

PART 1 GENERAL

1.1 SCOPE

- A. This item shall include furnishing all materials, labor, and equipment for the construction of the base and leveling course, complete, as shown on the Plans and specified under this item.

PART 2 PRODUCTS

2.1 BASE COURSE MATERIAL.

- A. Material for the base course shall be crushed rock or crushed gravel and shall be of the designated size of 1-inch minus, as specified in Section 2300 of these Specifications.
- B. Base course material thickness shall be as specified on Standard Drawing Nos. 402, 403, and 404 for residential, commercial, and industrial streets respectively.

2.2 GEOTEXTILE FABRIC:

- A. Geo-fabric shall be as called for on the Plans and conform to Section 2200 of these Specifications.

PART 3 EXECUTION

3.1 PLACING OF BASE COURSES.

- A. The crushed rock for base course is specified under 2.1 above, and shall be spread on the prepared subgrade to such a depth that when thoroughly compacted it will conform to the grades and dimensions shown on the Plans, with proper allowance for the leveling course hereinafter specified.
- B. Crushed rock shall be spread in an even course of uniform thickness by vehicles equipped with spreading devices. Segregation of material shall be avoided and the material as spread shall be free from pockets of large or fine materials. In general, the spreading shall begin at the end of the work farthest from the point of loading materials. The dumping of base course material in piles upon the subgrade will not be permitted.

3.2 COMPACTION:

- A. After the subbase course has been spread and brought to line and cross sections, it shall be compacted with approved equipment to achieve ninety-five percent 95 percent of Relative Maximum Density when tested in accordance with AASHTO Method T-180.
- B. Compaction equipment shall be of excellent working condition and capable of providing the amplitude and frequency required to accomplish compaction requirements.

- C. Level of compaction requirement may be adjusted to suit field conditions only by approval of the Engineer when break-over has been determined and is in no way due to lack of moisture application.

3.3 MOISTURE CONTROL:

- A. Sufficient water shall be added as needed to facilitate the movement of key material into the voids.
- B. Contractor shall aim for placing base aggregate material to optimum lab moisture percentile. Optimum may be adjusted to suit field conditions with the approval of the Engineer.

3.4 MEASUREMENT AND PAYMENT:

- A. Payment for base course shall be paid at the unit price as contracted in the Bid Proposal for the amount of completed work as measured in the field to the nearest 0.1 units.

PART 4 TESTING

4.1 MATERIAL CERTIFICATION:

- A. Aggregate material shall be supplied from a certified aggregate source as described in Section 2400 of these Specifications.

4.2 MATERIAL QUALITY:

- A. At the direction of the Engineer a sample of the material shall be taken, in accordance with ASTM D75, and tested by a qualified/certified laboratory for fractures, durability, sand equivalent, liquid limit, and plasticity. The Engineer reserves the right to request any test to ensure the quality of materials on the Project.
- B. The material shall be within the acceptable limits as set forth herein.
- C. Testing will be done by an independent, certified laboratory at no cost to the Contractor for the first test. If the material fails to meet the specified requirements and additional testing is required, the cost will be at the sole expense of the Contractor.

4.3 GRADATION:

- A. At the direction of the Engineer a sample of the material shall be taken and tested by a qualified/certified laboratory for gradation in accordance with AASHTO T 27, ASTM C136.
- B. Gradations shall be within tolerances of these specifications.
- C. Testing will be done by an independent certified laboratory at no cost to the Contractor for the first test. If the material fails to meet the specified requirements and additional testing is required, the cost will be at the sole expense of the Contractor.

4.4 MOISTURE-DENSITY:

- A. The Engineer may test in place material for compaction and moisture content to be in conformance with these specifications, in accordance with AASHTO T 238, ASTM D2922 for moisture and AASHTO T 239, ASTM D3017 for density.
- B. Testing will be done by an independent certified laboratory at no cost to the Contractor for the first test. If the material fails to meet the specified requirements and additional testing is required, the cost will be at the sole expense of the Contractor.

4.5 SURFACE TOLERANCES:

- A. When directed by the Engineer, the surface shall be tested with a 12-foot straightedge furnished and operated by the Contractor. The surface shall not vary from the testing edge by more than 0.04-foot at any point. The Engineer will observe this testing and may require additional testing. The average of the variation from the design grade shall not be greater than 40-percent of the allowable maximum variation.

END OF SECTION