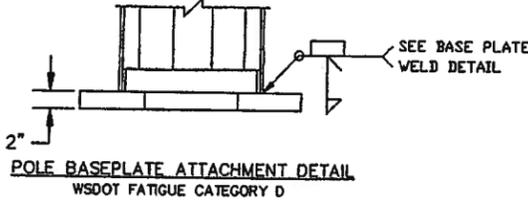
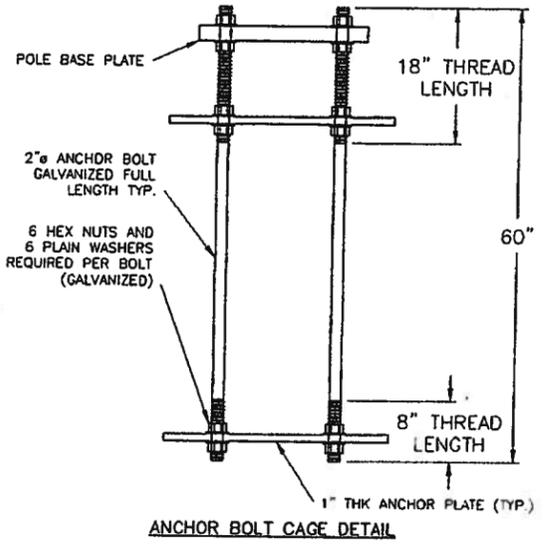
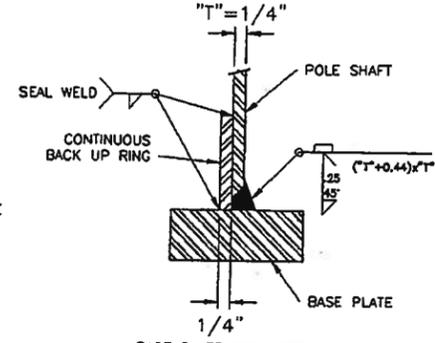
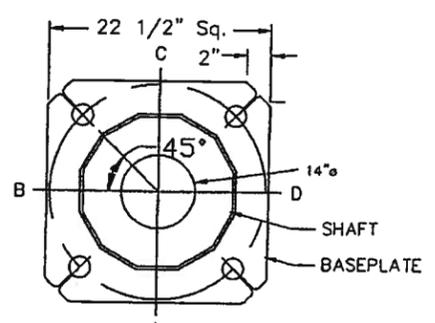
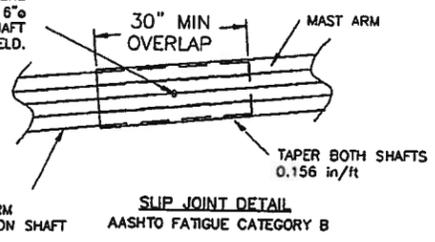
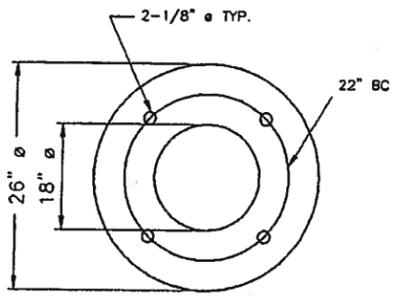
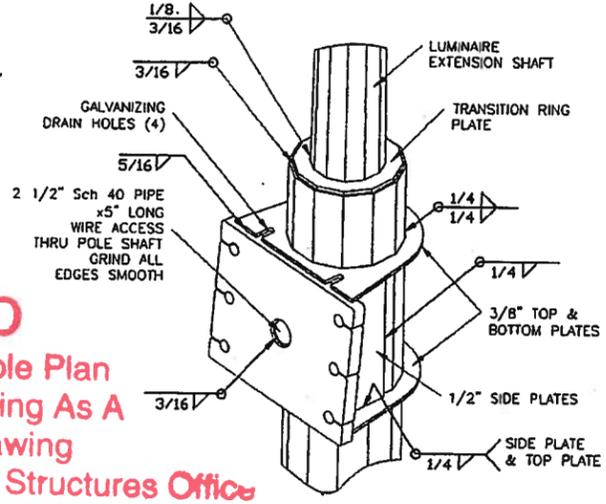
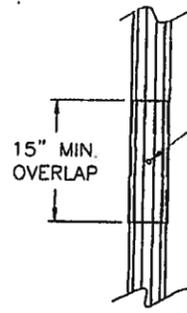
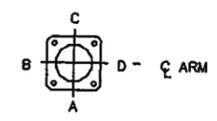


Expires 11-17-12

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



A MAIN SHAFT (1)			
AFB (3)	AFT (4)	THK	LENGTH
18"	15"	1/4"	22'-3" MAX

B MAST ARM SHAFT (1)			
AFB (3)	AFT (4)	THK	LENGTH
11 5/16"	5"	3/16"	40'

TOTAL MAST ARM LENGTH "B"	C MAST ARM EXTENSION SHAFT (1)				CONNECTING BOLTS (6 SETS)		SIGN & SIGNAL MAX. (2) LOADING XYZ
	AFB (3)	AFT (4)	THK	LENGTH	DIA.	LENGTH	
50'	12 3/8"	10 1/4"	1/4"	12' 6"	1 1/2"	6"	1775.7
55'	13 3/16"	10 1/4"	1/4"	17' 6"	1 1/2"	6"	1988.7
60'	13 15/16"	10 1/4"	1/4"	22' 6"	1 1/2"	6"	2690.8
65'	14 3/4"	10 1/4"	1/4"	27' 6"	1 1/2"	6"	2974.8

LUMIN. MOUNT HT "A2"	D LUMIN EXT SHAFT (1)		
	AFB (3)	AFT (4)	SHAFT LENGTH
30'	5 5/16"	5 1/2"	1' 5"
35'	5 15/16"	5 1/2"	3'-3"
40'	6 5/8"	5 1/2"	8'-3"
45'	7 5/16"	5 1/2"	13'-3"
50'	8"	5 1/2"	18'-3"

LUMIN. ARM REACH "C"	E LUMIN ARM SHAFT (1)		
	AFB (3)	AFT (4)	SHAFT LENGTH
6'	6-1/4"	4 1/16"	13'-11"
8'	6-1/4"	3 13/16"	15'-9"
10'	6-1/4"	3 9/16"	17'-7"
12'	6-1/4"	3 5/16"	19'-5"
14'	6-1/4"	3 1/4"	21'-3"
16'	6-1/4"	3 1/4"	23'-10"

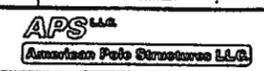
DESIGN: ALL STANDARDS ARE DESIGNED TO THE 2009 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.
 DESIGN WIND SPEED - 90 MPH (3 SECOND GUST WIND SPEED)
 DESIGN LIFE / RECURRENCE INTERVAL - 50 YEARS
 FATIGUE CATEGORY - III (GALLOPING, NATURAL & TRUCK GUSTS)
 MAXIMUM TRUCK GUST WIND SPEED - 65 MPH
 EACH STRUCTURE HAS A LOAD CAPACITY AS SHOWN IN THE ABOVE CHART. DESIGN AREAS OF SIGNS AS SIGNALS AS FOLLOWS:
TRAFFIC SIGNAL
 FACE AREA = 9.2 FT.²
 WIND DRAG COEFFICIENT = 1.2
 WEIGHT = 60 LB.
 ICE AREA = 23 FT.²
TRAFFIC SIGN
 FACE AREA = 5.0 FT.²
 WIND DRAG COEFFICIENT = 1.12
 WEIGHT = 60 LB.
 ICE AREA = 5.0 FT.²

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 80% 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

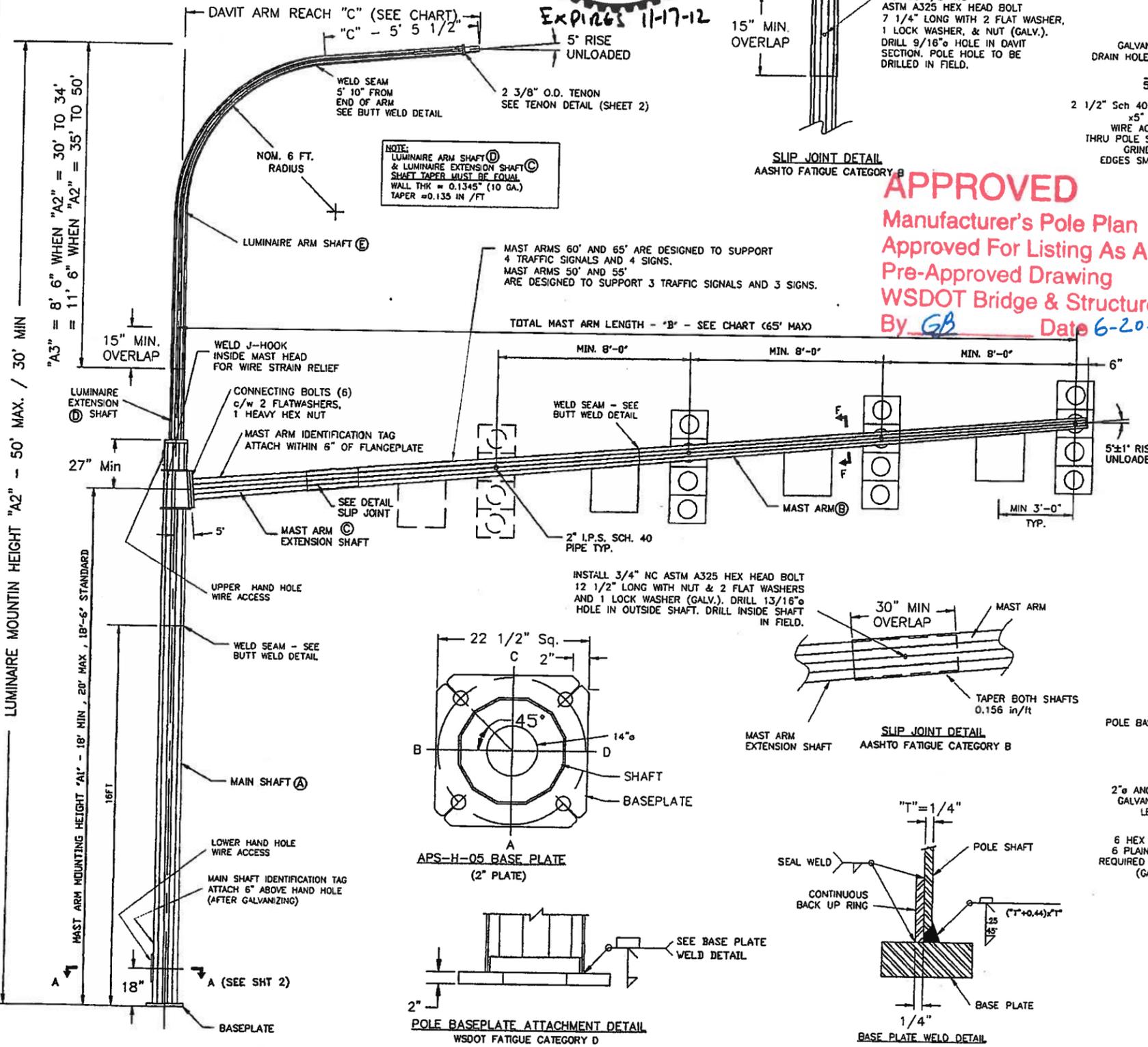
MATERIAL DATA (UNLESS OTHERWISE NOTED)	
COMPONENT	GRADE
ALL TAPERED TUBES	ASTM A572 Gr. 50 OR A1011 GR.50
BASE PLATE	ASTM A36
FLANGE PLATES	ASTM A36
PIPE TENONS	ASTM A53 Gr. B
CONNECTING BOLTS	ASTM A325 - Type 1
NUTS	ASTM A563-DH
FLAT WASHERS	ASTM F436
ANCHOR PLATE	ASTM A36
ANCHOR BOLTS	ASTM F1554 GR.105

REV. NO.	CHANGE	BY	APP. DATE	REV. NO.	SCALE	N.T.S.	REV. NO.	DATE	SCALE	N.T.S.
10	CHANGES WELD SEAM NOTES	ECH	06-11							
9	UPDATES PER G. BEZI 04-10-10	DRK	04-10							
8	UPDATES PER G. BEZI	DRK	04-09							
7	UPDATES PER G. BEZI	DRK	03-09							
6	UPDATES PER G. BEZI	DRK	07-08							
5	UPDATES PER G. BEZI	DRK	06-08							



WSDOT TYPE III TRAFFIC STRUCTURE
 65' MAX. MAST ARM LENGTH
 "J" STYLE LUMINAIRE ARM

DRWN BY	S.B.	APP. BY	DATE	REV. NO.	DATE	SCALE	N.T.S.
				10	10		



LUMINAIRE MOUNTING HEIGHT "A2" - 50' MAX. / 30' MIN

MAST ARM MOUNTING HEIGHT "A1" - 18' MIN, 20' MAX, 18'-6" STANDARD

NOTE: LUMINAIRE ARM SHAFT (D) & LUMINAIRE EXTENSION SHAFT (C) SHAFT TAPER MUST BE EQUAL
 WALL THK = 0.1345" (10 GA.)
 TAPER = 0.135 IN / FT

MAST ARMS 60' AND 65' ARE DESIGNED TO SUPPORT 4 TRAFFIC SIGNALS AND 4 SIGNS.
 MAST ARMS 50' AND 55' ARE DESIGNED TO SUPPORT 3 TRAFFIC SIGNALS AND 3 SIGNS.

TOTAL MAST ARM LENGTH - "B" - SEE CHART (65' MAX)

INSTALL 3/4" NC ASTM A325 HEX HEAD BOLT 12 1/2" LONG WITH NUT & 2 FLAT WASHERS AND 1 LOCK WASHER (GALV.). DRILL 13/16" HOLE IN OUTSIDE SHAFT. DRILL INSIDE SHAFT IN FIELD.

BASE PLATE WELD DETAIL
 WSDOT FATIGUE CATEGORY D

POLE BASEPLATE ATTACHMENT DETAIL
 WSDOT FATIGUE CATEGORY D

SLIP JOINT DETAIL
 AASHTO FATIGUE CATEGORY B

MAST HEAD DETAIL

APS-H-09 BASE PLATE
 (1" PLATE)

ANCHOR BOLT CAGE DETAIL