

Origination Form
Proposed Revisions to a Standard Plans Index

Originator:	Behring, Zachary	Index Number:	649-030
Date:	6/23/2026 3:58:58 PM	Sheet Number(s):	1
E-mail:	Zachary.Behring@dot.state.fl.us	Index Title:	Standard Mast Arm Assemblies

Summary of the changes:

Change variable "LD" from 0.125" to 11 gauge for wall thickness

Commentary/Background:

Industry preference for this part is to use standard gauge sheet materials. this will be more efficient than ordering custom thickness sheet steel.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

Implementation

["FY-Standard Plans (Next Release)"]

10/15/2025 7:28:02 AM

ARM AND BASE PLATE											
Arm ID Axx-ArmLength S-SingleArm D-DoubleArm H-HeavyDuty	Total Arm Length (ft)	Arm			Arm Extension			Base Plate			
		FA/SA (ft)	FC/SC (in)	FD/SD (in)	FE/SE (ft)	FG/SG (in)	FH/SH (in)	HT (in)	FJ/SJ (in)	FK/SK (in)	
A30/S	30	30	11	0.25	--	--	--	22	25	3	
A30/S/H			12					30	36		
A30/D			11								
A30/D/H			12								
A40/S	40	40	13	0.25	--	--	--	22	27	3	
A40/S/H			14					30	36		
A40/D			13								
A40/D/H			14								
A50/S	50 (See Note 2)	32.5	12	0.25	20.5	14	0.313	22	29	3	
A50/S/H			13			15		30	36		
A50/D			12			14					
A50/D/H			13			15					
A60/S	60	35.5	12	0.25	27.5	15	0.375	30	36	3	
A60/S/H			13			16					
A60/D			12			15					
A60/D/H			13			16					
A70/S	70	38	13	0.25	35	17	0.375	30	36	3	
A70/S/H			14			18					
A70/D			13			17					
A70/D/H			14			18					
A78/S	78	39	13	0.25	42	18	0.375	30	36	3	
A78/S/H			15			20					
A78/D			13			18					
A78/D/H			15			20					

NOTES:

- Work this Index with Index 649-031.
- 50 foot long arms may be fabricated in one piece, eliminating the lap splice, provided the arm base diameter = 15" and the wall thickness for the entire length of the arm = 0.313".

POLE, BASE PLATE AND ARM CONNECTION																							
Pole ID Px-PoleNo S-SingleArm D-DoubleArm L-Luminaire	Upright				Base Plate					Arm-Upright Connection													
	UA (ft)	UD (in)	UE (in)	UG (ft)	No. Bolts	BA (in)	BB (in)	BC (in)	BF (in)	HT (in)	FJ/SJ (in)	FL/SL (in)	FN/SN (in)	F0/S0 (in)	FP/SP (in)	FR/SR (in)	FS/SS (in)	FT/ST (in)					
P1/S	25	16	0.375		6	32	2.5	2	40	22	25	0.75	0.438	14	1.25	2	8.5	0.438					
P1/S/L	39									37.5													
P1/D	25																						
P1/D/L	39									37.5													
P2/S	25	18	0.375		6	34	2.5	2	40	22	27	0.75	0.438	15	1.25	2	8.5	0.438					
P2/S/L	39									37.5													
P2/D	25																						
P2/D/L	39									37.5													
P3/S	25	20	0.375		6	36	2.5	2	40	22	29	0.75	0.438	16	1.25	2	8.5	0.438					
P3/S/L	39									37.5													
P3/D	25																						
P3/D/L	39									37.5													
P4/S	25	22	0.375		8	38	2.5	2	40	30	36	0.75	0.438	17	1.25	2.5	12.5	0.438					
P4/S/L	39													37.5									
P4/D	25																						
P4/D/L	39													37.5									
P5/S	25	24	0.375		8	40	2.5	2	40	30	36	0.75	0.5	18	1.25	2.5	12.5	0.5					
P5/S/L	39													37.5									
P5/D	25																						
P5/D/L	39													37.5									
P6/S	25	24	0.5		8	40	2.5	2	40	30	36	0.75	0.625	18	1.5	2.5	12	0.625					
P6/S/L	39													37.5									
P6/D	25																						
P6/D/L	39													37.5									
P7/S	25	26	0.5		8	42	2.5	2	40	30	36	0.75	0.625	19	1.5	2.5	12	0.625					
P7/S/L	39													37.5									
P7/D	25																						
P7/D/L	39													37.5									

DRILLED SHAFT								
Drilled Shaft ID	DA (ft)	DB (ft)	RA	RB	RC	RD (in)	RE	RF (in)
DS/12/4.0	12	4.0	11	14	8	12	--	--
DS/12/4.5	12	4.5	11	16	8	12	--	--
DS/14/4.5	14	4.5	11	16	10	8	--	--
DS/14/5.0	14	5.0	11	18	10	8	--	--
DS/16/4.5	16	4.5	11	16	10	8	--	--
DS/16/5.0	16	5.0	11	18	10	8	--	--
DS/18/5.0	18	5.0	11	18	10	8	--	--
DS/20/5.0	20	5.0	11	18	10	6	10	9
DS/25/5.0	25	5.0	11	18	10	6	10	9

LUMINAIRE AND CONNECTION												
LA (ft)	LB (ft)	LC (in)	LD (in)	LE	LF (ft)	LG (in)	LH (in)	LJ (in)	LK (in)	LL (deg)	UG (ft)	
40	10	3	0.125	0.5	8	0.5	0.75	0.25	0.25	0	37.5	

CHANGED:
variable "LD" from 0.125" to
11 gauge for wall thickness

LD
(ga)

11

11/01/26



FY ~~2026-27~~
STANDARD PLANS

STANDARD MAST ARM ASSEMBLIES

INDEX
649-030

SHEET
1 of 1

LAST
REVISION
11/01/25

DESCRIPTION:

ARM AND BASE PLATE											
Arm ID Axx-ArmLength S-SingleArm D-DoubleArm H-HeavyDuty	Total Arm Length (ft)	Arm			Arm Extension			Base Plate			
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A50/D			12			14					
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A70/D/H			14			18					
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P1/S	25	16	0.375		6	32	2.5	2	40	22	25	0.75	0.438	14	1.25	2	8.5	0.438
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P2/S	25	18	0.375		6	34	2.5	2	40	22	27	0.75	0.438	15	1.25	2	8.5	0.438
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P2/D	25																	
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P3/S	25	20	0.375		6	36	2.5	2	40	22	29	0.75	0.438	16	1.25	2	8.5	0.438
P3/S/L	39																	
P3/D	25																	
P3/D/L	39																	
P4/S	25	22	0.375		8	38	2.5	2	40	30	36	0.75	0.438	17	1.25	2.5	12.5	0.438
P4/S/L	39																	
P4/D	25																	
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P5/S	25	24	0.375		8	40	2.5	2	40	30	36	0.75	0.5	18	1.25	2.5	12.5	0.5
P5/S/L	39																	
P5/D	25																	
P5/D/L	39																	
P6/S	25	24	0.5		8	40	2.5	2	40	30	36	0.75	0.625	18	1.5	2.5	12	0.625
P6/S/L	39																	
P6/D	25																	
P6/D/L	39																	
P7/S	25	26	0.5		8	42	2.5	2	40	30	36	0.75	0.625	19	1.5	2.5	12	0.625
P7/S/L	39																	
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DS/12/4.5	12	4.5	11	16	8	12	--	--
DS/14/4.5	14	4.5	11	16	10	8	--	--
DS/14/5.0	14	5.0	11	18	10	8	--	--
DS/16/4.5	16	4.5	11	16	10	8	--	--
DS/16/5.0	16	5.0	11	18	10	8	--	--
DS/18/5.0	18	5.0	11	18	10	8	--	--
DS/20/5.0	20	5.0	11	18	10	6	10	9
DS/25/5.0	25	5.0	11	18	10	6	10	9

LUMINAIRE AND CONNECTION											
LA (ft)	LB (ft)	LC (in)	LD (ga)	LE	LF (ft)	LG (in)	LH (in)	LJ (in)	LK (in)	LL (deg)	UG (ft)
40	10	3	11	0.5	8	0.5	0.75	0.25	0.25	0	37.5

