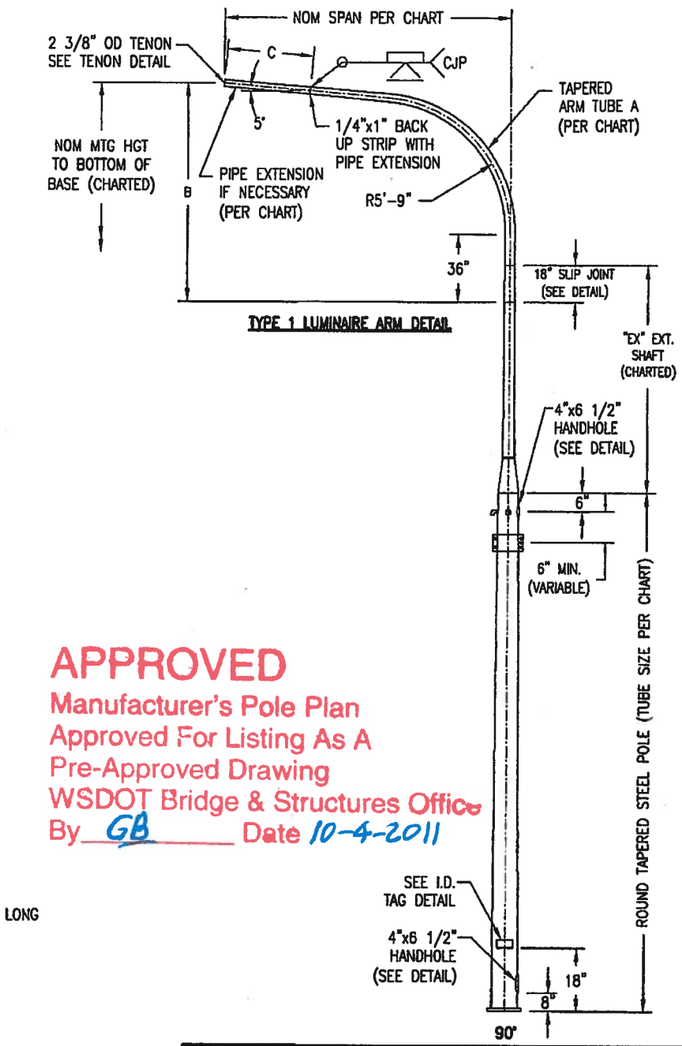
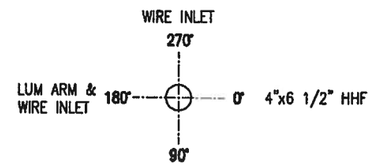
QTY	UMC DESIGN NUMBER	TUBE SIZE	POLE BASE CONNECTION DATA						POLE CLASS
			B.C.	S	F	P	T	ANCHOR BOLT SIZE	
	EA-10225-A	3E-10.00x5.80x30'-0"	15	15	10 5/8	5 3/4	1 3/4	1 1/4 x 60	1900 LBS
	EA-10225-B	3E-12.00x7.80x30'-0"	17	17	12	6 1/2	1 3/4	1 1/2 x 60	2700 LBS
	EA-10225-C	3E-14.00x9.80x30'-0"	19	19	13 7/16	6 1/2	1 3/4	1 1/2 x 60	3700 LBS
	EA-10225-D	0E-14.00x9.80x30'-0"	20	20	14 1/8	7 1/2	2	1 3/4 x 66	4800 LBS
	EA-10225-E	0E-15.00x10.80x30'-0"	20	20	14 1/8	7 1/2	2	1 3/4 x 66	5600 LBS
	EA-10225-F	0E-16.00x11.80x30'-0"	22	22	15 9/16	7 1/2	2	1 3/4 x 66	6300 LBS
	EA-10225-G	0E-17.00x12.80x30'-0"	22	22	15 9/16	7 1/2	2	1 3/4 x 66	7200 LBS

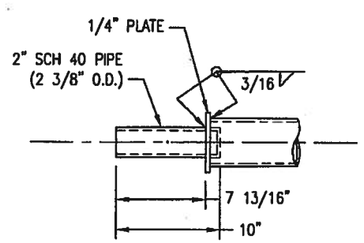
11 GA = 0.120" WALL THICKNESS
7 GA = 0.179" WALL THICKNESS
3 GA = 0.250" WALL THICKNESS
0 GA = 0.313" WALL THICKNESS
E = ROUND TAPERED STEEL TUBE @ 0.14 in/ft TAPER

TYPE 1 LUMINAIRE ARM DATA							
TYP	SPAN	B	ARM TUBE A	PIPE TUBE C	TENON	MTG HGT	EXTENSION SHAFT "EX"
M6	6'-0"	5'-10"	7E-5.64x3.93x12'-2 5/16"	-	REQ	40'-0"	11E-5.52x5.03x3'-6"
						50'-0"	11E-6.71x5.03x12'-0"
M8	8'-0"	6'-0"	7E-5.64x3.65x14'-2 5/16"	-	REQ	40'-0"	11E-5.52x5.03x3'-6"
						50'-0"	11E-6.71x5.03x12'-0"
M10	10'-0"	6'-2"	7E-5.64x3.37x16'-2 5/16"	-	REQ	40'-0"	11E-5.52x5.03x3'-6"
						50'-0"	11E-6.71x5.03x12'-0"
M12	12'-0"	6'-4"	7E-5.64x3.54x15'-0"	.188W-3.50x3'-9 5/16"	REQ	40'-0"	11E-5.52x5.03x3'-6"
						50'-0"	11E-6.71x5.03x12'-0"
M14	14'-0"	6'-6"	7E-5.64x3.54x15'-0"	.188W-3.50x5'-9 5/16"	REQ	40'-0"	11E-5.52x5.03x3'-6"
						50'-0"	11E-6.71x5.03x12'-0"
M16	16'-0"	6'-8"	7E-5.64x3.54x15'-0"	.188W-3.50x7'-9 5/16"	REQ	40'-0"	11E-5.52x5.03x3'-6"
						50'-0"	11E-6.71x5.03x12'-0"

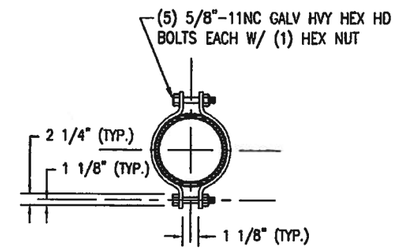


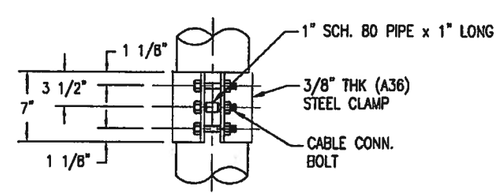
TYPE 1 LUMINAIRE ARM DETAIL





TENON DETAIL





STRAIN CLAMP DETAIL

DESIGN CRITERIA:

1. DESIGNED IN ACCORDANCE WITH THE 2009 AASHTO, 5TH EDITION, "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 90 M.P.H. WIND ZONE. THE DESIGN PARAMETERS INCLUDE:
   50 YEAR STRUCTURE DESIGN LIFE
2. DESIGNED TO STATE STANDARD PLAN SHEET J-7C
3. ANCHOR BOLTS ANALYZED FOR STEEL STRENGTH ONLY. THE ANCHOR BOLT EMBEDMENT LENGTH SHOWN ON THIS DRAWING SHALL BE VERIFIED BY THE FOUNDATION ENGINEER.
4. THE EXPOSED LENGTH OF THE ANCHOR BOLT BETWEEN THE TOP OF THE FOUNDATION AND THE BOTTOM OF THE LEVELING NUT SHOULD NOT EXCEED ONE BOLT DIAMETER.
5. WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY CODE AWS D1.1 LATEST EDITION. WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 WELDING PROCEDURES.
6. **CUSTOMER TO CONFIRM ALL DIMENSIONS & ORIENTATIONS BEFORE RELEASING ORDER FOR MANUFACTURING.**

MATERIAL SPECIFICATIONS	
TAPERED TUBE	ASTM A595 GR A
PLATE	ASTM A36
BAR HANDHOLE FRAME	ASTM A529 GR 50 (PREFERRED) or ASTM A572 GR 50 or ASTM A709 GR 50
HANDHOLE COVER	ASTM A36 or A1011
ANCHOR BOLTS	ASTM F1554 GR 105
ANCHOR BOLT NUTS	ASTM A563 GR DH
FLAT WASHERS	ASTM F436
CLAMP	ASTM A36
POLE TOP	ASTM B26 (319F) or A1011
PIPE	ASTM A501,A53 GR B or A500 GR B
S.S. HARDWARE	AISI-300 SERIES (18-8)
STRUCTURE FINISH	HD GALV TO ASTM A123
HARDWARE FINISH	HD GALV TO ASTM A153

APPROVED
Manufacturer's Pole Plan
Approved For Listing As A
Pre-Approved Drawing
WSDOT Bridge & Structures Office
By GB Date 10-4-2011

STATE OF OHIO
PAUL E. HAIG
E-041183
10/3/11
REGISTERED
PROFESSIONAL ENGINEER

REV	DESCRIPTION	DATE	REV BY	CHK BY
R13	ADDED A500 GR B TO PIPE MATERIAL SPEC'S	9/30/11	EGB	BJR
R12	REVISED BOLT CIRCLE FOR -B. REVISED BASE PLATE SQUARE DIMENSION FOR -B, -C, -D, -E, -F, AND -G.	9/28/11	BJR	BJR
R11	REVISED ANCHOR BOLT SIZE FOR -A, -B, -C, -D, AND -E. REVISED BOLT CIRCLE FOR -A. REVISED BASE PLATE SQUARE DIMENSION FOR -C, -D, -E, -F, AND -G.	9/20/11	BJR	BJR
R10	REVISED STRAIN CLAMP DETAIL (PIPE WAS 3/4")	3/31/11	EGB	JW
R9	UPDATED TO WASHINGTON STANDARDS; UPDATED DRAWING AND TITLE BLOCK; DESIGN RATING WAS 2001; ADDED ANCHOR BOLT CONFIGURATION DETAIL; UPDATED SIZING.	11/10/10	GCH	SAD

REVISIONS

STATE: WASHINGTON | REQ# / SO# : 0332-06-95
PROJECT NAME: -

ROUND TAPERED STEEL STRAIN POLE STANDARDS, TYPE 1 ARM
STATE OF WASHINGTON DOT

Union Metal Corporation

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DESIGNED BY	CHECKED BY	DATE	SCALE	ENG REF
TN	SMP	2/1/83	NTS	0408C95

EA-10225 | REVISION R13 | SHEET 1 OF 2

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