

SUDAS Revision Submittal Form

Status Date: As of 11/7/2022 **Topic:** Mast arm vibration clarification
Manual: Specifications **Manual Location:** Section 8010, 2.05, C, 2 and
Figure 8010.105

Requested Revision:

C. Traffic Signal Poles and Mast Arms:

2. **Pole Design:** Comply with AASHTO 2013 Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. Use a 90 mph basic wind speed with a 50 year mean recurrence interval for strength design. Use Category II for fatigue design. Apply only natural wind gust loads (i.e. do not apply galloping loads, vortex shedding loads, or truck-induced gust loads) for fatigue design. Install vibration mitigation devices **that mechanically or statically minimizes vibration on the mast arm caused by wind** on all traffic signal pole mast arms over 60 feet in length as shown on ~~the figures~~ **Figure 8010.105**.

Reason for Revision: Clarification.

Comments: None.

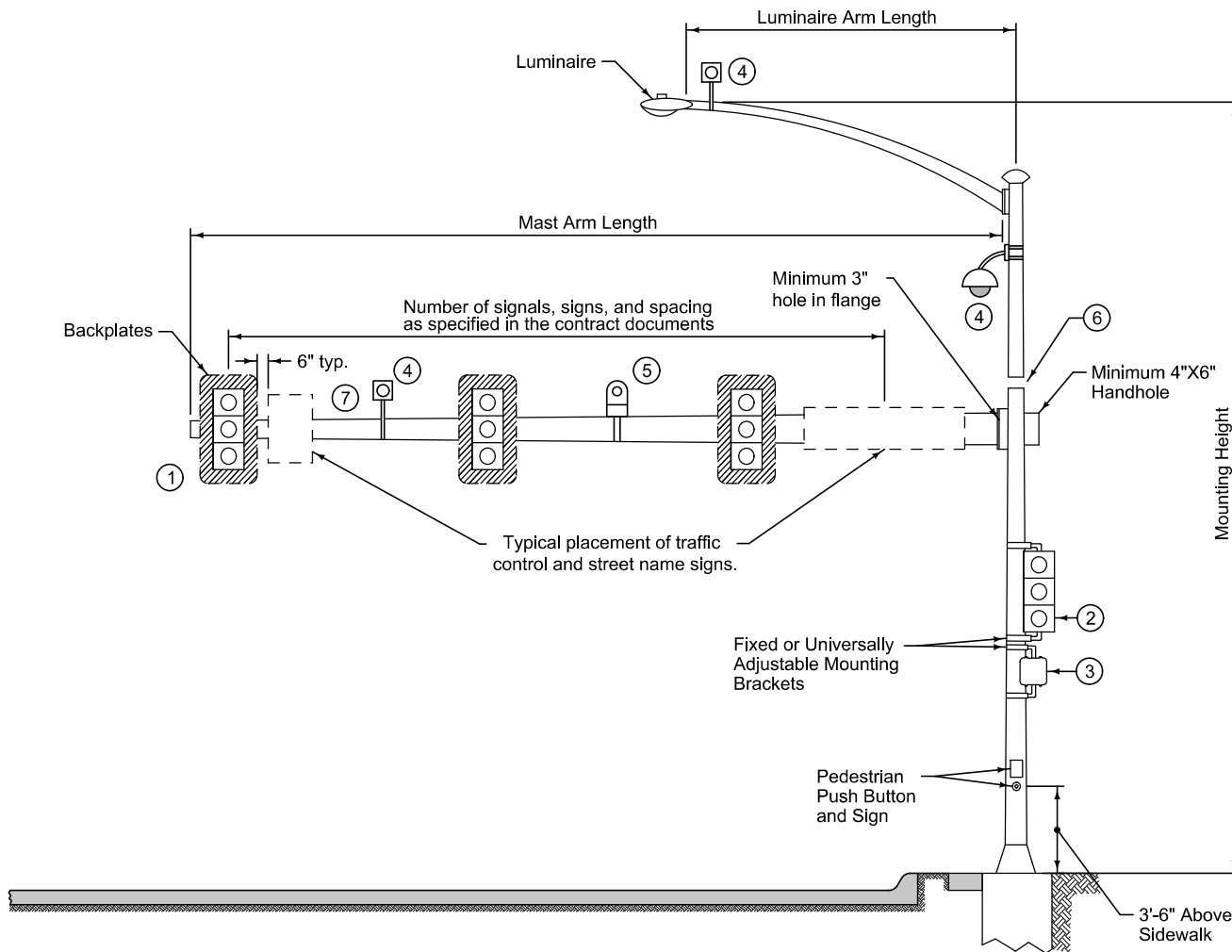
District: 1 2 3 4 5 6

Comments: None.

Action: Deferred Not Approved Approved


Final District Action Summary: All 6 districts approved.

Board of Directors Action: Approved.



- ① Ensure the top of the signal housing is no more than 25.6 feet above the pavement. Ensure the bottom of the signal housing and related attachments are at least 15 feet above the pavement.
- ② Ensure the bottom of the signal housing (including brackets) that is not located over a roadway is a minimum of 10 feet and a maximum of 19 feet above the sidewalk or, if there is no sidewalk, above the pavement grade at the center of the roadway.
- ③ Mount pedestrian signal heads with the bottom of the signal housing (including brackets) no less than 7 feet or more than 10 feet above the sidewalk level. Position and adjust heads to provide maximum visibility at the beginning of the controlled crosswalk.
- ④ Possible video camera location.
- ⑤ Possible EVP detector.
- ⑥ Pole cap if no luminaire extension.
- ⑦ Install wind vibration dampening device on mast arms greater than 60 feet in length. Location and mounting method as specified by manufacturer.

STEEL MAST ARM POLE

	REVISION 2 2023 Edition
	8010.105
	SHEET 1 of 1
SUDAS Standard Specifications	
MAST ARM POLE DETAILS	