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Soils; Peat; Description of Rocks and Rock Masses; Engineering Aspects of Igneous and Metamorphic Rocks; Engineering Behaviour of Sedimentary Rocks; Chapter 6: Geological Materials Used in Construction; Building or Dimension Stone; Roofing and Facing Materials; Armourstone; Crushed Rock; Concrete Aggregate; Road Aggregate; Gravels and Sands; Lime, Cement and Plaster; Clays and Clay Products; Chapter 7: Site Investigation

Desk Study and Preliminary Reconnaissance

Site Exploration - Direct Methods; In Situ Testing; Field Instrumentation; Geophysical Methods; Indirect Site Exploration; Maps for Engineering Purposes; Geographical Information Systems; Chapter 8: Geology, Planning and Development; Introduction; Geological Hazards, Risk Assessment and Planning; Hazard Maps; Natural Geological Hazards and Planning; Geological-Related Hazards Induced by Man; Derelict and Contaminated Land; Chapter 9: Geology and Construction; Open Excavation; Tunnels and Tunnelling; Underground Caverns; Shafts and Raises; Reservoirs

Dams and Dam Sites

Highways; Railroads; Bridges; Foundations for Buildings; Suggestions for Further Reading; References; Index

Sommario/riassunto

Every engineering structure, whether it's a building, bridge or road, is affected by the ground on which it is built. Geology is of fundamental importance when deciding on the location and design of all engineering works, and it is essential that engineers have a basic knowledge of the subject. Engineering Geology introduces the fundamentals of the discipline and ensures that engineers have a clear understanding of the processes at work, and how they will impact on what is to be built. Core areas such as stratigraphy, rock types, structures and geological processes are explained, and pu
