ALUMINUM POLE - "SHORT NORTH" STYLE

I. Quantity

The base bid shall include the number of aluminum poles indicated, furnished and installed as specified.

II. Material

a. Pole - The pole shall be as shown on DOE Drawing Number 01S0074. The pole shall have two (2) extruded rectangular aluminum arms at 180 degrees. Each arm shall have an extruded aluminum fixture mount and tenon to accept the luminaire.

All aluminum surfaces on the pole and base cover shall be rotary sanded to a satin ground finish and brackets shall be etched to a matte finish. Shafts and brackets shall be treated with an alcohol-phosphoric acid solution at 70°F for approximately five minutes followed by a cold water rinse. The shafts, bracket, and base shall be finished dark bronze (color specification #B73737-030). The finish shall be an electrostatically applied polyester or urethane powder coat, oven cured and bonded at approximately 400°F, to a dry film thickness of 2-4 mils.

The door shall be tethered to the pole by means of a 1/4" stainless steel cable.

All screw and bolt heads shall be counter sunk.

The pole shall include all hardware, bolts, etc., as necessary for complete installation on the foundation. Anchor nuts and shims shall be dipped galvanized steel. All other hardware and miscellaneous metal parts shall be aluminum or stainless steel.

The pole shall be tire wrapped with heavy paper to protect the finish during shipment and installation.

The pole shall be HAPCO #66882 SN or approved equal.

b. Luminaire - The luminaire shall be as specified in the specification titled 70w HPS luminaire spherical.

c. "Y" Connector Kit - The fused "Y" connector kit shall be Elastimold Style 82,
HOMAC FYU-M or approved equal with a 5 amp current limiting type fuse.

d. "In-Line" Connector Kit - The fused in-line connector kit shall be Elastimold Style 62, HOMAC SLK-M or approved equal with 1.5 amp current limiting type fuse.

e. Wire - The riser wire shall be stranded copper, cross-linked polyethylene insulation, 600 volt, Type XHHW, #10 AWG and may at the contractor's option be one or two conductor.

f. Connectors Kit (unfused) - The unfused "Y" connectors shall be Elastimold Style 83, HOMAC DYU-M connectors, or approved equal.

g. Transformer - The 0.5 KVA transformer shall be 240/480 volt primary, 120/240 volt secondary 60 Hertz, Type EP, 80 degrees Celsius rise suitable for outdoor installation. The maximum size of the transformer shall be 7 1/16" H x 4 7/8" W x 4 5/8" D. The transformer shall be Westinghouse S20N11S51M or approved equal.

h. Connectors - All other connectors shall be compression type. Burndy or approved equal.

III. Installation

The poles shall be placed on the concrete foundation with sufficient care to preserve the exterior finish of the pole and the surface of the foundation. The pole shall be plumbed and tightened as shown on the drawings and indicated in the field by the engineer.

The pole shall be wired as shown on DOE Drawing Number 01S0075.

The luminaires shall be installed on the poles as shown on the drawings and indicated in the field by the engineer. Orientation and leveling of the units shall be so as to provide for uniform appearance, maximum lighting efficiency and ease of maintenance, as directed by the engineer.

IV. Quotation

The complete "Short North" style pole shall be quoted as a unit price each in the appropriate place of this document.
ALL ALUMINUM TUBES SHALL BE FABRICATED FROM ALLOY 6063 T-6.
ALL EXPOSED METAL SHALL BE SATIN GROUND FINISHED W/DARK BRONZE ACRYLIC ENAMEL PAINT.

3" DIA. TUBE .125" WALL

FLUSH REMOVABLE CAST CAPS WITH S.S. SCREWS

1 3/4" x 4" ALUM. TUBE WITH .125" WALL THICKNESS,
(2 OR 4 AS SPECIFIED)
WITH RIVNUTS FOR 1/2" N.C. S.S. INTERNAL ATTACH HARDWARE.

1" DIA. HOLE
4 @ 90°

9/16" DIA. HOLES
4 @ 90°

5" DIA. ALUMINUM TUBE .188" WALL

5/16" DRILL, CSK 1/2" DIA. 4 1/2" DIA. TUBE x 1/2" L.A.
188" WALL

TRANSFORMER BASE ALUMINUM WITH DOOR AND SIX S.S. PHILLIPS OVAL HEAD SCREWS
(DOOR OPENING: 5 3/4" x 21")

9" DIA.

BOLT CIRCLE

6" DIA. HOLE

3/4" 10 NC. GALV. STEEL ANCHOR BOLTS WITH NUTS & WASHERS
4 REQ'D.