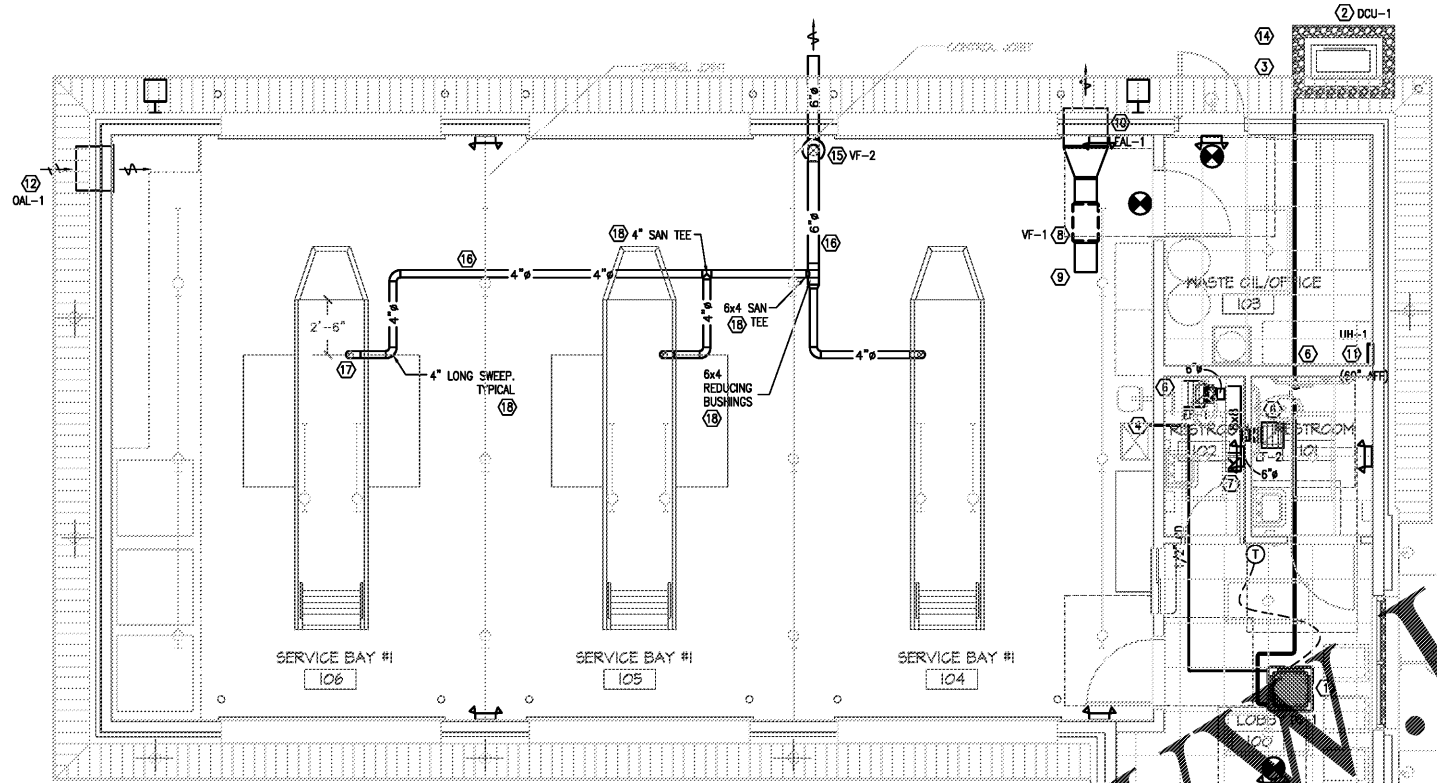
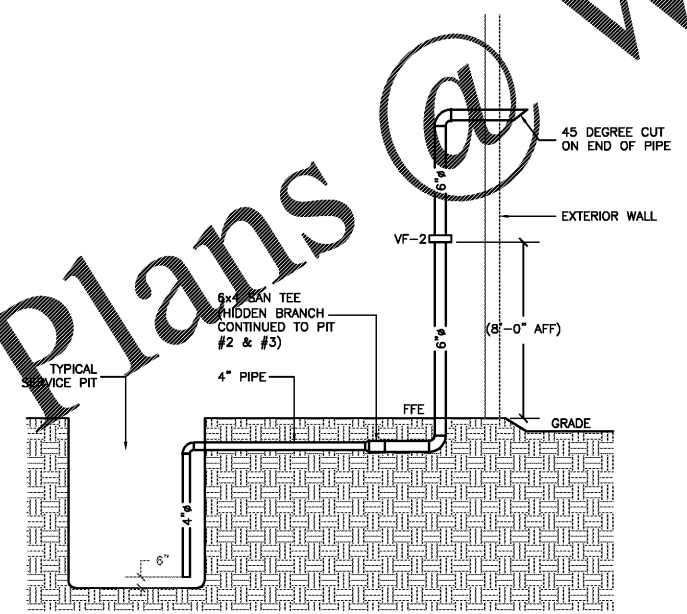


THE ARCHITECT/ENGINEER DOES NOT DEFINE THE SCOPE OF INDIVIDUAL TRADES, SUBCONTRACTORS, MATERIAL SUPPLIERS, OR VENDORS. ANY SHEET NUMBERING SYSTEM USED WHICH IDENTIFIES DISCIPLINES IS SOLELY TO SEPARATE ARCHITECT'S AND ENGINEER'S SCOPE. IT DOES NOT DEFINE A SUBCONTRACTOR'S SCOPE OF WORK. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, CODES OR CONSTRUCTION SEQUENCING SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING. NO CONSIDERATION WILL BE GIVEN TO REQUESTS FOR CHANGE ORDERS FOR FAILURE TO OBTAIN AND REVIEW THE COMPLETE SET OF CONSTRUCTION DOCUMENTS, OR FOR FAILURE TO SEEK INTERPRETATION FROM ARCHITECT FOR DISCREPANCIES.



1 MECHANICAL PLAN
M1 1/4"=1'-0"



2 MECHANICAL DETAIL
M1 SCALE: NTS

DUE TO THE CLASSIFICATION OF THE ELECTRICAL DEVICES INSTALLED IN THE PIT, A PIT VENTILATION IS REQUIRED THAT EXHAUSTS 1 CFM/SF OF PIT FLOOR AREA. (NEC SECTION 511).

EACH PIT IS 48.5 SF, THEREFORE 50 CFM IS EXHAUSTED FROM EACH PIT FOR A TOTAL OF 150 CFM VENTILATION FAN VF-2

- KEY NOTES**
- 15 VENTILATION FAN FOR SERVICE PITS AS REQUIRED BY THE NATIONAL ELECTRIC CODE SECTION 511. MOUNT FAN ON WALL BESIDE COMPRESSED AIR DROP WITH FAN MOUNTED AT 8'-0" AFF. EXTEND 6" PVC DISCHARGE PIPE UP ALONG FACE OF WALL AND TERMINATE THROUGH EXTERIOR WALL AS HIGH AS POSSIBLE IN SPACE. CUT END OF PIPE AT 45 DEGREE ANGLE TO MITIGATE RAIN BLOW IN. 6" PVC INLET PIPE SHALL TIE IN FROM UNDERGROUND.
 - 16 PVC SCHEDULE 40 DWV PIPING UNDERGROUND AT APPROX 12" BFF TO BOTTOM OF PIPE, ROUTED AS SHOWN. TRANSITION FROM 6" PIPE TO 4" WHERE SHOWN AND ROUTE 4" BRANCHES TO EACH PIT. THIS PIPING IS FOR SERVICE PIT VENTILATION PURPOSES.
 - 17 IN EACH PIT AT 30" FROM REAR WALL, EXTEND PIPING INTO PIT THEN TURN DOWN AND TERMINATE PIPE WITH OPEN END AT 6" ABOVE PIT FLOOR. SEAL PIT WALL PENETRATION WATER TIGHT. PROVIDE ADHESIVE LABEL ON PIPE DROP THAT READS "PIT VENTILATION PIPE".
 - 18 USE THE DESCRIBED PVC DWV FITTINGS AT THESE LOCATIONS.

- KEY NOTES**
- 1 CEILING MOUNTED SPLIT SYSTEM HEAT PUMP CASSETTE. PROVIDE COMPLETE WITH WALL MOUNTED AUTO-CHANGEOVER THERMOSTAT. COORDINATE INSTALLATION WITH LIGHTS AND ORIENT UNIT SUCH THAT REFRIGERANT AND CONDENSATE CONNECTIONS ARE NOT TOWARDS A LIGHT.
 - 2 DUCTLESS SPLIT OUTDOOR UNIT ON THICK HOUSEKEEPING PAD.
 - 3 ROUTE REFRIGERANT PIPING FROM UNIT TO BUILDING AND TURN UP INSIDE EXTERIOR WALL. ROUTE AS SHOWN ABOVE CEILING TO INDOOR UNIT. PROVIDE 1 1/2" ARMAFLEX INSULATION WITH ALUMINUM JACKET INSIDE. 3/4" ARMAFLEX INSULATION IS ACCEPTABLE INSIDE THE BUILDING.
 - 4 EXTEND 1/2" CD (CONDENSATE DRAIN) LINE FROM UNIT. RUN DOWN TO DRAIN BY GRAVITY AND DISCHARGE INTO SERVICE SINK (SK1). ATTACH PIPING TO WALL AND TERMINATE 2" ABOVE SINK RIM. LABEL PIPE AS "HVAC UNIT CONDENSATE".
 - 5 DELETED.
 - 6 CEILING MOUNTED EXHAUST FAN TIED TO RESTROOM LIGHT MOTION SENSOR. COORDINATE WITH E.C. ROUTE DISCHARGE TO 8"x8" EA DUCT ABOVE CEILING.
 - 7 8"x8" EA DUCT UP TO PITCHED ROOF CAP ABOVE. COORDINATE WITH G.C. AND ROOFING SUBCONTRACTOR TO FLASH AND SEAL ROOF CAP.
 - 8 VENTILATION FAN FOR REPAIR GARAGE AREA. REFER TO SIZING CALCULATION ON SHEET M0.1. FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED TIMES VIA TIMECLOCK. REFER TO SEQUENCE OF OPERATION.
 - 9 VENTILATION FAN INLET TO HAVE A 12" PIECE OF 16x16 EA DUCT WITH A MESH SCREEN OVER THE INLET.
 - 10 24x24 EXHAUST AIR LOUVER (EAL-1). PROVIDE 24x24 DUCT THROUGH WALL AND TRANSITION TO FAN INLET (16x16). SEAL WALL PENETRATION WATER TIGHT. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED FLASHING. APPROX LOUVER HEIGHT SHALL BE 12'-0" AFF TO TOP OF THE LOUVER SO THAT IT MATCHES THE HEIGHT OF THE GARAGE DOORS. REFER TO ARCHITECTURAL PLANS FOR EXACT ELEVATION.
 - 11 ELECTRIC UNIT HEATER RECESSED INTO WALL FOR SPACE TEMPERING. SET INTERNAL HEATER THERMOSTAT TO 50 DEG F TO MAINTAIN TEMPERATURE ABOVE FREEZING. INSTALL AT 60" AFF TO BOTTOM OF UNIT. THIS ELEVATION IS NECESSARY DUE TO LIMITED WALL SPACE DOWN LOW. IF AN AVAILABLE LOCATION WITHIN 18" OF THE FLOOR CAN BE FOUND, M.C. MAY RELOCATE. DO NOT INSTALL UNDER WATER HEATER.
 - 12 24x24 MAKE-UP AIR LOUVER (OAL-1). PROVIDE 24x24 DUCT THROUGH WALL AND PROVIDE GRAVITY DAMPER IN DUCT ON INSIDE OF BUILDING. SEAL WALL PENETRATION WATER TIGHT. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED FLASHING. APPROX LOUVER HEIGHT SHALL BE 12'-0" AFF TO TOP OF THE LOUVER SO THAT IT MATCHES THE HEIGHT OF THE GARAGE DOORS. REFER TO ARCHITECTURAL PLANS FOR EXACT ELEVATION. REFER TO NOTES UNDER "VEHICLE EXHAUST FAN CALCULATIONS" ON M0.1 FOR ALTERNATE TO THIS LOUVER.
 - 13 VENTILATION AIR FOR THE LOBBY SHALL BE ACHIEVED VIA NATURAL VENTILATION THROUGH THIS DOOR OPENING. THIS METHOD IS IN COMPLIANCE WITH 2018 NCMC SECTIONS 402.1 & 402.2. THE DOORWAY OPENING AREA EXCEEDS THE REQUIRED 4% OF FLOOR AREA OF THE LOBBY.
 - 14 M.C. TO SAWCUT A 6" WIDE BORDER AROUND THE DCU-1 HOUSEKEEPING PAD AND FILL BORDER WITH GRAVEL. MAINTAIN 4" BETWEEN PAD AND EDGE OF BORDER. THIS IS PROVIDED TO ALLOW FOR THE MOISTURE CREATED FROM THE HEAT PUMP DEFOST CYCLE TO BE ABSORBED AND NOT BECOME A NUISANCE OR HAZARD. M.C. MAY WISH TO COORDINATE WITH G.C. TO FORM THIS PERIMETER PRIOR TO ASPHALT INSTALLATION AROUND BUILDING.

ESD
ARCHITECTURE • INTERIOR DESIGN



STRICKLAND BROTHERS
10 MINUTE OIL CHANGE
810 SOUTH MAIN STREET
GRAHAM, NC



MECHANICAL PLAN

ISSUE DATE: 6/5/20
REVISION 1:
REVISION 2:
REVISION 3:
REVISION 4:
PROJECT #: 20-127
CONTENT:

PROJECT ARCHITECT: ECE
DRAWN BY: VW
CADD FILE NAME:
20-127

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Sheet

M1.0

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