Registration

Settlement of Structures and Embankments

☐ July 17-18 ■ San Francisco, CA
☐ July 21-22 ■ Long Beach, CA

Please print or type–complete a separate form for each participant or register online at: **www.conted.vt.edu/settlement/**

Name _____

Social Sec. No. _____ Required for award of CEUs.

Title _____

Company _____

Company's FID No.* _____

Address _____

City _____

State _____ Zip _____

Daytime Phone No. _____

Fax No. _____

E-mail _____

Signature _____

Registration Fee: Registration will be processed when payment is received.
☐ Non-member–$950
☐ CGPR Member–$650

Method of Payment:
☐ Check enclosed. Make checks payable to:
Treasurer, Virginia Tech, CE

☐ MasterCard ☐ VISA ☐ Amex Exp. Date _____

Card No. _____

Name on card _____

Return by **July 3, 2003** (no staples, tape, or paper clips, please) to: Conference Registrar
Outreach Program Development
Virginia Tech, Mail Code 0272
810 University City Boulevard, Suite D
Blacksburg, VA 24061
Phone (540) 231-5182
Fax (540)231-3306 (for credit card registrations only)

*FID number necessary to process a refund payable to a company, agency, or government agency.

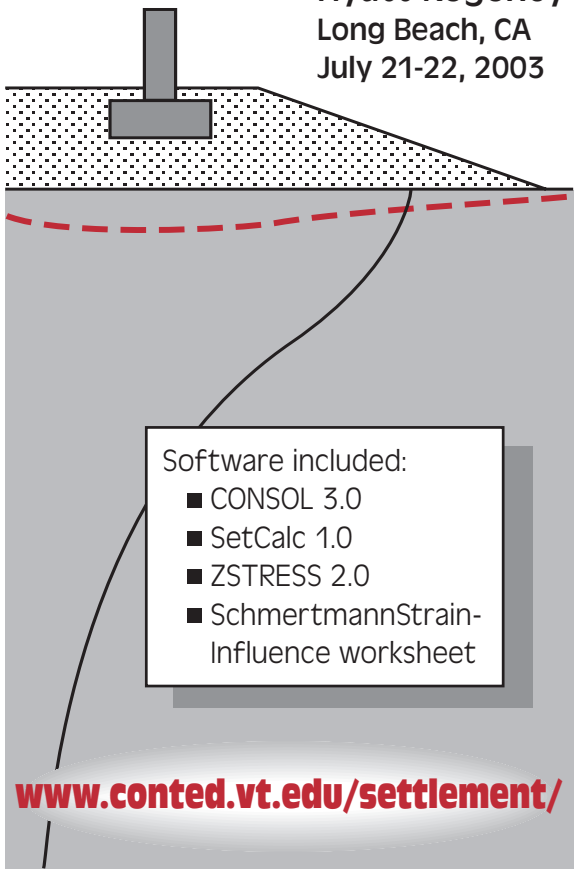
FOR OFFICE USE ONLY
RECEIVED | AMNT: _____ CHK#: _____ DPST: _____ DATE: _____

A two-day short course on

Settlement of Structures and Embankments

Hyatt Regency
San Francisco, CA
July 17-18, 2003

Hyatt Regency
Long Beach, CA
July 21-22, 2003



www.conted.vt.edu/settlement/

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Sponsored by:
Virginia Tech
The Center for Geotechnical Practice and Research
Outreach Program Development

About the Software Included in the Registration Fee

CONSOL 3.0 – A Windows-based computer program and 50-page user's guide. Based on numerical analysis of consolidation settlement magnitude and time rate. Accommodates nonlinear and inelastic stress-strain behavior; non-uniform soil profiles; normally consolidated, over-consolidated and under-consolidated initial conditions; loads applied at various times; settlement or heave due to changes in groundwater level; drainage at the top, bottom, or within the soil profile; adjustment for buoyancy effects as settlement occurs; stresses due to strip loads; circular loads, large area fills, or any user-specified changes in stress. List price $500.

SetCalc 1.0 – A Windows-based computer program and 25-page user's guide. Computes ultimate consolidation settlements at any x, y, z location for horizontally layered soil conditions; models stress changes due to surface loads or excavation at any location using both Boussinesq and Westergaard theories; accommodates arbitrary variations of sublayer compressibility and preconsolidation pressures with depth; computes settlement or heave due to change in groundwater level. List price $200.

ZSTRESS 2.0 – A Windows-based computer program and 12-page user's guide. Computes change in vertical stress at any x, y, z location for surface loads or excavation at any location, using Boussinesq and Westergaard theories. Surface loads can be represented as any number of point loads and/or uniformly loaded rectangular areas at any location. List price $100.

SchmertmannStrainInfluence – An Excel spreadsheet and 24-page guide for analysis of settlements of foundations on residual soils, based on the Schmertmann-Martin method. User's guide includes examples and evaluations of bias and reliability for three methods of evaluating residual soil modulus values based on pressuremeter tests (PMT), cone penetration tests (CPT) and standard penetration tests (SPT). List price $100.

Settlement of Structures and Embankments is a practical short course focusing on methods and tools for estimating and controlling settlements of buildings, embankments, landfills, and bridges.

What you'll receive: • 2 days of instruction – 14 class hours • Comprehensive course notes and supplemental references for each subject covered in the course • 4 computer programs (CONSOL 3.0, SetCalc 1.0, ZSTRESS 2.0, and SchmertmannStrainInfluence worksheet – see descriptions in this brochure) • Two hours devoted to discussion of settlement issues raised by attendees • Buffet luncheons • Reception • 1.4 CEU's.

Registration Information

The registration fee is $950 ($650 for employees of CGPR member firms). Please complete the attached form and return to the Conference Registrar before **July 3, 2003**. You may also register online at: www.conted.vt.edu/settlement/.

Note: Payment of registration fees is required prior to program attendance. Registration will be processed when payment is received. **Refund Policy:** Requests for refunds will be honored when received seven calendar days prior to the program. However, another person may be substituted at any time for this program. A $75 administrative fee will be deducted for cancellations. In the unlikely event that this program is cancelled or postponed due to insufficient enrollments or unforeseen circumstances, the university will fully refund registration fees but cannot be held responsible for any other expenses, including cancellation or change charges assessed by airlines, hotels, travel agencies, or other organizations.

Location and Lodging

The seminar will be held at the Hyatt Regency in San Francisco on July 17-18, 2003, and at the Hyatt Regency in Long Beach on July 21-22, 2003. For overnight accommodations in San Francisco, please make your own arrangements by calling (415) 788-1234. For overnight accommodations in Long Beach, please make your own arrangements by calling (562) 491-1234.

Agenda

Day One

7:30 – 8:00 AM	**On-site Registration**
8:00 – 8:50 AM	**Introduction** Mike Duncan and George Filz
9:00 – 9:50 AM	**Tolerable settlements of buildings, bridges, and tanks** Mike Duncan
10:00 – 10:50 AM	**Settlement of footings on sand** George Filz
11:00 – 11:50 AM	**Settlement of foundations on sand, silt and residual soils – other methods** Mike Duncan
11:50 AM – 1:00 PM	*Buffet lunch provided*
1:00 – 1:50 PM	**Compressibility of clay** George Filz
2:00 – 2:50 PM	**Initial stresses and changes in stress** Mike Duncan
3:00 – 3:50 PM	**Calculation of consolidation settlement magnitudes** George Filz
4:00 – 5:30 PM	**Reception – appetizers and soft drinks provided**

For a more detailed Agenda, please see the website at: **www.conted.vt.edu/settlement/**

Day Two

8:00 – 8:50 AM	**Time rate of consolidation** Mike Duncan
9:00 – 9:50 AM	**Loads of limited lateral extent, and consolidation with wick drains** George Filz
10:00 – 10:50 AM	**CONSOL 3.0 computer program** Mike Duncan
11:00 – 11:50 AM	**Additional practical aspects of foundation settlements** George Filz
11:50 AM – 1:00 PM	*Buffet lunch provided*
1:00 – 1:50 PM	**Settlements of embankments and landfills** Mike Duncan and George Filz
2:00 – 2:50 PM	**Questions, answers and discussion of practical settlement problems** Mike Duncan and George Filz
3:00 – 3:50 PM	**Questions, answers and discussion of practical settlement problems** Mike Duncan and George Filz
3:50 PM	**Adjourn**

About the Speakers

Dr. J. Michael Duncan, Ph.D., P.E.

Dr. Duncan is a University Distinguished Professor of Civil and Environmental Engineering at Virginia Tech, and Director of the Virginia Tech Center for Geotechnical Practice and Research. For the past 38 years he has taught undergraduate and graduate courses on foundation engineering and other geotechnical engineering subjects, has supervised research and development of computer programs for analysis of settlement and soil-structure interaction, and has served as a consultant on a wide range of projects involving settlement and stability of structures and embankments. He has received awards for teaching excellence from UC Berkeley and Virginia Tech, and awards for his contributions to geotechnical engineering practice from ASCE and the U.S. Army Corps of Engineers. He has been elected to membership in the National Academy of Engineering, and is an Honorary Member of ASCE.

Dr. George M. Filz, Ph.D., P.E.

Dr. Filz is a Professor of Civil and Environmental Engineering at Virginia Tech and co-director of the Center for Geotechnical Practice and Research. He has practiced, taught, and performed research on settlement of structures and embankments since 1981. He has served as a consultant on projects for which settlement has been critical, including the Bogotá, Columbia pipeline problem and several 310-ft-diameter petroleum storage tanks founded on soft deltaic deposits in Clovelly, Louisiana. He has performed research on settlement for the US Army Corps of Engineers, the National Science Foundation, and the Brazilian Research Agency. The research sponsored by Brazil produced a new, composite compressibility model for municipal solid waste.

For More Information

For further technical information about the seminar, contact Charles (C.J.) Smith, Executive Director of CGPR, Virginia Tech, phone (540) 231-5052, or e-mail: CJS@vt.edu.

For all other information, please contact Becky Shelor (540) 231-4849.