

SECTION 025223
CRUSHED LIMESTONE FLEXIBLE BASE

1. DESCRIPTION

This Specification shall govern all work for furnishing and placing Crushed Limestone Flexible Base required to complete the project.

2. MATERIAL

Crushed Limestone Flexible Base shall consist of crushed limestone produced from oversize quarried aggregate, sized by crushing and produced from a naturally occurring single source, meeting the requirements for Type 'A' material as specified in Texas Department of Transportation (TxDOT) Specification Item 247 "Flexible Base". Crushed gravel or uncrushed gravel shall not be acceptable. No blending of sources and/or additive materials will be allowed. The material shall be free of vegetation and shall be approved by the Engineer. All acceptable material shall be screened and the oversize shall be crushed and returned to the screened material in such a manner that a uniform product will be produced which meets all of the physical requirements for Grade 1-2 as specified in TxDOT Specification Item 247 "Flexible Base".

3. TESTING

The City will engage a laboratory and pay for one test each gradation, liquid limit, plasticity index, modified proctor, moisture-density relation, CBR, and necessary field densities. The Engineer may call for additional tests at any time. The cost of all retests, in case of failure to meet specifications, will be deducted from the Contractor's payment. The City will pay for proctor and soil constants and abrasion tests at the rate described in the materials testing schedule. If material changes, the Contractor shall pay the cost of additional tests required by the Engineer. The Engineer may waive testing and/or lime admix for small amounts for unimportant uses.

4. CONSTRUCTION METHODS

Prior to placement of flexible base, the surface of the previous underlying course shall be finished true to line and grade as established, and in conformity with the typical section shown on the drawings. Grade tolerance shall be generally 1/2 inch, and highs and lows must approximately balance. If called for in the drawings or elsewhere in the contract documents, geogrid, as specified in City Standard Specification Section 022040 "Street Excavation", shall be placed as indicated.

Flexible base shall be delivered and spread the same day if possible (no later than the next day).

Base shall be mixed as required to produce a uniform mixture with water. Base shall be placed in uniform lifts not to exceed 10 inch loose lifts or 8 inch compacted lifts. Moisture and density requirements shall be as indicated on the drawings, typical minimum 98% Modified Proctor

(ASTM D1557) under flexible pavements or typical minimum 98% Standard Proctor (ASTM D698) under concrete pavement and to within $\pm 2\%$ of optimum moisture. The section may be accepted if no more than 1 of the 5 most recent moisture or density tests is outside of the specified limits, and the failed test is within $\pm 1\%$ deviation from specified moisture or density requirements.

The surface of the compacted base, after meeting moisture and density requirements, shall be primed in accordance with City Standard Specification Section 025412 "Prime Coat".

On completion of compaction and priming, the surface shall be smooth and conform to lines, grades, and sections shown on the drawings. Areas with any deviation in excess of 1/4 inch in cross-section and in lengths of 16 feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping, and recompacting by repriming and rolling.

Moisture and density shall be maintained until the paving is complete. Excessive loss of moisture shall be prevented by sprinkling, sealing, or covering with a subsequent layer. Should the base, due to any reason or cause, lose the required stability, density, or moisture before it is protected by placement of the next layer, it shall be re-compacted, refinished, and retested at the expense of the Contractor until acceptable to the City.

5. MEASUREMENT AND PAYMENT

Unless otherwise specified on the Bid Form, crushed limestone flexible base shall be measured by the square yard complete in place. Payment shall be full compensation for all materials, royalty, hauling, placing, compacting, labor, equipment, tools, and incidentals necessary for the completion of work.

Prime shall be measured and paid under separate bid item if specified on the Bid Form.

Geogrid shall be measured and paid under separate bid item if specified on the Bid Form.