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\*\*\*\*THIS IS A NEW IM. – PLEASE READ CAREFULLY.\*\*\*\*

## **DETERMINING THE SLOPE OF PEDESTRIAN FACILITIES**

### **SCOPE**

Pedestrian facilities include, but are not limited to, sidewalks, shared use paths, recreational trails, curb ramps, and turning spaces. It is important that the State's pedestrian facilities are accessible by all people of varying levels of mobility. The Americans with Disabilities Act (ADA) requires pedestrian facilities to be accessible. The contract documents specify the requirements for the construction of pedestrian facilities. In order to fulfill these requirements, and create consistently accessible pedestrian facilities statewide, this document will establish a standard for taking measurements to verify compliance.

### **PURPOSE**

The purpose of this document is to describe the recommended equipment and required procedure to be used for verifying compliance of the pedestrian facilities.

### **APPARATUS**

1. A 48 inch digital inclinometer (digital level) with an accuracy of 1 degree (0.18%) or less, or
2. A 48 inch bubble level and measuring tape.

### **RECORD FORMS**

1. Pedestrian Facility Slopes form (See Page 3 of this IM).

### **CALIBRATION OF LEVELS**

1. The digital level shall be calibrated a minimum of once daily and in accordance with manufacturer's recommendations prior to inspection, making sure the calibration area is clean and level.

The bubble level shall be visually checked on a level surface in one direction and turned end for end to assure the bubble indicates level in both directions.

2. Record calibration results on Pedestrian Facilities Slope form.

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## **MEASUREMENTS**

1. Curb Ramps and Turning Spaces:
  - A. 1 measurement at each location where slopes are indicated in the contract documents.
  - B. Any areas of concern determined by visual observation.
2. Sidewalks, shared use paths, and recreational trails:
  - A. 1 at each end of every driveway; and
  - B. 1 at a maximum interval of 100 feet, if equal to or less than 1/4 mile in length; or
  - C. 1 at a maximum interval of 1/4 miles, if more than 1/4 mile in length.
  - D. Any areas of concern determined by visual observation.
  - E. A minimum of 3 measurement locations per project.

NOTE: Measure both cross slope and longitudinal slope at each location identified above.

3. Documentation

For curb ramps and turning spaces, measurements shall be documented on a copy of the S-sheet drawing(s) or Tab 113-10. The S-sheet drawing(s) or Tab 113-10 shall be signed and dated, and indicate their company name. The S-sheet drawing(s) or Tab 113-10 shall then be submitted to the Contracting Authority.

For sidewalks, shared use paths, and recreational trails, measurements shall be documented on the Pedestrian Facilities Slope form with a copy of the drawing(s) indicating the points where the measurements were taken. The Pedestrian Facilities Slope form and drawing(s) shall be signed and dated, indicating their company name. The Pedestrian Facility Slopes form and drawing(s) shall then be submitted to the Contracting Authority.

The Contracting Authority will perform quality assurance on a minimum 10% of the measurements including areas of concern determined by the visual observation. For curb ramps and turning spaces, the Contracting Authority will sign and date the S-sheet drawings or Tab 113-10 when satisfied with compliance. For sidewalks, shared use paths, and recreational trails, the Contracting Authority will sign and date the Pedestrian Facility Slopes form when satisfied with compliance.

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