



# TECHNICAL ADVISORY

Published as needed by the Construction and Bridge Divisions - June 2010

## Best Practices for Sampling Flexible Base

Material testing and management form the basis for material acceptance under Item 247, "Flexible Base." Flexible base material proposed for use must be temporarily stockpiled at an approved location for acceptance before delivery to the roadway. Acceptance is determined by verification that project gradation, liquid limit, plasticity index, wet ball mill and strength requirements for the specified grade are met.

The Construction Division's *Guide Schedule of Sampling and Testing* identifies three opportunities for obtaining samples to verify flexible base material requirements: during stockpiling operations, from the completed stockpile, or from the windrow. Sampling during stockpiling operations or from the completed stockpile is most appropriate for verifying material requirements and determining stockpile acceptance. Many of the tests specified take several days to complete, and stockpiles can be built, sampled and tested well in advance of the start of placement and compaction operations. If a problem is detected, it can be corrected before the contractor incurs the cost of shipping material to the project. This allows project delays to be avoided, or at least minimized.

Utilize windrow samples to ensure that approved stockpiles retain their integrity during delivery to the jobsite. The *Guide Schedule* states, "the Engineer will select any of these locations [completed stockpile, during stockpiling operations, or windrow] or any combinations thereof with the provisions that the initial sample will be obtained from the completed stockpile at the source, and at least one out of ten consecutive samples will be taken at the project site" for liquid limit, plasticity index, linear shrinkage and gradation.

### ➔ CONTACT INFORMATION

If you have any questions about this article or would like more information about this topic, please contact the Geotechnical, Soils and Aggregates Branch at 512/506-5907.