

### Scope

1. This method describes the use of the rolling straightedge for determining pavement surface irregularities.

### Apparatus

2. (a) A rolling straightedge approved in accordance with DOTD Designation: TR 603, and bearing a valid certification sticker dated within 30 days.

### Procedure

3. (a) The approved straightedge shall be checked at least once daily before initial use, and at any time during the day that the inspector feels it to be necessary, by the following procedure:

(1) Turn on the solenoids.

(2) Slowly raise one end of the straightedge while observing the movement of the pointer. The solenoid should discharge when the pointer just passes the preset increment. If the solenoid does not discharge

as the pointer just passes the preset location or if the solenoid discharges prior to the pointer's reaching the preset location, the straightedge shall be considered out of calibration.

(3) With the straightedge resting on a level surface, slowly raise the scale wheel and follow the procedure outlined in paragraph 3(a)(2) to determine if the straightedge has maintained calibration.

(4) If the straightedge has not maintained calibration, it shall be recalibrated in accordance with DOTD Designation: TR 603.

(b) Inspect the physical condition of the straightedge to ensure that it meets the general inspection requirements listed in DOTD Designation: TR 603, Figure 10.

(c) The rolling straightedge shall be pulled manually, at a slow walk (see Figure 1). It shall not be pulled by any type of motor vehicle.

(d) The inspector should always watch the dial indicator to determine the areas which are out of tolerance. This is especially true when there is more than one surface tolerance requirement to be considered. The deficient

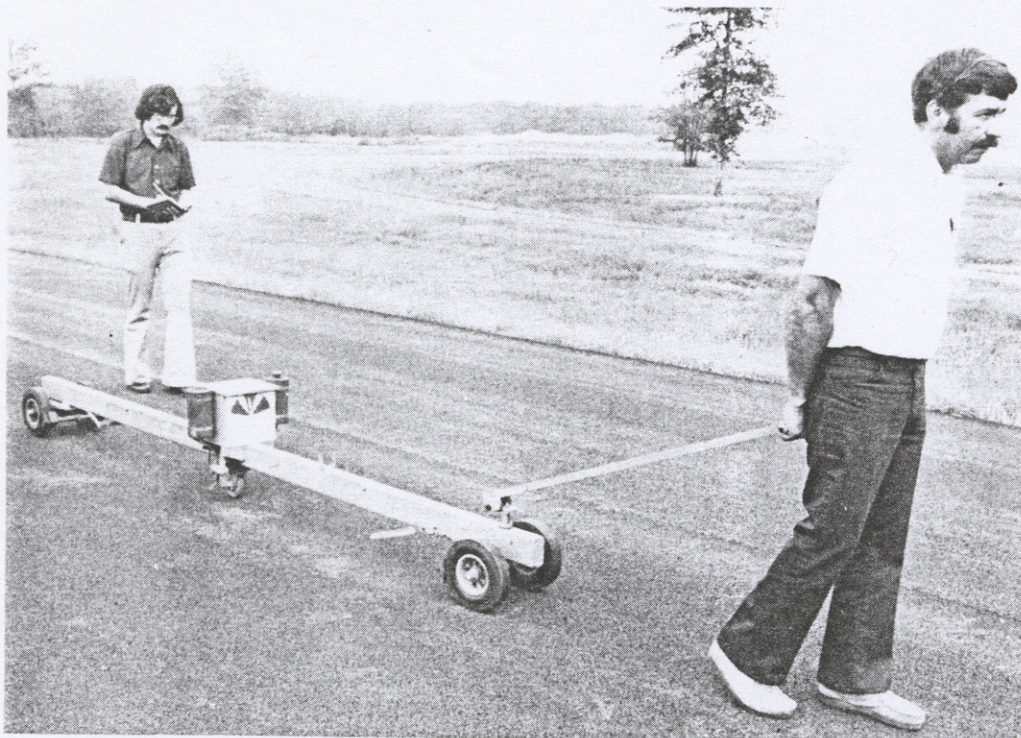


Figure 1



areas are to be marked off, measured, and recorded. They should be marked off in such a manner that the contractor will have visible evidence of which areas are out of tolerance.

(e) Whenever the pointer indicates that a specification tolerance which has not been preset with the sole-noids has been exceeded, the straightedge shall be backed up to ascertain the beginning point of the deviation.

#### **Care and Maintenance**

4. The rolling straightedge is a delicate instrument and shall be handled and transported with care at all times. The solution storage tanks should be flushed out regularly to prevent corrosion. All moving parts are to be kept clean, lubricated, and free of buildup, so that the straightedge may roll smoothly and measure surface tolerances accurately.