1. **Scope**

The test calculates the Weighted Plasticity Index (WPI) (reference A) as the product of Plasticity Index ($I_P$) and Percent passing the 0.425 mm sieve ($G$); using values obtained from plasticity index and grading test reports for samples of Type A earthworks material obtained post compaction (reference B).

2. **Procedure**

   (a) Record material source and placement location, test lot bounds and test site to which the calculation refers.

   (b) Obtain from the plasticity index test report the plasticity index value ($I_P$) for the material. Record the report number.

   (c) Obtain from the particle size distribution test report the value ($G$) for the percent passing the 0.425 mm sieve for the material. Record the report number.

   (d) Calculate the value of the Weighted Plasticity Index (WPI), as Plasticity Index x Percent passing 0.425 mm sieve, using the formula:

   $$WPI = I_P \times G$$

   where

   $WPI = \text{Weighted Plasticity Index}$
   $I_P = \text{Plasticity Index value for the material (\%)}$
   $G = \text{Percent passing the 0.425 mm sieve (\%)}$

3. **Reporting**

The test report shall include the following information, and may be combined in a report with other test data from the same sample:

   (a) The source and description of the material.

   (b) Location of test sites, and test lot boundaries.

   (c) Date of sampling.

   (d) The report number(s), applicable, to the test results used in the calculations.

   (e) The values of plasticity index (%) and grading (%) used in the calculation.

   (f) The value of the Weighted Plasticity Index (WPI), to the nearest 10 units.

   (g) Reference to this Test Method (RC 326.01).

4. **References**


   B. VicRoads Standard Specification Section 204 – *Earthworks* Clauses 204.04(b) and 204.14(a) use PI as the symbol for plasticity index, and are relevant to this test. Australian Standards use $I_P$ as the symbol for plasticity index.

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**VicRoads Test Method - Revision Summary**

| RC 326.01 – Weighted Plasticity Index – PI x Percent passing 0.425 mm sieve |
|---|---|---|---|
| **Date** | **Clause** | **Description of Revision** | **Authorised by** |
| April 2016 | Full method | New issue | Manager – Construction Materials |

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