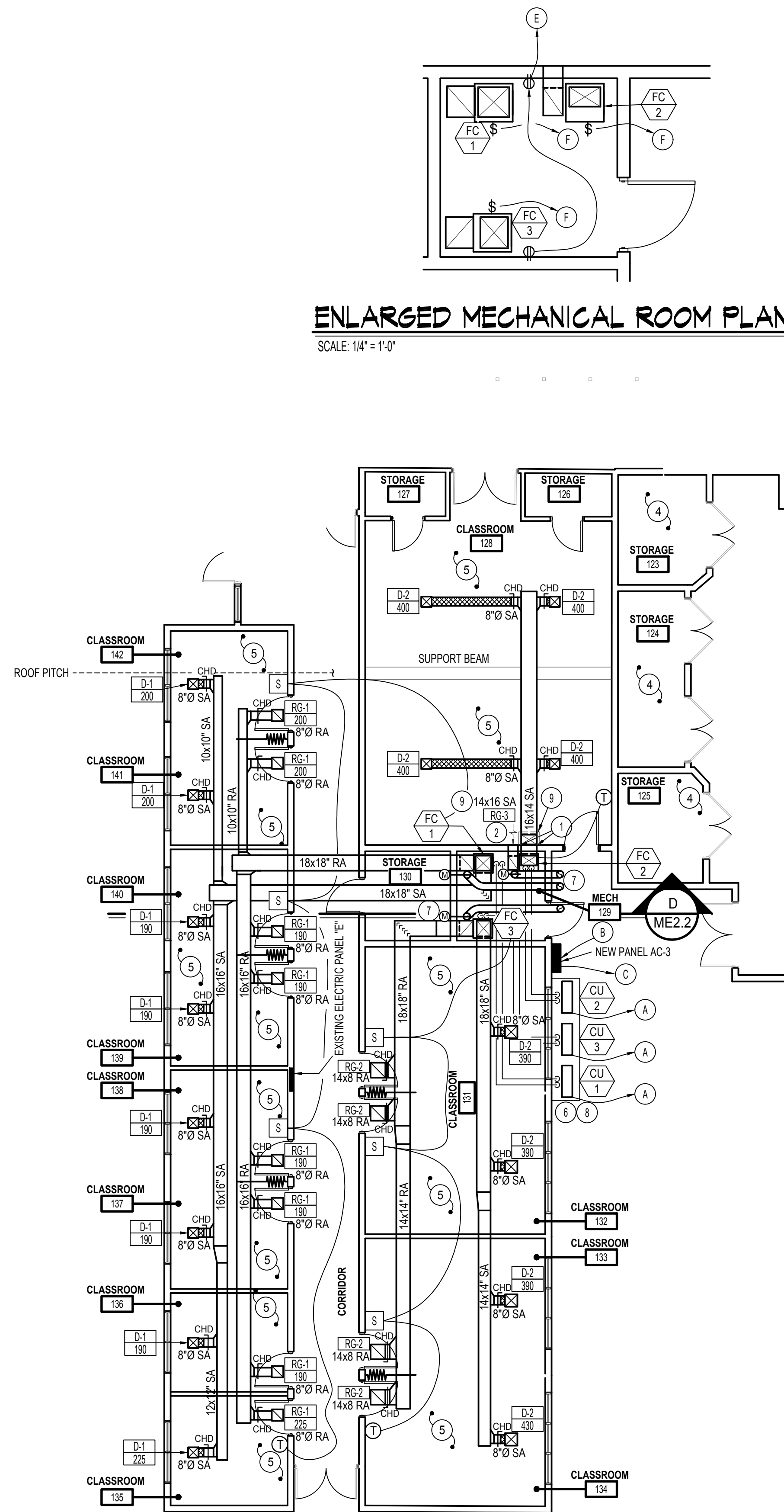


**ENLARGED MECHANICAL ROOM PLAN**

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



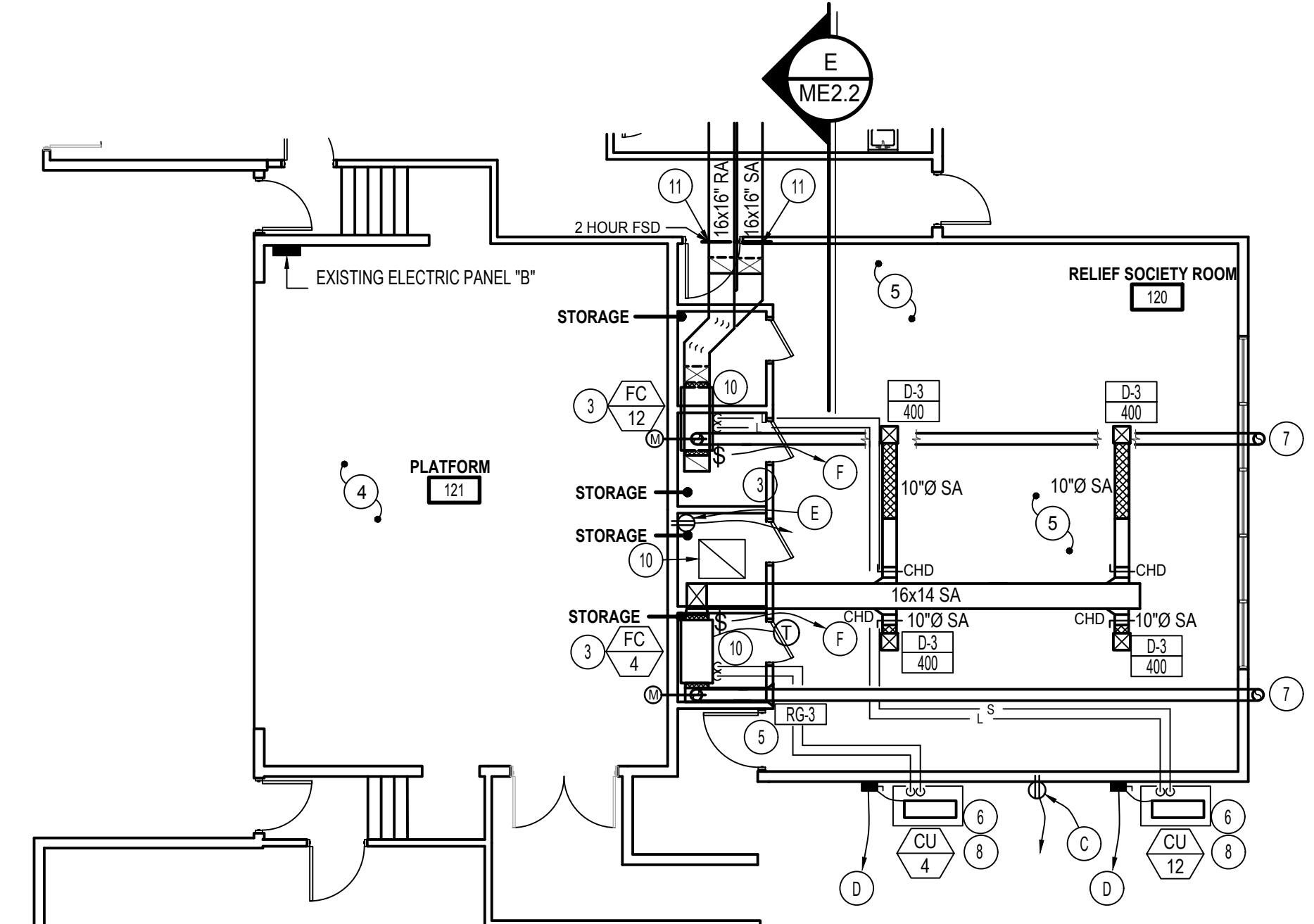
**SOUTH SIDE MECHANICAL PLAN**

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



**MECHANICAL NOTES:**

- 1 PENETRATE AND INSTALL LINTEL AS NEEDED FOR NEW DUCT PENETRATION THROUGH EXISTING BRICK WALL. FIELD VERIFY EXISTING CONDITIONS IN CEILING SPACE.
- 2 MIN QTY (2) 90° TURNS FROM CAN COIL TO GRILLE FOR SOUND ISOLATION.
- 3 KEEP 3" CLEARANCE IN FRONT OF FAN COIL FOR SERVICING.
- 4 NO WORK TO BE DONE IN THIS ROOM. PROTECT DURING CONSTRUCTION.
- 5 REMOVE EXISTING CEILING/WALL AS REQUIRED FOR NEW DUCTWORK. PATCH, TAPE, TEXTURE AND PAINT AS REQUIRED AFTER INSTALL. FIELD VERIFY EXACT EXISTING CONDITIONS OF CEILING SPACE AND MODIFY DUCT AS REQUIRED TO MAINTAIN DESIGN INTENT FOR CEILING SPACE CONDITIONS NOT EXPECTED. MIN OF TWO 90° DUCT ELBOWS BETWEEN ROOM GRILLES/DIFFUSERS FOR SOUND ISOLATION.
- 6 MOUNT NEW CONDENSING UNIT / ROOF TOP UNIT ON 4" CONCRETE PAD WITH 1" THICK NEOPRENE PADS UNDER EACH CORNER FOR VIBRATION ISOLATION. PAD TO BE MIN 6" LARGER THAN CONDENSING UNIT ALL SIDES. HOLD UNIT OUT SO CU IS NOT UNDER DRIP EDGE. REMOVE SHRUBS AS REQUIRED. SEE DETAILS ON SHEET ME3.1.
- 7 RUN OUTSIDE AIR DUCT TO OUTSIDE SOFFIT WITH INSECT SCREEN. INSTALL MOTORIZED DAMPER IN VERTICAL PORTION OF DUCT AND INTERLOCK WITH FUNCTION OF NEW FAN COIL. BALANCE TO CFM AS INDICATED ON SCHEDULE ON SHEET ME3.0. SEE DETAILS ON SHEET ME3.1. OUTSIDE AIR DUCT LOCATION AND ROUTE AS SHOWN ON PLANS FOR CLARITY. FIELD VERIFY BEST POSSIBLE ROUTE. MOTORIZED DAMPER TO BE INSTALLED IN ACCESSIBLE SPACE.
- 8 SEE OUTSIDE REFRIGERATION COVER DETAIL. OUTSIDE REFRIGERATION ALONG BUILDING. & REFRIGERATION COIL CONNECTION DETAILS ON SHEET ME3.2.
- 9 CLEAR CHALK BOARD FOR NEW DUCT/FUR-OUT.
- 10 PROVIDE 3/4" PLYWOOD ON TOP OF BOTTOM CHORD OF ROOF JOISTS IN THIS AREA TO SERVICE EQUIPMENT. SECURE TO JOISTS. PLATFORM TO BE 12" (MINIMUM) LONGER THAN EQUIPMENT AND 48" WIDE.
- 11 INSTALL SMOKE DETECTOR ON EACH SIDE THAT IS ACCESSIBLE & INTERLOCK WITH FIRE ALARM. INSTALL ACCESS BOX TO DAMPER FOR MANUAL RESET. SEE DETAIL ON SHEET ME3.2.

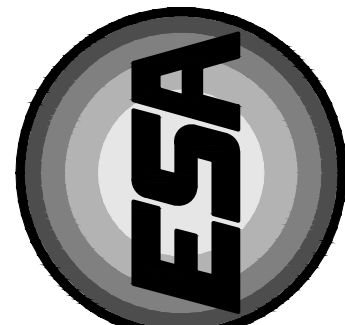


**ELECTRICAL NOTES:**

- A 34°C TO PANEL AC3. SEE COMPRESSOR UNIT SCHEDULE ON SHEET ME3.0 FOR WIRE SIZE.
- B NEW PANEL "AC3". SEE SCHEDULE AND POWER RISE ON SHEET ME3.0.
- C 20A GFCI WITH IN USE W.P. COVER. RUN 2#12, 1#12 GND, 1/2"C. TO NEW 20A 1P BREAKER IN NEAREST PANEL WITH AVAILABLE SPACE.
- D NEW NEMA 3R DISCONNECT. RUN 34°C TO NEAREST PANEL WITH AVAILABLE SPACE. INSTALL NEW 3P BREAKER IN PANEL. SEE COMPRESSOR UNIT SCHEDULE ON SHEET ME3.0 FOR WIRE AND BREAKER SIZE.
- E NEW SERVICE RECEPTACLE. COORDINATE EXACT LOCATION WITH MECHANICAL EQUIPMENT. RUN 2#12, 1#12 GND, 1/2"C TO NEW 20A 1P BREAKER IN NEAREST PANEL WITH AVAILABLE SPACE.
- F NEW FAN SWITCH. RUN 2#12, 1#12 GND, 1/2"C. TO NEW 20A 1P BREAKER IN NEAREST PANEL WITH AVAILABLE SPACE.
- G NEW FAN SWITCH. RUN 2#12, 1#12 GND, 1/2"C TO PANEL "AC3".

**MECHANICAL LEGEND**

SYMBOL	DESCRIPTION
(T)	ELECTRONIC THERMOSTAT
(FC)	EQUIPMENT SYMBOL
(CHD)	HAND DAMPER
(RBD)	ROUND BRANCH DUCT WITH HAND DAMPER
(IFD)	INSULATED FLEXIBLE DUCT
(RA)	RETURN AIR OR EXHAUST GRILLE
(CD)	CEILING DIFFUSER



**Engineered Systems Associates  
Mechanical Engineers**

Dwayne Sudweeks  
1355 East Center - Pocatello, Idaho 83201  
Phone: (208) 233-0501 Fax: (208) 233-0529 email: esa@engsystems.com

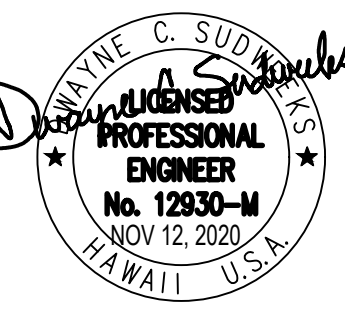
HVAC UPGRADE FOR: PROPERTY # 521-1514  
ZONE 5 (SEC 5) (PLAT 004) (PARCEL 15)

**LDS LAIE 1,8,9**

55-1109 LANIHULI ST

LAIE, HAWAII  
SOUTH SIDE MECHANICAL PLANS

PROJECT:



DRWN. BY: T DAVIS  
CKD. BY: D.SUDWEEKS  
JOB NO.: 20040  
DATE: NOV 2020

SHEET:  
**ME2.1**  
OF: 13