Section 5.0



Knoxville, Tennessee March 2022

TECHNICAL SPECIFICATIONS FOR MINERAL AGGREGATE BASE

1. Description

This work shall consist of furnishing and placing one or more courses of aggregates and additives, if required, on a prepared subgrade in accordance with these Specifications and in reasonably close conformity with the lines, grades, thicknesses and typical cross-section shown on the Plans or established by the Engineer. This work also includes furnishing and placing Maintenance Stone and Backfill Stone in accordance with these Specifications and the Plans.

2. <u>Materials</u>

All materials used in this construction, in addition to the general requirements of these Specifications, unless otherwise stipulated, shall conform to the following:

(a) Mineral Aggregate Base shall be crushed stone, Class A Aggregate Grading D, as specified in Subsection 903.05 of the TDOTSS, January 1, 2021, and all Supplemental Specifications pertaining thereto through the date of advertisement for this Contract.

	Total Percentage by Weight
<u>Sieve Size</u>	Passing Sieves
1-1/2 inch	100
1 inch	85 - 100
3/4 inch	60 - 95
3/8 inch	50 - 80
No. 4	40 - 65
No. 16	20 - 40
No. 100	9 - 18

- (b) Calcium Chloride shall meet the requirements of the AASHTO Specification for Calcium Chloride, Designation M-144 and shall be Type 2.
- (c) Maintenance Stone and Backfill Stone shall be of quality and gradation as specified in Subsection 2(a) above. The backfill stone in the roadway or less than 5 feet from the outside edge of the roadway, curbs, gutters and sidewalks shall be compacted to 100% of the Standard Proctor Density at 2% less than the optimum moisture content as determined by AASHTO T99 Method D.

- 3. Equipment & Construction Requirements
 - (a) Equipment and Construction Requirements shall conform to Subsections 303.06 and 303.07 of the TDOTSS, January 1, 2021, and all Supplemental Specifications pertaining thereto through the date of advertisement of this Contract. In addition, the following compaction, will be required: Mineral Aggregate Base shall be compacted to 100% of the Standard Proctor Density at 2% less than the optimum moisture content as determined by AASHTO T99 Method D.
 - (b) The maximum speed of trucks hauling or traveling over any part of the project under construction shall be 20 mph.
- 4. <u>Method of Measurement</u>
 - (a) Mineral Aggregate Base, Maintenance Stone, and Backfill Stone will be measured by the ton in place, as by the actual scale weight.
 - (b) All moisture in the Aggregate at the time of weighing in excess of eight percent will be deducted from the weight of the Aggregate.
 - (c) Any water added on the road will be at the Contractor's expense.
- 5. <u>Basis of Payment</u>
 - (a) The accepted quantities of Mineral Aggregate Base, Maintenance Stone, and Backfill Stone of the type specified will be paid for at the Contract unit price per ton, complete in place. This price shall be full compensation for all work, materials, including calcium chloride where specified and water; labor and other incidentals required to complete the work in accordance with the Plans and Specifications.
 - (b) Payment will be made under the following bid item as set forth in the Bid Schedule:

Mineral Aggregate Base Mineral Aggregate Base with Calcium Chloride Maintenance Stone