The purpose of Soil Surveys is to provide project designers with safe, effective and cost-efficient recommendations for the design of roadway foundations, embankments and the treatments for Geotechnical and other problems on the project. Although Soil Survey reports are provided for designers’ use, they are also used by contractors to assist in preparing bids, and by project engineers during construction to identify and help solve problems. Soil Survey investigations include the following activities:

1. Field reconnaissance and identification of problems and potential problems.
2. Examination of available data relevant to the project site.
3. Collection of soil, rock and water samples.
4. Laboratory testing of samples.
5. Analysis of all data, and preparation of the report including details, special provisions and attachments.
6. A quality review to ensure that all issues are addressed.

The Soil Survey report is not considered a part of the contract, although the special provisions that are sent with the report are considered to be contract documents.

The engineer should keep in mind several objectives when preparing the report:

1. Use the best available soils to construct the roadway, especially at subgrade. If good soils are not available, extra graded aggregate base, lime stabilization or other materials may be needed.
2. Discuss clearly all problems that may be associated with the construction of the project, and give clear, concise recommendations to designers. Although different options for solutions to problems may be listed, if there is a definite reason to recommend one solution over the others, let the designer know.
3. The production of a soil survey report should sometimes be the result of a joint effort among the Geotechnical engineer, the project designer, area and construction engineers, drillers, other Geotechnical and lab engineers, geologists, etc. Because no one person knows all the answers, it is recommended to get input from other knowledgeable people who may have direct experience with certain problems, especially on complex projects.