

**VALUE ADDED REWORKED ASPHALT CONCRETE PAVEMENT.
(REV 1-30-12)**

The following new Section is added after Section 338:

**SECTION 338B
VALUE ADDED REWORKED ASPHALT CONCRETE PAVEMENT**

338B-1 Description.

Construct Value Added Reworked Asphalt Concrete Pavement consisting of a reworked asphalt pavement layer and if required by the Contract Documents, an asphalt concrete friction course, subject to a three year warranty period after final acceptance of the Contract in accordance with 5-11.

The work specified in this Section will not be paid for directly, but will be considered as incidental to other Contract items.

338B-2 Materials and Construction Requirements.

Meet the following requirements:

Hot Bituminous Mixtures - Plant, Methods and Equipment	Section 320
Hot Bituminous Mixtures - General Construction Requirements	Section 330
Reworked Asphalt Concrete	Section 324
Superpave Asphalt Concrete	Section 334
Asphalt Concrete Friction Courses	Section 337

338B-3 Statewide Disputes Review Board.

The Statewide Disputes Review Board in effect for this Contract will resolve any and all disputes that may arise involving administration and enforcement of this Specification. The Contractor and the Department acknowledge that use of the Statewide Disputes Review Board is required, and the determinations of the Statewide Disputes Review Board for disputes arising out of this Specification will be binding on both the Contractor and the Department, with no right of appeal by either party.

Meet the requirements of 8-3.

338B-4 Pavement Evaluation and Remedial Work.

338B-4.1 General: The Department's Pavement Condition Survey Program, along with observations by the Engineer, will be used as the basis for determining the extent and the magnitude of the pavement distresses occurring on the project. In the event the level of distress exceeds any of the threshold values defined below, remedial work as described in 338B-4.5 by the Contractor will be required.

The Department will monitor the pavement for distresses and may require remedial action at any time. For evaluation purposes, the project will be subdivided into LOTs of 0.1 mile per lane. When the segment is less than 0.1 mile, the segment will be called a partial LOT. For purposes of threshold values and remedial work, partial lots and lots will be treated as lots. The Department may conduct a Pavement Condition Survey of the value added pavement

following the final acceptance of the project, and at intermediate times throughout the warranty period with findings provided when considered by the Department to be the obligation of the Contractor.

The final survey, if determined by the Engineer to be necessary, will be conducted before the end of the warranty period with results provided to the Contractor for those conditions exceeding contract threshold values requiring remedial action that the Department believes to be an obligation of the Contractor. The Department will be responsible for all costs associated with the surveys.

If the survey findings, intermediate or final, are to be disputed by the Contractor, written notification must be provided to the Engineer within 30 calendar days of the date of receipt of the information from the Department.

During the warranty period, the Contractor may monitor the project using nondestructive methods and may participate with the Department in the Pavement Condition Surveys upon request. The Contractor shall not conduct any coring, milling or other destructive methods without prior approval by the Engineer.

338B-4.2 Category 1 Pavement: For purposes of this Specification, Category 1 Pavement is defined as mainline roadways, access roads and frontage roads with a design speed of 55 mph and greater.

Threshold values and associated remedial work for Category 1 Value Added Asphalt Pavement are specified in Table 338B-1.

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TABLE 338B-1 Category 1 Pavements		
Type of Distress	Threshold Values	Remedial Work
Rutting ⁽¹⁾	Depth > 0.25 inch	Remove and replace the distressed LOT(s) to the full depth of all layers and to the full lane width ⁽²⁾
Ride ⁽³⁾	RN < 3.5	Remove and replace the top layer for the full length and the full lane width of the distressed LOT(s) ⁽⁴⁾
Settlement or Depression ⁽⁵⁾	Depth \geq 1/2 inch	Propose the method of correction to the Engineer for approval prior to beginning remedial work
Cracking ⁽⁶⁾	Cumulative length of cracking > 30 feet for Cracks > 1/8 inch	Remove and replace the distressed LOT(s) to the full depth of all layers, and to the full lane width ⁽⁷⁾
Raveling or Delamination ⁽⁸⁾	Any length	Remove and replace the distressed area(s) to the full distressed depth and the full lane width for the full distressed length plus 50' on each end
Pot holes or Slippage Areas ⁽⁸⁾	Observation by Engineer	Remove and replace the distressed area(s) to the full distressed depth and the full lane width for the full distressed length plus 50' on each end
Bleeding ⁽⁹⁾	Loss of surface texture due to excess asphalt, individual length \geq 10 feet and \geq 1 foot, in width.	Remove and replace the distressed area(s) to the full distressed depth and the full lane width for the full distressed length plus 50' on each end

TABLE 338B-1
Category 1 Pavements

<p>(1) Rutting: Rut depth to be determined by Laser Profiler in accordance with the Flexible Pavement Condition Survey Handbook. For any LOT that cannot be surveyed by Laser Profiler, the rut depth will be determined manually in accordance with the Flexible Pavement Condition Survey Handbook, with the exception that the number of readings per LOT will be one every 20 feet. For a partial LOT, a minimum of three measurements not exceeding 20 feet apart will be made. When the average of the measurements obtained manually exceeds 0.30 inch or if any individual measurement exceeds 0.6 inch, remedial work will be required.</p> <p>(2) Remedial Work for Rutting: The Contractor may propose removal and replacement of less than the full depth of all layers by preparation and submittal of a signed and sealed engineering analysis report, demonstrating the actual extent of the distressed area(s). Remedial work must be performed in accordance with Table 338B-1 unless approved otherwise by the Engineer.</p> <p>(3) Ride: Ride Number (RN) to be established by Laser Profiler in accordance with FM 5-549.</p> <p>(4) If the deficient ride is due to underlying asphalt layers; base, subgrade, or embankment which were constructed by the Contractor, propose the method of correction to the Engineer for approval prior to beginning the remedial work.</p> <p>(5) Settlement or Depression: Depth of the settlement or depression to be determined by a 6 foot manual straightedge.</p> <p>(6) Cracking: Beginning and ending of 1/8 inch cracking will be determined as the average of three measurements taken at one foot intervals. The longitudinal construction joint at the lane line will not be considered as a crack.</p> <p>(7) Remedial Work for Cracking: The Contractor may propose removal and replacement of less than the full depth of all layers by preparation and submittal of a signed and sealed engineering analysis report, demonstrating the actual extent of the distressed area. Remedial work must be performed in accordance with Table 338B-1 unless approved otherwise by the Engineer.</p> <p>(8) Raveling, Delamination, Pot holes, Slippage: As defined and determined by the Engineer in accordance with the examples displayed at the following URL: http://www.dot.state.fl.us/SpecificationsOffice/Implemented/URLinSpecs/Pavement.shtm</p> <p>(9) Bleeding: Bleeding to be defined and determined by the Engineer in accordance with the examples displayed at the following URL: http://www.dot.state.fl.us/SpecificationsOffice/Implemented/URLinSpecs/Pavement.shtm</p>

338B-4.3 Category 2 Pavement: For purposes of this Specification, Category 2 Pavement is defined as mainline roadways, access roads and frontage roads with a design speed less than 55 mph; approach transition and merge areas at toll booths; ramps; acceleration and deceleration lanes (including tapers); turn lanes; parking areas; rest areas; weigh stations; and agricultural inspection stations.

Threshold values and associated remedial work for Category 2 Value Added Asphalt Pavement are specified in Table 338B-2.

TABLE 338B-2
Category 2 Pavements

Type of Distress	Threshold Values	Remedial Work
Rutting ⁽¹⁾	Measured by Laser Profiler: See Table 338B-1	See Table 338B-1
	Manual Measurement: Avg. Depth > 0.4 inch	Remove and replace 1.5 inch ^(1a) the full lane width for the area plus 50 feet
Cracking	Cumulative length of cracking > 300 feet for Cracks > 1/8 inch	See Table 338B-1
Surface Deterioration ⁽²⁾	See Table 338B-1	See Table 338B-1
Settlement or Depression ⁽³⁾	Depth ≥ 1/2 inch	See Table 338B-1

(1) Rutting: Rut depth to be determined by Laser Profiler in accordance with the Flexible Pavement Condition Survey Handbook. For any LOT that cannot be surveyed by the Laser Profiler, the rut depth will be determined manually in accordance with the

TABLE 338B-2 Category 2 Pavements		
Type of Distress	Threshold Values	Remedial Work
Flexible Pavement Condition Survey Handbook, with the exception that the number of readings per LOT will be one every 20 feet. For a partial LOT, minimum of three measurements not exceeding 20 feet apart will be checked. When the average of the measurements obtained manually exceeds 0.40 inch, or if any individual measurement exceeds 0.6 inch, remedial work will be required..		
(1a) If pavement has an open graded friction course, remove and replace 2.0 inches.		
(2) Surface Deterioration: As used in Table 338B-2, Surface Deterioration includes Raveling or Delamination; Pot holes; Slippage Areas; and Bleeding; all as defined and footnoted in Table 338B-1.		
(3)Settlement or Depression: Depth of the settlement or depression to be determined by a 6 foot manual straightedge.		

338B-4.4 Category 3 Pavement: For purposes of this Specification, Category 3 Pavement is defined as bicycle paths, walking paths, median crossovers, shoulders and other areas as determined by the Engineer.

Threshold values and associated remedial work for Category 3 Value Added Asphalt Pavement are specified in Table 338B-3.

TABLE 338B-3 Category 3 Pavements		
Type of Distress	Threshold Values	Remedial Work
Rutting	N/A	N/A
Cracking	Cumulative length of cracking > 500 feet for Cracks > 1/8 inch	See Table 338B-1
Surface Deterioration ⁽¹⁾	See Table 338B-1	See Table 338B-1
Settlement or Depression ⁽²⁾	Depth \geq 1/2 inch	See Table 338B-1

(1) Surface Deterioration: As used in Table 338-3, Surface Deterioration includes Raveling or Delamination; Pot holes; Slippage Area(s); and Bleeding; all as defined and footnoted in Table 338B-1.

(2) Settlement/Depression: Depth of the settlement/depression to be determined by a 6 foot manual straightedge.

338B-4.5 Remedial Work: The Contractor will perform all necessary remedial work described within this Section at no cost to the Department. If the pavement distresses exceed threshold values and it is determined that the cause of the distress is due to the embankment, subgrade, base or other activities performed by the Contractor, the Contractor will be responsible for performing all remedial work associated with the pavement distress. Should an impasse develop in any regard as to the need for remedial work or the extent required, the Statewide Disputes Review Board will render a final decision by majority vote.

Remedial work will not be required if any one of the following conditions is found to apply:

- a. Determination that the deficiency was due to the failure of the existing underlying layers that were not part of the Contract work.
- b. Determination that the deficiency was the responsibility of a third party or its actions, unless the third party was performing work included in the Contract.

If a measured distress value indicates remedial action is required per Table 338B-1, Table 338B-2 or Table 338B-3, the Contractor must begin remedial work within 45 calendar days of notification by the Department or a ruling of the Statewide Disputes Review Board. The Disputes Review Board will determine the allowable duration for the completion of the remedial work, but not to exceed 6 months.

In the event remedial action is necessary and forensic information is required to determine the source of the distress, the Department may core or trench the pavement, or both. The Contractor will not be responsible for damages to the pavement as a result of any forensic activities conducted by the Department.

As applicable to distress criteria for rutting, ride and cracking for Category 1 and Category 2 pavements, when two LOTs requiring remedial action are not separated by three or more LOTs not requiring remedial action, the remedial work shall be required for the total length of all such contiguous LOTs, including the intermediate LOTs not requiring remedial action.

Additionally, for Category 1 and Category 2 pavements, where such areas of remedial action are required due to raveling, slippage or bleeding are separated by less than 1,000 feet, the remedial work will be required for the entire area contiguous to the distressed areas, including intermediate areas otherwise requiring no remedial action.

The Contractor has the first option to perform all remedial work that is determined by the Department to be their responsibility. If, in the opinion of the Engineer, the problem poses an immediate danger to the traveling public and the Contractor cannot provide temporary mitigation for the defect within 4 hours of written notification and restore the pavement to its original design condition within 72 hours of written notification, the Engineer has the authority to have the remedial work performed by other forces. Temporary mitigation includes the use of traffic control systems such as barricades, drums, or other approved devices to secure the area including lane closures if necessary, and constructing temporary repairs making it safe for the roadway user until the defect can be restored to its original design condition. The Contractor is responsible for all incurred costs of the work performed by other forces should the problem (remedial work) be determined to be the responsibility of the Contractor. Remedial work performed by other forces does not alter any of the requirements, responsibilities or obligations of the Contractor.

The Contractor must complete all remedial work to the satisfaction of the Engineer. Any disputes regarding the adequacy of the remedial work will be resolved by the Statewide Disputes Review Board. Approval of remedial work does not relieve the Contractor from continuing responsibility under the provisions of this Specification.

Notify the Engineer in writing prior to beginning any remedial work. Utilize hot mix asphalt meeting the requirements of Sections 334 and 337 of the Department's Standard Specifications for Road and Bridge Construction and implemented modifications thereto when performing any remedial work. Perform all signing and traffic control in accordance with the current edition of the Department's Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System. Provide Maintenance of Traffic during remedial work at no additional cost to the Department. Lane closure restrictions listed in the original Contract will apply to remedial work. Written request(s) to obtain permission for lane closure(s) for either forensic investigation or remedial work must be made to the Engineer 48 hours in advance of any lane closures. Do not perform any lane closures until written permission is given by the Engineer.

If remedial work necessitates a corrective action to overlying asphalt layers, pavement markings, signal loops, adjacent lane(s), roadway shoulders, or other affected Contract work, perform these corrective actions using similar products at no additional cost to the Department.

338B-5 Warranty/ Maintenance Bond.

Upon final acceptance of the Contract in accordance with 5-11, furnish a Warranty/Maintenance Bond written and issued in the amount of \$xxx,xxx, warranting the asphalt pavement (including both the reworked asphalt layer and the hot-mix asphalt friction course layer) to be free from distresses exceeding the threshold values for the established warranty period. Use a bonding company that, in addition to satisfying the provisions of Section 287.0935, Florida Statutes, has an A.M. Best rating of "A" or better. If the bonding company drops below the "A" rating during the three year Warranty/Maintenance Bond period, provide a new Warranty/Maintenance Bond for the balance of the three year period from a bonding company with an "A" or better rating, at no cost to the Department.

Warranty requirements apply to the reworked asphalt layer and the hot-mix asphalt friction course layer. Warranty requirements will not apply to any asphalt layers beneath the reworked asphalt layer, asphalt base, and/or miscellaneous asphalt placed on the project. The Warranty/Maintenance bond will cover the repair or replacement of the reworked asphalt layer and the hot-mix asphalt friction course layer. Assume responsibility for the process control, mix design, construction, compaction, testing and inspection of all asphalt mixtures.

At the end of the warranty period, the Engineer will release the Contractor from further warranty work and responsibility provided all previous warranty work and remedial work, if any, have been completed.

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