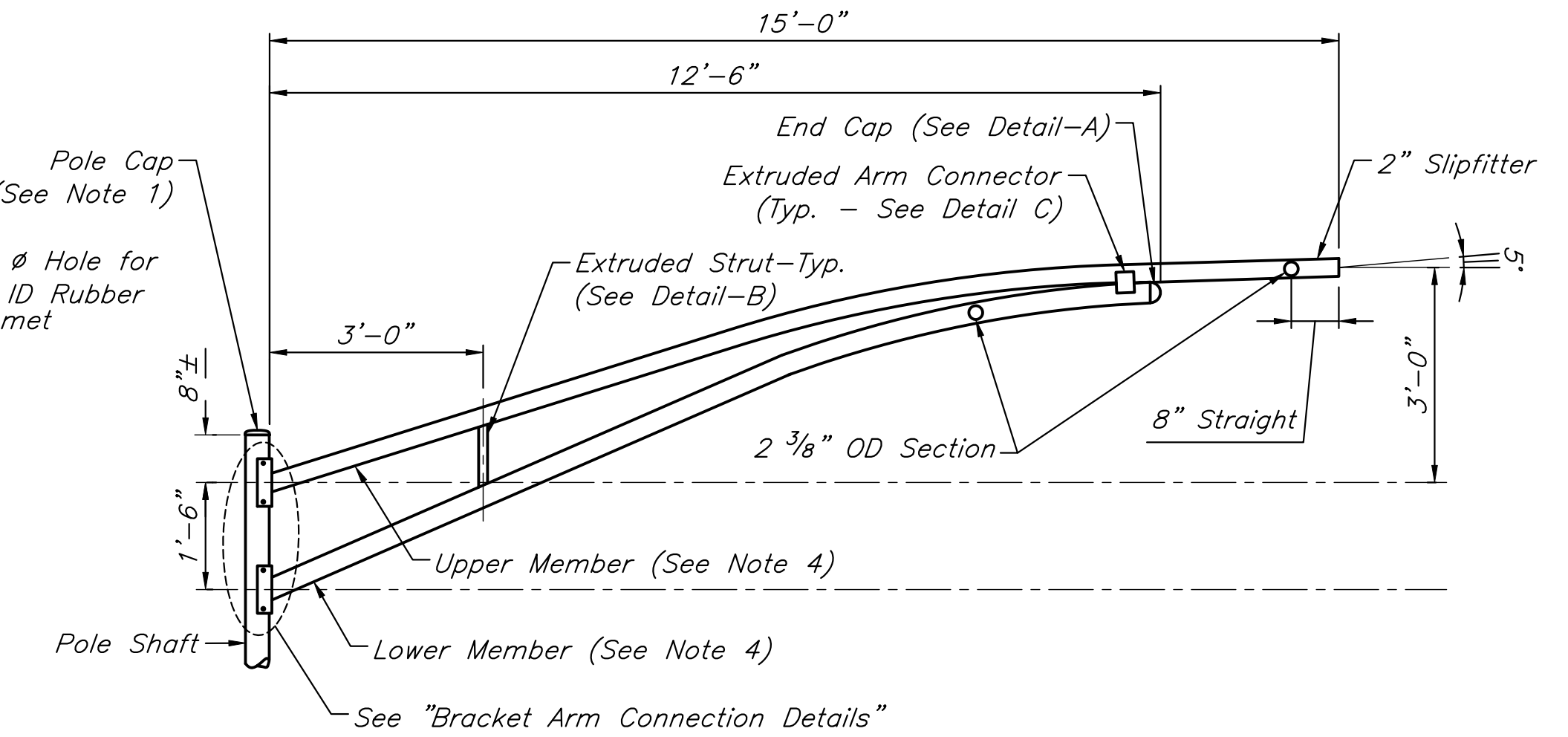
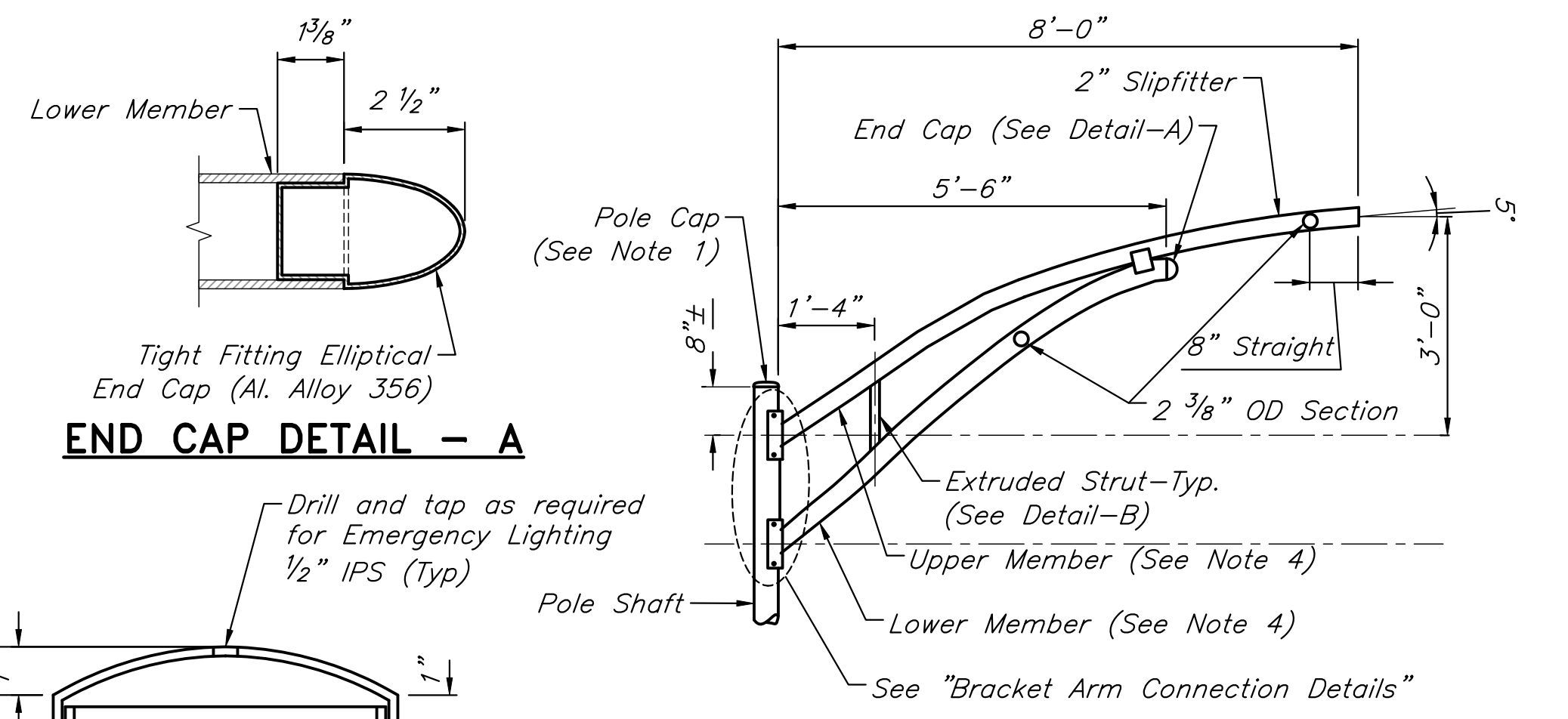


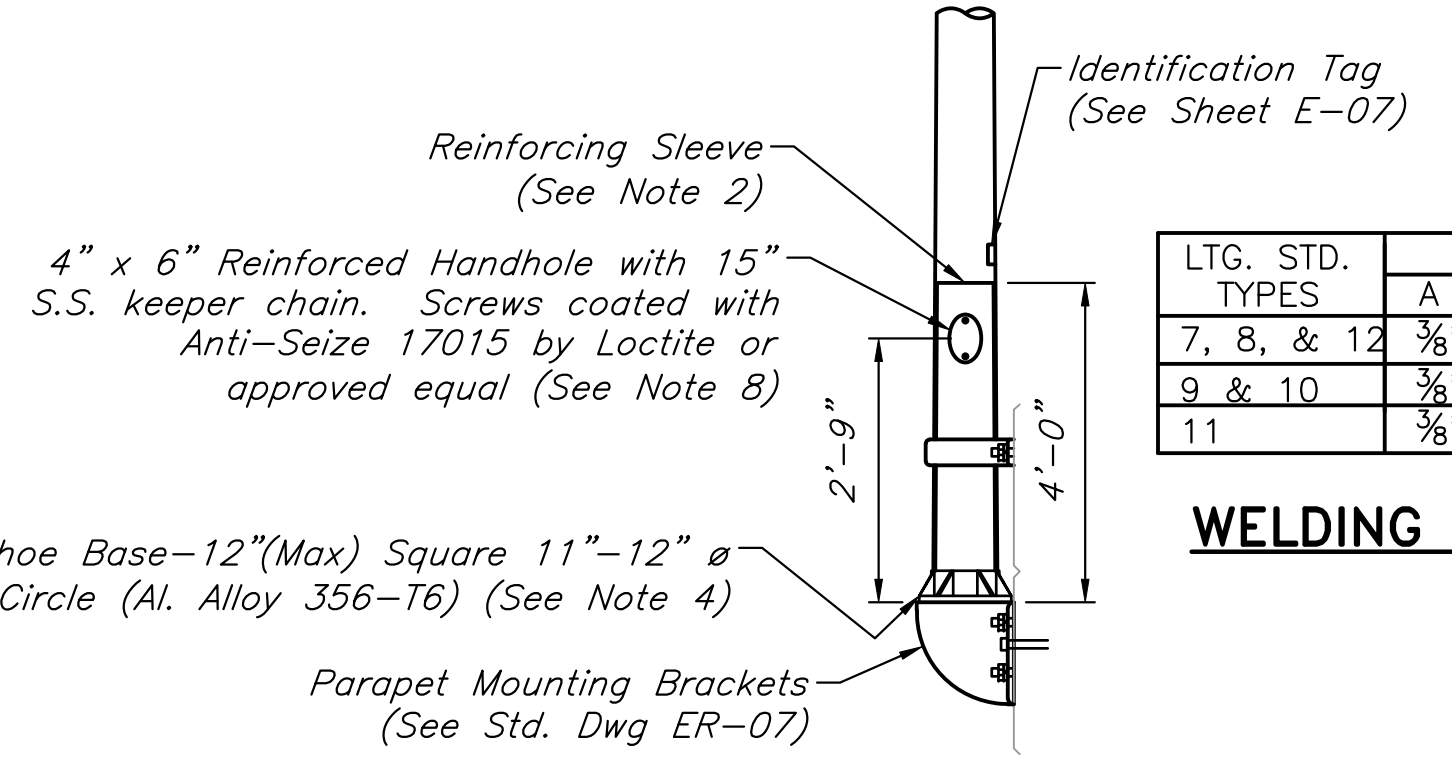
BRACKET ARM CONNECTION DETAILS



15 FT. BRACKET ARM DETAIL

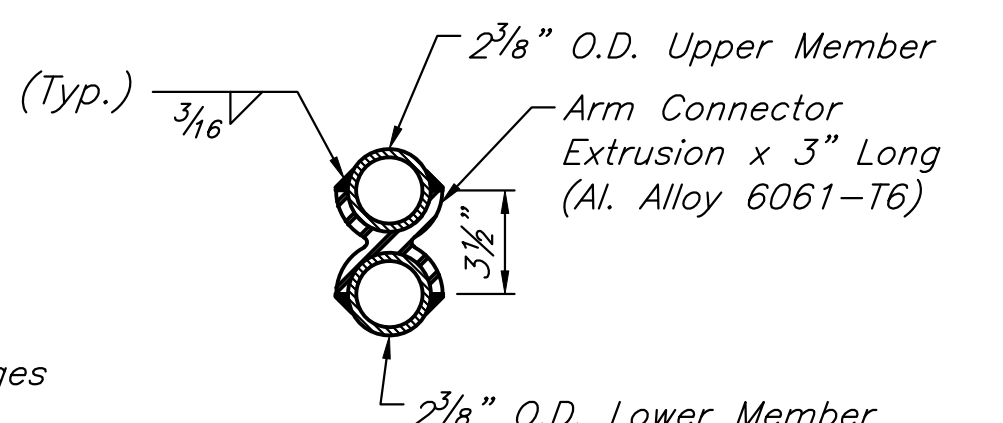
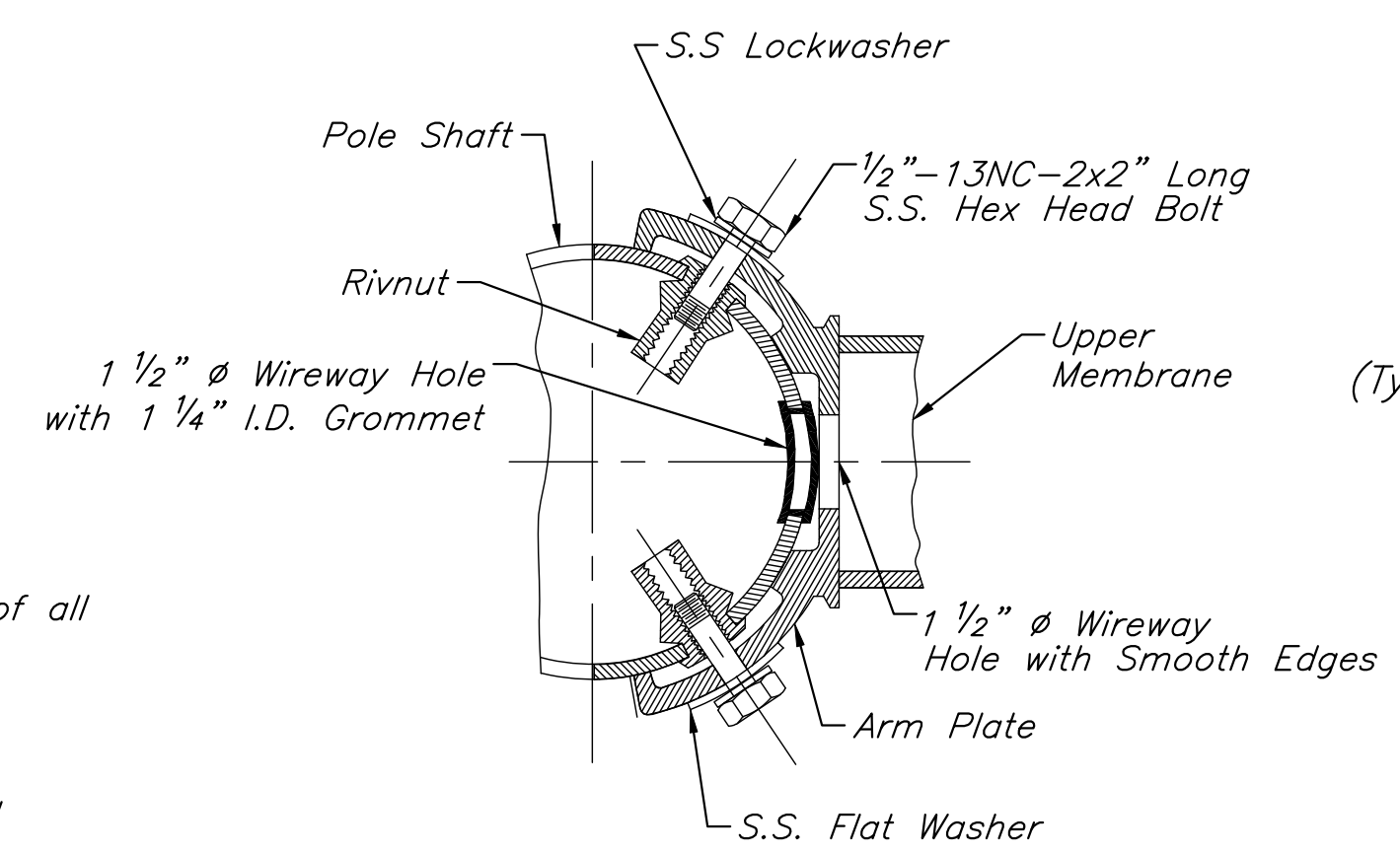
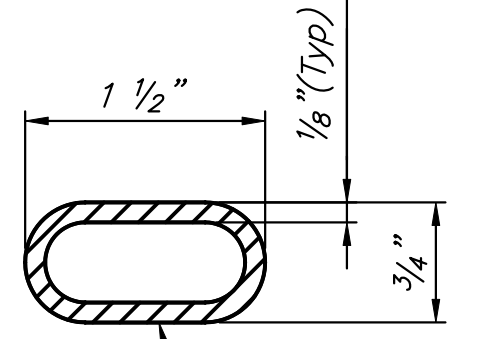
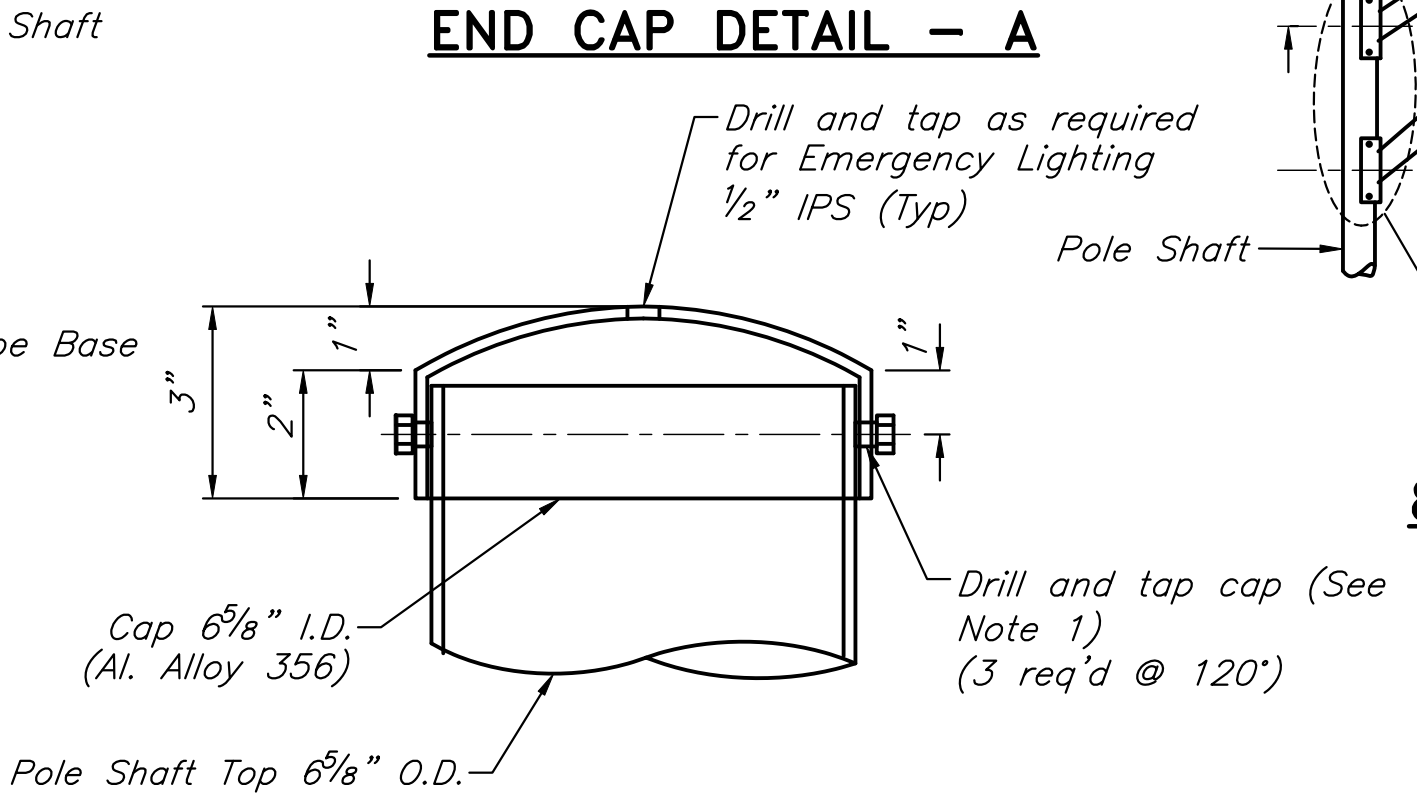
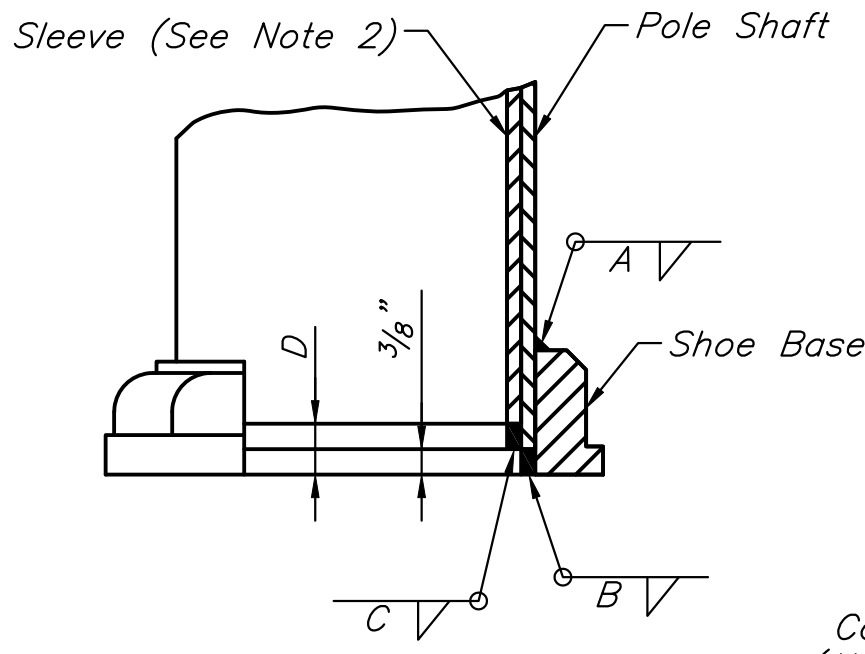


8 FT. BRACKET ARM DETAIL



WELDING SIZE TABLE

LTG. STD. TYPES	WELD SIZES			
	A	B	C	D
7, 8, & 12	3/8"	1/4"	NONE	3/8"
9 & 10	3/8"	1/4"	1/4"	A"
11	3/8"	5/16"	1/4"	5/16"



ELECTRICAL RETROFIT

NEW JERSEY TURNPIKE AUTHORITY

NEW JERSEY TURNPIKE

LIGHTING STANDARD TYPE 7-12 DETAILS

HNTB 145 RT. 46 WEST, SUITE 400, WAYNE, NJ 07470 - CO# 24G2800070

ANTHONY L. BARTELLO

N.J.P.E. License No. GE 45842

STANDARD DRAWING ER-04

LIGHTING STANDARD SCHEDULE

TYPES	MTG	BRACKET ARM NO.	LIGHTING STANDARDS		POLE SHAFT	WALL THICKNESS	MAX. LUMINAIRE SIZE	
			LENGTH	LENGTH			WEIGHT	PROJ. AREA SQ. FT.
TYPE 7	TB-B	1	15'	36'-3"	10x6 5/8"	.250"	50#	1.2
TYPE 8	TB-B	1	8'	36'-3"	10x6 5/8"	.250"		
TYPE 9	MB	1	15'	37'	8x6 5/8"	.250"		
TYPE 10	MB	1	8'	37'	8x6 5/8"	.250"		
TYPE 11	TB-B	2	15'	36'-3"	10x6 5/8"	.250"		
TYPE 12	TB-B	2	8'	36'-3"	10x6 5/8"	.250"		

For details of mounting brackets (MB) see Drawing ER-06

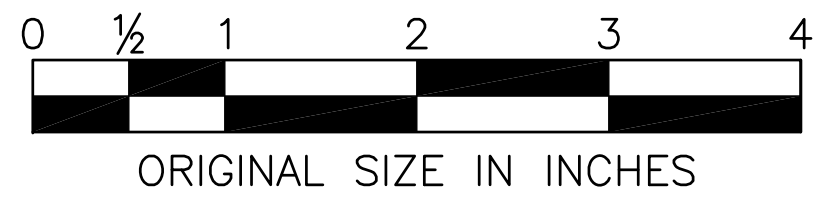
NOTES

- Cast pole cap (Al. Alloy 356) attached with #10-24NC2-1/2" hex head stainless steel screws with cup point.
- Tight fitted 0.188" thick reinforcing sleeve (Al. Alloy 6063-T6) shall be welded to pole shaft for lighting standards type 11 only.
- Shoe base for 10" O.D. pole shaft (Al. Alloy 356-T6) with 13" - 15" ϕ bolt circle, shall be provided with cast Al. Alloy bolt covers and stainless steel 1 1/4" ϕ hex head connection bolts, nuts, lock washers and flat washers (4 req'd).
- Shoe base for 8" O.D. pole shaft (Al. Alloy 356-T6) with 11" - 12" ϕ bolt circle, shall be provided with cast Al. Alloy bolt covers and stainless steel 1" ϕ hex head connection bolts, nuts, lock washers, and flat washers (4 req'd).
- Upper and lower members of bracket arms shall be manufactured from 3 1/2" O.D. tube with .125" (min.) wall thickness, tapered to 3 1/2"x2 3/8" O.D. (Al. Alloy 6063-T6).
- The lighting standard assembly shall be certified to meet current AASHTO breakaway criteria for structural supports utilizing an approved transformer base.

- All components submitted for use on NJTA projects must be fully interchangeable and similar in quality, in all respects with arms and bases shown herein. A comprehensive review and final determination for approval of all lighting standard equipment will be made by the Authority's Engineering Department prior to manufacture or use.
- A reinforced flush handhole is required on all bridge-mounted (MB) lighting standards and shall be located one foot from top of parapet. When located behind chain link fence, the hand hole shall be located one foot above the fence. A fiberglass handhole cover shall be used. It shall be modified for UV resistance.
- All stainless steel hardware shall be Type 304.

If you use this Standard Drawing:
 You also need —
 You may need ER-01, ER-06

BY	DATE
EMG	05/2009
MDC	05/2009
EMG	05/2009
ALB	05/2009



APP. NO.	DATE	REVISION
0	05/2009	ORIGINAL DRAWING