Section 335 Rubblized Pavement

335.1 Description
(1) This section describes rubblizing and compacting existing concrete pavement to create a stable construction platform for a pavement overlay either with or without an intermediate base layer.

335.2 Materials
(1) Furnish filler aggregate conforming to 305.2. Use either 1 1/4-inch or 3/4-inch base material.

335.3 Construction
335.3.1 General
(1) Use self-contained, self-propelled breakers. Use 10-ton or heavier rollers and roll at 6 feet per second or slower. Run vibratory rollers at an engineer-approved frequency and amplitude. A roller pass is defined as down and back in the same path.
(2) Before rubblizing, saw full depth joints and completely sever load transfer devices to isolate the rubblizing area. Saw jointed pavements at an existing joint. Do not damage adjacent pavement during rubblization. Repair damage to the adjacent pavement caused by contractor operations as the engineer directs.
(3) Use water to control dust until overlaying the rubblized pavement.

335.3.2 Rubblizing
(1) Break concrete uniformly across the pavement width into particles that have a maximum dimension less than or equal to 12 inches. Also, 75 percent of the particles, as the engineer determines visually, must have a maximum dimension less than or equal to the following:
   - In the bottom half of the slab; 9 inches.
   - In the top half of the slab; 3 inches.
   - At the surface of the slab; 2 inches.
(2) The engineer may direct or allow larger maximum particle dimensions.
(3) Determine particle size by excavating 2 test holes, of about 9 square feet each, during the first half day. Excavate at least one test hole per lane mile thereafter unless the engineer directs or allows otherwise. Backfill and restore the stability of each test hole.
(4) Do not damage pipes, valve boxes, manholes, and other fixtures. The contractor may prevent damage by doing one or more of the following:
   1. Use engineer-approved, modified methods around fixtures and above pipes.
   2. Remove pavement around fixtures and above pipes, backfill with aggregate, and compact.
(5) Repair damage to pipes, valve boxes, manholes, and other fixtures as the engineer directs.
(6) Remove reinforcing steel exposed at the surface by cutting below the surface and disposing of the steel as specified in 203.3.4. Do not remove unexposed reinforcing steel.

335.3.3 Compacting
(1) Compact the rubblized area using 2 passes with a vibratory steel roller. The engineer may adjust the number of passes to achieve the desired compaction and stability.
(2) Remove loose asphaltic patching material, joint fillers, expansion material, or other similar materials from the compacted surface. Also remove pavement or patches that have a maximum dimension greater than or equal to 6 inches that are either not well seated or projecting more than one inch. Dispose of removed material as specified in 203.3.4.
(3) Fill holes and localized depressions, deeper than 2 inches, with filler aggregate and compact as the engineer directs.
(4) If paving with no intermediate base layer, roll the entire surface additionally, unless the engineer directs or allows otherwise, as follows:
   1. One pass with a pneumatic-tired roller.
   2. One pass with a vibratory steel roller immediately before paving.

335.4 Measurement
(1) The department will measure Rubblizing by the square yard acceptably completed.

335.5 Payment
(1) The department will pay for the measured quantity at the contract unit price under the following bid item:

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<thead>
<tr>
<th>ITEM NUMBER</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
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Effective with the December 2018 Letting 135 2019 Standard Specifications
(2) Payment is full compensation for rubblizing; removing pavement adjacent to fixtures or above pipes; removing exposed steel; compacting; disposing of removed material; excavating, backfilling, and restoring the stability of test holes; and repairing damage to pipes, fixtures, and the adjacent pavement.

(3) Payment also includes water for dust control except, if the contract contains the Water bid item, the department will pay separately for dust control under 624.5.

(4) The department will pay separately for sawing under the Sawing Concrete bid item as specified in 690.5.

(5) The department will pay separately for filler aggregate under the Base Aggregate Dense bid items. This payment includes furnishing, placing, and compacting aggregate used to fill holes and depressions.