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MILITARY ROTC
BUILDING
PRAIRIE VIEW A&M
UNIVERSITY
1513 E.N. NORRIS
PRAIRIE VIEW, TX 77446

PROJECT # PV - 0579

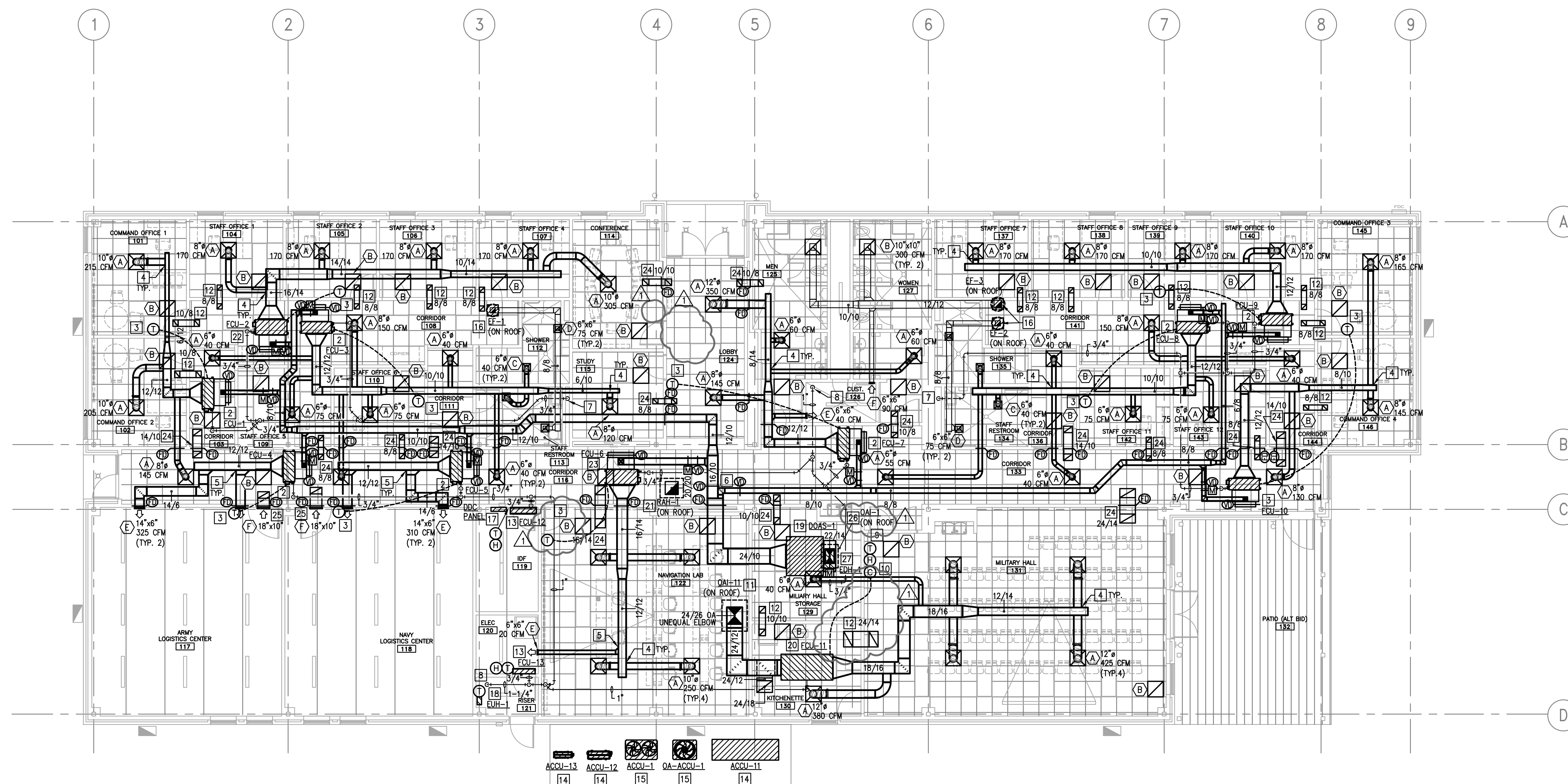
Date: 3/23/2018
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Revisions
Addendum 1 04-04-2018

Sheet Title:

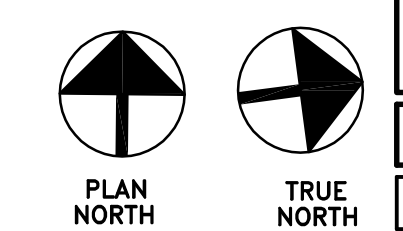
M2.01
MECHANICAL
PLAN

ISSUE FOR CONSTRUCTION



1 MECHANICAL PLAN
1/8"=1'-0"

- MECHANICAL GENERAL NOTES:**
- REFER TO M2.01 FOR MECHANICAL GENERAL NOTES.
 - REFER TO M2.02 FOR REFRIGERANT PIPE ROUTING.
- MECHANICAL KEYED NOTES:**
- PROVIDE CONDENSING UNIT AT APPROXIMATELY THIS LOCATION. REFER TO M2.02 FOR REFRIGERANT PIPING PLAN.
 - PROVIDE AND INSTALL FAN COIL UNIT AT APPROXIMATELY THIS LOCATION. SUPPORT UNIT FROM STRUCTURE ABOVE. PROVIDE FIELD FABRICATED MIXING BOX PLENUM FULL SIZE OF RETURN AIR OPENING AND 18" DEEP. PROVIDE A 32"x68" RETURN AIR OPENING WITH MINIMUM DUCTWORK REQUIRED TO INSTALL VOLUME DAMPER. ROUTE 6"x6" OUTSIDE AIR DUCT AS SHOWN AND TAP THE TOP OF MIXING BOX PLENUM. PROVIDE VOLUME DAMPER AND MOTORIZED DAMPER IN OUTSIDE AIR DUCT. ROUTE 3/4" CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND TAP THE TOP OF THE MAIN CONDENSATE LINE. REFER TO SPECIFICATIONS FOR PIPING MATERIAL AND INSULATION REQUIREMENTS. RE: DETAIL 15/M3.01. REFER TO SHEET 2/M3.01 FOR PIPING DIAGRAMS FOR CONNECTIONS AND BRANCH CIRCUITS FOR ALL REFRIGERANT LINES.
 - PROVIDE WALL MOUNTED THERMOSTAT INTERLOCKED WITH ASSOCIATED FAN COIL UNIT AT APPROXIMATE LOCATION SHOWN. COORDINATE WITH ARCHITECT FOR FINAL LOCATION AND MOUNTING HEIGHTS.
 - PROVIDE SPIN-IN FITTING WITH LOCKING QUADRANT BUTTERFLY DAMPER AT CONNECTION. RE: DETAIL 2/M3.01.
 - CONNECT SIDEWALL AIR DEVICE TO MAIN LOW PRESSURE DUCTWORK. RE: 4/M3.01 FOR DETAIL.
 - INSTALL DUCTWORK TEE AS SHOWN. RE: DETAIL 7/M3.01.
 - PROVIDE 1/8" PER SLOPE ON THE MAIN CONDENSATE DRAIN LINE AND TERMINATE TO NEAREST LAVATORY TRAP/RECE AS SHOWN. REFER TO PLAN FOR SIZE.
 - PROVIDE 1/8" PER SLOPE ON THE MAIN CONDENSATE DRAIN LINE AND TERMINATE TO NEAREST FLOOR DRAIN AS SHOWN. REFER TO PLAN FOR SIZE.
 - PROVIDE WALL MOUNTED THERMOSTAT WITH HUMIDITY CONTROL INTERLOCKED WITH ASSOCIATED ROOFTOP UNIT AT APPROXIMATE LOCATION SHOWN. COORDINATE WITH ARCHITECT FOR FINAL LOCATION AND MOUNTING HEIGHTS.
 - PROVIDE WALL MOUNTED CARBON DIOXIDE SENSOR INTERLOCKED WITH DEDICATED OUTSIDE AIR SYSTEM AT APPROXIMATE LOCATION SHOWN. COORDINATE WITH ARCHITECT FOR FINAL LOCATION AND MOUNTING HEIGHTS.
 - ROUTE OUTSIDE AIR DUCT UP THROUGH ROOF AND CONNECT OUTSIDE AIR DUCT TO OUTSIDE AIR INTAKE CONNECTION. REFER TO PLAN FOR SIZE. TRANSITION AS REQUIRED. PROVIDE VOLUME DAMPER IN VERTICAL DUCTWORK AFTER ARIELOW MEASURING STATION. PROVIDE AND INSTALL OUTSIDE AIR INTAKE AS SCHEDULED. MOUNT OUTSIDE AIR INTAKE ON PRE-FABRICATED ROOF CURB. RE: DETAIL 16/M3.01.
 - PROVIDE RETURN AIR BOOT; SIZE AS SHOWN. RE: DETAIL 8/M3.01.
 - PROVIDE DUCTLESS MINI SPLIT FAN COIL UNIT AT APPROXIMATELY THIS LOCATION. ROUTE REFRIGERANT PIPING TO ASSOCIATED CONDENSING UNIT. ROUTE 3/4" CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND TAP THE TOP OF THE MAIN CONDENSATE LINE. REFER TO SPECIFICATIONS FOR PIPING MATERIAL AND INSULATION REQUIREMENTS.
 - PROVIDE CONDENSING UNIT AT APPROXIMATELY THIS LOCATION. RE: DETAILS 19, 22 & 23/M3.01.
 - PROVIDE VRF OUTDOOR UNIT AT APPROXIMATELY THIS LOCATION. RE: DETAILS 19 & 22/M3.01.
 - ROUTE EXHAUST DUCT UP THROUGH ROOF AND CONNECT EXHAUST DUCT TO FAN INLET. REFER TO PLAN FOR SIZE. TRANSITION AS REQUIRED. PROVIDE AND INSTALL ROOF-MOUNTED CENTRIFUGAL EXHAUST FAN AS SCHEDULED. MOUNT FAN ON PRE-FABRICATED ROOF CURB. RE: DETAIL 12/M3.01.
- MECHANICAL KEYED NOTES (CONTINUED):**
- DIRECT DIGITAL CONTROL PANEL (DDC) TO BE FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - PROVIDE ELECTRIC UNIT HEATER WITH UNIT MOUNTED THERMOSTAT AT LOCATION SHOWN. SUPPORT UNIT FROM STRUCTURE ABOVE.
 - PROVIDE AND INSTALL DEDICATED OUTSIDE AIR SYSTEM VRF FAN COIL UNIT AT APPROXIMATELY THIS LOCATION. SUPPORT UNIT FROM STRUCTURE ABOVE. ROUTE OUTSIDE AIR DUCT UP TO OUTSIDE AIR INTAKE CONNECTION. REFER TO PLAN FOR SIZE. TRANSITION AS REQUIRED. ROUTE 3/4" CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND TAP THE TOP OF THE MAIN CONDENSATE LINE. REFER TO SPECIFICATIONS FOR PIPING MATERIAL AND INSULATION REQUIREMENTS.
 - PROVIDE AND INSTALL DX SPLIT SYSTEM FAN COIL UNIT AT APPROXIMATELY THIS LOCATION. SUPPORT UNIT FROM STRUCTURE ABOVE. ROUTE RETURN AIR DUCT AS SHOWN AND PROVIDE UNEQUAL ELBOW TURNED UP. ROUTE OUTSIDE AIR DUCT UP TO OUTSIDE AIR INTAKE CONNECTION. REFER TO PLAN FOR SIZE. TRANSITION AS REQUIRED. ROUTE 3/4" CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND TAP THE TOP OF THE MAIN CONDENSATE LINE. REFER TO SPECIFICATIONS FOR PIPING MATERIAL AND INSULATION REQUIREMENTS.
 - ROUTE RELIEF AIR DUCT UP THROUGH ROOF AND CONNECT RELIEF DUCT TO RELIEF AIR HOOD CONNECTION. REFER TO PLAN FOR SIZE. TRANSITION AS REQUIRED. PROVIDE BARGOMETRIC RELIEF AIR DAMPER IN VERTICAL DUCTWORK. PROVIDE AND INSTALL RELIEF AIR HOOD AS SCHEDULED. MOUNT RELIEF AIR HOOD ON PRE-FABRICATED ROOF CURB. RE: DETAIL 6/M3.01.
 - PROVIDE AND INSTALL FAN COIL UNIT AT APPROXIMATELY THIS LOCATION. SUPPORT UNIT FROM STRUCTURE ABOVE. PROVIDE FIELD FABRICATED MIXING BOX PLENUM FULL SIZE OF RETURN AIR OPENING AND 18" DEEP. PROVIDE A 40"x88" RETURN AIR OPENING WITH MINIMUM DUCTWORK REQUIRED TO INSTALL VOLUME DAMPER. ROUTE 6"x6" OUTSIDE AIR DUCT AS SHOWN AND TAP THE TOP OF MIXING BOX PLENUM. PROVIDE VOLUME DAMPER AND MOTORIZED DAMPER IN OUTSIDE AIR DUCT. ROUTE 3/4" CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND TAP THE TOP OF THE MAIN CONDENSATE LINE. REFER TO SPECIFICATIONS FOR PIPING MATERIAL AND INSULATION REQUIREMENTS. RE: DETAIL 15/M3.01. REFER TO SHEET 2/M3.01 FOR PIPING DIAGRAMS FOR CONNECTIONS AND BRANCH CIRCUITS FOR ALL REFRIGERANT LINES.
 - PROVIDE AND INSTALL FAN COIL UNIT AT APPROXIMATELY THIS LOCATION. SUPPORT UNIT FROM STRUCTURE ABOVE. PROVIDE FIELD FABRICATED MIXING BOX PLENUM FULL SIZE OF RETURN AIR OPENING AND 18" DEEP. PROVIDE A 40"x88" RETURN AIR OPENING WITH MINIMUM DUCTWORK REQUIRED TO INSTALL VOLUME DAMPER. ROUTE 6"x6" OUTSIDE AIR DUCT AS SHOWN AND TAP THE TOP OF MIXING BOX PLENUM. PROVIDE VOLUME DAMPER AND MOTORIZED DAMPER IN OUTSIDE AIR DUCT. ROUTE 3/4" CONDENSATE DRAIN LINE AS HIGH AS POSSIBLE AND TAP THE TOP OF THE MAIN CONDENSATE LINE. REFER TO SPECIFICATIONS FOR PIPING MATERIAL AND INSULATION REQUIREMENTS. RE: DETAIL 15/M3.01. REFER TO SHEET 2/M3.01 FOR PIPING DIAGRAMS FOR CONNECTIONS AND BRANCH CIRCUITS FOR ALL REFRIGERANT LINES.
 - PROVIDE RETURN AIR BOOT; SIZE AS SHOWN. RE: DETAIL 8/M3.01. PROVIDE HORIZONTAL FIRE DAMPER IN DUCT AT WALL PENETRATION. RE: DETAILS 11 & 12/M3.01.
 - PROVIDE RETURN AIR BOOT AT SIDEWALL REGISTER. RE: DETAIL 9/M3.01. PROVIDE HORIZONTAL FIRE DAMPER IN DUCT AT WALL PENETRATION. RE: DETAILS 11 & 12/M3.01.
 - ROUTE OUTSIDE AIR DUCT UP THROUGH ROOF AND CONNECT OUTSIDE AIR DUCT TO OUTSIDE AIR INTAKE CONNECTION. REFER TO PLAN FOR SIZE. TRANSITION AS REQUIRED. PROVIDE MOTORIZED DAMPER IN VERTICAL DUCTWORK. PROVIDE AND INSTALL OUTSIDE AIR INTAKE AS SCHEDULED. MOUNT OUTSIDE AIR INTAKE ON PRE-FABRICATED ROOF CURB. RE: DETAIL 16/M3.01.
 - PROVIDE INLINE ELECTRIC DUCT HEATER AT LOCATION SHOWN. INSTALL HEATER IN VERTICAL DUCT WITH CLEARANCES AS RECOMMENDED BY DUCT HEATER MANUFACTURER.



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