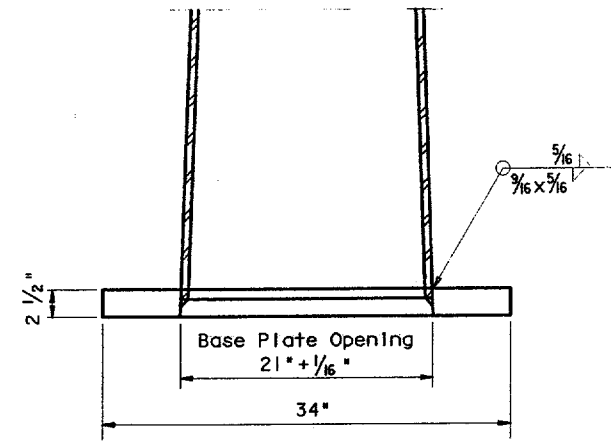
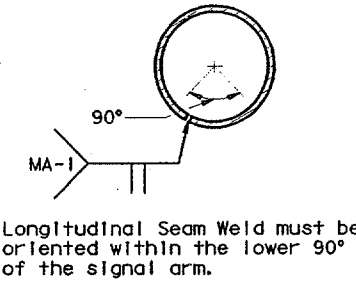


DISCLAIMER  
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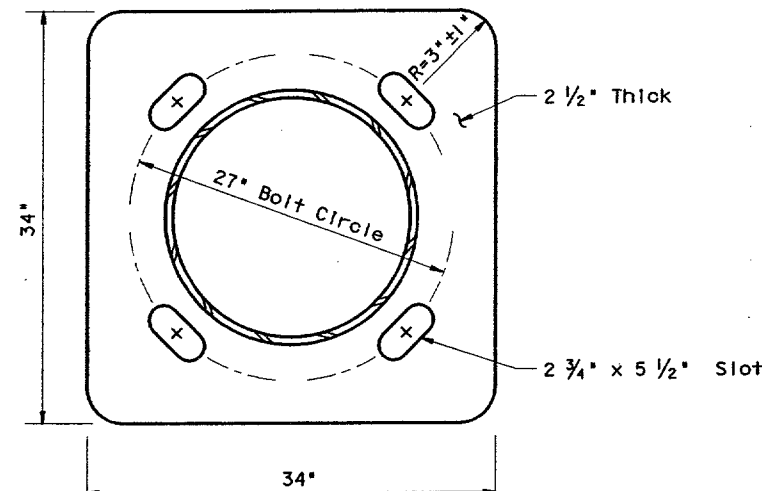


**POLE CONNECTION TO BASE PLATE**

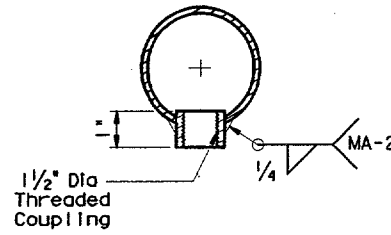


Longitudinal Seam Weld must be oriented within the lower 90° of the signal arm.

**ARM WELD DETAIL**



**BASE PLATE**



**COUPLING DETAIL**

Arm Length ft.	ROUND POLES					Foundation Type
	D <sub>B</sub> In.	D <sub>19</sub> In.	D <sub>24</sub> In.	D <sub>30</sub> In.	⊕thk In.	
50', 55'	21.0	18.3	17.6	16.8	.3125	48-A
60', 65'						

Arm Length ft.	ROUND ARMS				
	L <sub>1</sub> ft.	D <sub>1</sub> In.	D <sub>2</sub> In.	⊕thk In.	Rise (±2")
50	49	18.5	11.7	.3125	3'-3"
55	54	18.5	11.0	.3125	3'-7"
60	59	18.5	10.3	.3125	3'-11"
65	64	18.5	9.6	.3125	4'-4"

D<sub>B</sub> = Pole Base O.D.  
D<sub>19</sub> = Pole Top O.D. with no Luminaire and no ILSN  
D<sub>24</sub> = Pole Top O.D. with ILSN w/out Luminaire  
D<sub>30</sub> = Pole Top O.D. with Luminaire  
D<sub>1</sub> = Arm Base O.D.  
D<sub>2</sub> = Arm End O.D.  
L<sub>1</sub> = Shaft Length  
L = Nominal Arm Length

⊕ Thickness shown is minimum, thicker materials may be used.

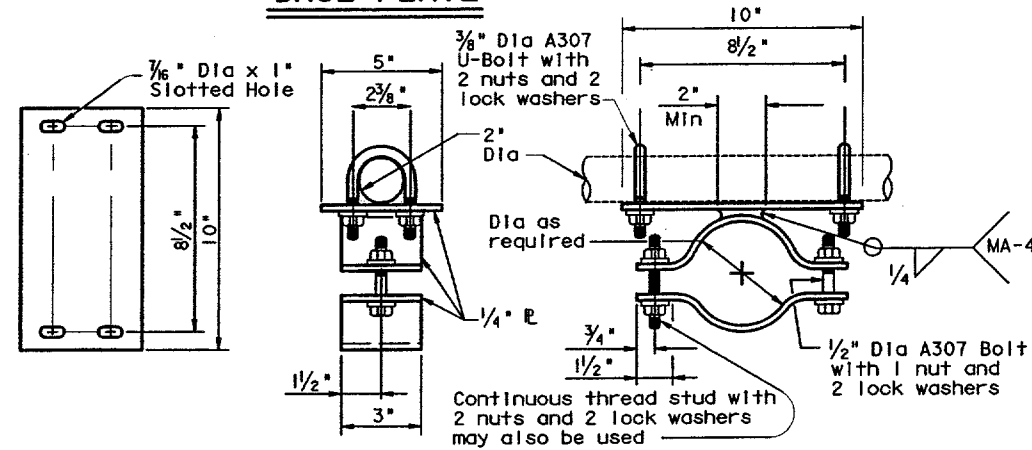
ANCHOR BOLT & TEMPLATE SIZE						
Bolt Dia In	Length ft	Top Thread	Bottom Thread	Bolt Circle	R <sub>2</sub>	R <sub>1</sub>
2 1/2"	5'-3"	10"	3"	27"	16"	11"

† Min dimension given, longer bolts are acceptable.

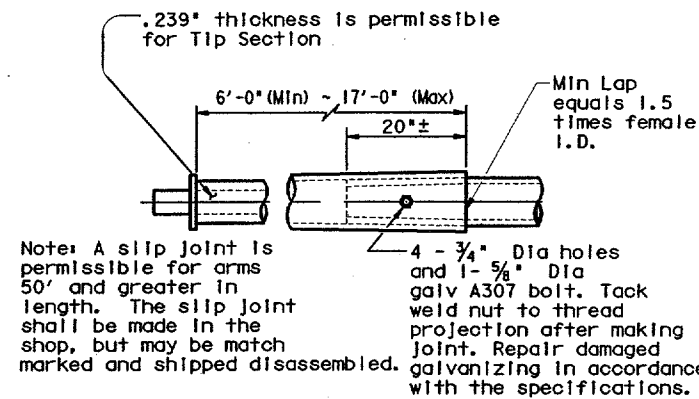
- Anchor bolt design develops the foundation capacity given under Foundation Design Loads.
- Foundation Design Loads are the allowable moments and shears at the base of the structure.
- Field Penetrometer readings at a depth of approximately 3 to 5 feet may be used to adjust shaft lengths.
- If rock is encountered, the Drilled Shaft shall extend a minimum of two diameters into solid rock.
- Decimal lengths in Design Table are to allow interpolation for other penetrometer values. Round to nearest foot for entry into Summary Table.

FDN TYPE	DRILLED SHAFT DIA	REINFORCING STEEL		DRILLED SHAFT LENGTH-ft			ANCHOR BOLT DESIGN				FOUNDATION DESIGN LOAD		TYPICAL APPLICATION
		VERT BARS	SPIRAL & PITCH	TEXAS CONE PENETROMETER N Blows/ft			ANCHOR BOLT DIA	F <sub>y</sub> (ksi)	BOLT CIR DIA	ANCHOR TYPE	MOMENT K-ft	SHEAR Kips	
				10	15	40							
48-A	48"	20 #9	#4 at 6"	21.9	19.5	14.7	2 1/2"	55	27"	2	490	10	Max arm assembly.

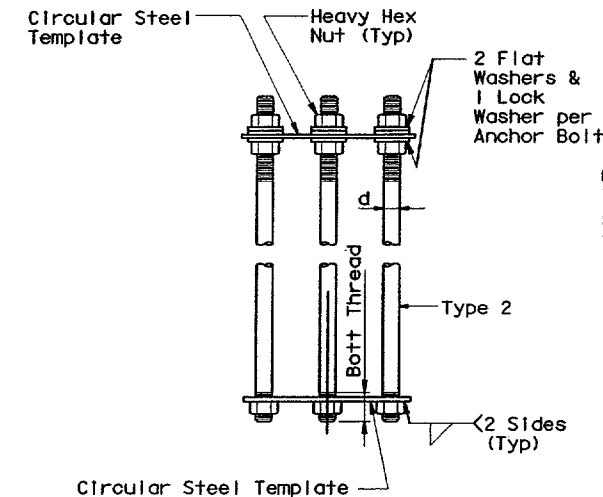
SEE SHEET "TS-FD" FOR ADDITIONAL DETAILS.



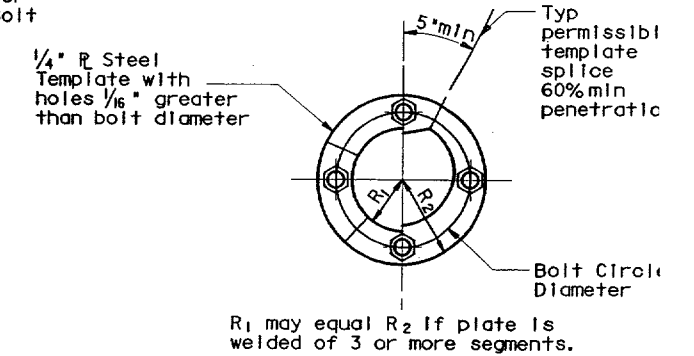
**BRACKET ASSEMBLY DETAILS OPTION A**



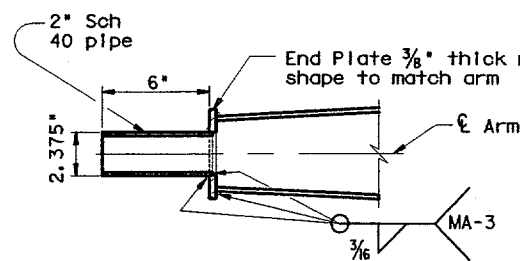
**SLIP JOINT DETAIL**



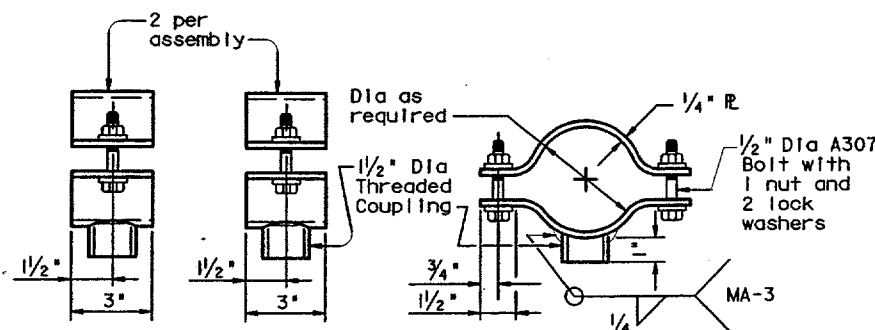
**ANCHOR BOLT ASSEMBLY (TYPE 2)**



**TEMPLATE DETAIL**



**TENON DETAIL**



**BRACKET ASSEMBLY DETAILS OPTION B**

Stainless steel bands and cast bracket as in 'Astro-Broc' with 1/2" Dia Threaded Coupling.

**BRACKET ASSEMBLY OPTION C**

LEVELS DISPLAYED	ACC
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
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97	97
98	98
99	99
100	100

STANDARD PLANS  
Texas Department of Transportation  
Traffic Operations Division

**TRAFFIC SIGNAL SUPPORT STRUCTURES (50 TO 65 FT) (80 AND 100 MPH WIND ZONE) LMA (2) - 01**

Sheet 2 of 4

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STATE DISTRICT	FEDERAL AID PROJECT	SHEET
DAL	CM XXXX (XXX)	31
COUNTY	CONTROL	SECTION
DALLAS	****	**
JOB	ROWAY	
***	VA	