LAK-2-0.02

NOTES

GENERAL

DETAILS OF THIS SHEET SHALL APPLY TO EACH OVERHEAD SIGN STRUCTURE TO SUPPORT EXTERNALLY ILLUMINATED SIGNS.

SERVICE

ELECTRIC SERVICE SHALL ENTER THROUGH A 2" GALVANIZED RIGID STEEL CONDUIT INSTALLED IN STRUCTURE FOUNDATION AS PER DETAIL. SIGN SERVICE OR CIRCUITRY SHALL BE CONTROLLED AS REQUIRED BY THE SYSTEM DESIGN AT THE PRIMARY SOURCE.

SERVICE CONDUCTORS SHALL BE THE SIZE AND TYPE AS SPECIFIED.

COMBINATION SWITCH AND TRANSFORMER

(TYPE Y OR Z ENCLOSURE REQUIRED AS PER SCHEDULE ON THIS SHEET)

THIS COMBINATION SHALL BE A 30 OR 60 AMPERE 600 VOLT SWITCH WITH A .25 TO 3.0 KVA TRANSFORMER. THE COMBINATION AND ENCLOSURE SHALL BE AS SQUARE D CLASS 9421, COLUMBUS ELECTRIC WORKS CLASS 101, PANALS INCORPORATED-CLASS 9400, OR APPROVED EQUAL.

TRANSFORMER

THE TRANSFORMER SHALL BE DRY TYPE SINGLE FACE 240/480 VOLT PRIMARY 120/240 VOLT SECONDARY, THE TYPE AND CAPACITY AS SPECIFIED IN DETAILED SCHEDULE ON THIS SHEET.

ENCLOSURE

THE ENCLOSURE SHALL BE NEMA *4 WATER TIGHT .063 GAGE STAINLESS STEEL ASTA 302-303. A DISCONNECT HANDLE SHALL BE FLANGE MOUNTED AND CAPABLE OF BEING LOCKED IN EITHER POSITION. THE ENCLOSURE SHALL BE EQUIPPED WITH A DOOR LOCKING MECHANISM WITH A DEFEATER THAT NECESSITATES TWO HANDS TO OPERATE MECHANISM WITH THE SWITCH IN OFF POSITION. SPACE FOR A 2" INSULATED CHASE NIPPLE SHALL BE PROVIDED APPROXIMATELY 2 1/4" ABOVE THE CENTER LINE OF THE LOWER MOUNTING SLOT. THIS ENCLOSURE AND STRUCTURE SHALL BE FIELD DRILLED AND TAPPED FOR THE REQUIRED NIPPLE AS SHOWN ON THE DETAIL ON THIS SHEET.

THIS ENCLOSURE SHALL BE FLANGE MOUNTED ON BRACKETS WITH 5/6-18×3/4" HEX HEAD CADMIUM PLATED MACHINE BOLTS. ENCLOSURES SHALL BE TYPE Y OR Z AS SPECIFIED AND DIMENSIONED ON THIS SHEET.

ENCLOSURE MOUNTING BRACKET

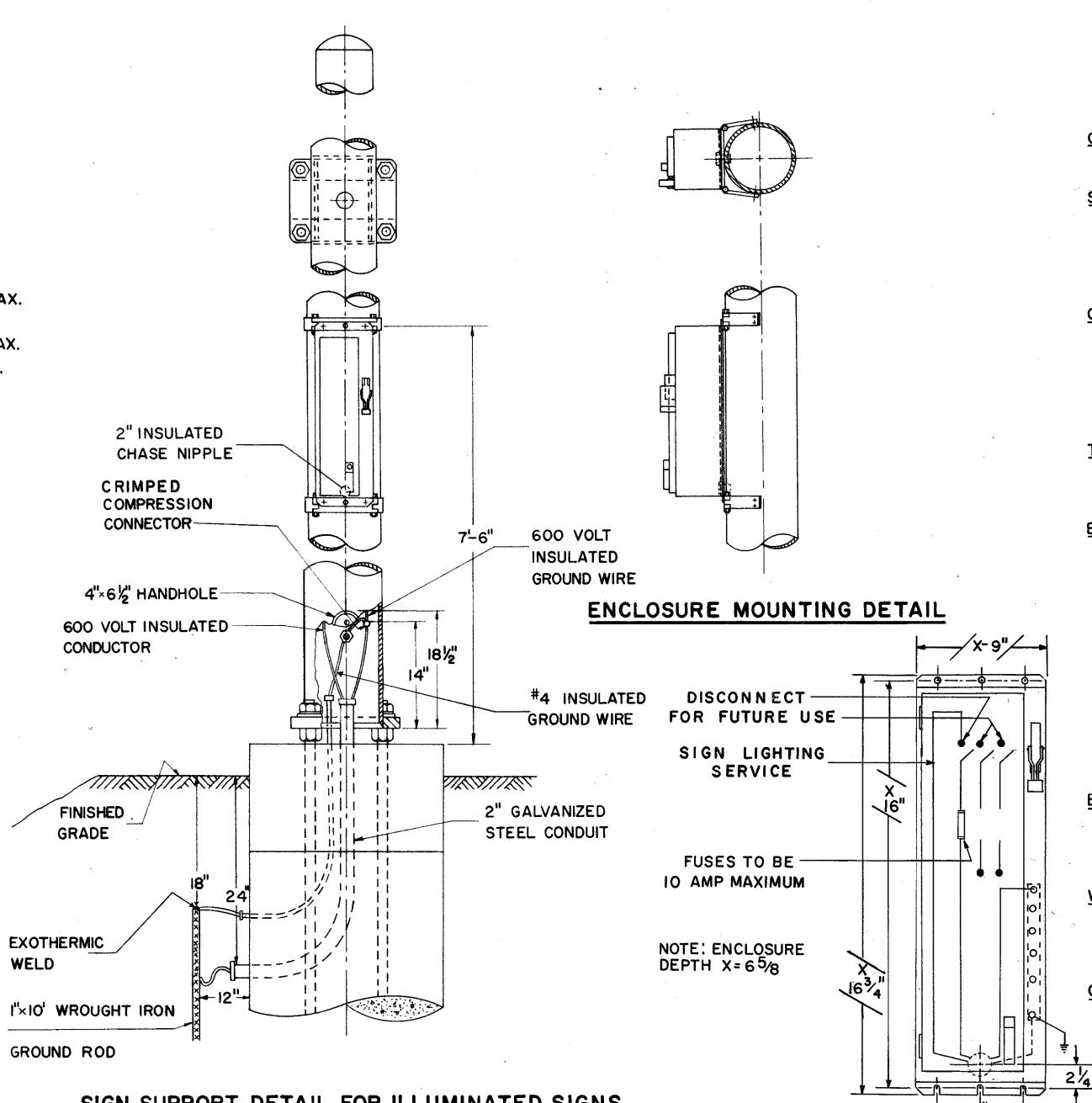
THE ENCLOSURE MOUNTING BRACKET SHALL BE FABRICATED THEN GALVANIZED BEFORE ASSEMBLY, THE BRACKET SHALL BE FIELD MOUNTED WITH 5/6 HEX HEAD SELF TAPPING CADMIUM PLATED SCREWS. THE SIGN SUPPORT SHALL BE FIELD DRILLED, AS PER DETAIL.

WIRE AND CABLE

ALL WIRE AND CABLE UP TO AND INCLUDING *4 SHALL COMPLY WITH FAA TYPE A SPECIFICATIONS. *2 OR LARGER WIRE OR CABLE SHALL BE G.E. 58006 OR ANACONDA AP-10711, OR EQUAL. ALL WIRE AND CABLE SHALL BE 600 VOLT.

GROUNDING

EACH SIGN SUPPORT OR STRUCTURE SHALL BE GROUNDED WITH A #4 RUBBER INSULATION AND NEOPRENE JACKETED CONDUCTOR. THE GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE SWITCH THEN TO THE COMPRESSION CONNECTOR IN THE SIGN SUPPORT THEN TO A I"XIO" WROUGHT IRON GROUND ROD, GROUND CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO GROUND ROD AND THEN TAPED WITH PLASTIC ELECTRICAL TAPE AT EACH EXPOSED PORTION OF CONDUCTOR. THE WELDED CONNECTION AND TAPED PORTION SHALL BE PAINTED 2 COATS OF INSULATING ENAMEL.



SIGN SUPPORT DETAIL FOR ILLUMINATED SIGNS

INSULATED CHASE NIPPLE POLE WALL, FIELD DRILLED & TAPPED STEEL LOCK--FIBER WASHER -STEEL LOCK NUT BACK WALL OF SWITCH

INSULATED CHASE NIPPLE ASSEMBLY DETAIL

AS MANUFACTURED BY THOMAS BETTS, APPELTON, STEEL CITY, OR EQUAL.

TRANSFORMERS

TYPICAL ENCLOSURE DETAIL
120 VOLT SIGN LIGHTING SERVICE

TYPE	MANUFACTURERS		OUTPUT	SWITCH
	G.E.	JEFFERSON	K.V.A.	TRANSFORMER ENCLOSURE
1	9T51Y7	244-241	.25	Y
11,	9T51Y8	244 — 251	.50	Y
Ш	975179	244-261	.75	Y
IV	9T51Y10	244-401-100	1.00	Z
٧	9T5!Y!I	244-411-100	1.50	Z
VI	9T51Y12	244-421-100	2,00	Z
VII	9T51Y13	244 431	3.00	Z

BUREAU OF TRAFFIC OHIO DEPARTMENT OF HIGHWAYS

ELECTRICAL SIGN SERVICE DETAILS 480 VOLT SYSTEM

ES-3A

DATE

APPROVED_ ENGINEER OF TRAFFIC

ENCLOSURE MOUNTING BRACKET

+-- PART A

PART A

— •• — - — •• — - — • —

TYPICAL ENCLOSURE DETAIL

480 VOLT SIGN LIGHTING SERVICE

DISCONNECT

NO. 12 RHW TO

LIGHT OUTLET-

2-HOLES

FORMED HINGE TO BE SNUG

PART B

5/8×21/2" HEX HEAD MACHINE BOLT AND

HEX SELF LOCKING NUT (CADMIUM PLATED)

FIT ON %" BOLT

SIGN LIGHTING SERVICE

FUSES: TO BE 5 AMP. MAX.

TO 2 KVA AND IO AMP. MAX.

FOR TRANSFORMERS UP

FOR 3 KVA TRANSFORMER.

NOTE: ENCLOSURE DEPTH

3/16×2" BAR STOCK

-ENCLOSURE

-7 1/6 -

Y= 7½" Z=8¾"

WELD

TRANSFORMER

SIZE AS NOTED

FOR FUTURE USE