

GENERAL NOTES

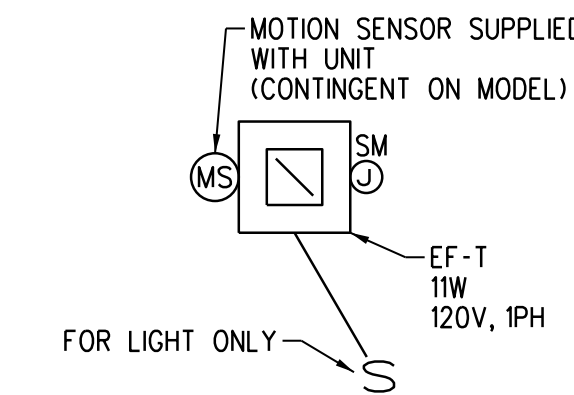
- NOT ALL SYMBOLS INDICATED IN THE LEGEND APPEAR ON THE DRAWINGS. COORDINATE WORK ACCORDINGLY. COMPLY WITH SPECIFICATIONS AND NOTES BELOW AS APPLICABLE.
- ALL RECEPTACLES SHALL BE INSTALLED 18" AFF TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.
- ALL WIRING SHALL BE COPPER UNLESS DESIGNATED AS "AL" UNLESS OTHERWISE NOTED. ALL WIRING SHALL BE 2#12 AWG AND #12 EQUIPMENT GROUNDING CONDUCTOR. HOMERUNS FED FROM A 20A-1P, 120V CIRCUIT IN EXCESS OF 70' SHALL BE #10 AWG.
- 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.
- TEST ALL EMERGENCY LIGHTING UNITS FOR PROPER OPERATION OF LAMPS AND BATTERIES.
- SEE MECHANICAL PLAN FOR HVAC UNITS, PUMPS AND FANS CONTROLLED BY THERMOSTATS (PROVIDED BY ATC CONTRACTOR).
- 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 MFR RECOMMENDATION.
- ALL WORK SHALL COMPLY WITH NFPA70, NFPA72, NFPA101 & ALL FEDERAL, STATE & LOCAL REGULATIONS.
- ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN FIRE RATING FOR THE SEPARATION.
- ALL ENCLOSURES, CONDUIT BODIES AND THEIR COVERS CONTAINING FIRE ALARM SYSTEM CONDUCTORS SHALL BE PAINTED RED.
- AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH ALL FEEDERS AND BRANCH CIRCUITS. SIZE IN ACCORDANCE WITH NFPA 70 ARTICLE 250.
- COORDINATE INSTALLATION OF VOICE/DATA OUTLETS WITH OWNER, MIS OR COMMUNICATIONS CONTRACTOR.
- LOCATE DISCONNECTS AT EQUIPMENT AS REQUIRED BY MANUFACTURER. LOCATIONS ON DRAWINGS ARE APPROXIMATE.
- PROVIDE RISER OR PLENUM RATED CABLES ABOVE SUSPENDED CEILINGS.
- PROVIDE EXPANSION FITTINGS FOR ALL UNDERGROUND RACEWAYS ENTERING ENCLOSURES ATTACHED TO FIXED STRUCTURES.
- OUTDOOR RECEPTACLE COVERS SHALL COMPLY WITH NFPA 70 - ARTICLE 406.9.
- ALL CONDUCTOR INSULATION FOR BUILDING WIRE SHALL BE THWN/THHN UNLESS NOTED OTHERWISE.
- PROVIDE LABEL ON SERVICE EQUIPMENT INDICATING AVAILABLE SHORT CIRCUIT CURRENT OBTAIN VALUES FROM ENGINEER.
- 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
- 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
- MINIMUM WIRE SIZE ON ALL BRANCH CIRCUITS SHALL BE #12.
- PROVIDE SIGN AT SERVICE ENTRANCE EQUIPMENT INDICATING TYPE AND LOCATION OF EMERGENCY GENERATOR PER NEC 700.7.

ABBREVIATIONS

A	AMP	LP	LIGHTING PANELBOARD
AC	ALTERNATING CURRENT, ABOVE COUNTER	LTG	LIGHTING
ADA	AMERICANS WITH DISABILITIES ACT	LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
AF	AMP FRAME		CIRCUIT BREAKER TRIP FUNCTIONS AS INDICATED
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MCC	MOTOR CONTROL CENTER
AFF	ABOVE FINISHED FLOOR	MCCB	MOLDED CASE CIRCUIT BREAKER
AFG	ABOVE FINISHED GRADE	MCB	MAIN CIRCUIT BREAKER
AIC	AMPERES INTERRUPTING CAPACITY	MDP	MAIN DISTRIBUTION PANEL
AL	ALUMINUM	MH	MANHOLE
AT	AMP TRIP	MLO	MAIN LUGS ONLY
ATC	AUTOMATIC TEMPERATURE CONTROL	MTS	MANUAL TRANSFER SWITCH
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED OF NURSE CALL
AWG	AMERICAN WIRE GAUGE	NEC	NATIONAL ELECTRICAL CODE
BLDG	BUILDING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
C	CONDUIT	NL	NIGHT LIGHT
CB	CIRCUIT BREAKER	NO	NORMALLY OPEN
CI	CAST IRON	NO.	NUMBER
CKT	CIRCUIT	OL	OVERLOAD
CL	CENTERLINE	P	POLE
CMP	CENTRAL MAINE POWER (ELECTRIC UTILITY)	PA	PUBLIC ADDRESS
CMU	CONCRETE MASONRY UNIT	PB	PUSH BUTTON
CT	CURRENT TRANSFORMER	PF	POWER FACTOR
CONC	CONCRETE	PH	PHASE
CS	CARBON STEEL	PNL	PANEL
CU	COPPER	TP1-2	TELE-POWER POLE - POLE AND CIRCUIT NUMBER AS INDICATED
CUH	CABINET UNIT HEATER	PSNH	PUBLIC SERVICE OF NEW HAMPSHIRE (ELECTRIC UTILITY)
DL	DAMP LOCATION	PT	POTENTIAL TRANSFORMER
EC	ELECTRICAL CONTRACTOR	PVC	POLYVINYL CHLORIDE
EF	EXHAUST FAN	RL	ELECTRICAL EQUIPMENT TO BE RELOCATED
ER	EXISTING REMAINS IN PLACE	RM	ELECTRICAL EQUIPMENT TO REMAIN
ERL	EXISTING RELOCATE	RSC	RIGID STEEL CONDUIT
ERM	EXISTING REMOVE	RTU	ROOF TOP UNIT
EUH	ELECTRIC UNIT HEATER	RV	ELECTRICAL EQUIPMENT TO REMOVE
EWC	ELECTRICAL WATER COOLER	RVNR	REDUCED VOLTAGE, NON-REVERSING
FACP	FIRE ALARM CONTROL PANEL	SB	SMART BOARD
FAPS	FIRE ALARM PULL STATION	SF	SUPPLY FAN
FRP	FIBER REINFORCED PLASTIC	SLD	SINGLE LINE DIAGRAM
FVNR	FULL VOLTAGE, NON-REVERSING	SM	MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT
FWU	FURNISHED WITH UNIT	SS	SOLID STATE
DC	DIRECT CURRENT	SWBD-1	SWITCHBOARD NUMBER AS DESIGNATED
GFI	GROUND FAULT INTERRUPTER	TC	TIME CLOCK
GND	GROUND	TS	TRANSFER SWITCH
HID	HIGH INTENSITY DISCHARGE	T&B	TOP AND BOTTOM
HOA	HAND-OFF-AUTOMATIC	TYP	TYPICAL
HP	HORSEPOWER	UG	UNDERGROUND
HPS	HIGH PRESSURE SODIUM	V	VOLT
HZ	HERTZ	VA	VOLT-AMPERE
ICB	INSULATED CASE CIRCUIT BREAKER	VFD	VARIABLE FREQUENCY DRIVE
JB	JUNCTION BOX	W	WATT
KAIC	THOUSAND AMP INTERRUPTING CAPACITY	W/	WITH
KCML	THOUSAND CIRCULAR MIL	WP	WEATHERPROOF
KV	THOUSAND VOLTS	XFMR	TRANSFORMER
KVA	THOUSAND VOLT-AMPS	XP	EXPLOSION PROOF
KW	THOUSAND WATTS (KILOWATT)	3PH	THREE PHASE
LC	LIGHTING CONTACTORS	4W	FOUR WIRE
LCP	LATERAL CONTROL PIT	3W	THREE WIRE
LED	LIGHT EMITTING DIODE		

SYMBOL LEGEND

- SURFACE MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING
- RECESSED MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING
- Ⓜ ELECTRIC MOTOR DRIVEN EQUIPMENT, HP SHOWN
- H, DS, DW ⊙ JUNCTION BOX, "H" DENOTES RANGE HOOD, "DS" DENOTES DISPOSAL, "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 AUXILIARY 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 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.
- CL ⊕ FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE - 20A, 125V SPEC GRADE GROUNDING TYPE. "CL" DENOTES CEILING MOUNTED
- Ⓜ POWER AND DATA WHIP LOCATION. NUMBER (*) DESIGNATES CAT6 CABLE RUNS BACK TO I.T. CLOSET.
- Ⓜ 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 BURIED 30" BELOW FINISH GRADE
- Ⓜ HOME RUN TO PANEL, WITH PANEL AND CIRCUIT NUMBER
- Ⓜ 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-DOORBELL
- Ⓜ DOOR ELECTRIC STRIKE
- Ⓜ DOOR CHIME WITH STROBE-ADA COMMUNICATIONS REQUIREMENT
- Ⓜ LIGHTING FIXTURES, CAPITAL LETTERS DENOTE TYPE PER LIGHTING FIXTURE SCHEDULE. LOWER CASE LETTERS INDICATE SWITCH CONTROL. "OB" INDICATES INBOARD LAMPS CONTROLLED BY OUTBOARD SWITCHED "O" AND "B". DIAGONAL INDICATED NIGHT LIGHT (UNSWITCHED)
- Ⓜ SELF CONTAINED EMERGENCY LIGHT W/2 HEADS DUAL-LITE (LED) MODEL LZ25NI-03L, 25 WATTS FOR 90 MINUTES, COLOR BY ARCHITECT
- Ⓜ EMERGENCY LIGHTING BATTERY PACK DUAL-LITE No LM130-12VI-0 SELF-DIAGNOSTIC
- Ⓜ 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-D4-10R APPROVED EQUAL COLOR BY ARCHITECT
- Ⓜ SECURITY CAMERA LOCATION, COORDINATE AND PROVIDE DUPLEX RECEPTACLE, DATA AND CONDUIT PER MANUFACTURERS RECOMMENDATIONS
- DT PIR ⊕ CEILING MOUNTED MOTION SENSOR (WATTSTOPPER OR EQUAL) CORRIDORS: WT-2255 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, 4-4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.
- S_{PL} SWITCH WITH PILOT LIGHT, SWITCH SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE IDENTIFYING USE
- S_{RF} REMOTE RANGE HOOD FAN SWITCH, CONNECT TO HOOD FAN THRU HOOD JUNCTION BOX.
- S_{RL} REMOTE RANGE HOOD LIGHT SWITCH, CONNECT TO HOOD LIGHT THRU JUNCTION BOX.
- S_B BURNER SAFETY SWITCH, PROVIDE WITH RED PLATE, MOUNTED 72" AFF
- D, D_S 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.
- PC PHOTOCELL
- LC LIGHTING CONTACTOR
- TC TIMECLOCK
- ▽ TELEPHONE/DATA DUAL JACK, MOUNT 18" AFF, RUN TWO CAT 5E CABLES BACK TO TBB
- ▽ DATA JACK, RUN TWO CAT 5E CABLES BACK TO TBB.
- CL ⊕ FLUSH FLOOR MOUNTED TELEPHONE/DATA DUAL JACK, RUN TWO CAT 5E CABLES BACK TO TBB. "CL" DENOTES CEILING MOUNTED
- ▽ TELEPHONE JACK, MOUNT 18" AFF UNLESS NOTED OTHERWISE, RUN ONE CAT 5E CABLE BACK TO TBB.
- TELEPHONE BACK BOARD
- W ⊕ WIFIROUTER, OCE CAT 5E 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
- FACP FIRE ALARM CONTROL PANEL
- Ⓜ FIRE ALARM ANNUNCIATOR PANEL
- Ⓜ 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" DENOTED CEILING MOUNTED. NO DESIGNATION EQUALS 15cd
- Ⓜ FIRE ALARM PULL STATION, MOUNT 48" AFF
- Ⓜ 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
- 155 ⊕ SYSTEM CONNECTED FIXED TEMPERATURE HEAT DETECTOR
- Ⓜ SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED.
- ER ⊕ SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED. "ER" DENOTES ELEV RECALL
- Ⓜ SYSTEM CONNECTED SMOKE DETECTOR, PHOTOELECTRIC TYPE, WITH SOUNDER BASE
- Ⓜ CARBON MONOXIDE DETECTOR
- Ⓜ 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.
- Ⓜ SPRINKLER SYSTEM FLOW SWITCH } SUPPLIED BY SPRINKLER CONTRACTOR
- Ⓜ SPRINKLER SYSTEM TAMPER SWITCH } SPRINKLER CONTRACTOR.
- H ⊕ MAGNETIC DOOR HOLD



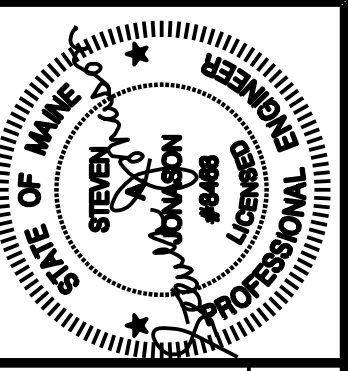
TYPICAL BATHROOM EXHAUST FAN DETAIL

- SCALE: NONE
- NOTES:
- PRIOR TO WIRING CONTRACTOR SHALL REFER TO MANUFACTURER SUPPLIED INSTALLATION INSTRUCTIONS.
 - CONTRACTOR SHALL WIRE HUMIDISTAT ALONG WITH MANUFACTURER SUPPLIED MOTION SENSOR TO EXHAUST FAN ONLY. FAN SHALL BE WIRED FOR CONTINUOUS LOW SPEED OPERATION WITH RAMP UP TO HIGH SPEED WHEN TRIGGERED BY MOTION SENSOR.
 - CONTRACTOR SHALL CONNECT FAN LIGHT TO BATHROOM SWITCH. SWITCH SHALL CONTROL FAN LIGHT AND VANITY LIGHT ONLY.

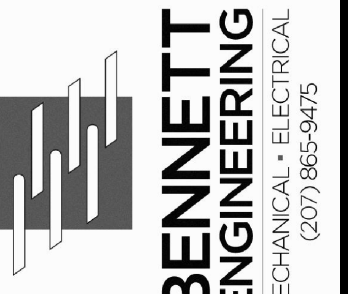
LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER AND MODEL NUMBER	LAMP INFO	REMARKS
A	JESCO LIGHTING CAT No PLD-22-40W-40	4000K LED	2'x2' HIGH PERFORMANCE LIGHTING PANEL
C	PRESCOLITE LIGHT BOX CAT No LBSQ5LEDA6L30K9 WH	3000K LED	0'-5" SQUARE SURFACE MOUNTED FIXTURE
E	FINELITE CAT No E1-I-C-XxX-H-8-35-277V-SC-	3500K LED	CONFIRM FIXTURE CONFIGURATION DIMENSIONS w/ ARCH PRIOR TO ROUGH-IN
G	FINELITE CAT No E1-I-C-XxX-H-8-35-277V-SC-	3500K LED	CONFIRM FIXTURE CONFIGURATION DIMENSIONS w/ ARCH PRIOR TO ROUGH-IN
F	EUREKA LIGHTING SENET CAT No 3217_LED_9.30 277V	3000K LED	VANITY FIXTURE

- NOTES:
- FIXTURES SHALL BE ENERGY STAR RATED OR HAVE HIGH PERFORMANCE BALLASTS AND LAMPS TO MEET STATE EFFICIENCY CRITERIA.
 - CONTRACTOR SHALL APPLY FOR ALL STATE EFFICIENCY INCENTIVES ON OWNERS BEHALF.



Prepared For:
Archetype
Union Wharf
Portland, ME 04101



Consultant:
ARCHETYPE architects
48 Union Wharf, Portland, Maine 04101
(207) 772-0023, ARCHETYPE@ARCHETYPEPA.COM

Project:
16 MIDDLE STREET OFFICE BUILDING
MIDDLE STREET
PORTLAND, MAINE

Revisions:
02/20/2017: CD ISSUE

Date:
20 FEB 2017
Scale:
1/8" = 1'-0" U.N.O.

TILSON TECHNOLOGIES,
ELECTRICAL NOTES, LEGEND &
DETAILS

E3.01