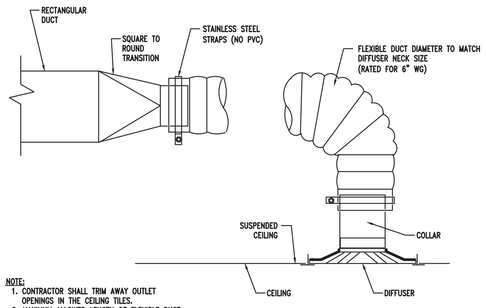
NOTES:
1. SUPPORT DUCT, PIPE OR CONDUIT TO PREVENT CONTACT WITH PARTITION.
2. NO TAPE OR COMPOUND BRIDGING BETWEEN GWB AND DUCT, PIPE OR CONDUIT.

8. PENETRATION OF GWB PARTITION
NOT TO SCALE



NOTES:
1. DAMPERS SHALL BE CONSTRUCTED, TESTED, LABELED, AND INSTALLED IN ACCORDANCE WITH UL 555, UL 555-S, NFPA 90A, NFPA 92A.
2. LEAKAGE RATINGS – CLASS II.
3. ALL FIRE DAMPERS SHALL BE RATED TO MAINTAIN THE RATING OF THE FIRE SEPARATION. THE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S APPROVED INSTRUCTIONS.
4. FACTORY SLEEVE TO BE 24" LENGTH UNLESS OTHERWISE SPECIFIED.
5. ALL DUCT-SLEEVE CONNECTIONS SHALL COMPLY WITH UL 555, ASHRAE & SMACNA.
6. CONNECTIONS BETWEEN SLEEVE AND DUCTWORK SHALL BE BREAKAWAY TYPE SUCH AS "S" SLIP, CRIMP, OR OTHER SLIP TYPE IN ACCORDANCE WITH UL 555.
7. WHERE THE HUNG CEILING DOES NOT HAVE REMOVABLE TILES AN ACCESS DOOR (FIRE RATED WHERE REQUIRED) SHALL BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED IN CEILING NEAR LOCATION OF FIRE DAMPER.
8. ALL DUCT ACCESS DOORS SHALL BE LOCATED SO THAT THERE WILL NOT BE ANY INTERFERANCES FOR MAINTENANCE AND INSPECTION OF DAMPER.
9. CONTRACTOR SHALL INSTALL FIRE DAMPERS PER MANUFACTURER'S INSTALLATION REQUIREMENTS.

9. TYPE "B" FIRE DAMPER DETAIL AND NOTES
NOT TO SCALE



NOTE:
1. CONTRACTOR SHALL TRIM AWAY OUTLET OPENINGS IN THE CEILING TILES.
2. MAXIMUM ALLOWED LENGTH OF FLEXIBLE DUCT SHALL BE 2'-0".
3. DUCT SHOULD EXTEND STRAIGHT FOR SEVERAL INCHES FROM A CONNECTION BEFORE BENDING.

10. FLEXIBLE DUCT CONNECTION TO CEILING DIFFUSER
NOT TO SCALE

ACCESS DOOR SIZES

DUCT HEIGHT \ DUCT WIDTH	8	10	12	14	16	20	24	28	32	36	40	44	48	52	56	58	62	66
8	10X6	10X8	10X8	10X8	10X8	10X8	10X8	12X10	12X10									
10		10X8	10X8	10X8	10X8	10X8	10X8	12X12	12X12	12X12	14X12							
12			12X10	12X10	12X10	12X10	12X10	14X12	14X12	14X12	14X14	14X14	14X14					
14				12X12	12X12	12X12	12X12	14X12	14X12	14X12	14X14	14X14	14X14	16X14	16X14			
16					14X12	14X18	14X12	14X12	14X12	14X12	14X14	14X14	14X14	16X14	16X14	20X14	20X14	
20						14X12	14X12	14X12	14X12	14X12	16X14	16X14	16X14	16X14	16X14	20X14	20X14	20X14
24							14X14	14X12	14X14	14X14	16X16	16X16	16X16	18X16	18X16	20X18	20X18	20X18

11. ACCESS DOOR SIZE SCHEDULE
NOT TO SCALE

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REVISIONS

ISSUE

MECHANICAL - DETAILS

GOODY CLANCY PROJECT NUMBER: 24006

FILE NAME:

DRAWN: AA, PE | DATE: 01/10/2025

CHECKED: MM, PE | SCALE: N.T.S.

DRAWING NO.:

M501