1. Record Nr. UNINA9911006654203321

Titolo	Sewers : rehabilitation and new construction : repair and renovation / / edited by Geoffrey F. Read with Ian G. Vickeridge
Pubbl/distr/stampa	London, : Arnold, 1997
ISBN	1-281-04703-1 9786611047030 0-08-054112-7
Descrizione fisica	1 online resource (433 p.)
Altri autori (Persone)	ReadGeoffrey F VickridgeIan G
Disciplina	628/.2/0288
Soggetti	Sewerage - Maintenance and repair Sewerage - Design and construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Sewers - Rehabilitation and New Construction: Repair and Renovation; Copyright Page; Contents; About the Editor; About the Assistant Editor; Foreword; Preface; Chapter 1. The Development of Public Health Engineering; 1.1 Introduction; 1.2 Ancient hygiene; 1.3 The Middle Ages and the early modern period; 1.4 Water - the foundation of life - waste water; 1.5 Population and urbanisation; 1.6 Life in the Victorian period; Bibliography; Chapter 2. The Development of the National Sewerage Network; 2.1 Early sewers, pre-1830; 2.2 Second generation sewers, 1828-90 2.3 Characteristics of first and second generation sewers in Manchester2.4 The interceptor sewers - lettered sewers; 2.5 Extended main drainage scheme - numbered sewers; 2.6 The present-day situation; 2.7 Construction materials; Chapter 3. The Problems of Sewerage Dereliction; 3.1 Background; 3.2 Infiltration/exfiltration; 3.3 The environmental impact of sewer collapse; 3.4 Sewer collapses - effect on overall economy; 3.5 The problem; 3.6 The brick sewers of Manchester; 3.7 Generally; 3.8 Present-day impact of original construction methods; 3.9 Structural considerations 3.10 Assessing structural3.11 Summary; Chapter 4. Planning Sewerage

Rehabilitation and Maintenance; 4.1 Introduction; 4.2 Maintenance strategies; 4.3 Rehabilitation strategies; 4.4 Computerised maintenance management; 4.5 The future; References; Chapter 5. Sewer Surveys; 5.1 Introduction; 5.2 Location of underground assets; 5.3 Inspection of underground assets; 5.4 Computer and software support for surveying; 5.5 The future; References; Chapter 6. Traffic Management and Public Relations; 6.1 Introduction; 6.2 Traffic problems following sewer collapse
6.3 Traffic management - planned sewer repairs and renovation works6.4 The wider view; 6.5 Public relations; 6.6 The future; Bibliography; Chapter 7. Access; 7.1 Present-day requirements; 7.2 Access in early sewers; 7.3 Types of manholes; 7.4 Shaft construction; 7.5 Internal layouts of manholes; 7.6 Shaft construction programmes; 7.7 Access and public utilities; 7.8 City centre problems and solutions; References; Chapter 8. Hydraulic Assessment; 8.1 Rainfall runoff and overland flow processes; 8.2 Rainfall; 8.3 Rainfall losses; 8.4 Rainfall runoff; 8.5 Mathematical modelling
8.6 Building and verifying the mathematical simulation model8.7 Catchment and sewer system data; References; Chapter 9. Ancillary Works - Cleaning and Overpumping; 9.1 Introduction; 9.2 Overpumping; 9.3 Sewer cleaning; Bibliography; Chapter 10. Repair and Renovation; 10.1 Introduction; 10.2 Repair or stabilisation techniques-man-entry sewers; 10.3 Renovation - man-entry sewers; 10.4 Renovation - non-man-entry sewers; 10.5 Hard linings; 10.6 Soft linings; 10.7 Spray linings; 10.8 Problems associated with lining systems; 10.9 Stabilisation; 10.10 Renovation - long-term
Chapter 11. Localised Repair Techniques for Non-man-entry Sewers

Sommario/riassunto

This, the first of two volumes, gives a comprehensive treatment of the civil engineering work relating to sewers and emphasises the practical aspects of repair and renovation. A considerable amount of theoretical work already exists on this subject. However this book is unique in meeting the engineer's need for up-to-date information on the application of theory and incorporates some important recent developments in the field.The technical aspects of survey and access are dealt with in some detail and the book also provides fundamental data on hydraulics, structural assessment and the