

PROVIDE 1 3/8" - 1 1/2" DIA. OPENING IN BOTTOM OF MAST ARM APPROXIMATELY 3" FROM CLAMP. PROVIDE NEOPRENE GROMMET IN OPENING FOR WIRE PROTECTION.

SEE "ARM DATA" TABLE

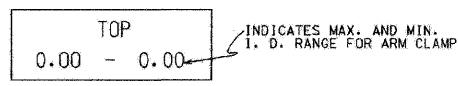
POLE SHAFT EXISTING IN PLACE OR PROVIDED BY OTHERS

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

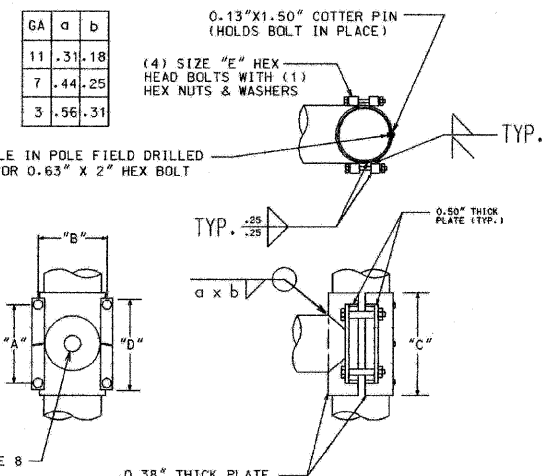
NOTES:

- TRAFFIC SIGNAL ARM SHAFT ASTM DESIGNATION: A595 GRADE C, 60,000 PSI MINIMUM YIELD STRENGTH WITH A LINEAR TAPER -0.14"/FT.
- TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 SET SCREWS AND 1 THRU ARM END BOLT. (PLATED HARDWARE)
- ALL THREADED FASTENERS TO BE GALVANIZED TO ASTM DESIGNATION: A153
- ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
- ALL ARM END CAPS AND ARM CLAMPS TO BE FULLY ASSEMBLED AND ATTACHED TO THE ARM PRIOR TO SHIPPING.
- 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".
- MAST ARM SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 9 WITH TEST VALUES AS SHOWN ON THE "ARM DATA" TABLE.
- 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.



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

DETAIL I
I. D. TAG



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: R. IVY	CHIEF DRAFTSMAN: ROBERT CARTER	ENGINEER: RON POOL
SUPERVISING ENGINEER	ELECTRICAL ENGR.	
ENGINEER IN CHARGE <i>[Signature]</i>		870
DEPUTY COMM. ENGINEER <i>[Signature]</i>		
SCALE: 1/8"	SCALE: 1/8"	DATE: DEC. 1991

112TH ST BORBER.DWG
 1 5 0009 186635
 T:\DOWNS\MENT\950860\112TH ST BORBER.DWG
 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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
112TH PLACE OVER
F.A.I ROUTE 57 (INTERSTATE 57)

ELECTRICAL STANDARD DETAILS

SCALE: DATE: 10/16/09 DRAWN BY: N/A CHECKED BY: N/A

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