Index 21200 Light Pole Pedestal

Design Criteria

AASHTO LRFD Bridge Design Specifications, 6th Edition; ***Structures Design Guidelines (SDG)***

Design Assumptions and Limitations

The pedestal and supporting deck are designed to resist the following Working Loads from the light pole applied at the top of the pedestal:

Axial Dead Load = 1.560 kip

Wind Load Moment about Transverse Axis = 40.60 kip-ft

Wind Load Moment about Longitudinal Axis = 28.30 kip-ft

Dead Load Moment about Longitudinal Axis = 1.690 kip-ft

Maximum Shear = 1.380 kip

Torsion about Pole Axis = 3.560 kip-ft

In order to minimize vibration of light poles due to traffic, locate pedestals near substructure supports.

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

Design of the additional bridge deck reinforcement is based on the minimum transverse top deck reinforcing required by the ***SDG***.

Use this standard with Indexes 420, 422, 423, 424, 425, 820, 821, 5210 and 5212 as appropriate.

Plan Content Requirements

In the Structures Plans:

Show Light Pole Pedestals on Plan and Elevation, Superstructure and Approach Slab Supplemental Detail sheets. Use stations or longitudinal dimensions along bridge to define pedestal locations.

Payment

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