1. Record Nr. UNINA9911048823803321

Titolo	ICE handbook of urban drainage practice / / edited by Richard Ashley (University of Sheffield, UK), Brian Smith (Independent Professional/Strategist, UK), Paul Shaffer (The University of Sheffield, UK), Issy Caffoor (Yorkshire Water, UK)
Pubbl/distr/stampa	Leeds : , : ICE Publishing is an imprint of Emerald, , [2024] ©2024
ISBN	9780727757005 0727757008
Edizione	[1st ed.]
Descrizione fisica	1 online resource (xxi, 459 pages) : illustrations
Collana	ICE Handbooks Series
Disciplina	628.21
Soggetti	Drainage Technology & Engineering, Hydraulics Hydraulic engineering Hydraulics, Pneumatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Contents and Preliminary Pages -- Urban drainage -- Urban drainage systems -- Stormwater control -- Engagement for effective urban drainage -- Urban drainage and development -- Rainfall estimation and prediction for urban drainage -- Urban hydrology -- Managing surface water using natural systems -- Sensing and control in urban drainage systems -- Asset management, operation and maintenance -- Urban drainage analysis and modelling -- Framing urban drainage -- Future outlook for urban drainage -- Case studies -- Index.
Sommario/riassunto	Written and edited by leading experts in the field, ICE Handbook of Urban Drainage Practice provides an overview of current key challenges, opportunities and future directions of urban drainage in a practical and accessible way. Initially setting out the context of historical urban drainage for sanitary and stormwater systems, the book covers the key elements of public and stakeholder engagement, rainfall inputs, some fundamentals of urban hydrology and the development of computational modelling. It also explains how systems

are now planned, designed and operated, alongside contemporary asset management and introduces the main elements of monitoring and management of urban drainage systems, as well as advancements in data acquisition, and transition to greater automation. The book osummarises regulations and other sources of information that professionals need to consult to practice effectively within a specific area of urban drainage oexplores modelling, sustainability, smart systems, and the global and local context of sustainable drainage oincludes case studies from across the UK and numerous examples of urban drainage practice from around the world. Urban Drainage Practice is an invaluable tool for local authority engineers, environmental engineers, drainage design and operation engineers, public health consultants, engineering hydrology professionals, and consultants or contractors working in this field. It is also a useful resource for students of engineering and sustainability, as well as professionals working in other disciplines who wish to understand how engineers are approaching urban drainage practice.