ELECTRICAL SPECIFICATIONS:

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SUPERVISION NECESSARY TO PROVIDE COMPLETE WORKING SYSTEMS AS DESCRIBED ON THE DRAWINGS.

2. EXAMINE ALL DRAWINGS RELATING TO THIS WORK AND VERIFY ALL GOVERNING CONDITIONS. NO EXTRA CHARGES WILL BE GRANTED FOR FAILURE OF THE CONTRACTOR TO BECOME FULLY INFORMED OF THE CHARACTER OF THIS WORK.

3. ALL WORK AND MATERIALS SHALL BE ACCORDING TO THE NATIONAL ELECTRIC CODE, UNDERWRITERS' LABORATORIES, NATIONAL BOARD OF FIRE UNDERWRITERS, BOCA AND THE STATE OF VERMONT REQUIREMENTS AS WELL AS ALL OTHER REQUIREMENTS APPLICABLE TO THE LOCATION.

4. THE CONTRACTOR SHALL OBTAIN ALL ELECTRICAL PERMITS AND PAY FOR FEES AND INSPECTIONS.

5. ALL WIRE SHALL BE #12 AWG, TYPE TW UNLESS OTHERWISE INDICATED. WIRE LARGER THAN #8 AWG SHALL BE TYPE THW OR RHW, UNLESS OTHERWISE INDICATED. 600 VOLT WIRING SHALL BE USED THROUGHOUT.

6. ALL WIRING INSTALLED IN FLUORESCENT FIXTURE CHANNEL SHALL BE APPROVED FOR 90 DEGREES CENTIGRADE.

7. NM CABLE MAY BE USED FOR ALL CONCEALED BRANCH CIRCUIT WIRING. EXPOSED WIRING SHALL BE IN EMT OR WIREMOLD. SERVICE ENTRANCE SHALL BE IN PVC AS INDICATED ON PLAN.

8. PULL AND JUNCTION BOXES SHALL BE SIZED PROPERLY ACCORDING TO THE NATIONAL ELECTRIC CODE. BOXES TO HAVE SCREW COVERS, KEYSTONE, COLUMBIA OR EQUAL.

9. FURNISH AND INSTALL SAFETY SWITCHES OF SIZE SHOWN ON THE DRAWINGS OR REQUIRED BY PREVAILING CODE.

10. CHECK MOTORS FOR PROPER RATINGS, CONNECT WITH FLEXIBLE CONDUIT OR LIQUID-TITE, DEPENDING ON LOCATION.

11. MOTOR STARTERS SHALL BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.

12. SAFETY SWITCHES SHALL BE NEMA GENERAL DUTY AND EQUAL TO SQUARE D, ITE OR GE.

13. GENERAL PURPOSE SWITCHES SHALL BE "SPECIFICATION" GRADE, EQUAL TO ARROW-HART 1991. GENERAL PURPOSE RECEPTACLES SHALL BE EQUAL TO ARROW-HART 5252. ALL DEVICES AND COVERPLATES SHALL BE THE SAME COLOR. ALL DEVICES SHALL HAVE IVORY PLASTIC "SMOOTHIE" COVERPLATES.

14. OUTLET BOXES FOR SWITCHES, RECEPTACLES, ETC. TO BE FLUSH MOUNTED EXCEPT AS SHOWN. WALL BOXES TO BE STANDARD GAUGABLE TYPE 2 1/2" DEEP, RACO, STEEL CITY OR EQUAL. GANGING THREE OR MORE BOXES SHALL REQUIRE REINFORCING BETWEEN STRUCTURE MEMBERS FOR RIGIDITY. WHERE REQUIRED 4" SQUARE, 4 11/16, 2 1/8" DEEP WITH PLASTER RINGS, SECURELY SUPPORTED WITH ADJUSTABLE HANGER BARS FOR FIXTURES.

15. IF THE CONTRACTOR OBSERVES THAT ANY OF THE CONTRACT DOCUMENTS ARE AT VARIANCE WITH ANY CODE OR STANDARD IN ANY RESPECT, HE SHALL NOTIFY THE ENGINEER PROMPTLY IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED BY APPROPRIATE MODIFICATION.

16. IF THE CONTRACTOR PERFORMS ANY WORK, KNOWING IT TO BE CONTRARY TO SUCH LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, AND WITHOUT SUCH NOTICE TO THE ENGINEER, HE SHALL ASSUME FULL RESPONSIBILITY THEREFOR AND SHALL BEAR ALL COSTS ATTRIBUTABLE THERETO.

17. ANY FEES OR CHARGES FOR CONNECTIONS BY CENTRAL VERMONT PUBLIC SERVICE CORPORATION, INCLUDING ALL TRANSFORMERS, TRANSFORMER PADS, TERMINATING CABINETS, CABLES, AND ALL OTHER ITEMS NECESSARY FOR COMPLETE SERVICE FROM C.V.P.S., SHALL BE INCLUDED IN THIS CONTRACT.

18. FURNISH AND INSTALL COMPLETE OPERATIONAL FIRE ALARM SYSTEM AS SHOWN ON THE DRAWINGS, INCLUDING THE FOLLOWING ITEMS. MANUFACTURER SHALL BE NOTIFIER NORTHEAST OR WALTER KIDDE.

A. CONTROL PANEL - SGL 4000
B. MANUAL STATION - PNG-1R
C. SMOKE DETECTOR - 710
D. HORN STOBE - 7002-24

ZONE DESIGNATION:

ZONE I - OFFICES

FIRE ALARM SHALL BE CONNECTED TO THE MUNICIPAL SYSTEM. CONTRACTOR TO PROVIDE AND INSTALL ALL MATERIALS NECESSARY TO MAKE THE MUNICIPAL CONNECTION.

19. BASEBOARD ELECTRIC RESISTANCE HEAT SHALL BE EQUAL TO BERKO MBB SERIES, 250 WATTS/FOOT. DESERT TAN FINISH, BUILT-IN SAFETY CUT-OFFS.
1/2 KW - MBB2-524-M 2 feet long
3/4 KW - MBB3-724-M 3 feet long
1 KW - MBB4-1024-M 4 feet long
1 1/4 KW - MBB5-1224-M 5 feet long
1 1/2 KW - MBB6-1524-M 6 feet long
2 KW - MBB8-2024-M 8 feet long
2 1/2 KW - MBB10-2524-M 10 feet long
WALL MOUNTED LINE VOLTAGE THERMOSTATS. DOUBLE POLE SNAP ACTION SWITCH, RATED FOR 22 AMPS, 240 VOLTS. ALL BASEBOARD SHALL BE MOUNTED IN ACCORDANCE WITH MANUFACTURERS' RECOMMEDATIONS FOR CLEARANCES TO CARPET, ETC.

20. INSTALL FLUSH MOUNTED WALL HEATERS 8" ABOVE FINISH FLOOR WHERE SHOWN ON THE DRAWINGS. UNITS SHALL BE EQUAL TO BERKO SR SERIES, SIZED AS INDICATED ON THE DRAWING. ALL UNITS ARE 240 VOLT, SINGLE PHASE, 60 HERTZ, WITH WALL MOUNTED THERMOSTATS.
3/4 KW - SR-2027
1 KW - SR-2024
1 1/4 KW - SR-1527
1 1/2 KW - SR-2027
2 KW - SR-2024

21. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL EMPTY 4" SCHEDULE 40 PVC FROM NEW POWER POLE TO BACKBOARD IN BUILDING FOR TELEPHONE SERVICE (PROVIDED AND INSTALLED BY TENANTS). ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE AND INSTALL TELEPHONE BACKBOARD AND DUPLEX RECEPTACLE FOR TELEPHONE CABINET; CABINET PROVIDED AND INSTALLED BY TENANTS.

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION
A	NUTONE 8663M - RECESSED FAN AND LIGHT COMBINATION, 14" DIAMETER, ANODIZED ALUMINUM GRILLE. FAN AND LIGHT TO OPERATE SIMULTANEOUSLY. 1-100W LAMP. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL FIXTURE, MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY DUCTWORK.
B	PRESCOLITE 90RM-8 - RECESSED DOWNLIGHT, 10" DIAMETER, PRISMATIC GLASS DIFFUSER, DAMP LOCATION LISTED. 1-100W LAMP.
C	LITHONIA 2GT440A - 2' X 4' RECESSED FLUORESCENT FIXTURE, FLUSH STEEL FRAME, PRISMATIC ACRYLIC DIFFUSER. 4-40W LAMPS.
D	LITHONIA 2GT240A - 2' X 4' RECESSED FLUORESCENT FIXTURE, FLUSH STEEL FRAME, PRISMATIC ACRYLIC DIFFUSER. 2-40W LAMPS.
E	LEVITON 9874 - SURFACE MOUNT PORCELAIN LAMPHOLDER, WITHOUT PULL CHAIN SWITCH. 1-100W LAMP.
	DUAL LITE ML-5-12V - SELF-CONTAINED, MAINTENANCE FREE EMERGENCY BATTERY UNIT WITH TWO INTEGRAL 7.2 WATT SEALED BEAM LAMP HEADS, SEALED LEAD/ACID BATTERY. CAPABLE OF POWERING UP TO 41 WATTS AT 12 VOLTS DC. MOUNT 7'0"AFF.
	DUAL LITE EXT-P5SB - MATCHING REMOTE 7.2 WATT SEALED BEAM LAMP HEAD WITH MP-103 MOUNTING PLATE. MOUNT 7'0"AFF. 12 VOLTS, DC.
	DUAL LITE ESRWW-DC-12V - CEILING MOUNT EXIT LIGHT WITH TWO 12 VOLT DC BAYONET BASE EMERGENCY SOCKETS TO BE POWERED FROM "EB". SINGLE FACE, RED LETTERS, WHITE FACE.

PANEL SCHEDULES

PANEL: "A" - LIGHTS & POWER SQUARE D TYPE NQOB
VOLTAGE: 120/240, PHASE: 1, WIRE: 3, AMPS 200 MCB, CIRCUITS: 42
MOUNT: FLUSH, HEIGHT: TOP 6'AFF, ENCLOSURE: NEMA 1, FURNISH WITH TYPE QOB BREAKERS

CCT	BREAKER	SERVES	CCT	BREAKER	SERVES
1	20A-1P	CONFERENCE & FRONT OFFICE LIGHTS	2	20A-2P	MEN'S ROOM HEAT
3	20A-1P	MAIN ROOM & STORAGE LIGHTS			
5	20A-1P	PUBLIC AREA & OFFICE LIGHTS	4	20A-2P	WOMEN'S ROOM HEAT
7	20A-1P	FRONT OFFICE RECEPTACLES			
9	20A-1P	CONFERENCE ROOM RECEPTACLES	*6	20A-1P	DEDICATED CIRCUIT
11	20A-1P	STORAGE & REAR OFFICE RECEPTACLES	*8	20A-1P	DEDICATED CIRCUIT
13	20A-1P	TESTING & WAITING ROOM RECEPTACLES	*10	20A-1P	DEDICATED CIRCUIT
15	20A-1P	BATHROOM & FOYER RECEPTACLES	12	20A-1P	TELEPHONE CABINET
17	20A-1P	MAIN WORK ROOM FLOOR RECEPTACLES	14	20A-1P	HOT WATER HEATER
19	20A-1P	MAIN WORK ROOM FLOOR RECEPTACLES	16	20A-1P	SEWAGE PUMP (1/4 HP)
21	20A-1P	FIRE ALARM PANEL	18	20A-1P	WELL PUMP (1/2 HP)
23	20A-1P	EXHAUST FAN		20A-2P	SPARE
	20A-1P	SPARE			
	20A-1P	SPARE			FUTURE SPACE
		FUTURE SPACE			FUTURE SPACE
		FUTURE SPACE			FUTURE SPACE
		FUTURE SPACE			FUTURE SPACE
		FUTURE SPACE			FUTURE SPACE
		FUTURE SPACE			FUTURE SPACE
		FUTURE SPACE	34	L00A-2P	SUBPANEL "B"

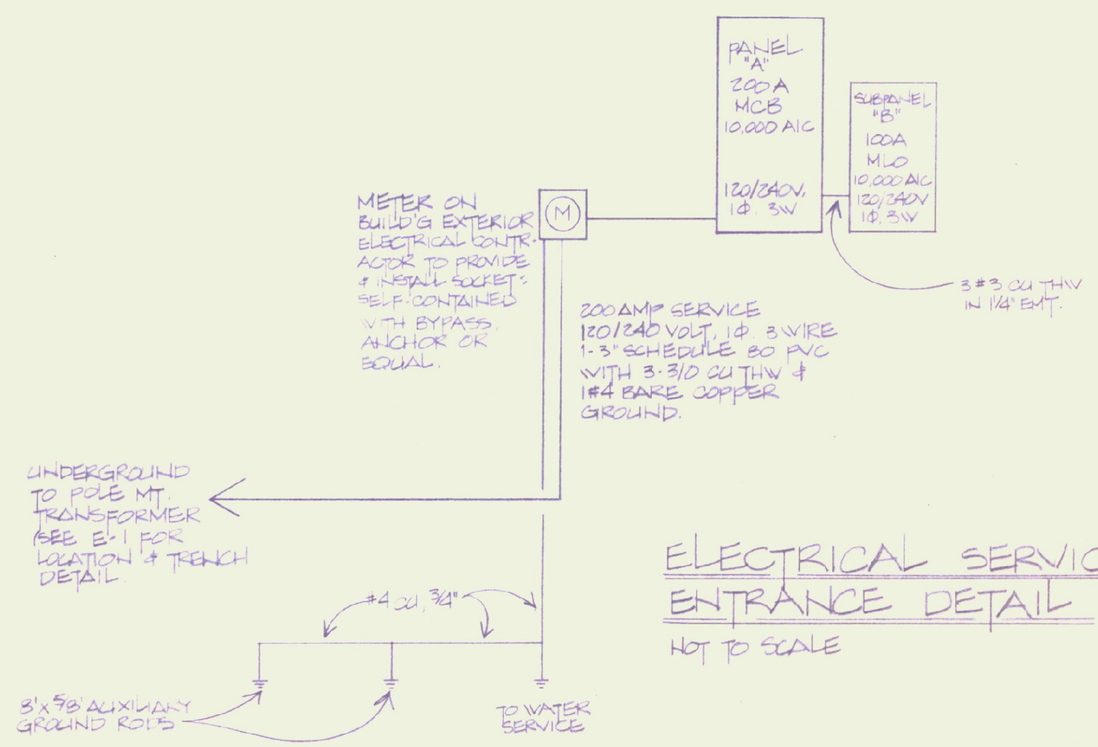
SUBPANEL "B" - ELECTRIC HEAT SQUARE D TYPE NQOB
VOLTAGE: 120/240, PHASE: 1, WIRE: 3, AMPS 100 MLO, CIRCUITS: 20
MOUNT: FLUSH, HEIGHT: TOP 6'AFF, ENCLOSURE: NEMA 1, FURNISH WITH TYPE QOB BREAKERS

CCT	BREAKER	SERVES	CCT	BREAKER	SERVES
1	20A-2P	FRONT OFFICE HEAT	2	20A-2P	CONFERENCE ROOM HEAT
3	20A-2P	REAR OFFICE HEAT	4	20A-2P	MAIN WORK ROOM HEAT
5	20A-2P	STORAGE ROOM HEAT	6	20A-2P	PUBLIC ROOM HEAT
7	20A-2P	TESTING ROOM HEAT	8	20A-2P	WAITING ROOM HEAT
9	20A-2P	FOYER HEAT	10	20A-2P	JANITOR'S ROOM HEAT

* NOTE: CIRCUITS A-6, A-8 & A-10 SHALL HAVE ISOLATED GROUNDS.

ELECTRICAL LEGEND:

- FLUORESCENT FIXTURE--LETTER DENOTES TYPE--SEE SCHEDULE
- INCANDESCENT CEILING FIXTURE--LETTER DENOTES TYPE--SEE SCHEDULE
- EXIT LIGHT--SEE SCHEDULE
- SINGLE POLE SWITCH--MOUNTED 48" AFF
- THREE WAY SWITCH--MOUNTED 48" AFF
- DUPLEX RECEPTACLE MOUNTED 12"AFF - SLASH DENOTES ABOVE COUNTER
- DUPLEX RECEPTACLE - FLOOR MOUNTED WITH ISOLATED GROUND
- DOUBLE DUPLEX - FLOOR MOUNTED
- EMERGENCY BATTERY UNIT - SEE SCHEDULE
- GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE MOUNTED 48" AFF
- TELEPHONE OUTLET MOUNTED 12"AFF
- FLOOR MOUNTED TELEPHONE OUTLET
- SYSTEM WIRED SMOKE DETECTOR
- SYSTEM WIRED SMOKE DETECTOR LOCATED ABOVE SUSPENDED CEILING GRID
- FIRE ALARM MANUAL PULL STATION MOUNTED 48"AFF
- FIRE ALARM HORN AND LIGHT ANNUNCIATOR MOUNTED 7'0"AFF
- EMERGENCY LIGHT HEAD - SEE SCHEDULE
- DISCONNECT SWITCH - NUMBER DENOTES AMPERAGE
- JUNCTION BOX
- HOT WATER HEATER - PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR
- 1KW - ELECTRIC RESISTANCE WALL HEATER - KW DENOTES SIZE
- 1KW - ELECTRIC RESISTANCE BASEBOARD HEAT - KW DENOTES SIZE AT 250 WATTS PER FOOT
- DISTRIBUTION PANEL MOUNTED 6'0"AFF TO TOP BREAKER
- THERMOSTAT FOR ELECTRIC HEAT - MOUNT 48"AFF
- WEATHERPROOF GFCI RECEPTACLE - MOUNT 36" ABOVE FINISHED GRADE
- 1/2 - MOTOR - NUMBER DENOTES HORSEPOWER - PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR
- MOTOR STARTER - PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR
- WP 20 - WEATHERPROOF DISCONNECT SWITCH - NEMA 3R - NUMBER DENOTES AMPERAGE



ELECTRICAL SERVICE ENTRANCE DETAIL
NOT TO SCALE

11 OCT. 1985

STATE OF VERMONT:
MOTOR VEHICLE DEPARTMENT
BRANCH OFFICE RUTLAND, VT.

ATKIN · WELKIND
ARCHITECTS
431 PINE ST., BURLINGTON, VT.

ELECTRICAL: SPECS, LEGEND, SCHEDULES

PROJECT NO. 364
DATE: 8 OCT. 1985
SCALE: AS NOTED
BY: MDG
CHKD: NV
DRAWING NO. E2