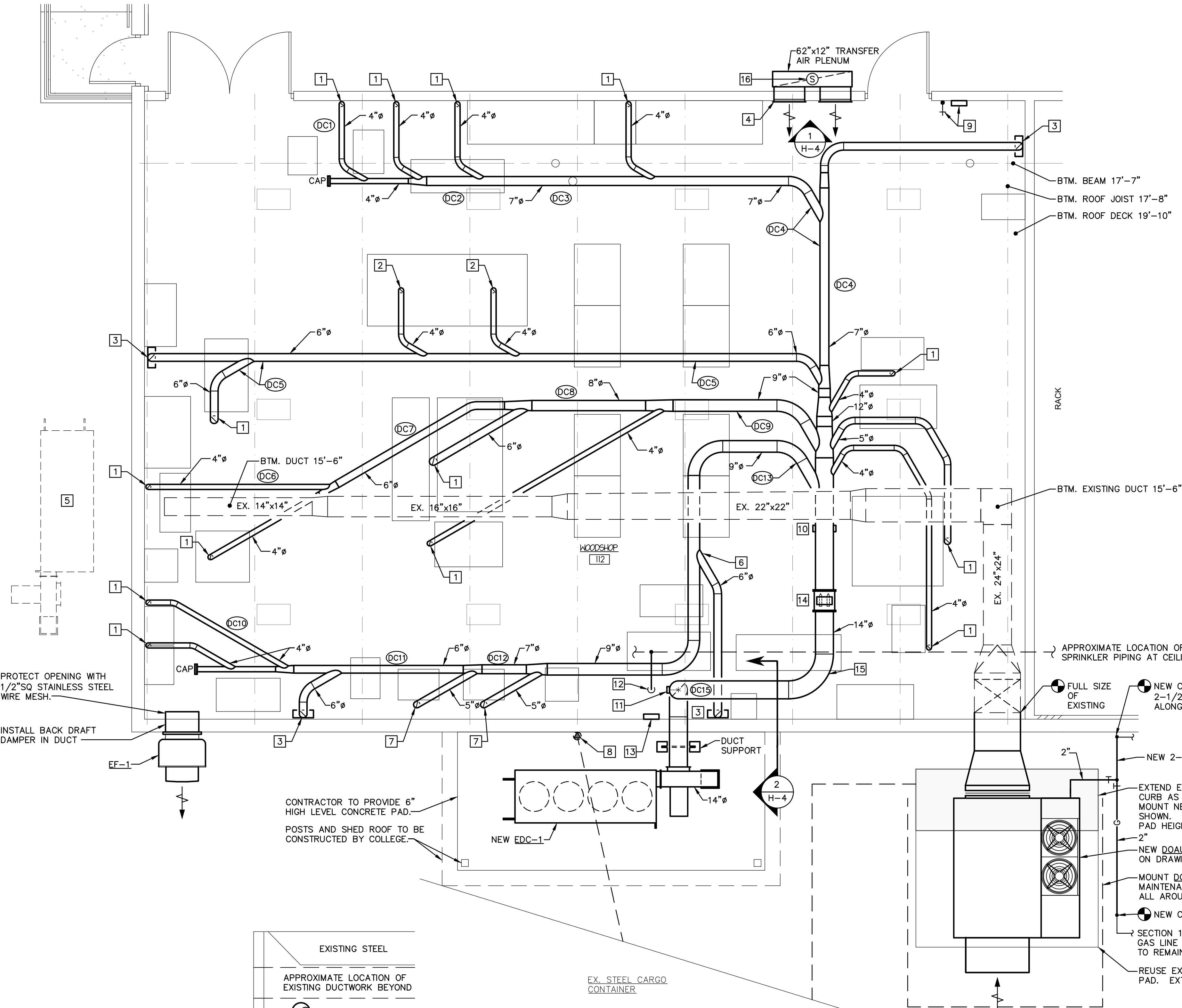


May 01, 2025 - 10:27am T:\Projects\2024\24-141 - ACH Makers Space Dust Collection and Weld Fume Extraction Systems\WOOD SHOP Drawings\24-141 - H4.dwg

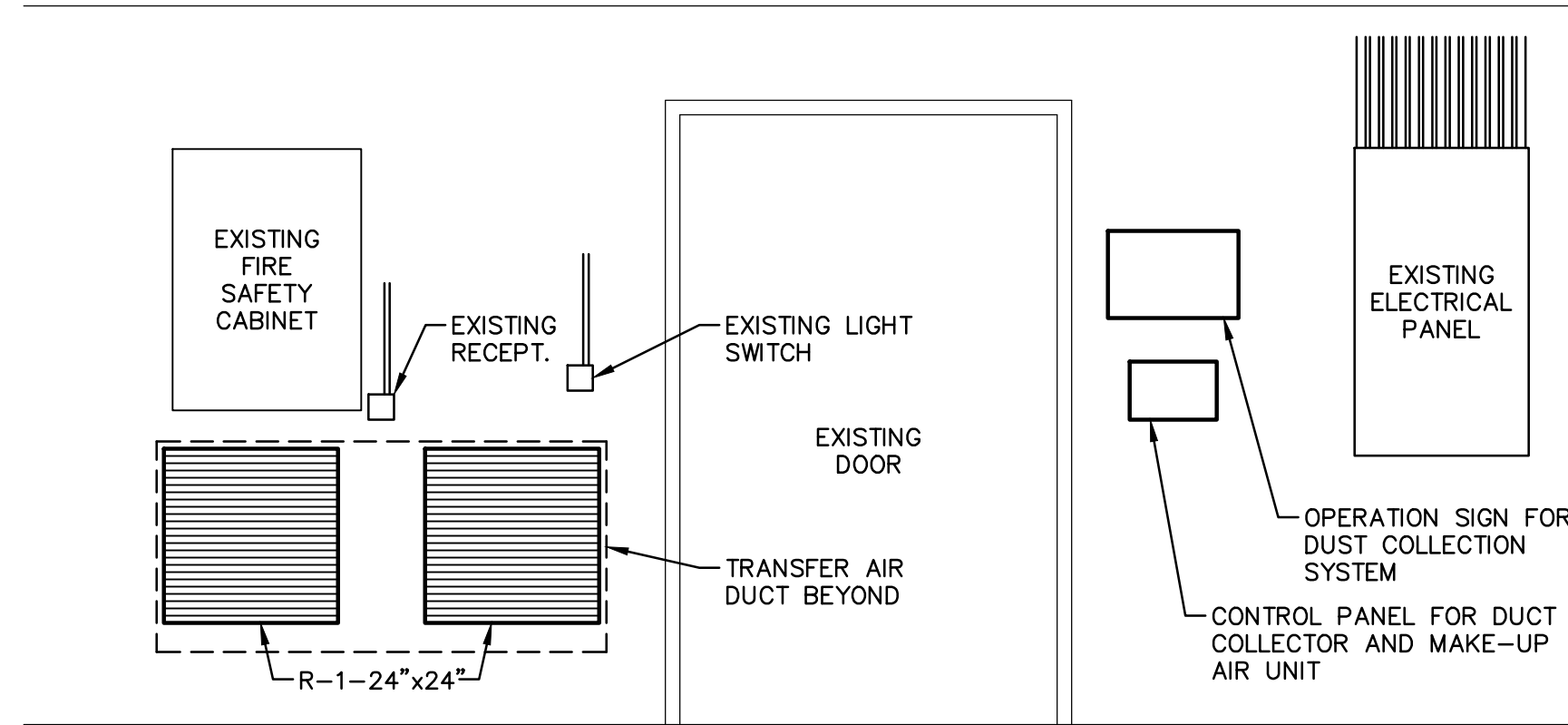


## PARTIAL FLOOR PLAN - WOOD SHOP - HVAC NEW WORK

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

### IMPORTANT NOTES

- REFER TO DRAWING H-3 FOR LOCATION AND IDENTIFICATION OF EXISTING WOODWORKING EQUIPMENT - NOT SHOWN ON THIS PLAN FOR CLARITY.
- ALL ELBOWS ARE TO BE LONG RADIUS ELBOWS (R/D = 2.0) UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- MAINTAIN 12" CLEARANCE BETWEEN ALL DUCTWORK AND COMBUSTIBLE MATERIALS.



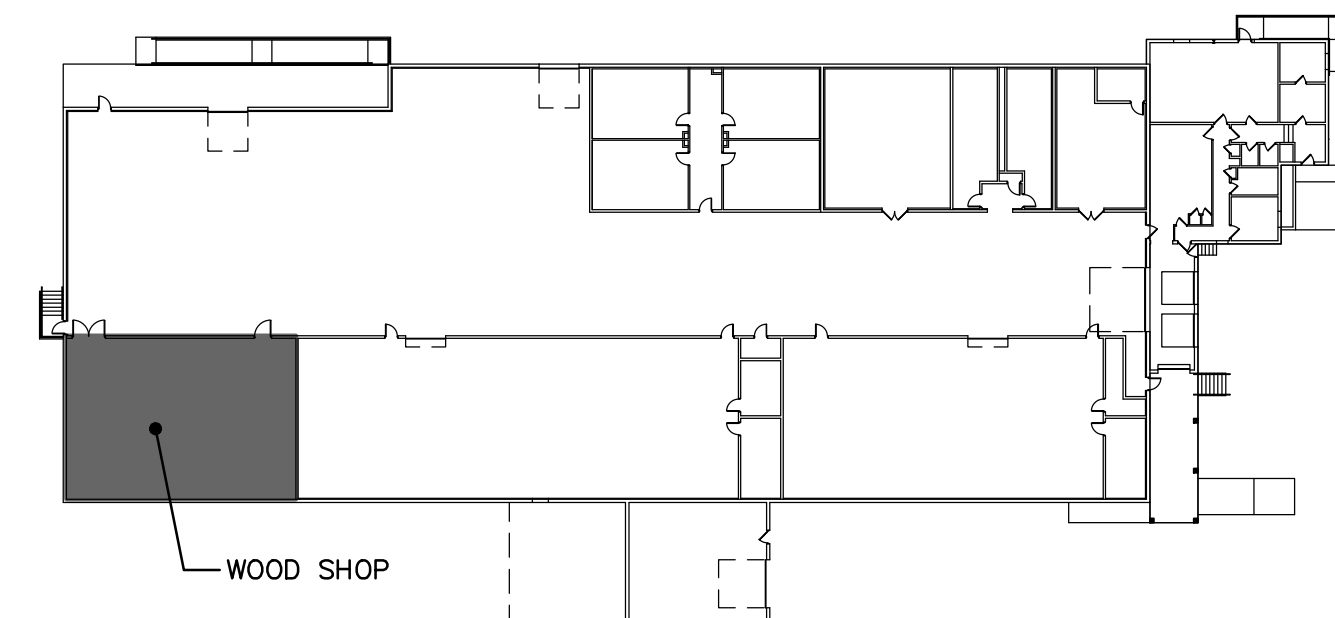
## ELEVATION AT ENTRY DOOR

NO SCALE

### SPECIFIC NOTES - HVAC

(APPLY TO THIS DRAWING ONLY)

- DROP EQUIPMENT CONNECTION BRANCH DUCT (FULL SIZE OF BRANCH DUCT AS SHOWN) TO FLOOR WITH BLAST GATE, EQUIPMENT CONNECTION AND CLEAN-OUT AT BOTTOM. SEE DETAILS ON DRAWING H-2. OWNER WILL PROVIDE FINAL CONNECTION TO EQUIPMENT.
- DROP BRANCH DUCT TO 1/4 POINT OF ROUTER TABLE WITH BLAST GATE. TERMINATE RIGID BRANCH DUCTWORK APPROXIMATELY 24" ABOVE ROUTER TABLE (COORDINATE EXACT LOCATION WITH OWNER) AND PROVIDE APPROXIMATELY 4FT OF FLEXIBLE STATIC DISSIPATIVE HOSE FOR CONNECTION TO ROUTERS. COORDINATE EXACT SIZE OF HOSE NEEDED TO FIT TO ROUTER AND PROVIDE TRANSITION AT BOTTOM OF RIGID DUCT DROP IF REQUIRED.
- DROP BRANCH DUCT DOWN TO FLOOR SWEEP. SEE DETAIL ON DRAWING H-2.
- TWO 24"x24" HEAVY DUTY SIDEWALL GRILLES MOUNTED 14" ABOVE THE FLOOR. CONNECT TO A 62"W. x 12"D. PLENUM ON THE OTHER SIDE OF THE WALL AND OPEN END THE BOTTOM OF THE PLENUM 8" ABOVE THE FINISHED FLOOR. TRANSFER GRILLES WILL PERMIT MOVEMENT OF AIR INTO THE WOOD SHOP IF THE EXHAUST FAN IS OPERATING BUT THE MAKE-UP AIR SYSTEM IS NOT OPERATIONAL.
- LOCATION OF FUTURE DUST COLLECTOR. NO WORK REQUIRED.
- 30' TAKE OFF CONNECTION ON BOTTOM OF DUCT TO DROP BRANCH TO FLOOR SWEEP UNDER MAIN DUST CONVEYANCE DUCT.
- DROP EQUIPMENT CONNECTION BRANCH DUCT (FULL SIZE OF BRANCH DUCT AS SHOWN) TO FLOOR WITH BLAST GATE, PROVIDE TWO (2) EQUIPMENT CONNECTIONS FOR ROUTER TABLE AND CLEAN-OUT AT BOTTOM. SEE DETAILS ON DRAWING H-2. OWNER WILL PROVIDE FINAL CONNECTION TO EQUIPMENT.
- EXISTING POWER CONNECTION TO KILN WITH UNDERGROUND CONDUIT TO CARGO CONTAINER. MAINTAIN ACCESS TO JUNCTION BOX.
- CONTROL PANEL AND THERMOSTAT TO CONTROL DUST COLLECTOR AND MAKE-UP AIR UNIT.
- DUCT MOUNTED INFRARED SPARK DETECTION. INSTALL PER THE MANUFACTURERS INSTRUCTIONS APPROXIMATELY 2-3 FT DOWNSTREAM OF THE LAST TAKE OFF. PROVIDE HANSENTEK MODEL 120-1 DETECTORS ON EACH SIDE OF THE DUCT - REFER TO THE INSTALLATION MANUAL FOR ADDITIONAL REQUIREMENTS.
- WATER-PROOF SPRAY ASSEMBLY (STRAINER, SOLENOID AND SPRAY NOZZLE) - HANSENTEK MODEL 901-1W - CONNECT VIA 1" SPRINKLER PIPING AT NEAREST SPRINKLER LINE. CONTRACTOR TO VERIFY EXISTING SPRINKLER SYSTEM IS MINIMUM 50 PSI.
- DROP 1" SPRINKLER PIPING TO SPRAY NOZZLE ASSEMBLY WITH BALL VALVE WITH SUPERVISORY SWITCH (HANSENTEK MODEL 922-1) IN DROP. WIRE TO CONTROL PANEL PER THE MANUFACTURERS REQUIREMENTS.
- HANSENTEK ONE-ZONE CONTROL PANEL (1PH-120V). E.C. TO PROVIDE INDEPENDENT POWER CIRCUIT TO PANEL. H.C. TO PROVIDE ALL CONTROL WIRING TO SPARK DETECTION AND SUPERVISORY VALVE/SWITCH PER INSTALLATION INSTRUCTIONS.
- FLANGED DUCT MOUNTED MAGNET - MAGNETIC PRODUCTS MODEL RSPLM-14 WITH QUICK RELEASE CLAMPS AND LIMIT-SWITCH.
- THIS ELBOW WILL NEED TO BE A 1.5D ELBOW TO FIT AS SHOWN.
- INSTALL SMOKE DETECTOR IN PLENUM OF TRANSFER DUCT. WIRE SMOKE DETECTOR TO SHUT DOWN DOAU-1 AND EDC-1 IF SMOKE IS DETECTED IN DUCT.



## KEY PLAN

NOT TO SCALE

### PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 48279, EXPIRATION DATE: 05-12-2026

Christopher G. Albright  
DATE 05-01-2025



PARTIAL FLOOR PLAN - HVAC NEW WORK

DUST COLLECTION & WELD FUME EXTRACTION  
WOOD SHOP & WELDING AREA  
FOR  
ALLEGANY COLLEGE, LAVALLE BUILDING  
37 LANE AVENUE, LAVALLE, MARYLAND 21502

East Hills  
Engineering  
Associates  
A LIMITED LIABILITY COMPANY

BRETT N. YONISH, P.E.  
CHRISTOPHER G. ALBRIGHT, P.E.

541 MAIN STREET  
WINDBER, PA 15963  
(814) 467-6877

### REVISIONS

MARK	BY	DATE

DATE: 5/01/2025

DRAWN BY: S.M.M.

CHECKED BY: C.G.A.

PROJECT NO. 24-141

DRAWING NO.

H-4



## ELEVATION/SECTION AT COLLECTOR

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