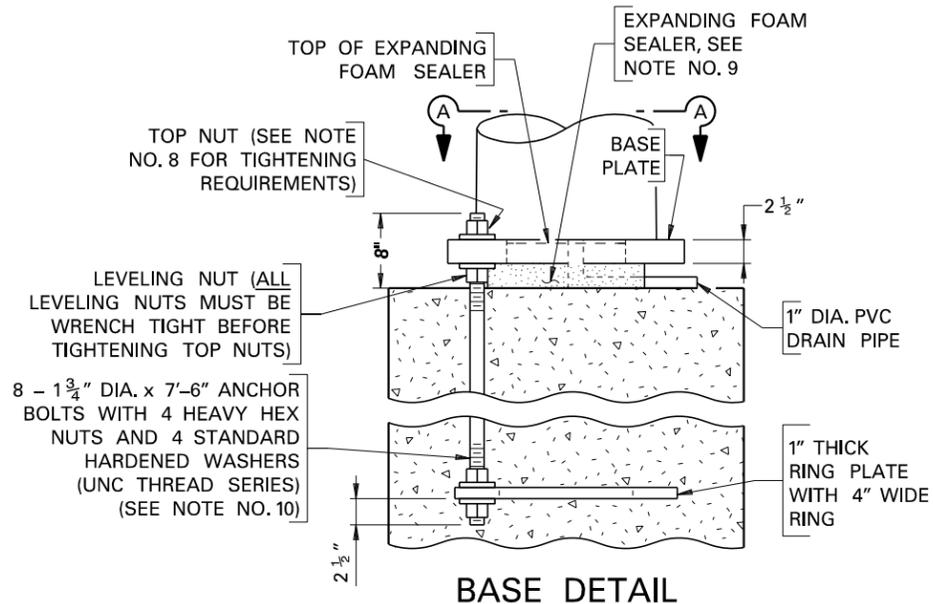


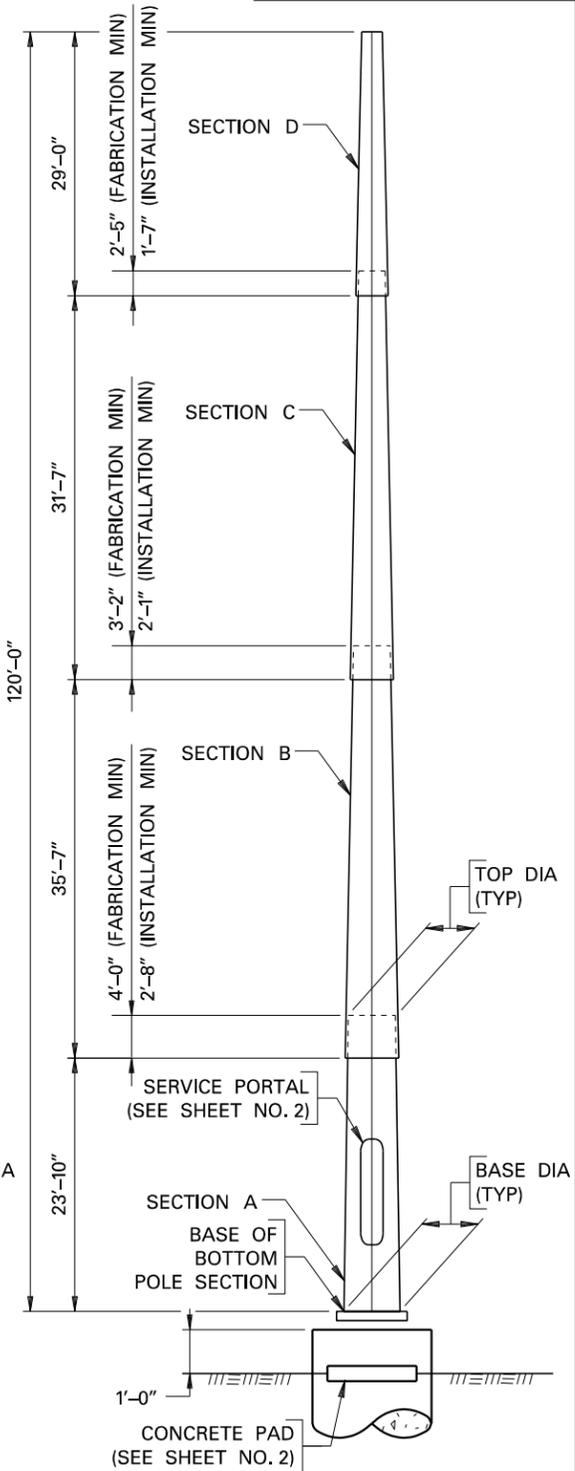
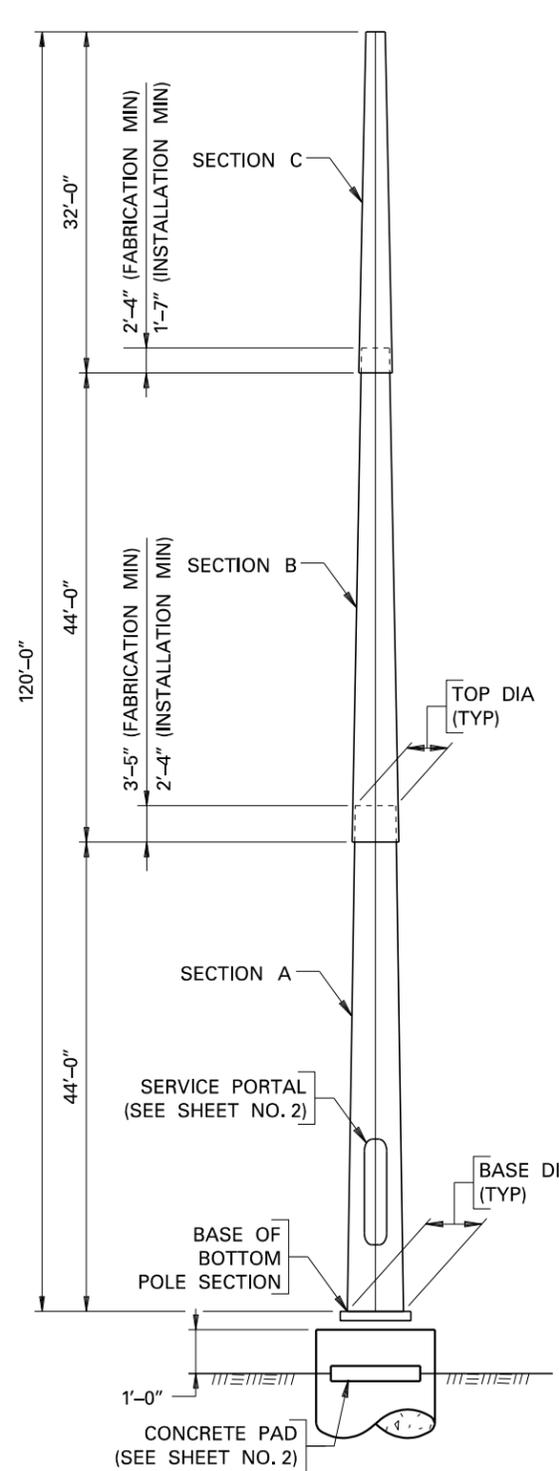
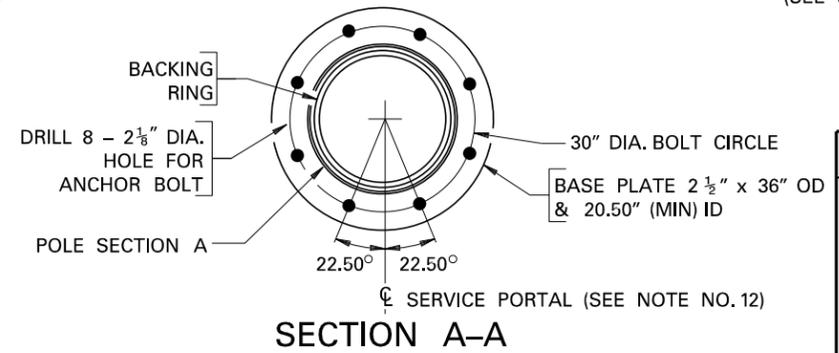
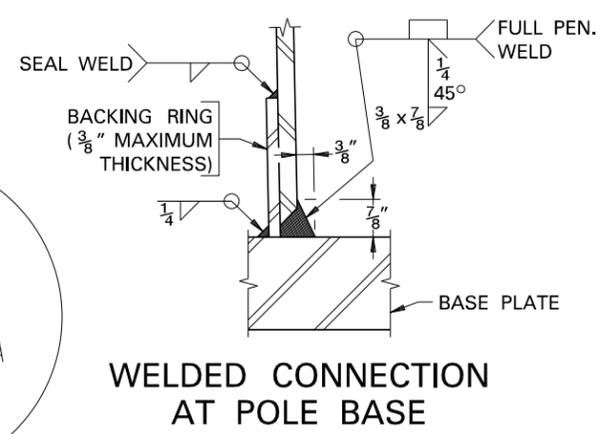
NOTE: ✕1) ENSURE BASE PLATE AND POLE SECTION-A ARE FABRICATED FROM ASTM A 572 AND HAVE A MINIMUM YIELD STRENGTH OF 50 KSI. ENSURE STEEL FOR REMAINDER OF POLE SECTIONS CONFORMS TO ASTM A 572, ASTM A 595 OR AN APPROVED ALTERNATE, AND HAS A MINIMUM YIELD STRENGTH OF 50 KSI AFTER FABRICATION. ENSURE ASTM DESIGNATIONS AND YIELD STRENGTHS FOR STEEL COMPONENTS ARE SHOWN ON THE SHOP DRAWINGS.

- 2) HIGH MAST POLE DESIGN IS IN ACCORDANCE WITH THE "2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AND INTERIM SPECIFICATIONS. POLES ARE DESIGNED FOR A 110 MPH FASTEST-MILE WIND VELOCITY IN ACCORDANCE WITH APPENDIX C OF THE AASHTO SPECIFICATIONS, FATIGUE IMPORTANCE CATEGORY I WITH A NATURAL WIND GUST FATIGUE LOADING OF 5.2Cd PSF WITH Cd EQUAL TO 1.10 FOR THE ENTIRE POLE, AND EIGHT LUMINAIRES (16 SQUARE FEET TOTAL EFFECTIVE PROJECTED AREA).
- 3) USE HIGH MAST POLE SECTIONS THAT ARE ROUND OR HAVE A MINIMUM OF 16 SIDES. DIAMETERS SHOWN ARE THE OUTSIDE DIMENSION FOR ROUND SECTIONS AND THE OUTSIDE CORNER TO CORNER DIMENSION FOR MULTI-SIDED SECTIONS. THE SECTIONS HAVE A 0.14 IN / FT TAPER (CORNER TO CORNER TAPER VALUE FOR MULTI-SIDED SECTIONS).
- ✕4) USE POLE SECTIONS WITH THE SHOWN DIAMETERS, LENGTHS, AND WALL THICKNESSES, EXCEPT AS NOTED BELOW. EXCLUDING THE TOP SECTION, LONGER SECTIONS THAN SHOWN WITH CORRESPONDING SMALLER TOP DIAMETERS THAN SHOWN MAY BE SUPPLIED RESULTING IN INCREASED OVERLAP LENGTHS TO ACCOUNT FOR FABRICATION TOLERANCES. MINIMUM FABRICATION OVERLAP LENGTHS SHOWN ARE APPROXIMATELY 150 PERCENT OF THE AASHTO SPECIFICATIONS' REQUIRED LENGTHS. AFTER THE SHOWN MINIMUM INSTALLATION OVERLAPS ARE ATTAINED, APPLY NECESSARY FORCES TO INCREASE THESE OVERLAPS TO PROVIDE A TIGHT FIT BETWEEN THE POLE SECTIONS.
- 5) FOR MULTI-SIDED SECTIONS, ENSURE THE CORNER BEND RADIUS IS NOT LESS THAN 0.75" AND IS SPECIFIED ON THE SHOP DRAWINGS.
- 6) SEE THE SPECIAL PROVISION FOR "HIGH MAST LIGHTING" FOR ADDITIONAL REQUIREMENTS FOR POLE AND ANCHOR BOLTS.
- 7) ENSURE THE POLE FABRICATOR SUPPLIES STEEL CONSTRUCTION TEMPLATE(S) FOR POSITIONING ANCHOR BOLTS.
- 8) TIGHTEN ANCHOR BOLT TOP NUTS IN ACCORDANCE WITH THE REQUIREMENTS IN THE SPECIAL PROVISION FOR "HIGH MAST LIGHTING". WRENCH TIGHTEN ALL LEVELING NUTS AGAINST THE BASE PLATE BEFORE TIGHTENING THE TOP NUTS.
- 9) TO PROVIDE A SEAL AGAINST BLOWN DUST, PLACE A RING OF EXPANDING FOAM SEALER BY ACCESSING THE SERVICE PORTAL OPENING. LEAVE THE ENTIRE FRONT WIDTH OF THE LEVELING NUTS VISIBLE AFTER ITS PLACEMENT.
- 10) ENSURE ANCHOR BOLTS CONFORM TO ASTM F 1554 SUPPLEMENTARY REQUIREMENT S5, GRADE 105 FOR CHARPY IMPACT REQUIREMENTS AT -20 DEGREES F. PROVIDE ANCHOR BOLT'S CERTIFIED TEST REPORTS TO THE STATE BRIDGE ENGINEER BEFORE SHIPMENT OF BOLTS.
- 11) AN EIGHT-SIDED BASE PLATE MAY BE SUBSTITUTED FOR A 36" DIAMETER CIRCULAR BASE PLATE. ENSURE MINIMUM DISTANCE FROM CENTERLINE BOLT HOLE TO EDGE OF PLATE IS 3" FOR THE EIGHT-SIDED BASE PLATE. MILL THE SURFACE AROUND EACH BOLT HOLE TO ENSURE THE BASE PLATE IS FLAT AND SMOOTH FOR ANCHOR BOLT NUTS AND WASHERS.
- 12) ENSURE SERVICE PORTAL IS CENTERED BETWEEN ANCHOR BOLTS AS SHOWN IN SECTION A-A AND THIS INFORMATION IS SHOWN ON SHOP DRAWINGS.

✕ MATERIAL DATA		
STEEL COMPONENTS	ASTM DESIGNATION	MIN YIELD (FY) (KSI)
SECTION A	A 572	50
SECTIONS B-D	A 572, A 595, OR APPROVED ALTERNATE	50
BASE PLATE	A 572	50
ANCHOR BOLTS	F 1554	105
HARDENED WASHERS	F 436	—
MISC STEEL	—	36
SERVICE PORTAL REINFORCEMENT	—	50



LEAVE
ENOUGH
ROOM FOR A
PE STAMP



120' POLE DATA									
† TUBE DIMENSIONS FOR THREE SECTION POLE					† TUBE DIMENSIONS FOR FOUR SECTION POLE				
SECTION	BASE DIAMETER	TOP DIAMETER	SECTION LENGTH	MINIMUM WALL THICKNESS	SECTION	BASE DIAMETER	TOP DIAMETER	SECTION LENGTH	MINIMUM WALL THICKNESS
A	24.25"	17.61"	47'-5"	0.3750"	A	24.25"	20.35"	27'-10"	0.3750"
B	18.59"	12.10"	46'-4"	0.2500"	B	21.54"	16.11"	38'-9"	0.3125"
C	12.91"	8.43"	32'-0"	0.2391"	C	17.04"	12.28"	34'-0"	0.2391"
—	—	—	—	—	D	12.98"	8.92"	29'-0"	0.1793"

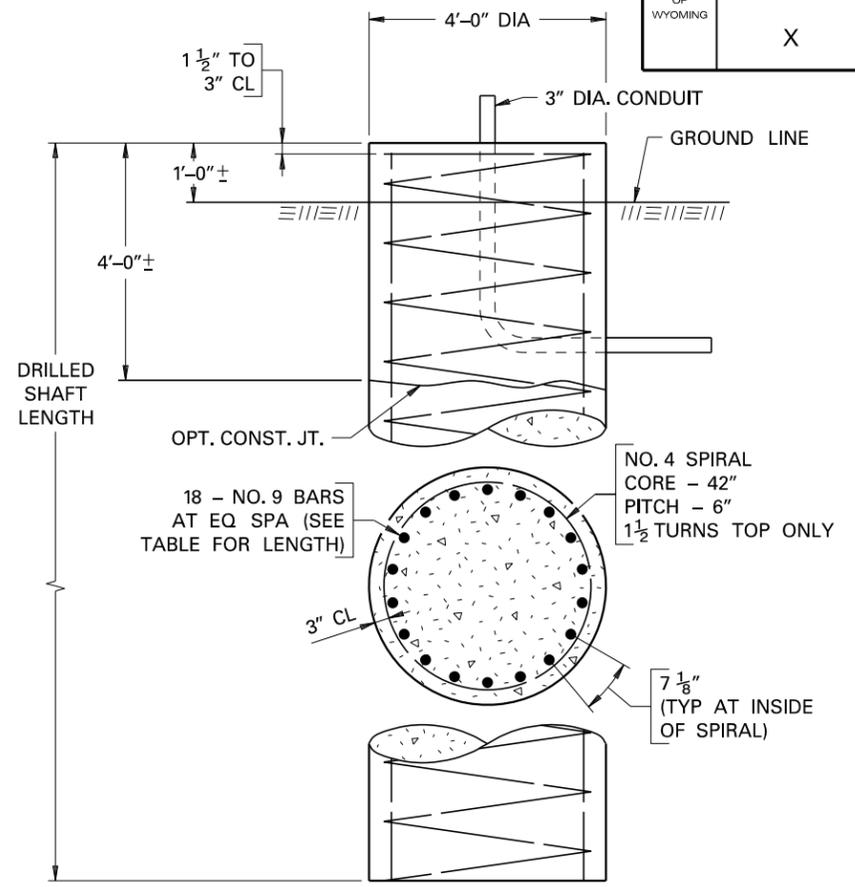
THREE SECTION POLE

FOUR SECTION POLE

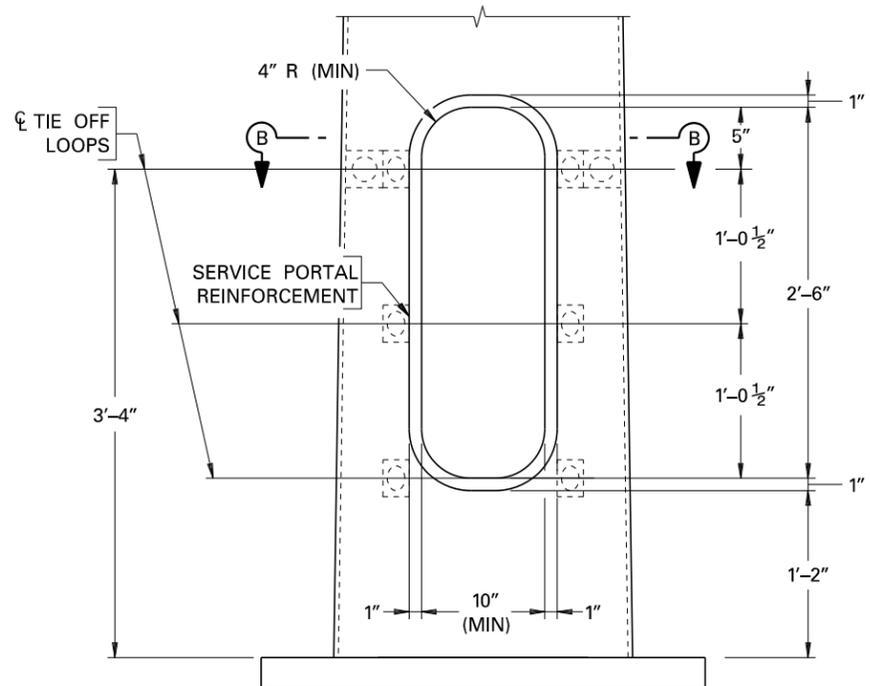
REVISIONS
REVISED ANCHOR BOLT PROJECTION LENGTH 07-SEP-06 ADDED MINIMUM INSTALLATION OVERLAP LENGTHS 07-SEP-06
ADDED BOLT PROJECTION BELOW RING PLATE AND NOTE NO. 12. 27-JULY-09

WYOMING DEPARTMENT OF TRANSPORTATION	
HIGH MAST LIGHTING STANDARD DETAILS	
DRAWN BY: LAF / TEW / LAC	DATE: 27-JULY-09
CHKD BY: PDH / JRB	SHEET 1 OF 2

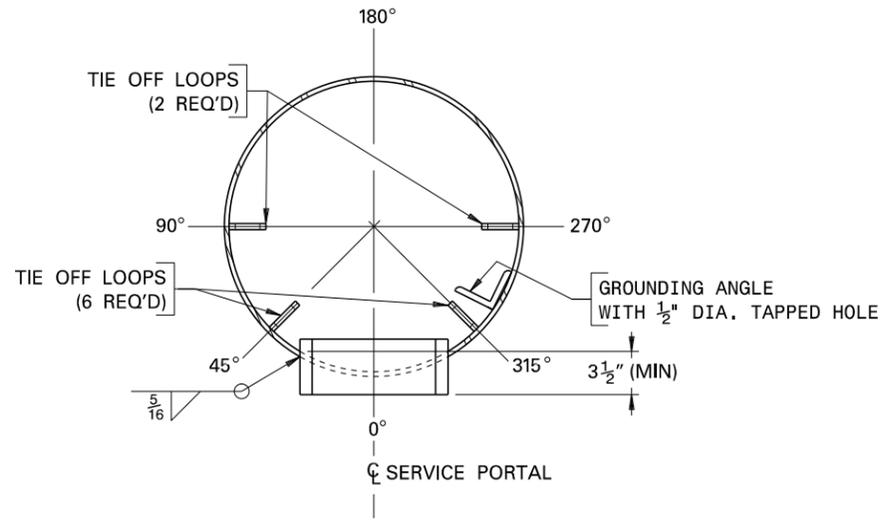
DRILLED SHAFT DATA				
HIGH MAST LIGHTING STANDARD UNIT NO.	DRILLED SHAFT LENGTH	VERTICAL REINFORCING LENGTH	SPIRAL TURNS	NOTES



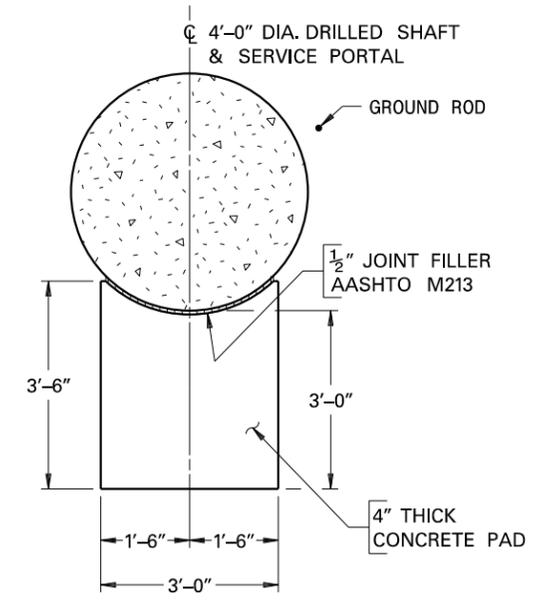
DRILLED SHAFT FOUNDATION



SERVICE PORTAL DETAIL



SECTION B-B
(SHOWING TIE OFF LOOPS ORIENTATION)



CONCRETE PAD DETAIL

- NOTE: 1) SEE SPECIAL PROVISION FOR "HIGH MAST LIGHTING" FOR ADDITIONAL REQUIREMENTS FOR SERVICE PORTAL.
- 2) SEE SHEET NO.1 FOR LOCATION OF CONCRETE PAD.

REVISIONS REVISED LOCATION OF TIE OFF LOOPS 07-SEP-06 TIE OFF LOOPS ADDED 16-JAN-07 ADDED BOLT PROJECTION BELOW RING PLATE AND NOTE NO.12. 27-JULY-09	WYOMING DEPARTMENT OF TRANSPORTATION <h3>HIGH MAST LIGHTING STANDARD DETAILS</h3> DRAWN BY: LAF / TEW / LAC DATE: 27-JULY-09 CHKD BY: PDH / JRB SHEET 2 OF 2
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