



Illinois Department of Transportation

Memorandum

To: Studies and Plans Squads PPM 30-03
From: James M. Sullivan Revised by: Tim Brandenburg
Subject: Soils Reports
Date: April 29, 1998 Revision Date: January 7, 2003

PLAN PREPARATION MEMORANDUM 30-03

BACKGROUND

This memorandum combines and supercedes Plan Preparation Memorandums 47-1974, Availability of Subsurface Information, dated February 20, 1974 and 159-1998, Soils Reports, dated April 29, 1998 and assists in providing direction for purpose and need of Soils Reports.

The following two paragraphs are from Director Monroney's policy memorandum (titled Preparation and Utilization of Soils Reports) dated March 6, 1979.

There have been numerous incidents where it has been necessary to correct soils related problems by change orders in the field rather than by design provisions incorporated in the contract plans. In order to insure satisfactory performance of highway construction, it is essential that a proper soils investigation be conducted and utilized as a basis for the design of highway projects.

Soils reports are required for all new construction. They should also be prepared for reconstruction projects where there are pavement widenings in excess of six feet, grade changes or relocations. When existing facilities are to be replaced in kind, a soils investigation should be prepared for those areas that have proven to be deficient as demonstrated by existing roadway conditions.

In addition, the following information is from R.C. Wehner's memorandum concerning Preparation and Approval of Soils Reports dated May 11, 1990.

Mr. Monroney's memorandum of March 6, 1979, (Subject: Preparation and Utilization of Soils Reports) indicates Soils Reports are to be prepared for all projects involving new construction, widening in excess of six feet, grade changes, or relocations. In order to ensure that proper soils investigations are being conducted but at the same time reduce some of the paperwork involved, I am instituting the following changes in the Soils Report preparation and approval process:

1. It will no longer be required to have the soils information reviewed by the State Soils Committee when the amount of new pavement involved is less than 3000 square yards. For these projects, the Soils Reports may be prepared/approved by the District Geotechnical Engineer and retained in the District files.
2. For projects less than one mile in length and which involve less than full-lane width widening which is to be constructed on the existing roadbed, the District may prepare a condensed, rather than formal, Soils Report for its file. The condensed report shall contain, as a minimum, a description of the project, a location map, a summary of the soils investigation (including the SSR and IBR of the soils), and recommend treatments, if any.
3. For projects as indicated above, the District Geotechnical Engineer should continue to submit Soils Reports to the State Soils Committee for review when unusual soil conditions are encountered, when high fills and deep cuts are involved, or when the existing pavement condition indicates deficient subgrade stability.

For projects other than those listed above, a Soils Report will be prepared in accordance with the Department's Soils Manual and approved by the State Soils Committee. Regardless of the type or approval level of the Soils Report, the final approved report should be forwarded to the District Bureau of Program Development for inclusion in the pavement design process and preparation of contract plans. The SSR and IBR should be included in the Soils Report for future use by the designer to finalize the pavement thickness designs. With the exception of the pavement design, BD507A must be completed and attached to all Soils Reports.

A copy of the District-approved soils investigations should be provided both to the Bureau of Design & Environment and the Bureau of Materials & Physical Research. A periodic review of this revised process should be conducted to assess its positive impact on plan preparation and letting schedules.

PROCEDURE

The Studies and Plans Squad Leader is responsible for requesting the Soils Report. As soon as it is known that one or more of the above conditions will apply, and before the pavement design begins, the Squad Leader prepare a written request from Program Development to Project Implementation for an appropriate Soils Report.

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