SECTION 32 11 27

REWORKING BASE MATERIAL

PART 1 - GENERAL

1.1 DESCRIPTION

A. This item consists of reworking existing base material (with or without an asphaltic surface). This item also consists of the blending of new base material when specified in the Contract Documents.

1.2 MEASUREMENT AND PAYMENT

A. Reworking Base Material by scarifying and reshaping or by scarifying, salvaging and replacing will be measured by the square yard of existing base or pavement in the original position. This is a plans quantity measurement and the quantity to be paid will be that shown in the proposal. No payment will be made for thickness or width exceeding that shown on the typical sections or provided by the Contract Documents.

B. The bid price includes full compensation for scarifying, salvaging, mixing, spreading, blading, shaping, wetting, compacting, and finishing of new and/or existing base material and for all labor, material, tools, equipment and incidentals necessary to complete the work including warranty work performed to satisfy the guarantee. Payment will not be made for unauthorized work.

C. When new base material is mixed with the existing base material, furnishing and delivery of the new base will be paid for in accordance with SECTION 32 11 14 - FLEXIBLE BASE CRUSHED STONE LIMESTONE.

PART 2 – PRODUCTS

2.1 TESTING REQUIREMENTS

A. A compaction curve (ASTM D 1557) shall be developed on the mixed or blended material.

B. In-place field density shall be determined by Nuclear Methods (ASTM D 2922) or by Sand Cone Methods (ASTM D 1556) at locations selected by the Engineer. The frequency of tests shall be at least one every 300 lineal feet or a minimum of three (3) tests, whichever is greater.

C. The base course shall be proof rolled as directed if, in the opinion of the Engineer, the blended material is non-uniform and a representative sample cannot be obtained for developing a compaction curve.

PART 3 – EXECUTION

3.1 GENERAL

A. The work shall be performed to the width and depth specified in the Contract Documents.

B. Reworking base material shall consist of either scarifying and reshaping or scarifying, salvaging and replacing existing base material as defined below;

1. Scarifying consists of loosening and breaking the existing base material.
2. Reshaping consists of reworking the scarified in-place base material with or without additional new base material.
3. Salvaging consists of removing, saving and temporarily stockpiling, if necessary, the existing scarified base material.
4. Replacing consists of returning and reworking the salvaged base material, with or without additional new base material, on the prepared roadbed.

New base material, when required, shall meet the requirements of SECTION 32 11 14 – FLEXIBLE BASE CRUSHED STONE LIMESTONE.

3.2 SCARIFYING AND RESHAPING

A. The existing base, with or without existing asphaltic concrete pavement, shall be cleaned of all objectionable materials by blading, brooming or other approved methods, prior to scarifying. After cleaning, the existing material shall be scarified for its full width and depth, unless otherwise shown on the plans. The underlying sub-grade shall not be disturbed. The material shall be broken into pieces not more than two-and-one-half (2 1/2) inches in size.

B. After completion of scarifying, the existing base shall be mixed and shaped to conform to the lines, grades, and typical sections shown on the Plans.

C. New base material shall be placed on the existing scarified material and uniformly mixed when required by the Contract Documents.

3.3 SCARIFYING, SALVAGING AND REPLACING

A. The existing base, with or without existing asphaltic concrete pavement, shall be cleaned of all objectionable materials by blading, brooming or other approved methods, prior to scarifying. After cleaning, the existing material shall be scarified for its full width and depth, unless otherwise shown on the plans. The underlying sub-grade shall not be disturbed. The material shall be broken into pieces not more than two-and-one-half (2 1/2) inches in size.

B. The scarified material shall be removed from the roadbed. The scarified material may be salvaged by placing in temporary stockpiles or windrows until preparation of the sub-grade is complete.

C. All salvaging operations shall not interfere with traffic, proper drainage or the general requirements of the work. All material to be salvaged shall be kept reasonably free of soil from the sub-grade or roadbed.

D. Prior to replacing the salvaged material, the sub-grade shall be constructed and shaped to conform to the requirements of the Contract Documents. This work shall be done in accordance with the provisions of applicable bid items.

E. The salvaged material shall be deposited on the prepared sub-grade, wetted if needed, bladed and shaped to conform to the lines, grades, and typical sections shown on the Plans or as directed by the Engineer. New base material shall be placed and uniformly mixed with the salvaged material when required by the Contract Documents.

F. All areas of segregated material shall be corrected or removed and replaced with well graded material. All salvaged material shall be kept reasonably free of objectionable materials during the replacing operations.

3.4 COMPACTION

A. The reshaped or replaced material shall be wetted as required and compacted to a uniform density of not less than 95 percent of the modified density (ASTM D 1557) The allowable deviation from optimum moisture content is to +4%.

B. The Contractor shall rework the base material at his expense if the material fails to meet the required density or, for any reason, loses stability and finish before the next course is placed. The method of reworking shall be by loosening, adding or removing material, and reshaping and recompacting by wetting and rolling. All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the affected areas, adding suitable material as required, reshaping and recompacting.

C. The shape of the course shall be maintained by blading throughout the entire compacting operation. The completed surface shall be smooth and in conformance with the lines, grades, and typical sections shown on Plans. The Contractor shall check the elevation by blue topping on at least fifty (50) foot centers along the centerline and curb lines. Any deviation more than one-fourth (1/4) inch from the established section and grade shall be corrected by loosening, adding or removing material, reshaping and compacting.

D. The base shall be cured to the approval of the Engineer prior to placing the final surface on the completed base. The base course may be opened to traffic if allowed by the Engineer.

END OF SECTION