

EXHAUST FAN SCHEDULE								
SYMBOL	AREA SERVED	CHAR.	MIN. CFM	1	STATIC PRESSURE	WATTS	REMARKS	2
EF 1	MEN 112	12060/1	100		0.25	77	CEILING MOUNTED WITH ROOF CAP	
EF 2	WOMEN 111	12060/1	100		0.25	77	CEILING MOUNTED WITH ROOF CAP	
EF 3	FONT 109	12060/1	100		0.25	77	CEILING MOUNTED WITH ROOF CAP	

1 SET BALANCE DAMPERS TO CFM LISTED. 2 CONTROL BY DIVISION 16.

FURNACE SCHEDULE														
SYMBOL	TYPE	MINIMUM EFFICIENCY	MIN. REQ'D INPUT BTU/HR	1	MIN. REQ'D OUTPUT BTU/HR	1	MINIMUM S.C.F.M.	EXT. S.P. IN. W.G.	MOTOR					
									MIN. H.P.	Ø	HERTZ	VOLTS	SPEED	4
F 1	HORIZONTAL	90%	88,000		85,000		1200	0.65	3/4	1	60	120	HIGH	
F 2	HORIZONTAL	90%	88,000		85,000		1200	0.65	3/4	1	60	120	HIGH	

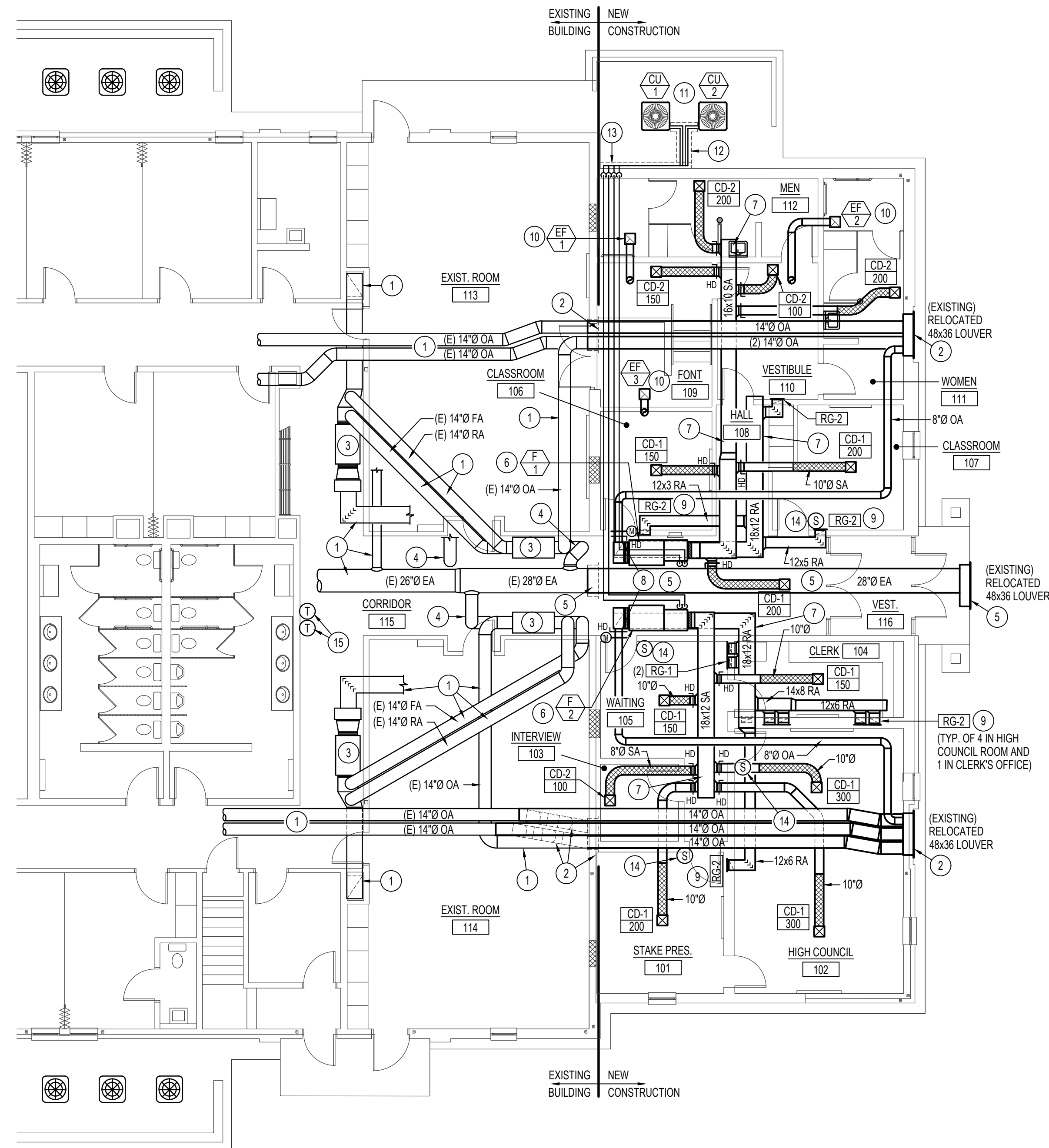
1 SEA LEVEL RATING. 2 FURNACE MARKS CORRESPOND WITH CONDENSING UNIT AND COOLING COIL MARKS. 3 SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS. 4 MAY VARY ACCORDING TO MANUFACTURER. INSTALL NECESSARY JUMPERS SO THAT FAN OPERATES ONLY AT COOLING SPEED WHENEVER FAN CIRCUIT IS ENERGIZED.

AIR COOLED CONDENSING UNIT SCHEDULE												
SYMBOL	AREA SERVED	MIN. SIZE (TONS)	2	MCA	MCOOP	COMPRESSOR MOTOR				CONDENSER		
						NO.	Ø	VOLTS	HERTZ	Ø	VOLTS	HERTZ
CU 1	CLASSROOMS	3.0		21.9	30	1	1	240/208	60	1	240/208	60
CU 2	STAKE SUITE	3.0		21.9	30	1	1	240/208	60	1	240/208	60

1 REFRIGERANT 401A. 2 AT DESIGN CONDITIONS AND 95°F EAT. 3 CONDENSING UNIT MARKS CORRESPOND WITH COOLING COIL AND FURNACE MARKS. 4 SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.

GRILLE AND REGISTER SCHEDULE					
SYMBOL	TYPE	CFM RANGE	NOMINAL SIZE	REMARKS	1
CD-1	CEILING DIFFUSER (4-WAY)	50-400	12 x 12	WITH 10" Ø DUCT	2
CD-2	CEILING DIFFUSER (3-WAY)	50-200	12 x 12	WITH 8" Ø DUCT	2
RG-1	LOW SIDEWALL RETURN GRILLE	0-100	12 x 6	WITH 12x3 UN-LINED DUCT	2
RG-2	LOW SIDEWALL RETURN GRILLE	100-220	12 x 8	WITH 12x5 UN-LINE DUCT	2

1 MAXIMUM NC = 25 @ MAXIMUM CFM NOTED. 2 SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS. 3 RETURN AIR GRILLE TO BE MOUNTED 8" FROM FLOOR TO BOTTOM EDGE OF GRILLE.



MECHANICAL FLOOR PLAN

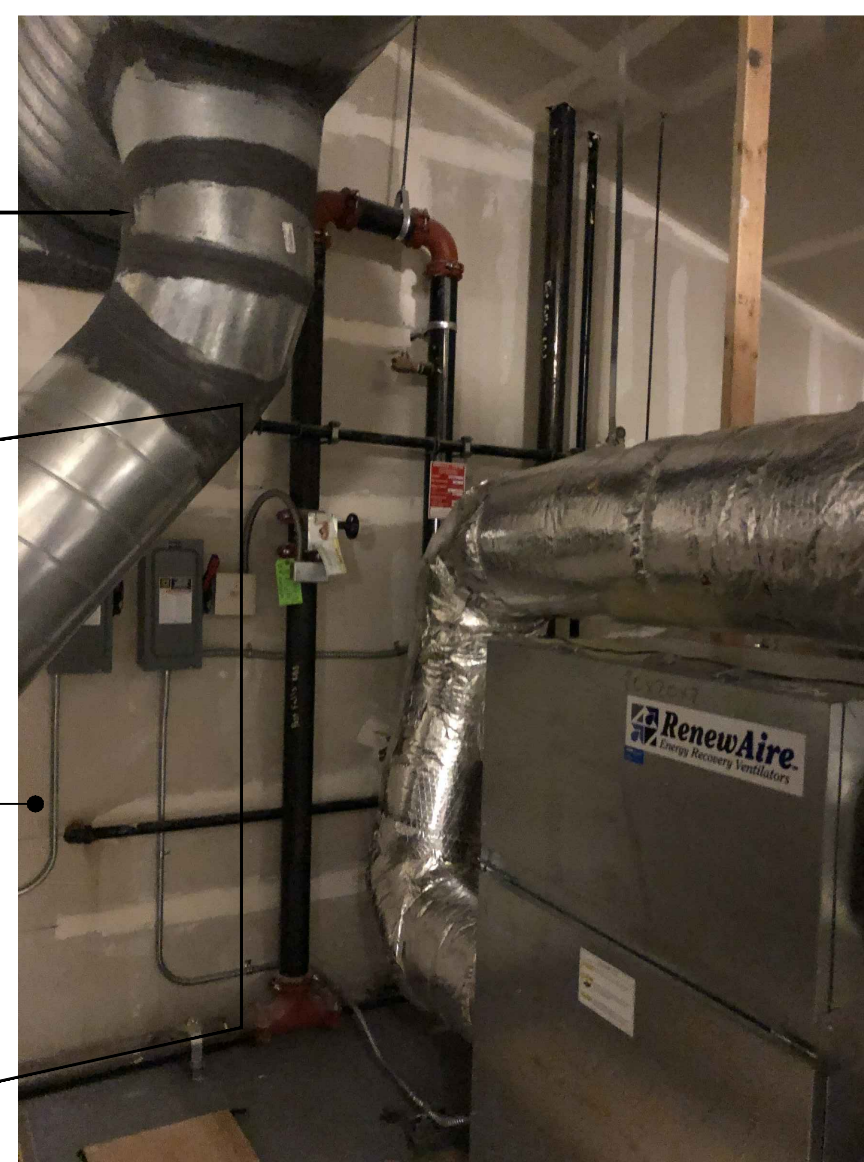
SCALE: 1/8" = 1'-0"



EXISTING CONDITIONS PHOTOS  
NO SCALE

MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS IN THIS AREA (SEE FLOOR PLAN). RE-ROUTE, RELOCATE, AND/OR REMOVE ANY EXISTING DUCTWORK AND/OR EQUIPMENT AS REQUIRED IN THIS AREA TO ALLOW FOR NEW WALKWAY ACCESS DOOR. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF NEW ACCESS DOOR.

ROTATE DUCT TAKE-OFF TO HORIZONTAL AND DROP 14" Ø EXHAUST DUCT DOWN VERTICALLY TO EXISTING ERV UNIT. REFER TO FLOOR PLAN.



ROTATE DUCT TAKE-OFF TO HORIZONTAL AND DROP 14" Ø EXHAUST DUCT DOWN VERTICALLY TO EXISTING ERV UNIT. REFER TO FLOOR PLAN.

REMOVE ANGLED SECTION OF 12" Ø DUCTWORK AND REPLACE WITH NEW VERTICAL SECTION AS SHOWN.



ROTATE DUCT TAKE-OFF TO HORIZONTAL AND DROP 14" Ø EXHAUST DUCT DOWN VERTICALLY TO EXISTING ERV UNIT. REFER TO FLOOR PLAN.

MECHANICAL CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS IN THIS AREA (SEE FLOOR PLAN). RE-ROUTE, RELOCATE, AND/OR REMOVE ANY EXISTING DUCTWORK AND/OR EQUIPMENT AS REQUIRED IN THIS AREA TO ALLOW FOR NEW WALKWAY ACCESS DOOR. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF NEW ACCESS DOOR.

PLAN NOTES:

- EXISTING DUCTWORK TO REMAIN. PROTECT DURING CONSTRUCTION.
- EXISTING 48x36 OUTSIDE AIR LOUVER IN WALL TO BE RELOCATED. DISCONNECT (3) 14" Ø OUTSIDE AIR DUCTS AND REMOVE ALL EXISTING TRANSITIONS AND FITTINGS IN THIS IMMEDIATE AREA. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF LOUVER AND DUCTWORK. EXTEND (3) 14" Ø OUTSIDE AIR DUCTS THRU NEW ADDITION AS SHOWN. CONNECT TO NEW LOCATION OF EXISTING LOUVER.
- EXISTING MECHANICAL EQUIPMENT AND DUCTWORK ON UPPER WALKWAY TO REMAIN. PROTECT DURING CONSTRUCTION.
- REMOVE EXISTING 14" Ø EXHAUST DUCTS FROM 28" Ø DUCT NEAR ROOF. TURN EXISTING TAKE-OFF TO HORIZONTAL. PROVIDE NEW 14" Ø DUCT UP FROM EXISTING ERV UNITS. RISE NEW DUCTS STRAIGHT UP AND CONNECT TO NEW HORIZONTAL FITTING. REFER TO EXISTING CONDITION PHOTOS AM101 FOR MORE DETAIL.
- EXISTING 48x36 OUTSIDE AIR LOUVER IN WALL TO BE RELOCATED. EXTEND 28" Ø EXHAUST AIR DUCT AS SHOWN TO NEW LOUVER LOCATION. KEEP DUCTWORK AS TIGHT TO ROOF STRUCTURE AS POSSIBLE. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF LOUVER AND DUCTWORK.
- PROVIDE AND INSTALL NEW HORIZONTAL FURNACE ON NEW UPPER MECHANICAL WALKWAY. SUPPORT UNIT FROM ROOF AND PROVIDE DRAIN PAN BELOW. UNIT TO BE COMPLETE WITH MATCHING DX COOLING COIL. REFER TO DETAIL CIP201 FOR TYPICAL INSTALLATION AND PIPING CONNECTIONS. RISE (2) 3" Ø FURNACE VENTS UP THRU ROOF WITH CONCENTRIC KIT. REFER TO DETAIL AM201 FOR VENT TERMINATION.
- RUN NEW SUPPLY AND RETURN DUCTS IN CEILING SPACE. ALL DUCTWORK RUN THRU COLD ATTIC SPACES TO BE WRAPPED WITH 1-1/2" EXTERNAL DUCTWRAP.
- CONNECT NEW 8" Ø OUTSIDE AIR DUCT TO RELOCATED LOUVER. RUN NEW 8" Ø O.A. DUCT AS SHOWN AND CONNECT TO NEW FURNACE RETURN DUCT. PROVIDE MOTORIZED DAMPER, DUCT ACCESS HATCH AND MANUAL BALANCING DAMPER IN DUCT. INTERLOCK MOTORIZED DAMPER WITH CORRESPONDING FURNACE CONTROLS. REFER TO DETAIL CM201 FOR TYPICAL DAMPER INSTALLATION AND TO FURNACE SCHEDULE FOR MAXIMUM CFM REQUIRED AT EACH FURNACE.
- INSTALL RETURN AIR GRILLE NEAR FLOOR AND RISE UNLINED DUCT UP IN WALL CAVITY. REFER TO DETAIL GM201 FOR TYPICAL INSTALLATION.
- PROVIDE AND INSTALL CEILING MOUNTED EXHAUST FAN AS SPECIFIED. RISE 6" Ø EXHAUST DUCT UP THRU ROOF WITH ROOF CAP. SEE DETAIL HM202 FOR TYPICAL INSTALLATION.
- MOUNT CONDENSING UNIT ON 1" THICK NEOPRENE ISOLATION PADS AT EACH CORNER.
- PROVIDE SHEET METAL COVERS OVER EXPOSED REFRIGERANT PIPING. REFER TO DETAILS DM201 AND FM201.
- EXTEND REFRIGERANT LINES THRU EXTERIOR WALL AND RISE UP IN WALL CAVITY. SEE DETAIL CM201 FOR TYPICAL INSTALLATION.
- INSTALL REMOTE SENSORS ON WALL AS INDICATED. CONNECT TO NEW THERMOSTAT LOCATED IN UPPER LEVEL MECHANICAL WALKWAY. (SEE NOTE 6) REFER TO DETAIL WIRING SCHEMATIC ON SHEET M301 FOR TYPICAL CONNECTIONS.
- LOCATE NEW THERMOSTAT OF NEW F-1 AND F-2 SYSTEMS IN UPPER MECHANICAL WALKWAY BY EXISTING CONTROLS. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF EXISTING CONTROLS.

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Project for:  
**THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS**

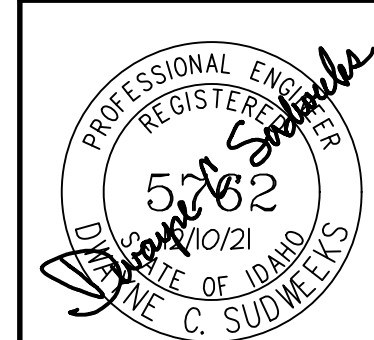
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MECHANICAL FLOOR PLAN

Sheet:

M101



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