

CONCRETE SQUARE POLE DATA TABLE							
POLE GROUP	EXPOSED POLE LENGTH (ft)	GRADE SLOPE	POLE TIP WIDTH (in)	POLE TAPER (in/ft)	EMBEDMENT DEPTH (ft)	TOTAL POLE LENGTH (ft)	MINIMUM REQUIRED POLE ULTIMATE MOMENT CAPACITY AT GROUND LINE (Kip-ft)
A	44	3:1	9.0	0.162	12	56	81.11
B	20	3:1	6.5	0.162	7	27	10.34
C	36	3:1	9.0	0.162	11	47	47.88
D	40	3:1	9.0	0.162	12	52	60.76

NOTES:

- Pole Materials:**
Concrete: Class V Special or Class VI
 6 ksi minimum at 28 days
 4 ksi minimum at transfer

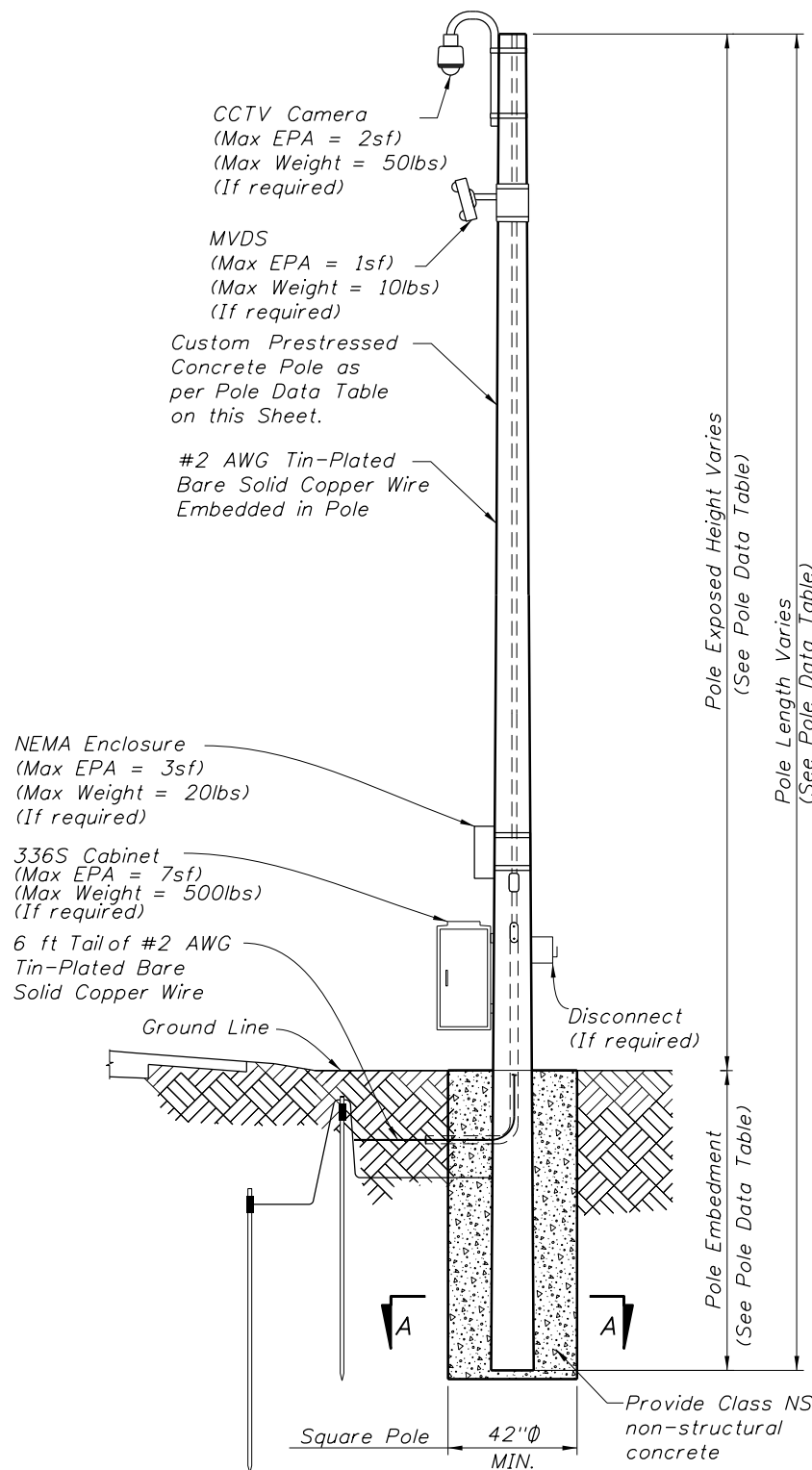
Prestressed Strands: ASTM A416 Grade 270
 stress relieved or low relaxation

Spiral Reinforcement: ASTM A1064 cold-drawn steel wire
- Provide a minimum concrete cover of 1 inch.
- For spiral reinforcement, one turn is required for splices and two turns are required at both the tip and butt ends of the pole.
- Provide hand hole and couple plates made of non-corrosive materials. Attach cover plates to poles in conjunction with round headed chrome plated screws.
- Tie ground wires to the interior reinforcing steel as necessary to prevent displacement during concreting operations.
- Provide Aluminum Identification Markings on the poles. Include the following information using inset numerals with 1" height or as approved in the Producer's Quality Control Plan:

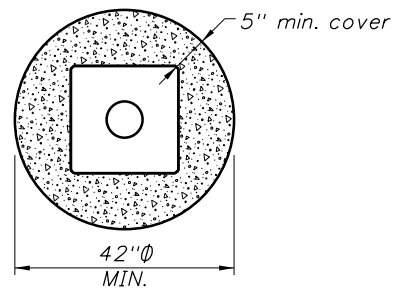
 Financial Project ID
 Pole Manufacturer
 Pole Type
 Pole Length (L)
- Cut the tip end of the prestressed strand first or simultaneously with the butt end.
- All prestressed poles shall be fully embedded in Class NS Non-Structural Concrete and designed for the following:
 - 150 mph wind speed with a 50 year structure design life.
 - A one inch maximum deflection in a 40 mph wind speed (3 second gust).
 - Assumed pole base mount elevation at 0 ft above surrounding grade.
 - Symmetrical strand layout (No rake).
- Contractor shall submit shop drawings and corresponding pole capacity calculations for Engineer of Record review and approval. Shop drawings and calculations shall be signed and sealed by a Florida Registered Professional Engineer.
- Coordinate this sheet with Pole Data Table on Sheet IT-19.
- Foundation design is based on the following conservative soil parameters:
 Soil Type - Sand
 Soil Layer Thickness - 15 ft
 Soil Friction Angle - 26 Degrees
 Effective Soil Weight - 42.6 pcf
 Design Water Table at Grade

If muck or peat is encountered during construction, the Contractor shall stop work and notify the Engineer for re-design of foundation.

If proposed pole Effective Projected Area (EPA) is greater than the EPA assumed in the foundation design, the Engineer of Record will re-evaluate the required foundation depth and specify any changes during the shop drawing review if required.



CONCRETE POLE ELEVATION



SECTION A-A

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METRIC ENGINEERING, INC.
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 CERTIFICATE OF AUTHORIZATION 2294

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	428213-2-52-02

**CONCRETE POLE
DATA SHEET**

SHEET NO.
IT-154

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.