

MATERIAL SPECIFICATIONS	
TAPERED TUBE	ASTM A595 GR A
PLATE	ASTM A36
BAR HANDHOLE FRAME	ASTM A529 GR 50 or ASTM A572 GR 50 or ASTM A500 GR B
HANDHOLE COVER	ASTM A1011 or A36
ANCHOR BOLTS	ASTM F1554 GR 55
ANCHOR BOLT NUTS	ASTM A563 GR A
FLAT WASHERS	ASTM F436
DTI WASHERS (ARM CONNECTION)	ASTM F959
DTI WASHERS (POLE CONNECTION)	ASTM F2437
CAN COVERS	ASTM B26 (319F or 356.0F)
ARM CONN. BOLTS	ASTM F3125 GRADE A325
ARM JOINT STUD	ASTM A36
"ANCO" LOCK NUTS	ASTM A563 GR DH
POLE TOP/ARM END CAP	ASTM B26 (356.0F) or A1011
PIPE	ASTM A500 GR B or A53 GR B
S.S. HARDWARE	AISI-300 SERIES (18-8)
STRUCTURE FINISH	H.D. GALV TO ASTM A123 & POWDER COAT BLACK
HARDWARE FINISH	H.D. GALV TO ASTM A153

DESIGN CRITERIA:

1. DESIGNED IN ACCORDANCE WITH 2013 AASHTO (APPENDIX C) "AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 6TH EDITION (LTS-6), 2013 WITH 2015 INTERIMS" FOR 80 MPH WIND ZONE.
2. DESIGNS Y1 THRU Y4 DO NOT REQUIRE FATIGUE STRESS CALCULATION FACTOR.
3. FOR POLES WITHOUT LUMINAIRE, THE HEIGHT OF POLE SHALL BE 2'-0" ABOVE THE TOP OF THE ARM CONNECTION PLATE.
4. ANCHOR BOLTS ANALYZED FOR STEEL STRENGTH ONLY. THE ANCHOR BOLT EMBEDMENT LENGTH SHOWN ON THIS DRAWING SHALL BE VERIFIED BY THE FOUNDATION ENGINEER.
5. THE EXPOSED LENGTH OF THE ANCHOR BOLT BETWEEN THE TOP OF THE FOUNDATION AND THE BOTTOM OF THE LEVELING NUT SHOULD NOT EXCEED ONE BOLT DIAMETER.
6. ALL WELDING SHALL BE IN ACCORDANCE WITH SECTIONS 1 THRU 8 OF THE AMERICAN WELDING SOCIETY (AWS) D1.1 STRUCTURAL WELDING CODE.
7. ASTM F959 GALVANIZED DTI WASHERS SHALL BE FURNISHED WITH HIGH STRENGTH BOLTS FOR MAST ARM CONNECTIONS. ASTM F2437 GALVANIZED DTI WASHERS SHALL BE FURNISHED WITH ANCHOR BOLTS FOR POLE BASE CONNECTIONS. CONTRACTOR TO PROVIDE PROPER DTI FEELER GAGES.
8. VIBRATION IS MORE LIKELY TO OCCUR WHEN STRUCTURES ARE INSTALLED WITHOUT ATTACHING THE SIGNALS AND OR SIGNS. THEREFORE, THE INTENDED EQUIPMENT OR DAMPENING DEVICES MUST BE INSTALLED AT THE TIME OF ERECTION. BECAUSE VIBRATION IS GENERALLY UNPREDICTABLE, A MAINTENANCE PROGRAM SHOULD INCLUDE INSPECTION FOR INDICATIONS OF EXCESSIVE VIBRATION OR FATIGUE AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING.
9. CUSTOMER TO CONFIRM ALL DIMENSIONS & ORIENTATIONS BEFORE RELEASING ORDER FOR MANUFACTURING.

NON-ORNAMENTAL POLE DESIGN CRITERIA

1 01/31/2019

REVISION & DATE



ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAWING NO.
62-01