

POWER SYMBOLS

	CIRCUIT BREAKER
	GROUND CONNECTION
	HOME RUN TO PANEL (CKT. NO. AS SHOWN)
	TRANSFORMER
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
	20 AMPERE, 120 VOLT DUPLEX RECEPTACLE, +18" AFF
	20 AMPERE, 120 VOLT DOUBLE DUPLEX RECEPTACLE, +18" AFF
	20 AMPERE, 120 VOLT SINGLE RECEPTACLE
	20 AMPERE, 120 VOLT DUPLEX GFCI RECEPTACLE, +18" AFF
	OTHER POWER RECEPTACLE NEMA DESIGNATION AS NOTED
	MOTOR
	JUNCTION BOX
	POWER POLE CONNECTION TO MODULAR FURNITURE WHIP
	TRANSFORMER
	CIRCUIT BREAKER SIZED AS NOTED
	PANELBOARD NORMAL POWER
	PANELBOARD EMERGENCY POWER
	BUS DUCT AMPERE RATING AS NOTED
	FLOOR RECEPTACLE CONDUIT INSTALLED IN SLAB
	UNFUSED SAFETY SWITCH, RATING AS NOTED
	FUSED SAFETY SWITCH, RATING AS NOTED
	MAGNETIC MOTOR STARTER, RATING AS NOTED
	MANUAL TOGGLE OPERATED MOTOR STARTER
	ELECTRIC ACTUATED VALVE
	MOTOR CONTACTOR
	CONTACT NORMALLY OPEN
	CONTACT NORMALLY CLOSED
	SELECTOR SWITCH
	TEMPERATURE SWITCH
	PILOT LIGHT

LIGHTING SYMBOLS

	LIGHT FIXTURE
	LIGHT FIXTURE W/ EMERGENCY BATTERY BALLAST
	WALL MOUNTED LIGHT FIXTURE
	PENDANT MOUNTED LIGHT FIXTURE
	STRIP/WRAP LIGHT FIXTURE
	EXTERIOR WALL-PACK
	ROUND RECESSED CEILING MOUNTED FIXTURE
	SURFACE MOUNTED FIXTURE
	WALL MOUNTED LIGHTING FIXTURE
	POLE MOUNTED LIGHTING FIXTURE
	WALL SCONCE
	TRACK LIGHTING FIXTURE (TRACK MOUNTED FIXTURE TYPE MAY VARY)
	EMERGENCY LED EXIT SIGN
	COMBINATION EMERGENCY EXIT SIGN & LIGHTING FIXTURE WITH DUAL LAMPS HEADS BATTERY AND CHARGER
	EMERGENCY LIGHTING FIXTURE WITH DUAL LAMPS HEADS BATTERY AND CHARGER
	REMOTE EMERGENCY LIGHTING LAMP HEAD
	LIGHT SWITCH
	DENOTES FIXTURE SWITCHED P = PILOT LIGHT (WHERE NOTED) 3 = 3-WAY (WHERE NOTED) 4 = 4-WAY (WHERE NOTED)
	ULTRASONIC/INFRARED OCCUPANCY SENSOR
	C = CEILING MOUNTED W = WALL MOUNTED 48" AFF (TO TOP)
	TIME CLOCK
	LIGHTING CONTACTOR
	PHOTOCELL

FIRE ALARM SYMBOLS

	PULL STATION
	FIRE ALARM AUDIBLE/VISIBLE NOTIFICATION APPLIANCE (GENERAL EVACUATION)
	STROBE UNIT XX= CANDELA
	NON-SYSTEM STROBE UNIT
	MINI HORN UNIT
	SMOKE DETECTOR
	FIXED TEMP HEAT DETECTOR (135F OR 200F)
	FIRE ALARM CONTROL PANEL
	ANNUNCIATOR
	MASTER BOX
	DIGITAL COMMUNICATOR
	DUCT SMOKE DETECTOR
	REMOTE TEST STATION
	SPRINKLER TAMPER SWITCH
	SPRINKLER FLOW SWITCH
	SPRINKLER PRESSURE SWITCH
	MONITOR MODULE
	CONTROL MODULE
	NON-SYSTEM SMOKE DETECTOR STR = DENOTES INTEGRAL STROBE FOR H/C UNITS
	RED MASTER BOX LIGHT
	KNOX BOX, FBO
	HOOD EXT SYSTEM
	DOOR HOLDER
	SIGNAL POWER EXTENDER

SYSTEMS SYMBOLS

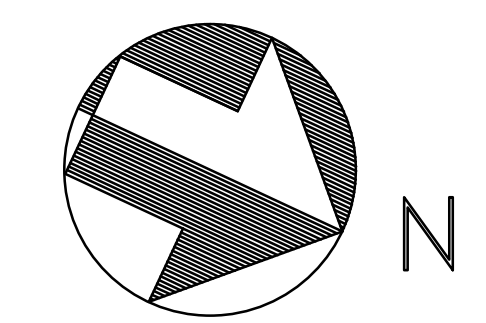
	TELEPHONE SYSTEM WALL JACK
	COMBINATION VOICE/DATA SYSTEM OUTLET
	COMBINATION VOICE/DATA SYSTEM OUTLET IN FLOOR BOX. FURNISH 1" CONDUIT IN SLAB
	CATV JACK
	SECURITY SYSTEM DOOR SWITCH
	ELECTRIC DOOR LOCK SET
	SECURITY SYSTEM CARD ACCESS PAD
	INTERCOM SYSTEM SPEAKER
	INTERCOM MASTER STATION
	CABLE TRAY
	PUSH BUTTON
	DOOR BELL

GENERAL NOTES

- ALL WORK SHALL BE IN COMPLIANCE WITH NFPA-70, NATIONAL ELECTRICAL CODE.
- ALL MOTOR SAFETY SWITCHES, DISCONNECTS AND MOTOR STARTERS ARE FURNISHED BY DIVISION 16000 UNLESS NOTED AS FURNISHED WITH EQUIPMENT (FWE).
- UNLESS OTHERWISE NOTED, CONVENIENCE RECEPTACLES SHALL BE MOUNTED 18 INCHES AFF AND LIGHTING TOGGLE SWITCHES 48 INCHES AFF.
- ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH A UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN THE RATING OF THE SEPARATION.
- LIGHTING TOGGLE SWITCHES SHALL BE COMMERCIAL SPECIFICATION GRADE, 120 VOLT, SIDE WIRED AS MANUFACTURED BY LEVITON, PASS & SEYMOUR, OR APPROVED EQUAL.
- CONVENIENCE RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE UNLESS SHOWN OTHERWISE, GROUNDING TYPE, NEMA 5-20R, SIDE WIRED, AS MANUFACTURED BY LEVITON, PASS & SEYMOUR, OR APPROVED EQUAL.
- DEVICE COVERPLATES SHALL BE THERMOPLASTIC NYLON TYPE WITH IVORY FINISH IN ALL FINISHED SPACES. MECHANICAL ROOMS, ELECTRICAL ROOM, AND UTILITY ROOMS SHALL BE FURNISHED WITH BRUSHED STAINLESS STEEL COVERPLATES.
- UNLESS OTHERWISE NOTED ALL HOMERUNS FOR 15 OR 20A CIRCUITS SHALL BE 2#12AWG & #12 GND. HOMERUNS FED FROM 20A, 1P CIRCUITS IN EXCESS OF 100 FEET (FOR 120V CIRCUITS) SHALL BE #10AWG. ALL WIRING SHALL BE COPPER.
- CONDUIT SYSTEMS: EXPOSED INTERIOR CONDUITS SHALL BE EMT, 3/4" MINIMUM. PROPERLY SUPPORTED NM CABLE (ROMEX) MAY BE USED ABOVE CEILINGS AND IN WALLS. FLEXIBLE LIQUIDTIGHT CONDUIT WHIPS SHALL BE USED FOR CONNECTION TO VIBRATING EQUIPMENT IN THE MECHANICAL ROOM.

ABBREVIATIONS

A	AMPERE	LV	LOW VOLTAGE
AC	ALTERNATING CURRENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AFG	ABOVE FINISHED GRADE	MCP	MOTOR CIRCUIT PROTECTION
AIC	AMPERES INTERRUPTING CAPACITY	MH	METAL HALIDE
AL	ALUMINUM	EMH	ELECTRICAL MANHOLE
ASYM	ASYMMETRICAL	MLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MO	MECHANICALLY OPERATED
AUX	AUXILIARY	MOD	MOTOR OPERATED DAMPER
AWG	AMERICAN WIRE GAUGE	MTS	MANUAL TRANSFER SWITCH
BKR	BREAKER	MV	MERCURY VAPOR
C	CONDUIT	MVA	MEGAVOLT-AMPERE
CAB	CABINET	NC	NORMALLY CLOSED
CB	CIRCUIT BREAKER	NO	NORMALLY OPENED
CKT	CIRCUIT	OH	OVERHEAD
CT	CURRENT TRANSFORMER	OL	OVER LOAD
CU	COPPER	OOA	ON-OFF-AUTOMATIC
DC	DIRECT CURRENT	OSY	OUTSIDE STEM & YOKE VALVE (FA SYSTEM)
DISC	DISCONNECT	P	POLE
EG	EQUIPMENT GROUND	PB	PUSH BUTTON
EH	ELECTRICALLY HELD	PF	POWER FACTOR
EM	EMERGENCY	PH	PHASE
EMT	ELECTRICAL METALLIC TUBING	PNL	PANEL
EO	ELECTRICALLY OPERATED	PRI	PRIMARY
EPR	ETHYLENE PROPYLENE RUBBER	PT	POTENTIAL TRANSFORMER
EQUIP	EQUIPMENT	PVC	POLYVINYL CHLORIDE
EX	EXTERIOR	RGSC	RIGID GALVANIZED STEEL CONDUIT
FA	FIRE ALARM	RVSS	REDUCED VOLTAGE SOLID STATE
FC	FOOT-CANDLE	RSC	RIGID STEEL CONDUIT
FDR	FEEDER	RVAT	REDUCED VOLTAGE AUTO TRANSFORMER
FLUOR	FLUORESCENT	S	SIGNAL
FS	FLOW SWITCH (FA SYSTEM)	SEC	SECONDARY
FVNR	FULL VOLTAGE NON REVERSING	SHLD	SHIELDED CABLE
FVR	FULL VOLTAGE REVERSING	SW	SWITCH
GEN	GENERATOR	SWBD	SWITCHBOARD
GF	GROUND FAULT	SYM	SYMMETRICAL
GFI	GROUND FAULT CIRCUIT INTERRUPTER	T	TELEPHONE
GND	GROUND	TR	TRANSFORMER
H	HAND HOLE	TBD	TO BE DETERMINED
HOA	HAND-OFF-AUTOMATIC	TD	TELEDIALER
HP	HORSE POWER	TDR	TIME DELAY RELAY
HPS	HIGH PRESSURE SODIUM	TEL	TELEPHONE
HV	HIGH VOLTAGE	TM	TELEMETRY
HZ	HERTZ	UG	UNDERGROUND
IG	ISOLATED GROUND	UT	UTILITY
IMC	INTERMEDIATE METAL CONDUIT	V	VOLT
INCAND	INCANDESCENT	VA	VOLT-AMPERE
JB	JUNCTION BOX	VFD	VARIABLE FREQUENCY DRIVE
KCMIL	THOUSAND CIRCULAR MILS	W	WATT
KV	KILOVOLT	WH	WATT HOUR
KVA	KILO VOLT-AMPERE	WP	WEATHERPROOF
KW	KILOWATT	XFMR	TRANSFORMER
KWH	KILOWATT HOUR	XLP	CROSS LINKED POLYETHYLENE
LPS	LOW PRESSURE SODIUM	XP	EXPLOSION PROOF
LTG	LIGHTING		
LSW	LIGHT SWITCH		



project name

Butler Payson
pine st.
state st.
portland, me

avesta housing

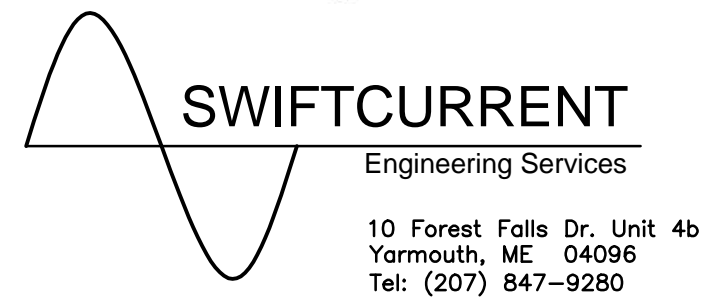
goduti/thomas architects

44 oak st.

portland, maine 04101

ph. 207-775-3184

fax 207-774-0486



ISSUED FOR PERMIT

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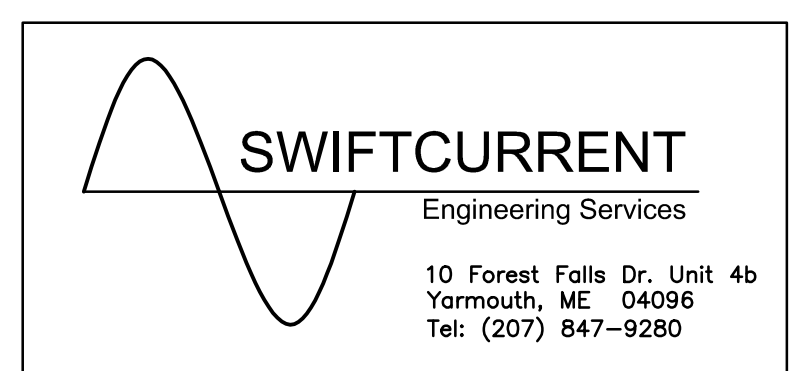
sheet title

ELECTRICAL LEGEND, SYMBOLS, & NOTES

scale: as shown

drawn by:JMD checked by:TDM

project number



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