QUESTIONNAIRE ON SUBJECT AREAS OF AUTHORS AND REVIEWERS

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To facilitate timely and fair reviews of papers submitted to GTJ, (a) authors of manuscripts submitted for publication are asked to circle the subject areas most applicable to their respective manuscripts, and (b) prospective reviewers are asked to circle the subject areas in which they have the greatest current competence to provide informed technical evaluations of manuscripts submitted to GTJ for publication. Thank you.

Howard Pincus
Technical Editor

1. FIELD EXPLORATION

- 1.1 Reconnaissance
- 1.2 Mapping and GIS
- 1.3 Remote Sensing
- 1.4 Geophysical Methods
- 1.5 Geochemical Methods
- 1.6 Geobotanical Methods
- 1.7 Borehole Logging
- 1.8 Drilling Operations
- 1.9 Sampling Soil
- 1.10 Sampling Rock
- 1.11 Sample Transport and Storage
- 1.12 Ground Water Monitoring
- 1.13 Surface Water Monitoring
- 1.14 Other _____

2. FIELD (IN SITU) TESTING

- 2.1 Calcareous Soils
- 2.2 Marine and Lacustrine Sediments
- 2.3 Admixtures
- 2.4 Hydrocarbon-Bearing Soils
- 2.5 Hazardous Materials
- 2.6 Pollutants
- 2.7 Jointed Rock
- 2.8 Tailings, Backfill, Talus
- 2.9 Penetration Testing
- 2.10 Moisture, Density
- 2.11 In Situ Stresses
- 2.12 Transmissivity, Storativity
- 2.13 Physicochemical Testing
- 2.14 Stress-Strain, Strength
- 2.15 Load-Deformation
- 2.16 Seismic Methods, Acoustic Emission
- 2.17 Other _____

3. TESTING AND MONITORING SOIL AND ROCK STRUCTURES

- 3.1 Embankments
- 3.2 Rock for Erosion Control
- 3.3 Dams
- 3.4 Tunnels and Shafts
- 3.5 Marine Structures
- 3.6 Waste Impoundments
- 3.7 Pavement Systems
- 3.8 Drainage Aids
- 3.9 Natural Slopes
- 3.10 Fills
- 3.11 Retaining Structures
- 3.12 Liners
- 3.13 Geotextile Structures
- 3.14 Mechanically Modified Soil and Rock
- 3.15 Chemically Modified Soil and Rock
- 3.16 Biologically Modified Soil and Rock
- 3.17 Admixtures
- 3.18 Erosion Tests
- 3.19 Subsidence and Collapse
- 3.20 Piles and Foundations
- 3.21 Other _____

4. LABORATORY TESTING—SOIL

- 4.1 Classification, Identification, Nomenclature
- 4.2 Sampling and Specimen Preparation, Transportation, and Storage

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4.3 Grain Size, Specific Gravity, Density
4.4 Physicochemical Properties
4.5 Permeability, Void Ratio, Water Content
4.6 Consolidation, Swelling, Collapse
4.7 Shrinkage, Creep
4.8 Compaction Tests
4.9 Stress-Strain, Strength
4.10 Liquefaction Tests
4.11 Cyclic and Dynamic Tests
4.12 Thermal Property Tests
4.13 Microscopic Analysis
4.14 Other _____

5. LABORATORY TESTING—ROCK AND DIMENSION STONE

5.1 Classification, Identification, Nomenclature
5.2 Specimen Preparation
5.3 Texture, Fabric, Specific Gravity, Density
5.4 Permeability, Void Ratio, Pore-Size Distribution, Water Content
5.5 Stress-Strain, Strength
5.6 Creep
5.7 Fracture-toughness
5.8 Shear Strength, Sliding Friction
5.9 Seismic and Acoustic Tests
5.10 Cyclic and Dynamic Tests
5.11 Electrical and Magnetic Properties
5.12 Thermal Properties
5.13 Microscopic Analysis
5.14 Other _____

6. LABORATORY TESTING—GEOSYNTHETICS

6.1 Classification, Identification, Nomenclature
6.2 Specimen Preparation
6.3 Mechanical Properties
6.4 Chemical Properties
6.5 Endurance Properties
6.6 Permeability and Filtration
6.7 Other _____

7. LABORATORY TESTING—ROAD AND PAVING MATERIALS

7.1 Classification, Identification, Nomenclature
7.2 Specimen Preparation
7.3 Mechanical Properties, Rheology
7.4 Chemical Properties
7.5 Durability Properties
7.6 Specific Gravity and Density
7.7 Analyses of Mixtures
7.8 Other _____

8. LABORATORY-MODEL TESTING

8.1 Soil-Rock-Structure Interaction
8.2 Soil and Rock Reinforcement
8.3 Grouts and Admixtures
8.4 Geotextiles
8.5 Fluid Flow through Soil and Rock
8.6 Simulated Soil and Rock
8.7 Centrifuge Tests
8.8 Other _____

9. MISCELLANEOUS

9.1 Quality Control, Quality Assurance
9.2 Equipment Calibration and Traceability
9.3 Proficiency Testing
9.4 Ruggedness in Testing
9.5 Interlaboratory Testing; Repeatability and Reproducibility
9.6 Error Propagation
9.7 Automated Control of Testing
9.8 Data Acquisition, Reduction and Management
9.9 Probabilistic Methods
9.10 Numerical Modelling
9.11 Laboratory Accreditation
9.12 Education and Training
9.13 Terminology, Definitions, and Notation
9.14 Other _____
9.15 Other _____

SUMMARY OF NUMBERS CHECKED: _____ _____ _____ _____

COMMENTS:

_____

_____

Please send completed form to:
Ms. Kathy G. Dernoga, Manager, Acquisitions and Review
ASTM Publications
1916 Race Street
Philadelphia, PA 19103-1187
or FAX 1 215 299 5511

ASTM Task Group on Data Automation
Questionnaire for Geotechnical Laboratories

1. Name_____ Position _____
   Company _____ Address _____
   Type of Organization: University_____ Government_____ Consulting_____ Industry_____
   List testing or standards organizations in which you participate _____

2. With regard to the general laboratory: Number of staff devoted to lab_____ Floor area in sq. ft._____
   Which do you have on staff? __Machinist __Mechanical engineer __Electronic specialist __Instrumentation Specialist __Software engineer
   Which of the following do you have? __Temperature Control __Dust Control __Emergency Power

3a. Please complete the following table for soil tests performed in your facility:

Soil Tests	Gradation (D422)	Limits (D4318)	Consolidation (D2435)	UC (D2166)	UU (Q) (D2850)	CU (R) (D4785)	CD (S) (D4785)	Direct Shear (D3080, D5321)	Permeability (D2434, D5084)	Other*
Number of tests per year										
Check if you automatically record data										
Check if you use computer for data reduction										
Check if you use computer for graphs or tables										
Estimated cost savings per test from automation										

* describe other test_____

4. Please complete the following table for rock tests performed in your facility:

Rock Tests	Strength (D2664, D2936, D2938, D3967)	Elastic Modulus (D2845, D3148, D5407)	Permeability (D4525)	Creep (D4341, D4405, D4406)	Sonic (D2845)	Thermal (D4535, D4611, D4612, D5334, D5335)	Other* (D4644, D5240, D5312, D5313)
Number of tests per year							
Check if you automatically record data							
Check if you use computer for data reduction							
Check if you use computer for graphs or tables							
Estimated cost savings per test from automation							

* describe other test_____

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ASTM Task Group on Data Automation
Questionnaire for Geotechnical Laboratories

5. If you have a data acquisition system, please answer the following questions (use a separate copy for each system)
   Type_____Number of Input Channels _____ Number of tests you monitor at once____
   Maximum Number of Readings per second you use___ Total Cost of hardware, excluding sensors_____
   Total cost of sensors_____How are data stored?__printed __tape __floppy disk __ hard disk __ other
   Describe what you use the system for _____
   Does the system control the test __ Describe how _____
   How much time required to train a new user_____ Frequency of breakdown ____ Describe reliability _____
   Did supplier offer service contract __ Did you take it __ Cost of service contract as percent of original system purchase price____
   Describe experience with service _____
   Is system rugged __ Give examples _____
   Has system been cost effective? __ Give example _____
   Are you considering additional equipment __ If yes please answer #7.
   How do you charge your clients for use of the system _____
   Would you buy the same system again __ Why _____

6. If your data acquisition system uses software to collect and reduce data, please answer the following:
   Function of software: __collect data __sort data for test from master data file __reduce data __plot results __show real-time graphs of test
   __control test __place data in master data base __perform statistical and/or engineering evaluations of data
   Programming language used_____Operating system used_____
   How much time to train new user ___ Who corrects deficiencies _____
   Can you modify software _____ Is software flexible enough for your needs ____
   Describe software problems you have had _____
   Would you buy same system again __ Why _____
   Is your software available to others _____

7. If you have no data acquisition equipment or are considering expansion of your present system
   Do you plan further automation in the near future?__ Why_____
   Which tests do you plan to automate? _____
   Which parts will you automate? __collect data __reduce data after test __plot results for report __provide real-time graph as test runs __control test__other _____
   Will you __purchase software __develop software in-house
   What information is most helpful in selecting a new system (please rank by importance with 1 as highest) __manufacturer's literature __specs __example results __reliability of system
   __experience of another with system __ other (specify _____)

8. Does your company use data acquisition equipment in field applications? __ Describe _____

9. What standards would be helpful to you in regard to using your data acquisition equipment?_____

10. Please comment on your experiences with data acquisition systems, positive and negative.

Thank you for your time and help. Please mail the completed questionnaire to: D18.95 Data Automation Survey, c/o Bob Morgan, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187. Phone any questions to Dr. Marr at (508) 635-0012.

Additional Information for Authors

The *Geotechnical Testing Journal* (GTJ) is a quarterly publication sponsored by ASTM technical committee D-18 on Soil and Rock, with support from D-35 on Geosynthetics, D-4 on Road and Paving Materials, and D-34 on Waste Management. Each published paper and technical note has been peer-reviewed. Papers and technical notes are open to brief written comments in the Discussion section of the Journal, which also includes authors' written responses.

The Technical Editor may consider a paper submitted to the Journal as a Technical Note if: it gives a reasonably brief description of ongoing studies with or without providing interim, tentative data, and/or conclusions; it reports phenomena observed in the course of research requiring further study; it provides mathematical procedures for facilitating reduction and analysis of data; or it reports promising new materials prior to undertaking extensive research to determine their properties.

The decision as to whether a manuscript is published as a paper or a technical note resides with the Technical Editor.

The guidelines below describe our manuscript selection, peer review, revision, and publication processes. Following these guidelines will ensure expeditious handling of submitted material.

Submission

The name, mailing address, position, affiliation, and telephone and fax number of each author must be supplied in a cover letter. The submitting author is to provide the names, affiliations, addresses, and telephone numbers of five to six individuals who are qualified to review impartially the paper and the research leading to it, and who are not employed at the same institution or company as any of the authors. While these names may or may not be used for the review, we will add them to our pool of potential reviewers. Also, a statement is to be included that the paper has not been published and is not under consideration for publication elsewhere. All permissions for previously published material used in the paper must be submitted in writing at this time.

The submitting author must also affirm that all those listed as co-authors have agreed (a) to be listed and (b) to submit the manuscript to ASTM for publication.

Five copies of the manuscript with clear copies of each figure are required. Original art work and computer disks should accompany the final revision.

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Word Processing Instructions

The hard-copy text can be produced on any letter-quality printer. Text is to be printed double-spaced with left and right margins of 1 in. (25.4 mm) using left justification. New paragraphs are to be indented five spaces, and end-of-line returns are not to be used.

The *revised* manuscript is to be sent on a $5^1/_4$ in. (133 mm) or $3^1/_2$ in. (89 mm) disk preferably in WordPerfect 5.1, with the corresponding hard copies. ASTM can convert from other word-processing packages as well.

* For complete manuscript instructions, which include a sample manuscript, call Barbara Stafford, Administrative Assistant, ASTM Journals, 215/299-5424 or FAX 215/299-5511.

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Figures

Each figure is to be simple and uncluttered. All illustrations are to be placed together at the end of the manuscript with a separate sheet of figure captions. Consecutive Arabic (not Roman) numerals are required. The size of type in illustrations must be large enough to be legible after reduction. All lettering, lines, symbols, and other marks must be drawn in black India ink on white paper. Computer graphics must be produced by a laser printer. Photographs must be high-contrast black and white. SCALE MARKERS MUST BE SHOWN ON ALL PHOTOMICROGRAPHS AND ALL FIGURES THAT ARE REPRESENTATIONS OF EQUIPMENT OR SPECIMENS.

Tables

All tables are to be placed together at the end of the manuscript preceding the illustrations. Tables are to be numbered in Arabic and are cited in numerical order in the text. it is better to use several small simple tables than one large, complex table.

References

References shall be cited in the text by author's last name and date of publication. References shall be listed together at the end of the text in alphabetical order by author's last name. They must contain enough information to allow a reader to consult the cited material with reasonable effort.

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Each new manuscript is sent to the Technical Editor for consideration. If the Technical Editor finds that the manuscript fits the scope of the journal, will be of interest to the readership, and is well written, the paper is processed for peer review.

Three or more reviewers, selected by the Technical Editor, review each paper for technical content, originality, logical conclusions, sound data, reproducibility of results, and clarity of presentation; two or more reviewers provide reviews of each technical note. Their comments are compiled and evaluated. The reviewers' anonymous comments and any other comments from the Technical Editor or his designee are then returned to the author for revision.

The author must submit five copies of the revised manuscript with an annotated (highlighted) version of the paper indicating clearly where each revision has been made and identifying the reviewer's comment to which the revision is responding. Changes in the text including all MANDATORY reviewers' comments must be addressed explicitly on the "Authors' Response Form" provided during revision, as well as any explanation why a change was not made.

The Technical Editor will evaluate all revised manuscripts and make the final decision regarding publication in the Journal. The Editor may (1) accept the revised manuscript for publication, (2) require further revision or explanation, or (3) reject the revised manuscript. A revised manuscript may be sent for re-evaluation to a reviewer who has found major flaws in the original manuscript.

Editorial Review by ASTM

Each accepted paper is edited by the ASTM staff for style, organization, and proper English usage. The edited manuscript is returned to the author before typesetting. The typeset page proof is also sent to the author and the Technical Editor for final review prior to printing.

If ASTM does not hear from the author by the time designated for return of the edited paper and/or page proof, ASTM will proceed with the publication process.

Book Reviews

ASTM receives books from other publishers requesting book reviews. The books are available to potential reviewers in exchange for publishable reviews. Book reviews are screened and edited by the Technical Editor and staff without peer review.

Testing Forum and Tips

Anyone having interesting test tips should submit a brief description of such innovations to the Testing Forum. Such contributions are screened and edited by the Technical Editor and staff without peer review.

Howard J. Pincus, Ph.D., P.E., C.P.G.
Technical Editor

E 380 SELECTED CONVERSION FACTORS

To convert from	to	multiply by
atmosphere (760 mm Hg)	pascal (Pa)	$1.013\ 25 \times 10^{5}$
board foot	cubic metre (m^3)	$2.359\ 737 \times 10^{-3}$
Btu (International Table)	joule (J)	$1.055\ 056 \times 10^{3}$
Btu (International Table)/h	watt (W)	$2.930\ 711 \times 10^{-1}$
Btu (International Table)•in./s•ft^2•°F (k, thermal conductivity)	watt per metre kelvin [W/(m•K)]	$5.192\ 204 \times 10^{2}$
calorie (International Table)	joule (J)	4.186 800*
centipose	pascal second (Pa•s)	$1.000\ 000^* \times 10^{-3}$
centistokes	square metre per second (m^2/s)	$1.000\ 000^* \times 10^{-6}$
circular mil	square metre (m^2)	$5.067\ 075 \times 10^{-10}$
degree Farenheit	degree Celsius	$t°C = (t°F - 32)/1.8$
foot	metre (m)	$3.048\ 000^* \times 10^{-1}$
ft^2	square metre (m^2)	$9.290\ 304^* \times 10^{-2}$
ft^3	cubic metre (m^3)	$2.831\ 685 \times 10^{-2}$
ft•lbf	joule (J)	1.355 818
ft•lbf/min	watt (W)	$2.259\ 697 \times 10^{-2}$
ft/s^2	metre per second squared (m/s^2)	$3.048\ 000^* \times 10^{-1}$
gallon (U.S. liquid)	cubic metre (m^3)	$3.785\ 412 \times 10^{-3}$
horsepower (electric)	watt (W)	$7.460\ 000^* \times 10^{+2}$
inch	metre (m)	$2.540\ 000^* \times 10^{-2}$
$in.^2$	square metre (m^2)	$6.451\ 600^* \times 10^{-4}$
$in.^3$	cubic metre (m^3)	$1.683\ 706 \times 10^{-5}$
inch of mercury (60°F)	pascal (Pa)	$3.376\ 85 \times 10^{3}$
inch of water (60°F)	pascal (Pa)	$2.488\ 4 \times 10^{2}$
kgf/cm^2	pascal (Pa)	$9.806\ 650^* \times 10^{4}$
kip (1000 lbf)	newton (N)	$4.448\ 222 \times 10^{3}$
$kip/in.^2$ (ksi)	pascal (Pa)	$6.894\ 757 \times 10^{6}$
ounce (U.S. fluid)	cubic metre (m^3)	$2.957\ 353 \times 10^{-5}$
ounce-force	newton (N)	$2.780\ 139 \times 10^{-1}$
ounce (avoirdupois)	kilogram (kg)	$2.834\ 952 \times 10^{-2}$
oz (avoirdupois)/ft^2	kilogram per square metre (kg/m^2)	$3.051\ 517 \times 10^{-1}$
oz (avoirdupois)/yd^2	kilogram per square metre (kg/m^2)	$3.390\ 575 \times 10^{-2}$
oz (avoirdupois)/gal (U.S. liquid)	kilogram per cubic metre (kg/m^3)	7.489 152
pint (U.S. liquid)	cubic metre (m^3)	$4.731\ 765 \times 10^{-4}$
pound-fource (lbf)	newton (N)	4.448 222
pound (lb avoirdupois)	kilogram (kg)	$4.535\ 924 \times 10^{-1}$
lbf/in^2 (psi)	pascal (Pa)	$6.894\ 757 \times 10^{3}$
lb/in^3	kilogram per cubic metre (kg/m^3)	$2.767\ 990 \times 10^{4}$
lb/ft^3	kilogram per cubic metre (kg/m^3)	$1.601\ 846 \times 10$
quart (U.S. liquid)	cubic metre (m^3)	$9.463\ 529 \times 10^{-4}$
ton (short, 2000lb)	kilogram (kg)	$9.071\ 847 \times 10^{2}$
torr (mm Hg, 0°C)	pascal (Pa)	$1.333\ 22 \times 10^{2}$
W•h	joule (J)	$3.600\ 000^* \times 10^{3}$
yard	metre (m)	$9.144\ 000^* \times 10^{-1}$
yd^2	square metre (m^2)	$8.361\ 274 \times 10^{-1}$
yd^3	cubic metre (m^3)	$7.645\ 549 \times 10^{-1}$

*Exact