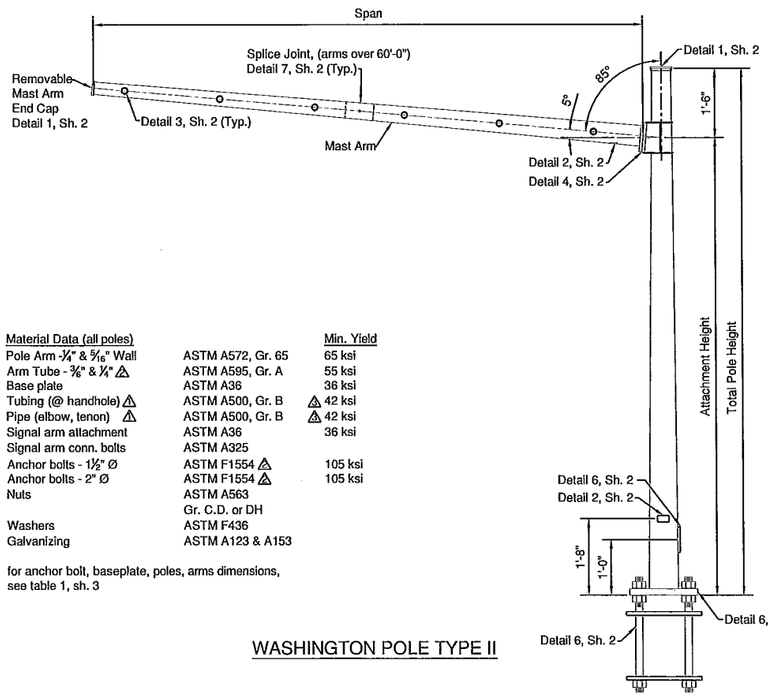
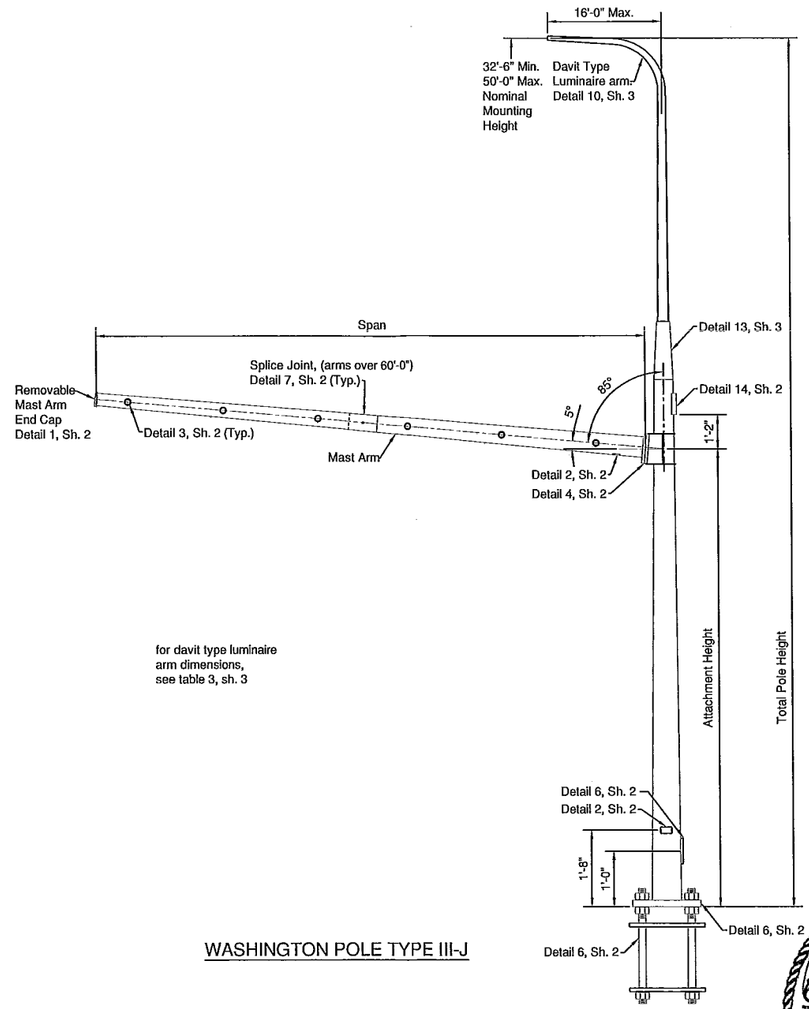
APPROVED
Manufacturer's Pole Plan
Approved For Listing As A
Pre-Approved Drawing
WSDOT Bridge & Structures Office
By GB Date 5-28-09




WASHINGTON POLE TYPE II

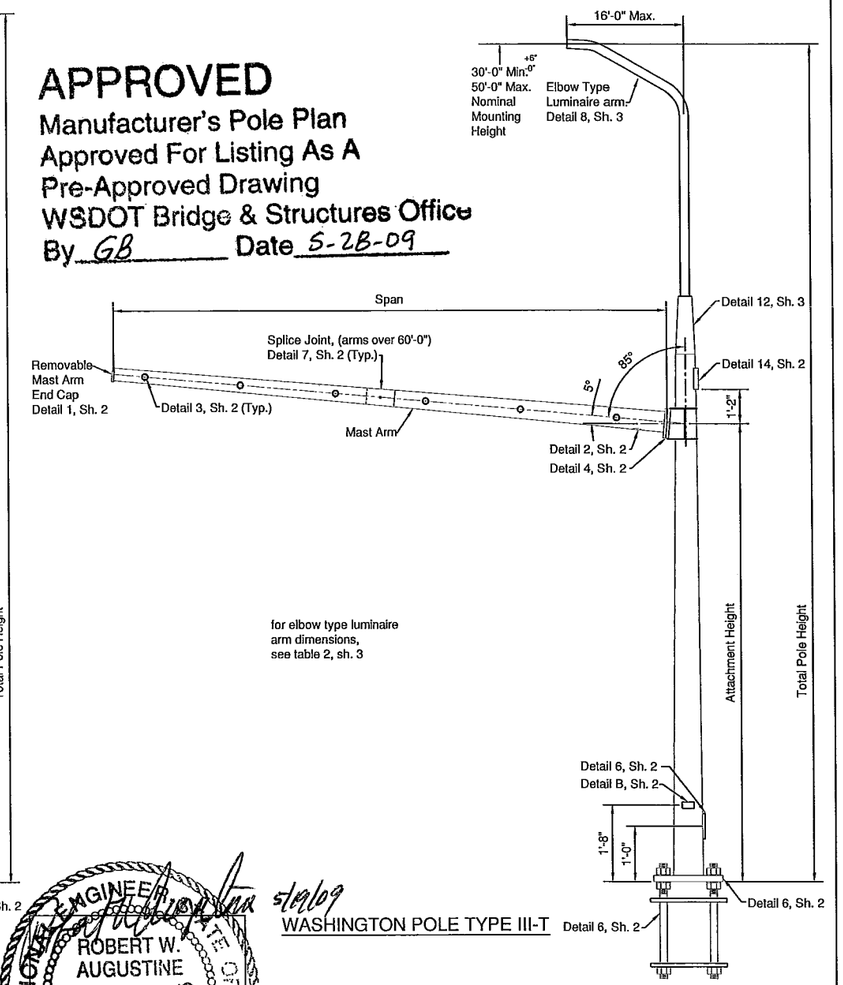
| Material Data (all poles) | | Min. Yield |
|---|---|---|
| Pole Arm -¼" & 5/16" Wall | ASTM A572, Gr. 65 | 65 ksi |
| Arm Tube - ⅜" & ¼" △ | ASTM A595, Gr. A | 55 ksi |
| Base plate | ASTM A36 | 36 ksi |
| Tubing (@ handhole) △ | ASTM A500, Gr. B | △ 42 ksi |
| Pipe (elbow, tenon) △ | ASTM A500, Gr. B | △ 42 ksi |
| Signal arm attachment | ASTM A36 | 36 ksi |
| Signal arm conn. bolts | ASTM A325 | |
| Anchor bolts - 1½" Ø | ASTM F1554 △ | 105 ksi |
| Anchor bolts - 2" Ø | ASTM F1554 △ | 105 ksi |
| Nuts | ASTM A563 Gr. C.D. or DH | |
| Washers | ASTM F436 | |
| Galvanizing | ASTM A123 & A153 | |

for anchor bolt, baseplate, poles, arms dimensions, see table 1, sh. 3




for davit type luminaire arm dimensions, see table 3, sh. 3

WASHINGTON POLE TYPE III-J




for elbow type luminaire arm dimensions, see table 2, sh. 3

WASHINGTON POLE TYPE III-T

PROFESSIONAL ENGINEER ROBERT W. AUGUSTINE Exp. 12-31-10 CIVIL No. 17425 STATE OF NEVADA

5/28/09

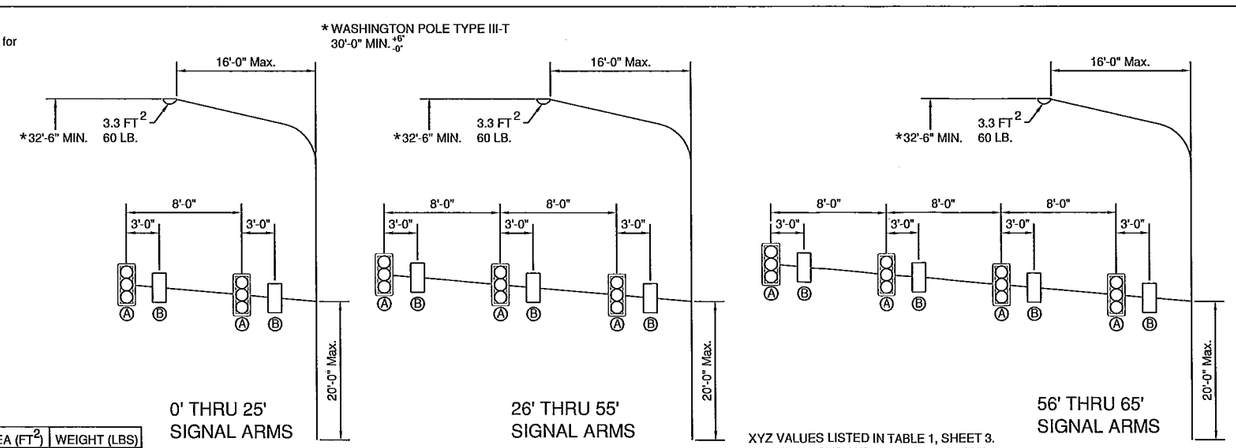
Design Criteria:
2001 AASHTO Standard Specification for Structural Supports for Highway Signs, Luminaires, and Trafic Signals.

25 Year Design Life/Recurrence Interval
Fatigue Category III
Galloping & Truck-Induced Fatigue Included

Wind Velocity:
90 mph Isotach.

Maximum Truck-Induced Fatigue
65 mph

CAFL at Critical Connections
Pole to base plate connection = D
Arm to Simplex plate connection = D
Simplex Gussets = ET
Pole Wall at Simplex Gusset = E
Pole Shaft = B' △
Slip Joint = B △




| DEVICE | DESCRIPTION | PROJ. AREA ($FT^2$) | WEIGHT (LBS) |
|---|---|---|---|
| Ⓐ SIGNAL | 12"-3 Sec. Signal With Backplates | 9.2 | 60 |
| Ⓑ SIGN | 30"x24" Directional Sign | 5.0 | 60 |

XYZ VALUES LISTED IN TABLE 1, SHEET 3. INCLUDE SIGNS AND SIGNALS, AND ONE LUMINAIRE WITH A 16'-0" ARM ON THE TYPE III POLES.


Engineer:
Robert W. Augustine, P.E.
936 Hwy. 14
Ellsworth, KS 67439
Ph: 785.472.5390

Maico Industries, Inc.
936 Highway 14
Ellsworth, KS 67439
Tel: 785-472-5390 Fax: 785-472-3729


JOB NAME & NUMBER: WSDOT MAST ARMS

DESCRIPTION : Washington State D.O.T. Standard Mast Arms

| Rev. | Date | Descriptions | Approved |
|---|---|---|---|
| △1 | 03/14/08 | changes per WSDOT | |
| △2 | 05/07/08 | Corrected Anchor Bolt Specification and Arm Tube Thickness | |
| △3 | 05/15/08 | changes per WSDOT | |

DRAWN : DS | DATE : 02/26/08
CHECKED : | SCALE : NTS

DRAWING NUMBER : WSDOTMA SH. 1 OF 3
REV: 3