November 2, 2020 – Alternative traffic signal pole details

Subject: Addition of alternative traffic signal pole details to supplement the PWES-009.1 Transportation Design Signal, Sign and Pavement Marking Standards

The City and County of Denver, Department of Transportation & Infrastructure (DOTI) has issued new 2020 alternative traffic signal pole details. The new details supplement the currently adopted 2019 Transportation Design Signal, Sign and Pavement Marking Standards with the inclusion of alternative traffic signal poles, and provide additional flexibility for the use of smaller poles at specific locations.

The alternative pole details follow the guidelines as listed in the 2015 AASHTO LRFD (Load and Resistance Factor Design) Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, including interim revisions. After further evaluation, it is determined that the smaller alternative traffic signal pole details are sufficient for use at locations with the following criteria:

- Single mast arm lengths between 20’ and 50’.
- Double mast arm lengths between 20’ and 40’.
- Posted speed on the road is less than or equal to 35 mph.

If these criteria, and the design guidelines and requirements included in the AASHTO Specifications, are met, the revised details for the alternative design are acceptable. This includes the omission of a mitigation device for single and double mast arm structures.

Users of these supplemental standards should be advised that the City will continue to require submittals for materials, consistent with the requirements of the contract documents. However, the changes reflected in this supplemental standard do not appreciably change the pole material and geometric requirements that have been in place since at least 2012. Rather, the supplemental standards verify the use of those poles for certain size and site conditions.

This addendum shall take effect immediately.

Department of Transportation & Infrastructure | City Traffic Engineer

Sincerely,

Emily Gloeckner, City Traffic Engineer

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