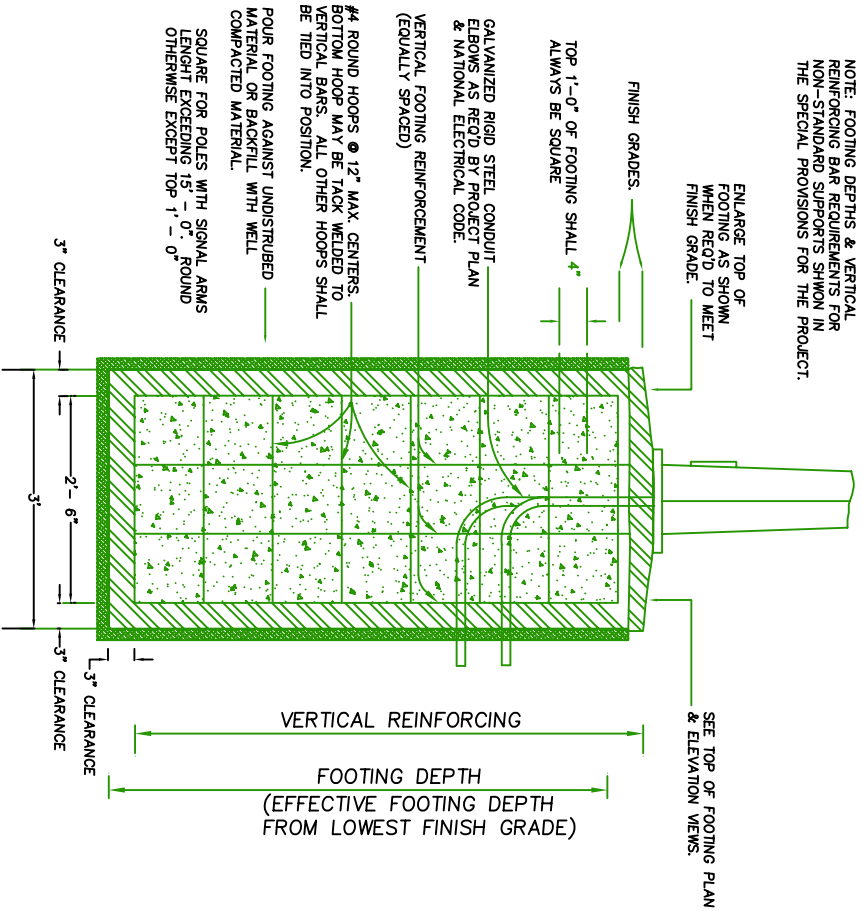
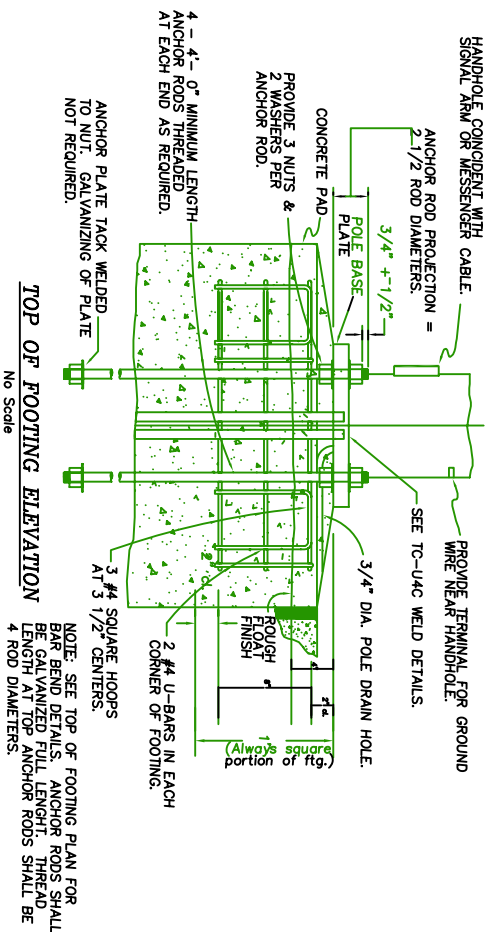


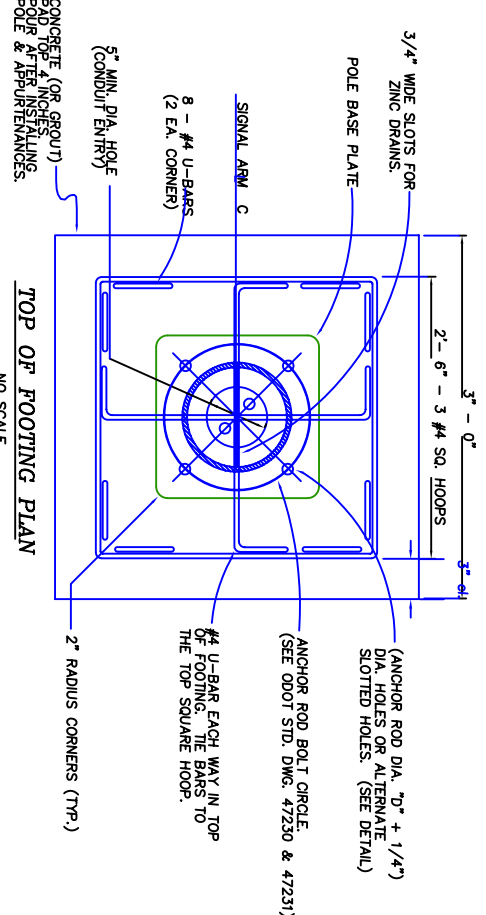
ALTERNATE SLOTTED HOLE FOR BASE PLATE



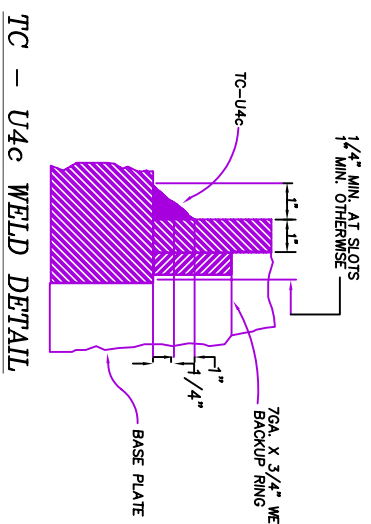
TYPICAL FOOTING ELEVATION



TOP OF FOOTING ELEVATION



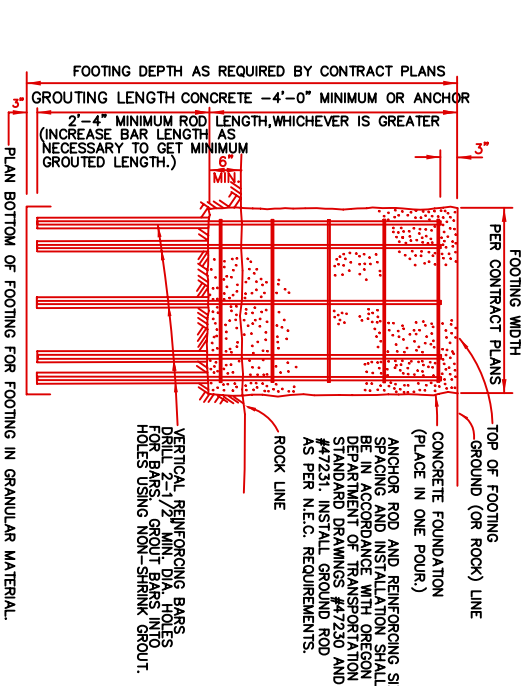
TOP OF FOOTING PLAN



TC - U4c WELD DETAIL

NOTE: DRAWING NOT TO SCALE.  
ALL EYE BOLTS, BOLTS, NUTS, AND WASHERS SHALL BE GALV. STEEL UNLESS NOTED OTHERWISE. ALL SET SCREWS SHALL BE MIN. DIA. 1/4" STAINLESS STEEL WITH SQUARE OR HEX HEADS. ALL SPANWIRE HANGERS AND PLUMBERS SHALL BE CAST BRONZE.

NOTE: REFER TO OREGON DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS #47230 AND #47231 FOR ALL SIGNAL POLE LOADING AND DIMENSION STANDARDS



FOUNDATION DETAILS FOR SOLID ROCK

TRAFFIC SIGNAL SUPPORTS

GENERAL NOTES:

Signal supports shall be designed in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. All material and workmanship shall conform to the City of Springfield Standard Specifications (Section 201.01) or the Oregon Standard Specifications (Section 201.01) unless otherwise noted. Dimensions on these drawings except as approved by the Engineer.

The design wind velocity shall be 90 mph unless shown otherwise in the Special Provisions for the Project.

Pole and arm supports may be either round or octagonal but shapes shall not be mixed on project. Dimensional tolerances of ASTM A595 shall apply to all tapered steel tubing members. Additionally, the diameter of round tapered steel tubing members or the dimensions of round tapered steel tubing members shall not vary more than 2% from the specified dimension.

Anchor rods shall conform to ASTM Specification A307. Tighten anchor rod nuts 1/8 turn past snug tight condition but not to exceed 1500 ft.-lbs. torque.

High strength bolts shall conform to ASTM Specification A325. Steel sheet and plate shall conform to any of the following: ASTM Specification or an approved equal: A36; A288 Grade D; ASTO (S18) Grades 33, 36, 1 or 40; A572 (S18) Grades 42 or 50; A611 (S18) Grades 42, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390, 395, 400, 405, 410, 415, 420, 425, 430, 435, 440, 445, 450, 455, 460, 465, 470, 475, 480, 485, 490, 495, 500, 505, 510, 515, 520, 525, 530, 535, 540, 545, 550, 555, 560, 565, 570, 575, 580, 585, 590, 595, 600, 605, 610, 615, 620, 625, 630, 635, 640, 645, 650, 655, 660, 665, 670, 675, 680, 685, 690, 695, 700, 705, 710, 715, 720, 725, 730, 735, 740, 745, 750, 755, 760, 765, 770, 775, 780, 785, 790, 795, 800, 805, 810, 815, 820, 825, 830, 835, 840, 845, 850, 855, 860, 865, 870, 875, 880, 885, 890, 895, 900, 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000.

The minimum yield strength used in computing allowable stresses shall be 48,000 psi. Two million cycles of stress shall be used in fatigue calculations for steel.

All structural steel including fasteners shall be hot dip galvanized after fabrication unless noted otherwise.

Galvanize-Control Silicon means silicon content of the base metal shall be in the range of 0 to 0.06% (preferably 0 to 0.04%) or 0.15 to 0.28 (preferably 0.15 to 0.23%).

Galvanize-Non-Silicon means silicon content of the base metal shall be non-silicon or expanding high early strength grout (non-ferrous) with a minimum strength of 5,000 psi.

Reinforcing steel shall conform to ASTM Specification A615, Grade 60. A minimum lap splice length of 32 bar diameters shall be used unless shown otherwise.

Computed deflection of the poles at full design loading shall be limited to 3% of the pole height. Computed dead load deflection of poles shall be limited to 2% of the pole height. Computed deflection of length of signal arms shall not exceed that listed in the Signal Arm Deflection table (000T DWG. #47230 & 47231). Additionally, the amplitude (maximum up to maximum down as measured at the tip of the arm) of wind induced vertical oscillations shall not exceed 1.5% of the signal arm length.

Luminare most arms and pole extensions to support luminare arms shall meet the requirements of Standard Drawing 25-232 which shall be welded into the pole prior to galvanizing. Poles may be tapered for up to 3/4" dia. UNF galvanized bolts after the pole has been galvanized.

The wall thickness of signal arms (and pieces below signal arm attachment) shall not be reduced except that material thicker than 3 gauge may be reduced to 3 gauge when permitted by design requirements.

Longitudinal seam welds within a distance equal to the pole top diameter of the top of the pole or within 6" of circumferential weld shall be complete penetration welds.

CITY OF SPRINGFIELD  
DEPT. OF PUBLIC WORKS  
TRANSPORTATION DIVISION  
225 FIFTH STREET  
SPRINGFIELD, OR. 97477  
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SIGNAL POLE  
FOUNDATION DETAIL

STANDARD  
DRAWING  
5-6

NO	REVISION	DATE	BY	APPR.
1	STD. DWG. 5-6	3/94	DRB	
2	DWG. REVISION	5/01	DRB	

BY: DRB DATE: 10/93  
DESIGNED: DRB  
CHECKED: DRB  
APPROVED: DRB  
FILENAME: TSD5\_6