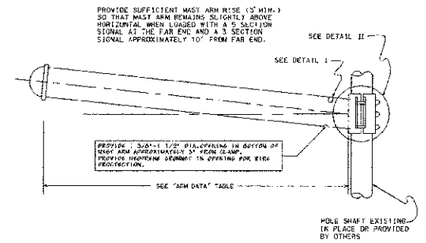
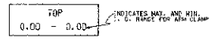


ARM DATA

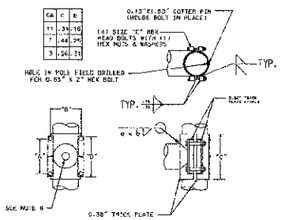
CLAMP RANGE (INCHES)	POLE END (INCHES)	SIGNAL END (INCHES)	LENGTH (FEET)	GAUGE	WEIGHT (POUNDS)	TEST LOAD (POUNDS)	MAX. DEFLECTION (INCHES)
7.45-7.95	7.0	4.76	16	7	241	1700	4.5
7.45-7.95	7.0	4.23	25	7	274	1300	12.0
7.45-7.95	7.0	3.74	26	7	315	1090	24.0
8.45-8.95	8.0	3.40	30	7	409	1100	29.0
9.95-10.45	9.0	4.10	31	7	529	1900	30.0
9.95-10.45	9.0	3.42	49	7	959	1090	52.0
9.95-10.45	10.0	3.84	44	7		1900	97.0

NOTES:

1. TRAFFIC SIGNAL ARM SHAFT ASTM DESIGNATION: A595 GRADE C, 60,000 PSI MINIMUM YIELD STRENGH WITH A LINEAR TAPER =0.14"/FT.
2. TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 SET SCREWS AND 1 THRU ARM END BOLT. (PLATED HARDWARE)
3. ALL THREADED FASTENERS TO BE GALVANIZED TO ASTM DESINATION: A153
4. ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
5. ALL ARM END CAPS AND ARM CLAMPS TO BE FULLY ASSEMBLED AND ATTACHED TO THE ARM PRIOR TO SHIPPING.
6. ARM ASSEMBLY TO BE DEGREASED; CLEANED; CHEMICALLY PRETREATED; GIVEN AN EXTERIOR THERMOSETTING POLYESTER POWDER COAT; AND AN INTERIOR THERMOPLASTIC HYDROCARBON RESIN POWDER COAT. ALL PAINTING TO BE IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 5, "PAINTING".
7. MAST ARM SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 9 WITH TEST VALUES AS SHOWN ON THE "ARM DATA" TABLE.
8. HOLE IN CLAMP TO BE 4.0" MIN. I.D. HOLE TO BE GROUND SMOOTH AND DEBURRED TO PROVIDE A SMOOTH WIRE ENTRY FROM POLE TO MAST ARM.



DETAIL I
I. D. TAG



CA	C	B
11	3¾	16
7	4¾	24
3	5½	31

DETAIL II
ARM ATTACHMENT

SIGNAL ARM ATTACHMENT DATA

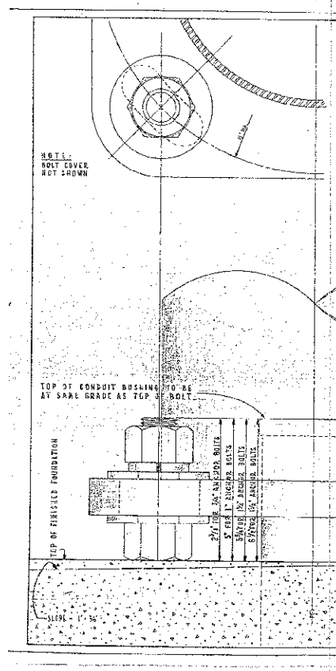
CLAMP RANGE	"A"	"B"	"C"	"D"	"E"
7.45" - 7.95"	7.25"	9.92"	10.80"	10.92"	1.00" X 7.50"
8.45" - 8.95"	9.00"	10.66"	13.06"	12.50"	1.00" X 8.00"
9.95" - 10.45"	10.25"	12.66"	15.33"	13.50"	1.25" X 8.50"

STEEL TRAFFIC SIGNAL MAST ARM-MONOTUBE

CITY OF CHICAGO

R.IVY	ROBERT CARTER	RON POOL

870



INSTALLATION NOTES

STEP 1 COAT EXPOSED PORTION OF ANCHOR BOLTS WITH APPROVED ANTI RUSTING GREASE ("NO-OX" OR EQUAL).

STEP 2 ERECTOR TO PER LEVELING NUTS & WASHERS, SET AT PROPER GRADE WITH HIGH LEVEL NUT TABLE FOR APPROPRIATE DIMENSIONS.

STEP 3 MOUNT POLE OR PEDESTAL, ATTACH TOP WASHERS & NUTS HAND TIGHT.

STEP 4 PLUMB POLE OR PEDESTAL SHIM AS NECESSARY. ATTACH MASTARM, STREET LIGHTS, TRAFFIC SIGNALS & SERVICE APPURTENANCES AS ATTACHED TO POLE & TIGHTEN ALL NUTS.

STEP 5 ATTACH NUT COVERS WHERE REQUIRED.

STEP 6 DO NOT GROUT IN SPACE BETWEEN BOTTOM OF POLE & TOP OF FOUNDATION. TOP OF FOUNDATION OR SURFACE OF SIDEWALK MUST BE FREE CLEAN AND SMOOTH.

STEP 7 POLE OR PEDESTAL IS TO BE PERPENDICULAR PLUMB, NO "CANT" IS TO BE USED.

IF NECESSARY: ANCHOR BOLT TO BE TRIMMED WITH SAW DO NOT SHEAR AS THIS PRACTICALLY RUINS THE THREADS AT UPPER END OF BOLT.

COAT ANCHOR BOLT WITH RUST-OLEUM HARD WAX ZINC RICH COMPOUND.

TABLE

	ANCHOR BOLT SIZE						
	1"	1 1/4"	1 3/4"				
	POLE GAUGES						BUSH. REQ.
	7 ga.	5 ga.	7 ga.	5 ga.	7 ga.	5 ga.	
A	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	7/8"	3/4"
B	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	3/4"
C	3/4"	1/4"	5/16"	5/16"	1/16"	3/4"	3/16"
D	5/16"	5/16"	1/4"	1/4"	1/4"	1/4"	3/16"
E	1"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	5/16"

CONSTRUCTION METHOD FOR "DOUBLE-NUT" INSTALLATION OF POLES AND PEDESTALS

CITY OF CHICAGO

837

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOE STANDARDS

SCALE: NTS | SHEET NO. 9 OF 12 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2865	10-B5159-00-TL	COOK	62	47
		CONTRACT NO. 63715		
	ILLINOIS FED. AID PROJECT			