GeoAdvanced™

ADVANCED SOFTWARE FOR GEOTECHNICAL ENGINEERING APPLICATIONS

Dr. Peter K. Robertson, one of the pioneers in CPT research, provided helpful advice during the development of GeoSuite©, especially relating to the application of CPT data.

GeoSuite©

GeoSuite© is a comprehensive geotechnical software package designed for geotechnical and civil engineers and engineering geologists to calculate liquefaction potential, seismic settlement, liquefaction-induced lateral spreading, compression or expansion deformation, bearing pressure, subgrade reaction modulus, and static and seismic earth pressures. All calculations are performed in an easy and understandable format and based on field geotechnical investigation data obtained through Standard Penetration test (SPT), cone penetration test (CPT) or shear wave velocity (Vs) measurements, as well as laboratory test results.

GeoSuite© is based on state-of-the-art theory and methods including Robertson et al (1998, 2002, 2004, and 2013), Idriss & Boulanger (2008), Youd et al. (2001), Andrus et al. (2002, 2004), and Yi (2010).

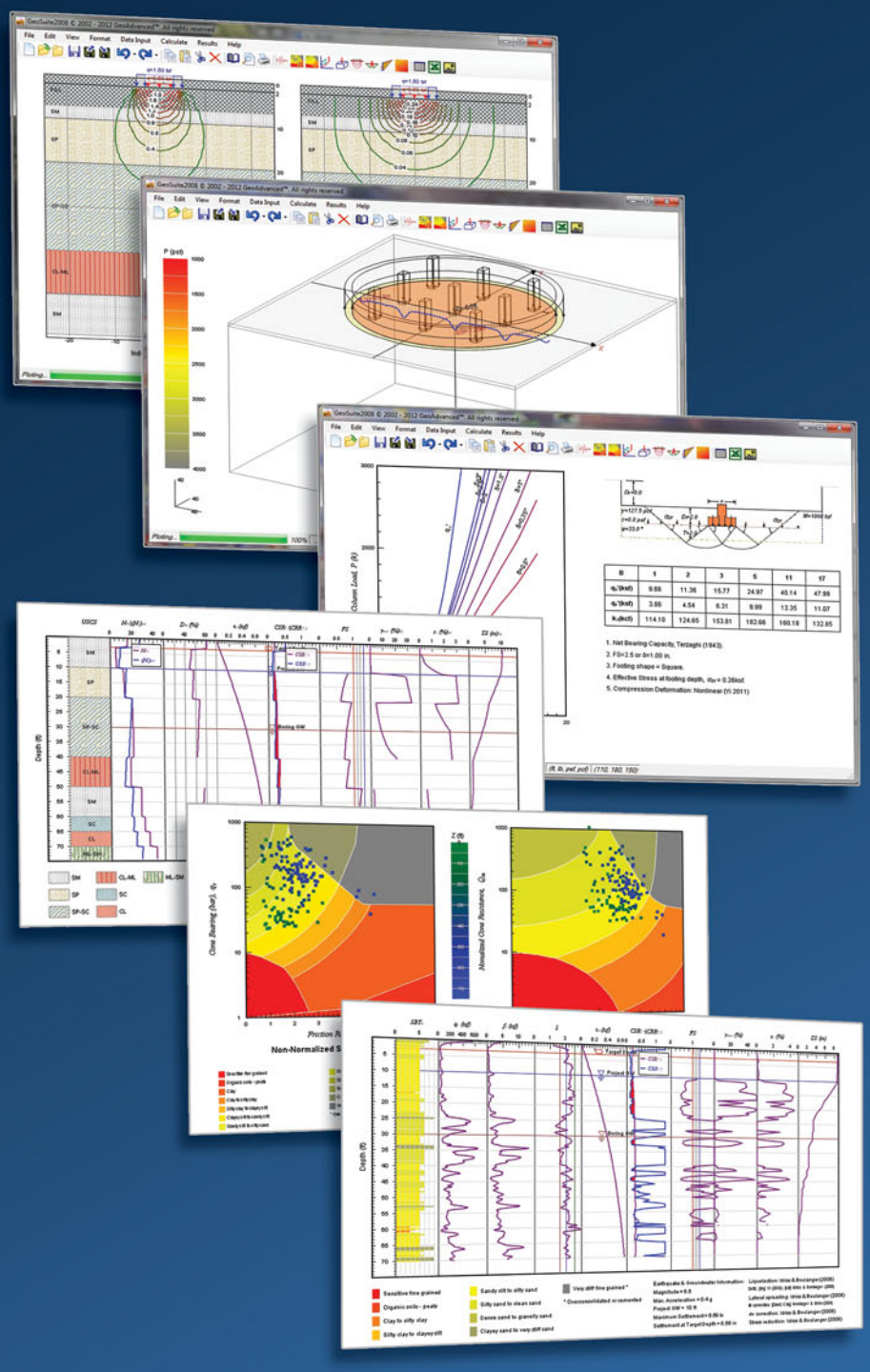
Modules Included in GeoSuite 2008

GeoLiqu© – The only program we know of on the market that analyzes liquefaction potential, seismic settlement (dry and saturated) and lateral spreading based on the soil profile defined by SPT, CPT or Vs data.

GeoComp© – The only program we know of on the market that analyzes multiple footing loads, such as floor loads combined with multiple column loads or tank pressure combined with column loads and ring wall loads.

GeoBP© – A comprehensive program for calculating allowable bearing pressure of footings, considering allowable settlement utilizing the soil profile defined by SPT, CPT or Vs data, as well as laboratory measured parameters.

GeoEP© – A software package for calculating static and seismic earth pressures for surface configurations such as level, ascending and/or descending or stepped surfaces.



LabSuite©

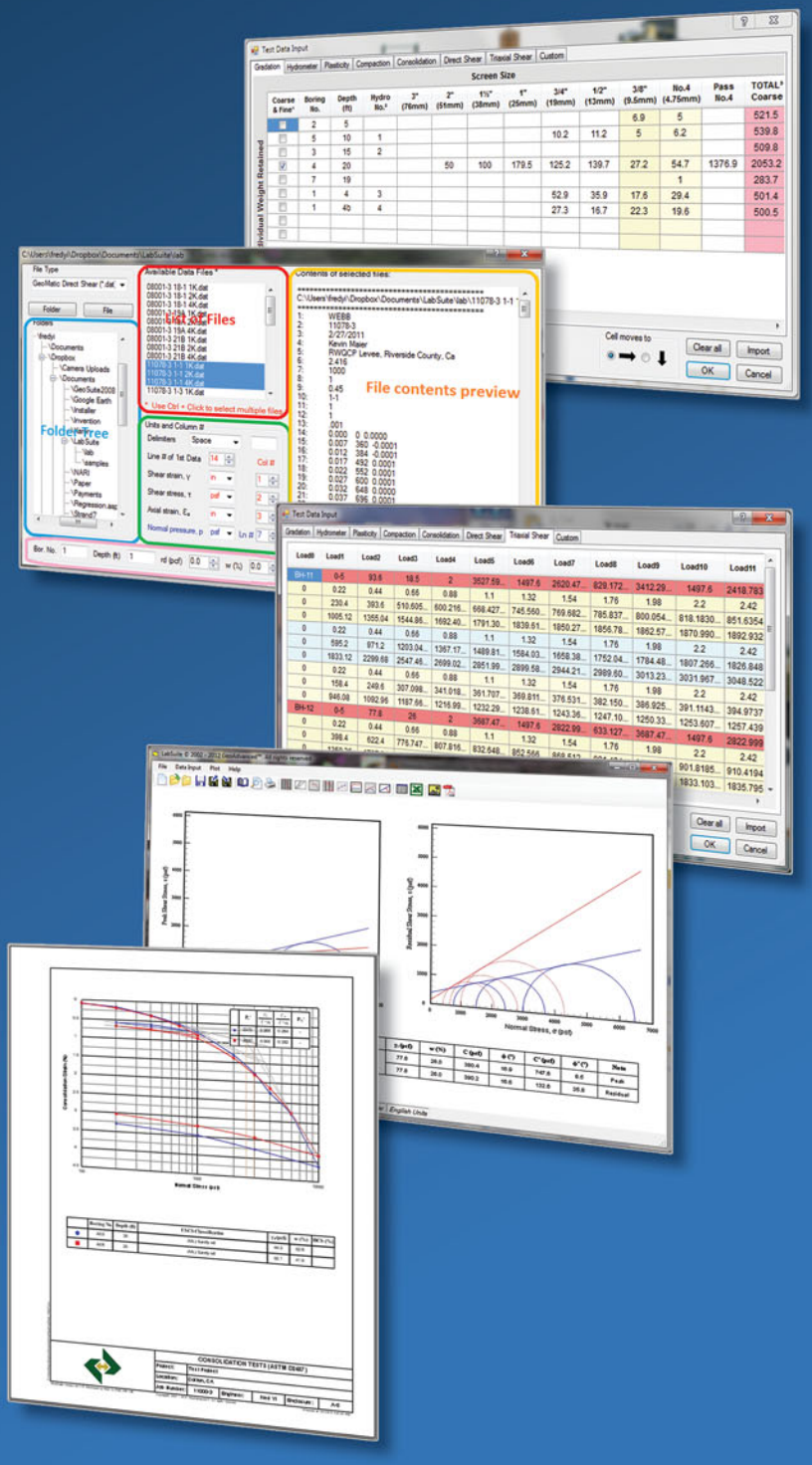
LabSuite© is a comprehensive geotechnical laboratory testing software package that plots geotechnical laboratory testing results of soils in a professional and straightforward manner. The types of soil tests range from gradation testing to triaxial testing. LabSuite© is easy of use and very powerful in automatically generating soil classifications based on Unified Soil Classification System (USCS) and calculating parameters such as compression indexes and shear strength parameters. It also contains various built-in functions such as text data import, "noisy" data smoothing, clipboard copy and paste. The neat and professional outputs can be directly printed on paper or to PDF files and are suitable for inclusions in geotechnical reports. The file name and date and time information included in output allows you to easily trace your work years later.

Geotechnical Tests

- Sieve Analysis
- Hydrometer
- Plasticity index
- Compaction
- Consolidation
- Direct Shear
- Triaxial Shear
- Customized User Input

Program Highlights

- Imports data from text or Excel files
- Automatically generates USCS descriptions from gradation curves
- Automatically generates USCS descriptions based on plasticity chart
- Generates USCS description with cross-references of gradation curve and plasticity chart
- Merges sieve analysis and hydrometer test results into a single plot
- Automatically calculates pre-consolidation pressure, compression index, rebound index, and/or expansion pressure
- Automatically removes data "noise" with unique data smoothing techniques for direct shear and triaxial shear test results
- Uses English or metric units
- Creates tabular summary sheet for test results or custom input data
- Many other functions



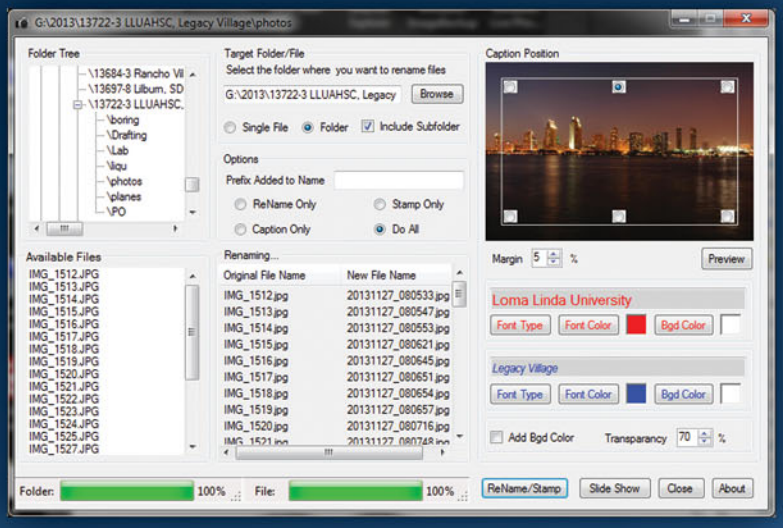
Company Profile

GeoAdvanced™ is a California-based company specializing in the development of professional software packages for geotechnical and civil engineers and engineering geologists, as well as contract consulting services for more complex geotechnical engineering and geotechnical earthquake engineering projects. GeoAdvanced also offers various customized numerical simulations ranging from traditional soil mechanics problems, such as compression deformation and earth pressure problems, to complex finite element simulations involving two- or three-dimensional construction sequence simulation, dynamic response analysis, soil-structure interaction and other unique and specific analysis problems.

GeoAdvanced
is dedicated to providing professional engineering software and numerical simulation services to the geotechnical and civil engineering communities.

GeoAdvanced
also provides contract geotechnical and earthquake engineering services for specific and unique applications.
Our goal is to provide quality and professional services and products to our clients.

PhotoTimeStamper© – Rename and Add Time Stamp and Captions to Your Photos



- Rename image files using "Date Taken" information
- Add time stamp to images
- Add up to two lines of captions
- Apply to all files in folder and subfolders with a single click

Consulting Services

GeoSuite© will prove to be the method of choice for providing solutions for geotechnical engineering tasks that are more or less "routine" in nature. **LabSuite©** allows presentation of test results and exhibits in a manner that conveys professionalism to your clients. In your practice you will come across more complex geotechnical engineering problems that require advanced, customized solutions. They may require modeling a site for numerical simulations (or finite element analysis) or seeking a peer review of the analysis that you have performed. We at GeoAdvanced have the ability and experience to assist you with those solutions.

The GeoAdvanced team is composed of registered civil and geotechnical engineers, as well as certified engineering geologists with combined experience of well over 100 years. When you have a geotechnical engineering problem that requires complex or special analysis, give the GeoAdvanced team an opportunity to work with you.

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