



ANCHOR BOLT & TEMPLATE SIZES

BOLT DIAMETER	*BOLT LENGTH	TOP THREAD	BOTTOM THREAD	BOLT CIRCLE	R2	R1
3/4"	1'-6"	3"	-	12-3/4"	7-1/8"	5-5/8"
1-1/2"	3'-4"	6"	2"	17"	10"	7"
1-3/4"	3'-10"	7"	2-1/4"	19"	11-1/4"	7-3/4"
2"	4'-3"	8"	2-1/2"	21"	12-1/2"	8-1/2"

* MINIMUM DIMENSIONS GIVEN, LONGER BOLTS ARE ACCEPTABLE

ANCHOR BOLT ASSEMBLY

INSTALLATION PROCEDURE :

THREADS OF ANCHOR BOLTS SHALL BE COATED WITH PIPE JOINT COMPOUND PRIOR TO INSTALLATION OF UPPER NUTS WHEN ERECTING POLE. AFTER POLE IS PLUMBED AND IN PERMANENT ALIGNMENT, THE EXPOSED THREADS OF PAINTED BOLTS SHALL BE CLEANED AND AN ADDITIONAL COATING OF ZINC-RICH PAINT APPLIED TO SEAL THE BOLT THREAD-NUT JOINT.

FOUNDATION DESIGN TABLE

FDN TYPE	DRILLED SHAFT DIA	REINFORCING STEEL		DRILLED SHAFT LENGTH-ft (3), (4), (5)			ANCHOR BOLT DESIGN (1)				FOUNDATION DESIGN LOAD (2)	
		VERT BARS	SPIRAL & PITCH	TEXAS CONE PENETROMETER N blows/ft			ANCHOR BOLT DIA	Fy (ksi)	BOLT CIR DIA	ANCHOR TYPE	MOMENT K-ft	SHEAR Kips
				10	15	40						
24-A	24"	4-#5	*2 at 12"	5.7	5.3	4.5	3/4"	36	12 3/4"	1	10	1
30-A	30"	8-#9	*3 at 6"	11.3	10.3	8.0	1 1/2"	55	17"	2	87	3
36-A	36"	10-#9	*3 at 6"	13.2	12.0	9.4	1 3/4"	55	19"	2	131	5
36-B	36"	12-#9	*3 at 6"	15.2	13.6	10.4	2 "	55	21"	2	190	7

- NOTES :**
- (1) ANCHOR BOLT DESIGN DEVELOPS THE FOUNDATION CAPACITY GIVEN UNDER FOUNDATION DESIGN LOADS.
 - (2) FOUNDATION DESIGN LOADS ARE THE ALLOWABLE MOMENTS AND SHEARS AT THE BASE OF THE STRUCTURE.
 - (3) FIELD PENETROMETER READINGS AT A DEPTH OF APPROXIMATELY 3 TO 5 FEET MAY BE USED TO ADJUST SHAFT LENGTHS.
 - (4) IF ROCK IS ENCOUNTERED, THE DRILL SHAFT SHALL EXTEND A MINIMUM OF TWO DIAMETERS INTO SOLID ROCK.
 - (5) DECIMAL LENGTHS IN DESIGN TABLE ARE TO ALLOW INTERPOLATION FOR OTHER PENETROMETER VALUES.

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Alan P. McNeil
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FOUNDATION DETAILS

SIGNAL DESIGN						
QUORUM - INWOOD CONNECTOR						
TRAFFIC SIGNAL POLE FOUNDATIONS						
DEPARTMENT OF PUBLIC WORKS						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
P.G.W.	C.W.W.	2/00		AS BUILT		42