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Design and Specification of Low Pressure Sewer Systems for Recreation Areas - M. John Cullinane 1985

Proceedings of the Conference on Pipelines in Adverse Environments II - Mark B. Pickell 1983

Design of Municipal Wastewater Treatment Plants MOP 8, Fifth Edition - Water Environment Federation 2012-09-01
Contemporary Municipal Wastewater Treatment Plant Design Methods Fully revised and updated, this three-volume set from the Water Environment Federation and the Environmental and Water Resources Institute of the American Society of Civil Engineers presents the current plant planning, configuration, and design practices of wastewater engineering professionals, augmented by performance information from operating facilities. Design of Municipal Wastewater Treatment Plants, Fifth Edition, includes design approaches that reflect the experience of more than 300 authors and reviewers from around the world. Coverage includes: Integrated facility design Sustainability and energy management Plant hydraulics and pumping Odor control and air emissions Thoroughly updated information on biofilm reactors Biological, physical, and chemical liquid treatment Membrane bioreactors, IFAS, and other integrated biological processes

Nutrient removal Sidestream treatment Wastewater disinfection Solids minimization, treatment, and stabilization, including thermal processing Biosolids use and disposal

Water-resources Engineering - David A. Chin 2000

"Water-Resources Engineering, by David A. Chin, provides students with a complete picture of water-resources engineering by integrating the fundamental concepts of fluid mechanics, hydraulics, hydrology, and containment transport processes. The material in the text is presented from first principles, is rigorous, is relevant to the practice of water-resources engineering, and is reinforced by detailed presentations of design applications."--BOOK JACKET.Title Summary field provided by Blackwell North America, Inc. All Rights Reserved

Water Resources Engineering - Ray K. Linsley 1992

Groundwater, Dams, Hydroelectric power, Sewerage and wastewater treatment, Flood-damage mitigation.

Advances in Underground Pipeline Engineering - Jey K. Jeyapalan 1985

Geotechnology of Waste Management - Issa S. Oweis 1990

The aim of the book is to equip the student and practicing engineer with the basic knowledge needed for the geotechnical design of waste facilities, the colsure and inprovement of waste facilities, and construction on waste.

Land Development for Civil Engineers - Thomas R. Dion 2002-02-21

Thomas Dion's Land Development has become a standard reference for the engineering information needed in site development. This revised edition brings the work completely up to date with current practices and procedures.

Gravity Sanitary Sewer Design and Construction - Paul Bizier 2007

ASCE MOP 60 & WEF MOP FD-5 provides theoretical and practical guidelines for the design and construction of gravity sanitary sewers.

Buried Pipe Design, 2nd Edition - A. P. Moser 2001-02-13

Everything you need to design…install… replace and rehabilitate buried pipe systems Put a single-volume treasury of underground piping solutions at your command! A one-of-a kind resource, Buried Pipe Design, Second Edition, identifies and explains every factor you must know to work competently and confidently with the subsurface infrastructure of distribution systems, including sewer lines, drain lines, water mains, gas lines, telephone and electrical conduits, culverts, oil lines, coal slurry lines, subway tunnels and heat distribution lines. Within the pages of this acclaimed professional tool you'll find space-age remedies for the aging, deteriorating piping beneath America's cities -- and learn how to design long-lived systems capable of delivering vital services and meeting new demands. This comprehensive, state-of-the-art resource shows you how to: * Determine loads on buried pipes * Understand pipe hydraulics * Choose an installation design for buried gravity flow pipes * Design for both rigid pipe and flexible pipe * Select appropriate pipe for your application based on material properties * Work within safety guidelines * Handle soil issues, including pipe embedment and backfill * Employ the powerful tool of finite element analysis (FEA) * Adhere to current standards of the AWWA, ASTM, and other relevant standards organization * Save time with actual design examples * More! This thorough update of A. P. Moser's classic guide is now twice the size of the previous edition -- reflecting the vast progress and changes in the

field in mere decade!You'll find enormous amounts of all-new material, including: *External Loads chapter: minimum soil cover, with a discussion of similitude; soil subsidence; load due to temperature rise; seismic loads; and flotation *Design of Gravity Flow Pipes chapter: compaction techniques; E' analysis; parallel pipes and trenches; and analytical methods for predicting performance of buried flexible pipes Design of Pressure Pipes chapter: corrected theory for cyclic life of PVC pipe…strains induced by combined loading in buried pressurized flexible pipe Rigid Pipe Products chapter: the direct method…design strengths for concrete pipe…and SPIDA (Soil-Pipe Interaction Design and Analysis) *Steel and Ductile Iron Flexible Pipe Products chapter: three-dimensional FEA modeling of a corrugated steel pipe arch…tests on spiral ribbed steel pipe, low-stiffness ribbed steel pipe, and ductile iron pipe *Plastic Flexible Pipe Products chapter: long-term stress relaxation and strain testing of PVC pipes…frozen-in stresses…cyclic pressures and elevated temperatures…the AWWA study on the use of PVC…long-term ductility of PE…the ESCR and NCTL tests for PE…and full-scale testing of HDPE profile-wall pipes *Entirely new chapter! You get new information on pipe handling and trenching as well as safety issues. Here are valuable directions for working with fast-growing trenchless methods for installing and rehabilitating pipelines PLUS: * MORE design examples * THE LATEST ASTM, AWWA, ASHTTO, and TRB standards * NEW DATA ON CUTTING-EDGE PIPE MATERIALS, including profile-wall polyethylene

Geotechnical Engineers Portable Handbook, Second Edition - Robert Day 2012-03-01

Instant access to the latest geotechnical engineering data Fully updated to include the 2012 International Building Code (IBC), Geotechnical Engineer's Portable Handbook, Second Edition, features a wealth of on-the-job geotechnical and construction related information in a convenient, quick-reference format. This practical resource is filled with essential data, formulas, and guidelines you can access right away. Detailed tables, charts, graphs, and illustrations are included throughout the book for ease of use in the field. Coverage includes: Field exploration Laboratory testing Soil and rock classification Phase relationships Effective stress and stress distribution Shear strength Permeability and seepage Settlement analyses Bearing capacity analyses Pavement and pipeline design Expansive soil Slope stability Geotechnical earthquake engineering Erosion analyses Retaining walls Deterioration Foundations Grading and other site improvement methods Groundwater and percolation tests Excavation, underpinning, and field lead tests Geosynthetics Instrumentation International Building Code regulations for soils International Building Code regulations for foundations

Choice - 2007

Small & Decentralized Wastewater Management Systems - Ronald Crites 1998-04-02

This text presents a comprehensive design of both conventional and innovative systems for the treatment and disposal or reuse of the treated effluent. Decentralized Wastewater Management focuses on smaller treatment plants, which most new engineers will deal with early in their professional careers.

New Jersey Register - 1999

Wastewater Collection System Modeling

and Design - Haestad Methods, Inc 2004
Disc 1 contains an academic version of SewerCAD stand-alone software, featuring exam booklet for continuing eduction credits, and user manual.
Selected Water Resources Abstracts - 1987

Pipeline Crossings 1996 - Lawrence F. Catalano 1996
In this compilation of peer-reviewed papers, contributors review the latest research, new designs, innovative methods of construction and maintenance, and regulatory issues associated with cross-country and urban pipelines. The crossings of highways, railroads, bodies of water, and seismic areas with buried or aerial pipelines are featured. In addition, papers and case studies address risk assessment and safety, trenchless crossings, seismic and low stability areas, and materials. The Manual of Practice on Pipeline Crossings is then briefly introduced as a guide for engineers and owners of pipelines in the design, construction, and permitting of pipeline crossings.
ACI Materials Journal - 1987

Control and Prevention of Odours in the Water Industry - Richard M. Stuetz 2000-05-31
The release of unpleasant odours during wastewater and sludge treatment and disposal is not new. However, in recent years the level of complaints concerning the release of these offensive odours has increased. This is in part a direct result of the encroachment of housing on lands surrounding existing wastewater and sludge treatment works, together with the raised awareness of the public over its rights related to environmental issues. To avoid the creation of nuisance odours in wastewater and sludge treatment requires an understanding of those processes that are responsible. Odours that are formed within wastewater and sludge will not create an odour nuisance until they are released into the atmosphere. It is therefore important to understand the mechanisms by which odours are formed and then released and dispersed in order to provide effective control systems. The CIWEM-IAWQ odour conference enabled practitioners, regulators and researchers to present findings on a wide range of topics relating to the control and prevention of odours. Twenty-two papers have been selected for these proceedings. They examine the regulation of odour emissions, techniques used to measure and model odour emissions and treatment technologies used to control and prevent odour formation and emission.
Fair, Geyer, and Okun's, Water and Wastewater Engineering - Nazih K. Shammas 2010-10-19
This text series of Water and Wastewater Engineering have been written in a time of mounting urbanisation and industrialisation and resulting stress on water and wastewater systems. Clean and ample sources of water for municipal uses are becoming harder to find and more expensive to develop. The text is comprehensive and covers all aspects of water supply, water sources, water distribution, sanitary sewerage and urban stormwater drainage. This wide coverage is helpful to engineers in their every day practice.
Sewer Processes - Thorkild Hvitved-Jacobsen 2013-04-23
Since the first edition was published over a decade ago, advancements have been made in the design, operation, and maintenance of sewer systems, and new problems have emerged. For example, sewer processes are now integrated in computer models, and simultaneously, odor and corrosion

problems caused by hydrogen sulfide and other volatile organic compounds, as well as other potential health issues, have caused environmental concerns to rise. Reflecting the most current developments, Sewer Processes: Microbial and Chemical Process Engineering of Sewer Networks, Second Edition, offers the reader updated and valuable information on the sewer as a chemical and biological reactor. It focuses on how to predict critical impacts and control adverse effects. It also provides an integrated description of sewer processes in modeling terms. This second edition is full of illustrative examples and figures, includes revisions of chapters from the previous edition, adds three new chapters, and presents extensive study questions. Presents new modeling tools for the design and operation of sewer networks Establishes sewer processes as a key element in preserving water quality Includes greatly expanded coverage of odor formation and prediction Details the WATS sewer process model Highlights the importance of aerobic, anoxic, and anaerobic processes Sewer Processes: Microbial and Chemical Process Engineering of Sewer Networks, Second Edition, provides a basis for up-to-date understanding and modeling of sewer microbial and chemical processes and demonstrates how this knowledge can be applied for the design, operation, and the maintenance of wastewater collection systems. The authors add chemical and microbial dimensions to the design and management of sewer networks with an overall aim of improved sustainability for the system itself and the surrounding environment.

Design and Construction of Urban Stormwater Management Systems - American Society of Civil Engineers 1993-01-01

Prepared byØtheØTask Committee of the Urban Water Resources Research Council of ASCE. Copublished by ASCE and the Water Environment Federation. Design and Construction of Urban Stormwater Management Systems presents a comprehensive examination of the issues involved in engineering urban stormwater systems. This Manual?which updates relevant portions of Design and Construction of Sanitary and Storm Sewers, MOP 37?reflects the many changes taking place in the field, such as the use of microcomputers and the need to control the quality of runoff as well as the quantity. Chapters are prepared by authors with experience and expertise in the particular subject area. The Manual aids the practicing engineer by presenting a brief summary of currently accepted procedures relating to the following areas: financial services; regulations;Ø surveys and investigations;Ø design concepts and master planning;Ø hydrology and water quality;Ø storm drainage hydraulics; andØ computer modeling.

Crane Safety on Construction Sites - Task Committee on Crane Safety on Construction Sites 1998-01-01

Crane Safety on Construction Sites (ASCE Manuals and Reports on Engineering Practice No. 93) was written to aid the construction industry in the management of crane operations. Crane operations in construction range from unloading and setting equipment on a one-time basis to using numerous cranes that perform multiple tasks on larger complex projects. This manual addresses these variables by clearly defining and assigning crane management responsibilities. It discusses issues such as safety plans, responsibilities, supervision and management, operations, training, manufacture, crane safety devices, and regulations in some detail as they relate to crane management.

Appendixes are provided that list additional resources, manufacturers of crane safety devices, and explore case studies of crane accidents.
Municipal & Industrial Waste - 1986

Coletor sanitário - Frederico Menezes Coelho 2022-07-13
A metodologia de dimensionamento de sistemas coletores de esgotos sanitários utiliza a centenária fórmula de Manning para os cálculos hidráulicos em condutos livres, apesar de não ser uma unanimidade nem homogênea. Ademais, os critérios de rugosidade e de autolimpeza em condutos são baseados em valores fixos que não consideram a sinergia dos parâmetros físicos e hidráulicos em situações reais operacionais: biofilme, sedimentos e obstáculos. Portanto, esse livro aborda pormenorizadamente 168 fórmulas de dimensionamento hidráulico e 133 fórmulas de transporte de sedimentos para critérios de autolimpeza em condutos, além de avaliar as normas e os critérios praticados mundialmente para, na sequência, modelar tanto as fórmulas existentes quanto as novas fórmulas aqui propostas, contemplando 5.105 dados bem representativos da operação de coletores de esgotos de todos os tipos de sistemas: separador, unitário e tempo seco, com diversos diâmetros, materiais e condições de uso. Destes dados, 312 foram obtidos pelo autor em experimentos na UFRJ e em coletores no Rio de Janeiro. Após análise e validação dos modelos propostos, novas fórmulas compõem uma nova metodologia de dimensionamento hidráulico de coletores sanitários, mais representativa das situações reais operacionais, incluindo novos modelos para critérios de autolimpeza e novos critérios para valores de rugosidade em projeto. Com isso, espera-se uma maior sustentabilidade nos sistemas sanitários ao redor do mundo.
Geotechnical Engineer's Portable Handbook - Robert Day 2000
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.
Ductile-Iron Pipe and Fittings, 3rd Ed. (M41) - AWWA Staff 2011-01-12

Annual Madison Conference of Applied Research & Practice on Municipal & Industrial Waste - 1983

Environmental Technologies to Treat Sulfur Pollution - Piet Lens 2000-01-01
Environmental Technologies to Treat Sulfur Pollution: Principles and Engineering provides a definitive and detailed discussion of state-of-the-art environmental technologies to treat pollution by sulfurous compounds of wastewater, off-gases, solid waste, soils and sediments. Special attention is given to novel bioremediation techniques that have

been developed over the last 10 years. Information density is unique owing to the many figures and graphs (150), tables (over 80) and over 1500 cited literature references. A detailed subject index helps the reader to find their way through the different technological applications, making it the perfect reference work for professionals and consultants dealing with sulfur-related environmental (bio)-technologies. Contents Part I - The sulfur cycle Part II - Technologies to Desulfurise Resources Part III - Treatment of Waters Polluted by Sulfurous Compounds Part IV - Treatment of Gases Polluted by Sulfurous Compounds Part V - Treatment of Soils and Sediments Polluted by Sulfurous Compounds Part VI - Other Applications of Sulfur Cycle: Bioconversions in Environmental Engineering Part VII - Problems Related to Sulfur Cycle: Bioconversions

ASCE Manuals and Reports on Engineering Practice - 2007

Drinking-Water Distribution, Sewage, and Rainfall Collection, Third Edition - François G. Brière 2014-11-10

Drinking Water Distribution, Sewage, and Rainfall Collection (Back cover) Drinking Water Distribution, Sewage, and Rainfall Collection is the first textbook produced in French and English entirely devoted to practical hydraulic problems as they occur in modern cities. It looks at the design and application of equipment for drinking water distribution, runoff and sewage collection. Fundamental hydraulic principles are presented clearly and their application is illustrated in examples representative of real-world situations. Exercises and problems enable students to test their knowledge in each chapter. Specific topics include the measurement of sewage flow, sewage pumping stations, pump selection, inverted siphon, and characteristics of pipes available on the market in a wide variety of materials. The textbook also covers issues such as water hammer and other overpressures, dead and live loads, underground pipe installation, water supply to high rise buildings, the design of sewer and water service connections, water flows and volumes for fire fighting, water intake and intake pipes, fire hydrants, water inlets and valve settings on water networks, sewage outfall, pipe freezing and corrosion, thrust blocks and restrained joints, culverts, etc. One chapter is entirely devoted to waterborne diseases, chemical contaminants and dangerous gases that accumulate in enclosed spaces. Engineers, technicians and scientists can use the textbook to learn the basic requirements for designing and evaluating sanitary storm networks, sewage networks and water distribution networks. François G. Brière is a civil engineer and Professor in the Department of Civil, Geological and Mining Engineering at the École Polytechnique de Montréal. He received his education in Québec and the United States and worked for the Ministère des Affaires municipales et des Régions du Québec (Ministry of municipal and regional affairs of Québec) before entering academia, where he has taught water chemistry, sewage treatment and urban hydraulics for more than 30 years.

Geotechnical Engineers Portable Handbook, Second Edition - Robert W. Day 2012-10-01

Instant access to the latest geotechnical engineering data Fully updated to include the 2012 International Building Code (IBC), Geotechnical Engineer's Portable Handbook, Second Edition, features a wealth of on-the-job geotechnical and

construction related information in a convenient, quick-reference format. This practical resource is filled with essential data, formulas, and guidelines you can access right away. Detailed tables, charts, graphs, and illustrations are included throughout the book for ease of use in the field. Coverage includes: Field exploration Laboratory testing Soil and rock classification Phase relationships Effective stress and stress distribution Shear strength Permeability and seepage Settlement analyses Bearing capacity analyses Pavement and pipeline design Expansive soil Slope stability Geotechnical earthquake engineering Erosion analyses Retaining walls Deterioration Foundations Grading and other site improvement methods Groundwater and percolation tests Excavation, underpinning, and field lead tests Geosynthetics Instrumentation International Building Code regulations for soils International Building Code regulations for foundations

CARE-S - Sveinung Saegrov 2006-03-31

CARE-S presents the result of an extensive EU project, Computer Aided Rehabilitation of Sewer and Storm Water Networks. The projects developed a complete management system for sewer and storm water assets, including methods and software. It comprises methods and models for the three levels necessary of management, namely the long-term planning, the project ranking and the technology selection. The results of a comprehensive testing of CARE-S in representative European cities are also included in the book. Long-term planning relies on state-of-the-art description, judgement of future service-life and available measurements, including CCTV. This information is handled in tools for Performance Indicators, network condition prediction and investment needs. Project ranking is conducted by an elimination system and includes analysis by tools for structural condition, hydraulic performance and customer requirements. The system identifies projects that can be included within actual budget limits. Selection of appropriate technologies relies on a comprehensive database for renovation and repair techniques and their properties, applied into the conditions of the single projects. The purpose of this book is to present a new generation management system of sewer and storm water assets. Due to ageing systems and increasing demands to these networks, and the complexity of systems and problems, advanced management systems are necessary to secure an optimal use of limited resources for repair, maintenance and renewal. In the future, management should be based on solid objective information given by computer programs and databases, and judged by professional management engineers. The market for modern urban water network management including software and consulting services is expected to increase substantially during the coming years. This is the first book to consider a complete management system for sewer and storm water assets. The book presents a system that will improve the cost-effectiveness of sewer and storm water assets by at least 10%. The book presents the methodology and software for modern maintenance and renewal of wastewater networks.

Quality in the Constructed Project - American Society of Civil Engineers 2000

Primarily for the three parties named in the subtitle, this manual offers information and recommendations on principles and procedures that have been shown effective in enhancing the quality of construction projects the projects themselves not the finished

product. Among other aspects, it discusses

BURIED PIPE DESIGN 3/E - A. Moser 2008-07-15

Unearth the Secrets of Designing and Building High-Quality Buried Piping Systems This brand-new edition of Buried Pipe Design helps you analyze the performance of a wide range of pipes, so you can determine the proper pipe and installation system for the job. Covering almost every type of rigid and flexible pipe, this unique reference identifies and describes factors involved in working with sewer and drain lines, water and gas mains, subway tunnels, culverts, oil and coals slurry lines, and telephone and electrical conduits. It provides clear examples for designing new municipal drinking and wastewater systems or rehabilitating existing ones that will last for many years on end. Comprehensive in scope and meticulously detailed in content, this is the pipe design book you'll want for a reference. This NEW edition includes: Important data on the newest pipe styles, including profile-wall polyethylene Updated references to ASTM, AWWA, and ASHTTO, standards Numerous examples of specific types of pipe system designs Safety precautions included in installation specifications Greater elaboration on trenchless technology methods New information on the cyclic life of PVC pressure pipe Buried Pipe Design covers the ins and outs of: External Loads Gravity Flow Pipe Design Pressure Pipe Design Rigid Pipe Products Flexible Steel Pipe Flexible Ductile Iron Pipe Flexible Plastic Pipe Pipe Installation Trenchless Technology

Ductile-Iron Pipe and Fittings - American Water Works Association 2009

An ideal reference for design engineers and operators in water treatment, this manual of water supply practices describes ductile-iron pipe manufacturing, design, hydraulics, pipe wall thickness, corrosion control, installation, supports, fittings and appurtenances, joining, and installation.

Pipeline Route Selection for Rural and Cross Country Pipelines - Nicholas B. Day 1998-01-01

This 1998 version of Manual No. 46, Pipeline Route Selection for Rural and Cross-Country Pipelines, replaces Report on Pipeline Location, published in 1965. Since that time, many high technology items have been developed to benefit the Routing Engineer, the Project Manager, and other project team members. In addition to technological developments, this updated manual places much more emphasis on environmental, regulatory, and political issues related to pipeline route selection.

Design of Water Resource Recovery Facilities, Manual of Practice No.8, Sixth Edition - Water Environment Federation 2017-09-29

Complete Coverage of the State-of-the-Art in Water Resource Recovery Facility Design Featuring contributions from hundreds of wastewater engineering experts, this fully updated guide presents the latest in facility planning, configuration, and design. Design of Water Resource Recovery Facilities: WEF Manual of Practice No. 8 and ASCE Manuals and Reports on Engineering Practice No. 76, Sixth Edition, covers key technical advances in wastewater treatment, including •Advances with membrane bioreactors applications •Advancements within integrated fixed-film/activated sludge (IFAS) systems and moving-bed biological-reactors systems •Biotrickling filtration for odor control •Increased use of ballasted flocculation •Enhanced nutrient-control systems •Sidestream nutrient removal to reduce the loading on the

main nutrient-removal process •Use and application of wireless instrumentation •Use and application of modeling wastewater treatment processes for the basis of design and evaluations of alternatives •Process design and disinfection practices to minimize generation of TTHMs and other organics monitored for potable water quality •Approaches to minimizing biosolids production and advances in biosolids handling, including effective thermal hydrolysis, and improvements in sludge thickening and dewatering technologies •Increasing goals toward energy neutrality and driving net zero •Trend toward resource recovery

ACI Manual of Concrete Practice - American Concrete Institute 2002

Introduction to Water Resource Recovery Facility Design, Second Edition - Water Environment Federation 2014-09-19

THE MOST COMPLETE, CURRENT INTRODUCTORY GUIDE TO WATER RESOURCE RECOVERY FACILITY DESIGN Fully updated for the latest regulations and standards, the second edition of this renowned Water Environment Federation book provides students and practicing engineers with authoritative information on state-of-the art facility design and treatment processes. The text addresses the challenges of the design engineer's job--to incorporate new technology and innovations while producing a facility that will perform as expected under variable and unpredictable loadings. Introduction to Water Resource Recovery Facility Design, Second Edition, also offers guidance on designing facilities with the flexibility to allow modifications to meet more-stringent treatment requirements as environmental regulations evolve. Comprehensive coverage includes: The design process Hydraulics Preliminary treatment Primary treatment Suspended-growth biological treatment Attached-growth biological treatment Biological nutrient removal Natural treatment systems Physical and chemical processes Ancillary processes Production and transport of wastewater solids Conditioning of solids Stabilization Thickening, dewatering, and drying solids Beneficial use and ultimate disposal