Chapter One
GENERAL

1-1.0 PURPOSE

The purpose of this Pavement Manual is twofold. One is to provide the District Materials and Soils Engineers with the necessary reference materials, procedures, and tools to design uniform and stable highway pavements, subgrades, embankments, and back slopes. The other is to provide the direction required to achieve consistency in the way pavement problems and solutions are approached within the Minnesota Department of Transportation (referred to herein as Mn/DOT or "the Department").

1-2.0 SCOPE

This manual provides background information pertaining to pavement design. It also includes guidance for performing pavement surveys, preparation of design recommendations, and submittal of the Materials Design Recommendations (MDR) Report (formerly called the Soils Letter). It is based on past Mn/DOT experience, the experience of other groups and agencies with similar requirements, and the current state of the practice in pavement engineering.

The intent is that this manual will stand on its own. However, to avoid unnecessary duplication, reference is often made to readily available manuals and publications. Additionally, since it is impractical to be totally encompassing, and since the state of the practice is continually evolving, some subjects are simply referenced for further research and study as needed.

1-3.0 RESPONSIBILITY

Generally, the District Soils Engineer will apply the presented information under the guidance and supervision of the District Materials Engineer. Monitoring of this manual's use will be through the review of Materials Design Recommendations Reports by the Office of Materials as they are routinely submitted during the design of projects. The manual will be updated after reviewing the performance of highway, subgrade, and pavement sections over their entire lifecycle.

1-4.0 REVIEW AND REVISION

Comments and/or recommendations, which may ultimately lead to revision of this manual, should be submitted in writing to the Pavement Engineer for review. It is anticipated that updates will be developed and distributed by the Office of Materials. The updates will reflect the current state of practice to the maximum extent possible.

1-5.0 SYSTEM OF UNITS

The information presented in this manual is in both metric and U.S. Customary units. The U.S. Customary units are shown in parenthesis. There are a few cases in the manual where the units indicated in figures, tables, equations, or examples have not been presented in dual units. This may be due to the source and presentation of information. Converting units in a few situations was not done where conversion may alter the results, presentations, or shape of figure, etc.

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