LEGEND

SYMBOL	DESCRIPTION
	GENERAL SYMBOLS
E	EQUIPMENT WITH "E" ADJACENT IS EXISITNG TO REMAIN.
R	EQUIPMENT WITH "R" ADJACENT IS EXISTING TO BE COMPLETELY DISCONNECTED AND REMOVED.
RR	EQUIPMENT WITH "RR" ADJACENT IS EXSTING TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.
ER	RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.
—E—	EXISTING CONDUIT RUN TO REMAIN. EXISTING CONDUCTORS TO REMAIN UNLESS NOTED OTHERWISE ON DRAWINGS.
—EA—	EXISTING CONDUIT RUN TO BE ABANDONED. REMOVE CONDUCTORS AND CAP ENDS OF CONDUIT.
—EX—	EXISTING CONDUIT RUN TO BE REWIRED. REFER TO PLANS FOR WIRING REQUIREMENTS.
—R—	EXISTING CONDUIT AND WIRE RUN TO BE COMPLETELY DISCONNECTED AND REMOVED BACK TO LAST REMAINING OUTLET OR DEVICE.
—R—X—E—	"X" INDICATES APPROXIMATE POINT OF INTERCEPTION OF EXISTING CONDUIT RUN. CONDUIT TO BE REMOVED AT "R" SIDE OF "X". REMOVE ALL CONDUCTORS PRIOR TO CUTTING CONDUIT. EXACT LOCATION OF ALL CONDUITS SHALL BE FIELD VERIFIED. EXTEND CONDUIT AS INDICATED ON PLANS.
	CONDUIT RUN, CONCEALED IN CEILING, WALLS OR UNDER FLOORS.
— —	CONDUIT RUN UNDERGROUND.
	CONDUIT STUBBED OUT AND CAPPED. PULL LINE IN PLACE.
	CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #12 CURRENT CARRYING CONDUCTORS CONTAINED THEREIN. TWO #12 AND ONE #12 GROUND WIRE ARE INDICATED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #12. ALL CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250-95, BUT NOT SMALLER THAN #12.
B-1,3	CONDUIT HOMERUN TO PANELBOARD. LETTER AND NUMERALS INDICATE ELECTRICAL PANEL AND CIRCUIT NUMBER.
	ISOLATED GROUND WIRE. RUN IN ADDITION TO REGULAR GROUND WIRE.
	SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD.
	RECESSED BRANCH CIRCUIT PANELBOARD.
P1	PANEL DESIGNATION.
	RECESSED COMMUNICATION TERMINAL CABINET. REFER TO DRAWINGS AND SPECIFICATIONS.
	SURFACE MOUNTED COMMUNICATION TERMINAL CABINET. REFER TO DRAWINGS AND SPECIFICATIONS.
J	JUNCTION BOX IN ACCESSIBLE CEILING SPACE OR FLUSH IN WALL WITH BLANK COVER PLATE TO MATCH DEVICE PLATES.
	SINGLE LINE DIAGRAM SYMBOLS
M	THREE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER MOTOR. NUMERAL IN PLACE OF "M" INDICATES HORSEPOWER.
3P 100AF 70AT	MOLDED CASE CIRCUIT BREAKER. "AF" INDICATES AMPERE FRAME, "AT" INDICATES AMPERE TRIP RATING AND NUMBER OF POLES AS INDICATED. SUBSCRIPT INDICATES TYPE. NO SUBSCRIPT THERMAL MAGNETIC
	VOLTAGE TRANSFORMER. FLOOR MOUNTD, COPPER WOUND, DRY TYPE UNLESS SPECIFIED OTHERWISE.
M	UTILITY METER SOCKET, WITH C.T.s, CLIPS, ETC., PER SERVING UTILITY COMPANY.
	GROUND, "GRD".
GFI	"GROUND FAULT INTERRUPTER"
GFP	GROUND FAULT PROTECTION DEVICE.
GFS	GROUND FAULT SENSOR.
	LIGHTING SYMBOLS
1a	CEILING LIGHT FIXTURE AND OUTLET, HID, FLUORESCENT, OR INCANDESCENT. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL INDICATES CIRCUIT. SHADED SYMBOL INDICATES FIXTURE WITH EMERGENCY BATTERY PACK.
1a	FLUORESCENT LIGHT FIXTURE OUTLET. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL INDICATES CIRCUIT. SHADED CIRCLE DENOTES FIXTURE WITH EMERGENCY BATTERY PACK.
1a	BRACKET OR WALL MOUNTED LIGHT FIXTURE AND OUTLET, HID, FLUORESCENT OR INCANDESCENT. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL INDICATES CIRCUIT. SHADED CIRCLE DENOTES FIXTURE WITH EMERGENCY BATTERY PACK.
	ILLUMINATED EXIT LIGHT FIXTURE. SIDE, BACK, CEILING, OR PENDANT MOUNTED, SINGLE OR DOUBLE FACED AS NOTED BY SHADED ARC, WITH OR WITHOUT DIRECTIONAL ARROW AS NOTED ON THE DRAWINGS. NOT TO BE USED AS JUNCTION BOX OR "THROUGH-WIRE" DEVICE.
L	LOW LEVEL EXIT LIGHT FIXTURE, WALL MOUNTED WITH OR WITHOUT DIRECTIONAL ARROW AS NOTED ON THE DRAWINGS. BOTTOM OF FIXTURE AT +6 INCHES ABOVE FINISHED FLOOR AND WITHIN FOUR INCHES OF DOOR FRAME WHERE APPLICABLE.
a 21 106 +9'-0"	LIGHTING FIXTURE IDENTIFICATION SYMBOL. LETTER INDICATES FIXTURE TYPE. NUMERALS IN LOWER HALF OF HEXAGON INDICATE FIXTURE WATTAGE (INCLUDING BALLAST WHERE APPLICABLE). NUMERAL OUTSIDE TOP OF HEXAGON INDICATES NUMBER OF FIXTURES REQUIRED. NUMERAL OUTSIDE BOTTOM OF HEXAGON INDICATES MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF FIXTURE. OMISSION OF MOUNTING HEIGHT INDICATES CEILING MOUNTING.
3K Sa	SWITCH. LOWER CASE LETTER AT BOTTOM INDICATES OUTLETS CONTROLLED. CAPITAL SUPERSCRIPT INDICATES SWITCH TYPE. NO SUPERSCRIPT – SINGLE POLE SWITCH; 2 – DOUBLE POLE; 3 – THREE WAY; 4 – FOUR WAY; K – KEYED SWITCH; M – MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION
	POWER SYMBOLS
	DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNTED AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED.
	DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNTED AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED.
	TWO DUPLEX GROUNDING TYPE RECEPTACLES IN 4S BOX, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE. MOUNTED AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED.
	FLUSH FLOOR MOUNTED DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE.

SYMBOL	DESCRIPTION
A	SPECIAL PURPOSE OUTLET MOUNTED IN FLUSH WALL BOX. LETTER INDICATES TYPE. A – NEMA TYPE 14-20R (125/250V, 3 POLE, 4 WIRE, GROUNDING, 20 AMP); B – NEMA TYPE 6-20R (250V, 2 POLE, 3 WIRE, GROUNDING, 20 AMP); C – NEMA TYPE 6-30R (250V, 2 POLE, 3 WIRE, GROUNDING, 30 AMP); D – NEMA TYPE 14-50R (125/250V, 3 POLE, 4 WIRE, GROUNDING, 50 AMP); E – NEMA TYPE 5-30R (125V, 2 POLE, 3 WIRE, GROUNDING, 30 AMP); F – NEMA TYPE 15-30R (250V, 3 PHASE, 3 POLE 4 WIRE, GROUNDING, 30 AMP); G – NEMA TYPE 15-60R (250V, 3 PHASE, 3 POLE, 4 WIRE, GROUNDING, 60 AMP); H – NEMA TYPE L5-20R (125 V, 1 PHASE, 2 POLE, 3 WIRE, GROUNDING, 20 AMP, TWIST LOCK); K – NEMA TYPE 15-60R (250 V, 3 PHASE, 3 POLE, 4 WIRE, GROUNDING, 60 AMP); M – NEMA TYPE 10-20R (125/250 VOLT, 1 PHASE, 3 POLE, 3 WIRE, UNGROUNDED, 20 AMP); N – NEMA TYPE L6-20R (250 VOLT, 1 PHASE, 2 POLE, 3 WIRE, GROUNDING, 20 AMP TWIST LOCK); P – NEMA TYPE 5-20R (120 VOLT, 1 PHASE, 2 POLE, 3 WIRE, GROUNDING, SINGLE, 20 AMP)
100AS (F) 60AFU	FUSED DISCONNECT SWITCH. "AS" INDICATES SWITCH AMPERE RATING. "AFU" INDICATES FUSE AMPERE RATING.
	SINGLE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER MOTOR.
T	TRANSFORMER, PRIMARY & SECONDARY VOLTAGE AND KVA RATING AS NOTED. TYPE AND CONFIGURATION AS SPECIFIED. PROVIDE DRY TYPE, COPPER WOUND, WALL OR BOX MOUNTED UNLESS NOTED OTHERWISE.
P	POWER CONCRETE PULLBOX
C	COMMUNICATION CONCRETE PULLBOX
F	FIRE ALARM CONCRETE PULLBOX.
	TELEPHONE SYSTEM SYMBOLS
	TELEPHONE TERMINAL BACKBOARD "TTB". 3/4 INCH SANDED AND PAINTED CPX PLYWOOD, 4' X 8' UNLESS NOTED OTHERWISE.
—T1—	VOICE SYSTEM CABLE RUN UNLESS OTHERWISE NOTED. NUMERAL ADJACENT TO "T" INDICATES QUATITY OF VOICE CABLES. NO NUMERAL ADJACENT INDICATES 1 CABLE.
W	TELEPHONE OUTLET. "W" ADJACENT INDICATES WALL MOUNTED AT +48" MAXIMUM TO TOP OF DEVICE. PROVIDE JUNCTION BOX WITH 1 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING.
	COMPUTER SYSTEM SYMBOLS
—D2—	DATA SYSTEM CABLE RUN UNLESS OTHERWISE NOTED. NUMERAL ADJACENT TO "D" INDICATES QUANTITY OF DATA CABLES. NO NUMERAL ADJACENT INDICATES 1 CABLE.
—VD—	VOICE/DATA SYSTEM CABLE RUN UNLESS OTHERWISE NOTED. NUMERAL ADJACENT TO "V" INDICATES QUANTITY OF VOICE CABLES; NUMERAL ADJACENT TO "D" INDICATES QUANTITY OF DATA CABLES. NO NUMERAL ADJACENT INDICATES 1 CABLE, EACH.
4	DATA OUTLET, MOUNT AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED. NUMERAL ADJACENT INDICATES QUANTITY OF DATA PORTS. PROVIDE 1 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING.
	COMBINATION VOICE/DATA OUTLET, (1) DATA AND (1) VOICE PORT MOUNT AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED. PROVIDE 1 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING.
2	COMBINATION VOICE/DATA OUTLET, (2) DATA AND (1) VOICE PORT MOUNT AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED. PROVIDE 1 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING.
4	COMBINATION VOICE/DATA OUTLET, (2) DATA AND (2) VOICE PORTS. MOUNT AT +15 INCHES TO BOTTOM OF DEVICE, UNLESS OTHERWISE NOTED. PROVIDE 1 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING.
	CLOCK SYSTEM SYMBOLS
—CL—	CLOCK SYSTEM CABLE RUN, UNLESS INDICATED OTHERWISE ON DRAWINGS. REFER TO DRAWINGS AND SPECIFICATIONS FOR REQUIRED WIRING.
	WALL MOUNTED SINGLE FACE CLOCK. MOUNT AT +90 INCHES UNLESS INDICATED OTHERWISE ON DRAWINGS. PROVIDE 3/4 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING. REFER TO SPECIFICATIONS.
	PUBLIC ADDRESS SYSTEM SYMBOLS
—PA—	SOUND SYSTEM CABLE RUN UNLESS INDICATED OTHERWISE ON DRAWINGS. REFER TO DRAWINGS AND SPECIFICATIONS FOR REQUIRED WIRING.
S	SPEAKER WITH PROPER MATCHING TRANSFORMER, BACKBOX AND GRILLE. MOUNT AT +90" UNLESS OTHERWISE INDIATED OTHERWISE ON DRAWINGS. REFER TO SPECIFICATIONS. PROVIDE 3/4" CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING.
VC	VOLUME CONTROL. MOUNT AT +48 INCHES TO TOP OF DEVICE, UNLESS OTHERWISE NOTED. REFER TO SPECIFICATIONS.
S4 WP	EXTERIOR SURFACE MOUNTED PAGING SPEAKER. PROVIDE 3/4 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING. REFER TO SPECIFICATIONS.
	SECURITY ALARM SYSTEM
—SI—	SECURITY/INTRUSION SYSTEM CABLE RUN, UNLESS OTHERWISE NOTED. REFER TO SPECIFICATIONS FOR REQUIRED WIRING.
SI	CORNER/WALL MOUNTED INTRUSION DETECTION SYSTEM SENSOR. PROVIDE 3/4 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING. REFER TO SPECIFICATIONS.
DS	MAGNETIC DOOR SWITCH. PROVIDE 3/4 INCH CONDUIT MINIMUM AND STUB-UP CONDUIT INSIDE CEILING. REFER TO SPECIFICATIONS.
K	INTRUSION DETECTION SYSTEM KEYPAD. MOUNT AT +48 INCHES MAXIMUM TO TOP OF DEVICE.
	AUDIO/VIDEO SYSTEM SYMBOLS
SP	SPEAKER FOR AUDIO/VIDEO SYSTEM WITH BACK BOX AND GRILLE.
SV	COMBINATION SVGA OUTLET AND (2) RCA JACK OUTLETS.
—SP—	AUDIO/VIDEO SYSTEM CABLE
—VS—	(1) SVGA-VIDEO CABLE AND (2) 22GATSP AUDIO CABLE.
—JH—	J-HOOK SYSTEM

REFER TO SHEET E5.5 FOR FIRE ALARM SYSTEM SYMBOL LIST

ABBREVIATIONS

SYMBOL	DESCRIPTION
AF	AMPERE FRAME RATING OF CIRCUIT BREAKERS
AFF	ABOVE FINISHED FLOOR
AFU	AMPERE FUSE RATING
AIC	AMPS INTERRUPTING CAPACITY RATING (RMS SYMMETRICAL)
AMP,A	AMPERES
AS	AMPERE SWITCH RATING
AT	AMPERE TRIP RATING OF BREAKER
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C.	CONDUIT
CC	CENTER TO CENTER
CKT	CIRCUIT
C.O.	CONDUIT ONLY
CU	COPPER
DISC	DISCONNECT
DISTR	DISTRIBUTION
DWG	DRAWING
EQPT	EQUIPMENT
E	EXISTING
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FF	FINISHED FLOOR
FG	FINISHED GRADE
FS	FLOW SWITCH
FLEX	FLEXIBLE
FLUOR	FLUORESCENT
FUT	FUTURE
GND	GROUND
Hz	HERTZ
INC	INCANDESCENT
IDF	INTERMEDIATE DISTRIBUTION FRAME
J.B.	JUNCTION BOX
k	THOUSAND (KILO)
kV	KILOVOLTS
kW	KILOWATTS
kVA	KILOVOLT AMPERES
LT, LTS	LIGHT, LIGHTS
LTG	LIGHTING,
MA	MILLIAMPS
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MILS
MDF	MAIN DISTRIBUTION FRAME
MH	MANHOLE
MS	MANUAL MOTOR STARTER
MIN	MINUTES, MINIMUM
MT,MTD,MTG	MOUNT, MOUNTED, MOUNTING
NO, NOS	NUMBER, NUMBERS
NTS	NOT TO SCALE
OC	ON CENTER
PB	PUSHBUTTON
PIV	POST INDICATOR VALVE
PNL	PANEL
PNLBD	PANELBOARD
PRI	PRIMARY
PVC	POLYVINYL CHLORIDE
PWR	POWER
REC	RECEPTACLE
RECPTS	RECEPTACLES
REQD	REQUIRED
SEC	SECONDS, SECONDARY
SHLD	SHIELDED
SHT	SHEET
SPECS	SPECIFICATIONS
STA	STATION
STD	STANDARD
STL	STEEL
SW	SWITCH
SYS	SYSTEM
SYM	SYMMETRICAL
TEMP	TEMPERATURE
TS	TAMPER SWITCH
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UGPS	UNDERGROUND PULL SECTION
V	VOLTMETER
W	WATTS
WP	WEATHERPROOF
XFMR	TRANSFORMER

BRANCH CIRCUIT WIRING NOTES

A. FOR RECEPTACLE CIRCUITS & 120V BRANCH CIRCUITS, UNLESS NOTED OTHERWISE, PROVIDE THE FOLLOWING CONDUCTORS: (1) #12 CONDUCTOR FOR EACH PHASE (i.e. CIRCUIT NUMBER) & (1) SEPARATE DEDICATED #12 NEUTRAL CONDUCTOR FOR EACH SINGLE 120 VOLT CIRCUIT, OR (1) #12 NEUTRAL CONDUCTOR FOR 2 TO 3 CIRCUITS WHERE EACH CIRCUIT IS ON A DIFFERENT PHASE; (1) EQUIPMENT GROUNDING CONDUCTOR, SIZED PER N.E.C. ART. #250 (DO NOT USE A COMMON NEUTRAL FOR MULTIPLE CIRCUITS ON SAME PHASE)

B. FOR LIGHTING BRANCH CIRCUITS, PROVIDE THE FOLLOWING CONDUCTORS: (1) #12 CONDUCTOR FOR EACH PHASE (i.e. CIRCUIT NUMBER); (1) #12 NEUTRAL CONDUCTOR FOR A SINGLE, 120 OR 277 VOLT CIRCUIT, OR (1) #12 NEUTRAL CONDUCTOR FOR 2 TO 3 CIRCUITS WHERE EACH CIRCUIT IS ON A DIFFERENT PHASE, (1) INTERCONNECTING CONDUCTOR BETWEEN EACH 3-WAY AND/OR 4-WAY SWITCH.

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Agency Approval

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Project Name

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Checked By	Drawn By
RA	KA

Sheet Title

LEGEND AND ABBREVIATIONS

Sheet Number

E0.2

Project Number	Scale
10021-010-00	NONE

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