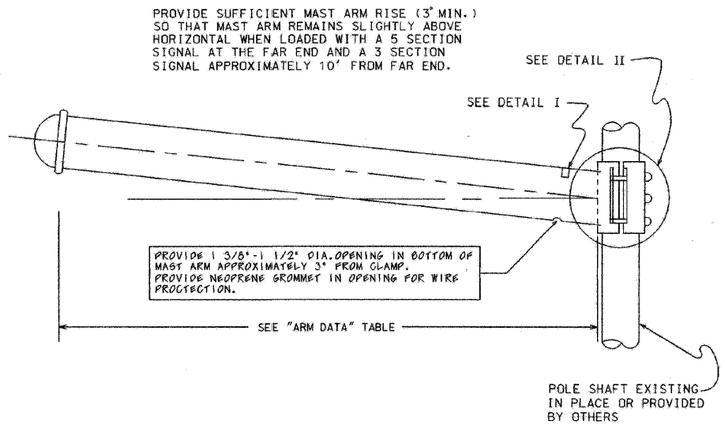
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2021.1B-R	COOK	101	049
STA.	TO STA.			
FED. ROAD DIST. NO. :	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62532



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	6.5
7.45-7.95	7.0	4.20	20	7	274	1300	12.0
7.45-7.95	7.0	3.36	26	7	315	1000	24.0
8.45-8.95	8.0	3.80	30	7	409	1100	29.0
9.95-10.45	9.0	4.10	35	7	529	1200	36.0
9.95-10.45	9.0	3.40	40	7	559	1000	52.0
9.95-10.45	10.0	3.84	44	7		1200	57.0

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 8, "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.). HOLE TO BE GROUND SMOOTH AND DEBURRED TO PROVIDE A SMOOTH WIRE ENTRY FROM POLE TO MAST ARM.

TOP
0.00 - 0.00

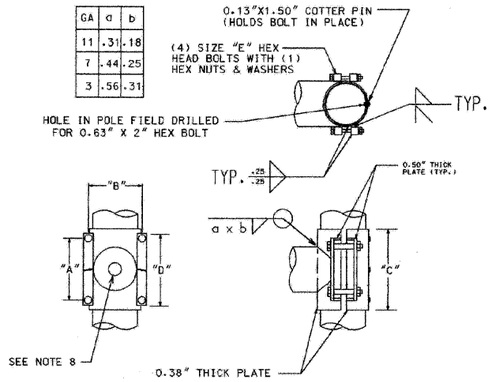
INDICATES MAX. AND MIN. I. D. RANGE FOR ARM CLAMP

I. D. TAG TO BE MOUNTED ON THE TOP OF THE POLE AS INDICATED. USING 2 "GRIP-NAIL" FASTENERS.

DETAIL I

I. D. TAG

GA	a	b
11	.31	.18
7	.44	.25
3	.56	.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"	10.32"	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"	15.30"	13.50"	1.25" X 8.50"

B	10-29-02	REFERENCES SPEC. 1454
A	8-6-93	WIRE OPENING ON MAST ARM
DATE	REVISION	

SUPERSEDES DWG. DATED DEC. 1991

STEEL TRAFFIC SIGNAL MAST ARM-MONOTUBE

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

DRAFTSMAN:	CHIEF DRAFTSMAN:	ENGINEERS:
R. IVY	ROBERT CARTER	RON POOL

SUPERVISING ENGINEER: ELECTRICAL ENGINEER

ENGINEER OF ELECTRICAL OPERATIONS

GEN'L SUPT. OF ELECTRICITY

DEPUTY COMMISSIONER:

870

SIZE: 16" 22" SCALE: DATE: DEC. 1991

ES-13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
111TH STREET OVER
F.A.I ROUTE 57 (INTERSTATE 57)

ELECTRICAL STANDARD DETAILS

SCALE: DRAWN BY: N/A

DATE: 01/16/09 CHECKED BY: N/A

TENG

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE: 312/616-0000

..\WITH ST BORDER.DGN
1-16-2009, 8:48:50 T:\DOCUMENTS\0308DGN\CIVIL\DGN\EXHIBIT#9.DGN
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
HECHTER