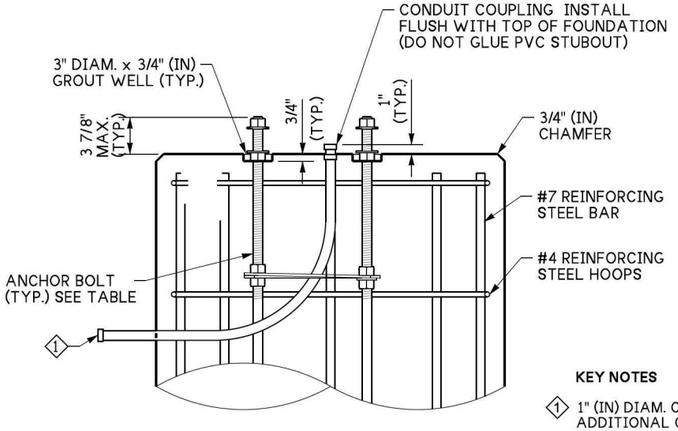
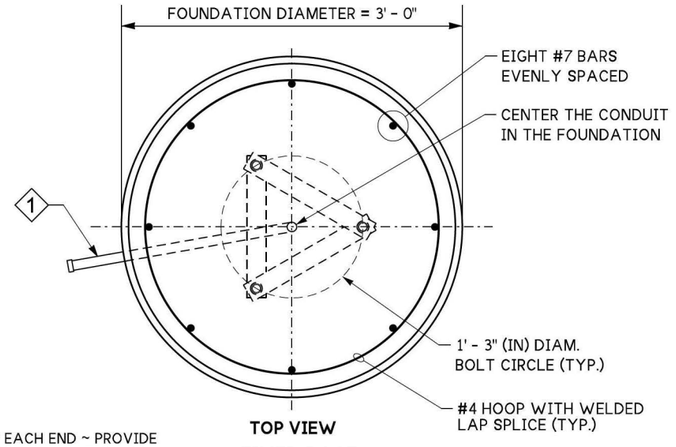


PARTIAL ELEVATION VIEW

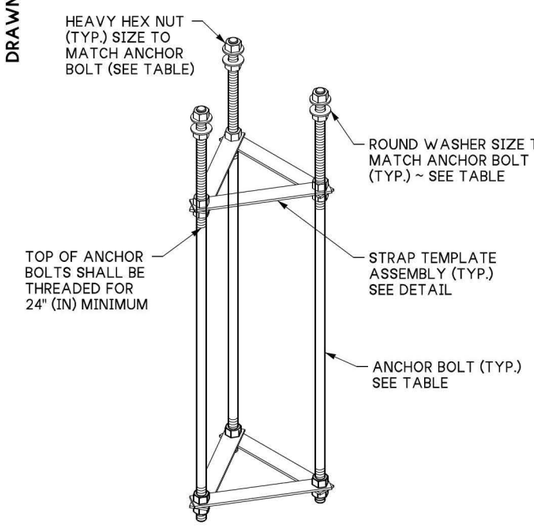
SLIP BASE
(SEE FIXED BASE FOR DETAILS NOT SHOWN)



TOP VIEW
FIXED BASE

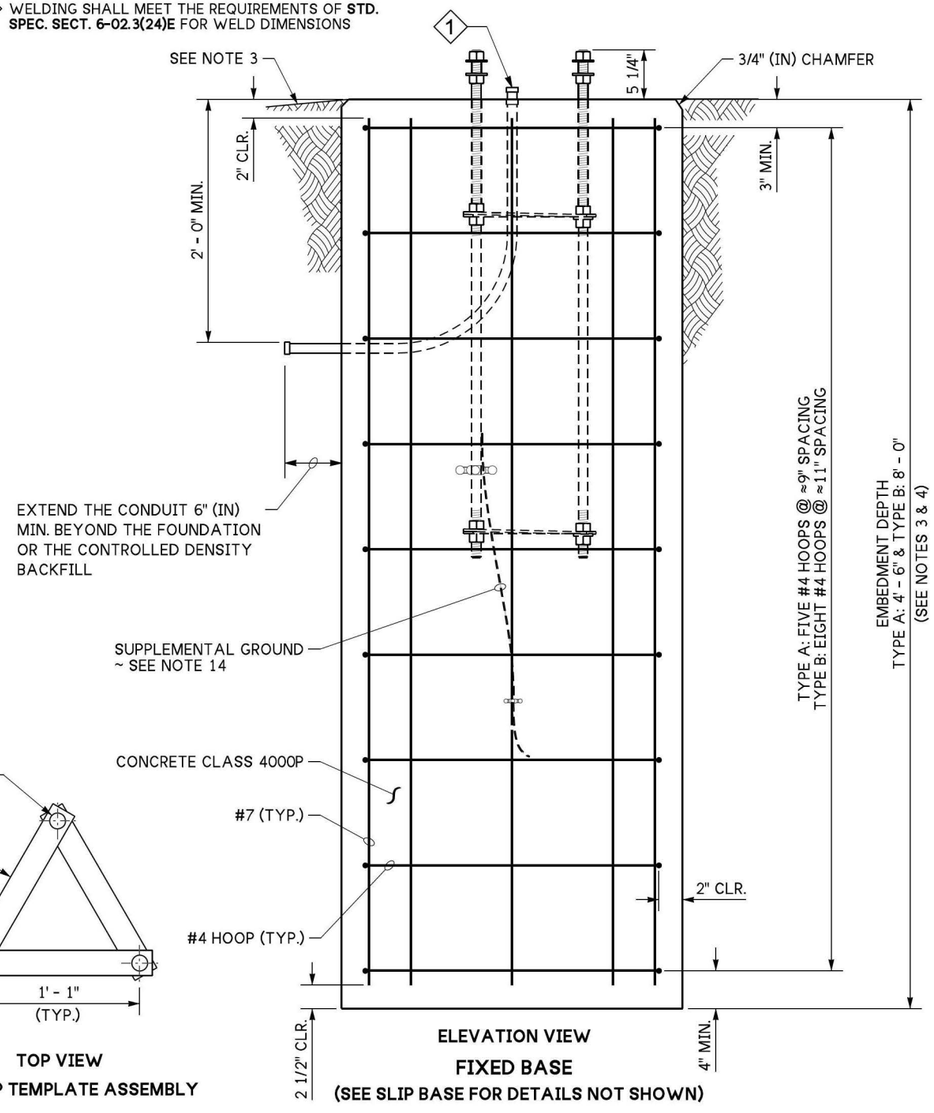
KEY NOTES

1. 1" (IN) DIAM. CONDUIT ~ CAP EACH END ~ PROVIDE ADDITIONAL CONDUIT FOR COMMUNICATION OR SIGNAL CABLE WHERE SHOWN IN THE CONTRACT
2. WELDING SHALL MEET THE REQUIREMENTS OF **STD. SPEC. SECT. 6-02.3(24)E** FOR WELD DIMENSIONS



ISOMETRIC VIEW

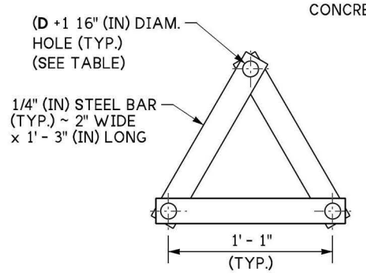
ANCHOR BOLT ASSEMBLY



ELEVATION VIEW

FIXED BASE

(SEE SLIP BASE FOR DETAILS NOT SHOWN)



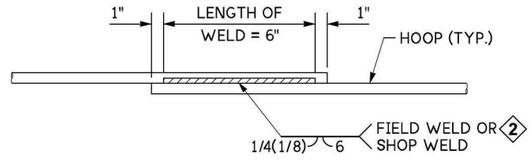
TOP VIEW

STRAP TEMPLATE ASSEMBLY

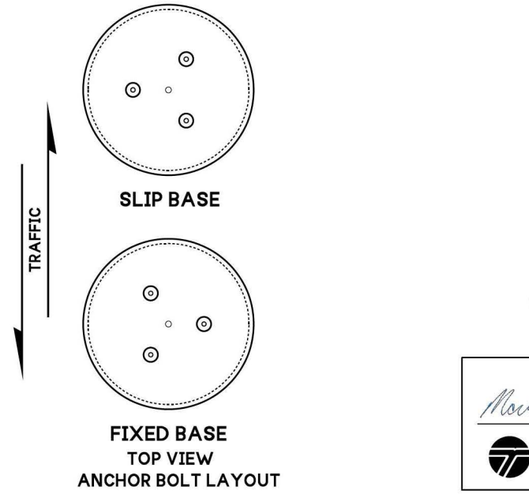
ANCHOR BOLT TABLE			
LUMINAIRE HEIGHT (H1) (FT.)	MAST ARM TYPE	MAST ARM LENGTH (FT.)	ANCHOR BOLT DIAMETER "D" (IN.)
20 TO 50	SINGLE	6 TO 16	1
20 TO 50	DOUBLE	6 TO 8	1
20 TO 45	DOUBLE	10 TO 16	1
46 TO 50	DOUBLE	10 TO 16	1 1/8

NOTES

1. See **Standard Plan J-28.40** for Luminaire Pole base mounting details.
2. The Strap Templates shall be held in place by heavy hex nuts, 18" (in) from the top of the foundation and 3" (in) from the bottom of the anchor bolts. Eighteen heavy hex nuts and six round washers are required for a slip base assembly. Eighteen heavy hex nuts and six plate washers are required for a fixed base assembly.
3. Use Steel Light Standard Foundation on level ground or slopes not exceeding 2H : 1V. Slopes steeper than 2H : 1V shall require a special foundation design.
4. These foundations are designed for a minimum of 2000 PSF (TYPE A) or 1500 PSF (TYPE B) allowable lateral bearing pressure for the soil. A special foundation design shall be required for soil with allowable lateral bearing pressure lower than 1500 PSF.
5. The Luminaire Pole height shall not exceed 50' (ft) (H1).
6. Slip bases shall not be installed on 50' (ft) (H1) poles with Double Mast Arms, nor on poles weighing more than 1000 lbs.
7. Slip base poles are required except where fixed bases are allowed by the **WSDOT Design Manual**.
8. Foundations constructed within Media Filter Drains shall be increased in depth by the depth of the Media Filter Drain.
9. Exposed portions of the foundation shall be formed to create a Class 2 surface finish. All forming shall be removed upon completion of foundation construction.
10. For excavation, concrete placement, and backfill options, see METHOD 1 and METHOD 2 on Sheet 2 of 2.
11. The anchor bolts shall be high-strength steel, manufactured from **ASTM F1554** Grade 105, with heavy hex nuts and hardened washers. Galvanize the anchor bolts according to **ASTM F2329.**
12. The foundation shall be grounded in accordance with the requirements of **Standard Specification Section 8-20.3(9)A.**
13. See **Standard Plan C-85.15** for steel light standards on traffic barrier.
14. Supplemental grounding conductor - non-insulated #4 AWG stranded copper. Clamp to reinforcing steel and anchor bolt as shown using connector suitable for use embedded in concrete.



WELDED LAP SPLICE DETAIL



SLIP BASE

FIXED BASE
TOP VIEW
ANCHOR BOLT LAYOUT

DRAWN BY: LISA CYFORD

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32820
STRUCTURAL ENGINEER
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Aug 21, 2026

STEEL LIGHT STANDARD FOUNDATION TYPES A & B

STANDARD PLAN J-28.30-05

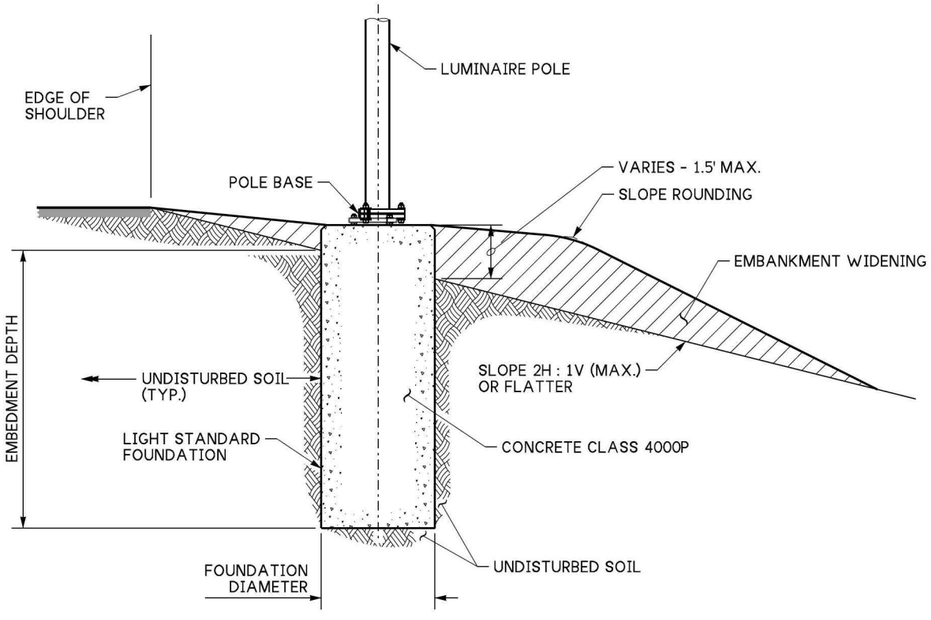
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Mark A Gaines Aug 21, 2026

STATE DESIGN ENGINEER

Washington State Department of Transportation



CONSTRUCTION METHOD 1

NO SUBSURFACE FORM

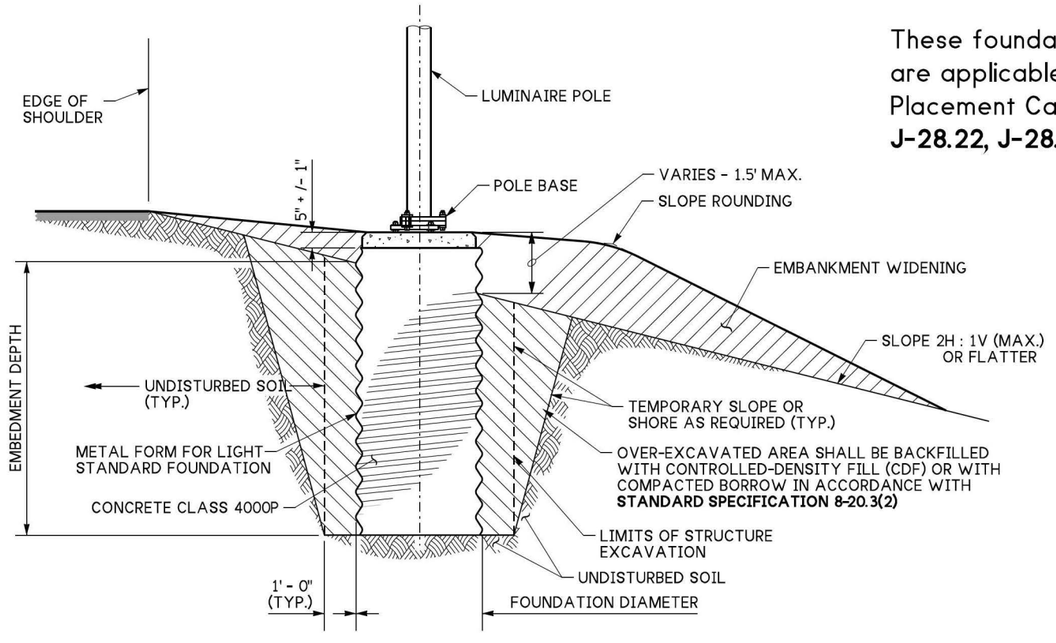
This method is used only when the existing soil in the hole will remain standing and the cement concrete can be placed without causing the soil to collapse. Concrete shall be cast directly against undisturbed soil.

Auger the hole for the foundation. Use a paper or cardboard form to achieve a smooth finish on the final exposed cement concrete. Support the form as necessary to remain plumb.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Construct the embankment widening (if required).



CONSTRUCTION METHOD 2

METAL (SUBSURFACE) FORM REQUIRED

When the existing soil will not retain a vertical face, over-excavate the foundation area and install a 36" (in) diameter corrugated metal (pipe) form. The corrugated metal form shall not extend more than 5" (in) +/- 1" (in) below any portion of the foundation that will remain exposed upon final grading. Continue forming to full height using a paper or cardboard form to achieve a smooth finish on final exposed cement concrete. Support the form as necessary to remain plumb.

Place the concrete foundation.

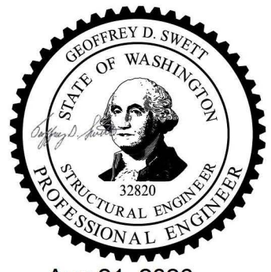
After concrete has cured, remove the paper or cardboard form portion.

Backfill with controlled-density fill or compacted borrow in accordance with **Standard Specification Sect. 8-20.3(2)**.

Construct the embankment widening (if required).

NOTE

These foundation Construction Methods are applicable to all Steel Light Standard Placement Cases. See **Standard Plans J-28.22, J-28.24,** and **J-28.26**.



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STEEL LIGHT STANDARD FOUNDATION TYPES A & B

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SHEET 2 OF 2 SHEETS

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