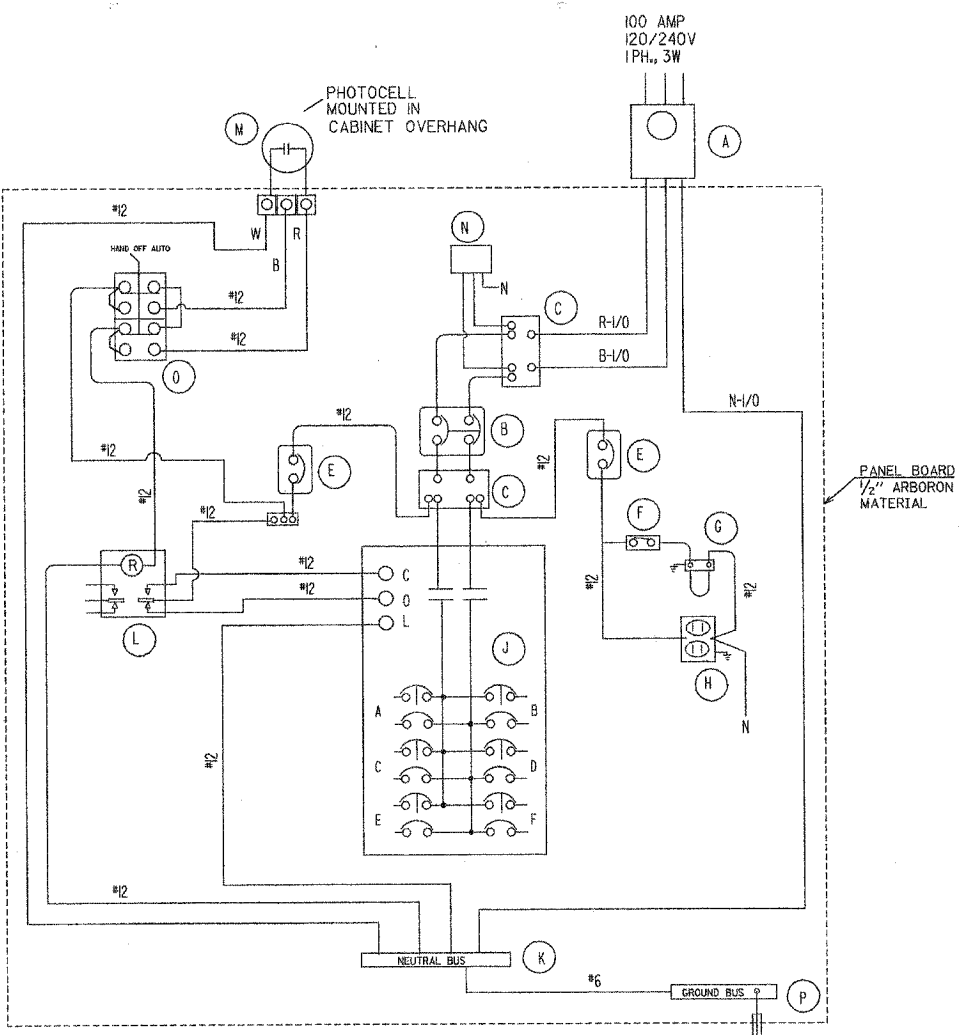


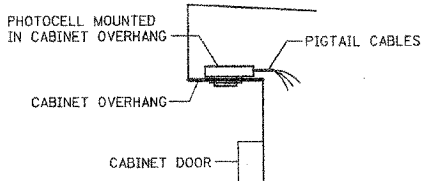
CONTROL CABINET - SPECIAL




100 AMPERE - 120/240 VOLT. WIRING DIAGRAM

DEVICE SCHEDULE		
ITEM	QUANT.	DESCRIPTION
(A)	1	METER FITTING
(B)	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC BOLT-ON TYPE, 2- POLE-100 AMPERE, 225 A FRAME, 240Vcc, NON INTERCHANGABLE TRIP, INTERRUPTING CAPACITY OF NOT LESS THAN 25,000 RMS SYMMETRICAL AMPERES AT 480 VOLT.
(C)	2	SPLICE BLOCK
(D)		RESERVED
(E)	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 240 V., BOLT-ON TYPE, 15 A. WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277 V.
(F)	1	20 A. SPST MICRO SWITCH MOUNTED ON A DOOR.
(G)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX
(H)	1	GFI RECEPTACLE, 120 V., 20 A., PREMIUM SPEC. GRADE, NEMA REFERENCE 5-20R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.
(I)		RESERVED
(J)	1	100 A CONTACTOR PANEL BOARD INTERIOR, 12 CKT, 1 PH, 3 WIRE, 6-2P/40 A BREAKERS, MOLDED CASE, THERMAL MAGNETIC BOLT-ON TYPE, 40 A, 480 A FRAME, 240Vcc, NON INTERCHANGABLE TRIP, INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 480 VOLT.
(K)	1	NEUTRAL, COPPER BUSS BAR, PAINTED IN WHITE
(L)	1	POWER RELAY, 120 VOLT COIL
(M)	1	PHOTO ELECTRIC CELL, MOUNTED IN CABINET OVERHANG
(N)	1	SURGE ARRESTOR
(O)	1	SELECTOR SWITCH, 3 POSITION, ON-OFF-AUTO
(P)	1	GROUND COPPER BUSS BAR, PAINTED IN GREEN

- NOTES**
- THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3R CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.
 - THE CONTRACTOR SHALL REMOVE VEGETATION AND TOPSOIL. LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET. A PRECAST PAD, 36"x36"x3" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCIDENTAL TO THE CONTROL CABINET.
 - CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "MTW" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.
 - THE ELECTRIC METER BOX SHALL BE MOUNTED ON THE SIDE OF THE CONTROL CABINET, NEAR TO THE SERVICE POLE AND/OR AS DIRECTED BY THE ENGINEER.
 - ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.
 - ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN
 - PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
 - THE CABINET SHALL BE PRIMED AND PAINTED IN COLOR AS DIRECTED BY THE VILLAGE ENGINEER
 - THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.
 - ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
 - THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
 - PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAIN WATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN. FURNISH A LAMINATED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".
 - THE FABRICATION OF CONCRETE FOUNDATION FOR CONTROLLER SHALL COMPLY TO ARTICLE 836 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN ANCHOR BOLTS LOCATION TEMPLATE FROM THE FABRICATOR OF LIGHTING CONTROLLER
 - THE CONTROLLER FABRICATION SHALL COMPLY TO ARTICLE 1068.01 OF THE STANDARD SPECIFICATIONS
 - THE CONTROLLER CABINET DOOR SHOULD OPEN AWAY FROM THE STREET



PHOTOCELL IN CABINET OVERHANG DETAIL
NOT TO SCALE



Sunjoy Inc.
Area Lighting
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

McHENRY COUNTY DIVISION OF TRANSPORTATION
CITY OF CRYSTAL LAKE
INTERSECTION OF GOLF COURSE ROAD
WITH ACKMAN ROAD

LIGHTING CONTROLLER, SPECIAL

SCALE: _____ DRAWN BY HKQ
DATE: NOV. 23, 2006 CHECKED BY JS