# ALUMINUM LIGHT POLE WITH 14" TENON & FLOOD LIGHT MOUNTING HARDWARE

## I. Quantity

The base bid shall be for the indicated number of aluminum poles furnished and erected as hereinafter specified at locations shown on the drawings.

### II. Material

The aluminum pole shall be as follows: The shaft shall be a one piece, round, tapered aluminum tube, satin ground, having the base welded to the lower end and complete with bolts, aluminum transformer base, and 2" diameter by 14" long horizontal tenon near the top of the shaft for side mounting a rectangular lighting fixture.

Located 5' below the top of the pole, there shall be three-2" half conduit couplings at 90 degrees and shall include pipe plug(s). The center coupling shall be located opposite the horizontal tenon. The complete unit shall be designed for wind loading of 101 miles per hour, the shaft shall have no longitudinal or circumferential welds except at he lower end joining the shaft to the base. The shaft shall be 8"x4.5" x approximately 28' with minimum wall thickness of 0.188 inches. The shaft shall have a true continuous taper except for the bottom sections which may be straight. No more than 40 per cent of the total shaft shall be straight. 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 pole shall be furnished with a two piece base cover. The pole shall be supplied with number indicated (one, two, three) flood light mounting brackets. The L shaped brackets shall be constructed from 2" schedule 40 Aluminum pipe. The center of the flood light tenon shall be located 18" from the outside of the pole.

The aluminum transformer base shall be 20" high, 13-3/4" square at the base and 13-1/8" square at the top to fit 15" bolt circle. The door opening in the base shall be approximately 8-3/4" x 9-1/4" x 13" and the door shall be attached to the base with a stainless steel piano hinge. The hinge shall be placed at the top of the door and attached to the base and the taper resistant fastener at the bottom. Each base shall be provided with four (4) loose bearing plates and nuts to fasten the base to the down to the anchor bolts. The transformer base shall fasten to the shaft anchor base by four (4) loose bearing plates and four (4) hot plates shall be hot dipped galvanized. A 1/4"-20 NC and 1/2"-13 NC tapped hole shall be provided for a grounding lug.

## 9/92 MIS-74

Four (4) high-strength, hot dipped 1"8 NC galvanized, steel anchor bolts, each fitted with a hex nut, shall be furnished with the pole, each anchor bolt shall have an "L" bend at the bottom end and be threaded at the top end. Threaded ends and all nuts shall be galvanized. Anchor bolts shall 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). Pole shafts and tenons shall be tire-wrapped with a heavy water resistant paper for protection during shipment and installation.

The complete pole shall be Hapco-Division of Kearny National, Inc. 29'-8" lighting pole as per drawing No. B69253, or approved equal in design, quality and performance.

All aluminum surfaces, on the pole, and base cover shall be treated with an alodyne etch, washed, primed and finished with a dark bronze acrylic enamel (DuPont Paint No. 449959) both the prime coat and final finish shall be baked on at 350 degrees for a period of 20 minutes.

### III. Installation

The poles and bases shall be set on the foundation securely anchored to the anchor rods so that the T base door is opposite the curb. Bases shall be properly plumbed by means of shims.

#### IV. Quotation

The aluminum poles furnished and erected as herein specified shall be quoted as a unit price each in the appropriate place in this proposal.

9/92 MIS-74