



### REQUEST FOR LABORATORY TESTS

Project name: \_\_\_\_\_ Project No.: \_\_\_\_\_

FHWA Project Engineer: \_\_\_\_\_ State: \_\_\_\_\_ County: \_\_\_\_\_

Submitted by: \_\_\_\_\_ Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Field sample / QL PAY number: \_\_\_\_\_ Sampled by: \_\_\_\_\_

Date sampled: \_\_\_\_\_

Number & type containers: \_\_\_\_\_ Witnessed by: \_\_\_\_\_ Date shipped: \_\_\_\_\_

Quantity represented: \_\_\_\_\_ Intended use: \_\_\_\_\_

Sample type (Acceptance, PC, IAS, CVS, etc.): \_\_\_\_\_ Date needed: \_\_\_\_\_

Source name: \_\_\_\_\_ Source location: \_\_\_\_\_

Material description: \_\_\_\_\_ Item No: \_\_\_\_\_

Sample location: \_\_\_\_\_ Lot No: \_\_\_\_\_

Station: \_\_\_\_\_ Offset: \_\_\_\_\_ Milepost: \_\_\_\_\_ Depth: \_\_\_\_\_

| <b>List Tests To Be Performed:</b><br><small>(See Reverse For Tests)</small> | <b>Project Specifications and Field Test Results</b> |                           |  |                    | Special Instructions:  |
|--|--|---------------------------|--|--------------------|--|
|  | <b>Parameters/Sieves</b>                             | <b>Target Value Range</b> | <b>Specification Range<sup>1</sup></b> | <b>Test Result</b> |  |
|  |  |                           |  |                    |  |
|  | 1½ -inch (37.5 mm)                                   |                           |  |                    |  |
|  | 1-inch (25.0 mm)                                     |                           |  |                    |  |
|  | ¾-inch (19.0 mm)                                     |                           |  |                    |  |
|  | ½-inch (12.5 mm)                                     |                           |  |                    |  |
|  | ⅜-inch (9.5 mm)                                      |                           |  |                    |  |
|  | No. 4 (4.75 mm)                                      |                           |  |                    |  |
|  | No. 8 (2.36 mm)                                      |                           |  |                    |  |
|  | No. 10 (2.00 mm)                                     |                           |  |                    |  |
|  | No. 16 (1.18 mm)                                     |                           |  |                    |  |
|  | No. 30 (600 µm)                                      |                           |  |                    |  |
|  | No. 40 (425 µm)                                      |                           |  |                    |  |
|  | No. 50 (300 µm)                                      |                           |  |                    |  |
|  | No. 100 (150 µm)                                     |                           |  |                    |  |
|  | No. 200 (75 µm)                                      |                           |  |                    |  |
|  | Moisture-Density                                     |                           |  |                    | Please include a specific date the results are needed. (Do NOT use ASAP).  |
|  | Liquid Limit   |                           |  |                    |  |
|  | PI   |                           |  |                    | <b>Portland Cement Concrete Data</b><br><br>Air Content (%): _____<br>Slump: _____<br>Break Date: _____<br>Age (Days): _____<br><b>Specified Strength</b><br>Min. _____ @ _____ Days |
|  | Sand Equivalent                                      |                           |  |                    |  |
|  | Fractured Faces                                      |                           |  |                    |  |
|  | Asphalt Content                                      |                           |  |                    |  |
|  | Density  |                           |  |                    |  |
|  | Flat & Elongated                                     |                           |  |                    |  |
|  | Concrete Strength                                    |                           |  |                    |  |

<sup>1</sup>The specification range may be the allowable deviation (±) from the target value.

## INSTRUCTIONS FOR SUBMITTING SAMPLE

1. Please refer to the [FLH Field Materials Manual<sup>2</sup> Appendix C – Sample Quantities](#) for appropriate sample sizes.
2. Fill out the transmittal completely. (Use "NK" for not known).
  - a. Please include a specific date the results are needed. (Do *NOT* use ASAP).
3. Place one transmittal inside a waterproof envelope and place inside the sample container.
4. Place a second transmittal in a waterproof envelope and attach to the outside of sample container.
5. E-mail the transmittal directly to WFL.Materials\_Lab@dot.gov.

| TESTS ON SUBBASE, BASE & SURFACING AGGREGATES <sup>1</sup> :  | TESTS ON SOILS <sup>1</sup> :   |
|---|---|
| <p>Complete Preliminary Testing of Gravel<br/>1 to 10</p> <p>Complete Preliminary Testing of Quarries<br/>4 to 10</p> <p>Base or Subbase Evaluation<br/>1 to 6 &amp; 13</p><br><p>1. Sieve Analysis T 11/T 27</p> <p>2. Plasticity Index T 89/T 90</p> <p>3. SE as received, Referee Method T 176</p> <p>4. Durability T 210</p> <p>5. Specific Gravity, Fine/Coarse (Apparent) T84/T85</p> <p>6. Los Angeles Abrasion T 96</p> <p>7. Soundness by Sodium Sulfate T 104</p> <p>8. Accelerated Weathering DMSO</p> <p>9. Plasticity Index, Lab Manufactured T89/T 90</p> <p>10. SE, Lab Manufactured, Referee Method T 176</p> <p>11. Specific Gravity, Coarse T 85</p> <p>12. Specific Gravity, Fine T 84</p> <p>13. R-Value, 300 PSI Exudation T 190</p> <p>14. Humphre's Granular Compaction</p> <p>15. Fractured Faces ASTM D 5821</p> <p>16. Unit Weight T 19</p> <p>17. Flat and Elongated Particles ASTM D 4791</p> | <p>Complete Preliminary Testing of Soils<br/>2 to 5</p> <p>Identification of Soils, COMPLETE (24 hr)<br/>1, 3, 4, &amp; 6</p> <p>Identification of Soils, PARTIAL (4 hr)<br/>2, 3, 4, &amp; 6</p> <p>Identification of Soils, SIMPLE<br/>3, 6, &amp; 7</p><br><p>1. Particle Size Analysis to 0.002 mm (24 hr) T 88</p> <p>2. Particle Size Analysis to 0.02 mm (4 hr) T 88</p> <p>3. Plasticity Index (Atterberg Limits) T 89/T 90</p> <p>4. Specific Gravity T 100</p> <p>5. R-Value, 300 PSI Exudation T 190</p> <p>6. Soil Classification M 145</p> <p>7. Sieve Analysis T 11/ T 27</p> <p>8. Natural Moisture Content T 265</p> <p>9. Moisture Density, Standard Proctor T 99</p> <p>10. Moisture Density, Modified Proctor T 180</p> <p>11. Sand Equivalent T 176</p> <p>12. Unconfined Compression T 208</p> <p>13. Mass Loss by Ignition T 267</p> <p>14. Consolidation T 216</p> <p>15. Direct Shear T 236</p> <p>16. pH of Soil T 289</p> <p>17. Resistivity T 288</p> <p>18. Revegetation Analysis</p> |
| TESTS ON CONCRETE AGGREGATES AND CONCRETE <sup>1</sup> :  | TESTS ON BITUMINOUS MATERIALS <sup>1</sup> :  |
| <p>Specific Gravity, Coarse &amp; Fine T 85/T 84</p> <p>Unit Weight T 19</p> <p>Organic Impurities T 21</p> <p>Clay Lumps T 112</p> <p>Lightweight Pieces Compressive Strength, Cylinders T 113<br/>T 22</p>  | <p>Verification of Liquid Asphalt<br/>Grading Tests on Emulsified Asphalts</p><br><p>Hot Mix Design, Laboratory Verification<br/>Preliminary Superpave Contractor Verification Sample<br/>1 to 5</p><br><p>1. Asphalt Content, Ignition Method T 308</p> <p>2. Sieve Analysis T 30</p> <p>3. Bulk Specific Gravity T 166</p> <p>4. Theoretical Maximum Specific Gravity (RICE) T 209</p> <p>5. Air Voids T 269</p> <p>6. Core Density w/Submitted RICE Value T 166</p>  |
| IMAGING <sup>1</sup> :  |   |
| <p>Digital Specimen Photography ASTM E 312</p>  |   |

<sup>1</sup> All tests noted above are AASHTO standards unless otherwise noted.

<sup>2</sup> <http://flh.fhwa.dot.gov/resources/manuals/fmm/>

\*NOTE: For additional tests not listed above, contact the Central Laboratory. Additional tests may include, but are not limited to the following:  
Additive stabilization, Cement Treated Base, Mortar Strength.

### Special Instructions (continued):