



World Trade Center

GeoStructural Design: Building Services



Geocomp performed instrumentation, monitoring and other geostuctural services at World Trade Center, NY

Geocomp: Helping clients identify, manage, and mitigate building risk

Expertise and experience our clients can count on.

Geocomp provides a unique suite of geotechnical engineering services that assist property owners and project design teams produce innovative and efficient structures, reduce project costs, save time, and minimize potential risks. Our unique Active Risk Management™ approach provides outstanding value to clients from project inception, through the design phase, during construction, and for operation. Through our technical abilities, creative approaches, and wide array of engineering expertise, we strive to exceed our clients' expectations on each of our projects.

CONCEPTUAL AND PLANNING PHASES

In the planning stages of a project our Active Risk Management™ experts perform a quantitative, proactive risk assessment to identify potential risks and quantify their likelihood of occurrence and their potential impacts on schedule and cost of the project.

Our quantitative approach to risk assessment provides information helpful to support informed decisions, assists project teams minimize the probability and consequences of adverse events, and maximize the probability and consequences of positive events throughout the life of a project.

Geocomp's experienced risk assessment and design teams recommend proactive measures that can be implemented during both the design and construction stages to manage potential threats, vulnerabilities, and consequences.

SITE INVESTIGATIONS AND EARLY ASSESSMENTS

During the conceptual/schematic phase, Geocomp's team of creative and technically savvy engineers recommend and perform site-specific investigations to identify critical surface and subsurface conditions that might effect the project foundation design and future construction approach.

From large-scale master planning projects to small-scale single building projects, we have experience in designing and performing efficient and advanced ground investigation techniques in the most cost-effective manner possible.

We seek the optimal balance between reducing uncertainty in subsurface conditions and controlling the cost of front-end investigations.

SUBSURFACE CHARACTERIZATION MATERIALS TESTING

Our ASTM certified laboratory and materials testing experts use state-of-the-art automated testing equipment to test soils, rock and geosynthetic materials, and develop design parameters for projects. Our high-quality testing increases the probability of a successful construction project by carefully testing geo-materials collected during our site investigations.

We are experts in soil, rock and geosynthetic behavior. We integrate our knowledge of material engineering properties with our ability to measure critical material parameters in our world class testing laboratory.

Our laboratory's reputation for quality and accuracy is supreme, our services provide high value, and we offer them at a competitive price through the use of one of the most advanced and efficient laboratories in the world.



Instrumentation monitoring of the Harvard Allston Science Complex, Allston, MA



Monitoring buildings for Second Avenue Subway Project in New York City, NY



Bedrock testing in Geocomp's material testing laboratory

Our Capabilities

EXISTING CONDITIONS ASSESSMENTS

Prior to the onset of construction activities, Geocomp's team of specialists inspect adjacent properties to document the existing condition of nearby structures.

Whether you're a developer, property owner, or member of the design team, knowledge and documentation of the condition of adjacent properties before commencement of construction can provide information critical to the sequencing of construction activities and to limiting project risk.

Geocomp tailors the extent of each construction survey to the level of information needed by each of our clients and the potential risks to these neighbors from the planned work.

DESIGN

Our approach to design is custom-tailored to our clients' needs and the complexity of each project. As a technology-based company, our broad experience and expertise in multiple engineering disciplines provides a unique perspective and ability to deliver innovative and cost-effective solutions for an extensive array of building projects. From advanced state-of-the-practice finite element analyses to industry-standard design methods, Geocomp has the design tools and experience to maximize the efficiency of each of our designs while keeping project risks to a minimum. A sample of our extensive building design services are listed below:

- *Reuse of Existing Subsurface Elements*
- *Building Foundations*
- *Deep Basements*
- *Temporary and Permanent Retaining Structures*
- *Excavation Support Systems*
- *Analysis of Impacts on Adjacent Structures*

ACTIVE RISK MANAGEMENT™

Based on available information and input from the project team, Geocomp develops a risk management framework for the life cycle of each project.

Our team of risk management specialists and experienced engineers provides our clients with proactive risk mitigation strategies for all aspects of the project to substantially decrease the likelihood of adverse impacts on project costs and schedule.

We recommend actions for continuously monitored risk factors and provide the necessary information to proactively minimize the consequence of risks as they arise.

CONSTRUCTION MONITORING AND IMPACTS ON ADJACENT STRUCTURES

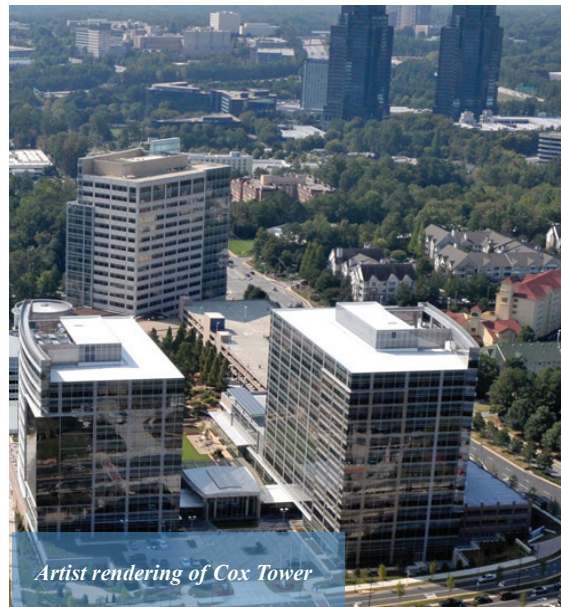
As world leaders in construction monitoring, Geocomp uses real-time data to actively monitor risk throughout the life of each project. We design, install, and manage comprehensive, cost-efficient, web-based performance monitoring programs for diverse projects from small to large.

Using our comprehensive data collection, management, and visualization platform, *iSiteCentral™*, Geocomp helps our clients avoid costly delays and impacts on adjacent structures through implementation of real-time alarm programs that warn of unexpected performance. Using cutting edge technology, we measure ground and facility performance before, during, and after construction.

We integrate monitoring data with the project performance predicted during the design phase in order to actively manage risks as they emerge. Geocomp provides the data necessary for the design team to make informed decisions on proactive measures that can be taken to reduce the likelihood of negative project impacts from emerging risks.



Geocomp designed the support of excavation system for construction of the 19-story Cox Tower in Atlanta, GA



Artist rendering of Cox Tower



Our project portfolio comprises the subsurface aspects of virtually every kind of constructed facility, including:

AIRPORTS
 BROWNFIELD DEVELOPMENTS
 BUILDING FOUNDATIONS
 CANALS AND LAGOONS
 DAMS AND LEVEES
 DEEP EXCAVATIONS
 ENERGY FACILITIES
 HIGHWAYS AND BRIDGES
 MARINE STRUCTURES
 MASS-TRANSIT FACILITIES
 MINES
 RAILWAYS
 REINFORCED SOIL STRUCTURES
 RETAINING STRUCTURES
 SITE DEVELOPMENTS
 TANK FOUNDATIONS
 TUNNELS AND SHAFTS
 UNDERGROUND CHAMBERS
 UTILITIES
 WASTE-CONTAINMENT FACILITIES
 WATER AND WASTEWATER FACILITIES

About Geocomp Corporation

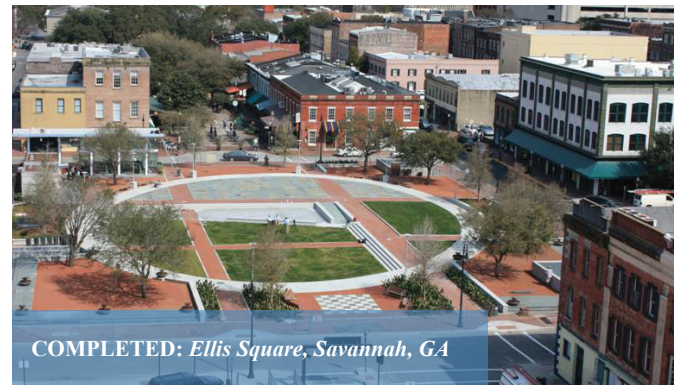
Geocomp Consulting, the underground experts, provides comprehensive geotechnical services and Active Risk Management™ to clients across the United States and around the globe. We focus on (1) helping clients identify and manage risks and (2) minimizing impacts of geotechnical activities on a project's critical path. We are also a leading provider of real-time web-based instrumentation and monitoring services for the construction and operation of infrastructure. Our *iSiteCentral*™ system provides real-time data and related information to support informed decision making.

GeoTesting Express, Inc. (GTX), our in-house laboratory, performs a complete range of mechanical and physical properties tests on soil, rock, geosynthetics, and other geo-materials. We focus on providing high quality testing services with fast turnaround.

Geocomp Products manufactures, sells, and supports automated soil-testing systems used at government, industrial, and university research labs. We also manufacture remote-monitoring systems that provide web-based access to geotechnical instruments used for real-time monitoring of ground performance at construction sites worldwide. We focus on providing products that help our clients complete work faster with high reliability.



DESIGN: Support of excavation design, Ellis Square, Savannah, GA



COMPLETED: Ellis Square, Savannah, GA