

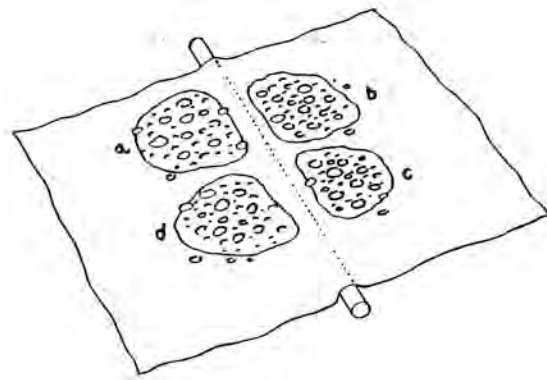
Gravel:

Sampling and Preparation for Testing

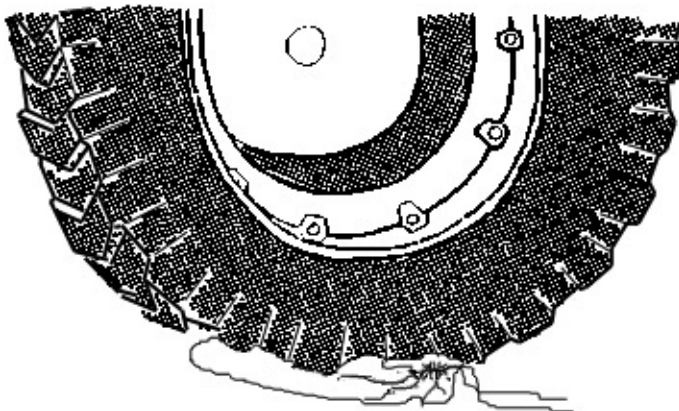
The key word that should describe any sample taken for testing is representative. Test results refer only to the sample tested. Thus, if the test results are to be valid, the sample must faithfully represent the material in the gravel source. Remember that tests measure only the properties of the sample. The more closely a sample resembles the material that will be hauled to the road, the more reliable the test results.

Sample from several locations if possible and when a representative sample (about 40 pounds) is collected, place it on a piece of canvas and mix it well. Remove any stray cobbles larger than 2-3 inches. With a shovel handle, quarter the large sample in order to get a smaller, yet representative sample for testing purposes.

This technique is illustrated in the figure to the right. After quartering, discard quarters b and d and thoroughly mix quarters a and c. This is a representative sample reduced to about 20 pounds. Repeat the quartering process and place quarters a and c (about 10 pounds total) into a bag and save this sample for testing the gradation. Either quarter b or d should be saved if a plasticity estimate is desired.



Quartering a Gravel Sample



Rolling the Gravel Sample

The next step is to place the bag of material on a firm surface and drive over it several times with either a loaded truck or a roller to simulate conditions during construction. If any breakdown is to occur, it should be accounted for in the test.

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