Handbook Of Geotechnical Investigation And Design Tables Second Edition

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Handbook of Slope Stabilisation CRC Press
One-volume library of instant geotechnical and foundation data Now for the first time ever, geotechnical, foundation, and civil engineers...geologists...architects, planners, and construction managers can quickly find information they must refer to every working day, in one compact source. Edited by Robert W. Day, the time -and effort-saving Geotechnical Engineer's Portable Handbook gives you field exploration guidelines and lab procedures. You'll find soil and rock classification, basic phase relationships, and all the tables and charts you need for stress distribution, pavement, and pipeline design. You also get abundant information on all types of geotechnical analyses, including settlement, bearing capacity, expansive soil, slope stability - plus coverage of retaining walls and building foundations. Other construction-related topics covered include grading, instrumentation, excavation, underpinning, groundwater control and more.

Geotechnical and Geoenvironmental Engineering Handbook CRC Press
Effective Site Investigation provides an introductory guide to accepted best practice for site investigations, both for construction professionals such as civil and structural engineers, builders and architects, and for their clients. It has been prepared by the Site Investigation Steering Group, a multidisciplinary body representing those professional institutions, learned societies, trade organisations and government agencies involved or affected by site investigations. The second edition represents a major revision and extension of the series with the aim of bringing together the whole site investigation industry and is intended for general application to all ground investigation work.

Geotechnical Site Characterization J. Ross Publishing
Site investigation is the crucial first step in design and construction, when the cost and practicality of a project are evaluated. It is also a necessary part of the investigation of building failures. This major reference work describes the organization of site investigation, the plant, sampling equipment and interpretation of results. The second edition includes new material on specification and procurement, desk studies on geophysics, sample disturbance and sampling methods, in-situ testing and laboratory testing.

Second Edition CRC Press
Manual of Geotechnical Laboratory Soil Testing covers the physical, index, and engineering properties of soils, including compaction characteristics (optimum moisture content), permeability (coefficient of hydraulic conductivity), compressibility characteristics, and shear strength (cohesion intercept and angle of internal friction). Further, this manual covers data collection, analysis, computations, additional considerations, sources of error, precautionary measures, and the presentation results along with well-defined illustrations for each of the listed tests. Each test is based on relevant standards with pertinent references, broadly aimed at geotechnical design applications. FEATURES Provides fundamental coverage of elementary-level laboratory characterization of soils Describes objectives, basic concepts, general understanding, and appreciation of the geotechnical principles for determination of physical, index, and engineering properties of soil materials Presents the step-by-step procedures for various tests based on relevant standards Interprets soil analytical data and illustrates empirical relationship between various soil properties Includes observation data sheet and analysis, results and discussions, and applications of test results This manual is aimed at undergraduates, senior undergraduates, and researchers in geotechnical and civil engineering. Prof. (Dr.) Bashir Ahmed Mir is among the senior faculty of the Civil Engineering Department of the National Institute of Technology Srinagar and has more than two decades of teaching experience. Prof. Mir has published more than 100 research papers in international journals and conferences; chaired technical sessions in international conferences in India and throughout the world; and provided consultancy services to more than 150 projects of national importance to various government and private agencies.

A Field Guide for Geotechnical Engineers CRC Press
The object of this book is to shed light on the most important design aspects encountered in foundation engineering and to present basic design principles representative of the developed part of the world. Modern geotechnical investigation methods and their interpretation are exemplified. The philosophy of the new European code for geotechnical design is presented. The most important and practical aspects of ground modification techniques are included. This book can be used as a textbook for senior undergraduate and graduate students. It can also serve as a combined text- and handbook for professional engineers working in the field of geotechnical engineering. Line drawings and photographs accompany the text.

Practical Handbook of Soil, Vadose Zone, and Ground-Water Contamination Handbook of Geotechnical Investigation and Design TablesSecond Edition
NOTE: NO FURTHER DISCOUNT FOR THIS PRINT PRODUCT--OVERSTOCK SALE -- Significantly reduced list price USDA-NRCS. Issued in spiral ringboundbinder. By Philip J. Schoeneberger, et al. Summarizes and updates the current National Cooperative SoilSurvey conventions for describing soils. Intended to be both currentand usable by the entire soil science community."

New Methods and Applications Routledge
Geotechnical investigation, which is usually implemented to obtain baseline information of ground and groundwater, is the focus of this book. Authored by practitioner and academic who is extensively involved in geotechnical ground investigations over four continents, this book covers both large scale preliminary ground investigation and intrusive detailed investigation, as well as specialized in-situ testing to obtain advanced geotechnical parameters of soils. Both surface and borehole geophysical methods used in geotechnical investigation, including methods of sampling and tools to obtain good quality soil samples are also discussed and presented in the book.Written for advanced undergraduate and graduate students, researchers and practitioners in the fields of geotechnical engineering, geoenvironmental engineering, and ground investigation, the book also provides guidelines on presenting factual geotechnical data and preparing factual reports.

Site Investigation Using Resistivity Imaging Government Printing Office
This text was compiled by the Japanese Geotechnical Society. It describes everything about the remedial measures against liquefaction currently used in Japan following research projects after the Niigata earthquake of 1964.

Evaluation of Soil and Rock Properties CRC Press
The Geotechnical Engineering Investigation Handbook provides the tools necessary for fusing geological characterization and investigation with critical analysis for obtaining engineering design criteria. The second edition updates this pioneering reference for the 21st century, including developments that have occurred in the twenty years since the first edition was published, such as: • Remotely sensed satellite imagery • Global positioning systems (GPS) • Geophysical exploration • Cone penetrometer testing • Earthquake studies • Digitizing of data recording and retrieval • Field and laboratory testing and instrumentation • Use of the Internet for data retrieval The Geotechnical Engineering Investigation Handbook, Second Edition is a comprehensive guide to a complete investigation: study to predict geologic conditions; test-boring procedures; various geophysical methods and when each is appropriate; various methods to determine engineering properties of materials, both laboratory-based and in situ; and formulating design criteria based on the results of the analysis. The author relies on his 50+ years of professional experience, emphasizing identification and description of the elements of the geologic environment, the data required for analysis and design of the engineering works, and procuring the data. By using a practical approach to problem solving, this book helps engineers consider geological phenomena in terms of the degree of their hazard and the potential risk of their occurrence.

Geotechnical Engineering Investigation Handbook, Second Edition Taylor & Francis
Your guide to the design and construction of foundations onexpansive soils Foundation Engineering for Expansive Soils fills asignificant gap in the current literature by presenting coverage ofthe design and construction of foundations for expansive soils.Written by an expert author team with nearly 70 years of combinedindustry experience, this important new work is the only modernguide to the subject, describing proven methods for identifying andanalyzing expansive soils and developing foundation designsappropriate for specific locations. Expansive soils are found worldwide and are the leading cause ofdamage to structural roads. The primary problem that arises withregard to expansive soils is that deformations are significantlygreater than in non-expansive soils and the size and direction ofthe deformations are difficult to predict. Now, FoundationEngineering for Expansive Soils gives engineers and contractorscoverage of this subject from a design perspective, rather than atheoretical one. Plus, they'll have access to case studies coveringthe design and construction of foundations on expansive salts fromboth commercial and residential projects. Provides a succinct introduction to the basics of expansivesoils and their threats Includes information on both shallow and deep foundationdesign Profiles soil remediation techniques, backed-up with numerouscase studies Covers the most commonly used laboratory tests and siteinvestigation techniques used for establishing the physicalproperties of expansive soils If you're a practicing civil engineer, geotechnical engineer orcontractor, geologist, structural engineer, or an upper-levelundergraduate or graduate student of one of these disciplines,Foundation Engineering for Expansive Soils is a must-haveaddition to your library of resources.
Geologic Hazards CRC Press
Handbook of Geotechnical Investigation and Design TablesSecond EditionCRC Press
Highway Subdrainage Design John Wiley & Sons
This book provides the most comprehensive and authoritative book yet published on the subject of criminal investigation, a rapidly developing area within the police and other law enforcement agencies, and an important sub discipline within police studies. The subject is rarely out of the headlines, and there is widespread media interest in criminal investigation. Within the police rapid strides are being made in the direction of professionalizing the criminal investigation process, and it has been a particular focus as a means of improving police performance. A number of important reports have been published in the last few years, highlighting the importance of the criminal investigation process not only to the work of the police but to public confidence in this. Each of these reports has identified shortcomings in the way criminal investigations have been conducted, and has made recommendations for improvement . The Handbook of Criminal Investigation provides a rigorous and critical approach to not only the process of criminal investigation, but also the context in which this takes place, the theory underlying it, and the variety of factors which influence approaches to it. It will be an indispensable source of reference for anybody with an interest in, and needing to know about, criminal investigation. Contributors to the book are drawn from both practitioners in the field and academics.
Characteristics of Geologic Materials and Formations Springer Science & Business Media
Determination of the physical, chemical and mechanical properties of ground materials is the key to successfully deliver such projects as slope stabilization, excavation and lateral support, foundation etc. A book containing both theory of geomaterial testing and up-to-date testing methods is much in demand for obtaining reliable and accurate test results. This book is intended primarily to serve this need and aims at the clear explanation, in adequate depth, of the fundamental principles, requirements and procedures of soil and rock tests. It is intended that the book will serve as a useful source of reference for professionals in the field of geotechnical and geological engineering. It can work as a one-stop knowledge warehouse to build a basic cognition of material tests on which the readers are working. It helps college students bridge the gap between class education and engineering practice, and helps academic researchers guarantee reliable and accurate test results. It is also useful for training new technicians and providing a refresher for veterans. Engineers contemplating the ICE, IOM3 and other certification exams will find this book an essential test preparation aid. It is assumed that the reader has no prior knowledge of the subject but has a good understanding of basic mechanics.
In Situ Testing Methods in Geotechnical Engineering Taylor & Francis
A synthesis of years of interdisciplinary research and practice, the second edition of this bestseller continues to serve as a primary resource for information on the assessment, remediation, and control of contamination on and below the ground surface. Practical Handbook of Soil, Vadose Zone, and Ground-Water Contamination: Assessment, Prevention, and Remediation, Second Edition includes important new developments in site characterization and soil and ground water remediation that have appeared since 1995. Presented in an easy-to-read style, this book serves as a comprehensive guide for conducting complex site investigations and identifying methods for effective soil and ground water cleanup. Remediation engineers, ground water and soil scientists, regulatory personnel, researchers, and field investigators can access the latest data and summary tables to illustrate key advantages and disadvantages of various remediation methods.
Site Assessment and Remediation Handbook, Second Edition Routledge
In Situ Testing Methods in Geotechnical Engineering covers the field of applied geotechnical engineering related to the use of in situ testing of soils to determine soil properties and parameters for geotechnical design. It provides an overview of the practical aspects of the most routine and common test methods, as well as test methods that engineers may wish to include on specific projects. It is suited for a graduate-level course on field testing of soils and will also aid practicing engineers. Test procedures for determining in situ lateral stress, strength, and stiffness properties of soils are examined, as is the determination of stress history and rate of consolidation. Readers will be introduced to various approaches to geotechnical design of shallow and deep foundations using in situ tests. Importantly, the text discusses the potential advantages and disadvantages of using in situ tests.
Geotechnical Earthquake Engineering Handbook CRC Press
This practical handbook of properties for soils and rock contains, in a concise tabular format, the key issues relevant to geotechnical investigations, assessments and designs in common practice. In addition, there are brief notes on the application of the tables. These data tables are compiled for experienced geotechnical professionals who require a reference document to access key information. There is an extensive database of correlations for different applications. The book should provide a useful bridge between soil and rock mechanics theory and its application to practical engineering solutions. The initial chapters deal with the planning of the geotechnical investigation, the classification of the soil and rock properties and some of the more used testing is then covered. Later chapters show the reliability and correlations that are used to convert that data in the interpretative and assessment phase of the project. The final chapters apply some of these concepts to geotechnical design. This book is intended primarily for practicing geotechnical engineers working in investigation, assessment and design, but should provide a useful supplement for postgraduate courses.
Geotechnical Engineering Investigation Manual John Wiley & Sons
This book reviews the techniques used to improve the engineering behaviour of soils, either in situ or when they are used as a construction material. It is a straightforward, well illustrated and readable account of the techniques and includes numerous up-to-date references.
Second Edition Wiley-Blackwell
The first book on the subject written by a practitioner forpractitioners. Geotechnical Instrumentation for Monitoring FieldPerformance Geotechnical Instrumentation for Monitoring FieldPerformance goes far beyond a mere summary of the technicalliterature and manufacturers’ brochures: it guides readersthrough the entire geotechnical instrumentation process, showingthem when to monitor safety and performance, and how to do it well.This comprehensive guide: * Describes the critical steps of planning monitoring programsusing geotechnical instrumentation, including what benefits can beachieved and how construction specifications should bewritten * Describes and evaluates monitoring methods and recommendsinstruments for monitoring groundwater pressure, deformations,total stress in soil, stress change in rock, temperature, and loadand strain in structural members * Offers detailed practical guidelines on instrument calibrations,installation and maintenance, and on the collection, processing,and interpretation of instrumentation data * Describes the role of geotechnical instrumentation during theconstruction and operation phases of civil engineering projects,including braced excavations, embankments on soft ground,embankment dams, excavated and natural slopes, undergroundexcavations, driving piles, and drilled shafts * Provides guidelines throughout the book on the best practices
Effective Site Investigation World Scientific Publishing Company
Access usable seismic engineering data right at your fingertips Don’t miss out on the first book specifically devoted to seismology, geotechnical engineering basics, earthquake analysis, and site improvement methods. Written by Robert Day, one of the most respected names in the field, Geotechnical Earthquake Engineering Handbook is a one-stop resource that gives you instant access to: Field and laboratory testing methods and procedures Current seismic codes Site improvement methods In-depth earthquake engineering analysis as applied to soils Worked-out problems illustrating earthquake analysis Subsurface exploration data Fundamental geotechnical engineering principles
A Field Guide for Geotechnical Engineers CRC Press
The 12th edition of Chudley and Greeno’s Building Construction Handbook remains THE authoritative reference for all construction students and professionals. The principles and processes of construction are explained with the concepts of design included where appropriate. Extensive coverage of building construction practice, techniques and regulations representing both traditional procedures and modern developments are included to provide the most comprehensive and easy to understand guide to building construction. This new edition has been updated to reflect recent changes to the building regulations, as well as new material on modern methods of construction, greater emphasis on sustainability and a new look interior. Chudley and Greeno’s Building Construction Handbook is the essential, easy-to-use resource for undergraduate and vocational students on a wide range of courses including NVQ and BTEC National, through to Higher National Certificate and Diploma, to Foundation and three-year Degree level. It is also a useful practical reference for building designers, contractors and others engaged in the construction industry.