

## TRAFFIC SIGNAL STANDARD FOUNDATIONS

**TRAFFIC SIGNAL STANDARD FOUNDATION SELECTION TABLE**

SIGNAL STANDARD DESCRIPTION	24" DIAMETER FOOTING DEPTH	30" DIAMETER FOOTING DEPTH	36" DIAMETER FOOTING DEPTH	42" DIAMETER FOOTING DEPTH
<b>TYPE I, II, V, VI, VII STANDARD</b>				
10-14' HEIGHT	4'	4'	3'	-
15-17' HEIGHT	6'	6'	5'	-
<b>TYPE IV SIGNAL STANDARD</b>				
0'-25' MAST ARM	-	11'	11'	11'
26'-30' MAST ARM	-	12'	12'	12'
31'-35' MAST ARM	-	12'	12'	12'
36'-39' MAST ARM	-	13'	13'	13'
40'-45' MAST ARM	-	15'	15'	15'
46'-50' MAST ARM	-	16'	15'	15'
51'-55' MAST ARM	-	16'	16'	16'
56'-60' MAST ARM	-	17'	17'	17'
61'-65' MAST ARM	-	18'	18'	18'
<b>COMBO SIGNAL STANDARD 30' MT HEIGHT</b>				
0'-25' MAST ARM	-	11'	11'	11'
26'-30' MAST ARM	-	12'	12'	12'
31'-35' MAST ARM	-	13'	13'	13'
36'-39' MAST ARM	-	14'	14'	14'
40'-45' MAST ARM	-	16'	15'	15'
46'-50' MAST ARM	-	16'	16'	16'
51'-55' MAST ARM	-	17'	16'	16'
56'-60' MAST ARM	-	18'	17'	17'
61'-65' MAST ARM	-	19'	18'	18'
<b>COMBO SIGNAL STANDARD 40' MT HEIGHT</b>				
0'-25' MAST ARM	-	12'	12'	12'
26'-30' MAST ARM	-	13'	13'	13'
31'-35' MAST ARM	-	13'	13'	13'
36'-39' MAST ARM	-	14'	14'	14'
40'-45' MAST ARM	-	16'	15'	15'
46'-50' MAST ARM	-	16'	16'	16'
51'-55' MAST ARM	-	17'	16'	16'
56'-60' MAST ARM	-	18'	17'	17'
61'-65' MAST ARM	-	19'	18'	18'
<b>COMBO SIGNAL STANDARD 50' MT HEIGHT</b>				
0'-25' MAST ARM	-	12'	12'	12'
26'-30' MAST ARM	-	13'	13'	13'
31'-35' MAST ARM	-	13'	13'	13'
36'-39' MAST ARM	-	14'	14'	14'
40'-45' MAST ARM	-	16'	16'	16'
46'-50' MAST ARM	-	16'	16'	16'
51'-55' MAST ARM	-	17'	17'	17'
56'-60' MAST ARM	-	18'	18'	17'
61'-65' MAST ARM	-	19'	19'	18'

**FOUNDATION NOTES:**

1. SEE PLANS FOR CORRECT LOCATION OF FOUNDATION. THE GRADE AND EXACT LOCATION SHALL BE ESTABLISHED BY THE ENGINEER IN THE FIELD.
2. THE FOUNDATION SHALL PROVIDE A MINIMUM OF 3" OF CONCRETE COVER FROM THE ANCHOR BOLTS TO THE REBAR CAGE AND A MINIMUM OF 3" OF CONCRETE COVER OVER THE REBAR CAGE TO THE OUTSIDE OF THE FOUNDATION. THE DIAMETER OF THE FOUNDATION SHALL BE INCREASED TO ACCOMMODATE A LARGER BOL CIRCLE.
3. AN ANCHOR BOLT CAGE SHALL BE SHOP FABRICATED FROM #6 BAR CIRCLE OR 3/4" SQUARE STOCK OR APPROVED EQUAL WELDED TO THE INSIDE OF THE ANCHOR BOLT TO HOLD ALIGNMENT.
4. GROUND ROD SHALL BE PLACED PRIOR TO CONCRETE PLACEMENT. THE ROD SHALL PROJECT 4" ABOVE THE FINISHED FOUNDATION AND SHALL EXTEND 12" BELOW THE FOUNDATION BOTTOM.
5. CONDUIT BENDS SHALL BE 90°. CONDUIT SHALL BE LOCATED 24" MINIMUM BELOW GROUND LEVEL. A SPARE 2" CONDUIT SHALL BE INSTALLED IN EACH FOUNDATION WITH BOTH ENDS PLUGGED AS PER SPARE CONDUIT SPECIFICATION.

**CONCRETE FOUNDATION:**

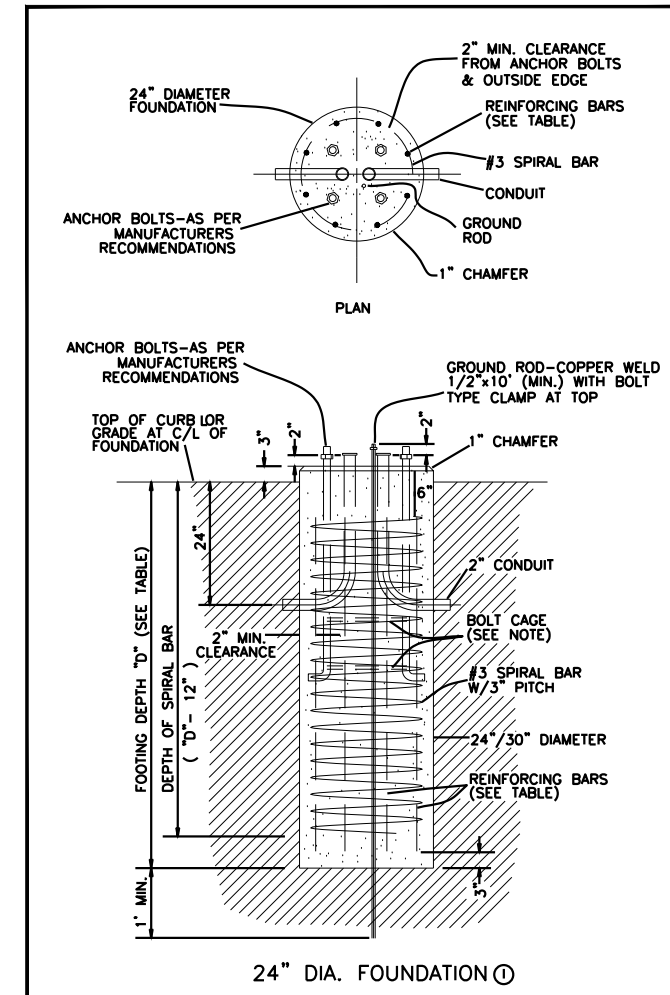
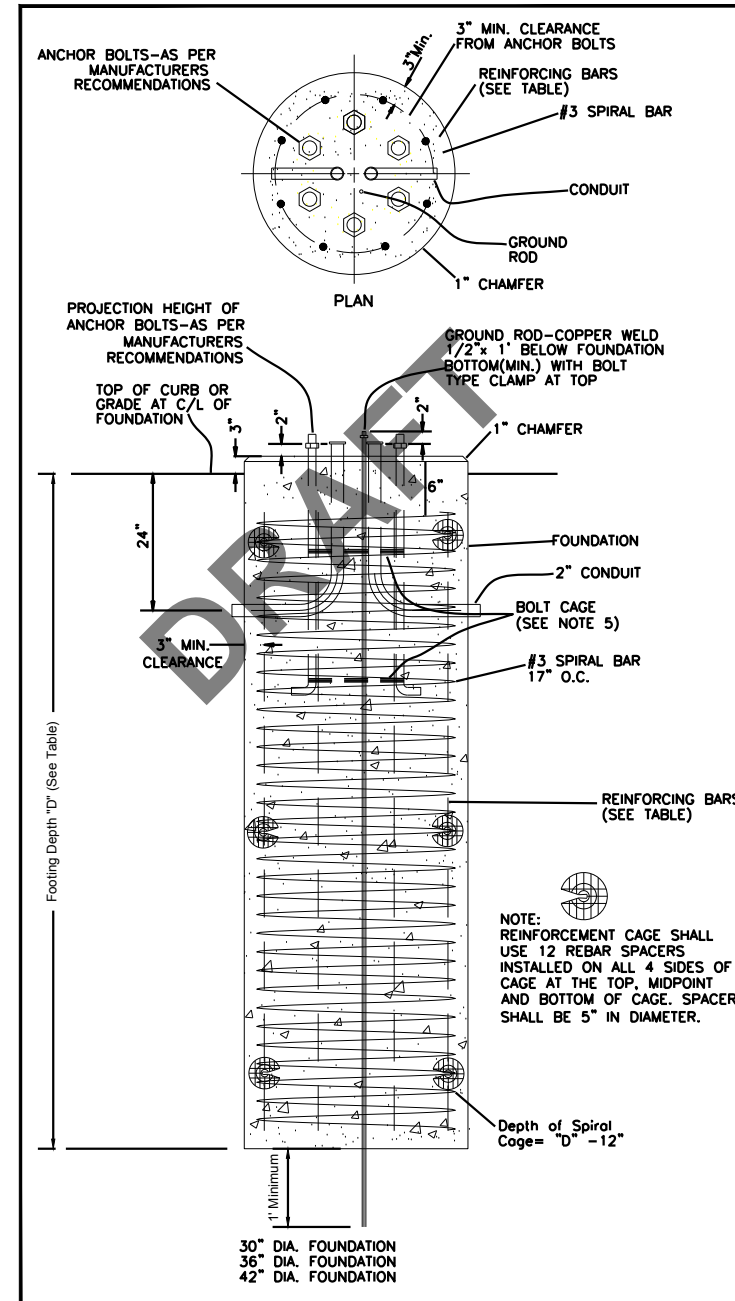
1. CONCRETE USED IN THE WORK SHALL BE CLASS AE PORTLAND CEMENT CONCRETE MIXED AND PROPORTIONED AS SPECIFIED IN SECTION 802.
- NOTE:  
THE TOP OF THE FOUNDATION SHALL BE CIRCULAR. IF APPROVED BY THE ENGINEER A SQUARE CASING MAY BE USED. PRIOR TO FINAL GRADING OR SIDEWALK PLACEMENT THE CASING TUBES SHALL BE REMOVED TO A POINT 6" BELOW GRADE.

**NOTES:**

- ① NO REINFORCEMENT IS REQUIRED IF THE ANCHOR BOLTS EXTEND TO WITHIN 3" TO 6" ABOVE THE BOTTOM OF THE FOUNDATION FOR THE 24" DIAMETER FOUNDATION.
- ② ALL REINFORCING STEEL TO BE GRADE 40 OR 60.
- ③ IF THE CONTRACTOR ELECTS TO USE A 24" SQUARE FOUNDATION, THE NEXT SIZE SMALLER REINFORCEMENT BARS MAY BE SUBSTITUTED FOR THOSE SHOWN IN THE TABLE. NO SUBSTITUTIONS MAY BE MADE FOR A 36" SQUARE FOUNDATION. #4 TIE BARS MAY BE SUBSTITUTED FOR THE SPIRAL, WITH THE BARS SPACED AT EQUAL SPACE TO A MAXIMUM OF 12" C. TO C., STARTING WITH THE FIRST AT THE TOP OF THE REINFORCING AND THE LAST AT THE BOTTOM OF THE REINFORCING. ROUND TIE BARS SHALL HAVE A MIN OF 12" OVERLAP.
- ④ SEE PLANS FOR CONDUIT SIZE, NUMBER OF BENDS AND CORRECT POSITIONING FOR EACH FOUNDATION.

**FOUNDATION REINFORCING TABLE**

FOOTING DEPTH	LONGITUDINAL REINFORCING
12' or Less	8 - #5
13'-14'	8 - #6
15'-16'	8 - #7
17'-19'	8 - #8



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**STANDARD DETAILS  
TRAFFIC SIGNAL FOUNDATION**

