

MATERIAL SPECIFICATION	
MONOTUBES any t	ASTM-A595 GR.A
or 0.23 ≤ t ≤ 0.3125	ASTM-A572 GR.55
or t < 0.23	ASTM-A607 GR.55 CL II /AKA/ ASTM-A1011 HSLAS GR.55 CL II (dual certification)
PLATES	ASTM-A36
PIPE	ASTM-A53 GR.B OR A501
CONNECTING BOLTS	ASTM-A325
FLAT WASHER	ASTM-F436
ANCHOR BOLTS	ASTM-F1554 GR 105
A. BOLT NUTS	ASTM-A563 GR. DH
STRUCTURE FINISH	H.D. GALV TO ASTM-A123
HARDWARE FINISH	H.D. GALV TO ASTM-A153

RATING NOTE: FOR MAX ALLOWABLE XYZ VALUE AS CHARTED.

DESIGNED PER 2001 AASHTO
 BASIC WIND SPEED: 90MPH
 DESIGN LIFE: 50 YEARS
 FATIGUE CATEGORY: III
 GALLOPING LOADS: YES (If=0.30)
 TRUCK GUSTS: YES (If=0.68)
 NATURAL WIND: YES (If=0.59)
 CAFL AT CRITICAL CONNECTIONS:
 POLE TO BASE PLATE CONNECTION
 A. SOCKET DETAIL W/ FILLET WELD=E'
 B. FULL PENETRATION WELD=D
 ARM TO PLATE CONNECTION:
 A. SOCKET DETAIL W/ FILLET WELD=E'
 B. FULL PENETRATION WELD=D
 FLANGE GUSSETS=E'
 POLE WALL AT FLANGE GUSSETS=E'
 POLE JUST BELOW FLANGE BOX=E
 POLE SHAFT=B'
 TELESCOPIC JOINT=B

NOTE: (SAMPLE DESIGN)

35'-0" @ 17' SIGNAL ARM END MOUNTED & SPACED
 10'-0" & 22'-0" FROM OUTBOARD END,

"E" SIGNIFIES END MOUNTED SIGNAL CONN.

71026-B86-Y5-35EK10K12. IF OUTBOARD SIGNAL
 IS SIDE MOUNTED, USE 71026-B86-Y5-SK10K12-35@17

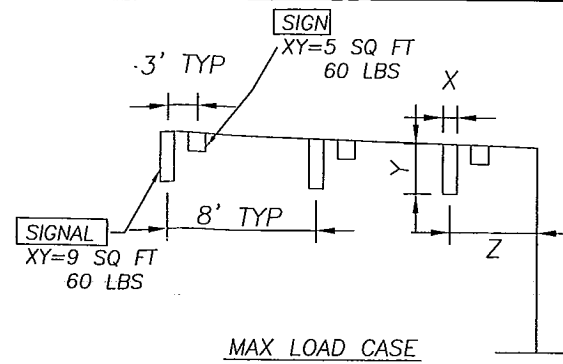
"S" SIGNIFIES SIDE MOUNTED SIGNAL CONN. ARM CONN. MTG HGT
 "L" (ARM) LENGTH

WELDING NOTE:

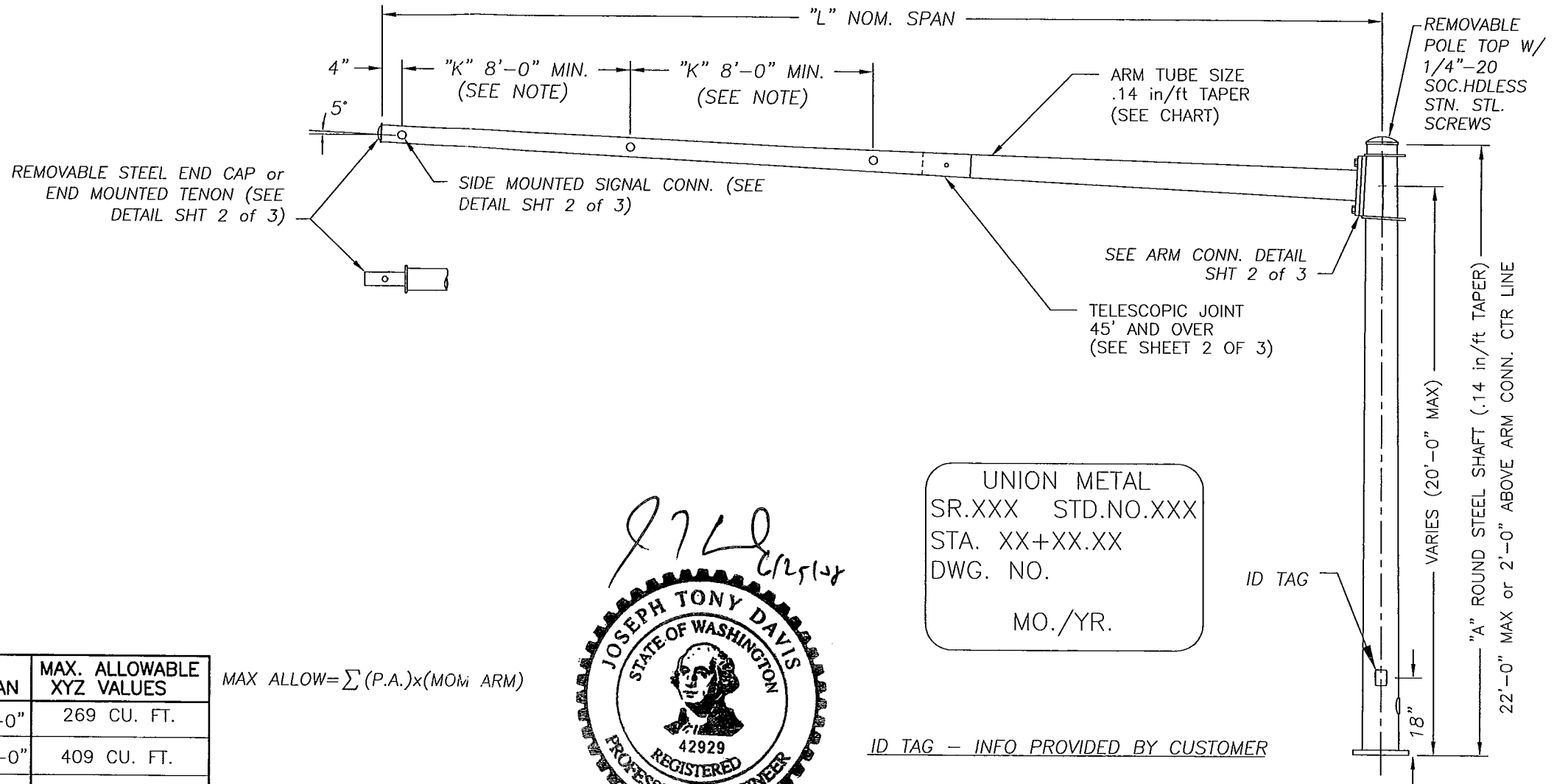
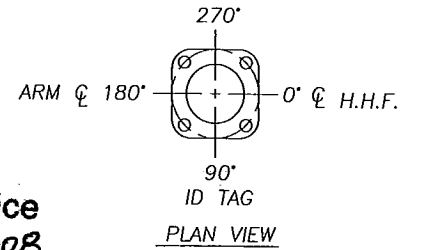
"WELDING PER AWS D1.1 STRUCTURAL WELDING CODE, 2002
 AND SECTION 1.4.2 OF THE SPECIFICATIONS FOR
 STRUCTURAL SUPPORTS OF HIGHWAY SIGNS, LUMINAIRES
 AND TRAFFIC SIGNALS, AASHTO 2001, 90MPH."

U.M. DESIGN NUMBER	"A" ROUND STEEL SHAFT	ARM TUBE SIZE	L SPAN	MAX. ALLOWABLE XYZ VALUES
71026-B86-Y1	7E-14.0x10.92x22'-0"	7E-6.0x3.90x15'-0"	15'-0"	269 CU. FT.
71026-B86-Y2		7E-6.0x3.20x20'-0"	20'-0"	409 CU. FT.
71026-B86-Y3	3E-14.0x10.92x22'-0"	7E-7.5x4.00x25'-0"	25'-0"	655 CU. FT.
71026-B86-Y4		7E-8.5x4.30x30'-0"	30'-0"	865 CU. FT.
71026-B86-Y5		7E-10.0x5.10x35'-0"	35'-0"	1075 CU. FT.
71026-B86-Y6	0E-14.0x10.92x22'-0"	7E-11.0x5.40x40'-0"	40'-0"	1285 CU. FT.
71026-B86-Y7		7E-11.0x6.80x30'-0" 11E-7.29x4.98x16'-6"	45'-0"	1495 CU. FT.
71026-B86-Y8	3E-17.0x13.92x22'-0"	7E-12.0x7.80x30'-0" 11E-8.29x5.28x21'-6"	50'-0"	1705 CU. FT.
71026-B86-Y9		7E-12.5x8.30x30'-0" 11E-8.83x5.09x26'-9"	55'-0"	1915 CU. FT.
71026-B86-Y10	0E-17.5x14.42x22'-0"	3E-12.5x7.60x35'-0" 11E-8.09x4.38x26'-6"	60'-0"	2609 CU. FT.
71026-B86-Y11		3E-13.0x7.68x38'-0" 7E-8.29x4.30x28'-6"	65'-0"	2889 CU. FT.

$$\text{MAX ALLOW} = \sum (P.A.) \times (\text{MOM}_i \text{ ARM})$$

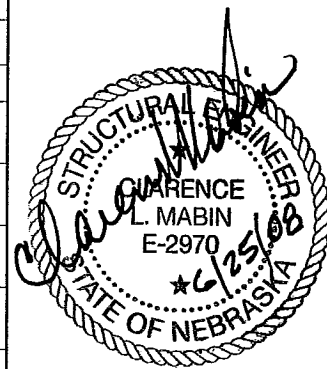
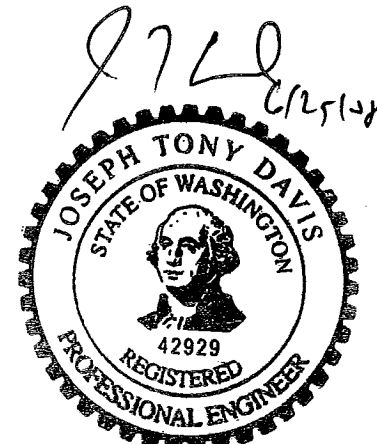


APPROVED
 Manufacturer's Pole Plan
 Approved For Listing As A
 Pre-Approved Drawing
 WSDOT Bridge & Structures Office
 By GB Date 8/20/2008



UNION METAL
 SR.XXX STD.NO.XXX
 STA. XX+XX.XX
 DWG. NO.
 MO./YR.

ID TAG -- INFO PROVIDED BY CUSTOMER



REVISIONS		DATE		DESCRIPTION		DRAWN		CHECKED	
R07	20273	-4	5/8/08	REVISED CENTER HOLE DIMENSION ON ANCHOR PLATES.		LCV		EBL	
R06	20273	-3	4/7/08	REVISED SHAFT TUBE SIZES FOR Y3, Y4, & Y6 AND ARM TUBE SIZES FOR Y7 & Y11. Y11 DIMS: X WAS 9, APT WAS 1 1/2. SOCKET DETAIL W/ FILLET WELD WAS E. Y8-Y11 POLE BASE HAD SOCKET WELD. Y8-Y11 "H" DIM. WAS 2 1/4". ANCHOR MATL WAS A449. DESIGN LIFE WAS 25 YRS. ADDED ANCHOR PLATES.		LRR		JAB	
R05	20273	-1	7/16/07	REVISED TUBE SIZES FOR ALL DESIGNS		AJO		JNL	

TYPE II STEEL TRAFFIC POLE FOR STATE OF WASHINGTON D.O.T.

LOF _____ ENG. REF. # 71026-B34
 REQ. # 0873-07-1 S.O. # _____ CAD # _____

Union Metal CORPORATION R07

DRAWN LCV DATE 2/12/03 CHECKED EBL DRAWING NO. 71026-B86 SHT. 1 OF 3