

# ELECTRICAL SYMBOLS LIST

	20A, 2P, 3 WIRE, 125V, SINGLE RECEPTACLE, FLUSH WALL MOUNTED	NUMERAL IDENTIFIES PANELBOARD CIRCUIT NUMBER, REFER TO BRANCH CIRCUIT NOTES BELOW
	20A, 2P, 3 WIRE, 125V, DUPLEX RECEPTACLE, FLUSH WALL MOUNTED	
	20A, 2P, 3 WIRE, 125V, DUPLEX RECEPTACLE, FLOOR MOUNTED	
	20A, 2P, 3 WIRE, 125V, DUPLEX RECEPTACLE, UPPER CASE LETTER DENOTES TYPE, REFER TO RECEPTACLE SCHEDULE; CLG/WALL MOUNTED	
	CLOCK HANGER RECEPTACLE	
	20A, 2P, 3 WIRE, 125V, SINGLE RECEPTACLE, FLOOR MOUNTED	
	'S' DENOTES SERVICE FITTING FOR FLOOR BOX	
	20A, 2P, 3 WIRE, 125V, DUPLEX RECEPTACLE, FLOOR MOUNTED	
	'S' DENOTES SERVICE FITTING FOR FLOOR BOX	
	POKE THROUGH RECEPTACLE ASSEMBLY	
	DUPLEX RECEPTACLE - SPLIT WIRE, FLOOR MOUNTED	
	DOUBLE DUPLEX RECEPTACLE, FLOOR MOUNTED	
	CONDUIT STUB WITH JUNCTION BOX TERMINATION	
	COMBINATION DEVICE OF SINGLE POLE SWITCH AND 2P, 3W SINGLE RECEPTACLE	
	WALL SWITCH WITH DUPLEX RECEPTACLE UNDER COMMON PLATE	
	DUPLEX RECEPTACLE MTD ABOVE COUNTER	
	POWER POLE WITH RECEPTACLE - ROMAN NUMERAL DENOTES RECEPTACLE QUANTITY WHEN MORE THAN ONE	
	COMMUNICATION - POWER POLE (COMBINATION TELEPHONE, COMPUTER AND POWER)	
	SINGLE POLE SWITCH, LOWER CASE LETTER IDENTIFIES OUTLET(S) CONTROLLED BY THAT SWITCH, UPPER CASE LETTER AND/OR NUMERAL INDICATES:	
	T - TIMER SWITCH	
	2 - DOUBLE POLE	
	3 - THREE-WAY	
	4 - FOUR-WAY	
	P - WITH PILOT LIGHT	
	K - KEY OPERATED	
	M - MOMENTARY CONTACT	
	D - DIMMER SWITCH, 1000W, UNLESS OTHERWISE NOTED	
	LRCM - LOW VOLTAGE RELAY MASTER CONTROL SWITCH	
	LRC - LOW VOLTAGE RELAY CONTROL SWITCH	
	TH - HORSEPOWER RATED MANUAL SWITCH WITH THERMAL PROTECTION	
	H - HORSEPOWER RATED MANUAL SWITCH WITHOUT THERMAL PROTECTION	
	DIMMER SYSTEM REMOTE CONTROL STATION	
	SUBLETTER(S) IDENTIFIES TYPE AS SCHEDULED	
	CEILING MOUNTED LIGHTING FIXTURE	
	CEILING MOUNTED FLUORESCENT LIGHTING FIXTURE	
	WALL MOUNTED LIGHTING FIXTURE	
	WALL MOUNTED FLUORESCENT LIGHTING FIXTURE	
	FLUORESCENT BARE LAMP STRIP	
	'EM' DENOTES EMERGENCY POWER SOURCE	
	CEILING MOUNTED EXIT LIGHT, SHADED AREA INDICATES ILLUMINATED FACE(S), DIRECTIONAL ARROWS AS INDICATED	
	WALL MOUNTED EXIT LIGHT, SHADED AREA INDICATES ILLUMINATED FACE(S), DIRECTIONAL ARROWS AS INDICATED	
	EMERGENCY BATTERY LIGHT UNIT WITH NUMBER OF HEADS AS INDICATED, FIXTURE TYPE	
	LIGHTING TRACK, LETTER DENOTES TRACK TYPE WITH MOUNTED FIXTURE TYPE 'B'	
	STRIP LIGHT, LETTER IN OVAL INDICATES FIXTURE TYPE, SUBLETTER 'A' IDENTIFIES CORRESPONDING TRANSFORMER	
	SURFACE MOUNTED PANELBOARD	
	FLUSH MOUNTED PANELBOARD	
	DISTRIBUTION OR POWER PANEL	
	ATS DENOTES AUTOMATIC TRANSFER SWITCH; MTS DENOTES MANUAL TRANSFER SWITCH	
	MOTOR - REFER TO MOTOR & MOTOR CONTROL SCHEDULE FOR HORSEPOWER RATING AND TYPE OF CONTROLS - ALPHA NUMERIC REPRESENTS MOTOR DESIGNATION	
	3 POLE, UNFUSED DISCONNECT (SAFETY) SWITCH IN NEMA 1 TYPE ENCLOSURE, 30A UNLESS OTHERWISE NOTED	
	3 POLE, FUSED DISCONNECT (SAFETY) SWITCH IN NEMA 1 TYPE ENCLOSURE, 30A UNLESS OTHERWISE NOTED	
	3 POLE MAGNETIC MOTOR STARTER	
	3 POLE COMBINATION MOTOR STARTER FUSED TYPE, 'P' DENOTES CKT PROTECTOR TYPE	
	3 POLE CIRCUIT BREAKER - INDIVIDUALLY MOUNTED, NUMBER DENOTES TRIP SIZE IF OTHER THAN 20 AMPS	
	BREAK GLASS SWITCH	
	PUSHBUTTON - START-STOP TYPE	
	CONTROL RELAY - NUMBER DENOTES QUANTITY OF POLES IF MORE THAN 2	
	POWER TRANSFORMER - REFER TO 'T'-NUMBER IN SCHEDULE OR SPECIFICATION FOR CHARACTERISTICS	
	'FCU COIL' - FAN COIL UNIT; 'HPU' - HEAT PUMPS UNITS; '#' - INDICATES TYPE	
	'OH' - CABINET HEATER; 'DH' - DUCT HEATER; 'UH' - UNIT HEATER	
	THERMOSTAT	
	CONDUIT RUN CONCEALED	
	CONDUIT RUN EXPOSED	
	CONDUIT RUN IN FLOOR OR BELOW FLOOR SLAB AND/OR BELOW FINISHED GRADE	
	SURFACE METAL RACEWAY	
	CONDUIT TURNED UP	
	CONDUIT TURNED DOWN	
	BUSHED OR CAPPED CONDUIT	
	HOME RUN TO DESIGNATED PANELBOARD - NUMERALS INDICATE CIRCUIT NUMBER, REFER TO SPECIFICATION FOR GROUNDING REQUIREMENTS	
	HOME RUN TO DESIGNATED PANELBOARD - NUMERALS INDICATE CIRCUIT NUMBER, CROSS LINES INDICATE NUMBER OR CONDUCTORS WHEN MORE THAN TWO (2) - REFER TO SPECIFICATION FOR GROUNDING REQUIREMENTS	
	THREE PHASE HOME RUN TO DESIGNATED PANELBOARD	
	HOME RUN TO DESIGNATED DIMMER BOARD, NUMERALS INDICATE CIRCUIT NUMBER, ARROWS DENOTE SINGLE PHASE CIRCUITS WITH SEPARATE NEUTRAL WIRE	
	HOME RUN FOR SIGNAL SYSTEMS SUCH AS: TELEPHONE, COMPUTER, CONTROL, ETC.	
	MULTIOUTLET ASSEMBLY (FILLED IN AREA DESIGNATE OUTLET LOCATIONS) LETTER DENOTES TYPES OF OUTLET	
	UNDERFLOOR DUCT SYSTEM; SINGLE, DOUBLE OR TRIPLE DUCTS AS INDICATED BY THE NUMBER OF PARALLEL LINES	
	'P' - DENOTES POWER DUCT	
	'T' - TELEPHONE DUCT	
	'C' - COMPUTER DUCT	

# ELECTRICAL SYMBOLS LIST

	JUNCTION BOX, CEILING/FLOOR/WALL MOUNTED
	PULL BOX SIZED AS REQUIRED
	BELL
	CHIME
	HORN (SINGLE/BI-DIRECTIONAL)
	BUZZER
	DOOR PUSHBUTTON
	SIGNAL TRANSFORMER
	MAGNETIC DOOR HOLDER
	MAGNETIC TYPE DOOR CLOSER, 'S' DENOTES SMOKE DETECTOR TYPE
	SPRINKLER WATER FLOW SWITCH
	SPRINKLER SUPERVISED VALVE - TAMPER SWITCH
	INDICATING CLOCK - SINGLE FACE CLG/WALL MTD
	'S' - DENOTES SKELETON TYPE 'R' - DENOTES RECESSED TYPE 'D' - DENOTES DOUBLE FACED 'S' - DENOTES SURFACE MOUNTED 'D' - DENOTES DOUBLE FACED
	SPEAKER, CLG/WALL MTD
	VOLUME CONTROL
	MICROPHONE OUTLET, CLG/WALL MTD
	PUBLIC ADDRESS EQUIPMENT RACK
	ELECT. LOWER PATCH PANEL WITH 4 RECEPTS AND R/S SWITCH
	MULTIMEDIA PATCH PANEL
	WINDOW ALARM SWITCH
	DOOR PUSHBUTTON
	CLOSED CIRCUIT SURVEILLANCE CAMERA 'P' DENOTES PAN - P/T TILT
	CLOSED CIRCUIT SURVEILLANCE MONITOR - NUMBERS DENOTE QUANTITY
	TELEVISION ANTENNA OUTLET
	TELEVISION SPLITTER NUMBER DENOTES QUANTITY OF SPLITS
	TELEVISION CAMERA OUTLET
	TELEVISION HEADED EQUIPMENT
	TELEPHONE OUTLET WITH BUSHED OPENING
	LETTERS DENOTE: 'H' - HOUSE PHONE 'J' - JACK TYPE; 'P' - PAY (PUBLIC) PHONE 'W' - WALL TYPE PHONE
	TELEPHONE TERMINAL CABINET
	TELEPHONE FLOOR BOX WITH NIPPLE (RISER) EXTENSION, 'S' DENOTES SERVICE FITTING TYPE
	DATA OUTLET WITH BUSHED OPENING WALL MOUNTED
	COMBINATION TELEPHONE/DATA OUTLET WITH BUSHED OPENING WALL MOUNTED
	SWITCH
	BELL
	CHIME
	DOOR STRIKE
	START/STOP WITH PILOT LIGHT
	POWER TRANSFORMER
	GROUND (EARTH)
	LIGHTNING ARRESTER
	CIRCUIT BREAKER
	GROUND BUS
	NEUTRAL BUS
	CARD READER
	'R' - DENOTES RECESSED TYPE
	POWER DOOR OPERATOR
	INTERCOM
	CEILING MOUNTED OCCUPANCY SENSOR
	SURFACE MOUNTED OCCUPANCY SENSOR
	PHOTOSENSOR

**BRANCH CIRCUIT NOTES:**

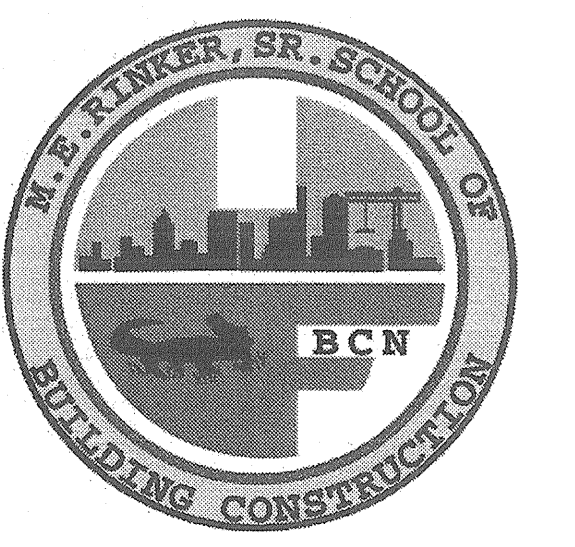
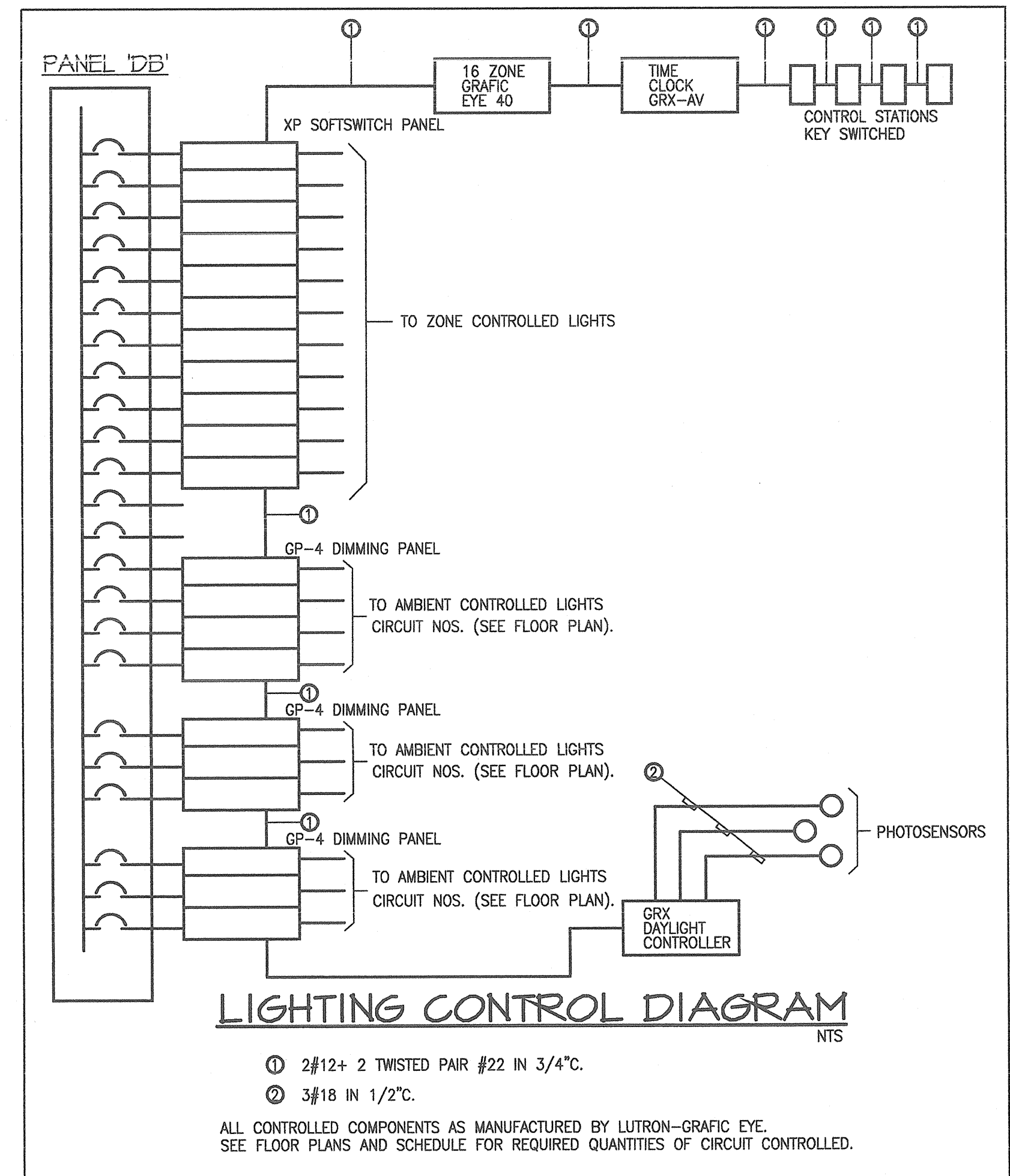
- CIRCUIT NUMBERS ARE FOR REFERENCE ONLY AND INDICATE THE OUTLETS REQUIRED TO BE CONNECTED TO DESIGNATED CIRCUITS.
- THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING THE ACTUAL NUMBER OF CONDUCTORS REQUIRED FOR ALL BRANCH CIRCUIT WIRING TO SERVE THE INTENDED FUNCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY BALANCING LOADS ON ALL THREE PHASES.

# FIRE ALARM SYSTEM

	FIRE ALARM MANUAL PULL STATION
	SMOKE DETECTOR
	HEAT (THERMAL) DETECTOR
	SINGLE STATION SMOKE DETECTOR WITH SELF CONTAINED ALARMS
	COMBINATION SMOKE DETECTOR CONSISTING OF SMOKE AND HEAT (THERMAL) DETECTOR
	FIRE ALARM SPEAKER WITH VISUAL ALARM
	FIRE ALARM SPEAKER - BI-DIRECTIONAL
	FIRE ALARM GONG
	FIRE ALARM HORN, 'V' - DENOTES, WITH VISUAL ALARM LAMP
	DUCT TYPE SMOKE DETECTOR
	DUCT TYPE FIRESTAT
	MAGNETIC DOOR HOLDER
	MAGNETIC TYPE DOOR CLOSER, 'S' DENOTES SMOKE DETECTOR TYPE
	SPRINKLER WATER FLOW SWITCH
	SPRINKLER SUPERVISED VALVE - TAMPER SWITCH
	FIRE FIGHTER'S TELEPHONE
	FIRE FIGHTER'S TELEPHONE JACK
	FIRE COMMAND CENTER (STATION) FCC (FCS)
	FIRE ALARM CONTROL PANEL
	FIRE / MULTIPLEX PANEL
	FIRE ALARM ANNUNCIATOR
	LOCAL FIRE ANNUNCIATOR
	MOTORIZED DAMPER
	ELECTRIC PNEUMATIC SWITCH

# ELECTRICAL ABBREVIATIONS

A	AMPERE(S)	MATV	MASTER ANTENNA TELEVISION SYSTEM
AC	ALTERNATING CURRENT	MC	METAL CLAD CABLE
ACB	AIR CIRCUIT BREAKER	MCC	MOTOR CONTROL CENTER
AF	ABOVE FINISHED GRADE	MCM	THOUSAND CIRCULAR MIL(S)
AL	ALUMINUM	MCP	MOTOR CONTROL PANEL
AL	ALTERNATE	M.C.	MECHANICAL CONTRACTOR
ASTM	ASYMMETRICAL	MIC	MECHANICAL CONTRACTOR
ATS	AUTOMATIC TRANSFER SWITCH	MIN	MICROPHONE
AWG	AMERICAN WIRE GAUGE	MIN	MINIMUM
BC	BOTTOM CONDUIT	MS	MAGNETIC STARTER
BD	BUS DUCT	MTD	MOUNTED
BFG	BELOW FINISHED GRADE	MTG	MOUNTING
BIL	BASIC IMPULSE LEVEL	MTR	MANUAL TRANSFER SWITCH
BLDG	BUILDING	MTS	NEUTRAL
BX	ARMORED CABLE	NA	NON-AUTOMATIC
C	CONDUIT	NL	NORMALLY CLOSED
CATV	CABLE ANTENNA TELEVISION SYSTEM	NF	NON-FUSE
CCAB	CONTROL CABINET	N.I.C.	NOT IN CONTRACT
CCTV	CLOSED CIRCUIT TELEVISION	NO	NORMALLY OPEN
CH	CIRCUIT BREAKER	NP	NETWORK PROTECTOR
CKT	CIRCUIT BREAKER	NTS	NOT TO SCALE
CKR/CB	CIRCUIT BREAKER	OC	OVERLOAD ELEMENT
CL	CEILING	OL	OVERLOAD ELEMENT
CLG	CONDUIT ONLY	PA	PUBLIC ADDRESS
CO	CURRENT TRANSFORMER	PB	PULL BOX
CT	COPPER	P.C.	PLUMBING CONTRACTOR
CU	DUCT BANK	PF	POWER FACTOR
DB	DIMMER BOARD	PH	PHASE
DDB	DIRECT CURRENT	PL	PILOT (INDICATOR) LIGHT
DC	DUCT HEATER	PNL	PANEL (PANELBOARD)
DM	DIMMER CONTROL	PP	POWER PANEL
DISC	DISCONNECT	PT	POTENTIAL TRANSFORMER
DM	DAMPEN MOTOR	PVC	POLYVINYL CHLORIDE
DN	DOWN	PWR	POWER
DP	DISTRIBUTION POWER PANELBOARD	R	RECESSED
DT	DOUBLE THROW	RC	RECEPTACLE
DWG	DRAWING	REC	RECEPTACLE
EA	EACH	S	SURFACE
E.C.	ELECTRICAL CONTRACTOR	SC	SEPARATE CIRCUIT
EHTR	ELECTRIC HEATER	SDB	SUB-DISTRIBUTION BOARD
ELEV	ELEVATOR	SEC	SECONDARY
EL	ELECTRIC	SMR	SURFACE METAL RACEWAY
EM	EMERGENCY	SP	SINGLE POLE
EMT	ELECTRICAL METALLIC TUBING	SPK	SPEAKER
ENT	ELECTRICAL NON-METALLIC TUBING	ST	SINGLE THROW
EVC	ELECTRIC WATER COOLER	SW	SWITCH
EX	EXISTING	SWBD	SWITCHBOARD
F	FUSE	SYM	SYMMETRICAL
FA	FIRE ALARM	T	THERMOSTAT
FACP	FIRE ALARM CONTROL PANEL	TEL	TELEPHONE
FBD	FURNISHED BY OTHERS	TB	TERMINAL BOX
FCC	FLAT CONDUCTOR CABLE	TOP	TOP CONDUIT
FCU	FAN COIL UNIT	TCAB	TELEPHONE CABINET
FDR	FEEDER	T.C.C.	TEMPERATURE CONTROL CONTRACTOR
FL	FLUORESCENT	TP	TAMPER PROOF
F.LDR	FLUORESCENT	TV	TELEVISION
F.P.C.	FIRE PROTECTION CONTRACTOR	UG	UNDERGROUND
FS	FUSIBLE SWITCH	UH	UNGROUND
F.S.C.	FLOOD SERVICE CONTRACTOR	UN	UNLESS OTHERWISE NOTED
FT	FEET OR FOOT	UPS	UNINTERRUPTED POWER SYSTEM
G.C.	GENERAL CONTRACTOR	V	VOLT(AMPS)
GEN	GENERATOR	VA	VOLT AMPERES REACTIVE
GF	GROUND FAULT	VAPORPROOF	VAPORPROOF
GG	GROUND GRID	V	VOLTS
GRD	GROUND	VP	WEATHERPROOF
HC	HUNG CEILING	WT	WATERTIGHT
H.I.D.	HIGH INTENSITY DISCHARGE	XFR	TRANSFORMER
HP	HORSEPOWER	XP	EXPLOSION PROOF
H.P.S.	HIGH PRESSURE SODIUM		
HPU	HEAT PUMP UNIT		
HT	HEIGHT		
HV	HIGH VOLTAGE		
HZ	HIGH WALL RIGID CONDUIT		
IC	INTERCLOCKING		
IG	ISOLATED GROUND		
IMC	INTERMEDIATE METALLIC CONDUIT		
INC	INCANDESCENT		
IN	INSULATED		
JB	JUNCTION BOX		
K	KEY OPERATED		
KVA	KILOVOLT AMPERE(S)		
KVAR	KILOVARS		
KW	KILOWATT(S)		
KWHr	KILOWATT(HOUR)		
LP	LIGHTING PANEL		
L.P.S.	LOW PRESSURE SODIUM		
LTG	LIGHTING		
LV	LOW VOLTAGE		



**M.E. RINKER, Sr. HALL**  
SCHOOL OF BUILDING CONSTRUCTION  
UNIVERSITY OF FLORIDA-GAINESVILLE  
PROJECT NO. BR-1