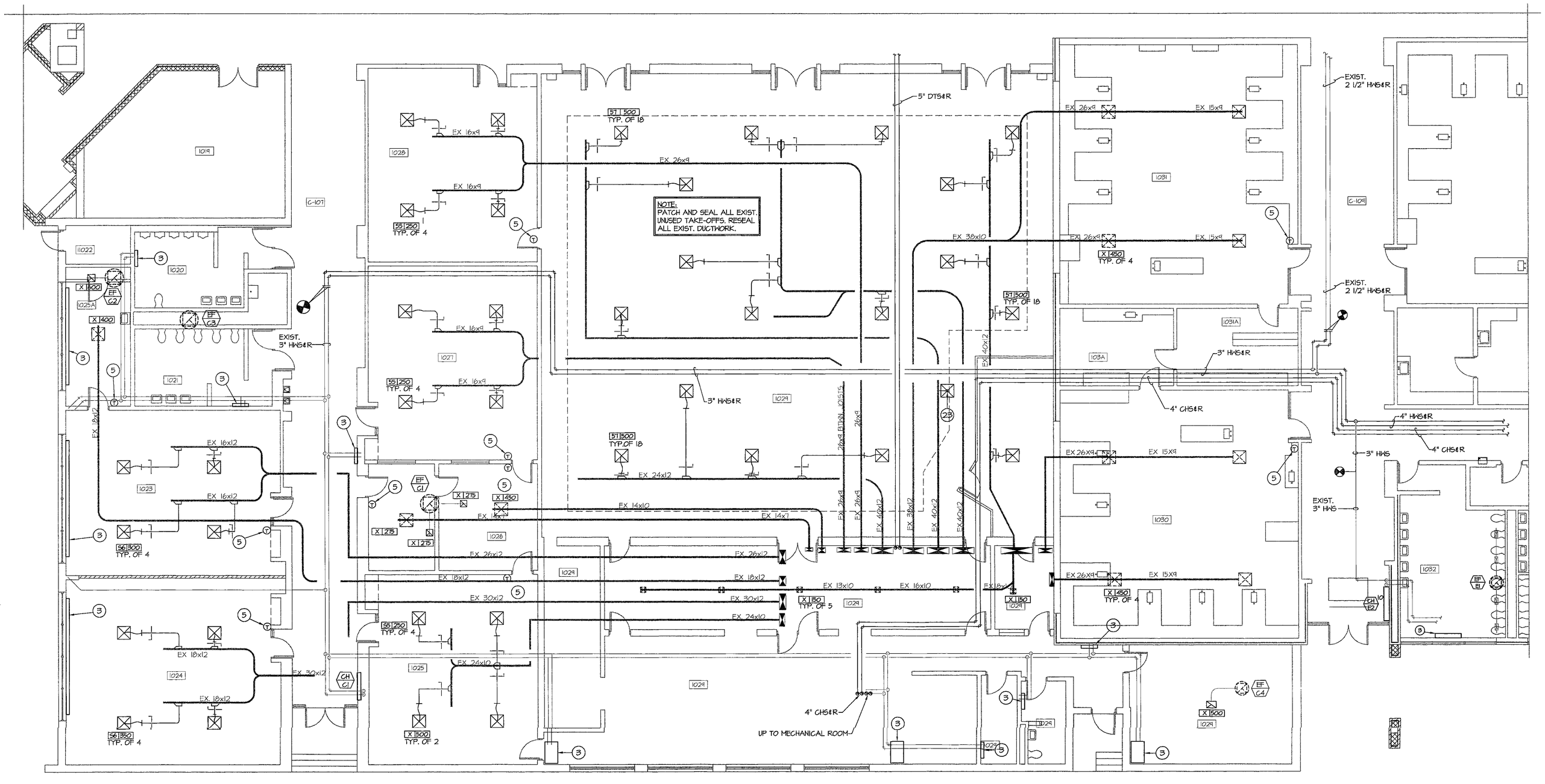
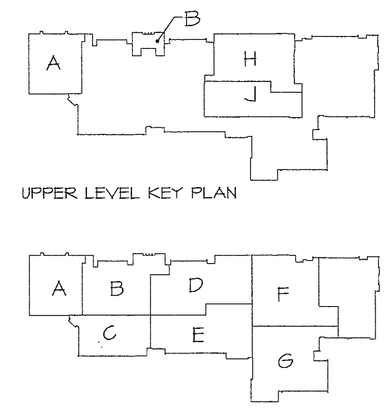


MECHANICAL PLAN – UNIT C
SCALE: 1/8" = 1'-0"



GENERAL MECHANICAL NOTES:

A. ALL SUPPLY AIR DUCTWORK AND ALL DIFFUSER NECKS SHALL HAVE 1" DUCTWRAP.

B. ALL RETURN AIR DUCTWORK SHALL HAVE 1" ACOUSTICAL LINING, UNLESS NOTED DIMENSIONS SHOWN ARE GROSS METAL SIZES.

C ALL O/A DUCTWORK SHALL HAVE 1 1/2" DUCTBOARD, UNLESS NOTED OTHERWISE.

D. COORDINATE ALL T-STAT LOCATIONS WITH ARCHITECT, ENGINEER, & CASEWORK.

E. ALL DUCTWORK ON MECHANICAL PLANS SHALL BE CONSTRUCTED AS INDICATED ON THE LEGEND & IN COMPLIANCE WITH S.M.A.C.N.A. STANDARDS.

F. COORDINATE ALL MECHANICAL GRILLES, FANS & OTHER MISC. EQUIPMENT WITH LIGHTING FIXTURES.

G. ALL EXTERIOR PENETRATIONS SHALL BE SEALED WATERTIGHT.

H. PROVIDE 1/4" MANUAL VENT VALVES AT ALL HIGH POINTS

I. ALL DUCTWORK SHALL BE INSTALLED AS HIGH AS STRUCTURE ALLOWS UNLESS NOTED OTHERWISE.

J. ALL PIPING SHOWN OFFSET FOR CLARITY. SUPPLY IS ROUTED ON TOP & LEFT. RETURN IS ROUTED ON BOTTOM & RIGHT. ALL MAINS SHALL BE ROUTED IN THIS MANNER. BRANCH LINES MAY BE ROUTED IN EASIEST MANNER.

K. ENSURE 10'-0" MINIMUM CLEARANCE FROM ALL EXHAUST HOODS (AND FANS) TO FRESH AIR INTAKE.

L. COORDINATE ROUTING OF DUCTWORK & WATER PIPING WITH ALL TRADES. COORDINATE ALL ROOF & WALL PENETRATIONS WITH ALL TRADES.

M. VERIFY LOCATIONS AND SIZES OF EXISTING DUCTWORK TO REMIAN FOR ACCURATE INSTALLATION OF NEW WORK.

N. CONDENSATE DRAIN TRAPS ON ALL ROOFTOP UNITS SHALL BE CONSTRUCTED OF FLEXIBLE AND/OR FORMABLE, 3/4" RUBBER HOSE.

P. PROVIDE HIGH EFFIECENT TAKE-OFFS, AND ROUNDED ELBOWS OR ELBOWS WITH TURNING VANES.

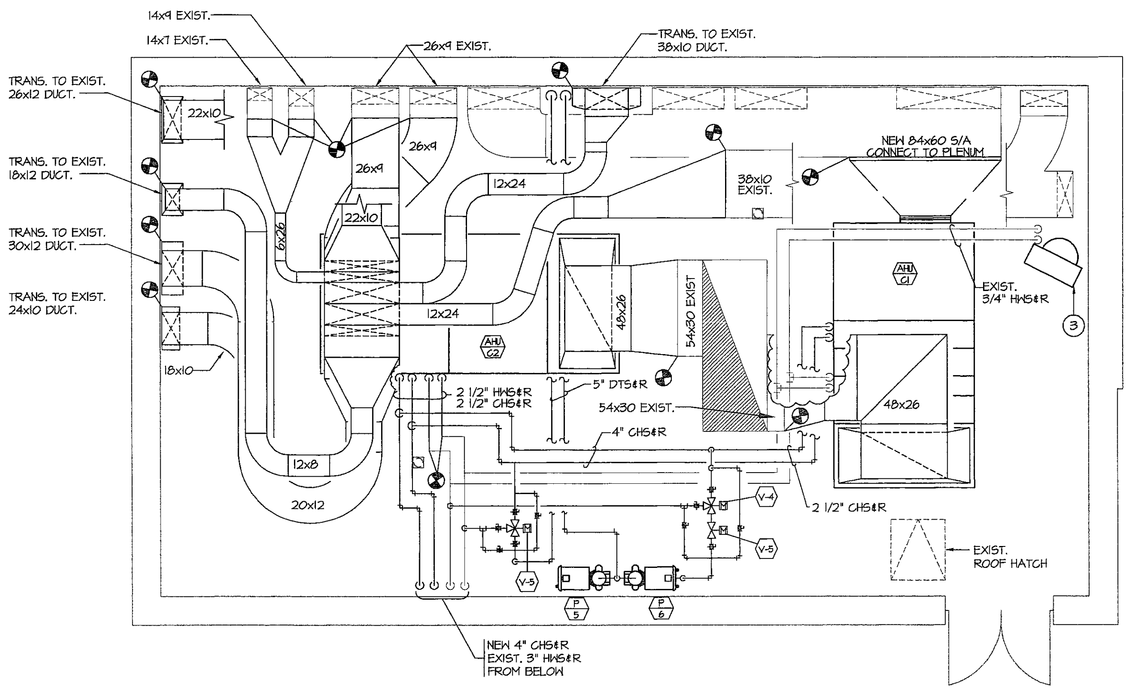
Q. SEE HVAC LEGEND SHEET M0.1

MECHANICAL REFERENCE NOTES:

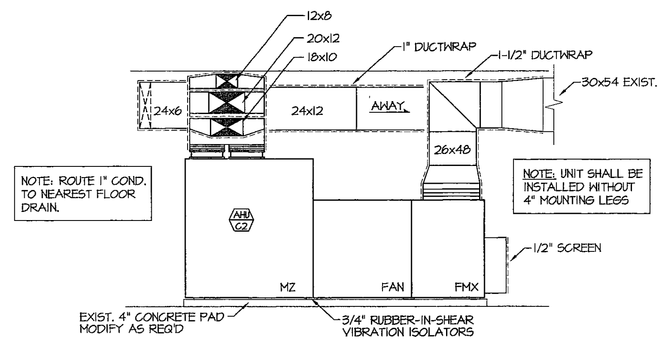
1. CAP EXIST. HWS&R LINES FROM REMOVED CABINET HEATER. DIV. 03 TO PATCH FLOOR AND WALL.
2. BLANKED OFF EXIST. DUCT OPENING. FLOOR TO BE FINISHED BY OTHERS. SIZE INDICATED ON PLANS.
3. EXIST. CABINET HEATER, FINNED RADIATOR, OR UNIT HEATER SHALL REMAIN. PROVIDE NEW TSTAT AND CONTROL VALVES TO EXIST. UNIT. UNIT SHALL BE ELECTROSTATICALLY PAINTED
4. PROVIDE NEW NON-ADJUSTABLE RECESSED SENSOR. CONNECT TO NEW NETWORK. TYP. OF ALL TOILET ROOMS, LOCKER ROOMS, AND CORRIDORS.
5. PROVIDE NEW T-STAT W/LOCKING COVER. CONNECT TO NEW NETWORK.
6. PROVIDE FRESH AIR HOOD EQUAL TO GREENHECK FABRA-HOOD MODEL SIZE 18X20 W/SLOPED ROOF CURB. PROVIDE MOTORIZED DAMPER IN FRESH AIR DUCT. TRANS AS REQ'D.
7. PROVIDE HORIZ. 16 GA. PIPE COVER PER DETAIL. SHAPE TO MATCH ADJACENT MECH. EQUIPMENT. PAINT BY DIV 09.
8. PROVIDE VERTICAL 16 GA. PIPE COVER PER DETAIL. PAINT BY DIV 09.
9. PROVIDE NEW DEMOUNTABLE LOUVER IN EXIST. LOCATION. SEE PLAN FOR SIZE. V.I.F.
10. PROVIDE NEW DEMOUNTABLE LOUVER IN NEW LOCATION. SEE PLAN FOR SIZE. V.I.F.
11. 3/4" GI COND. ENSURE LAWN MOWER CLEARANCE. DRILL FROM OUTSIDE TO AVOID "BLOW-OUT".
12. BOOKSHELVES ADJACENT TO UNIT VENTS SHALL BE MOVED FROM EXIST. LOCATION FOR INSTALLATION OF NEW UNIT VENTS. REWORK BOOKSHELVES AS REQ'D. NEW LAMINATE TOP BY DIV 06. SEE DETAIL THIS SHEET.
13. FILLER CABINETS EACH SIDE OF BY UNIT MFGR. EXACT LENGTH SHALL BE DETERMINED IN FIELD.
14. EXIST. CEILING FAN TO REMAIN.
15. PROVIDE CONDENSATE PUMP EQUAL TO BECKETT MODEL NO 414WB, 120V/1Ø, 1/50 HP. LOCATE PUMP BEHIND WALL W/12"x12" ACCESS PANEL. CONTROL BY SECT. 15900. IF COND. PUMP FAILS, FAN COIL UNIT SHUTS DOWN.
16. ROUTE 2" COND TO NEAREST FLOOR DRAIN IN TUNNEL.
17. PROVIDE (2) 3/4" HWS&R (2) GHS&R TO FC-3. DROP DOWN IN EXIST. LOCKER THAT IS TO BE BLOCKED OFF BY DIV 03.
18. PROVIDE COND. PUMP EQUAL TO BECKETT MODEL NO. 414WB, 120V/1 1/50 HP. LOCATE PUMP IN EXIST. LOCKER THAT IS BE BLOCKED OFF BY DIV 03. CONTROL BY SECT. 15900.
19. PROVIDE 3/4" COND. FROM FAN COIL UNIT, DROP THRU FLOOR TO NEAREST FLOOR DRAIN IN TUNNEL.
20. CONNECT EXISTING 14x6 O/A DUCT TO BACK OF FC-D4. PROVIDE TRANSITIONS AS REQ'D.
21. EXPANSION LOOP NOT REQ'D W/VITAULIC OR SIMILAR PIPE CONNECTION THAT COMPENSATES FOR EXPANSION.
22. FUTURE CONNECTION FOR CHILLED WATER H MNS.
23. PROVIDE 12"Ø TAKE-OFF FROM BELOW EXISTING DUCT.
24. PROVIDE RELIEF HOOD EQUAL TO GREENHECK FABRA-HOOD MODEL SIZE 30X48 W/ROOF CURB. SECT 15400 TO PROVIDE MOTORIZED DAMPER. DAMPER TO OPEN AT BUILDING PRESSURE OF 0.03" W.C. ABOVE OUTSIDE.
25. PROVIDE 44X8 O/A DUCT W/ 1/2" INSULATION W/MOTORIZED DAMPER TO NEW O/A HOOD EQUAL TO GREENHECK FABRA-HOOD MODEL SIZE 12X44. MODIFY EXISTING OPENING.
26. PROVIDE 12X48 RELIEF HOOD EQUAL TO GREENHECK FABRA-HOOD MODEL SIZE 12X48 W/ROOF CURB. SECT. 15400 TO PROVIDE MOTORIZED DAMPER. DAMPER TO OPEN AT BUILDING PRESSURE OF 0.03" W.C. ABOVE OUTSIDE. MODIFY EXISTING OPENING.
27. PROVIDE 8"Ø EXHAUST DUCT THRU ROOF TO FLAT ROOF CAP. COORDINATE ROUTING W/WATER PIPING. CAP MUST HAVE A MIN. OF 10' CLEARANCE FROM NEAREST O/A OPENING.
28. PROVIDE 6"Ø EXHAUST DUCT FROM DRYER TO FLAT ROOF CAP.
29. PROVIDE 48X20 DEMOUNTABLE LOUVER IN EXISTING WINDOW WALL. SEE DETAIL SHT. M1.4.
30. SECT. 15400 TO PROVIDE MOTORIZED DAMPER TO EXIST. RELIEF HOOD. DAMPER TO OPEN AT BUILDING PRESSURE OF 0.03" W.C. ABOVE OUTSIDE. PROVIDE DUCT TRANSITIONS AS REQ'D.
31. TRANSFER OPENING IN WALL ABOVE CEILING. SEE PLAN FOR SIZE.
32. PROVIDE 10"Ø VARITRAC DAMPER.
33. PROVIDE 8"Ø VARITRAC DAMPER.
34. PROVIDE 20"X10" BYPASS DAMPER.
35. PROVIDE 18X6 O/A DUCT W/1-1/2" DUCT BOARD & MOTORIZED DAMPER BY SECT. 15400, ROUTE DUCT TO GREENHECK INTAKE FABRA-HOOD MODEL SIZE 24X12 OR EQUAL.
36. PROVIDE 6"Ø O/A DUCT W/MOTORIZED DAMPER (BY SECT. 15400) THRU ROOF. SEE DETAIL SHT. M4.1.
37. PROVIDE 24X8 O/A DUCT TO O/S PLENUM OF UV-FI.

X ### EXISTING DIFFUSER/GRILLE TO BE REUSED W/NEW WORK. SEE PLAN FOR REBALANCE OF DIFFUSER/GRILLE.

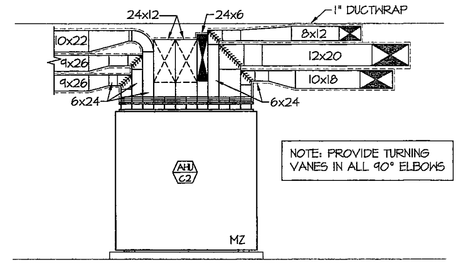
NORTH
SCALE: 1/8" = 1'-0"



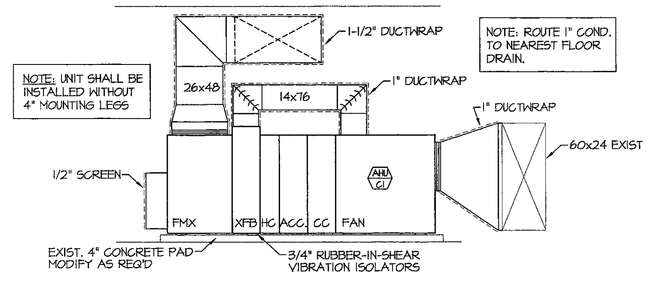
MECHANICAL MEZZANINE PLAN – UNIT C
SCALE: 1/4" = 1'-0"



ELEVATION OF AHU-C2
SCALE: 1/4" = 1'-0"



ELEVATION OF AHU-C2
SCALE: 1/4" = 1'-0"



ELEVATION OF AHU-C1
SCALE: 1/4" = 1'-0"

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RENOVATION PROJECT FOR:
DUNELAND SCHOOL CORP.
CHESTERTON HIGH SCHOOL/MIDDLE SCHOOL
CHESTERTON, INDIANA

Drawing Title
MECHANICAL PLAN UNIT C

THOMAS H. DURKIN REGISTERED No. 19257 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No	9980.00
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Approved By	
Drawing No	M 1.3

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