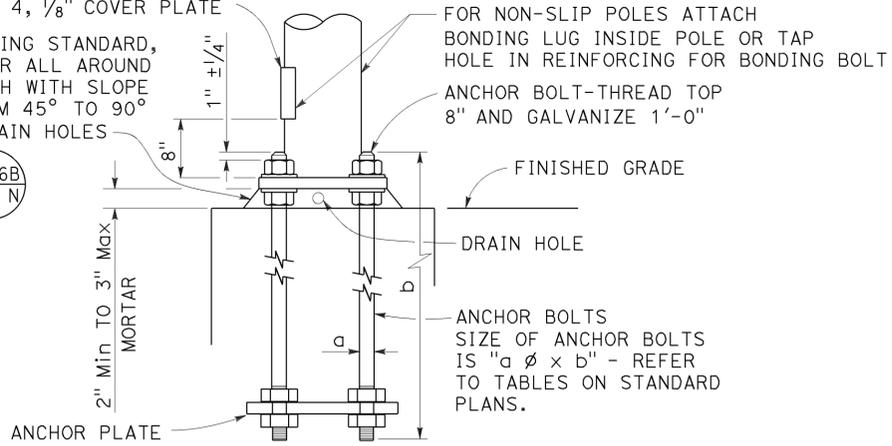


4" x 6 1/2" ROUNDED RECTANGLE HANDHOLE REINFORCED WITH RING WELDED TO OUTSIDE OF POLE. SEE NOTE 4, 1/8" COVER PLATE

AFTER PLUMBING STANDARD, PLACE MORTAR ALL AROUND BOLTS. FINISH WITH SLOPE RANGING FROM 45° TO 90° INCLUDES DRAIN HOLES

4 SIDES ES-6B Det N



**HANDHOLE AND ANCHORAGE**  
DETAIL A

**IDENTIFICATION NUMBER**

1. Attach a stamped metal tag with pole's identification number above the handhole. 1/4" high number, minimum.
2. Attach a stamped metal tag with mast arm's identification number to the bottom of the signal mast arm near the pole plate. 1/4" high number, minimum.

**SAMPLE IDENTIFICATION NUMBER**

Type 26A - 3 - 100 - 45 - 10 - F or FB  
 Load case (Use SL for special load case)  
 Design wind velocity (mph)  
 Signal mast arm length (ft)  
 Standard plan year  
 Only for poles or mast arms using Detail F  
 Only for poles or mast arms using ES-70

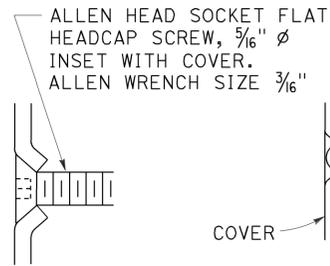
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5, 80	Var	34A	37

Stanley P. Johnson  
 REGISTERED CIVIL ENGINEER  
 October 30, 2015  
 PLANS APPROVAL DATE

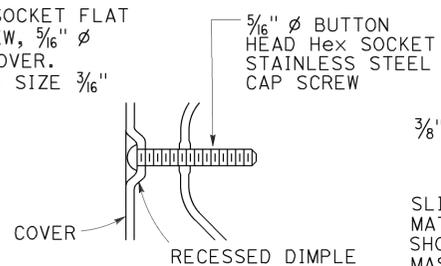
Stanley P. Johnson  
 REGISTERED PROFESSIONAL ENGINEER  
 No. C57793  
 Exp. 3-31-16  
 CIVIL  
 STATE OF CALIFORNIA

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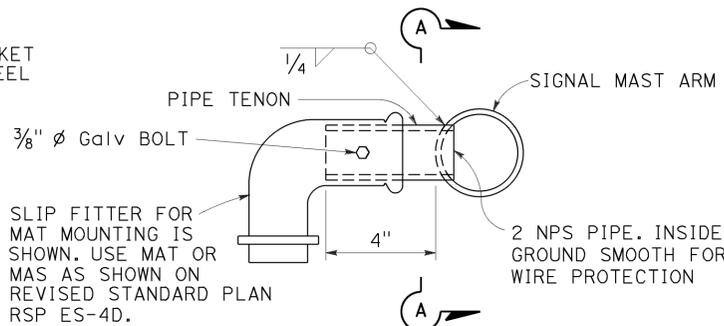
TO ACCOMPANY PLANS DATED 11-23-15



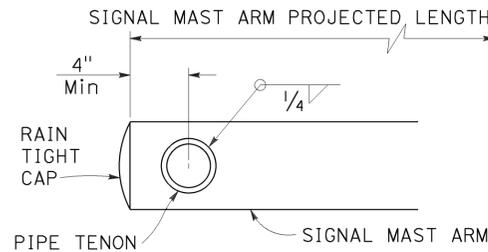
**TYPICAL DETAIL**  
DETAIL B-1



**ALTERNATIVE DETAIL**  
DETAIL B-2



**SIDE TENON**  
DETAIL S-1

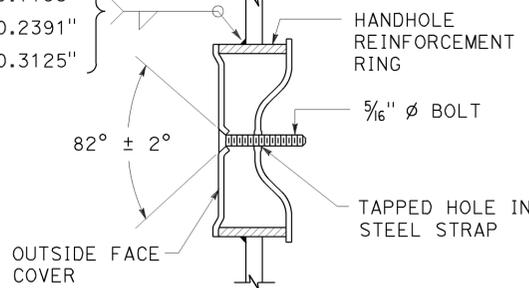


**SECTION A-A**

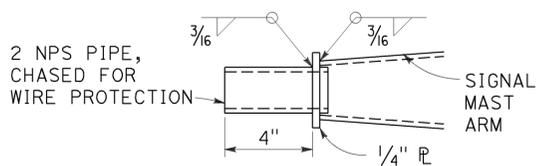
**NOTES:**

1. Provide a Hex nut, leveling nut and 2 washers for each bolt.
2. Luminaire mast arms shall be round, tapered steel tubes, taper of 0.1375" to 0.143-inch per foot with an end section 2 3/8" OD for mounting hardware. Extensions of 2 NPS Standard pipe and 7" long may be used at the option of the manufacturer. When low pressure sodium luminaires are required, the extension shall be 1'-3".
3. Signal mast arms shall be round, tapered steel tubes, maximum taper 0.143-inch per foot.
4. Handhole reinforcement ring shall be 1/4" x 2" for 0.1196" to 0.2391" thick poles, 3/8" x 2" for 0.3125" thick poles.
5. Handholes shall be located on the downstream side of traffic.
6. Detail F, fatigue resistant weld, is required at socket welded signal mast arm plate and pole base plate.
7. Cap screws shall be tightened by the turn-of-nut method 1/3 turn from a snug tight condition. No washer will be required.
8. Outside diameter, wall thickness, and corresponding section properties of poles and mast arms as shown in the Standard Plans are minimums. Unless otherwise specified, alternative sections shall require approval by the Engineer.
9. Wind Loading (3 seconds gust): 100 mph
10. Unit Stresses (Structural steel):  
 fy = 55,000 psi (tapered steel tube and anchor bolts)  
 fy = 50,000 psi (unless otherwise noted)
11. Unit Stresses (Reinforced concrete):  
 f'c = 3,625 psi  
 fy = 60,000 psi

WELD SIZE	WALL THICKNESS
3/16"	0.1196"
1/4"	0.1793"
5/16"	0.2391"
3/8"	0.3125"



**TAMPER RESISTANT HANDHOLE COVER**  
DETAIL B

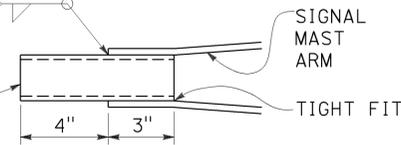


**TIP TENON**  
DETAIL TL  
This detail supersedes Detail S when so designated

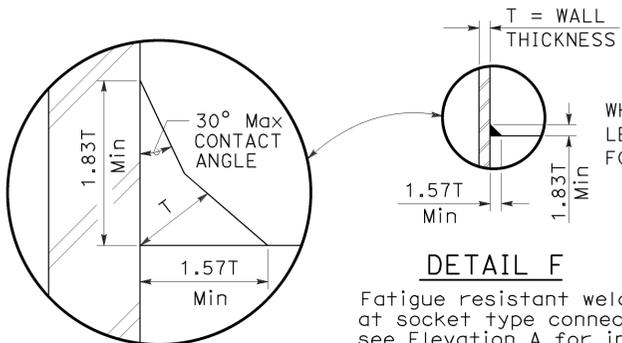
**PIPE TENONS**  
DETAIL S

WELD SIZE	WALL THICKNESS
1/8"	0.1196"
3/16"	0.1793"
1/4"	0.2391"

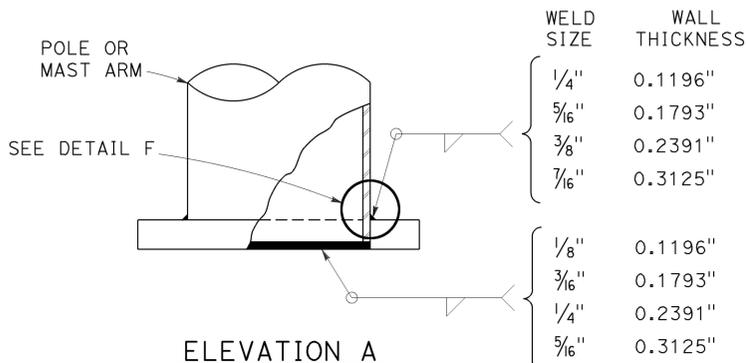
2 NPS PIPE, CHASED FOR WIRE PROTECTION SEE NOTE 2



**TIP TENON**  
DETAIL TS



**DETAIL F**  
Fatigue resistant weld at socket type connection see Elevation A for inner weld



**ELEVATION A**

**1 ADDED PER ADDENDUM No. 1 DATED FEBRUARY 25, 2016**

**REVISED STANDARD PLAN RSP ES-7M**

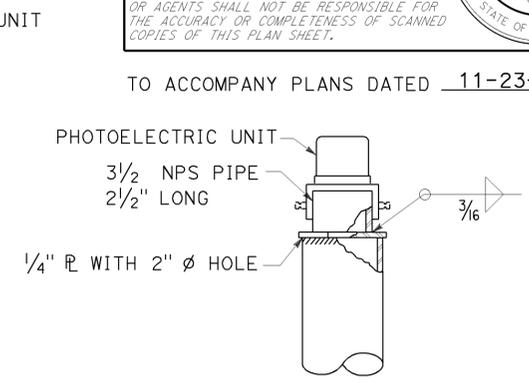
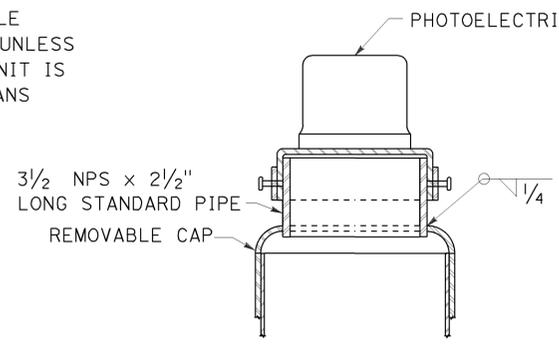
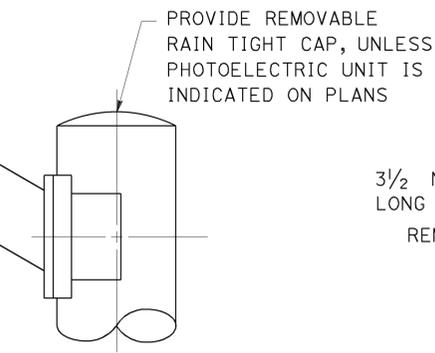
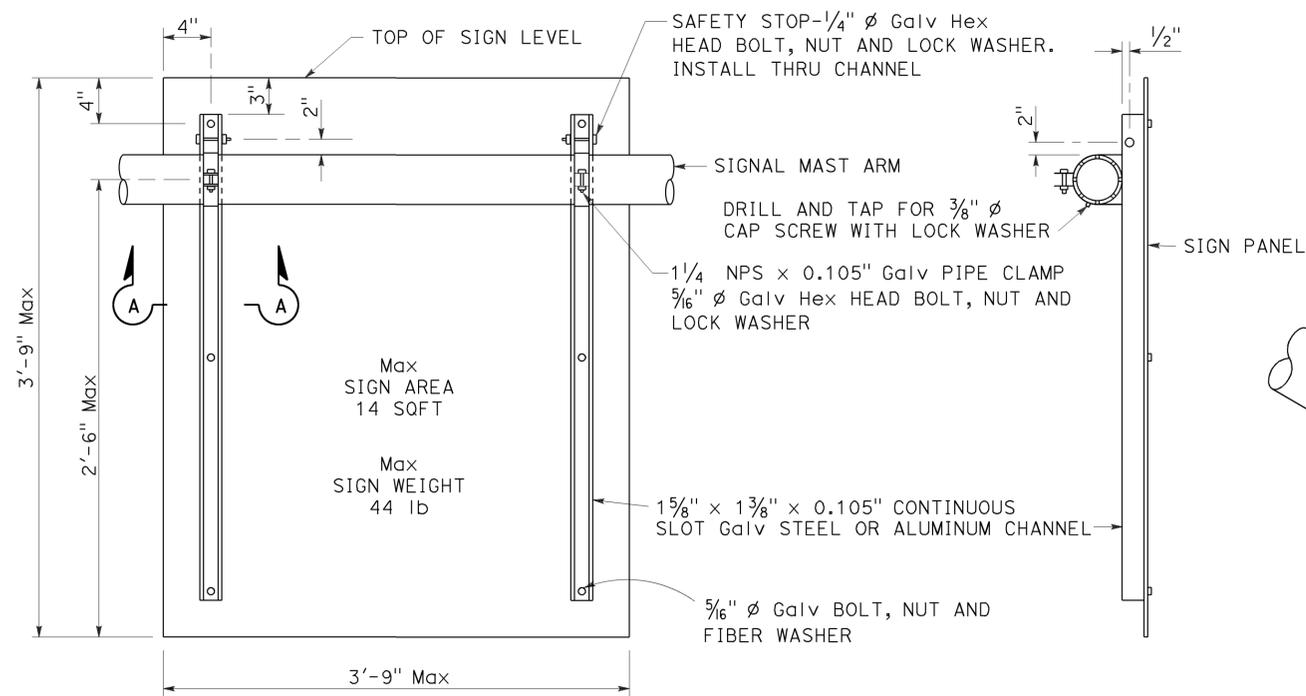
STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS**  
**(SIGNAL AND LIGHTING STANDARD,**  
**DETAIL No. 1)**  
 NO SCALE

RSP ES-7M DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-7M DATED MAY 20, 2011 - PAGE 474 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP ES-7M

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5, 80	Var	34B	37

Stanley P. Johnson  
 REGISTERED CIVIL ENGINEER  
 October 30, 2015  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



TO ACCOMPANY PLANS DATED 11-23-15

REAR VIEW

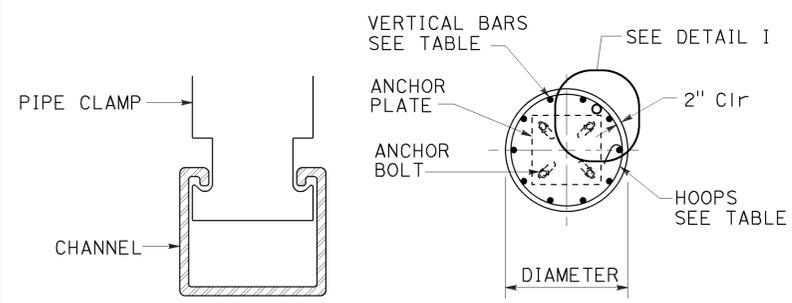
SIDE VIEW

MOUNTING ADAPTER FOR PHOTOELECTRIC UNIT DETAIL B-2

ALTERNATIVE MOUNTING ADAPTER DETAIL B-3

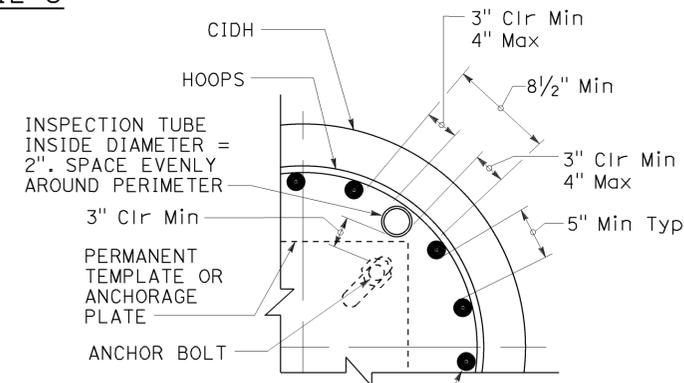
POLE TOP DETAILS DETAIL B

**SIGN MOUNTING DETAILS**  
DETAIL U



SECTION A-A

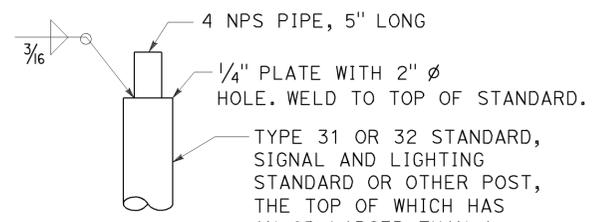
SECTION B-B



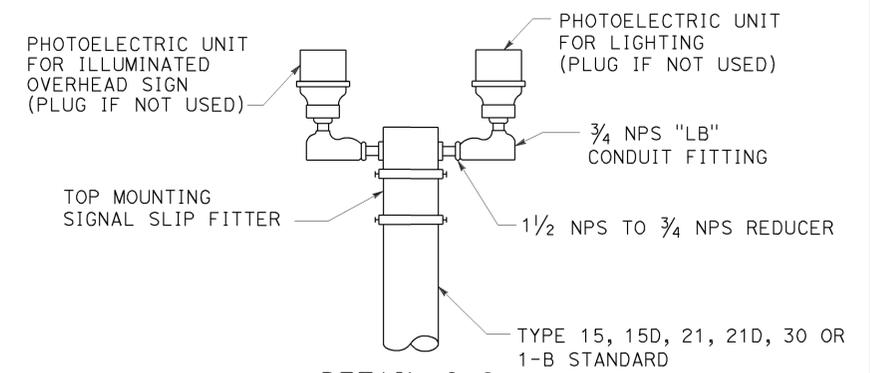
**INSPECTION TUBE PLACEMENT**  
DETAIL I

CIDH DIAMETER	VERTICAL BARS	HOOPS (WELDED)	INSPECTION TUBE
2 ft	8-#5	#4 AT 6	2
2.5 ft	10-#6		4*
3 ft	12-#7	#5 AT 6	4
3.5 ft	14-#8		5
4 ft	18-#9	2-#4 AT 7	6
5 ft	22-#10	2-#5 AT 7	7
6 ft	26-#11	2-#6 AT 7	7

\* FOR SLIP BASE VERSIONS WITH 3 ANCHOR BOLTS USE 3 INSPECTION TUBES.



DETAIL C-1

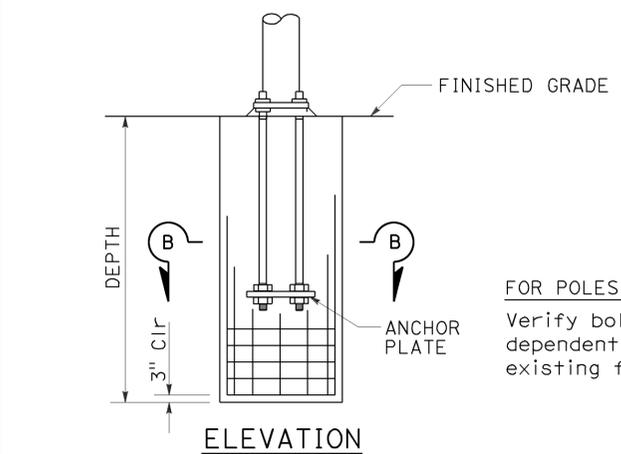


**DUAL PHOTOELECTRIC UNIT MOUNTING DETAIL**  
DETAIL C

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, DETAIL No. 2)**  
NO SCALE

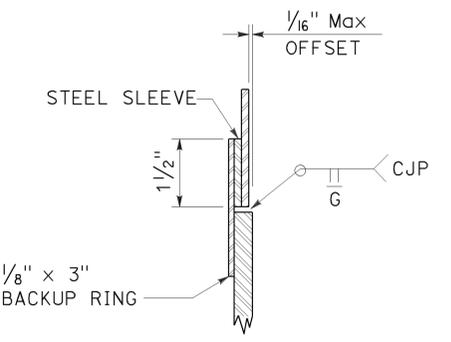
RSP ES-7N DATED OCTOBER 30, 2015 SUPERSEDES STANDARD PLAN ES-7N DATED MAY 20, 2011 - PAGE 475 OF THE STANDARD PLANS BOOK DATED 2010.



ELEVATION

**CAST-IN-DRILLED-HOLE PILE FOUNDATION, REINFORCED PILE**  
DETAIL A

FOR UNIFORM TUBE THICKNESS  
DETAIL T-1



AT TUBE THICKNESS CHANGE  
DETAIL T-2

**POLE SPLICES**  
DETAIL T

**ADDED PER ADDENDUM No. 1 DATED FEBRUARY 25, 2016**

**REVISED STANDARD PLAN RSP ES-7N**

2010 REVISED STANDARD PLAN RSP ES-7N

1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sac	5, 80	Var	36A	37

Theresa Gabriel  
REGISTERED ELECTRICAL ENGINEER

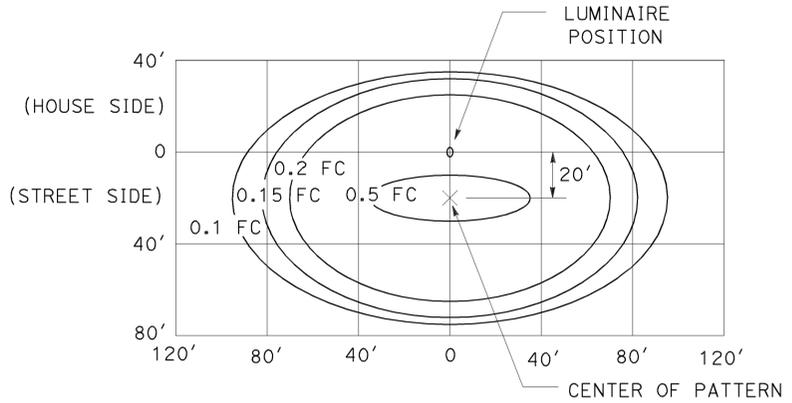
October 30, 2015  
PLANS APPROVAL DATE

Theresa Aziz Gabriel  
No. E15129  
Exp. 6-30-16  
ELECTRICAL  
STATE OF CALIFORNIA

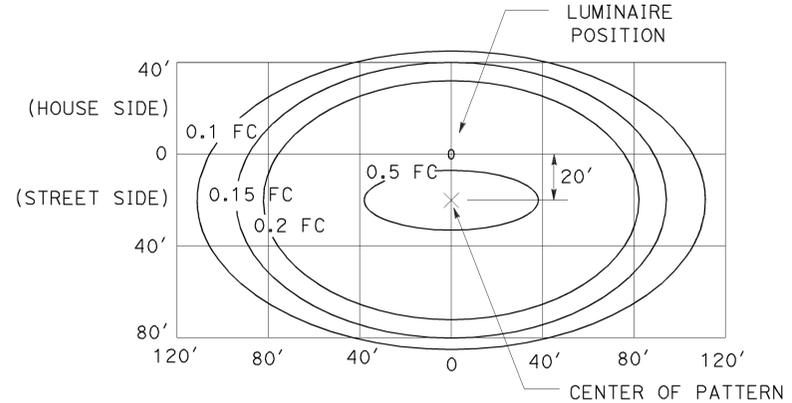
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TO ACCOMPANY PLANS DATED 11-23-15

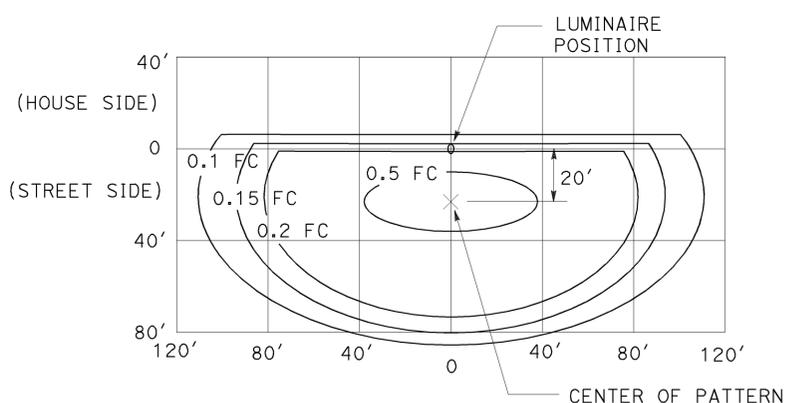
**NOTE:**  
Curves represent the minimum footcandle (FC).



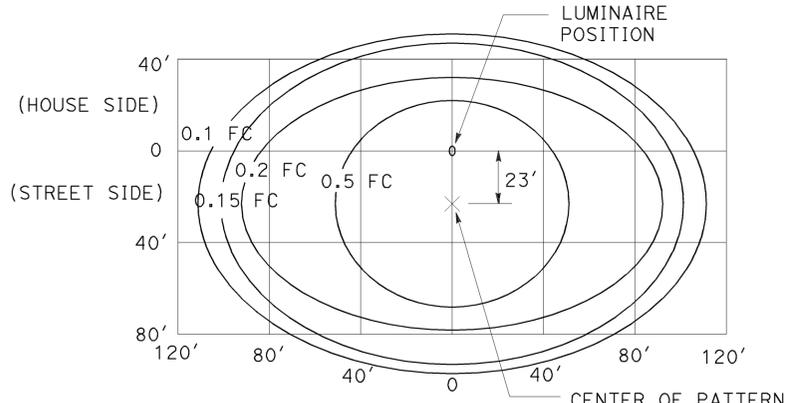
**LED LUMINAIRE 165 W**  
34' Mounting Height



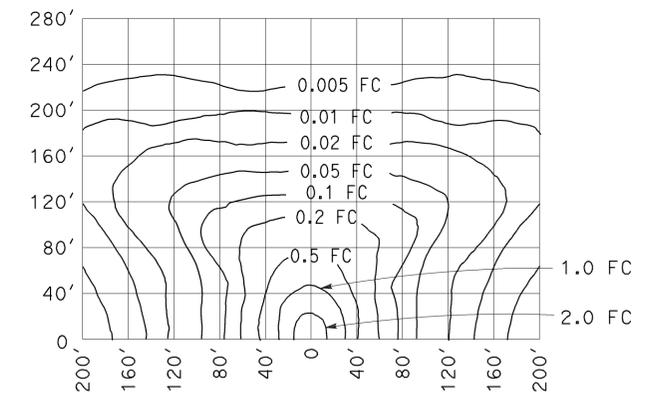
**LED LUMINAIRE 235 W**  
40' Mounting Height



**LED LUMINAIRE 235 W**  
40' Mounting Height  
with back side control



**LED LUMINAIRE 300 W**  
40' Mounting Height



**LOW-PRESSURE SODIUM LUMINAIRE 180 W**  
40' Mounting Height  
Lamp operated at 33,000 lm

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL SYSTEMS  
(ISOFOOTCANDLE CURVES)**

NO SCALE

RSP ES-10A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-10A DATED JULY 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP ES-10A**

**1 ADDED PER ADDENDUM No. 1 DATED FEBRUARY 25, 2016**

2010 REVISED STANDARD PLAN RSP ES-10A