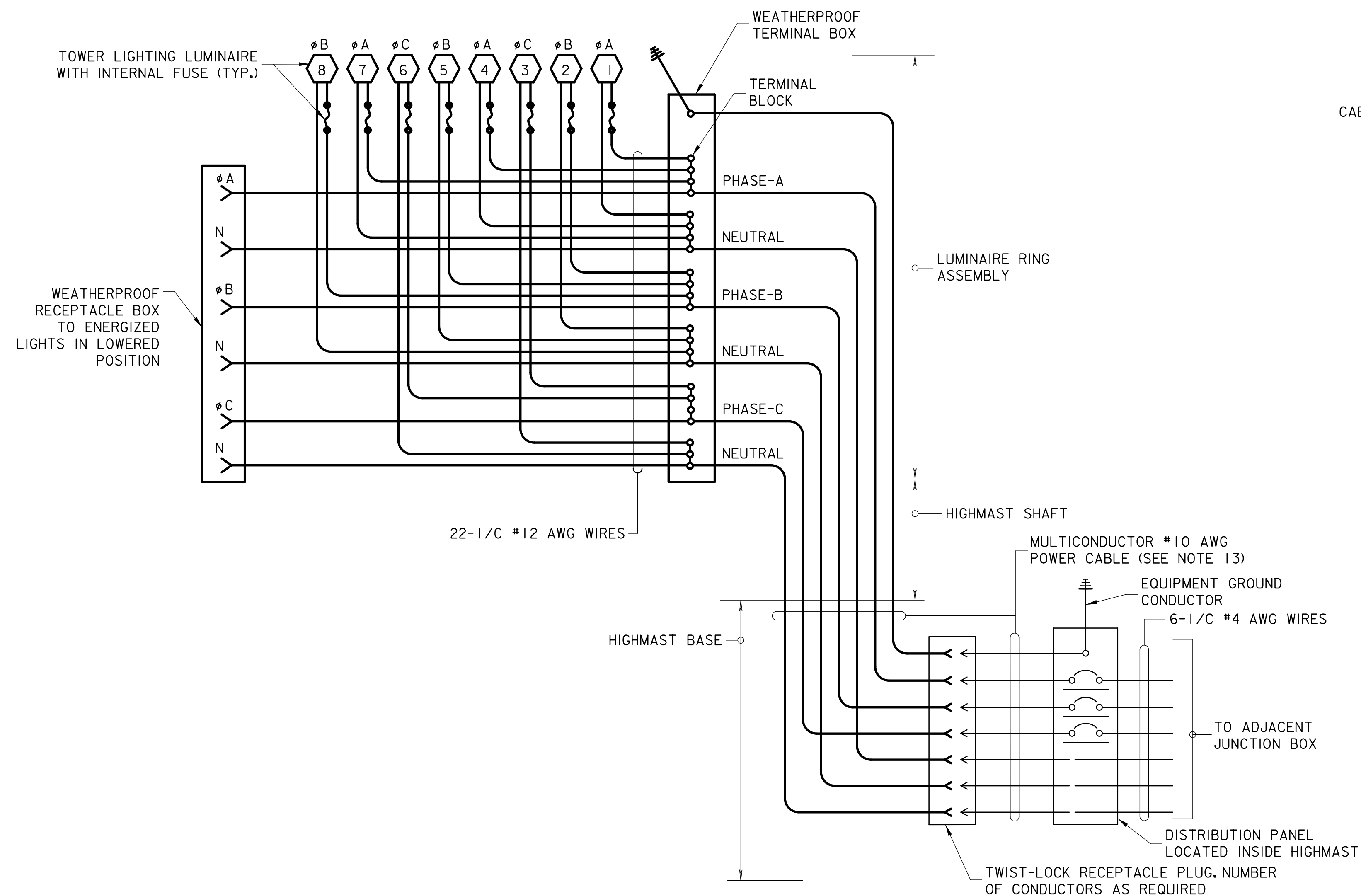
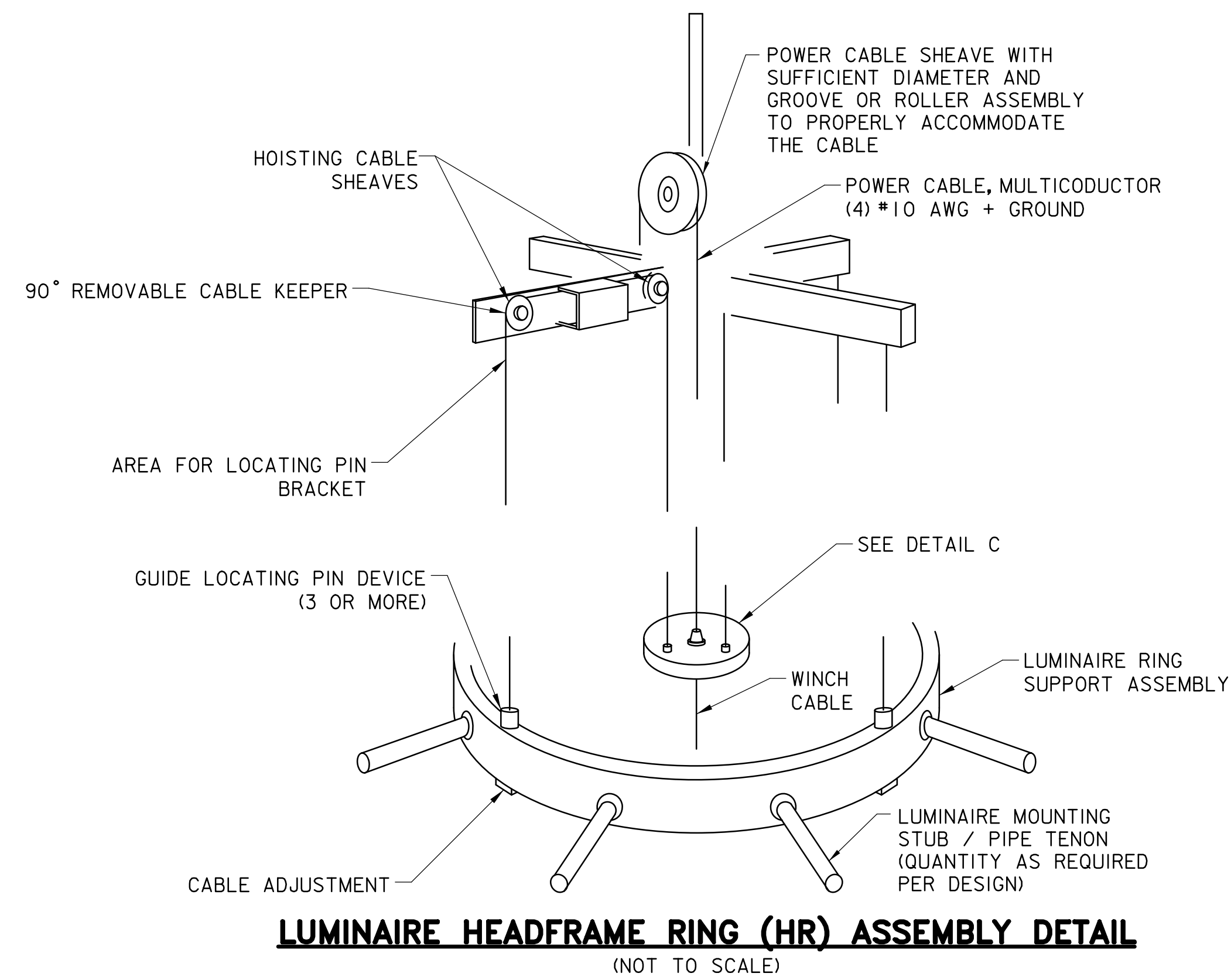


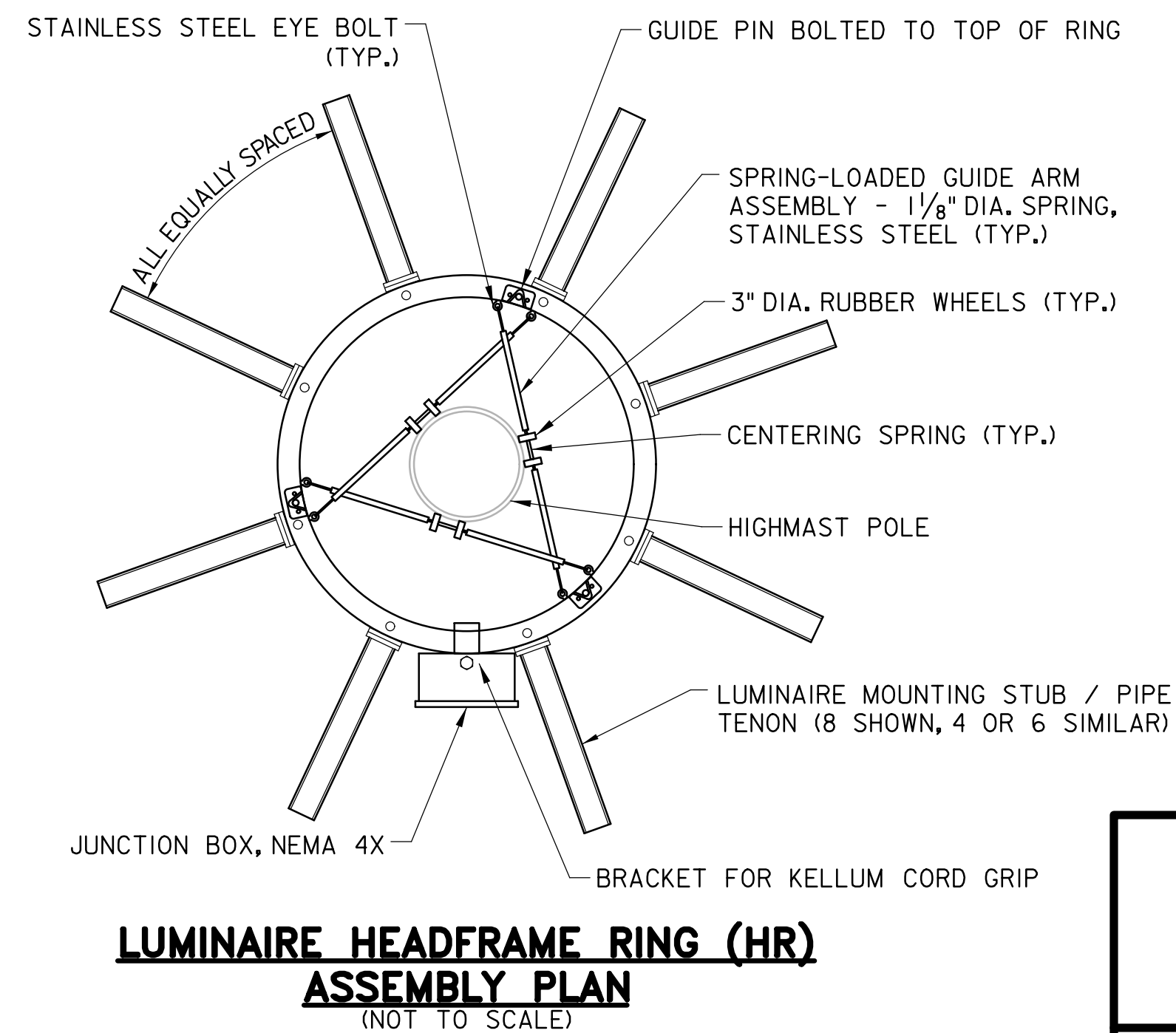
**HIGHMAST INSTALLATION DETAILS**  
(NOT TO SCALE)



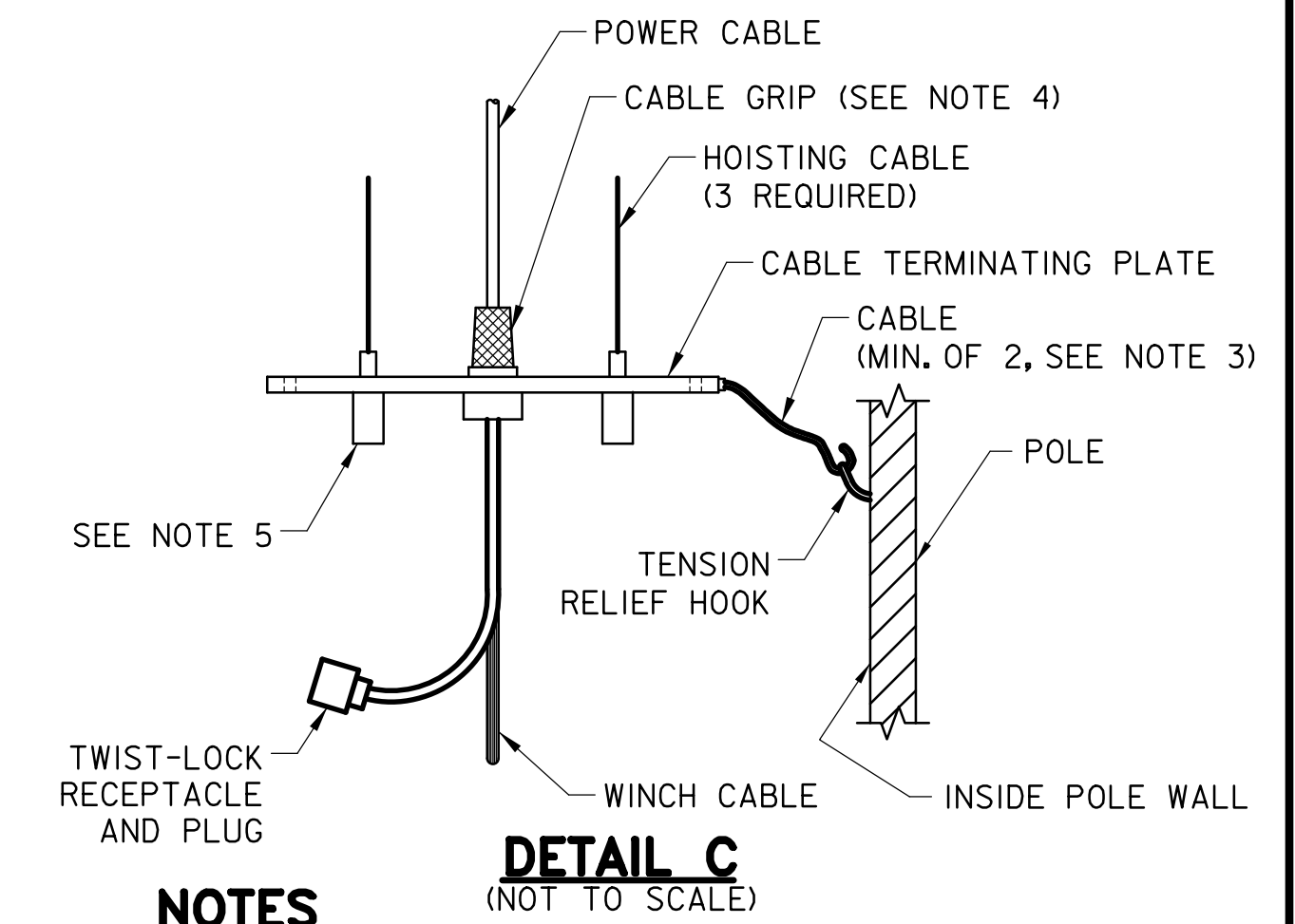
**TYPICAL HIGHMAST LIGHTING WIRING DIAGRAM**  
(NOT TO SCALE)



**LUMINAIRE HEADFRAME RING (HR) ASSEMBLY DETAIL**  
(NOT TO SCALE)

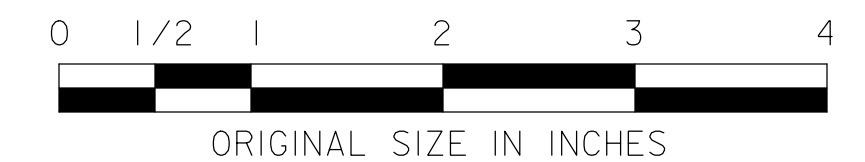


**LUMINAIRE HEADFRAME RING (HR) ASSEMBLY PLAN**  
(NOT TO SCALE)



**NOTES**

1. ALL LUMINAIRES SHALL BE INSTALLED AND ORIENTED AS PER LIGHTING ILLUMINATION DESIGN AND AS SHOWN ON THE PLANS.
2. ONE (1) PORTABLE DRIVE UNIT WITH TRANSFORMER, REMOTE CONTROL SWITCH, AND ALL ACCESSORIES SHALL BE SUPPLIED BY THE CONTRACTOR.
3. EACH HIGHMAST HEADFRAME SHALL BE BOTTOM-LATCHING TYPE. A BOTTOM LOCKING DEVICE SHALL BE FURNISHED AND INSTALLED TO REMOVE TENSION FROM THE WINCH.
4. THE POWER CABLE SHALL BE PROVIDED WITH AN APPROVED STRAIN RELIEF DEVICE.
5. EACH HOISTING CABLE SHALL BE PROVIDED WITH A SPRING LOADED SHOCK ABSORBER TO PREVENT CABLE STRETCH DUE TO MOVEMENT OF THE TOWER WHEN RING IS IN THE UPPER POSITION.
6. THERE SHALL BE SPRING-LOADED, WATER-RESISTANT, NON-SCRATCHING GUIDE ARMS (MIN. OF 3) TO GUIDE THE HEAD FRAME AND TO PREVENT ROTATION AROUND HIGHMAST.
7. THE LUMINAIRE RING ASSEMBLY AND SUPPORT ASSEMBLY SHALL BE PROVIDED WITH SUITABLE POSITIONING DEVICES. (MINIMUM OF THREE (3) LOCATING PINS.)
8. HEAD ASSEMBLY SHALL BE FURNISHED WITH A ONE-PIECE SPUN ALUMINUM ANODIZED COVER.
9. THE ONLY OPENINGS ON THE HEAD ASSEMBLY SHALL BE THE HOLES THROUGH WHICH THE LUMINAIRE RING HOISTING CABLES AND POWER CABLE PASS.
10. ALL CABLES SHALL BE ADJUSTED FROM THE ACCESS DOOR.
11. EACH HIGHMAST SHALL BE INSTALLED WITH A LIGHTNING ROD AT THE TOP.
12. LIGHTING LEVELS SHALL MEET ALL NJTA ROADWAY LIGHTING DESIGN REQUIREMENTS AND ILLUMINATION LEVELS.
13. WIRE SIZES SHOWN FOR TYPICAL 8-LUMINAIRE, 277 VOLT OPERATION. FOR OTHER VOLTAGES AND LUMINAIRE QUANTITIES, WIRE SIZE SHALL BE MODIFIED TO MAINTAIN VOLTAGE DROP BETWEEN MAIN DISTRIBUTION PANEL (SERVICE) AND LUMINAIRES AT A MAXIMUM OF 3%. EACH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR. SHARED NEUTRAL CONDUCTORS STRICTLY PROHIBITED.
14. GROUND RODS SHALL BE INSTALLED IN ACCORDANCE WITH NEC RECOMMENDATIONS.



NEW JERSEY TURNPIKE AUTHORITY  
**NEW JERSEY TURNPIKE  
GARDEN STATE PARKWAY**  
STANDARD DRAWINGS

**HIGHMAST LIGHTING STANDARD  
DETAILS - 2**

OFFICE OF THE CHIEF ENGINEER  
NEW JERSEY TURNPIKE AUTHORITY  
WOODBIDGE, NEW JERSEY

STANDARD DRAWING

REV.	DESCRIPTION	DATE
0	REISSUED DRAWING	09/21

**E-07**