



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

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Memorandum To: Division Engineers

From: Christopher A. Peoples, PE  
State Materials Engineer

Subject: Change to ABC Minimum Sampling Requirements

Recently, the Construction Unit and Materials and Tests have been reviewing the requirements for the acceptance of Aggregate Base Coarse. As part of the review, the small quantities allowance and the required minimum of three samples per project were evaluated. Projects with smaller tonnage typically have irregular areas or narrow widening which make it difficult to use optimum placement methods and require special sampling methods. Additionally, requiring a minimum of three samples per project creates confusion on where to spilt lots for those projects with fairly small tonnage. Raising the small quantity amount (where roadway sampling is optional) to the minimum lot size and eliminating the three sample minimum per project will reduce confusion and allow our project staff to focus on higher production operations where failures have a higher risk of causing significant long term quality issues.

Below is a summary of our current and the revised minimum sampling requirement. The Minimum Sampling Guide has been revised to reflect this change which takes place immediately on all active projects.

**Current:** Aggregate Base Coarse: 1 roadway sample for every 2,500 tons with a minimum of 3 samples per contract. Projects with final quantities of ABC less than 1000 tons can be accepted as small quantities.

**Revised:** Aggregate Base Coarse: 1 roadway sample for every 2,500 tons. Projects with final quantities of ABC less than 2500 tons can be accepted as small quantities with roadway samples optional.

**Notes:**

1. As always, the minimum sampling requirements and small tonnage allowance do not preclude the Resident Engineer or designees from sampling materials should there be any concern over the quality of material.
2. For projects with planned quantities of Aggregate Base Coarse below 2500 tons, it is important to be aware that the sampling requirement is based on actual placed tonnage. Therefore, projects that overrun and exceed 2500 tons would actually require 2 samples to be taken. The first representing 0-2500 tons placed and the second representing the amount that exceeds 2500 tons.

Example: The planned quantity of Aggregate Base Coarse for project X is 2250 tons. The actual amount placed on project X ends up being 2620 tons. The project inspector pulls a sample as the last 50 tons of material are being placed. For project certification purposes, the sample represents the last 120 tons only and this project would be short one sample because the first 2500 tons placed were not represented.

Project personnel should plan accordingly and be prepared to comply with minimum requirements should this example become reality.

As always, we will continue to monitor and review product quality, sampling and placement practices and other issues that may affect the quality of this product for risks and efficiencies.

Please let me know if you have any questions.

CAP:rkp

cc: Mike Holder, PE  
Ricky Greene, Jr., PE  
Ron Hancock, PE  
Division Construction Engineers  
District Engineers  
Resident Engineers  
FHWA