2. ALL RECEPTACLES SHALL BE INSTALLED 18" AFF TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.

3. MOUNT PANELS IN RESIDENTIAL SPACES SO NO CIRCUIT BREAKER HANDLE IS HIGHER THAN 44" AFF.

4. ALL WIRING SHALL BE COPPER UNLESS DESIGNATED AS "AL". UNLESS OTHERWISE NOTED ALL WIRING SHALL BE 2\*12 AWG AND 1\*12 EQUIPMENT GROUNDING CONDUCTOR. HOMERUNS FED FROM A 20A-1P, 120V CIRCUIT IN EXCESS OF 70' SHALL BE #10 AWG.

5. CONNECT BATTERY BACKED EMERGENCY AND EXIT LIGHTING TO NEAREST LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. CONNECT REMOTE HEADS WITH \*10 AWG COPPER CONDUCTORS. AC EXIT FIXTURES SHALL BE CONNECTED TO NEAREST EMERGENCY CIRCUIT OR AS INDICATED.

6. TEST ALL EMERGENCY LIGHTING UNITS FOR PROPER OPERATION OF LAMPS AND BATTERIES.

7. ALL WORK SHALL COMPLY WITH NFPA70, NFPA72, NFPA101 & ALL FEDERAL, STATE & LOCAL REGULATIONS.

8. ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN FIRE RATING FOR THE SEPARATION.

9. ALL ENCLOSURES, CONDUIT BODIES AND THEIR COVERS CONTAINING FIRE ALARM SYSTEM CONDUCTORS SHALL BE PAINTED RED.

10. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH ALL FEEDERS AND BRANCH CIRCUITS. SIZE IN ACCORDANCE WITH NFPA 70 ARTICLE

11. COORDINATE INSTALLATION AND LOCATION OF VOICE AND CABLE TV OUTLETS WITH OWNER.

12. THE CONTRACTOR SHALL SET ALL ELECTRONIC BREAKERS TO SPECIFIED TRIP SETTINGS BEFORE ENERGIZING EQUIPMENT.

13. PROVIDE EXPANSION FITTINGS FOR ALL UNDERGROUND RACEWAYS ENTERING ENCLOSURES ATTACHED TO FIXED STRUCTURES.

14. OUTDOOR RECEPTACLE COVERS SHALL COMPLY WITH NFPA 70 - ARTICLE

15. ALL CONDUCTOR INSULATION FOR BUILDING WIRE SHALL BE THWN/THHN UNLESS NOTED OTHERWISE.

16. PROVIDE LABEL ON SERVICE EQUIPMENT INDICATING AVAILABLE SHORT CIRCUIT CURRENT OBTAIN VALUES FROM ENGINEER.

17. PROVIDE ARC-FALUT CIRCUIT BREAKERS FOR ALL CIRCUITS WITHIN TENANT PANELS. PROVIDE ARC FAULT LABELS PER NFPA 70-ARTICLE 110.2.

18. PROVIDE GFCI RATED CIRCUIT BREAKERS FOR DISHWASHER, REFRIGERATOR, WASHING MACHINE AND DRYER CIRCUIT.

19. IF BUILDING REQUIRES TWO SERVICE ENTRANCES, PROVIDE SIGNS PER NFPA 70-230. 20. OUTLETS INSTALLED IN FIRE RATED WALLS BACK TO BACK SHALL BE

SEPARATED BY 24" MINIMUM OR BE PROTECTED WITH "PUTTY PADS" PER 2009 INTERNATIONAL BUILDING CODE SECTION 713.3.2 21. PROVIDE AIR VAPRO BARRIER BOXES FOR WIRING DEVICES IN EXTERIOR WALLS AND INTERIOR SOUND CONTROL WALLS BETWEEN RESIDENT ROOMS. INSTALL

PER MANUFACTURER'S INSTRUCTIONS. PROVIDE LESSCO MODEL NUMBER:

VAPORBOX 22. MINIMUM WIRE SIZE ON ALL BRANCH CIRCUITS SHALL BE #12.

## UNIT FIRE ALARM NOTES:

- 1. WHEN UNIT SMOKE DETECTOR GOES INTO ALARM ALL SINGLE STATION DEVICES WITHIN THAT UNIT WILL ACTIVATE.
- 2. INTERCONNECT ALL 120 VOLT SINGLE STATION SMOKE DETECTORS WITHIN EACH LIVING UNIT. ALL INTERCONNECTED SMOKE DETECTORS SHALL BE ON THE SAME CIRCUIT FOR PROPER OPERATION. REFER TO MANUFACTURER'S INSTALLATION MANUAL AND MOUNT DETECTORS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 3. CARBON MONOXIDE DETECTORS (120V) IN RESIDENCES SHALL BE INSTALLED AT LEAST 10 FEET FROM ANY HEAT SOURCE.
- 4. INTERCONNECT ALL 120 VOLT CARBON MONOXIDE (CO) DETECTORS WITHIN EACH LIVING UNIT. ALL INTERCONNECTED CO DETECTORS SHALL BE ON THE SAME CIRCUIT FOR PROPER OPERATION. REFER TO MANUFACTURER'S INSTALLATION MANUAL AND MOUNT DETECTORS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CO DETECTORS SHALL HAVE AN ALARM SOUND THAT IS DIFFERENT THAN THE LIVING UNIT SMOKE DETECTORS AND FIRE ALARM SYSTEM
- 5. AUDIBLE ALARM Db LEVELS SHALL COMPLY WIHT NFPA 72.

## ABBREVIATIONS

AMP AC ALTERNATING CURRENT, ABOVE COUNTER AMERICANS WITH DISABILITIES ACT

AMP FRAME AFCI ARC FAULT CIRCUIT INTERRUPTER ABOVE FINISHED FLOOR

AFG ABOVE FINISHED GRADE AMPERES INTERRUPTING CAPACITY

AL ALUMINUM ΑT

AUTOMATIC TEMPERATURE CONTROL ATS AUTOMATIC TRANSFER SWITCH

AWG AMERICAN WIRE GAUGE BLDG BUILDING CONDUIT

CB CIRCUIT BREAKER CI CAST IRON CKT CIRCUIT CENTERLINE

CMP CENTRAL MAINE POWER (ELECTRIC UTILITY)

CONCRETE MASONRY UNIT CT CURRENT TRANSFORMER

CONC CONCRETE CS CARBON STEEL CU COPPER

CABINET UNIT HEATER DAMP LOCATION

ELECTRICAL CONTRACTOR EXHAUST FAN

EXISTING REMAINS IN PLACE ERL EXISTING RELOCATE ERM EXISTING REMOVE

ELECTRIC UNIT HEATER EWC ELECTRICAL WATER COOLER FACP FIRE ALARM CONTROL PANEL FAPS FIRE ALARM PULL STATION

FRP FIBER REINFORCED PLASTIC FVNR FULL VOLTAGE, NON-REVERSING FWU FURNISHED WITH UNIT

DC DIRECT CURRENT GFI GROUND FAULT INTERRUPTER GROUND GND

HID HIGH INTENSITY DISCHARGE HOA HAND-OFF-AUTOMATIC HP HORSEPOWER HPS HIGH PRESSURE SODIUM

HZ HERTZ ICB INSULATED CASE CIRCUIT BREAKER JUNCTION BOX JB KAIC THOUSAND AMP INTERRUPTING CAPACITY

KCMIL THOUSAND CIRCULAR MIL KV THOUSAND VOLTS KVA THOUSAND VOLT-AMPS KW THOUSAND WATTS (KILOWATT) LED LIGHT EMITTING DIODE

LP LIGHTING PANELBOARD

LTG LIGHTING LSIG LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT CIRCUIT BREAKER TRIP FUNCTIONS AS INDICATED

MCC MOTOR CONTROL CENTER MCCB MOLDED CASE CIRCUIT BREAKER MCB MAIN CIRCUIT BREAKER MDP MAIN DISTRUBITION PANEL

MANHOLE MLO MAIN LUGS ONLY MTS MANUAL TRANSFER SWITCH NORMALLY CLOSED OF NURSE CALL

NEC NATIONAL ELECTRICAL CODE NFPA NATIONAL FIRE PROTECTION ASSOCIATION NIGHT LIGHT NORMALLY OPEN

NO. NUMBER OVERLOAD 0L POLE

PUBLIC ADDRESS PUSH BUTTON POWER FACTOR PΗ PHASE PNL PANEL

TP1-2 TELE-POWER POLE - POLE AND CIRCUIT NUMBER AS INDICATED PSNH PUBLIC SERVICE OF NEW HAMPSHIRE (ELECTRIC UTILITY) POTENTIAL TRANSFORMER

LAMPS

ELECTRICAL EQUIPMENT TO BE RELOCATED

ELECTRICAL EQUIPMENT TO REMAIN RIGID STEEL CONDUIT RTU ROOF TOP UNIT

ELECTRICAL EQUIPMENT TO REMOVE RVNR REDUCED VOLTAGE, NON-REVESING SMART BOARD SUPPLY FAN SINGLE LINE DIAGRAM

MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT SOLID STATE

SWBD-1 SWITCHBOARD NUMBER AS DESIGNATED TC TIME CLOCK TS TRANSFER SWITCH TYP TYPICAL UNDERGROUND UG VOLT VA VOLT-AMPERE

VFD VARIABLE FREQUENCY DRIVE WATT WITH WEATHERPROOF XFMR TRANSFORMER

3PH THREE PHASE 4W FOUR WIRE 3W THREE WIRE

SYMBOL LEGEND

SURFACE MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING

RECESSED MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING JUNCTION BOX, "H" DENOTES RANGE HOOD, "DS" DENOTES DISPOSAL, "DW"

DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT 18" AFF UNLESS NOTED OTHERWISE.

GROUND FAULT DUPLEX RECEPTACLE 20A, 125V, TAMPER PROOF WITH MATCHING PLATE FURNISHED W/ OUTLET. FLUSH MOUNTED 45" AFF EXCEPT AS NOTED.

REFRIGERATOR DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT RECEPTACLE AT 48 INCHES ABOVE FINISHED FLOOR.

RANGE OUTLET 50 AMP, 250 VOLT, GROUNDING TYPE FLUSH MOUNTED 18" AFF DRYER OUTLET 30 AMP, 250 VOLT, GROUNDING TYPE FLUSH MOUNTED 18" AFF

------ RACEWAY & WIRING OR MC CABLE RUN CONCEALED IN WALLS/CEILINGS (1)1/2"C-2\*12AWG+1\*12GND UNLESS OTHER WISE NOTED. (\*)ASTERISK DENOTED \*10AWG FOR ALL CIRCUITS CONTAINED IN HOME RUN. (\*\*)DOUBLE ------ RACEWAY & WIRING RUN EXPOSED RACEWAY & WIRING RUN CONCEALED UNDER FLOOR OR BURIED 30" BELOW FINISH GRADE ASTERISK DENOTES (1)3/4"C-2\*8AWG+1\*10GND PROVIDE EQUIPMENT GROUNDS IN ACCORDANCE WITH NFPA 70, ARTICLE 250.

TV OUTLET LOCATION, CABLE AND JACKS BY EC

TELEPHONE JACK, MOUNT 18"AFF UNLESS NOTED OTHERWISE, RUN ONE CAT 5E CABLE BACK TO

CEILING MOUNTED MOTION SENSOR (WATTSTOPPER OR EQUAL) CORRIDORS: WT-2255 SENSOR 8 B120E-P POWER PACK. OTHER COMMON SPACES: WT-605 SENSOR & B120E-P POWER PACK. SENSORS AND RELAYS TO CONTROL CIRCUITS IN SPACES INDICATED. DEVICES SHALL PROVIDE FULL COVERAGE IN AREAS INSTALLED. DT INDICATES DUAL TECHNOLOGY PIR INDICATED PASSIVE INFRARED TECHNOLOGY

(MS)—I WALL MOUNTED MOTION SENSOR. MOUNT AT 120" AFF UNLESS OTHER WISE NOTED

SINGLE POLE SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF, 3=3-WAY, 4=4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.

SINGLE POLE DIMMER SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF, 3=3-WAY, 4=4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.

SB(SD) SMOKE DETECTOR, PHOTOELECTRIC TYPE, WITH SOUNDER BASE (CO) CARBON MONOXIDE DETECTOR, WITH SOUNDER BASE

SELF CONTAINED EMERGENCY LIGHT W/2 HEADS DUAL-LITE (LED) MODEL LZ65I-03L, 65 WATTS FOR 90 MINUTES, COLOR BY ARCHITECT

EXIT LIGHT FIXTURE, UNSWITCHED, DUAL-LITE LX-U-R-W-E OR APPROVED EQUAL

LIGHTING FIXTURES, CAPITAL LETTERS DENOTE TYPE PER LIGHTING FIXTURE SCHEDULE. LOWER CASE LETTERS INDICATE SWITCH CONTROL. "ab" INDICATES INBOARD LAMPS CONTROLLED BY OUTBOARD SWITCHED "a" AND "b". DIAGONAL INDICATED NIGHT LIGHT (UNSWITCHED)

D 0

**CONSULTANTS:** 

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SHEET TITLE: BASEMENT AND 1ST FLOOR ELECTRICAL PLANS

**CHECKED BY:** WSB

A-E101

## LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER / MODEL NUMBER	LAMPS (WATTAGE, COLOR TEMP, LUMENS)	DESCRIPTION
B1	PROGRESS #P8071-28-35K-L10-STR2	LED / 12W / 3000K / 1037 LUMENS	6" DIA LED DOWNLIGHT W/FROSTED POLYCARBONATE LENS, WHITE TRIM AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR WET LOCATIONS
B2	PROGRESS #P8046-28-30K	LED / 9W / 3000K / 642 LUMENS	5.2" DIA LED ADJUSTABLE ACCENT LIGHT W/DIFFUSED POLYCARBONATE LENS, SATIN WHITE FINISH AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR WET LOCATIONS
C1	PROGRESS #P8022-28-30K	LED / 17W / 3000K / 1050 LUMENS	7.25" DIA x 1.7" H LED SURFACE MTD SHOWER LIGHT W/DIFFUSED POLYCARBONATE LENS, DIE CAST ALUMINUM HOUSING, WHITE TRIM AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR WET LOCATIONS
C2	PROGRESS #P8147-28-30K	LED / 16.4W / 3000K / 1035 LUMENS	7.25" DIA x 2.35" H SURFACE MTD CAST ALUMINUM LED LIGHT W/7" DIA DROPPED DECORATIVE GLASS RING, DIFFUSED POLYCARBONATE LENS, WHITE HOUSING FINISH AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR WET LOCATIONS
С3	PROGRESS #P350007-009-30	LED / 28W / 3000K / 2409 LUMENS	15" DIA x 5-7/8" H SURFACE MTD LED LIGHT W/ETCHED WHITE LINEN GLASS BOWL, BRUSHED NICKEL STEEL HOUSING AND DECORATIVE ACCENT AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR DAMP LOCATIONS
C4	PROGRESS #P350005-009-30	LED / 21W / 3000K / 1601 LUMENS	SIMILAR TO TYPE C3 EXCEPT 11" DIA x 4-5/8" H WITH LOWER LIGHT OUTPUT
C5	PROGRESS #P3648-3130K9	LED / 17W / 3000K / 1211 LUMENS	9-1/2" DIA x 4-3/8" H SURFACE MTD LED LIGHT W/FROSTED IMPACT RESISTANT POLYCARBONATE DIFFUSER, BLACK CAST ALUMINUM AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR WET LOCATIONS
C6	PROGRESS #P3910-3030K9	LED / 17W / 3000K / 1211 LUMENS	9" DIA x 4-3/8" H SURFACE MTD LIGHT W/ETCHED OPAL WHITE ACRYLIC DIFFUSER, WHITE STEEL HOUSING AND INTEGRAL ELECTRONIC DIMMING DRIVER, UL LISTED FOR DAMP LOCATIONS
E1	PROGRESS *PE2EU-30	LED / .56W	9" W x 4" T x 2.75" D WALL MTD WHITE THERMOPLASTIC EMERGENCY LIGHT WITH FULLY ADJUSTABLE LAMP HEADS AND NICKEL CADMIUM BATTERY RATED FOR 90 MINS UPON LOSS OF NORMAL POWER, UL LISTED FOR DAMP LOCATIONS
L1	PROGRESS #P7186-30EB	(2) F32T8 / 32W	48" L x 7-3/4" W x 3" H SURFACE MTD FLUORESCENT W/CLEAR PRISMATIC ACRYLIC LENS, WHITE STEEL HOUSING AND END CAPS AND ELECTRONIC NON-DIMMING BALLAST, UL LISTED FOR DAMP LOCATIONS
R1	PROGRESS #P5042-09	(1) A19 BASE, LED EQUIVALENT TO 100W MAX	DECORATIVE SINGLE STEM MTD PENDANT LIGHT W/6" DAI x 8" H ETCHED GLASS CONE, BRUSHED NICKEL STEEL STEM, TRIM AND CANOPY, OVERALL HEIGHT OF 64", UL LISTED FOR DRY LOCATIONS
R2	PROGRESS #P4621-09	(3) A19 BASE, LED EQUIVALENT TO 100W MAX	DECORATIVE 3-LIGHT CHANDELIER W/7-3/16" DIA x 5-3/8" H ETCHED GLASS SHADES, BRUSHED NICKEL STEEL TRIM, ACCENTS AND CANOPY, 9 GUAGE CHAIN, OVERALL DIAMETER OF 23", OVERALL FIXTURE HEIGHT OF 20-1/8", OVERALL HEIGHT W/CHAIN 95", UL LISTED FOR DRY LOCATIONS
R3	PROGRESS #P5300-09	(1) A19 BASE, LED EQUIVALENT TO 100W MAX	DECORATIVE SINGLE CHAIN MTD PENDANT LIGHT W/7-1/2" DAI x 5-3/8" H ETCHED GLASS SHADE, BRUSHED NICKEL STEEL TRIM AND CANOPY, 6FT 9 GAUGE CHAIN, UL LISTED FOR DRY LOCATIONS
T1	PROGRESS #P9105-28		96" L x 1-1/8" W x 7/8" H SURFACE MTD SINGLE CIRCUIT WHITE ALUMINUM TRACK, UL LISTED FOR DRY LOCATIONS
T1	PROGRESS #P9200-28	PAR20 / 50W	3-1/2" DIA x 7-5/8" H TRACK MTD ACCENT LIGHT W/358 DEG HORIZONTAL ROTATION, SELF LOCKING PIVOT FOR VERTICAL POSITIONING, WHITE STEEL HOUSING, AND BLACK BAFFLE, UL LISTED FOR DRY LOCATIONS, PROVIDE 4 FIXTURES PER 8FT TRACK LENGTH
U1	PROGRESS #P7012-30	LED / 6.5W / 3000K / 284 LUMENS	12" L x 3-1/2" W x 1" H UNDERCABINET LED LIGHT W/WHITE ALUMINUM HOUSING, TEMPERED MICRO-PRISMATIC GLASS LENS AND INTEGRAL ELECTRONIC NON-DIMMING DRIVER, UL LISTED FOR DAMP LOCATIONS
	PROGRESS #P8740		UNDERCABINET LIGHT DIRECT WIRE JUNCTION BOX
	PROGRESS *PP8735(6"), P8733(12"), P8737(18"), P8743(24")		6", 12", 18", 24" LONG LINKING CABLE, PROVIDE AS NECESSARY
	PROGRESS #P8743		COUPLING CABLE TO CONNECT LINKING CABLES TOGETHER
W1	PROGRESS #P2006-09	(3) A19 BASE, LED EQUIVALENT TO 100W MAX	26-3/4" L x 8-3/4" H x 8-3/4" D 3-LIGHT WALL MOUNTED VANITY LIGHT W/7-1/4" D x 5-3/8" H ETCHED GLASS SHADES, BRUSHED NICKEL STEEL TRIM, CAN BE MTD UP OR DOWN, UL LISTED FOR DAMP LOCATIONS
W2	PROGRESS #P7092-0930K9	LED / 17W / 3000K / 1211 LUMENS	8" W x 10-5/8" H x 4" D LED WALL SCONCE ETCHED OPAL GLASS DIFFUSER WITH BRUSHED NICKEL TRIM, INTEGRAL ELECTRONIC DIMMING BALLAST, UL LISTED FOR DAMP LOCATIONS
W3	PROGRESS #P7201-30WB	F15T8 / 15W	18-1/4" L x 4" W x 1-3/8" H CLG MTD FLUORESCENT LIGHT W/WHITE ACRYLIC DIFFUSER AND WHITE METAL HOUSING, UL LISTED FOR DAMP LOCATIONS
W4	PROGRESS #P560030-031-30	LED / 9W / 3000K / 670 LUMENS	7-1/2" W x 13-1/2" H x 4-3/4" D WALL MTD EXTERIOR SCONCE W/ETCHED OPAL GLASS DIFFUSER AND BLACK ALUMINUM CURVED BACK-FRAME AND INTEGRAL ELECTRONIC DIMMING BALLAST, UL LISTED FOR WET LOCATION
X1	PROGRESS *PETPE	LED / 1.78W	12.6 W x 7.2" H x 2" D UNIVERSAL MOUNTED EXIT SIGN W/WHITE HIGH IMPACT THERMOPLASTIC HOUSING, RED LETTERS AND NICKEL CADNIUM BATTERY RATED TO OPERATE FOR 90MINS UPON LOSS OF NORMAL POWER, PROVIDE DIRECTIONAL ARROWS AS INDICATED ON PLANS, UL LISTED FOR DAMP LOCATIONS.

ALL LIGHTING FIXTURES SHALL BE ENERGY STAR RATED OR HAVE HIGH PERFORMANCE BALLASTS AND LED LAMPS.