ELECTRICAL SYMBOLS & INSTRUCTIONS

XXX	ROOM NUMBER.
X	KEYED NOTE, SEE NOTE OF SAME LETTER ON SHEET.
	BRANCH CIRCUIT WIRING ON PLAN DRAWING INDICATES CONCEALED IN CEILING OR WALL. DIAGRAM DRAWING WIRING INDICATES NEW.
	BRANCH CIRCUIT WIRING ON PLAN DRAWING INDICATES CONCEALED IN FLOOR. DIAGRAM DRAWING WIRING INDICATES EXISTING.
	BRANCH CIRCUIT WIRING ON PLAN DRAWING INDICATES EXPOSED WIRING. DIAGRAM DRAWING WIRING INDICATES REMOVED.
	LOW-VOLTAGE OR SYSTEMS WIRING CONCEALED IN CEILING OR WALL.
	WIRING UP TO ABOVE.
	WIRING DOWN TO BELOW.
	MULTI-CONDUCTOR BRANCH CIRCUIT, NO. OF HASHMARKS IS NO. OF CIRCUIT CONDUCTORS, WITHOUT HASHMARKS TWO CIRCUIT CONDUCTORS. ALL CIRCUITS TO INCLUDE SEPARATE GREEN GROUNDING CONDUCTOR. FOR FLUORESCENT LIGHTING CIRCUITS, INCREASE NEUTRAL CONDUCTOR 1 SIZE OVER PHASE CONDUCTORS (#10 AWG FOR 20A CIRCUIT)
	HOMERUN TO CIRCUIT AND PANELBOARD INDICATED, NO. OF ARROWS IS NO. OF PHASE WIRES, NO. OF HASHMARKS INDICATE NO. OF CIRCUIT CONDUCTORS.
	DIRECTIVE ARROW.
	CIRCUIT BREAKER.
	GROUND.
J S P	JUNCTION BOX, SPLICE BOX AND PULL BOX.
	LIGHTING WIRING OUTLET BOX WITH FLEXABLE WIRING CONNECTION (WHIPS).
	FLUORESCENT OR LED LIGHTING FIXTURE WITH AND WITHOUT OUTLET, UPPER CASE LETTER TYPE, LOWER CASE LETTER IS CONTROL GROUP, RECTANGLES INDICATE NO. OF SECTIONS. SEE LIGHTING FIXTURE SCHEDULE FOR TYPES AND MOUNTING.
a	CEILING MOUNTED LIGHTING FIXTURE, LETTER SUBSCRIPTS AS ABOVE.
a	WALL MOUNTED LIGHTING FIXTURE, LETTER SUBSCRIPTS AS ABOVE.
#	PHOTOCELL CONTROL.
	WALL MOUNT AND CEILING MOUNT EXIT LIGHTS. SEE FIXTURE SCHEDULE FOR TYPE(S).
S Sp	SPST FLUSH WALL SWITCH 4'-0" UP ON CENTER ADJUSTED TO MINIMUM CUT OF BLOCK OR TILE, LOWER CASE LETTER IS CONTROL GROUP, WITH "H" 6" ABOVE FLOOR, WITH "P" PILOT LIGHT, WITH "L" LOW-VOLTAGE, WITH "K" KEY OPERATED, WITH "M" MOMENTARY.
S2 S3 S4	DOUBLE POLE, THREE-WAY AND FOUR-WAY SWITCHES, SUBSCRIPTS AS ABOVE.
D	DIMMER SWITCH, SUBSCRIPTS THE SAME AS ABOVE.
	REMOTE EMERGENCY LIGHTING HEAD, SINGLE, DUAL, OR TRIPLE AS NOTED. SEE FIXTURE SCHEDULE FOR TYPE(S).
	EMERGENCY LIGHTING BATTERY UNIT WITH LIGHTING HEADS AS NOTED. SEE FIXTURE SCHEDULE FOR TYPE(S).
	120/208 VOLT PANELBOARD, FLUSH MOUNTED AND SURFACE MOUNTED.
	UNIVERSAL PANEL OR CABINET, FLUSH MOUNTED AND SURFACE MOUNTED.
	MOTOR OF SIZE SHOWN, WITH "F" FRACTIONAL HORSEPOWER MOTOR BELOW 1/20 HP OR 100 WATTS.
M	UTILITY POWER METER. MOUNT 5'-0" UP.
	ADA AUTOMATIC DOOR OPENER, 4'-0" ABOVE FINISH FLOOR.
WH	WATER HEATER.
UH	UNIT HEATER.
	SINGLE THROW HEAVY DUTY FUSED DISCONNECT SWITCH, NO. OF POLES AND SIZE AS REQUIRED FOR THE LOAD, "NF" NON FUSED, "WP" WEATHERPROOF.
	ENCLOSED CIRCUIT BREAKER.
	COMBINATION STARTER, DISCONNECT TYPE.
HOA	HAND/OFF/AUTO SWITCH.
VFD	VARIABLE FREQUENCY DRIVE.
ATC	AUTOMATIC TEMPERATURE CONTROLS CIRCUIT, COORDINATE LOCATION WITH CONTROLS CONTRACTOR.
	DUPLEX GROUNDED POLARIZED 120 VOLT THREE-WIRE CONVENIENCE OUTLET 1'-6" UP VERTICALLY, WITH "U" 4'-0" AFF OR 0'-6" ABOVE COUNTER, ADJUST TO MINIMUM CUT OF BLOCK OR TILE. LETTER IS CIRCUIT GROUP, WITH "WP" WEATHERPROOF, WITH "G" FOR GROUND FAULT PROTECTED BY GFCI RECEPTACLE OR CIRCUIT BREAKER LOCATED UPSTREAM, WITH "H" MOUNT 7'-6" UP OR AS NOTED, WITH "TR" TAMPER RESISTANT, WITH "C" CEILING MOUNTED.
	QUADRUPLEX OUTLET IN ONE BOX, NOTES AND SUBSCRIPTS AS ABOVE.
	GROUND FAULT CIRCUIT INTERRUPTING (GFCI) DUPLEX RECEPTACLE, 120 VOLT THREE-WIRE 20 AMP, SUBSCRIPTS AND MOUNTING AS ABOVE.
	EQUIPMENT CONNECTION.
2 W	TELEPHONE OUTLET 1'-6" AFF, QUANTITY AS NOTED, WITH "W" 4'-0" AFF, WITH "U" 0'-6" ABOVE COUNTER.
2	COMPUTER DATA OUTLET 1'-6" AFF, WITH "U" 0'-6" ABOVE COUNTER, QUANTITY AS NOTED.
T2D	COMBINATION TELEPHONE AND COMPUTER DATA OUTLET 1'-6" AFF, WITH "W" 4'-0" AFF, WITH "U" 0'-6" ABOVE COUNTER, WITH "T" TELEPHONE, WITH "D" DATA, WITH "TD" COMBINATION TELEPHONE/DATA, QUANTITY AS NOTED.
	CABLETRAY.
FACP	FIRE ALARM CONTROL PANEL.
ARN	FIRE ALARM REMOTE ANNUNCIATOR.
F S P	FIRE ALARM FLOW SWITCH, TAMPER SWITCH, PRESSURE SWITCH.
W H	FIRE ALARM AUDIO/VISUAL ALARM, 6'-8" AFF.
W	FIRE ALARM VISUAL ALARM, 6'-8" AFF.
F	FIRE ALARM MANUAL PULL STATION 4'-0" AFF.
S	FIRE ALARM SMOKE DETECTOR, CEILING MOUNTED UNLESS NOTED OTHERWISE.
DM	FIRE ALARM DUCT SMOKE DETECTOR.
H	FIRE ALARM HEAT DETECTOR, CEILING MOUNTED UNLESS NOTED OTHERWISE.
TV	CABLE TELEVISION OUTLET, MOUNTING HEIGHT PER ARCH'L's.

ABBREVIATIONS

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ARCH'L	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
BH	BANGOR-HYDRO
BATT	BATTERY
BKR	BREAKER
BLDG	BUILDING
C,c	CONDUIT, CONDUCTOR
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CMP	CENTRAL MAINE POWER CO.
CT	CURRENT TRANSFORMER
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING
E	EXISTING
EC	ELECTRICAL CONTRACTOR
ER	EXISTING REPLACE
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATION, ELEVATOR
EMG	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EXT	EXTERIOR
FA	FIRE ALARM
FIN	FINISH, FINISHED
FLR	FLOOR
F,FUT	FUTURE
GND	GROUND
HP	HORSEPOWER, HEAT PUMP
J-BOX	JUNCTION BOX
KW	KILOWATT(S)
LTG	LIGHTING
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MIN	MINIMUM
N	NEW
NIC	NOT IN CONTRACT
NID	NETWORK INTERFACE DEMARCATION
NO	NUMBER
OC	ON CENTER
PNL	PANEL, PANELBOARD
PVC	POLYVINYL CHLORIDE
PWR	POWER
R	REMOVE
RECEP	RECEPTACLE
RL	RELOCATE
RSC	RIGID STEEL CONDUIT
SW	SWITCH
TEL	TELEPHONE
XFMR	TRANSFORMER
TYP	TYPICAL
UG	UNDERGROUND
V	VOLTS
VAT	VACUUM AIR TUBE
W	WATTS
WM	WIREMOLD
WP	WEATHERPROOF
WW	WIREWAY

Electrical & Mechanical Coordination Matrix

	Power Wiring	PCA Switch	Mech Magnetic Starter / Contactor	Manual Disconnect	Smoke Sensor Detector	Duct Smoke Detector	Smoke Detector Fire Alarm Wiring	Wall Mounted Switch	Wall Mounted Thermostat	Time Delay Motor	Time Switch Wiring	Sensor Switch Mounting & Wiring	Thermostat	Thermostat Wiring	Thermostat Wiring & Switch	Sensor Switch	Emergency Shut-off Switch	Boiler Emergency Shut-off Switch Wiring	Boiler Flame Safeguard Wiring	Boiler Inside Thermostat Wiring	Blocks for Fire Dampers
FRU-1	E																				
1 ph Pump (WS)-P-1, P-2	E	E		E																	
1 ph Pump P-2	E	E																			
1 ph Sump Pump PP-1	E																E				
CUS-1,2,3	E														M	E					
UPS-1	E			M											M	E					
DSS, SSD, BSB - All	E			M											M	E					
ACCU-1 (3 ph) Qty 1	E			E																	
ACCU-2-11 (ph) Qty 1	E			E																	
Sprinkler Wiring to Fire Alarm	E																				
115V Circuit for ATC Control Panel - CITY 4	E																				
Electric/Hydronic Water Heater - HTR-1	E			E																	
Water Cooler - F-4A	E																E				
Boiler B-1	E																				
Boiler Emergency Shutoff Switch																	E	E			
Boiler Fusible Element Switch																			Note		

M Signifies Mechanical Supplies and Specifies
E Signifies Electrical Supplies and Specifies

LIGHTING FIXTURE & LAMPING SCHEDULE

TYPE	DESCRIPTION	VOLTS	VA	MOUNTING & INSTRUCTIONS	LAMPING
A	FOCAL POINT CAT# FEQL-22-WP-3000LH-35K-1C-UNIV-LD1-G -WH 2'x2' RECESSED LED ARCHITECTURAL TROFFER, WHITE PAINTED SIDE RAILS, 3000 LUMENS, HIGH EFFICIENCY, 0-10V DIMMING DRIVER, WHITE FINISH	UNIV		RECESS IN GRID CEILING	LED INCLUDED
A4	FOCAL POINT CAT# FEQL-24-WP-4000LH-35K-1C-UNIV-LD1-G -WH 2'x4' RECESSED LED ARCHITECTURAL TROFFER, WHITE PAINTED SIDE RAILS, 4000 LUMENS, HIGH EFFICIENCY, 0-10V DIMMING DRIVER, WHITE FINISH	UNIV		RECESS IN GRID CEILING	LED INCLUDED
A4D	SAME AS TYPE A4, ADD #-PY1 DAYLIGHT HARVESTING SENSOR FOR EACH FIXTURE	UNIV		RECESS IN GRID CEILING	LED INCLUDED
B4	COLUMBIA CAT# LTR24-35K-LWG-RFA-EDU 2'x4' RECESSED LED ARCHITECTURAL TROFFER, APPROX 3700 LUMENS, RIBBED FROSTED ACRYLIC SHIELD, 0-10V DIMMING DRIVER	UNIV		RECESS IN GRID CEILING	LED INCLUDED
C4	LITHONIA CAT# 2SRQL4-4000L-FNR-EZ1-LP835 2'x4' RECESSED ARCHITECTURAL SHADOW BOX TROFFER, FLUSH WHITE ALUMINUM DOOR, 4000 LUMENS, 0-10V DIMMING DRIVER, PROVIDE DAYLIGHT HARVESTING SENSOR FOR EACH FIXTURE	UNIV		RECESS IN GRID CEILING	LED INCLUDED
D	PRESCOLITE CAT# LF6LED04-6LFLED504-35K-X 6" LED OPEN DOWNLIGHT, 0-10V DIMMING, 1100 LUMENS, CLEAR REFLECTOR, BLACK TRIM, WITH "T" PROVIDE #-WT WHITE TRIM AND COBALT BLUE SIGNOS TRIM RING # SR6060	UNIV		RECESS IN METAL OR GWB CEILING	LED INCLUDED
F	PRESCOLITE CAT# LF6SQLED04-6SQLED5G4-35K-WT 6" SQUARE LED OPEN DOWNLIGHT, 0-10V DIMMING, 1100 LUMENS, CLEAR REFLECTOR, WHITE TRIM	UNIV		RECESS IN GRID CEILING	LED INCLUDED
G	COLUMBIA CAT# LLT14-35KMLG-FSA19-EDU 1'x4' LED LENSED TROFFER, APPROX 2400 LUMENS, FLUSH WHITE STEEL DOOR, PATTERN 19 FROSTED ACRYLIC LENS, 0-10V DIMMING	UNIV		RECESS IN GRID CEILING	LED INCLUDED
H	KIRLIN CAT# LSR-14150-BL 14" ROUND LED SCONCE, BRUSHED ANODIZED ALUMINUM HOUSING, 0-10V DIMMING, BLUE INNER LENS COLOR	UNIV		WALL MOUNT	LED INCLUDED
L	OWNER SUPPLIED 36" LED PENDANT FIXTURE, EC TO INSTALL			STEM SUSPEND 9'-0" AFF	LED INCLUDED
M	FOCAL POINT CAT# FSDL22-FLXP-LL2-35K-1C-UNIV-LD1-U-WH 2' DIAMETER ROUND RECESSED LED, FLAT FROSTED DIFFUSER, APPROX 2200 LUMENS, 0-10V DIMMING DRIVER, MATTE SATIN WHITE FINISH	UNIV		RECESS IN GWB CEILING	LED INCLUDED
P	FINELITE HP-4 ID-X-SO-HO-3500K-TG-120-FA-SC-C1-08D 4" APERTURE INDIRECT/DIRECT, RECTANGULAR CONFIGURATION AS INDICATED ON PLAN, STANDARD OUTPUT UPLIGHT w/TOP GLOW DIFFUSER, HIGH OUTPUT DOWNLIGHT, FULLY ADJUSTABLE MOUNTING, INTEGRATED DAYLIGHT SENSOR	120		STEM SUSPEND 8'-6" AFF	LED INCLUDED
S	COLUMBIA CAT# LCL4-35LW-EU 4' LENSED STRIPLIGHT, 2500 LUMENS, FIXED OUTPUT	UNIV		WALL MOUNT 0'-6" ABOVE DOOR	LED INCLUDED
S1	SAME AS TYPE S	UNIV		SURFACE MOUNT ON CEILING	LED INCLUDED
S4	COLUMBIA CAT# LCL4-35LW-EDU 4' LENSED STRIPLIGHT, 2500 LUMENS, 0-10V DIMMING DRIVER	UNIV		SURFACE MOUNT ON CEILING WITHIN SOFFIT	LED INCLUDED
S8	COLUMBIA CAT# LCL8-35LW-EDU 8' LENSED STRIPLIGHT, 5000 LUMENS, 0-10V DIMMING DRIVER	UNIV		SURFACE MOUNT ON CEILING WITHIN SOFFIT	LED INCLUDED
W4	LITHONIA CAT# WL4-20L-EZ1-LP835-N80-NES7-DM10 4' WALL MOUNT LED STAIR LIGHT w/INTEGRAL OCCUPANCY SENSOR, APPROX 2000 LUMENS, 80% LUMEN MANAGEMENT, FIXTURE DIMS TO 10% LIGHT OUTPUT WHEN UNOCCUPIED, WHITE FINISH	UNIV		WALL MOUNT 7'-6" AFF	LED INCLUDED
W	SAME AS TYPE W4	UNIV		CEILING SURFACE	LED INCLUDED
Z	STONCO CAT# VCXL-26-HFL-EB-1 26W FLUORESCENT VAPOR TIGHT, GLASS GLOBE, CAST GUARD, ELECTRONIC BALLAST	120		CEILING SURFACE TO BEST ADVANTAGE TO AVOID ELEVATOR TRAVEL AND EQUIPMENT	1-26W CF/835
	DUAL-LITE CAT# SEXRWD THERMOPLASTIC LED EXIT SIGN, SINGLE/DOUBLE FACE AS INDICATED ON DRAWINGS, RED LETTERS, WHITE HOUSING	UNIV		WALL SURFACE 0'-6" ABOVE DOOR OR CEILING MOUNT AS INDICATED ON DRAWINGS	LED INCLUDED
	DUAL-LITE CAT# CPRDW1203L INDOOR REMOTE LED DUAL LIGHTING HEADS, WHITE FINISH, 12V 3W HEADS			WALL SURFACE 0'-6" BELOW CEILING	LED INCLUDED
E	DUAL-LITE CAT# CCRDW12V03L OUTDOOR REMOTE LED DUAL LIGHTING HEADS, WET LOCATION LISTED, WHITE FINISH 12V 3W HEADS			WALL MOUNT LEVEL WITH WALL PACKS	LED INCLUDED
X	DUAL-LITE CAT# LMBG-12V-V-0 EMERGENCY LIGHTING BATTERY UNIT, 80W CAPACITY, 12V OUTPUT WATTAGE, SELF-DIAGNOSTICS, VOLTMETER, NO HEADS			WALL SURFACE 7'-6" AFF	
1	KIRLIN CAT# LRS-08525-120-43-41K-13-26 8" LED LENS DOWNLIGHT, WET LOCATION, 2400 LUMENS, VANDAL RESISTANT TEMPERED PRISMATIC SPREAD LENS, TAMPER-RESISTANT SCREWS	120		RECESS IN EXTERIOR CANOPY	LED INCLUDED
1A	KIRLIN CAT# LRS-08525-120-41K-13-26 8" LED LENS DOWNLIGHT, WET LOCATION, 3300 LUMENS, VANDAL RESISTANT TEMPERED PRISMATIC SPREAD LENS, TAMPER-RESISTANT SCREWS	120		RECESS IN EXTERIOR CANOPY	LED INCLUDED
2	COOPER CAT# 303-W1-LEDB1-4000-UNV-T4-DIMELV-CS EXTERIOR LED WALL PACK, SINGLE HEAD DOWN, ONE MINI LIGHTBAR, TYPE IV DISTRIBUTION, DIMMING DRIVER, CITY SILVER FINISH	UNIV		WALL MOUNT 10'-0" AFG	LED INCLUDED
3	COOPER CAT# 303-W1-LEDB1-4000-UNV-T2-CS EXTERIOR LED WALL PACK, SINGLE HEAD DOWN, ONE MINI LIGHTBAR, TYPE II DISTRIBUTION, CITY SILVER FINISH	UNIV		WALL MOUNT 10'-0" AFG	LED INCLUDED
8	COOPER CAT# 303-B1-LEDB2-4000-UNV-T4-DIMELV-CS-36 EXTERIOR LED BOLLARD, SINGLE HEAD, TWO MINI LIGHTBARS, TYPE IV DISTRIBUTION, DIMMING DRIVER, CITY SILVER FINISH	UNIV		MOUNT AT EDGE OF PATIO, TIE IN WITH RAILING, COORDINATE WITH ARCHITECTURAL	LED INCLUDED
93 94 95	COOPER LED AREA FIXTURE CAT# GLEON-AE-01-LED-E1-T3/T4FT/ SMO-AP. 93 w/TYPE 3 DIST. 94 w/TYPE 4 FORWARD THROW. 95 w/TYPE 5 MEDIUM SQUARE. GRAY (SILVER) COLOR, ALUMINUM SQUARE POLE.	UNIV		POLE MOUNT 20' AFG, WITH 2' BASE	LED INCLUDED
11	OPEN/CLOSED LED SIGN FURNISHED BY SECURITY VENDOR, EC TO INSTALL			COORDINATE WITH SECURITY VENDOR	

Hewett & Whitney
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PLOT DATE: Jul 21, 2015

NO.	DATE	DESCRIPTION

ISSUE FOR CONSTRUCTION
07.22.15

TAC Architectural Group Inc.

STATE OF MAINE
COLIN C. HEWETT
6374
LICENSED PROFESSIONAL ENGINEER
07-22-15

BSB - MARGINAL WAY

PORTLAND, MAINE

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