

SECTION 3.0 STONE

3.01 Coarse Aggregate Base Course

The stone required under this item shall be for the construction of coarse aggregate base course for City streets, parking lots, and pavement repairs or patches. This material shall consist of crushed stone and/or crushed or uncrushed gravel. This material shall meet the North Carolina Department of Transportation gradation for size ABC (7) stone and shall comply to the requirements as set forth in Section 520 of the North Carolina Department of Transportation Standard Specification (latest revision). Also, see table 1005-1.

3.02 Stabilized Aggregate Base Course

The stone required under this item shall be for the construction of stabilized aggregate base course for City streets, parking lots, pavement repairs or patches, sanitary sewer lines, water lines and/or storm drainage lines. This material shall consist of crushed stone, and/or crushed or uncrushed gravel. This material shall meet and comply with the requirements as set forth in Section 510 of the North Carolina Department of Transportation Standard Specifications (latest revision).

3.03 Aggregate for Bituminous Surface Treatment

Aggregate required under this item shall be used for the construction of bituminous surface treatment and retreatment on City streets. This stone aggregate shall be washed to remove clay, loam, dust and similar adherent fine material. Stone aggregate requirements shall be as set forth in Section 660 of the North Carolina Department of Transportation Standard Specifications (latest revision).

3.04 (G) Delivery Tickets

Each truck load of stone delivered to a City stockpile, street, or other location shall be accompanied by at least two tickets showing the actual weight of the material placed on the truck at the quarry and delivered to the City. Both tickets shall be signed by an authorized City employee, one ticket shall be retained by the City and the other shall be retained by the contractor. At the time of the billing, the contractor shall submit four copies of the invoice, to the Public Works Department of the City of Gastonia along with a copy of each stone ticket, properly signed by an authorized City employee.

3.05 (G) Rate of Delivery

The contractor shall have sufficient equipment to deliver this material at a minimum rate of 80 tons per hour to the delivery point within the following time period.

Section I Stone delivered by contractor, shall be delivered to the job site or stockpile as specified by the City within four hours after being notified by the City, begin delivering such materials at the rate specified in the contract documents.

Section II Stone on City vehicles, shall be deposited in City vehicles at the crushing plant or point as designated by the contractor in the proposal within two (2) hours after being notified by the City, shall begin supplying to the City such material at the minimum rate specified in the contract documents. The requests by the City shall be confined to the normal working of the plant.

Failure on the part of the contractor to comply with this requirement shall be reason for termination of this contract at the discretion of the Public Works Director.

3.06 Test Results

When required by the City, the contractor shall present to the City a materials analysis report, at the contractor's expense, certified by an approved engineering testing laboratory showing that the material supplied meets all specifications as set forth above. The City also reserves the right to perform any tests on the materials as it may deem necessary. Any material which does not meet the minimum requirements when tested by the City's laboratory or contractor's laboratory shall be corrected or removed before further work is begun or continued. All materials found to be unsatisfactory by the City Engineer shall be removed from City or public property at contractor's expense.

3.07 (G) Unit Prices

All bid prices for items 3.01, 3.02, and 3.03 shall be based on a per ton unit price delivered F.O.B. to any location within the corporate limits of the City of Gastonia, City streets, established City stockpiles, or on City vehicles.

3.08 (G) Measurement of Quantities

Estimated quantities shall be based on the actual amount of stone delivered to and accepted by the City and shall be verified by delivery tickets signed by an authorized employee at the delivery site.

3.09 (G) Monthly Estimate

The contractor shall submit to the City of Gastonia Public Works Department a monthly invoice, in triplicate, along with a copy of each stone ticket. The invoice shall be submitted no later than the fifth of the month and shall include all material delivered to the City and accepted by the City during the preceding month. Upon receipt of the invoice, the City shall within fifteen days pay the contractor for all approved material, less the percent retained as specified in the contract documents.

3.10 (G) Final Payment

Within fifteen (15) days of the completion date of this contract or upon request by, the City, the contractor shall submit to the City an invoice for final payment. Upon receipt of the invoice, the City shall within thirty (30) days pay the contractor the final payment due, including the percent retained.

3.11 Kings Mountain Quarry and Bessemer City Quarry

All ABC crushed stone shall be supplied from either the Kings Mountain Quarry or the Bessemer City Quarry or a quarry approved by the City Engineer. All stone, other than ABC stone, shall be supplied from the Kings Mountain Quarry or a quarry approved by the City Engineer. If a source other than the Kings Mountain or Bessemer City Quarries is quoted, the contractor shall submit to the City Engineer test results certified by a Registered Engineer, prior to the award of any contract. All materials tested shall be of samples taken randomly and shall be a true representation of the materials produced by the quarry. Such tests shall show the gradation, hardness and abrasive qualities of the materials and shall meet the requirements set forth in Section 1005 thru 1010 of the North Carolina Department of Transportation Specifications.

If a quarry other than the Kings Mountain or Bessemer City Quarries is approved, the contractor shall provide the City Engineer, each month, test results taken on a sample of the materials delivered to the City during that month. Tests shall show the gradation and hardness of the materials.

3.12 Graduation Requirements

NEW SIZE NO.	OLD SIZE NO.	PERCENTAGE OF TOTAL PASSING (BY WEIGHT)														
		1-1/2"	1"	3/4"	1/2"	3/8"	#4	#8	#10	#16	#30	#40	#50	#100	#200	
57	3	100	95- 100		25- 60		0- 10	0- 5							0- 0.6	*
ABC	7	100	75- 97		55- 80		35- 55		25- 45			14- 30			4- 12	*
89	13				100	90- 100	20- 55	5- 30		0- 10		0- 5			0- 0.6	*
1/2"	1/2"			100	70- 85	15- 30	0- 10		0- 5						0- 0.6	

Misc. Stone Sizes

*

* When these sizes of aggregate are used for portland cement concrete, bituminous surface treatment and retreatment, and bituminous plant mix, the requirements shall be specified in the North Carolina Department of Transportation "Standard Specifications for Roads and Structures", Table 1005-1 or latest revision.