

Guidelines for journal authors

Introduction

These guidelines are intended to help you through the Journals publishing process. Please take time to read these guidelines, and where you have any queries please consult with the editorial and production team.

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Why publish with Thomas Telford and the Institution of Civil Engineers

The ICE's journals provide an unparalleled forum for disseminating your achievements—or those of your organisation—in any field of civil engineering, whether you are in design, construction, research or academia. Here are some of the benefits of publishing with us:

Profile—our journals are sold in large numbers all over the world and are subscribed to by most of the major international engineering libraries. We will ensure that your work reaches the widest possible audience in print and on-line, through creative promotion and marketing, and through our constantly developing electronic initiatives.

Quality—our journals' reputation for quality is unsurpassed ensuring that the originality, authority and accuracy of your work will be fully recognised. Our refereeing procedures are fair and open, with the usual aim of helping authors develop and improve their work. We have been producing journals for over 160 years; this accumulated knowledge has resulted in journals of the highest quality.

Author services—we provide a rapid response service to all our authors, with dedicated support staff for each journal, and a point of contact throughout the refereeing and production processes. Our aim, to ensure that the production process is as smooth as possible, is borne out by the high number of authors who publish with us again and again.

Copyright and originality

Copyright permission must have been sought for all submissions. It is your responsibility to have gained copyright permission for all material used in your paper. Thomas Telford and ICE will not take responsibility for copyright. Similarly your submission must be original and must not have been published, or be under consideration elsewhere.

Manuscript appraisal

Once your paper has been approved for publication by the referees and assessors it will be sent to the production team at Thomas Telford. Once received the paper is added to our tracking database with the same reference number allocated to it by the ICE journals team. Please always use this paper number when corresponding with the journals team as it makes it much easier for us to locate your details. The Production Editor for the journal will look at the submission and if there are any queries on file formats or any material missing will contact you by email.

Schedule

Journal issues take 3 months to produce but at this stage unless for a Special issue your paper will not be allocated to a specific issue. Normally when you receive your proofs the Production Editor should be able to let you know which issue your paper is due to be published in.

Copy editing

The complete manuscript will be sent to a specialist **copy-editor** – who will be specifically selected for experience of dealing with similar texts. The copy-editor will carefully read your typescript to check for any errors in grammar, spelling, editorial presentation and consistency, and will identify corrections required to the text. Copy-editing is mainly done on screen. At this stage the editor will compile a list of queries which will be sent to you with your proofs.

Illustration

Illustrations will be checked by the copy-editor to ensure annotations are correct and that the illustrations are consistent with the text. (Please refer to the *Guidelines for illustration* for the acceptable formats for illustrations.)

Typesetting

Following copyediting the edited manuscript will be sent to a **typesetter**. The typesetter will take the raw text and illustrations and make your paper up into proofs according to the style of the journal.

Proofreading

A PDF file of the proofs are then sent to you for you to check, with this email you will also receive an offprint order form and the list of copy-editor queries. A second set is simultaneously sent to a freelance professional **proofreader** simultaneously. It is important to only make vital corrections at this stage as excessive corrections are time-consuming and expensive and excessive corrections costs could be charged back to you. This is an opportunity to check for errors in the text, not for re-writing material any large rewrites would need to go back to the refereeing stage.

Proof correction

Once proofs have been checked, any corrections to the illustrations or text will be made and a final set of proofs prepared. Thomas Telford does not send out revised proofs.

Printing

UK printers specialising in this kind of work print Thomas Telford and Institution of Civil Engineers journals. The production editor will check printer's proofs in-house.

Preparing the manuscript

Introduction

Before you start to prepare your manuscript, please read this section. It is intended to provide you with the practical guidance you will require in order to produce your manuscript. Not every part will be appropriate to all titles, but please take time to review the requirements to ensure that you present the material in a way that will make production a straightforward process. Before you start to write your paper please visit our website at www.ttjournals.com where sample issues of each journal are available to make sure that your content is suitable for the subject areas we publish in.

Authors are encouraged to submit a 100-200 word synopsis for approval before submitting a paper, technical note or article to avoid duplication and wasted effort. Advice on editorial style is presented in a separate section.

Length of typescript

Your paper should not exceed the word lengths below according to which journal you are publishing in and what category of paper you are writing.

	Civil Engineering	Other Proceedings journals	Géotechnique
Refereed paper	2000	3500	5000
Refereed technical notes	2000	2000	2000

Refereed Briefing	n/a	800	n/a
Non-refereed briefing	800	n/a	n/a
Discussion contributions	500	500	500
Book reviews	500	500	500

Preparing the document for production

Format and copies

Authors should supply four printed copies (one original and three duplicate copies) of any paper, technical note, discussion or article submitted for publication. Each copy should comprise text, references, tables, illustrations and captions in separate sections. The text should have consecutively numbered pages and use double-line spacing and wide margins. The paper can be submitted electronically or as hard copy. Electronic submissions, which need to be complete with tables and figures, are preferable as they speed up the review and production processes.

Please do not try to recreate the look of the journal when you are preparing your paper as this hinders the production process greatly. It is important to realise that the page design will be imposed by the typesetter, therefore any styling of page layouts (e.g. fonts, margin styles, heading styles) undertaken by the author will be removed prior to typesetting. For this reason, authors are encouraged to apply only a minimum of styling to their typescript – allowing you to concentrate on the content of the text rather than the layout. Text styling, such as use of italic and bold fonts, will be retained so should be set correctly in the typescript.

Page 1 should comprise the following information

- date written/revised
- title of paper **maximum eight words**
- full names and qualification of authors
- positions/affiliations of authors
- contact address and telephone, fax numbers and e-mail address of lead author – if this address changes during the refereeing or production process please inform Thomas Telford and ICE as soon as possible to avoid your proofs and/or copies of the journal going to the wrong address
- number of words
- number of tables and figures.
- three key words for reference purposes – six for *Géotechnique* (a list of keywords is included in Appendices 4 and 5).

Page 2 should start with

An abstract of 150-200 words, which summarises the objectives, and conclusions of your paper. The abstract should not include references, figure citations or acronyms. The abstract is very important as it will be freely available to all users of our website and is the information sent to the abstracting agencies so it should be written with that in mind in order to draw readers in to your paper.

Electronic submissions

Electronic submissions should be sent by email or on PC compatible disk or CD. The text, captions and tables should be in Microsoft Word or rtf files and figures

should be in separate jpg, tif, eps, Excel or Word files as appropriate (see section on figures for details). File names must contain all or part of the lead author's surname and indicate what it contains (e.g. smithtext.doc, smithfig2.jpg).

Hard-copy submissions

Authors should supply four printed copies (one original and three duplicate copies). Each copy should comprise text, references, tables, illustrations and captions in separate sections. The text should have consecutively numbered pages and use double-line spacing and wide margins.

Text

The text should be as short and concise as possible, excluding anything, which is not directly relevant to the subject matter but including any associated safety, environmental or ethical issues. The text should be in English, and should be readily understood by practicing engineers. All statements and references should be correct and accurate. Speculative material must be clearly identified as such. The text should be in the third person and should avoid colloquialisms – texts originally prepared for oral presentation therefore will usually need to be rewritten. The text should not refer to the names of individuals, organisations, products or services unless it is essential to understanding and then only appear once. Text must be neither gratuitously complimentary nor in any way derogatory about any person or organisation. Principal participants in a project should be listed separately from the text in a table or acknowledgement.

Spelling should follow the first spelling in the latest edition of the Concise Oxford English Dictionary, however “s” spellings rather than “z” spellings are preferred (e.g. specialise). Capital letters should only be used at the beginning of proper nouns and acronyms and abbreviations should be avoided. Symbols should be in accordance with latest edition of the relevant industry guidelines.

Mathematical equations

Equations should only be used where absolutely necessary and should be clear and easily understood by engineers. Each equation should be numbered and appear on a separate line in the text. A notation defining all symbols used should be provided at the start of the paper. Only relevant equations should be shown in the main body of the text — any development of an equation should appear, if essential, in an appendix.

Simple, single line equations can be set directly in Word, though an equation editor programme will be required for more complex equations.

If you have problems producing equations or special characters (Greek, mathematical symbols etc) due to a limitation in your word processor you should identify on the hard copy of the print out the symbol required. (Ideally, all special characters should be set using an equation editor, even where single characters appear in the text.)

SI Units

Should be used throughout, even for descriptions of historic projects using Imperial or other units.

Tables

Information which is additional yet essential to the understanding of the text — and which cannot be better presented graphically — should be supplied as tables on separate pages. Tables should be simple with brief column headlines (including all units) and as few rows and columns as possible. Each table should be numbered consecutively and referred to in the text (e.g. Table 1).

References

Any information, work or ideas from other sources used or referred to must be properly acknowledged in a list of references. All references should have as much information as possible (at least enough so a reader can find the source information). Further information on references is supplied in Appendix 1.

Books:

Author's surname, initials, title of book, publisher, place of publication, year (e.g. Wearne S. *Principles of engineering organizations (3rd edition)*, Thomas Telford, London, 2000).

Periodicals:

Author's surname, initials, title of article, title of periodical, year, volume, month or part, first – last page number
Gibbons C., Experimental behaviour of partially restrained steel columns.
Proceedings of the Institution of Civil Engineers – Structures and Buildings, 2001, 146,1, 29-42

Conference proceedings:

Author's surname, initials, title of paper, title of conference proceedings, place of conference, year, first - last page number
Bishop A.W. Factors controlling the strength of partially saturated soils.
Proceedings of the Residential Conference on the Shear Strength of Soils, Colorado, 1960, 503 - 532.

In the *Proceedings of the Institution of Civil Engineers*, all references should be indicated in the text with consecutive superscript numbers in the text where the as appropriate (e.g. Smith,¹). The numbered references should then be listed at the end of the text in numerical order. References in *Géotechnique* should be indicated in the text by the authors' names with the year of publication in brackets (e.g. Smith (2001)). Details of references should be given in an unnumbered list in alphabetical order of authors' names at the end of the paper.

Figures

Line drawings and photographs should be included wherever possible to enhance the understanding of the text. As a rough guide, there should be one or two figures (or tables) per 500 words. In the print version colour is only used for Civil Engineering, therefore figures for all other journals **must be suitable for reproduction in black and white**. Each figure should be marked with the author's name, numbered consecutively and referred to in the text (e.g. Fig. 1). A list of captions for all figures should be supplied on a separate page. Where figures are supplied electronically (see below they must be saved separately from the text, with each figure saved as a separate file. Detailed maps,

CAD drawings and large charts do not reproduce well on screen, and will not be accepted.

Photographs

Photographs must be of good quality with sharp focus and clear definition. For electronic submission, photographs must be supplied as jpg, tif or eps format. No other format can be accepted. The file name must include all or part of the author surname and the figure number (e.g. smithfig1.jpg).

To be suitable for reproduction, the width of the image should be at least 1500 pixels or 'dots', for which you will need to scan a 125 mm wide photographic print at a resolution of at least 300 dots per inch (dpi) or use a 2 mega-pixel digital camera. Please note that many digital cameras refer to a dpi resolution scale, however this means dots per image. Please be sure to check that the file resolution is dots per inch.

For hard copy submission, the original photographs should be on glossy photographic paper at least 125 mm x 100 mm in size or on transparency. Inkjet and laser prints and photographs taken directly from brochures, books, magazines or journals are not acceptable as originals. Three duplicates of each photograph should be provided for referees but can be in the form of photocopies. The originals and duplicates should each be clearly marked with the lead author surname and figure number. Originals should be sent in stiff packaging and individually protected from marking and scratching. They will not be returned if the submission is accepted. The correct orientation must also be indicated if there is any possibility of a misunderstanding.

Slides are acceptable, however figure details and the paper title must be included on the side of the frame.

Drawings

Drawings and charts should sufficiently clear and simple to enable them to be used at a width of 175 mm without any loss of detail. Tints and shading must not be used as they do not reproduce in black and white. If an area needs to be filled you should use a method such as cross-hatching. Working drawings and plans are generally too detailed and need to be simplified. For electronic submission, line drawings can be supplied as Microsoft Word, Excel, tif or eps files. No other format (such as bmp or Corel Draw files) can be accepted. The file name must include all or part of the lead author's surname and the figure number (e.g. smithfig2.tif). To enable reduction, drawings should be supplied both with and without annotations. All location plans and maps must have a north point and a scale and all numerical values must have units.

Style guidelines

It is important that authors preparing manuscripts are careful to impose consistency of style throughout. The following guidance is intended to help authors impose a clear and consistent style.

General

- Use -ise spellings
- Values and units should be separated by a space (e.g. 20 kN, not 20kN)
- Use SI units and derived units
- Italic text should be indicated by setting in *italic font*, not underlined
- Recommended style is to follow Oxford English Dictionary for spelling.

References

Make sure sufficient details are given to enable the reader to trace the reference without difficulty. Reference style must be consistent throughout a series or a book.

It is important that authors take care to ensure that reference lists are complete: all references cited in the text must appear in the list, and all reference in the list should contain all the information required to allow readers to find the source of the citation.

A system for preparing references is given in Appendix 1.

Mathematics and units

Mathematical expressions and formulae should be word processed if possible and presented clearly and in a form easily read by non-mathematicians. Each equation should be on a separate line. It would be helpful if Greek characters could be identified in the margin of the typescript where they first occur.

If authors wish to set mathematics to a higher level they should use the following conventions:

- Scalars in italic
- Vectors in bold italic
- Matrices in bold roman
- Letters attached to scalars which do not themselves have values (e.g. subscripts) should be roman

Table

- All tables and figures must be numbered in a consecutive sequence (however tables and illustrations should be numbered as two different sets)
- All tables must be referred to in the text
- All tables and figures must include a caption, indicating the number, content and, where necessary, a reference to the original source of the item.

Illustrations

- All illustrations must be referred to in the text
- Keep annotations on illustrations as short as possible
- Ensure that style and content of annotations is consistent with the style used in the main text.
- Use capital letter for initial word and proper nouns only

Captions

All tables and illustrations require captions. Captions should be kept brief and include:

- Table/illustration number
- Title of table/illustration
- Source of original table/illustration (if not original to the new work)

Trade names

Trade names should have initial capital letters.

Gender

Please take care to avoid unnecessary use of the masculine gender where it is not required.

Contractual roles

Take care when referring to job titles to impose consistent and correct use of initial capital letters. When referring to an engineer in general, the title does not require a capital letter, whereas if the reference is to the specific role of Engineer as defined in a contract it is usual to capitalize the term. Different contracts refer to specified roles in different terms so please take care. (Also applies to: a client/the Client, a contractor/the Contractor, etc.)

Copyright and permissions

Non-members of the Institution should acknowledge that they have read and accept the provisions of ICE by-law 117 (see Appendix 3) which grants the Institution a licence to publish submitted material. ICE members are bound by this by-law as a condition of membership.

It is the corresponding author's responsibility to obtain agreement to these terms from all co-authors, and to obtain the permission of all relevant parties for publication of the information contained in their submission, including all illustrations. Written assurance will be sought from submitting authors prior to acceptance of their paper.

Photographs, illustrations and technical drawings (works of art)

It is always necessary to obtain permission to reproduce a photograph, illustration or technical drawing for which the author is not the copyright holder (normally this is the person who actually took the photograph, drew the illustration etc.) unless:

- the copyright holder of the work has been deceased for more than 70 years (125 years for Crown Copyright and 70 years from date of publication for works published posthumously prior to 1988) and the work is being reproduced from the original material and not from a more recent reproduction (in which case the copyright on the published image could still apply).

Ownership of the original work of art does not entitle you to reproduce it without permission, unless you are the copyright holder.

Text extracts

It is necessary to seek permission to quote any text that was not written by the author unless one of the following applies.

- The author of the text has been dead for more than 70 years (125 years for Crown Copyright and 70 years from date of publication for works published posthumously prior to 1988) and the work is being cited from the original material, not from a specific more recent edition which may have been edited by the publishers.
- The text is cited solely for the purposes of criticism and review and does not exceed: 400 words of continuous prose, or 800 words in total from any one work, made up of no more than 300 words per passage, or 25% of the whole.

Except in these circumstances it is always necessary to seek permission to reproduce any material. **THIS IS A LEGAL REQUIREMENT.**

If in any doubt it is therefore better to err on the side of safety. The commissioning department at TT are happy to advise on copyright issues.

Appendix 1: preparation of references

Journals

Author's surname followed by initials, no punctuation after surname, full point after initials, capitals or ulc as style of journal, 2 authors linked by 'and' in lc roman, more than 2 authors - give first author only followed by "et al." in italics.

Titles of article followed by full point, roman ulc, capitals for proper nouns only (all German nouns have capitals).

Name of journal in italics, followed by a comma. Use & where appropriate and abbreviate as follows

<i>Proceedings</i>	<i>Proc.</i>
<i>Journal</i>	<i>J.</i>
<i>Engineering</i>	<i>Engng</i>
<i>Engineer</i>	<i>Engr</i>
<i>Engineers</i>	<i>Engrs</i>
<i>Foundation</i>	<i>Fndn</i>
<i>Concrete</i>	<i>Concr.</i>
<i>Structural</i>	<i>Struct.</i>
<i>Structures/Buildings</i>	<i>Structs/Bldgs</i>
<i>Civil</i>	<i>Civ.</i>
<i>Mechanical</i>	<i>Mech.</i>
<i>Electrical</i>	<i>Elec.</i>
<i>Geotechnical</i>	<i>Geotech.</i>
<i>Environmental</i>	<i>Env.</i>
<i>Geoenvironmental</i>	<i>Geoenv.</i>
<i>Institute/Institution</i>	<i>Inst./Instn</i>

Year of publication in roman followed by comma.

Volume number in bold followed by bold comma (omit 'vol.')

Number followed by comma; leave in 'No.' (or 'Part').

Month (abbreviated as follows), followed by comma: Jan., Feb., Mar., Apr., May, June, July, Aug., Sept., Oct., Nov., Dec.

First and last, or specific, page numbers followed by full point. Use en dashes for ranges of pages, e.g. '199-220'.

Example

TAYLOR C. and OFFORD R. S. Design of outfalls in tidal waters. *Proc. Instn Civ. Engrs Structs & Bldgs*, 1969, **3**, July, 811-840

Books

Author: as for journals, or Editor in style of author, followed by '(ed)' or '(eds)', or name of organization acting as author.

Chapter title followed by full point, given in roman ulc.

Title of book, followed by full point, in italic ulc, with capitals for proper nouns only.

Publisher, followed by comma.

Place of publication followed by comma (except where publisher includes name of town where published, e.g. Oxford University Press).

Year of publication followed by comma.

Volume number in bold, followed by comma.

Edition followed by comma, (e.g.) '2nd edn,'.

Chapter number followed by comma, abbreviated ch. number in arabic, numerals.

Page numbers, followed by full point. Use en dashes for ranges.

Example

BLOGGS J. F. (SMITH S. (ED.)) or (INSTITUTION OF CIVIL ENGINEERS.) *A survey of reactors*. Wiley, New York, 1969, 2nd edn, ch. 10, 24–26.

Conferences

Author: as for journals

Paper title as for journals

Conference title in *italics* as for book title, followed by full point.

For periodic conferences abbreviate title in style as for journals, and include conference place and date in *italics*: items 4–6 may then be omitted.

Publisher, followed by comma.

Place of publication, followed by comma.

Year of publication, followed by comma.

Page numbers followed by comma.

Example

BLOGGS F. A survey of sewage. *Storm sewage overflows*. Institution of Civil Engineers, London 1969, 24–26.

Reports

Author, as for journals.

Title as for books.

Publisher in full unless it is obvious, e.g. HMSO, followed by comma.

Place of publication, followed by comma.

Year of publication, followed by comma.

Report and reference number which may include initials of publishers, followed by comma.

Page numbers, followed by full point. Use en dashes for ranges.

Example

Baker A. L. L. *The inelastic space frame*. Cement and Concrete Association, London, 1967, TND-1140, 15–17.

Theses

Author as for journals.

Title as for books

Name of university, including place if this part of the name, e.g. University College London, followed by PhD thesis, followed by comma.

Year, followed by comma.

Page numbers followed by full point. Use en dashes for ranges.

Example

BLOGGS J. A. *A study of breakdown in editorial negotiations*. St George's University, London, Phd thesis, 1968 7–12.

Patents

• Author as for journals.

• Title as for books.

• Patent reference abbreviated as per BS 1629, page 15, followed by comma.

• Date in style e.g. 29 Jan. 1970.

Example

DABERNARD P. and GUILLOTEAU Q. *Methods and machines for separating irradiated nuclear fuels from their jackets*. Can. Pat. 672 051, 8 Oct. 1963.

Appendix 2: ICE By-Law 117

ICE By-Law 117 (part)

In this by-law:

“oral contribution” means an oral contribution given at a meeting by any person in relation to a paper. “paper” means any literary or artistic work and shall be construed to include:

- (i) any drawing, picture, photograph, model, map, table, diagram or graph forming part of or appended to a paper, and
- (ii) (ii) any contribution submitted to the Institution by any person in relation to a paper and
- (iii) the written record of any oral contribution

Unless there shall have been some previous agreement to the contrary, every paper submitted to the Institution for publication in the regular proceedings of the Institution or in the proceedings of any meeting arranged by or on behalf of the Institution shall be considered to be the property of the Institution, and any person submitting such a paper shall be deemed to have granted a licence to the Institution to publish the paper in the Proceedings in which it was intended, and in any republication, reproduction or translation of such Proceedings or parts thereof, at such times and in such manner as the Council may think proper; but the Council shall be under no obligation to publish any paper.

Appendix 3: Submission and Approval procedure

Submissions should be sent to: (Name of journal),
The Institution of Civil Engineers,
Great George Street, London SW1P 3AA,
telephone +44 (0)20 7222 7722,
fax +44 (0)20 7799 1325,
e-mail: journals@ice.org.uk.

Before submitting a paper, technical note or article, authors may send in a 100 to 200-word synopsis to ensure that the proposed subject matter does not conflict with other papers in preparation but not yet published.

A covering letter should be sent with every submission indicating the journal for which it is intended, though the ICE retains the right to publish the submission in the journal it considers most appropriate after consultation with the author. If the submission has been submitted or published elsewhere, the authors must provide full details.

All material submitted to ICE journals is approved before publication via the relevant journal's Editorial Panel on behalf of the Council of the Institution. All papers and technical notes are refereed, usually by two referees chosen by the Panel. Referees are generally required to complete a report form within four weeks. This includes a recommendation of which ICE journal the paper or technical note should be published in. In most cases authors are requested to make a revision, which may be returned to the referees for reassessment. The minimum time taken for a submission to be accepted or rejected by a panel is therefore about two months, though five months is the average.

Rejected submissions are returned to the author as soon as possible and the Institution relinquishes its licence to publish. Accepted submissions are passed for publication to the ICE's publishing company, Thomas Telford Ltd. At this stage authors are asked to provide a final electronic copy of the text, which incorporates all the amendments made during the refereeing process, and is exactly the same as the finally accepted submission.

Appendix 4: Keywords Proceedings

Airports	Field testing & monitoring
Anchors & anchorages	Floods & floodworks
Beams & girders	Foundations
Biography	Geology
Bitumen & tar	Geotechnical engineering
Book reviews	Geotextiles, membranes & geogrids
Brickwork & masonry	Grouting
Bridges	Groundwater
Buildings, structure & design	Health & safety
Cables & tendons	History
Car parks	Hydraulics & hydrodynamics
Coastal engineering	Hydrology & water resource
Codes of practice & standards	Information technology
Cofferdams & caissons	Infrastructure planning
Columns	Landfill
Communications & control systems	Land reclamation
Composite structures	Land surveying
Concrete technology & manufacture	Lecture
Concrete structures	Liability
Conservation	Local government
Contracting	Maintenance & inspection
Contracts, law & arbitration	Management
Cooling towers	Marinas
Corrosion	Maritime engineering
Cranes, conveyors & material handling	Marketing and public relations
Dams, barrages & reservoirs	Materials technology
Demolition	Mathematical modelling
Design methods & aids	Mechanical engineering
Developing countries	Military engineering
Diaphragm walls	Mining & quarrying
Disaster engineering	Models (physical)
District heating	Municipal & public service engineering
Drainage & irrigation	Noise
Dredging	Offshore engineering
Drilling & drillholes	Pavement design
Dynamics	Piles & piling
Economics & finance	Pipes & pipelines
Education & training	Planning and scheduling
Electrical engineering & distribution	Pollution
Embankments	Ports, docks & harbours
Environment	Power stations (fossil fuel)
European Union (EU)	Power stations (non-fossil fuel)
Excavation	Public health
Failures	Quality control
Fatigue	Rail & bus stations
	Rail track design

Railway systems
Recreational facilities
Recycling of materials
Rehabilitation, reclamation
& renovation
Research & development
Resins & plastics
Retaining walls
Reviews
Risk & probability analysis
River engineering
Roads & highways
Rock mechanics
Safety & hazards
Sea defences
Seismic engineering
Sewers & drains
Sewage treatment &
disposal
Shells
Silos
Site investigation
Slabs & plates
Social impact
Statistical analysis
Steel structures
Street lighting
Strength and testing of
materials
Stress analysis
Structural frameworks
Subsidence
Temporary works
Tendering
Thermal effects
Timber structures
Town and city planning
Traffic engineering
Transport management
Transport planning
Tunnels & tunnelling
Underwater engineering
Urban regeneration
Waste management &
disposal
Water supply
Waterways & canals
Weather
Wind loading &
aerodynamics

Appendix 5 Keywords Géotechnique

Anchors
Anisotropy
Basements
Bearing capacity
Buried structures
Calcareous soils
Case history
Centrifuge modelling
Chalk
Chemical properties
Clays
Coastal engineering
Compaction
Compressibility
Contaminated land
Consolidation
Constitutive relations
Creep
Cut-off walls and barriers
Dams
Deformation
Design
Dewatering
Diaphragm and in situ walls
Drainage
Dredging
Dynamics
Earthfill
Earth pressure
Earthquakes
Elasticity
Electrokinetics
Embankments
Environmental engineering
Erosion
Excavation
Expansive soils
Fabric/structure of soils
Failure
Field instrumentation
Filters
Footings/foundations
Friction
Full-scale tests
Geology
Geomorphology
Geotextiles
Geosynthetics
Glacial soils
Gravels
Ground freezing
Ground improvement
Ground movements
Groundwater
Grouting
Historical review
Industrial wastes
In situ testing
Laboratory equipment
Laboratory tests
Landfills
Landslides
Limit state design/analysis
Liquefaction
Microscopy
Mineralogy
Model tests
Monitoring
Numerical modelling and analysis
Offshore engineering
Organic soils
Partial saturation
Pavements and roads
Permeability
Piles
Pipejacking
Plasticity
Pollution migration/control
Pore pressures
Rafts
Radioactive waste disposal
Reclamation
Reinforced soils
Remediation
Repeated loading
Residual soils

Retaining walls	Suction
Rocks/rock mechanics	Temperature effects
Sampling	Theoretical analysis
Sands	Time dependence
Sedimentation	Torsion
Seepage	Trenches
Seismicity	Tunnels
Settlement	Vibration
Shear strength	Water flow
Sheet piles and cofferdams	Waves and wave loading
Silos	
Silts	
Site investigation	
Slopes	
Snow ice and frost	
Soft rocks	
Soil classification	
Soil stabilization	
Soil/structure interaction	
Standards	
Statistical analysis	
Stiffness	
Stress analysis	