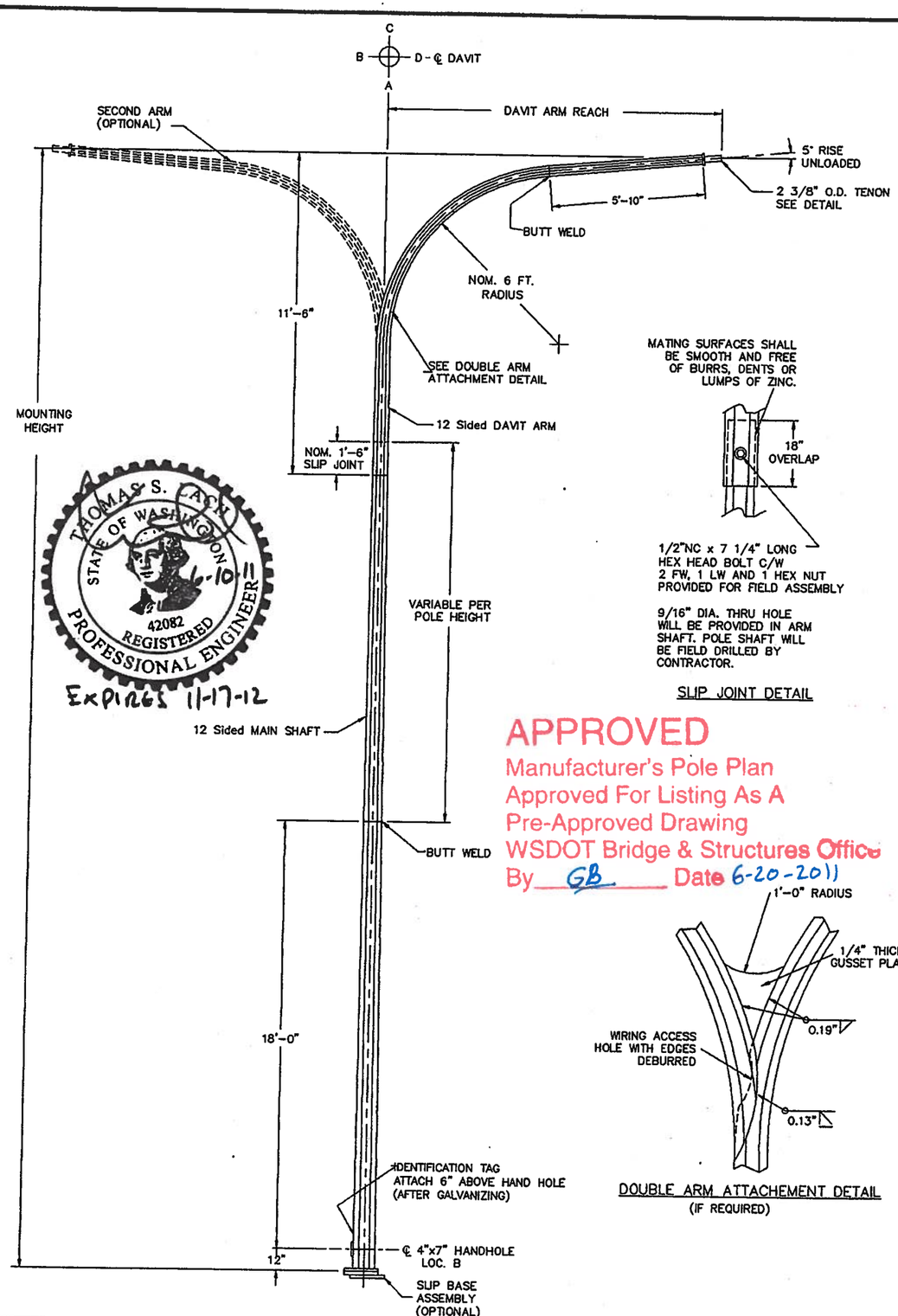


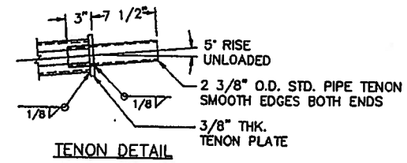
THOMAS S. LACH
STATE OF WASHINGTON
42082
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11-17-12

APPROVED
Manufacturer's Pole Plan
Approved For Listing As A
Pre-Approved Drawing
WSDOT Bridge & Structures Office
By GB Date 6-20-2011

10GA (0.1345 IN)
7GA (0.1793 IN)

DAVIT ARM				
ARM REACH (FT.)	BASE A/F (IN.)	END A/F (IN.)	LENGTH (FT.)	THK.
6	6-3/8	4 1/16	14' 8"	3/16"
8	6-3/8	3 13/16	16' 6"	3/16"
10	6-3/8	3 13/16	18' 4"	3/16"
12	6-3/8	3 13/16	20' 2"	3/16"
14	6-3/8	3 13/16	22' 0"	3/16"
16	6-3/8	3 13/16	23' 10"	3/16"

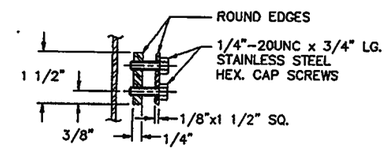
MAIN SHAFT				
MOUNTING HEIGHT (FT.)	BASE A/F (IN.)	END A/F (IN.)	LENGTH (FT.)	THK.
25	7 1/2	5 1/2	15.00	3/16"
30	8 1/4	5 1/2	20.00	3/16"
35	8 7/8	5 1/2	25.00	3/16"
40	9 5/8	5 1/2	30.00	3/16"
45	10 5/16	5 1/2	35.00	3/16"
50	11	5 1/2	40.00	3/16"



TENON DETAIL

	MOUNTING HEIGHT (FT.)	CONNECTING BOLT		ANCHOR BOLT			
						PLATE WASHER	
		DIA (IN.)	LENGTH (IN.)	DIA (IN.)	LENGTH (IN.)	SIZE (IN. SQ.)	THICKNESS (IN.)
SINGLE	25 TO 50	1	5-1/2	1	54	4	3/8
DOUBLE DAVIT	25 TO 45	1	5-1/2	1	54	4	3/8
DOUBLE DAVIT	46 TO 50	N/A	N/A	1 1/8	66	4	3/8

SLIP JOINT DETAIL



SECTION X-X

DESIGN: ALL STANDARDS ARE DESIGNED TO THE 2009 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.
DESIGN WIND SPEED - 90 MPH (3 SECOND GUST WIND SPEED)
DESIGN LIFE / RECURRENCE INTERVAL - 50 YEARS
EACH STRUCTURE CAN ACCOMODATE A MAXIMUM OF 2 LUMINAIRES
THE DESIGN AREA OF THE LUMINAIRES IS AS FOLLOWS:

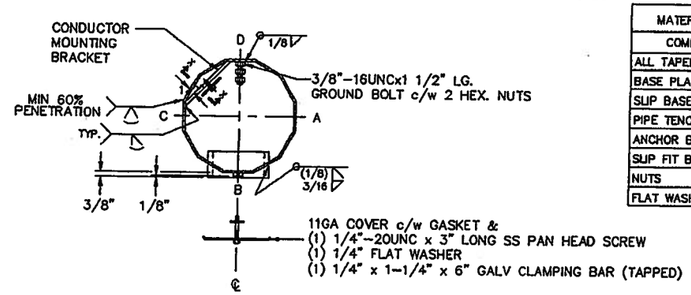
LUMINAIRE DATA
FACE AREA = 3.3 FT.^{2}
WIND DRAG COEFFICIENT = 0.5
WEIGHT = 60 LB.
ICE AREA = 8.7 FT.^{2}

NOTES: INSTALLATION OF 50' POLE WITH DOUBLE LUMINAIRE ARMS ON SLIP BASE IS NOT ALLOWED. THE ALLOWABLE MAZIMUM SIGN AREA LOCATED 7'-0" ABOVE THE BASE WILL BE 20 SQ. FT. FOR ALL ARMS AND ALL MOUNTING HEIGHT.

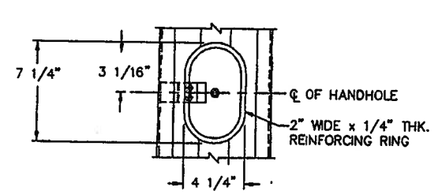
WELDING: WELDING OF STRUCTURES SHALL BE IN ACCORDANCE WITH THE CURRENT AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS OF HIGHWAY SIGNS, LUMINAIRES & TRAFFIC SIGNALS.
LONGITUDINAL SEAM WELD IS 60% MINIMUM PENETRATION EXCEPT:
- 6 INCHES FROM END OF SECTIONS IT IS 100% PENETRATION.
- ON THE FEMALE SECTION OF TELESCOPIC FIELD SPLICES IT IS 100% PENETRATION FOR MINIMUM SPLICE LENGTH PLUS 6 INCHES

FINISH: ALL COMPONENTS TO BE HOT DIP GALVANIZED AS PER ASTM A123 / A153

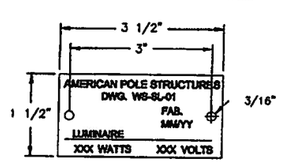
MATERIAL DATA (UNLESS OTHERWISE NOTED)	
COMPONENT	GRADE
ALL TAPERED TUBES	ASTM A572 GR. 50 OR A1011 GR. 50
BASE PLATE	ASTM A572 GR. 50
SLIP BASE PLATES	ASTM A36
PIPE TENONS	ASTM A53 GR. B
ANCHOR BOLTS	ASTM F1554 GR.105
SLIP FIT BOLT	ASTM A325 - Type 1
NUTS	ASTM A563-DH
FLAT WASHERS	ASTM F436



DOUBLE ARM ATTACHEMENT DETAIL
(IF REQUIRED)



VIEW OF HANDHOLE SHOWING
1. POSITION OF GROUND BOLT.
2. POSITION OF REINFORCING RING.
3. LONGITUDINAL SHAFT WELD.
4. CONDUCTOR MTG. BRACKET



IDENTIFICATION TAG

MAT'L - 14 GAUGE ALUMINUM
SECURE TO POLE WITH TWO (2) 0.125" SS OR ALUMINUM RIVETS
LETTERS TO BE STAMPED OR ENGRAVED
MINIMUM LETTER HEIGHT = 3/16"

REV.No.	CHANGE	BY	APP.	DATE
7	CHANGED WELD SEAM NOTES	ECH		JUNE 9 2011
6	UPDATED DRAWING AS PER D. Bedl ADDED SHEET 2	CMK		MAY 16 2010
5	UPDATED DRAWING AS PER O. Bedl NOTES AUG 26-2008	DRK		AUG 26 2008
4	UPDATED DRAWING AS PER T LACH NOTES AUG 14-2008	DRK		AUG 18 2008

No. REQ'D.	W.O. No.	FILE No.	DATE	P.O. No.	CUSTOMER	LOCATION

APS L.L.C.
American Pole Structures L.L.C.

TITLE
STATE OF WASHINGTON
DAVIT TYPE ST. LIGHT POLE

DRAWN BY	L.B.	APP. BY	S.B.	DWG. No.	REV. No.	SHT. 1 of 2 SHTS.
DATE	APRIL 10, 03	SCALE	N.T.S.	WS-SL-01	7	