209 AGGREGATE BASE COURSE

209.01 DESCRIPTION

This item shall consist of constructing a base course to the specified depth on a prepared foundation conforming to the lines, grades and cross sections shown in the contract documents.

209.02 MATERIALS

Materials shall conform to the requirements of one of the following:

Crushed Stone - 804.04(A)

Recycled Crushed Concrete - 804.04(B)

Note: Recycled Crushed Concrete shall not be used in areas where subsurface drainage problems exist in the roadbed; in areas where the roadbed soil is unstable; within undercut roadbed areas; over backfill in areas where unsuitable materials have been removed; or under full depth flexible pavements

Fly ash and other pozzolans, when used with lime in a mixture of soil, soil aggregate or aggregate, shall conform to the requirements of ASTM C 593.

209.03 CONSTRUCTION REQUIREMENTS

Aggregate base course shall be constructed and tested in accordance with Section 203.

Except as required in excavating and replacing soft spots, the ground shall not be plowed scarified, or disturbed below the base course layer

Proof rolling as defined in 203 is required.

209.04 PLACING

After the grade has been properly shaped and compacted, the aggregate material shall be evenly placed and spread to a uniform depth without segregation. If the required compacted depth of the base course exceeds 6 inches, the base shall be compacted in 2 or more layers of approximately equal thickness. The maximum compacted thickness shall be 6 inches.

209.05 MIXING

After the material has been placed, water shall be added if needed to provide the optimum moisture content and the material uniformly mixed by means of a motor grader or other approved equipment.

209.06 SHAPING AND COMPACTION

Upon satisfactory completion of the sub-grade layer as per 203.03 and placement and mixing, if necessary, of the aggregate base course layer, compaction and fine grading shall occur using approved rollers to achieve the correct elevation as shown on the Plans. Prior to the placement of any pavement section layer, the aggregate base course layer shall be proof rolled under the action of a loaded tandem or 10-wheeled dump truck or similar equipment. If any ruts or irregularities occur in base course layer, it shall be considered unsatisfactory and

replaced to the depth indicated by the Chief Engineer. Materials used to replace unsatisfactory base course material in shall meet the requirements of 804.04 and 213. The Contractor shall rework the aggregate base to the specified density, line, and grade. Tamping instead of rolling is prohibited.

Compaction shall continue until densities are obtained of not less than 95 percent under a rigid pavement and 100 percent under a bituminous pavement of maximum density determined in accordance with AASHTO T 180, Method D.

New base course for sidewalk foundations shall be compacted to a density of 95 percent. As directed by the Chief Engineer, any unsuitable materials shall be removed and replaced with materials meeting the requirements of 804.04.

209.07 MEASURE AND PAYMENT

The unit of measure for Aggregate Base Course will be the cubic yard. The actual number of cubic yards of base course of variable dimensions, measured complete in place will be paid for the contract unit price per cubic yard, which payment will include all labor, materials, tools, equipment and incidentals necessary to complete the work as specified herein. Payment will also include all re-compaction and/or scarifying necessary to achieve the required density.

If the Chief Engineer determines any volume measurement to be inappropriate, a value of 3,800 pounds per cubic yard will be used to convert verified weights to a cubic yard basis.