

## 203-R-628 COMPACTION ACCEPTANCE WITH LWD

(Revised 10-20-16)

The Standard Specifications are revised as follows:

SECTION 203, AFTER LINE 971, INSERT AS FOLLOWS:

*The compaction of chemically modified soils and coarse aggregates will be determined by Light Weight Deflectometer, LWD, testing in accordance with ITM 508. The moisture content will be determined in accordance with AASHTO T 255 or ITM 506. The compaction procedures shall be in accordance with 203.23, 215, 301, 302, and 303. Compaction of aggregate shall not occur if the moisture content of the aggregate is greater than 6.0%.*

*The maximum allowable deflection will be determined from a test section or will be specified. Acceptance testing with a LWD will be in accordance with ITM 508. The optimum moisture content and gradation will be determined by performing AASHTO T 99 Method C, AASHTO T 11, and AASHTO T 27 on representative samples of the aggregates.*

*The moisture content of the aggregate shall be between 4.0% and the optimum moisture content when the aggregate is delivered to the project. Water shall not be added to the aggregate on the grade. Samples for moisture content testing will be taken on the grade from the first truck of the day. The frequency of the moisture content test for aggregates will be a minimum of one test for each day of aggregate placement.*

*The maximum allowable deflection for chemically modified soils and aggregate over chemically modified soils shall be in accordance with the following:*

| <i>Material Type</i>                        | <i>Maximum Allowable Deflection, mm</i> |
|---------------------------------------------|-----------------------------------------|
| <i>Lime Modified Soil</i>                   | <i>0.30</i>                             |
| <i>Cement Modified Soil</i>                 | <i>0.27</i>                             |
| <i>Aggregates over Lime Modified Soil</i>   | <i>0.30</i>                             |
| <i>Aggregates over Cement Modified Soil</i> | <i>0.27</i>                             |

*Table 1*

*Test sections shall be constructed in accordance with ITM 514 in the presence of a representative of the Office of Geotechnical Services for other materials not included in Table 1 to determine the maximum allowable deflection.*

*Acceptance of the compaction of chemically modified soils or aggregates will be determined by averaging three LWD tests obtained at a random station determined in accordance with ITM 802. The location of the three tests will be at 2 ft from each edge of the construction area and at 1/2 of the width of the construction area. The average deflection shall be equal to or less than the maximum allowable deflection allowed in Table 1 or determined by the test section. The frequency of the LWD testing will be three tests for each 800 t for compacted aggregate and three tests for each 1,400 cu yd of chemically modified soil.*

*If the average deflection is not equal to or less than the maximum allowable deflection for aggregates, a sample of the aggregate shall be obtained in accordance with AASHTO T 2 and a moisture content test shall be performed in accordance with AASHTO T 255 to determine if the moisture content is within the acceptable limits. If the moisture content is not within the acceptable limits, additional LWD tests may be taken at the same locations after 24 h if the moisture content is within the acceptable limits at the time of testing. The aggregate will be accepted if the LWD tests are equal to or less than the maximum allowable deflection.*

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