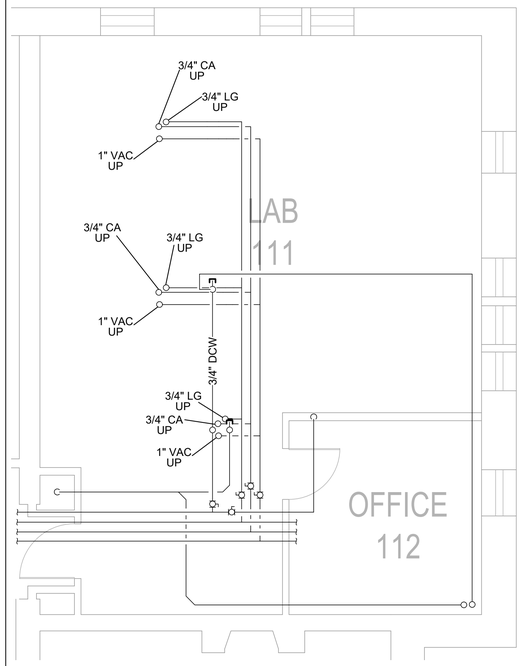
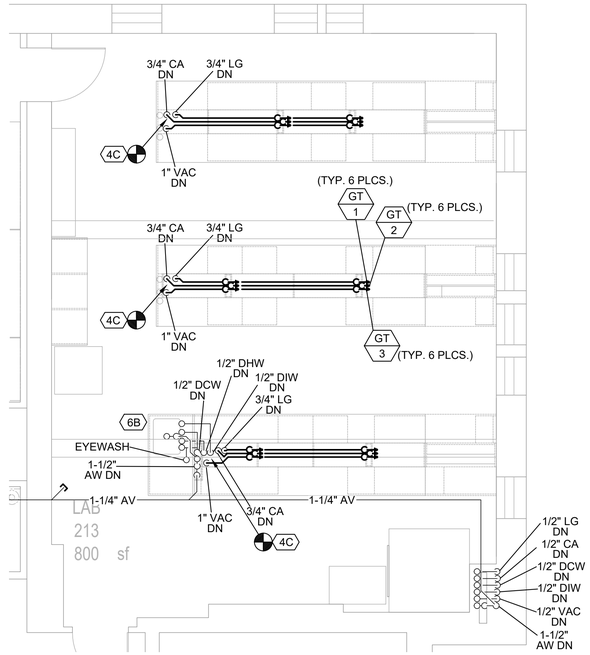


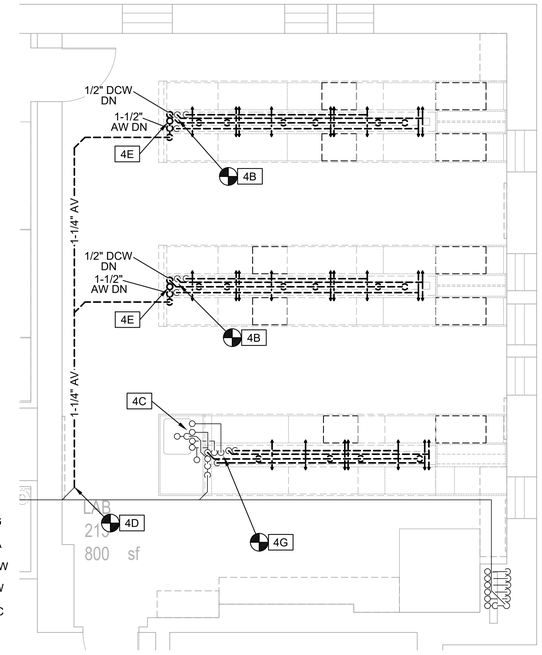
PLUMBING RENO FLR PLAN - FLR 2 - BASE BID

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



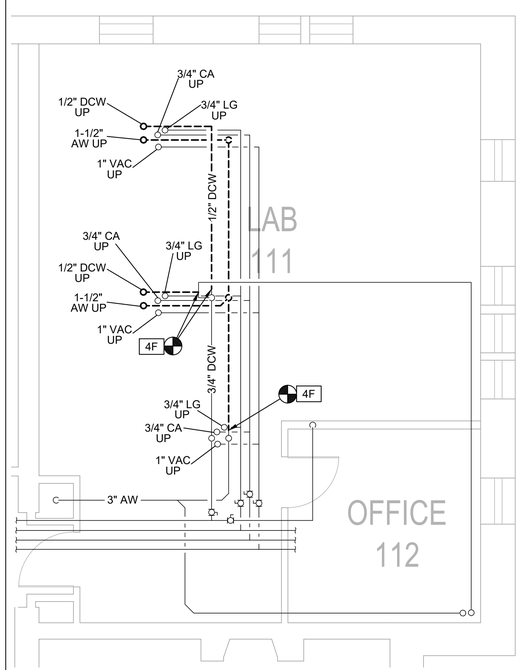
PLUMBING RENO FLR PLAN - FLR 3 - BASE BID

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



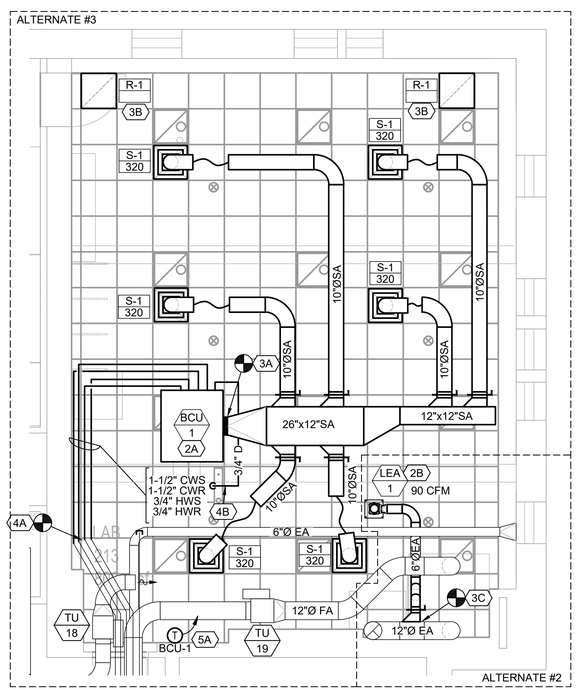
PLUMBING DEMO FLR PLAN - FLR 3 - BASE BID

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



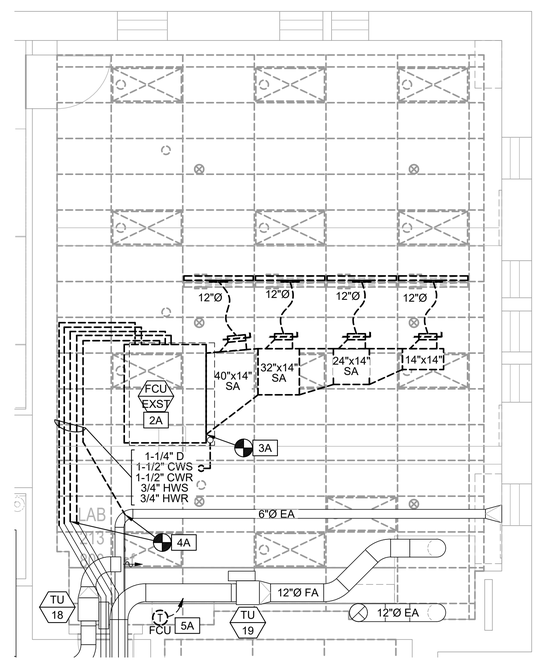
PLUMBING DEMO FLR PLAN - FLR 2 - BASE BID

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



MECH RENO FLR PLAN - FLR 3 - ALT #1 & #4

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



MECH DEMO FLR PLAN - FLR 3 - ALT #4

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

MECH/PLUMB DEMOLITION NOTES

INDICATES NOTES LOCATED ON PLAN

1. GENERAL:
   - A. ALL PIPING SHALL BE TESTED PRIOR TO OPENING TO ATMOSPHERE FOR PRESENCE OF FLUID (WATER, GAS, ETC.) THIS DRAWING DOES NOT SEEK TO ENSURE/DISPROVE LIVE CONNECTIONS.
2. EQUIPMENT:
   - A. ALT #4 - DISCONNECT AND REMOVE EXST. FCU AND DRAIN PAN.
3. DUCTWORK:
   - A. ALT #4 - DISCONNECT FROM EXISTING FAN COIL UNIT OUTLET AND REMOVE EXISTING SA DUCT.
4. PIPING:
   - A. ALT #4 - DISCONNECT FROM EXISTING HWS, HWR, CWS, CWR, AND DRAIN PIPE AND REMOVE TO EXISTING FAN COIL UNIT. CAP REMAINING DRAIN PIPE.
   - B. DISCONNECT FROM EXISTING DCW, CA, LG, AND VAC PIPES IN CABINET PIPE CHASE AND REMOVE PIPE AND SUPPLY TURRETS FROM EXISTING CABINET UPPERS. REMOVE DCW TO FLOOR BELOW AND CAP.
   - C. PIPING TO SINK, FAUCETS, AND EEW TO REMAIN.
   - D. REMOVE ABANDONED AV PIPE AND CAP AT MAIN. AV PIPE IS GLASS AND IS COVERED BY SS SHEATHING UNDER CEILING.
   - E. REMOVE EXISTING AW FROM CABINET TRENCH DRAIN TO FLOOR BELOW.
   - F. DISCONNECT FROM EXISTING AW AND DCW PIPE AND REMOVE TO FLOOR ABOVE. CAP REMAINING PIPE.
   - G. DISCONNECT FROM EXISTING DCW, CA, LG, AND VAC PIPES ABOVE FLOOR LEVEL AND REMOVE FROM BENCH UPPERS TO SUPPLY TURRETS. CAP REMAINING DCW BENCH TOP BRANCH. REMAINING GAS SERVICES TO BE RE-USED IN NEW WORK.
5. CONTROLS:
   - A. CONTACT MU ENERGY MANAGEMENT PRIOR TO DEMOLITION WORK FOR REMOVAL / SALVAGE OF EXISTING CONTROLLERS. ALL CONTROL WIRING, SENSORS, AND PNEUMATICS TO BE REMOVED BY CONTRACTOR. PNEUMATICS SHALL BE CAPPED BACK AT MAIN, NOT PINCHED. REMOVE EXISTING THERMOSTAT.

MECH/PLUMB RENOVATION NOTES

INDICATES NOTES LOCATED ON PLAN

1. GENERAL:
   - A. FIELD VERIFY ALL DUCT AND PIPE CONNECTION POINTS SHOWN. IF CONNECTIONS CANNOT BE MADE AS SHOWN NOTIFY OWNER'S REPRESENTATIVE TO APPROVE VARIATIONS.
   - B. NEW DUCT AND PIPING SHALL NOT INTERFERE WITH OR RESTRICT (INCLUDING BUT NOT LIMITED TO) LIGHTING, AIR FLOWS, NECESSARY ACCESS TO ELECTRICAL, HVAC AND PIPING ELEMENTS, ETC.
   - C. COORDINATE INSTALLATION OF DUCTWORK AND PIPING WITH OTHER DISCIPLINES IN AREAS OF SHARED SPACE.
   - E. ALL DUCTWORK SIZES SHOWN MAYBE ROUND OR EQUIVALENT RECTANGULAR, EXCEPT INLETS TO VAV BOXES.
   - F. ALL SUPPLY AIR AND OUTSIDE AIR DUCT TO BE INSULATED WITH NOMINAL 1-1/2" THICK FIBERGLASS WRAP INSULATION: ASTM C553, MINIMUM DENSITY OF ONE LB/CU. FT., WITH FOIL SKRIM KRAFT JACKET. FLEXIBLE DUCT MAY BE EXTENDED OVER RIGID DUCT AND SECURED WITH BAND INSTEAD OF DUCT WRAP.
   - G. ALL DUCTWORK WHICH HAD INSULATION REMOVED MUST BE REINSULATED.
   - H. EXTREME CARE SHALL BE TAKEN TO OMIT KINKS IN FLEXIBLE DUCTWORK SO THAT MAXIMUM AIR FLOW REACHES THE SPACES SERVED. USE SHEET METAL ELBOWS FOR ALL 90° BENDS. REMOVE EXCESS FLEXIBLE DUCT WHERE NEEDED, DO NOT LOOP OR SNAKE FLEXIBLE DUCT. SUPPORT FLEXIBLE DUCT AS NECESSARY TO PREVENT SAGGING WHICH MAY RESTRICT AIR FLOW.
   - J. INSTALL MANUAL AIR VENTS AT ALL HIGH POINTS ON CHILLED WATER SUPPLY AND RETURN LINES, AND HEATING HOT WATER SUPPLY AND RETURN LINES (TYPICAL).
   - K. INSULATE ALL CHILLED WATER, DOMESTIC COLD WATER, AND DOMESTIC HOT WATER PIPES WITH PREFORMED FLEXIBLE ELASTOMERIC CELLULAR RUBBER INSULATION.
   - L. INSULATE ALL HEATING WATER SUPPLY AND HEATING WATER RETURN PIPES WITH PREFORMED FIBERGLASS WITH FACTORY APPLIED ASJ JACKET.
   - M. ALL PIPING WHICH HAD INSULATION REMOVED MUST BE REINSULATED AS DESCRIBED IN 1J AND 1K ABOVE.
2. EQUIPMENT:
   - A. ALT #4 - FURNISH AND INSTALL NEW BCU AND CONNECT TO NEW DUCT AND PIPING. SEE BCU SCHEDULE ON SHEET M601.
   - B. ALT #1 - PROVIDE NEW LOCAL EXHAUST ARM WITH MOUNTING BRACKET AND CONNECT TO NEW EXHAUST DUCT.
3. DUCTWORK:
   - A. ALT #4 - CONNECT TO NEW BCU OUTLET AND ROUTE NEW DUCT TO NEW DIFFUSERS. SEE DIFFUSER SCHEDULE ON SHEET M601.
   - B. ALT #4 - PROVIDE NEW RETURN GRILLE.
   - C. ALT #1 - CONNECT TO EXISTING EXHAUST DUCT AND ROUTE NEW DUCT TO NEW LOCAL EXHAUST ARM.
4. PIPING:
   - A. ALT #4 - CONNECT TO EXISTING CWS, CWR, HWS, AND HWR PIPES AND ROUTE NEW PIPES TO NEW BCU COILS. SEE COIL PIPING DETAIL ON SHEET M601.
   - B. ALT #4 - ROUTE NEW COIL DRAIN FROM BCU TO EXISTING AW/AV IN NEW CABINET UPPER CHASE AND CONNECT.
   - C. CONNECT TO EXISTING CA, LG, AND VAC PIPES AND ROUTE NEW PIPE TO NEW GAS TURRETS IN NEW CABINET UPPERS. SEE PIPING DETAIL ON SHEET M601.
5. CONTROLS:
   - A. ALT #4 - INSTALL NEW THERMOSTAT AT 48" A.F.F. WIRING AND CONDUIT BY CONTRACTOR. FINAL TERMINATIONS AND PROGRAMMING BY MU ENERGY MANAGEMENT.
6. MISCELLANEOUS:
   - A. ALT #4- TESTING AND BALANCING BY MU ENERGY MANAGEMENT.
   - B. CLEAN / REFURBISH EXISTING SINK AND FAUCETS.

STATE OF MISSOURI JAMES LEE WYRICK NUMBER PE-2018021277 PROFESSIONAL ENGINEER

ENGINEER - JAMES LEE WYRICK
MO# - 2018021277

James Wyrick Digitally signed by James Wyrick Date: 2021.09.07 15:52:51 -05'00'

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09/13/21	ISSUED FOR CONSTRUCTION	
DRAWN BY: JLW		CHECKED BY: JLW

CAMPUS FACILITIES
Planning, Design, & Construction
Design Services
UNIVERSITY OF MISSOURI

SCHWEITZER HALL
COLUMBIA, BOONE COUNTY, MISSOURI 65211
RENOVATE LAB 213
MECHANICAL & PLUMBING RENOVATION PLANS

PROJECT NUMBER
CP211261

SHEET
MP101