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 EQUIPMEN 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. SEE MECHANICAL PLAN FOR HVAC UNITS, PUMPS AND FANS CONTROLLED BY THERMOSTATS (PROVIDED BY ATC CONTRACTOR).

8. FUSES AND OVERLOAD UNITS FOR MOTORS SHALL BE SIZED BASED ON ACTUAL MOTOR NAMEPLATE DATA AND IN ACCORDANCE WITH NEC. CIRCUIT BREAKERS FOR MOTORS ARE SUPPLIED AT MAX VALUE PER NEC (2.5 x FLA). SIZE IN THE FIELD IN ACCORDANCE WITH MFGR RECOMMENDATION.

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

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

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

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

13. PROVIDE TWO BALLASTS FOR EACH FIXTURE INDICATED AS REQUIRING DUAL LEVEL SWITCHING. ONE BALLAST TO CONTROL OUTER LAMPS AND THE SECOND BALLAST TO CONTROL INNER LAMP(S).

14. COORDINATE INSTALLATION OF VOICE/DATA OUTLETS WITH OWNER, MIS OR COMMUNICATIONS CONTRACTOR.

15. LOCATE DISCONNECTS AT EQUIPMENT AS REQUIRED BY MANUFACTURER. LOCATIONS ON DRAWINGS ARE APPROXIMATE

16. OPERATE ALL FLUORESCENT AND METAL HALIDE LAMPS FROM INITIAL INSTALLATION FOR 100 HOURS AT FULL OUTPUT (NO DIMMING) TO SEASON LAMPS

17. PROVIDE RISER OR PLENUM RATED CABLES ABOVE SUSPENDED CEILINGS.

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

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

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

21. ALL CONDUCTOR INSULATION FOR BUILDING WIRE SHALL BE THWN/THHN

UNLESS NOTED OTHERWISE.

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

23. PROVIDE ARC FAULT LABELS PER NFPA 70-ARTICLE 110.24

INTERNATIONAL BUILDING CODE SECTION 713.3.2

24. IF BUILDING REQUIRES TWO SERVICE ENTRANCES, PROVIDE SIGNS PER NFPA

25. OUTLETS INSTALLED IN FIRE RATED WALLS BACK TO BACK SHALL BE SEPARATED BY 24" MINIMUM OR BE PROTECTED WITH "PUTTY PADS" PER 2009

26. PROVIDE AIR VAPOR 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

27. MINIMUM WIRE SIZE ON ALL BRANCH CIRCUITS SHALL BE \*12.

28. PROVIDE SIGN AT SERVICE ENTRANCE EQUIPMENT INDICATING TYPE AND LOCATION OF EMERGENCY GENERATOR PER NEC 700.7.

## **ABBREVIATIONS**

LTG LIGHTING ALTERNATING CURRENT, ABOVE COUNTER LONG TIME, SHORT TIME, INSTANTANEOUS. GROUND FAULT CIRCUIT BREAKER TRIP AMERICANS WITH DISABILITIES ACT FUNCTIONS AS INDICATED MCC MOTOR CONTROL CENTER ARC FAULT CIRCUIT INTERRUPTER MCCB MOLDED CASE CIRCUIT BREAKER ABOVE FINISHED FLOOR MAIN CIRCUIT BREAKER ABOVE FINISHED GRADE MAIN DISTRUBITION PANEL AMPERES INTERRUPTING CAPACITY MANHOLE ALUMINUM MANAGEMENT INFORMATION SYSTEM AMP TRIP MLO MAIN LUGS ONLY AUTOMATIC TEMPERATURE CONTROL MTS MANUAL TRANSFER SWITCH AUTOMATIC TRANSFER SWITCH AWG AMERICAN WIRE GAUGE NORMALLY CLOSED OF NURSE CALL BLDG BUILDING NATIONAL ELECTRICAL CODE CONDUIT NFPA NATIONAL FIRE PROTECTION ASSOCIATION CIRCUIT BREAKER NIGHT LIGHT CAST IRON NORMALLY OPEN CKT CIRCUIT NO. NUMBER CENTERLINE OVERLOAD CENTRAL MAINE POWER (ELECTRIC UTILITY) POLE CONCRETE MASONRY UNIT PUBLIC ADDRESS PUSH BUTTON CURRENT TRANSFORMER POWER FACTOR CONC CONCRETE РΗ PHASE CS CARBON STEE PANEL COPPER TP1-2 TELE-POWER POLE - POLE AND CIRCUIT CABINET UNIT HEATER NUMBER AS INDICATED DAMP LOCATION PSNH PUBLIC SERVICE OF NEW HAMPSHIRE ELECTRICAL CONTRACTOR (ELECTRIC UTILITY) EXHAUST FAN POTENTIAL TRANSFORMER EXISTING RELOCATE PVC POLYVINYL CHLORIDE EXISTING REMOVE ELECTRICAL EQUIPMENT TO BE RELOCATED ETR EXISTING TO REMAIN ELECTRICAL EQUIPMENT TO REMAIN ELECTRIC UNIT HEATER RSC RIGID STEEL CONDUIT ELECTRICAL WATER COOLER ROOF TOP UNIT FACP FIRE ALARM CONTROL PANEL ELECTRICAL EQUIPMENT TO REMOVE FAPS FIRE ALARM PULL STATION RVNR REDUCED VOLTAGE, NON-REVESING FIBER REINFORCED PLASTIC SMART BOARD FULL VOLTAGE, NON-REVERSING SUPPLY FAN FURNISHED WITH UNIT SINGLE LINE DIAGRAM DIRECT CURRENT MANUAL MOTOR STARTER SWITCH WITH GFI GROUND FAULT INTERRUPTER THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT GROUND SOLID STATE SWBD-1 SWITCHBOARD NUMBER AS DESIGNATED HIGH INTENSITY DISCHARGE TIME CLOCK HAND-OFF-AUTOMATIC TS TRANSFER SWITCH HP HORSEPOWER HIGH PRESSURE SODIUM TOP AND BOTTOM HΖ HERTZ TYP TYPICAL INSULATED CASE CIRCUIT BREAKER UG UNDERGROUND JUNCTION BOX VOLT THOUSAND AMP INTERRUPTING CAPACITY VOLT-AMPERE THOUSAND CIRCULAR MIL VARIABLE FREQUENCY DRIVE THOUSAND VOLTS W WATT THOUSAND VOLT-AMPS W/ WITH THOUSAND WATTS (KILOWATT) WEATHERPROOF LIGHTING CONTACTORS XFMR TRANSFORMER LIGHTING CONTROL PANEL EXPLOSION PROOF

THREE PHASE

THREE WIRE

FOUR WIRE

SURFACE MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING

RECESSED MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING (1/4) ELECTRIC MOTOR DRIVEN EQUIPMENT, HP SHOWN

H, DS, DW @ JUNCTION BOX, "H" DENOTES RANGE HOOD, "DS" DENOTES DISPOSAL UNIT, "DW" DENOTES DISHWASHER

SM MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE MOUNTED AT UNIT

DISCONNECT SWITCH, SIZE AND NUMBER OF POLES AS INDICATED ON DRAWING. PROVIDED BY EC UNLESS NOTED OTHERWISE. PROVIDE FUSES WHERE RECOMMENDED BY MANUFACTURER.

COMBINATION MOTOR STARTER/ DISCONNECT SWITCH WITH AUXILARY CONTACTS AND HAND-OFF-AUTO SWITCH AND RED RUN LIGHT. PROVIDED AND INSTALLED BY EC UNLESS NOTED OTHERWISE

VFD VARIABLE FREQUENCY DRIVE, PROVIDED BY MC, INSTALLED AND WIRED BY EC

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

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

DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF

AND MATCHING PLATE. MOUNT 18" AFF, BOTTOM RECEPTACLE SWITCHED. GROUND FAULT DUPLEX RECEPTACLE 20A, 125V, TAMPER PROOF WITH MATCHING

PLATE FURNISHED W/ OUTLET. FLUSH MOUNTED 45" AFF UNLESS OTHERWISE NOTED. REFRIGERATOR DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE.

TAMPER PROOF AND MATCHING PLATE. MOUNT RECEPTACLE AT 48" AFF.

DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF WITH (2) USB CHARGING PORTS, COLOR BY ARCH. MOUNT 18" AFF UNLESS NOTED OTHERWISE.

CL FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE- 20A, 125V SPEC GRADE GROUNDING TYPE. "CL" DENOTES CEILING MOUNTED

- 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 ---- RACEWAY & WIRING RUN EXPOSED \_\_\_\_\_ RACEWAY & WIRING RUN

CONCEALED UNDER FLOOR OR

BRANCH CIRCUIT WIRING SHALL CONSIST OF (1)1/2"C-2\*12AWG+1\*12GND UNLESS OTHER WISE NOTED. (\*) ASTERISK DENOTED \*10 AWG FOR ALL CIRCUITS CONTAINED IN HOME RUN. (\*\*)DOUBLE ASTERISK DENOTES (1)3/4"C-2\*8AWG+1\*10GND.

BURIED 30" BELOW FINISH GRADE HP-XX HOME RUN TO PANEL, WITH PANEL AND CIRCUIT NUMBER

PROVIDE EQUIPMENT GROUNDS IN ACCORDANCE WITH NFPA 70, ARTICLE 250.

CABLE TV JUNCTION BOX "CTV", SIZE AS REQUIRED BY CABLE UTILITY

■ TV OUTLET LOCATION, CABLE AND JACKS BY EC

TEMPERATURE CONTROL PANEL, PROVIDED BY MC WIRED BY EC

PUSHBUTTON FOR ELECTRICALLY OPERATED DOOR, FURN W/ DOOR OPERATOR, WIRED BY EC

DOOR PUSHBUTTON-DOORBELI

DOOR ELECTRIC STRIKE

PAS DOOR CHIME WITH STROBE-ADA COMMUNICATIONS REQUIREMENT

LIGHTING FIXTURES, CAPITAL LETTERS DENOTE TYPE PER LIGHTING FIXTURE SCHEDULE, LOWER CASE LETTERS INDICATE DЮ

SWITCH CONTROL. "ab" INDICATES INBOARD LAMPS CONTROLLED BY OUTBOARD SWITCHED "a" AND "b". DIAGONAL OR "NL' INDICATES NIGHT LIGHT (UNSWITCHED)

SELF CONTAINED EMERGENCY LIGHT W/2 HEADS DUAL-LITE (LED) MODEL LZ25NI-03L 25 WATTS FOR 90 MINUTES, COLOR BY ARCHITECT

BATT EMERGENCY LIGHTING BATTERY PACK DUAL-LITE No LM130-12VI-0 SELF-DIAGNOSTIC

P INTERIOR REMOTE HEAD DUAL-LITE (LED) MODEL No CPRD 1203L, COLOR BY ARCHITECT

EXTERIOR REMOTE HEAD DUAL-LITE (LED) MODEL No OCRD 1203L COLOR BY ARCHITECT

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

EXIT/ EMERGENCY LIGHT COMBO, DUAL-LITE No EVCU-R-D4-IOR APPROVED EQUAL COLOR BY ARCHITECT

SECURITY CAMERA LOCATION, COORDINATE AND PROVIDE DUPLEX RECEPTACLE, DATA AND CONDUIT PER MANUFACTURERS RECOMMENDATIONS

CEILING MOUNTED MOTION SENSOR (WATTSTOPPER OR EQUAL) CORRIDORS: WT-2255 PIR SENSOR & 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  $S_{MS}$  WALL MOUNTED SWITCH MOTION SENSOR. MOUNT AT 48" AFF UNLESS OTHER WISE NOTED

S. S SINGLE POLE SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF, 3-3-WAY  $\mathbb{S}_4 \mathbb{S}_3$  4=4-WAY,LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.

SWITCH WITH PILOT LIGHT, SWITCH SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE

SRF REMOTE RANGE HOOD FAN SWITCH, CONNECT TO HOOD FAN THRU HOOD JUNCTION BOX.

SRL REMOTE RANGE HOOD LIGHT SWITCH, CONNECT TO HOOD LIGHT THRU JUNCTION BOX.

 $\mathsf{S}_\mathtt{B}$  BURNER SAFETY SWITCH, PROVIDE WITH RED PLATE, MOUNTED 72'' AFF

D SINGLE POLE DIMMER SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF,  $D_4D_3$  3=3-WAY, 4=4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.

PC PHOTOCELL

LC LIGHTING CONTACTOR

TC TIMECLOCK

TELEPHONE/DATA DUAL JACK, MOUNT 18"AFF, RUN TWO CABLES BACK TO TBB. SEE SPECIFICATIONS FOR FURTHER INFORMATION

DATA JACK, RUN TWO CABLES BACK TO TBB. SEE SPECIFICATIONS FOR FURTHER INFO

CL (TO FLUSH FLOOR MOUNTED TELEPHONE/DATA DUAL JACK, RUN TWO CABLES BACK TO TBB. "CL" DENOTES CEILING MOUNTED

▼ TELEPHONE JACK, MOUNT 18"AFF UNLESS NOTED OTHERWISE, RUN ONE CABLE BACK TO TBB.

TELEPHONE BACK BOARD

W((+)) WIFIROUTER, RUN CABLE BACK TO TBB OR IT ROOM. MOUNT ABOVE CEILING, "W'

DENOTES WALL MOUNTED AT 72" AFF

INTERCOM PANEL IN UNIT

INTERCOM PANEL AT RECEPTION

ER CARD READER LOCATION: PROVIDE BOX AND 3/4" CONDUIT TO NEAREST LOCATION ABOVE SUSPENDED CEILING. PROVIDE 120V DOOR STRIKE POWER FROM NEAREST RECEPTACLE CIRCUIT.

FACE FIRE ALARM CONTROL PANEL WITH DEDICATED TELEPHONE JACK

ANN FIRE ALARM ANNUNCIATOR PANEL

FABP FIRE ALARM BOOSTER PANEL

FEM. FIRE EXTINGUISHER ELECTRONIC MONITOR-SHALL BE ACCOMPLISHED THROUGH USE OF AN ADDRESSABLE INTERFACE DEVICE AND SHALL PROVIDE INPUT TO THE FACP

FIRE ALARM AUDIO/VISUAL, MOUNT 6'-8"AFF, NUMBER DENOTES CANDELA RATING. "MH" DENOTES MINIHORN, "CL" DENOTES CEILING MOUNTED. NO DESIGNATION EQUALS 15cd

F FIRE ALARM PULL STATION, MOUNT 48"AFF

15 SD FIRE ALARM VISUAL STROBE ONLY, FLUSH MOUNT 6'-8" AFF, NUMBER DENOTES CANDELA RATINGS. "CL" DENOTES CEILING MOUNTED

SYSTEM CONNECTED SMOKE / CARBON MONOXIDE DETECTOR,

PHOTOELECTRIC TYPE

135° SYSTEM CONNECTED FIXED TEMPERATURE HEAT DETECTOR

SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED

"ER" DENOTES ELEVATOR RECALL

SB SYSTEM CONNECTED SMOKE DETECTOR, PHOTOELECTRIC TYPE, WITH SOUNDER BASE

© CARBON MONOXIDE DETECTOR

SD DUCT SMOKE DETECTOR & TEST STATION

FIRE/SMOKE DAMPER, SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE ALL WIRING CONNECTIONS AND FIRE ALARM DUCT SMOKE DETECTORS, ADDRESSABLE MODULES AND PROGRAMMING.

F SPRINKLER SYSTEM FLOW SWITCH ] SUPPLIED BY SPRINKLER CONTRACTOR

WIRED BY EC, VERIFY LOCATIONS WITH SPRINKLER SYSTEM TAMPER SWITCH SPRINKLER CONTRACTOR.

HMM MAGNETIC DOOR HOLD

NURSE CALL BASE STATION NURSE CALL PULL STATION

MH NURSE CALL ANNUNCIATOR LIGHT

WP DENOTES WEATHERPROOF CONSTRUCTION RP DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE REPLACED

RM OR ETR DENOTES EXISTING ELECTRICAL EQUIPMENT TO REMAIN

RV DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED

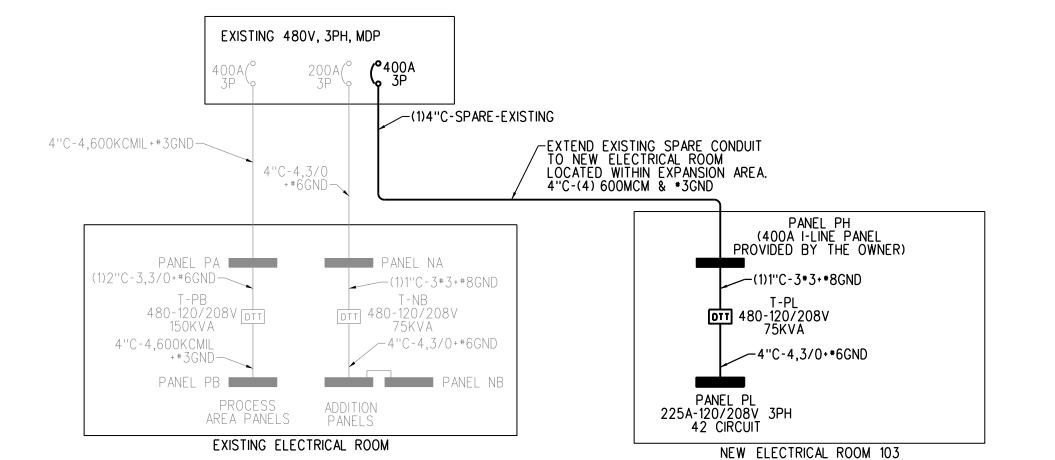
RL DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE RELOCATED

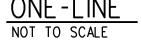
## LIGHT FIXTURE SCHEDULE

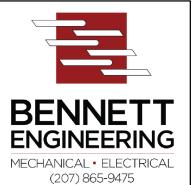
LIGHT EMITTING DIODE

LIGHTING PANELBOARD

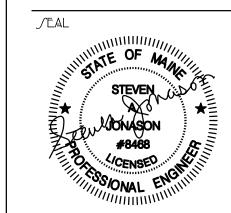
TYPE	MANUFACTURER AND MODEL NUMBER	LAMP INFO	REMARKS
А	BIG ASS LIGHTING BAS-HBL3-20050103 5K, WL	137W, LED, 18,530 LUMENS	USED IN PRODUCTION AREA SUPPLIED BY OWNER-277V
В	COLUMBIA LIGHTING No LRO4-35-ML-EU-GLR	53W LED, 5000 LUMENS	GENERAL USE 4' LENSED STRIP LED, SURFACE MOUNT-277V
С	COLUMBIA LIGHTING No LEPC22-35MLG-LL-EDU-GLR	30W LED, 3407 LUMENS	GRID MOUNTED 2x2 OFFICE AREAS-277V
D	HUBBELL BEACON VIPER VPS/36NB-80/5K/T2/UNV/PCR-TL/WB/xx	80\\\\   E	WALL MOUNTED EXTERIOR BUILDING LIGHTING, SEE ARCH PLANS FOR MOUNTING HEIGHT. VERIFY WITH OWNER THE FINISH PRIOR TO ORDERING.
PF	BIG ASS POWERFOIL X3.0 PLUS-PFX3-16	480V4C 60H7 3PH 104	16' CEILING FANS AND CONTROLS PROVIDED BY THE OWNER, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR.







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REVI/ION/

PRICING SET NOT FOR CONSTRUCTION

DRAWING NAME

 $\square$ 

**∫ĦEET** 

 $\bigcirc$ 

1/8"=1'-0" PMC//AI .JOB 110.

4 APRIL 2018

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