

**NOTES:**

1. Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
2. Design shall comply with the requirements of the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 6th Edition (2013) with 2015 Interim Revisions.
3. All concrete shall be Class "S".
4. Reinforcing steel shall conform to ASTM Specification A615 (Grade 60).
5. Structural steel shall conform to ASTM Specification A36 unless noted otherwise.
6. Stresses:
 

Class "S" concrete	f'c= 3,500 psi
Grade 60 reinforcing steel	f's= 24,000 psi
7. All bolts shall conform to ASTM Specification F3125 Grade A325. All bolts, nuts, and washers shall be galvanized in accordance with the requirements of ASTM A153. All other steel shall be galvanized after fabrication in accordance with ASTM A123.
8. Welding of structural tubing shall conform to the requirements of the American Welding Society, Structural Welding Code, D1.1, latest Edition. All welding shall be continuous unless noted otherwise. All butt welds shall be full penetration using prequalified welding procedures and shall be tested by ultrasonic testing. All butt welds shall be ground flush, full width.
9. The column to base plate weld shall be tested by Magnetic Particle testing (MT).
10. All tubular structural frame pipes (step tapered) shall be seamless steel pipes, and shall conform to ASTM Specification A252, Grade 3, (latest edition).
11. Base plate and connection plates for step tapered poles shall conform to the latest edition of ASTM A36. Bell reducers shall conform to ASTM A252 Grade 3, (latest edition) and shall produce a finished appearance, after galvanizing which matches that of the tubular structural frame pipe ("Z" Series).
12. All tubular structural frame pipe (Tapered) shall be seamless steel pipe and shall conform to ASTM Specification A570, Grade 45, or A572, Grade 42 or A595, Grade "A" (latest edition).
13. Base plates and connection plates for Tapered shall conform to the latest edition of ASTM A572, Grade 55 or ASTM A633M, Grade E.
14. All luminaire supports shown have been designed for a wind velocity of 90 mph.
15. Material thicknesses shown are minimum. All material thicknesses shall conform to ASTM A6 requirements.
16. All poles have been designed to support two luminaire assemblies weighing not more than 55 lbs. each, and having an Equivalent Projected Area (EPA) that doesn't exceed 2.0 square Feet each.
17. Steel composition for tubular structural frame pipes shall have silicone content per the applicable ASTM Specification.
18. Signed and sealed shop drawings shall be submitted to the Engineer for review and approval prior to fabrication in accordance with the Standard Specifications, unless the manufacturer has been granted approval on the Department's most recently published Approved Product List (APL).
19. All dimensions not shown on the plans are dependent on the manufacturer's design, and shall be shown on the shop drawings.
20. Foundation depth shown is based on the assumption that this material has a density (w) of 110 lbs./cu.ft., and an angle of internal friction angle of 35 degrees. If the density (w) or the angle of internal friction is less than these values, then the engineer shall be notified and the shaft depth shall be adjusted appropriately.

**ANCHOR BOLT PLACEMENT NOTES:**

1. Holes in baseplate shall match holes in anchor plate with a tolerance of 1/16". Both items should preferably be drilled together so that deviations are minimal or zero.
2. Nuts above and below base plate and anchor plate shall be snug tight.
3. Both top and bottom surfaces of base plate shall be level so anchor bolts can fit properly
4. Base plate shall be set in horizontal plane with a tolerance of 1/8" in 10'-0" in two directions at right angles, and shall be securely held in position during concrete placement and vibration. Final acceptance of the completed foundation shall be subject to inspection and approval of the level-ness of these plates.

Note to Designer: The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Comments within the inner border line shall not be altered.

PRIOR DISTRIBUTION DATE

STANDARDS ENGINEER <b>A. ALZUBI</b> RECOMMENDED FOR APPROVAL GROUP MANAGER <b>M. HANNA</b>	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION <b>TRAFFIC SIGNAL &amp; LIGHTING</b> STANDARD DRAWING		DRAWING NO. T-SL 4.20
APPROVED STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION	TYPE U POLE (ROUND POLE WITH SQUARE BASE) NOTES	DATE 04/19	