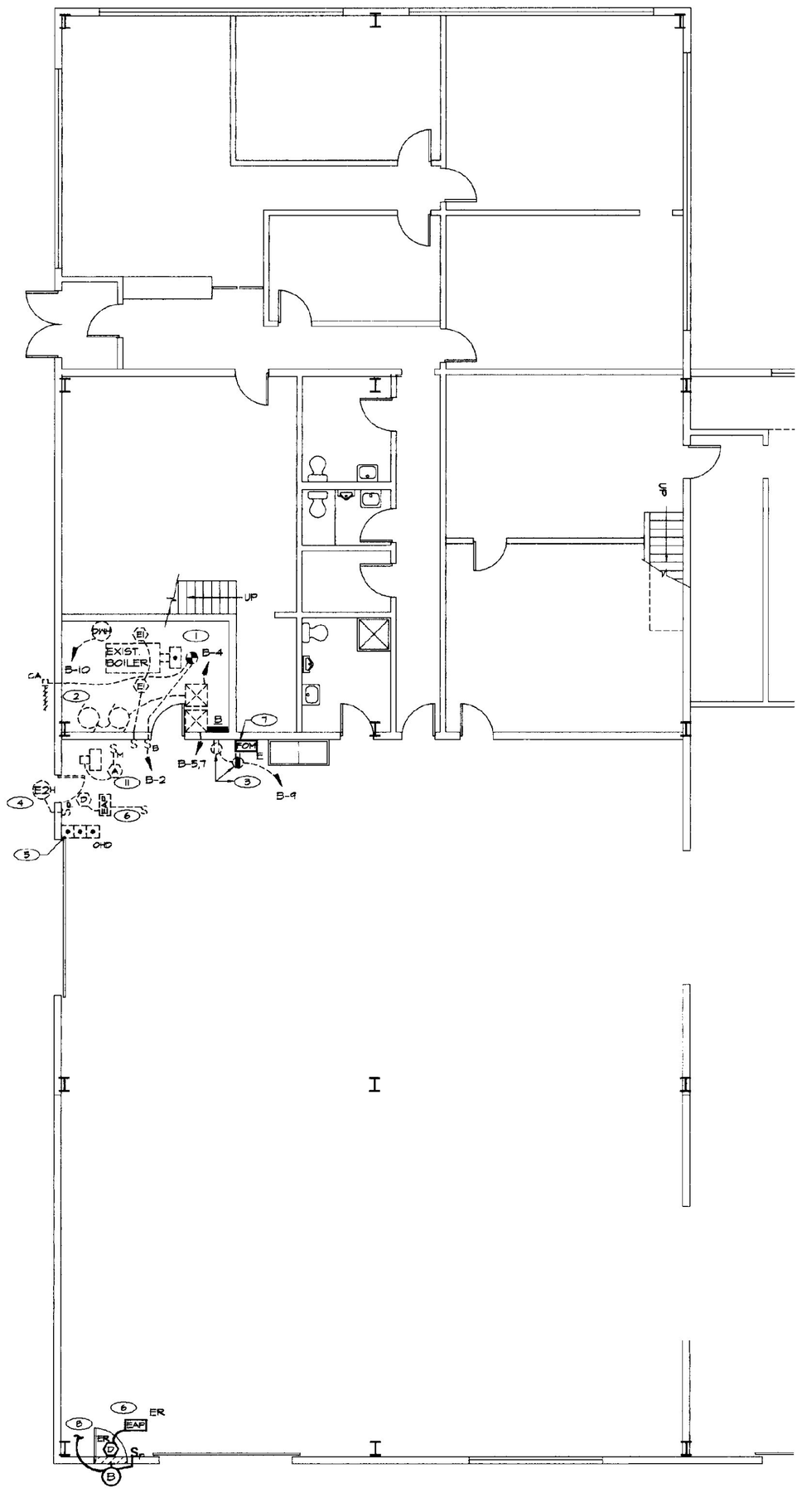
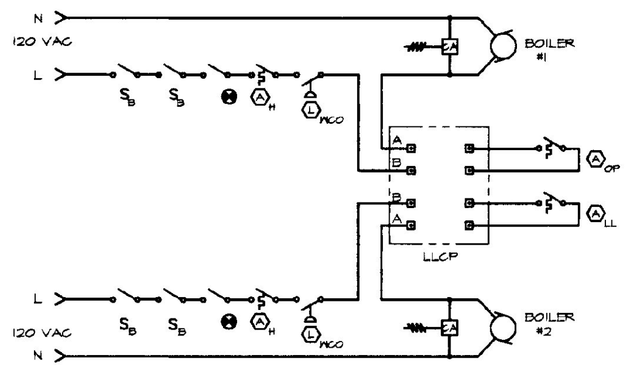


PARTIAL FIRST FLOOR PLAN-ELECTRICAL

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

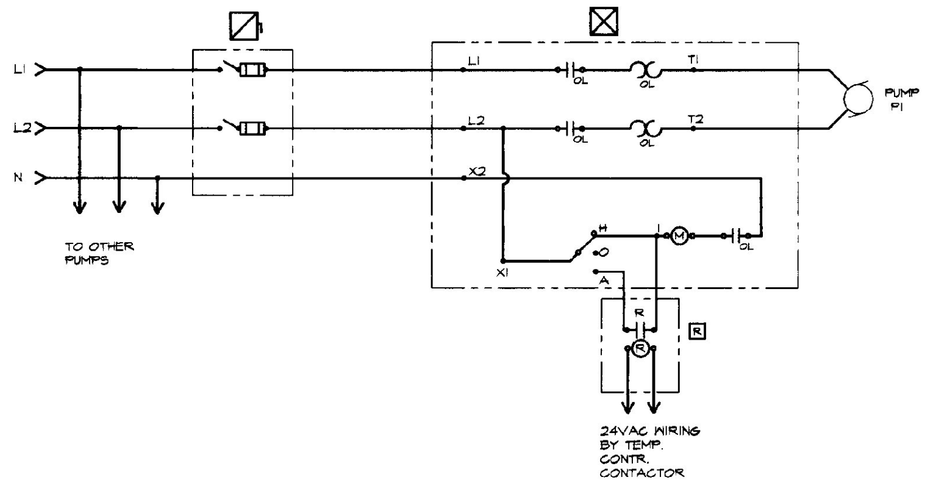


BOILER WIRING DIAGRAM

NOT TO SCALE

NOTES:

1. BONDING CONDUCTOR IS NOT SHOWN.
2. MAKE ALL CONNECTIONS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



CIRCULATOR PUMP WIRING DIAGRAM

NOT TO SCALE

NOTES:

1. BONDING CONDUCTOR IS NOT SHOWN.
2. SIMILAR FOR PUMPS P-1, P-1A, P-2, & P-2A

DRAWING NOTES:

1. REMOVE ALL WIRING FOR EXISTING BOILER, INCLUDING CONDUCTORS, RACEWAYS, BOXES, FITTINGS, AND CONTROL DEVICES. SAVE CIRCUIT BREAKER B2 FOR RELISE.
2. REMOVE ALL WIRING FOR EXISTING CIRCULATOR PUMPS INCLUDING CONDUCTORS, RACEWAYS, BOXES, FITTINGS, MOTOR STARTERS AND CONTROL DEVICES.
3. REMOVE EXISTING RECEPTACLES. REMOVE WIRING BACK TO NEAREST OUTLET OR JUNCTION BOX TO REMAIN.
4. REMOVE EXISTING LIGHT FIXTURE AND SWITCH. REMOVE WIRING BACK TO NEAREST OR JUNCTION BOX TO REMAIN.
5. REMOVE AND SAVE OVERHEAD DOOR OPERATOR STATION, REMOVE WIRING AS NECESSARY TO ACCOMODATE CONSTRUCTION OF NEW WALL. RE-INSTALL CONTROL STATION AS SHOWN ON DRAWING E2 AND EXTEND WIRING AS NECESSARY.
6. REMOVE EXISTING ENTRY ALARM PANEL AND DOOR CONTACT. RELOCATE TO NEW DOOR IN SOUTH WALL AS SHOWN. EXTEND ALL WIRING AS REQUIRED. FIELD VERIFY EXACT REQUIREMENTS PRIOR TO BIDDING.
7. REMOVE AND SAVE EXISTING FUEL OIL TANK MONITOR PANEL. RE-INSTALL AT LOCATION SHOWN ON DRAWING E2. INTERCEPT EXISTING WIRING AND EXTEND AS NECESSARY, INCLUDING BRANCH CIRCUIT, INDIVIDUAL SENSOR CONDUCTORS AND SHIELDED SIGNAL CABLES. FIELD VERIFY EXACT REQUIREMENTS PRIOR TO BIDDING.
8. CONNECT TO UNSWITCHED CONDUCTORS OF NEAREST LIGHTING CIRCUIT.
9. MODIFY PANELBOARD 1B AS FOLLOWS: REMOVE 20A-2P CIRCUIT BREAKER IN POSITIONS 5 & 7 AND REPLACE WITH 30A-2P CIRCUIT BREAKERS. SAVE AND MAINTAIN 20A-1P CIRCUIT BREAKERS IN POSITIONS 2,4, &9 FOR RE-USE AFTER EXISTING WIRING IS REMOVED. INSTALL 20A-1P CIRCUIT BREAKERS IN EXISTING SPACES 15 AND 19
10. CONNECT NEW DOOR CONTACT TO EXISTING ENTRY ALARM ZONE SERVING THIS AREA. WIRE TO MAINTAIN AND EXISTING SUPERVISION FUNCTIONS.
11. REMOVE WIRING TO EXISTING UNIT HEATER AND REMOVE AQUASTAT AND LOCAL DISCONNECT SWITCH. SAVE DEVICES FOR REINSTALLATION AS SHOWN ON DRAWING E2. UNIT HEATER WILL BE RELOCATED BY MECHANICAL CONTRACTOR. EXTEND EXISTING WIRING TO NEW LOCATION AND RE-INSTALL AQUASTAT AND DISCONNECT SWITCH.

ELECTRICAL LEGEND & ABBREVIATIONS

(E1)	CEILING MOUNTED INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. FIXTURE, TYPE AS INDICATED. REFER TO SCHEDULE AND SPECIFICATIONS. SUBSCRIPTS: a = SWITCHGROUP, NL = UNSWITCHED NIGHT LIGHT
(B)	WALL MOUNTED, INCANDESCENT, COMPACT FLUORESCENT OR H.I.D. FIXTURE REFER TO SCHEDULE AND SPECIFICATIONS. TYPE AS INDICATED. SUBSCRIPTS: a = SWITCHGROUP, NL = UNSWITCHED NIGHT LIGHT
	SURFACE MOUNTED FLUORESCENT FIXTURE, TYPE AS INDICATED, REFER TO SCHEDULE AND SPECIFICATIONS. SUBSCRIPTS: a = SWITCHGROUP, NL = UNSWITCHED NIGHT LIGHT.
S	SINGLE POLE SWITCH, MH = 4'-0" U.O.N., SUBSCRIPTS: 2 = 2 POLE, 3 = WAY, 4 = 4 WAY, K = KEY OPERATED, D = DIMMER, V = VARIABLE SPEED, a = SWITCHGROUP
	DUPLEX RECEPTACLE, MH = 2'-0" U.O.N.
	DUPLEX RECEPTACLE WITH 5 MA G.F.C.I., MH = 2'-0" U.O.N.
	BRANCH CIRCUIT WIRING.
ALC-1	HOME RUN TO PANELBOARD AND CIRCUIT BREAKER INDICATED.
60/40 N	DISCONNECT SWITCH, MH = 6' - 0" OR ON EQUIPMENT, 60/40 = FRAME/FUSE SIZE, N = NOT FUSED
S_B	BURNER EMERGENCY SWITCH, REFER TO SPECIFICATIONS, MH = 4'-6" U.O.N.
	FIR-O-MATIC SWITCH, CEILING MOUNTED.
A_H	AQUASTAT, PROVIDED BY MECH. CONTR. WIRED BY ELECT. CONTR. SUBSCRIPTS: H=HIGH LIMIT,OP=OPERATING, LL=LEAD/LAG
L PCO	SELF CONTAINED CONTROL DEVICE, L = LEVEL, P = PRESSURE, SUBSCRIPTS: LPO = LOW WATER CUTOFF SWITCH, H = HIGH, L = LOW, L/L = LEAD/LAG.
1/2	MOTOR WITH HORSEPOWER DESIGNATED, F= FRACTIONAL HORSEPOWER LESS THAT 1/8 HP.
	MOTOR STARTER, MH = 5'-0" OR ON EQUIPMENT.
R	LOW VOLTAGE TEMPERATURE CONTROL RELAY, PROVIDED BY MECHANICAL CONTRACTOR.
PR	PRE-WIRED CONTROL PACKAGE FURNISHED WITH EQUIPMENT.
S_H	TOGGLE TYPE MOTOR DISCONNECT SWITCH, HP RATED, MH = 4'-6" U.O.N. OR ON EQUIPMENT.
T	DRY TYPE TRANSFORMER PROVIDED BY MECHANICAL CONTRACTOR, 120VAC WIRING BY ELECTRICAL CONTRACTOR.
	MOTORIZED DAMPER, PROVIDED BY MECH. CONTR. WIRED BY ELECT. CONTR.
CA	CA=COMBUSTION AIR, VH=VENTILATION AIR.
OHD	PUSHBUTTON STATION
T C	THERMOSTAT, PROVIDED BY MECH. CONTR. 120 VAC WIRING BY ELECT. CONTR. SUBSCRIPTS: C=COOLING
LLCP	LEAD/LAG CONTROL PANEL
FOM	FUEL OIL TANK MONITOR PANEL
EAP	ENERGY ALARM PANEL, MH=5'-0" U.O.N.
D	MAGNETIC DOOR CONTACT FOR ENTRY ALARM SYSTEM MOUNT AT HEAD OF DOOR, STRIKE SIDE
WP	WEATHERPROOF, N.E.M.A. 3R, MINIMUM.
ER	EXISTING RELOCATED
E	EXISTING, USED WHERE DASHED SYMBOLS ARE NOT CLEAR.
U.O.N.	UNLESS OTHERWISE NOTED
DHW	DOMESTIC WATER HEATER
OHD	OVERHEAD DOOR
FOP	FUEL OIL PUMP

NOTE:
ANY SYMBOL DRAWN DASHED INDICATES EXISTING FIXTURES, DEVICES, OUTLETS OR WIRING.

NO.	ISSUED FOR	DATE
2	BIDDING	11/01/01
1	STATE PRELIMINARY REVIEW	10/20/01

THE STATE OF VERMONT — CHARLES F. LANE — REGISTERED PROFESSIONAL ENGINEER

LANE ASSOCIATES CONSULTING ENGINEERS, P.C.

HEATING, VENTILATION, & AIR CONDITIONING, PLUMBING, FIRE PROTECTION, & ELECTRICAL

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MAIN FLOOR PLAN
EXISTING CONDITIONS

BENNINGTON DISTRICT NO.1
AOT MAINTENANCE GARAGE
PHASE I - HEATING SYSTEM RENOVATION

E 1

APPR: CFL | DRAWN: PJE | SCALE: AS NOTED | PROJ. NO. 0032-07

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