File : C1 – text books

The material listed below has been collected by Matt Steffan and Andy Banas, Engineering Geology students of Prof. Scott Burns at Portland State University (USA) in the framework of a students assignment. The material has not yet been screened and commented nor approved by the C16 chair and membership

Text Books

1. **Modern Geophysics in Engineering Geology (Geological Society Engineering Geology Special Publication)**
   Edited by D. M. McCann
   - Taken From the Preface: "This book is based on papers presented to the 30th Annual Conference of the Engineering Group of The Geological Society which was held at the University of Liege between 12 and 15 September 1994.The theme of the Conference was 'Modern Geophysics in Engineering Geology' and covered the whole spectrum of the application of geophysical methods to engineering and environmental geology. The conference took place over a four-day period with plenary sessions covering topics on site investigation, rock mass assessment, routes,, pollution, and urban planning. A special topic on the application of the seismic refraction method in engineering studies was also included in the program. In keeping with previous years, an introductory review is provided which surveys the main themes of the Conference in the context of the application of geophysical methods in site investigation. A concluding paper which explores the future development of engineering and environmental geophysics is also included. Field surveys form an essential part of geophysical investigations and most of the major manufacturers of geophysical equipment took part in a day of practical field demonstrations of current and new instruments which were on show at the Conference exhibition." The Table of Contents can be reviewed at this Link:
     http://egsp.lyellcollection.org/cgi/issue_pdf/frontmatter_pdf/12/1.pdf

2. **Engineering Geology for Tomorrow's Cities**
   Edited by M. G. Culshaw, H. J. Reeves, I. Jefferson, T. W. Spink
   - Taken from the Preface:
     This book and the accompanying CD-ROM provide a statement of our knowledge and understanding of engineering geology as applied to the urban environment at the start of the 21st century. In particular, this volume demonstrates that: working standards originally developed nationally are becoming internationalized;
       - risk assessment, rather than just assessment of hazards, is driving decision-making;
       - geo-environmental change, whether climatically or anthropogenically driven, is becoming better understood;
       - greater use of underground space is being made;
       - the relentless advance of information technology is providing new opportunities for engineering geologists to interpret and visualize the subsurface.

     This book shows that in developed and developing countries alike, engineering geolgists are increasingly exchanging ideas and learning from each other in a genuine two-way process. These ideas will contribute significantly to the sustainable development of both new and

long-established urban environments world-wide. The abstracts for all topics is located here: http://www.iaeg.info/iaeg2006/PAPERS/ABSTRACT.PDF

- Google Book copy can be found here: http://books.google.com/books?id=fjS72BpPImYC&lpg=PA175&ots=xIkGBxvNUX&dq=2.%09Engineering%20Geology%20for%20Tomorrow's%20Cities%3A%20%20edited%20by%20M.%20G.%20Culshaw%2C%20H.%20J.%20Reeves%2C%20I.%20Jefferson%2C%20T.%20W.%20Spink&pg=PP1#v=onepage&q&f=false

3. **3D Geoscience Modeling: Computer Techniques for Geological Characterization**
   By Simon W. Houlding Springer-Verlag, Berlin, 1994
   a. Book review can be Found here: http://www.springerlink.com/content/j5158180067x4x23/fulltext.pdf

4. **Geotechnical Engineering Investigation Handbook**
   By Roy E. Hunt (2005)
   a. Google Book can be Reviewed here: http://books.google.com/books?id=ch7q7xtGMVkC&pg=PP7&dq=Geotechnical+engineering+investigation+handbook:+By+Roy+E.+Hunt&hl=en&ei=MKUETPrCCobYM8z05Ds&sa=X&oi=book_result&ct=result&resnum=1&ved=0CC0Q6AEwAA#v=onepage&q&f=false

5. **Reliability and statistics in geotechnical engineering**
   By Gregory B. Baecher, John T. Christian
   a. Google Book can be Reviewed here: http://books.google.com/books?id=42r6CKatuwcC&pg=PA129&dq=Engineering+geological+characterization&hl=en&ei=I6EETMqcMZzONJeAjTw&sa=X&oi=book_result&ct=result&resnum=9&ved=0CE4Q6AEwCDgK#v=onepage&q=Engineering%20geological%20characterization&f=false

6. **Remote sensing and GIS for site characterization: applications and standards**
   By Vernon Singhroy, D. Nebert, Arnold Ivan Johnson
   a. Google Book can be Reviewed here: http://books.google.com/books?id=DCTr9-trGx0C&pg=PA15&dq=Engineering+geological+characterization&hl=en&ei=SqIETLeNI4faMaiLxTs&sa=X&oi=book_result&ct=result&resnum=7&ved=0CEkQ6AEwBjgo#v=onepage&q=Engineering%20geological%20characterization&f=false

7. **Fundamentals of discrete element methods for rock engineering: theory and application**
   By Lanru Jing, Ove Stephansson
   a. Google Book can be Reviewed here: http://books.google.com/books?id=WS9bjQ0ORSEC&pg=PA314&dq=Engineering+geological+characterization&hl=en&ei=h6METPG2OpquNYy7pDs&sa=X&oi=book_result&ct=result&resnum=9&ved=0CEYQ6AEwCDhG#v=onepage&q=Engineering%20geological%20characterization&f=false

8. **Landslides and Society: Keynote and Invited Presentations at the 1st North American Landslide Conference, Vail, Colorado, June 3-8, 2007.**
   AEG Special Publication No. 22.
   Edited by: A. Keith Turner, Robert L. Schuster
   Sponsored by: Federal Highway Administration, Federal Lands Highway Division
   Publication No. FHWA-FLH-07-006, June 2007