Index 521-650 Light Pole Pedestal – Wall Coping

Design Criteria

AASHTO LRFD Bridge Design Specifications; ***Structures Design Guidelines (SDG)***

Design Assumptions and Limitations

Use this Index with Indexes 521-422, 521-423, 521-427, 521-428, 521-610, 521-820, 515-021, and 521-510 as appropriate.

Anchor Bolts were designed for wind loads on Standard Index 715-040 Light Poles.

For poles at or below elevations in the table, 4~1" diameter anchor bolts meet design criteria. Where elevations are 75 feet or less but greater than those shown in Table 1 4~1 ¼" diameter anchor bolts are required.

The pedestal and supporting junction slab is designed to accommodate the following unfactored loads:

Axial Dead Load = 1.56 kip
Wind Load Moment about Transverse Axis = 40.6 kip-ft
Wind Load Moment about Longitudinal Axis = 28.3 kip-ft
Dead Load Moment about Longitudinal Axis = 1.69 kip-ft
Torsion about Pole Axis = 3.56 kip-ft
Maximum Shear = 1.38 kip

Locate the centerlines of pedestals a minimum 3'-10" away from centerlines of open joints in junction slabs and traffic railings.

Plan Content Requirements

In the Plans:

Show Light Pole Pedestals on Plan and Elevation wall layout sheets. Use stations or longitudinal dimensions to define pedestal locations. Include anchor bolt diameters.

Payment

No separate payment is made for Light Pole Pedestals. See Payment Note on the ***Standard Plan***.