



C.T. SOIL & MATERIALS TESTING INC.

A MEMBER OF INFRASTRUCTURE ENGINEERING GROUP INC.

Mission Statement:

A Group of Companies Dedicated to Providing Complete Services in Geotechnical Engineering, Geo-Environmental Evaluations, Construction Inspections, and Building Diagnostics

C.T. Soil & Materials Testing Inc., is affiliated with a sister company called Soil & Materials Engineering Inc., Consulting Engineers, an engineering company able to fulfill multiple needs of various sectors of the development and construction industries. The C.T. Soil Group of Companies will provide three key functions: geotechnical engineering and geo-environmental evaluations; project construction inspection with building component testing; and building envelope diagnostics.

The geotechnical engineering and **geo-environmental** evaluation component of the C.T. Soil Group of Companies will offer physical site exploration to evaluate the engineering constructability of the site and/or potential environmental risks the site may afford prospective land owners. Once the environmental risks are known, the developer can assess a development strategy. The **geotechnical** evaluation of the site will determine items such as soil or rock strength and compressibility, groundwater contentions, and potential construction difficulties associated with site specific subsurface conditions. C.T. Soil & Materials Testing Inc. owns a **drill rig and sampling equipment** enabling us to provide timely service. The data gathered by field and laboratory test programmes are presented in an engineering report produced by Soil & Materials Engineering Inc. to be used by the owner to assess potential cost of development, the architect to optimize site and building planning, and the structural engineer to allow the design of structural foundations, pavements, sewers and other site appurtenances. The geotechnical section of the C.T. Soil Group of Companies will also engage in diverse engineering projects such as **mining potential** and **hydrogeologic impact studies**.

During the development of a project, which includes new construction as well as renovations, our sister organization C.T. Soil & Materials Testing Inc. will provide **site inspection and testing services** during the various stages of construction. Some items of inspection include soil bearing surface inspections prior to placement of foundation concrete, foundation piling inspection, reinforcement steel placement inspection, sampling and testing of plastic concrete, laboratory testing of hardened concrete, field compaction testing of construction fills, laboratory testing of proposed construction fills for project suitability, Portland cement concrete and asphalt concrete mix designs, inspection and placement of asphalt concrete, erection inspection of structural steel and metal deck, vapour barrier and building envelope installation inspection, and roofing materials application inspections. The inspection and testing programme is completed in one of two perspectives: construction testing data presentation to the structural engineers and architects for their assessment and causative action; or independent construction testing and inspection quality assurance where the inspection agency, C.T. Soil & Materials Testing Inc., amasses the inspection and testing data, monitor the results of the testing, and formulates decisions regarding the nature of construction quality prior to final building commissioning.

The third aspect of the C.T. Soil Group of Companies involves **diagnostics of existing structures** and structural components. The recent trend in proper building management facilitates the concept of reviewing the expected performance of the structure in order to develop a short term and long term maintenance or replacement budget of planned costs. Condition surveys will involve roof membranes, as well as concrete condition surveys for parking garages, bridge decks, roadways, and driveways.

The concept of a **full cycle engineering inspection and evaluation** within an affiliated group of companies spanning from the soil-foundation interaction through subsequent building construction and ultimately the structure rehabilitation, is a service convenience to developers, owners, architects and engineers.

CONSTRUCTION MATERIALS INSPECTION & TESTING

2000 Legacy Park Drive • Windsor, Ontario • N8W 5S6

Phone 519-966-8863 • Fax 519-966-8870 • email: ctsoil@ctsoil.com • www.ctsoil.com