

PREFACE

The *MDT Geotechnical Manual* has been developed to provide guidance to Department and consultant personnel performing geotechnical investigations and design analyses on Department projects. The project geotechnical specialist should follow the guidance presented in the *Manual* to the extent practical. However, the *Manual* should not be considered a “standard” that must be met regardless of project type, location or application.

The *Manual* presents much of the information normally required for a geotechnical project; however, it is impossible to address every situation that the project geotechnical specialist will encounter. Therefore, project geotechnical specialists must exercise good judgment on individual projects and, frequently, they must be innovative in their approach to geotechnical engineering. This may require, for example, additional research into the geotechnical literature or different approaches than are described in the following chapters. Where questions exist regarding the appropriate approach, the project geotechnical specialist should seek guidance from Geotechnical Section management personnel and other experienced and knowledgeable individuals.

It is also important to recognize that the field of geotechnical engineering continues to evolve with time. New field methods will be developed, new computer software will become available and revised or new methods of design will be identified. The methods described in this *Manual* are not intended to restrict consideration or use of these new developments. However, the project geotechnical specialist must identify possible limitations and evaluate the suitability of the method for the particular application. Where questions exist regarding the use of new methods, the project geotechnical specialist should seek guidance from Geotechnical Section management personnel and other experience and knowledgeable individuals. After appropriate review, this *Manual* may be modified to include these new methods.

The *MDT Geotechnical Manual* was developed by the MDT Geotechnical Section with assistance from the engineering consulting firm of Roy Jorgensen Associates, Inc., and their subconsultant CH2M HILL, Inc. The *Manual* Preparation and Review Committee consisted of:

Rich Jackson, PE	Geotechnical Engineer, Montana Department of Transportation
Jeff Jackson, PE	(Manual Project Coordinator) Geotechnical Operations Manager, Montana Department of Transportation
Mark Zitzka	Materials Engineer, FHWA
Barry Siel, PE	Geotechnical Engineer, FHWA
R. Kenneth Shearin	Roy Jorgensen Associates, Inc.
Craig R. Birkholz, PE	Roy Jorgensen Associates, Inc.
Dr. Donald G. Anderson, PE	CH2M HILL, Inc.
Prof. Robert Mokwa, PE	Montana State University

Several other individuals from the MDT Geotechnical Section and FHWA not listed have also participated in the preparation and review of the *Manual* specific to their individual area of expertise.

MDT GEOTECHNICAL MANUAL (Revision Process)

The MDT Geotechnical Manual is expected to be updated periodically as limitations within the *Manual* are identified and as new methods of investigation and design are implemented. Before making these updates, revisions to the *MDT Geotechnical Manual* will be submitted and reviewed according to the following process:

Revision and Review

1. All proposed revisions should be submitted to the Geotechnical Engineer. The Revision Request Form (next page) should be used for the submittal.
2. A three-person Review Committee, selected by the Geotechnical Engineer, will meet every three months, or as necessary, to review the proposed changes.
3. The Committee will submit their recommendations and will meet with the Geotechnical Engineer to determine if the proposed revisions should be incorporated into the *Manual*.
4. If the revisions represent a policy change, the revisions will be presented to the Materials Engineer for comment.
5. If the *Manual* will be revised as recommended, a memo describing the revision will be distributed by the Geotechnical Engineer and posted on the Montana Department of Transportation website.

Review Committee

The Review Committee will consist of three members. One member will be replaced each year; therefore, no one will serve on the Committee for more than three consecutive years. Individuals may serve on the Committee more than once.

In addition to the review of proposed revisions, the Committee will be responsible for the following:

- providing all updates for the *MDT Geotechnical Manual*,
- maintaining a library of all revisions to the *Manual* in chronological order
- developing a "parking lot" of issues that need to be addressed in future revisions.

**MDT GEOTECHNICAL MANUAL
(Revision Request)**

Identification

Date Submitted: _____

Section To Be Revised: _____

Section Title: _____

Page Number(s): _____

Description of Revision

List other sections of the *Manual* that would be affected by the revision:

- A.
- B.
- C.

Justification For The Revision

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