

WIRING DIAGRAM

INDIANA DEPARTMENT OF TRANSPORTATION	
HIGHWAY ILLUMINATION TOWER BOTTOM LATCH	
MARCH 1995	
STANDARD DRAWING NO. E 807-LTHI-01	
DETAILS PLACED IN THIS FORMAT 11-15-99	
	/s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE
	ORIGINALLY APPROVED 3-01-95

Power cable disconnected
in tower

Junction box on luminaire
ring in lowered position

Auxiliary luminaire
connector

2P, 480 V, 30 A
circuit breaker

Strain relief
connectors

4/C #10 AWG Copper
insulated electrical
cable to junction box
on luminaire ring

600 V 30 A rated
electrical plug-moisture
resistant

4/C #10 Flexible cable
or 4-#10 strand wire
in flexible conduit

Bonding plate

Multiple compression fitting

Insulating link

Ground

DETAIL

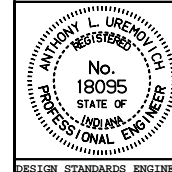
INDIANA DEPARTMENT OF TRANSPORTATION

**HIGHWAY ILLUMINATION
TOWER BOTTOM LATCH**

MARCH 1995

STANDARD DRAWING NO. **E 807-LTHI-02**

DETAILS PLACED IN THIS FORMAT 11-15-99

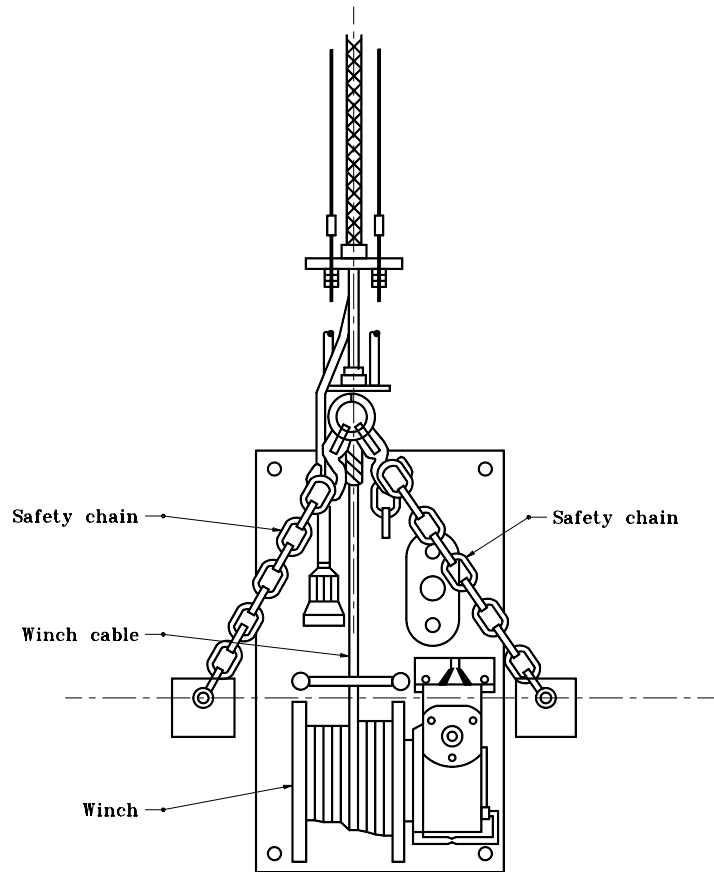


/s/ Anthony L. Uremovich 11-15-99
DESIGN STANDARDS ENGINEER DATE

/s/ Firooz Zandi 11-15-99
CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER

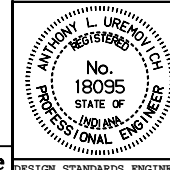
ORIGINALLY APPROVED 3-01-95



BOTTOM LATCH

INDIANA DEPARTMENT OF TRANSPORTATION
HIGHWAY ILLUMINATION TOWER
DETAILS - BOTTOM LATCH
 JANUARY 1999

STANDARD DRAWING NO. **E 807-LTHI-03**



/s/ Anthony L. Uremovich 1-04-99
 DESIGN STANDARDS ENGINEER DATE

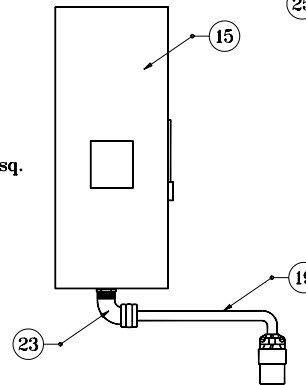
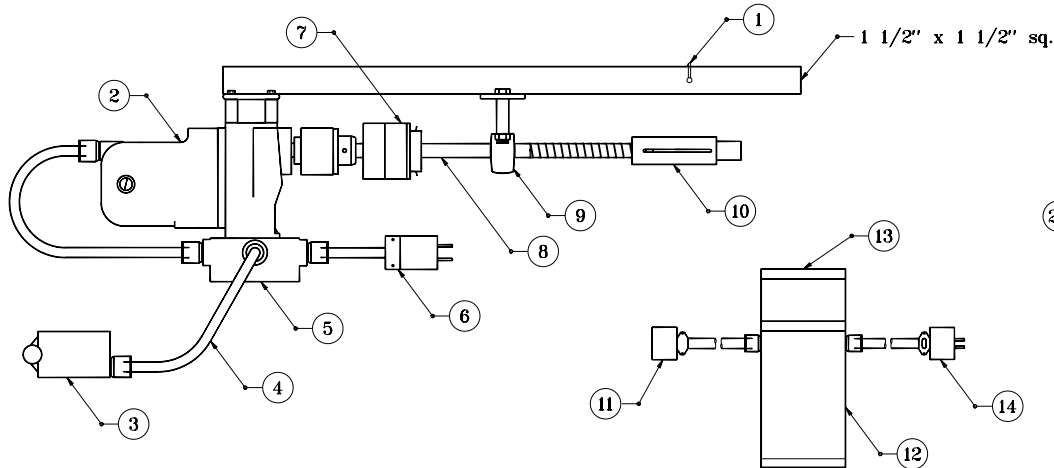
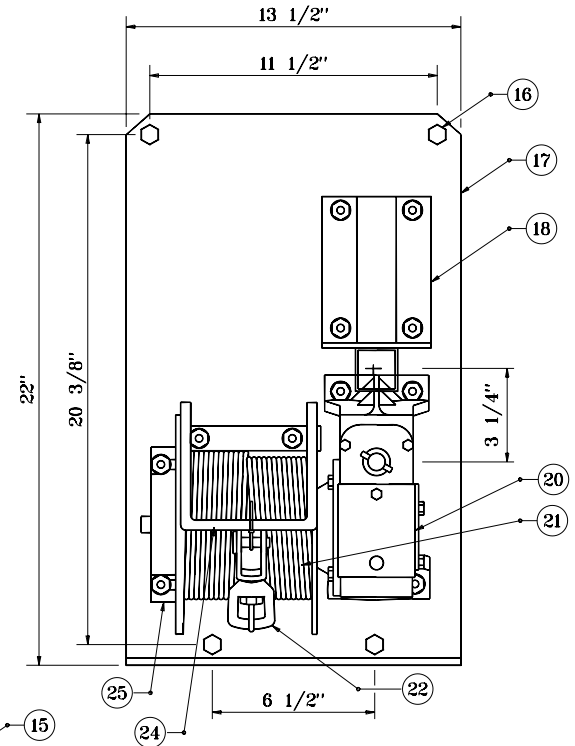
/s/ Donald W. Lucas 1-04-99
 CHIEF HIGHWAY ENGINEER DATE

Source Sheet: None

DESIGN STANDARDS ENGINEER

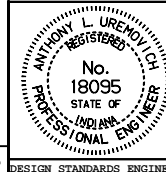
ITEM DESCRIPTIONS

- ① Hitch pin
- ② 3/4" dia. reversible electric motor 120 V, 11.5 A, 350 RPM
- ③ Reversing drum switch
- ④ Control cord 20 ft. length
- ⑤ Wiring housing
- ⑥ Plug to mate to connector in pole base or transformer secondary
- ⑦ Torque limiter coupling
- ⑧ 3/4" dia. steel shaft
- ⑨ Ballbearing pillowblock
- ⑩ 5/8" hex socket crank shaft coupling
- ⑪ Connector to motor from 120 V transformer secondary
- ⑫ Stepdown transformer 120 V secondary, 1.5 kVA for 240 V, 277 V, & 480 V; 2.0 kVA for 208 V
- ⑬ 1/2" carry handle
- ⑭ Plug to connector in pole base from transformer primary
- ⑮ NEMA 4-circuit-breaker enclosure field mounted to pole handhole door
- ⑯ 1/2" dia. mounting bolt, 4 req'd.
- ⑰ 0.25 in. thick steel winch plate zinc electroplate finish
- ⑱ Power unit mounting bracket, 0.25 in. thick steel zinc electroplate finish
- ⑲ 5 ft. power supply cord and connector
- ⑳ Winch 30:1 gear ratio internal drag brake
- ㉑ 5/16" dia. 7 x 19 wire rope. Length is pole height + 6 ft. stainless steel
- ㉒ Forged steel swivel, 11,000 psi ultimate strength
- ㉓ Cord grip
- ㉔ Winch cable guard
- ㉕ Winch outboard support



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HIGHWAY ILLUMINATION TOWER
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 JANUARY 1999

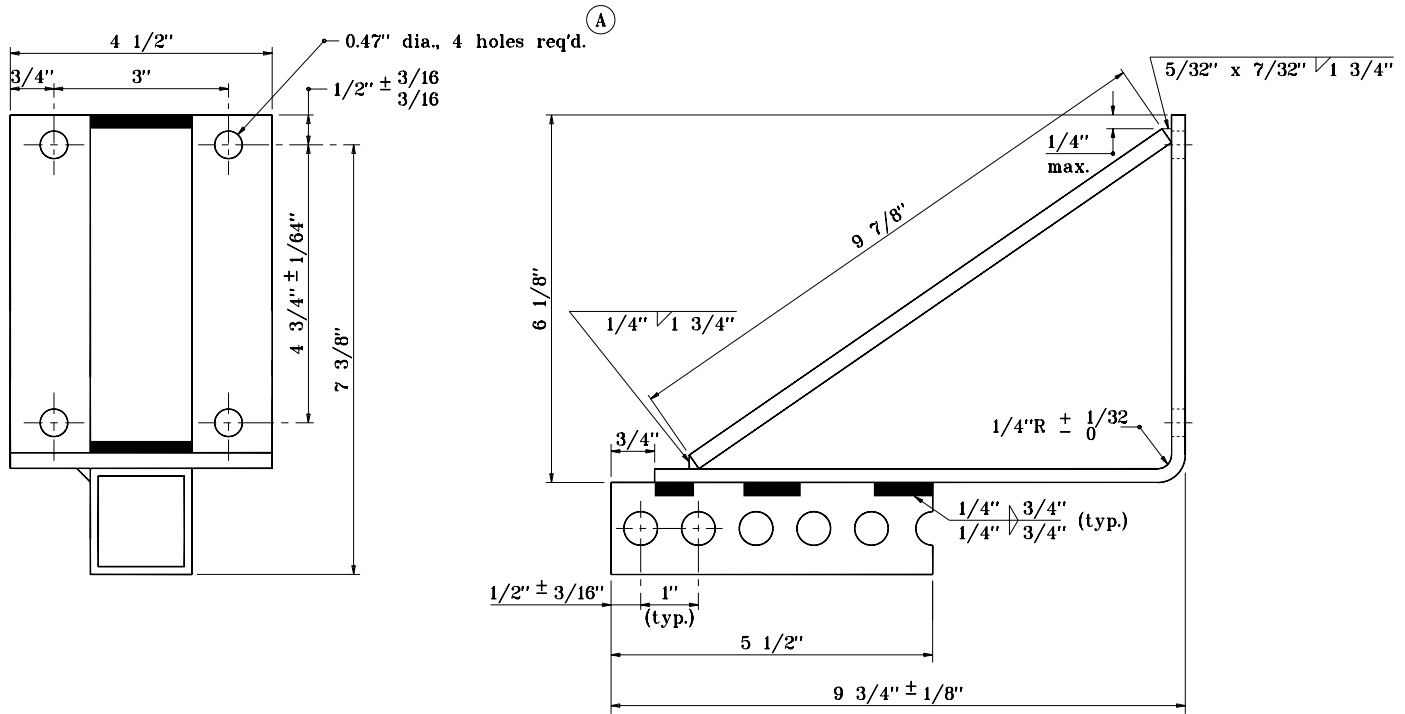
STANDARD DRAWING NOE 807-LTHI-03A



/s/ Anthony L. Uremovich 1-04-99
 DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 1-04-99
 CHIEF HIGHWAY ENGINEER DATE

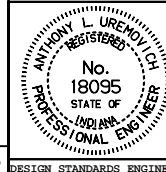
Source Sheet: None



(A) Tolerances: $0 \pm \frac{1}{32}''$, angles $\pm \frac{1}{2}''$ unless noted

INDIANA DEPARTMENT OF TRANSPORTATION
HIGHWAY ILLUMINATION TOWER
DETAILS - BOTTOM LATCH
 JANUARY 1999

STANDARD DRAWING NO. **E 807-LTHI-03B**



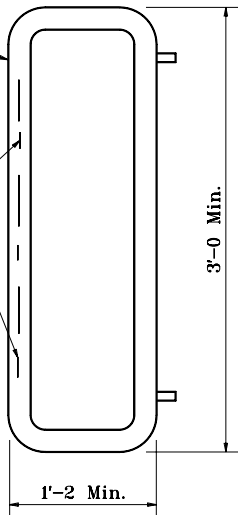
/s/ Anthony L. Uremovich 1-04-99
 DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 1-04-99
 CHIEF HIGHWAY ENGINEER DATE

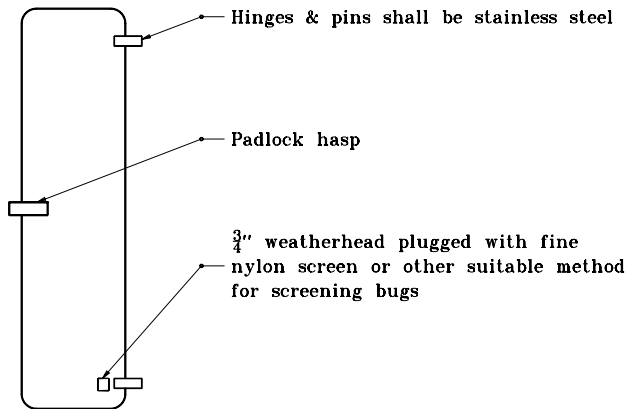
Source Sheet: None

Silicone or neoprene rubber gasket

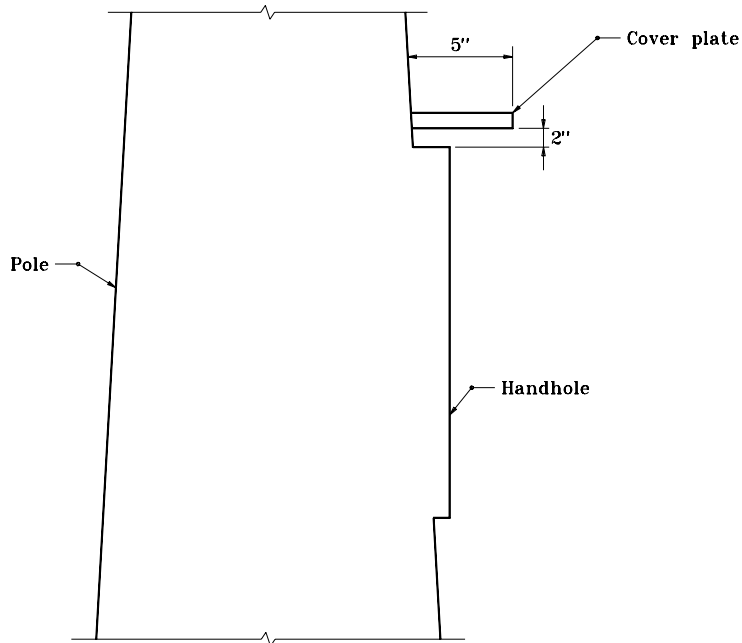
1/4" x 1" DP Drill & tap 2 places for stainless steel bolts for securing door shut



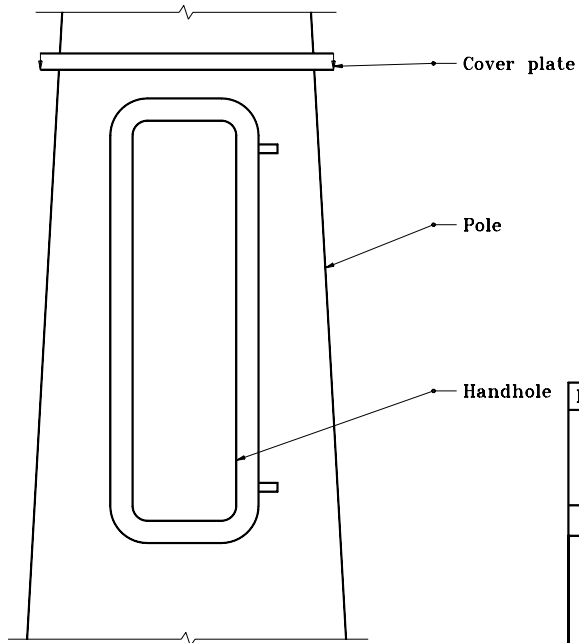
HANDHOLE FRAME DETAIL



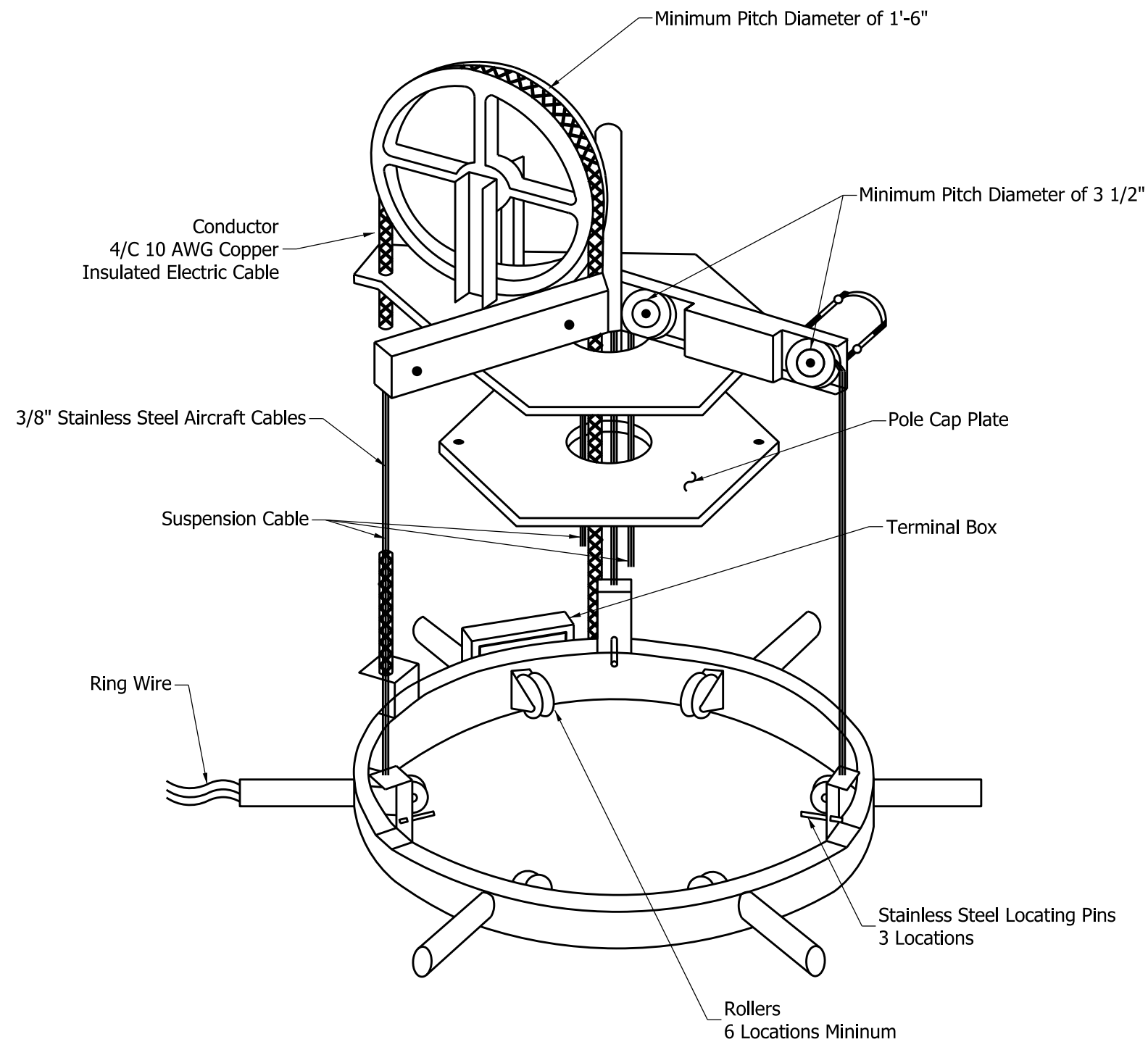
HANDHOLE COVER DETAIL



COVER PLATE



INDIANA DEPARTMENT OF TRANSPORTATION	
HIGHWAY ILLUMINATION TOWER BOTTOM LATCH	
MARCH 1995	
STANDARD DRAWING NO. E 807-LTHI-04	
	DETAILS PLACED IN THIS FORMAT 11-15-99 /s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE ORIGINALLY APPROVED 3-01-95

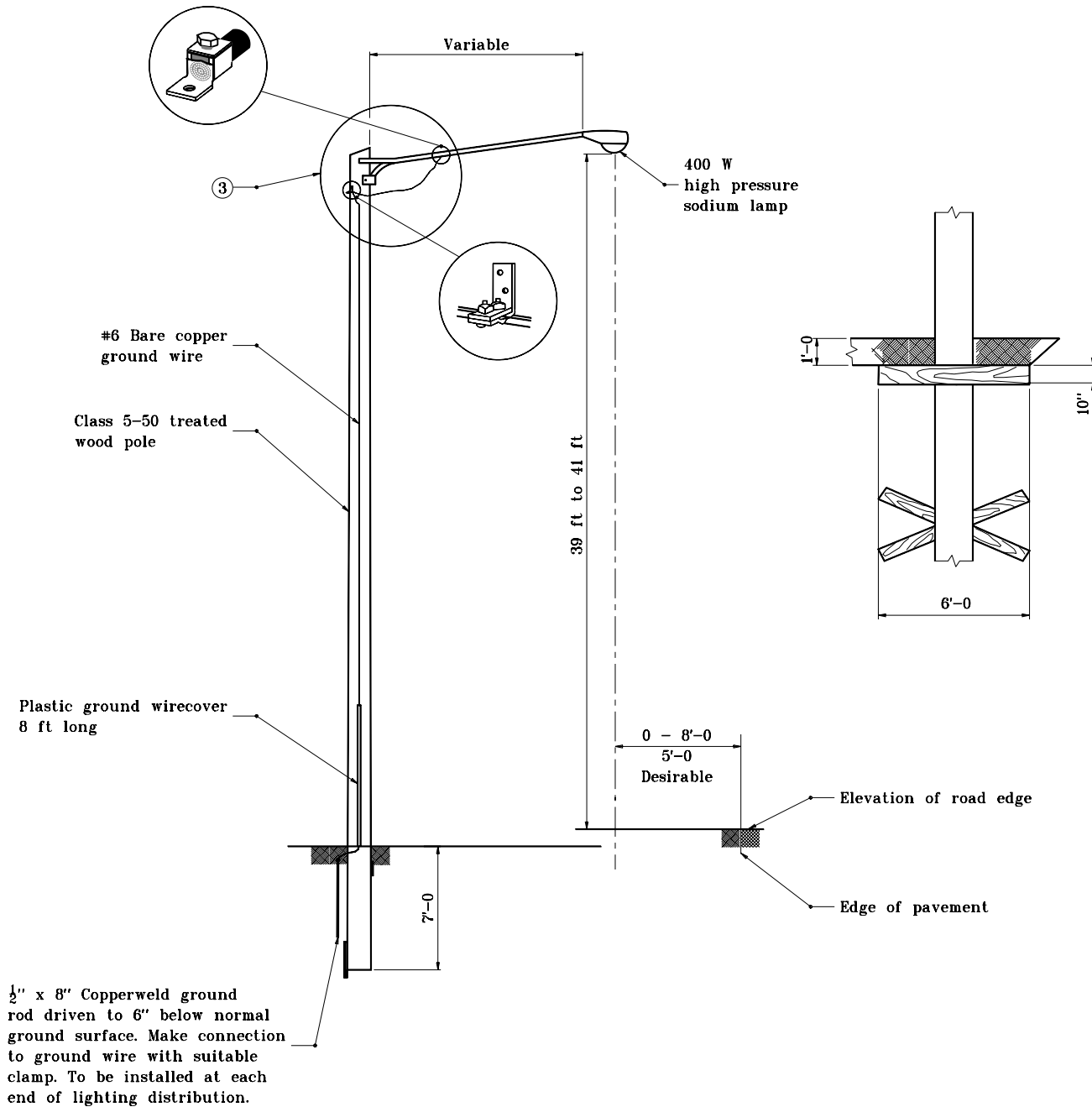


RING ASSEMBLY

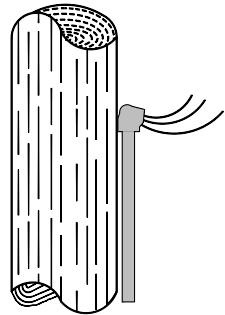
INDIANA DEPARTMENT OF TRANSPORTATION	
HIGHWAY ILLUMINATION TOWER DETAILS BOTTOM LATCH	
SEPTEMBER 2010	
STANDARD DRAWING NO.	E 807-LTHI-05
	<i>/s/ Richard L. Vancleave</i> 09/01/10 DESIGN STANDARDS ENGINEER DATE
	<i>/s/ Mark A. Miller</i> 09/01/10 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

GENERAL NOTES

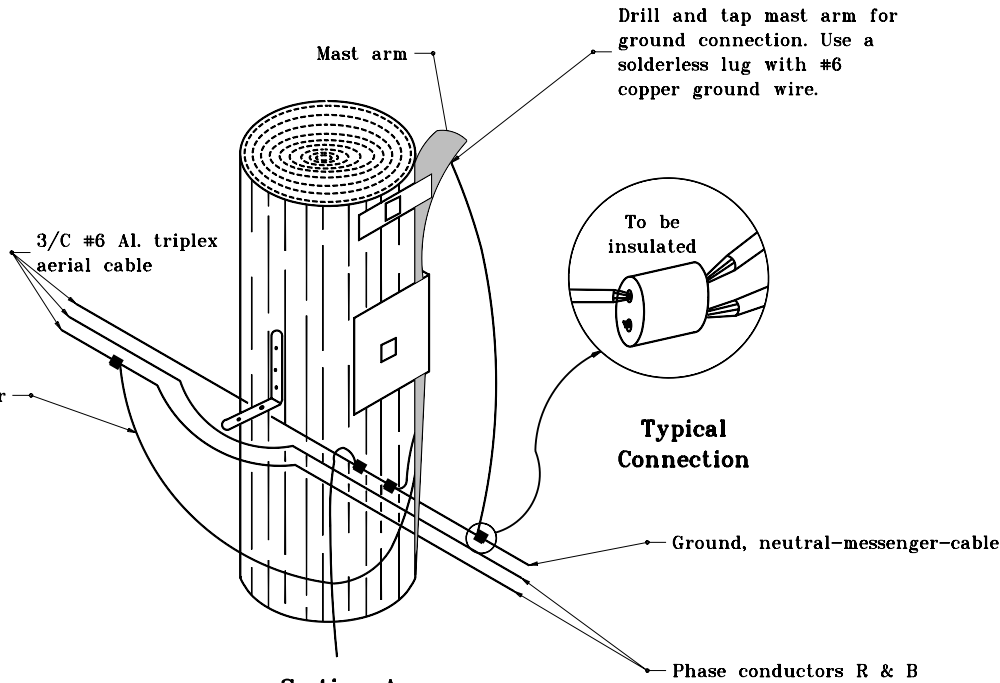
1. Install 2" x 10" x 6'-0 treated plank 1'-0 below ground surface with inner face directly against pole outer face to be placed against undisturbed earth as near as practicable.
2. Pole key anchor and plank stabilizer to be installed at each major change of overhead line direction and at each end of lighting distribution.
- ③ See Section on Standard Drawing E 807-LHTI-07.



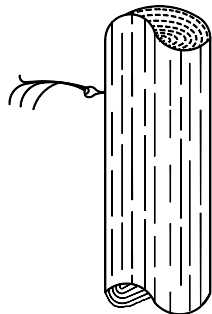
INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY HIGHWAY ILLUMINATION DETAILS	
JANUARY 2000	
STANDARD DRAWING NO. E 807-LTHI-06	
	/s/ Anthony L. Uremovich 1-03-00 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 1-03-00 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



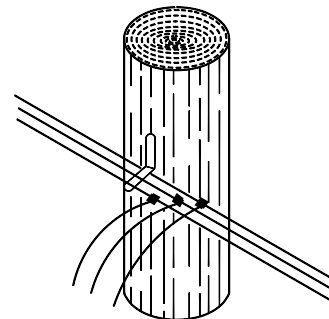
Conduit Riser



**Section A
Typical Aerial Luminaire
Connection with Ground**



**Aerial Cable
Termination**



**Typical Circuit
Connection to
Aerial Cable**

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY HIGHWAY ILLUMINATION DETAILS	
JANUARY 2000	
STANDARD DRAWING NO. E 807-LTHI-07	
	/s/ Anthony L. Uremovich 1-03-00 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 1-03-00 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	