

ROUND TAPERED STEEL MAST ARM	
MAST ARM LENGTH	* MAST ARM DIMENSIONS
20'-0"	0.2500"-8.00" x 5.20" x 20'-0"
25'-0"	0.2500"-8.00" x 4.50" x 25'-0"
30'-0"	0.2500"-8.00" x 3.80" x 30'-0"
35'-0"	0.2500"-9.00" x 4.10" x 35'-0"
40'-0"	0.2500"-11.00" x 5.40" x 40'-0"
45'-0"	0.3125"-11.0" x 8.66" x 16'-9" 0.1793"- ** x 5.10" x **
50'-0"	0.3125"-11.0" x 8.66" x 16'-9" 0.1793"-9.30" x 4.40" x 35'-0"

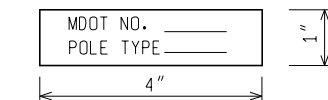
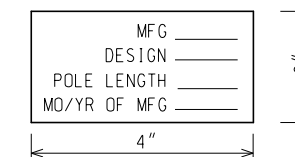
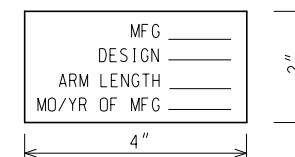
ROUND TAPERED STEEL MAST ARM POLE	
* POLE DIMENSIONS	LUMINAIRE ARM SPAN
0.3125"-14.00" x 11.06" x 21'-0"	6'-0"
0.3125"-14.00" x 9.80" x 30'-0"	8'-0"
0.3125"-14.00" x 8.96" x 36'-0"	10'-0"
0.3125"-14.00" x 8.40" x 40'-0"	24'-0"

POLE TUBE TAPER IS 0.140 IN/FT
* DIAMETERS GIVEN ARE O.D.

MAST ARM TUBE TAPER IS 0.140 IN/FT
* DIAMETERS GIVEN ARE O.D.
** TO BE DETERMINED BY CONTRACTOR BASED ON REQUIRED MAST ARM LENGTH AND TELESCOPIC SPLICE LENGTH.

NOTES:

1. THE DESIGN OF THIS STRUCTURE IS BASED ON THE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRE AND TRAFFIC SIGNALS FOR 90 MPH WIND LOAD AND CATEGORY III WITH GALLOPING, NATURAL WIND GUSTS, AND TRUCK INDUCED FATIGUE LOADS.
2. WELD THE LONGITUDINAL ARM SEAM ON THE INBOARD AND OUTBOARD SECTIONS OF THE TELESCOPIC FIELD SPLICE WITH A COMPLETE JOINT PENETRATION (CJP) WELD A MINIMUM OF 36 INCHES LONG. IN ADDITION, LONGITUDINAL SEAM WELDS MUST BE CJP FOR A MINIMUM OF 6 INCHES FROM TUBE TO PLATE CJP WELDS.
3. SEAM WELDS MUST BE 90° ± FROM HAND HOLE AT BASE.
4. LUMINAIRE ARM IS 11 GAUGE ROUND STEEL WITH 0.140 INCH PER FOOT TAPER.
5. BACKING BAR FOR PIPE TO BASE PLATE (P) AND MAST ARM TO MAST ARM PLATE MUST BE MINIMUM 5/16 INCH X 2 INCH PLATE.
6. 1/2 INCH DIAMETER (Ø) ROUND STOCK C-HOOK ATTACHED TO ALL POLE SIZES. 3/4 INCH SCHEDULE (SCH.) 40 PIPE ATTACHED TO ALL POLE SIZES AND INBOARD AND OUTBOARD ARM.
7. S.S. DENOTES STAINLESS STEEL. GA. DENOTES GAUGE. O.D. DENOTES OUTSIDE DIAMETER. I.D. DENOTES INSIDE DIAMETER. H.S. DENOTES HIGH STRENGTH.



ARM/POLE S.S. ID TAG DETAIL

TO BE ATTACHED TO POLE OR MAST ARM AT LOCATIONS SHOWN 4" FROM BASE OF TUBE BELOW HANDHOLE WITH (4) #8 X 3/8" S.S. TYPE U DRIVE SCREWS. (LETTERS STAMPED IN 3/8" CHARACTERS)

BASE S.S. ID TAG DETAIL

WELD TAG TO EDGE OF BASE P (LETTERS STAMPED IN 3/8" CHARACTERS)

NOT TO SCALE

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<p>PREPARED BY TRAFFIC AND SAFETY</p> <p>DRAWN BY:</p> <p>CHECKED BY:</p>	<p>ENGINEER OF DELIVERY</p> <p>ENGINEER OF DEVELOPMENT</p> <p>(SPECIAL DETAIL)</p> <p>FHWA APPROVAL DATE</p>	<p>MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR</p> <p>TRAFFIC SIGNAL MAST ARM POLE AND MAST ARM DETAILS - CATEGORY III</p> <p>SIG-032-B</p> <p>SHEET 1 of 6</p>
	<p>PLAN DATE</p>	<p>SHEET 1 of 6</p>

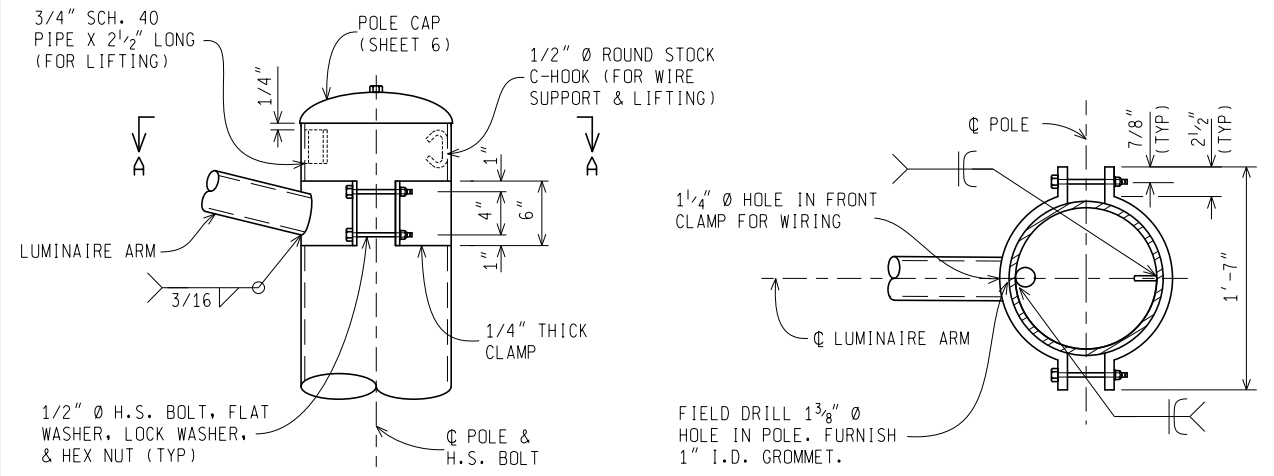
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<p>MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN</p> <p>File: RefDoc/TR/Signals/Web/Sp Det/FIn/SIG032B.dgn Rev. 11/05/18</p>	<p>FHWA APPROVAL DATE</p>	<p>PLAN DATE</p>	<p>SIG-032-B</p>	<p>SHEET 2 of 6</p>
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AS-LET PLAN REVISIONS							
NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION

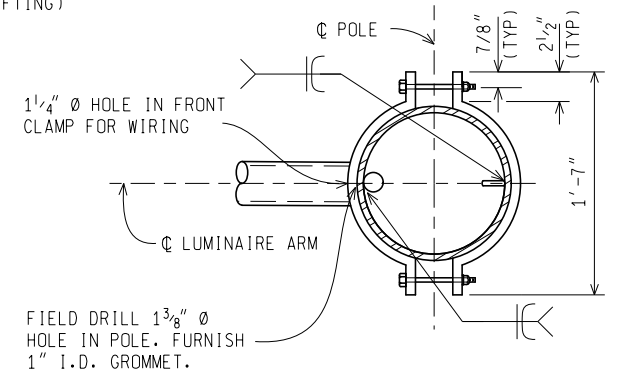


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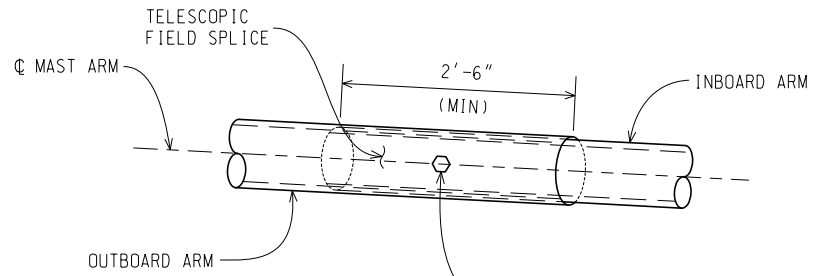


DETAIL A

ORIENTATION OF SCH. 40 PIPE 180° FROM HAND HOLE AT BASE & C-HOOK 180° FROM SCH. 40 PIPE

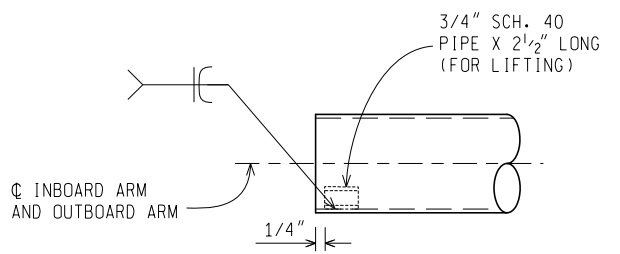


SECTION A-A



DETAIL B

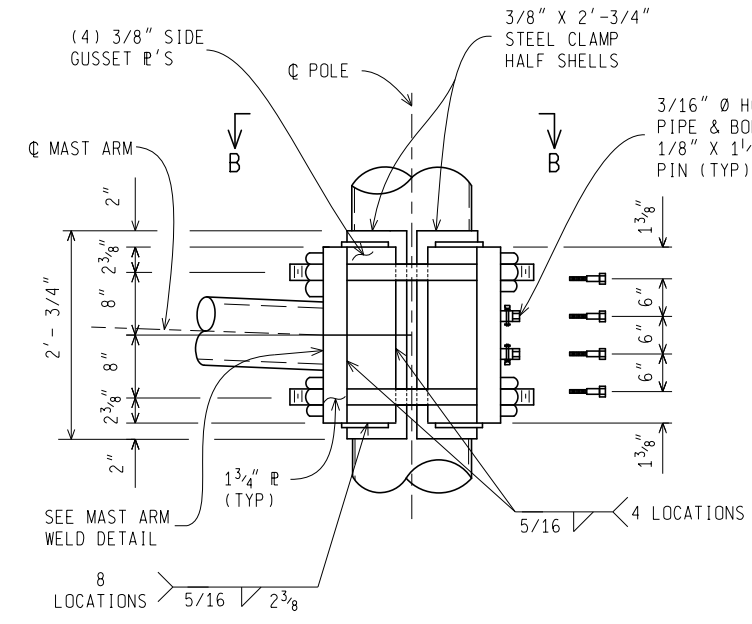
(45°-90° ARMS AND GREATER)



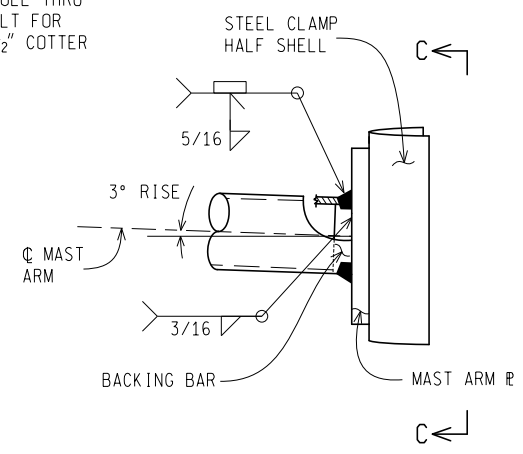
INBOARD/OUTBOARD ARM LIFTING DEVICE

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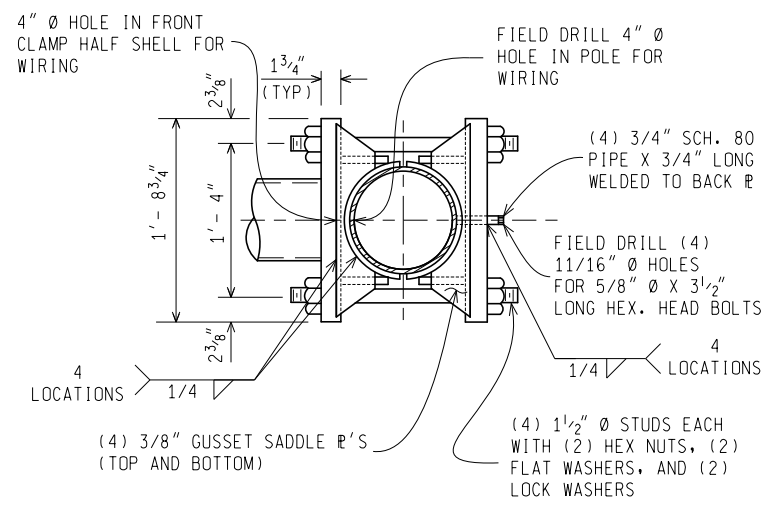


DETAIL C

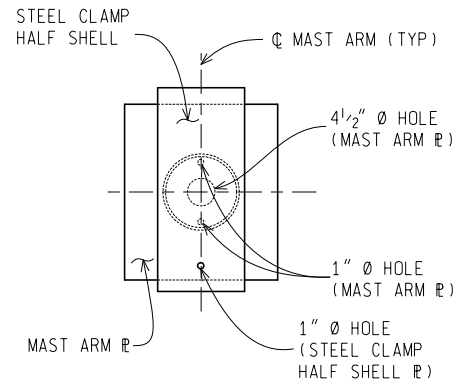


MAST ARM WELD DETAIL

SIDE GUSSET R'S AND SADDLE R'S NOT SHOWN FOR CLARITY



SECTION B-B



SECTION C-C

SIDE GUSSET R'S AND SADDLE R'S NOT SHOWN FOR CLARITY

NOT TO SCALE

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AS-LET PLAN REVISIONS								MDOT Michigan Department of Transportation	DATE:	CS:	DRAWING	SHEET
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DESIGN UNIT:
TSC:

JN:

