

WHERE PCU (POWER AND CONTROL UNIT) AND PAPI LIGHT BOX #4 (CLOSEST LIGHT BOX TO PCU) ARE LOCATED WITHIN 10 FT. FROM EACH OTHER, PROVIDE ONE GROUND ROD TO SERVE BOTH.

#6 AWG BARE SOLID COPPER COUNTERPOISE (BETWEEN GND RODS). INSTALL IN TRENCH APPROX. 10" ABOVE CONDUIT WITH POWER & CONTROL CABLES.

20'L x 3/4" DIA. UL LISTED COPPERCLAD GND ROD TYP. FOR 4. MIN. BURY 30" BELOW GRADE. ALL CONNECTIONS TO GND RODS SHALL BE EXOTHERMIC WELD.

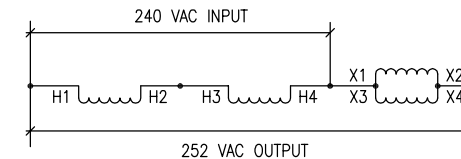
**PAPI FIELD WIRING CONNECTIONS
(FOR CROUSE-HINDS 880A3A-1 PAPI)**

NOTES

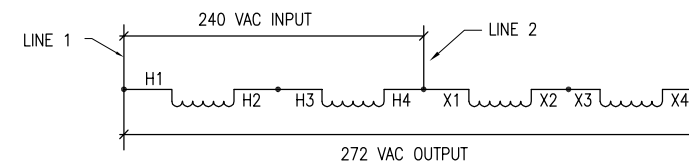
- PAPI FIELD WIRING CONNECTION DIAGRAM IS BASED ON A CROUSE-HINDS PART NO 880A3A-1, L-880 STYLE A PAPI WITH 3 LAMPS PER LIGHT BOX, & INFORMATION PROVIDED BY CROUSE-HINDS FIELD SERVICE SUPPORT CENTER. WIRING REQUIREMENTS VARY FOR DIFFERENT PAPI MANUFACTURERS AND DIFFERENT PAPI MODEL NUMBERS BY THE SAME MANUFACTURER. CONTRACTOR SHALL CONFIRM WIRING REQUIREMENTS WITH THE RESPECTIVE PAPI MANUFACTURER AND ADJUST TO MEET MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS. POWER WIRING REQUIREMENTS SHOWN ARE MINIMUM, FOR THE RESPECTIVE PAPI SYSTEM.
- INCLUDE #6 AWG EQUIPMENT GROUND WIRE IN CONDUIT WITH POWER & CONTROL WIRING BETWEEN THE POWER & CONTROL UNIT & THE PAPI LIGHT BOXES.
- CONDUIT BETWEEN PAPI PCU AND SPLICE CANS AT PAPI LIGHT UNITS SHALL BE GALVANIZED RIGID STEEL CONDUIT.
- PROVIDE DUCT SEAL FOR CONDUITS ENTERING/LEAVING THE PAPI POWER AND CONTROL UNIT.

KEYED NOTES

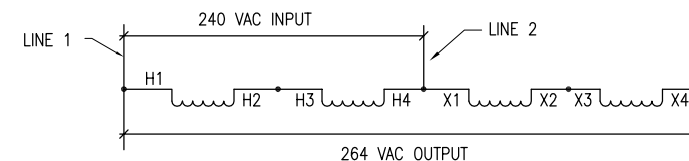
- CONSOLIDATING HARNESS, 4 #14 AWG LEADS AS FURNISHED OR REQUIRED BY PAPI MFR.
- OUTGOING POWER FEED FROM POWER & CONTROL UNIT TO THE TWO CLOSEST PAPI LIGHT BOXES (#1 & #2), #8 AWG XLP-USE OR THWN (MIN.)
- OUTGOING POWER FEED FROM POWER & CONTROL UNIT TO THE TWO FURTHEST PAPI LIGHT BOXES (#3 & #4), #6 AWG XLP-USE OR THWN (MIN.)
- TILT SWITCH WIRING #14 AWG XLP-USE OR THWN (MIN.) CONFIRM WIRING WITH PAPI MFR & ADJUST AS APPLICABLE.
- PLUG WITH CABLE ASSEMBLY AS FURNISHED OR REQUIRED BY PAPI MFR.
- L-867, CLASS IA, SIZE B, 24" DEEP SPLICE CAN.
- 2" MINIMUM GALVANIZED RIGID STEEL CONDUIT BETWEEN PAPI PCU AND L-867 SPLICE CANS AT PAPI LIGHT UNITS.
- #6 AWG EQUIPMENT GROUND.



**240 VAC TO 252 VAC BOOST TRANSFORMER CONNECTION DIAGRAM
120 x 240 VAC PRIMARY, 12/24 VAC SECONDARY TRANSFORMER**



**240 VAC TO 272 VAC BOOST TRANSFORMER CONNECTION DIAGRAM
120 x 240 VAC PRIMARY, 16/32 VAC SECONDARY TRANSFORMER**



**240 VAC TO 264 VAC BOOST TRANSFORMER CONNECTION DIAGRAM
120 x 240 VAC PRIMARY, 12/24 VAC SECONDARY TRANSFORMER**

NOTES

- WIRING DIAGRAMS SHOWN ARE TYPICAL FOR MULTIPLE 120 x 240 VAC PRIMARY, 12/24 OR 16/32 VAC SECONDARY BUCK-BOOST TRANSFORMERS FROM VARIOUS MANUFACTURERS. WIRING MAY VARY BETWEEN MANUFACTURERS. CONFIRM WIRING WITH RESPECTIVE TRANSFORMER MFR.
- PROVIDE BOOST TRANSFORMER AT VAULT WHERE VOLTAGE DROP FROM VAULT TO RESPECTIVE PAPI UNIT EXCEEDS 5% (12 VOLTS FOR 240 VAC NORMAL SUPPLY). MEASURE VOLTAGE AT PLASI UNIT WITH PAPI OPERATING. ADJUST CONNECTIONS TO BOOST TRANSFORMER AND SELECT BOOST TRANSFORMER TO PROVIDE VOLTAGE WITHIN 5% OF 240 VAC AT RESPECTIVE PAPI UNIT.
- BOOST TRANSFORMER SHALL BE MANUFACTURED IN THE UNITED STATES TO COMPLY WITH THE AIRPORT IMPROVEMENT PROGRAM BUY AMERICAN REQUIREMENT AND THE "BUY AMERICAN ACT".

REVISION	
DATE	

MARSHALL COUNTY AIRPORT
LACON, ILLINOIS
BLOCK GRANT PROJ.: 3-17-0059-B15
ILL. PROJ.: C75-4223

Hanson Proj. No. 10A0051	08/26/10
Filename E-605.DWG	09/02/10
Scale NONE	03/30/11
Date 12/14/12	
LAYOUT KNL	
DRAWN MLH	
REVIEWED KNL/CAH	

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Hanson Professional Services Inc.
1525 South Sixth Street
Springfield, Illinois 62703-2986
Ph: (217) 788-2450 Fax: (217) 788-2503
www.hanson-inc.com
Offices Nationwide

PAVE, LIGHT AND MARK
805' EXTENSION
PAPI FIELD WIRING
CONNECTIONS