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FOREWORD

The science of soil mechanics is a complex one, due to the very nature of the materials involved, which vary not only geographically but locally as well. This variability of soils makes it especially difficult to develop standard methods of test that can be universally used for evaluating the engineering properties of soils. The science of rock mechanics is also complex and the development of widely accepted test methods is relatively new.

ASTM Committee D-18 on Soil and Rock for Engineering Purposes has sponsored this publication, which covers many suggested methods of test that have generally received wide recognition in the United States. A good many of these methods may ultimately become ASTM standards. All existing ASTM standards on testing soils, which standards are the result of general agreement and acceptance, are referenced in this publication and are published in the Annual Book of ASTM Standards, Part 11. This publication is considered to be the only one that brings together in convenient form all of these various methods now in current use.

The soil test procedures are grouped into 14 categories, each pertaining to related phases of soil testing and the subcommittee structure of Committee D-18, as follows:

Section I—Soil and Foundation Engineering Studies—General
Section II—Surface and Subsurface Reconnaissance
Section III—Sampling and Related Field Testing for Soil Investigation
Section IV—Texture, Plasticity, and Density Characteristics of Soils
Section V—Permeability and Capillarity Properties of Soils
Section VI—Structural Properties of Soils
Section VII—Physicochemical Properties of Soils
Section VIII—Identification and Classification of Soils
Section IX—Special and Construction Control Tests
Section X—Dynamic Properties of Soils
Section XI—Bearing Tests of Soils in Place
Section XII—Deep Foundations
Section XIII—Rock Mechanics
Section XIV—Nomenclature for Soil and Rock Mechanics

This special compilation was first published in 1944, with a second printing of the first edition being required. The second edition was published in 1950, the third edition in 1958, and the fourth edition in 1964. This fifth edition represents a complete review in which certain test procedures were deleted and new methods added, based on current use. Other methods have been revised to bring them up to date. Standards and tentatives have, however, been deleted, requiring that the user also rely on Part 11 of the Annual Book of ASTM Standards for a complete reference to available test methods.

Credit for bringing this group of soil test methods up to date is due the subcommittee chairmen and present and past officers of Committee D-18, and especially John P. Gnaedinger who served as Editor, and W. G. Holtz who served as Assistant Editor.
FOREWORD

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A. I. Johnson, Subcommittee G-3, Nomenclature for Soil and Rock Mechanics

November 1969
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A list of ASTM Publications is available on request.

*Copies are no longer available from ASTM but may be obtained on microfilm from University Microfilms, Inc., 300 N. Zeeb Road, Ann Arbor, Mich. 48106.
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