I. MATERIALS

THE ALUMINUM POLES SHALL BE AS FOLLOWS:

THE STREET LIGHT POLE SHALL CONSIST OF A ROUND, TAPERED, SPUN ALUMINUM SHAFT HAVING A BASE WELDED TO THE LOWER END AND COMPLETE WITH ANCHOR BOLTS, TRANSFORMER BASE AND BRACKET AS SPECIFIED AND WITH A POLE TOP. THE COMPLETE UNIT SHALL BE DESIGNED FOR WIND LOADING OF AT LEAST 80 MPH 1.3 GUST PER AASHO 1964.


EACH BASE SHALL BE PROVIDED WITH FOUR (4) LOOSE BEARING PLATES AND NUTS TO FASTEN THE BASE DOWN TO THE ANCHOR BOLTS. THE TRANSFORMER BASE SHALL FASTEN TO THE SHAFT ANCHOR BASE BY MEANS OF FOUR (4) LOOSE BEARING PLATES AND FOUR (4) HOT DIPPED GALVANIZED HEX HEAD STEEL MACHINE BOLTS AND NUTS. ALL BEARING PLATES SHALL BE HOT DIPPED GALVANIZED.

A 1/2"-13 UNC TAPPED HOLE SHALL BE PROVIDED FOR THE GROUNDING LUG. THE SHAFT SHALL HAVE NO LONGITUDINAL OR CIRCUMFERENTIAL WELDS EXCEPT AT THE LOWER END JOINING THE SHAFT TO THE BASE AND SHALL BE 8" X 4.5" X 356" AND BE 6063 ALLOY T-6 WITH MINIMUM WALL THICKNESS 0.186".

AN OPENING SHALL BE FURNISHED NEAR THE TOP OF THE SHAFT TO PROVIDE A CABLE ENTRANCE FROM THE SHAFT INTO THE BRACKET ARM. A SPECIAL CAST ADAPTER SHALL BE WELDED INTO THIS OPENING, PROVIDING A SMOOTH CABLE GUIDE FOR WIRING AND A SUPPORT FOR THE ATTACHING PLATE WHICH IS WELDED TO THE BRACKET ARM. THE TOP OF THE SHAFT SHALL BE EQUIPPED WITH A CAST ALUMINUM REMOVABLE POLE TOP HELD SECURELY IN PLACE BY MEANS OF SET SCREWS.


THE BRACKET ARM SHALL INCORPORATE A 2" PIPE SIZE SLIP FITTER TENON AT LEAST 6" LONG.

FOUR (4) 1"X36" CABLE RINGS, HOT DIPPED GALVANIZED, HOOKED STEEL ANCHOR BOLTS, FITTED WITH A HEX NUT, SHALL BE FURNISHED WITH THE POLES. EACH ANCHOR BOLT BE THREADED AT THE TOP END, THREADED ENDS AND ALL NUTS SHALL BE GALVANIZED. ANCHOR BOLTS SHALL ALL BE CAPABLE OF RESISTING AT YIELD STRENGTH STRESS THE BENDING MOVEMENT OF THE SHAFT AT ITS YIELD STRENGTH STRESS.

ALL HARDWARE (BOLTS, NUTS AND WASHERS—BUT NOT INCLUDING ANCHOR BOLTS) NOT OTHERWISE SPECIFICALLY DESIGNATED IN THIS SPECIFICATION, SHALL BE ALUMINUM OR STAINLESS STEEL (AT THE OPTION OF THE SUPPLIER).