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**Test Procedure for****CALCULATING THE PLASTICITY INDEX OF SOILS****TxDOT Designation: Tex-106-E****Effective Date: August 1999**

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**1. SCOPE**

- 1.1 This method determines the plasticity index of soils.
  - 1.2 The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.
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**2. DEFINITIONS**

- 2.1 *Plasticity Index*—Plasticity index is a test conducted on soil samples as set out in this test method. The plasticity index is a range of moisture in which a soil remains in a plastic state while passing from a semisolid state to liquid state. Numerical difference between Liquid Limit and Plastic Limit of a soil ( $PI = LL - PL$ ) using Tex-106-E.
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**3. PROCEDURE**

- 3.1 Determine liquid limit in accordance with Tex-104-E.
  - 3.2 Determine plastic limit in accordance with Tex-105-E.
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**4. CALCULATION**

- 4.1 Use the following calculation to determine plasticity index:

$$PI = \text{Liquid Limit} - \text{Plastic Limit}$$

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**5. REPORTING**

- 5.1 Record results to the nearest whole number.
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