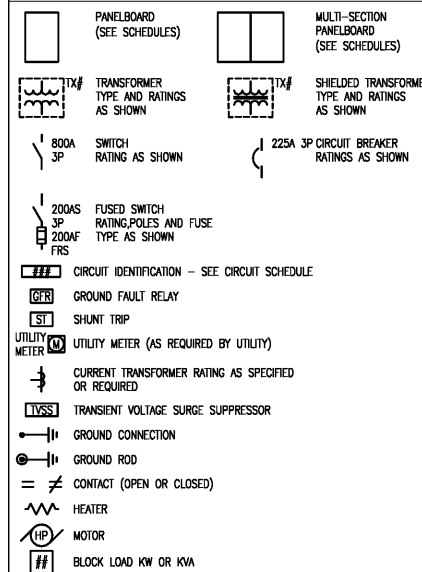
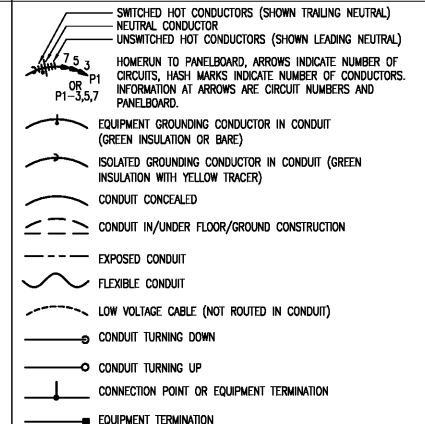


ELECTRICAL SYMBOLS

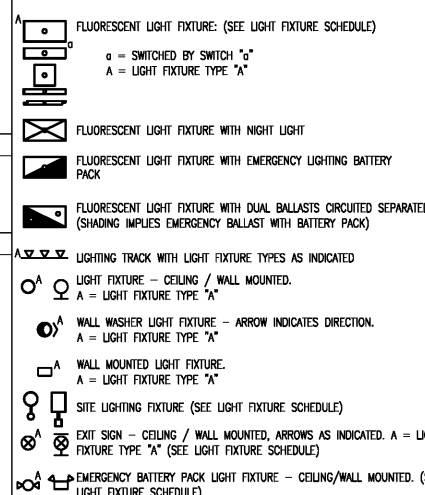
ELECTRICAL ONE-LINE & RISER



CIRCUITING & WIRING

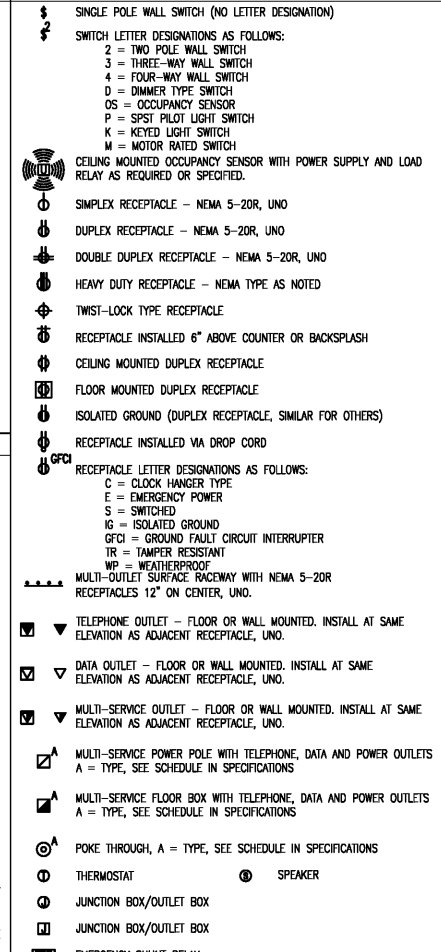


LIGHTING

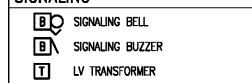


NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ABBREVIATIONS, ETC. ARE NECESSARILY USED ON THE DRAWINGS.

WIRING DEVICES & OUTLETS



SIGNALING



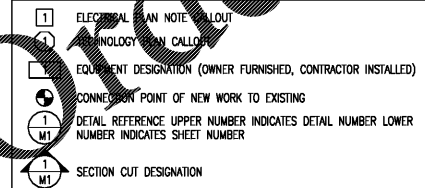
ABBREVIATIONS

A	AMPERES, AIR (COMPRESSED)	MAX	MAXIMUM
A/C	AIR CONDITIONING	MCA	MINIMUM CIRCUIT AMPACITY
AF	AMPERE FUSE	MCB	MINIMUM CIRCUIT BREAKER
AFD	ABOVE FINISHED CEILING	MCC	MOTOR CONTROL CENTER
AFC	ARC FAULT CIRCUIT INTERRUPTER	MDC	MOTORIZED DAMPER
AFA	AREA FOR EVACUATION ASSISTANCE	MDF	MAIN DISTRIBUTION PANEL
AFB	ABOVE FINISHED FLOOR	MFP	MANUFACTURER
AFG	ABOVE FINISHED GRADE	MG	MOTOR GENERATOR
AH	ANALOG INPUT	MH	MANHOLE
AI	AMPERE INTERRUPTING CURRENT	MIN	MINIMUM
AL	ALUMINUM	MLO	MAIN LISTS ONLY
ALP	ALTERNATE	MOP	MOTION OVERCURRENT PROTECTION
AO	ANALOG OUTPUT	MSB	MAIN SWITCHBOARD
AP	ACCESS PANEL	MSMB	MAIN SWITCHBOARD
ATS	AUTOMATIC TRANSFER SWITCH	MS/TP	MASTER SLAVE/TOKEN PASSING - COMMUNICATION TRUNK MOUNTED
AWG	AMERICAN WIRE GAUGE	MTD	MOUNTED
BAS	BUILDING AUTOMATION SYSTEM	N/A	NOT APPLICABLE
BFF	BELOW FINISHED FLOOR	N/C	NORMALLY CLOSED
BFO	BELOW FINISHED GRADE	NC	NOT IN CONTRACT
BI	BINARY INPUT	NO	NIGHT LIGHT
BIC	BREAKER	NO	NORMALLY OPEN
BO	BINARY OUTPUT	ND	ON CENTER
C	CONDUIT	ND	NORMALLY OPEN
CD	CANDELA	OS	OCCUPANCY SENSOR
CT	CURRENT TRANSFORMER	POU	POWER DISTRIBUTION UNIT
CTV	CABLE TELEVISION SYSTEM	PH, #	PHASE
CCTV	CLOSED CIRCUIT TELEVISION	PIV	POST INDICATOR VALVE
CKT	CIRCUIT	PKL	PANEL
CCT	CONTROL POWER TRANSFORMER	PNLB	PANELBOARD
CU	COPPER, CONDENSING UNIT	PROVIDE	FURNISH AND INSTALL
CVD	CUMULATIVE VOLTAGE DROP	PT	POTENTIAL TRANSFORMER
DDC	DIRECT DIGITAL CONTROL	PITZ	PAN. TILT, ZOOM
DI	DIGITAL INPUT, DUCTILE IRON	QTY	QUANTITY
DN	DOWN	RPT	RECEPTACLE
DPT	DOUBLE-POLE, DOUBLE-THROW	RLA	RUNNING LOAD AMPS
EIR	EMERGENCY	RTU	ROOFTOP UNIT
EPO	EMERGENCY POWER OFF	SD	SMOKE DETECTOR, SUPPLY DUCT
EM	EMERGENCY	SF	SQUARE FEET, SUPPLY FAN
EPD	EXISTING TO REMAIN	SPOT	SINGLE-POLE, DOUBLE-THROW
FACP	FIRE ALARM CONTROL PANEL	SPST	SINGLE-POLE, SINGLE-THROW
FBO	FURNISHED BY OTHERS/OWNER	SS	STAINLESS STEEL
FCA	FAULT CURRENT AMPS	ST	SHUNT TRIP, STEAM TRAP
FF	FINISHED FLOOR	SWBD	SWITCHBOARD
FLA	FULL LOAD AMPS	TR	TAMPER RESISTANT
FLR	FLOOR	TX	TRANSFORMER
FVNR	FULL-VOLTAGE, NON-REVERSING	TX	TRANSFORMER
GC	GENERAL CONTRACTOR	TYF	TYPICAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	U/F	UNDER FLOOR
GFR	GROUND FAULT RELAY	U/H	UNIT HEATER
G	GROUND	UN	UNDERSLAB
GND	GROUND	UNL	UNDERWRITERS LABORATORIES, INC.
GRS	GALVANIZED RIGID STEEL	UNL	UNLESS NOTED OTHERWISE
HDA	HAND-OFF-AUTOMATIC	UPS	UNINTERRUPTIBLE POWER SUPPLY
IG	ISOLATED GROUND	V	VOLTS
ISC	SHORT CIRCUIT CURRENT	VAC	VOLTS ALTERNATING CURRENT
JB	JUNCTION BOX	VDC	VOLTS DIRECT CURRENT
J-BOX	JUNCTION BOX	VFD	VARIABLE FREQUENCY DRIVE
kntrl	1000 CIRCULAR MILS	W	WIRE
KK	KIRK KEY	WP	WEATHERPROOF
KV	KILOVOLT	XP	EXPLOSION-PROOF
KVA	KILOVOLT-AMPS		
KWH	KILOWATT-HOUR		
LF	LINEAR FEET		
MATV	MASTER ANTENNA TELEVISION SYSTEM		

STANDARD MOUNTING HEIGHTS

ELECTRICAL ALARMS	48"
ANNUNCIATOR PANELS	48"
CLOCK OUTLETS (CENTERLINE)	84"
CONTROLS (CENTERLINE)	80"
EXIT SIGNS (WALL MOUNTED, BOTTOM)	80"
INTERCOM (AREA ONLY)	36"
INTERCOMS	48"
PANELS/PANELBOARDS (TOP)	72"
PHOTOCELLS	144"
RECEPTACLES (CENTERLINE)	18"
RECEPTACLES (EXTERIOR)	24"
RECEPTACLES (GARAGES)	26"
RECEPTACLES IN EQUIPMENT ROOMS	48"
RECEPTACLES A SERVICE WRITERS COUNTER	52"
REMOTE INDICATING LIGHT (EQUIPMENT ROOMS)	48"
REMOTE INDICATING LIGHT (FINISHED AREAS)	48"
SAFETY SWITCHES	48"
STARTERS	48"
SWITCHES (CENTERLINE)	48"
TELEPHONES (PUBLIC)	48"
TELEPHONE, DATA OUTLETS (CENTERLINE)	48"
TELEPHONE TERMINAL BOARD (BOTTOM)	6"
TELEVISION OUTLETS	18"

ANNOTATION



LOAD SERVED	CKT. NO.	CKT. SIZE	TYPE	CONNECTED VA						LOAD SERVED				
				PHASE			PHASE							
				A	B	C	A	B	C					
MANAGER / RESTROOM LTG	1	20	1	135			180			5	20	2	EF-1 AND EF-2	
ENTRY / CORRIDOR LTG	3	20	1	247			180			2	20	4	* RR RECEPT	
EXTERIOR LIGHTING 1	5	20	1				484			1128	1	20	6	TECH AREA LIGHTING 2
EXTERIOR LIGHTING 2	7	20	1	255			1128			1	20	8	TECH AREA LIGHTING 3	
TECH AREA LIGHTING 1	9	20	1				960			1500	1	20	10	BUILDING SIGN 2
TECH AREA NIGHT LIGHTING	11	20	1				139			960	2	20	12	SERVICE AREA RECEPT.
LUNCH RM RECEPT.	13	20	2	720			1340			3	20	14	WATER HEATER	
BUILDING SIGN 1	15	20	1	1500							20	16	SPARE	
COUNTER RECEPITS	17	20	2				360			500	4	20	18	PHONE EQUIP RECEPT.
SECURITY RECEPITS *	19	20	2	200			1000			4	20	20	* REFRIGERATOR	
LC-1	21	20	4	300			1500			4	20	22	* MICROWAVE	
SHOP QUAD RECEIPT 11 *	23	20	2				360			720	2	24	24	SERVICE RECEPITS
MANAGER'S RECEPITS	25	20	2	540			540			2	20	26	26	COUNTER RECEPITS
ENTRY ROOM 1 RECEPT	27	20	2				360			540	2	20	28	* SHOP QUADS 6,7
ENTRY ROOM 2 RECEPITS	29	20	2				360			720	2	20	30	* SHOP QUAD 3
PHONE EQUIP RECEPITS	31	20	2	500			1500			1	20	32	32	BUILDING SIGN 3
SHOP QUAD RECEIPT 9 *	33	20	2				360			360	2	20	34	SERVICE RECEPITS
SHOP QUAD RECEIPT 10 *	35	20	2				360			360	2	20	36	* CONV. RECEPITS 105
COMPRESSOR	37	25	7	1320			1368			6	20	38	38	AHU-1
	39	25	7				1320			3678	8	40	40	PANEL C
	41	7					1320			3678	8	42	42	
TOTAL PHASE A							3670			7056				10726
TOTAL PHASE B							5047			7758				12805
TOTAL PHASE C							3383			8066				11449

	TYPE	CONNECTED LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (VA)
LIGHTING	1	8976	125%	11220
FIRST 10KW RECEPT	2	7780	100%	7780
REMAINING RECEPT		0	50%	0
HEAT	3	1340	125%	1675
MISC. EQUIPMENT	4	3300	100%	3300
MOTOR LOADS	5	180	100%	180
HVAC EQUIPMENT	6	1368	100%	1368
LARGEST MOTOR	7	3960	125%	4950
PANEL FEEDER	8	7356	100%	7356
		34260		37829

* INDICATES GFCI BREAKER

CONNECTED LOAD (VA)	34260
CONNECTED LOAD (A)	95
DEMAND LOAD (VA)	37829
DEMAND LOAD (A)	105

LOAD SERVED	CKT. NO.	CKT. SIZE	TYPE	CONNECTED VA						LOAD SERVED				
				PHASE			PHASE							
				A	B	C	A	B	C					
AUTO LIFT 1	1	30	5	1373			2162			7	30	2	CU-1	
AUTO LIFT 2	5	30	5				1373			2162	7	30	4	
AUTO LIFT 3	7	30	5	1373			1373			2162	7	30	8	AUTO LIFT 6
AUTO LIFT 4	11	30	5				1373			1373	5	30	10	
AUTO LIFT 5	13	30	5	1373			1373			1373	5	30	12	AUTO LIFT 7
AUTO LIFT 6	15	30	5				1373			1373	5	30	14	
AUTO LIFT 7	17	30	5				1373			1373	5	30	16	AUTO LIFT 8
AUTO LIFT 8	19	30	5	1373			1373			1373	5	30	18	
AUTO LIFT 9	21	20	3				1056			1373	5	30	22	AUTO LIFT 9
RH-1, & RH-2	23	20	5				1392			1500	2	20	24	MONUMENT SIGN
SF-1, SF-2	25	20	5	1392							20	26	26	SPARE
SF-3, SF-4	27	20	6	500							20	28	28	SPARE
INTAKE LOUVER	29	20	5				1656			720	2	20	30	* EXT. CONV. RECEPITS
EF-4	31	20	5	1656			720				2	20	32	* IRRIGATION
EF-3	33	20	5				900			360	2	20	34	* SHOP QUADS 8
CORD REEL 1 *	35	20	2											