



Office/Warehouse Project Profile

G2 Consulting Group, LLC (G2) performed a Phase I Environmental Site Assessment (ESA), Geotechnical Investigation and Quality Control Services for a proposed light industrial and commercial business in the City of Troy, Michigan. Various businesses and land uses were evaluated during the performance of the Phase I ESA including light industrial businesses, light assembly operations, offices, retail stores, warehouses, vacant land, and a residential dwelling.



G2 performed this **Phase I ESA** study in general accordance with the scope and limitations of American Society of Testing and Materials (ASTM) Standard Practice E 1527-97, entitled: "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process".

The **Geotechnical Investigation Report** included drilling five soil borings for two proposed adjacent buildings. The report presented the results of our observations and analysis and our recommendations regarding subgrade preparation, foundation types suitable for the soil conditions encountered, allowable bearing capacity of different soil layers, estimated settlement, pavement design and construction, and construction considerations relative to foundation construction and other aspects of construction.

During construction operations, G2 Consulting Group, LLC performed construction **Quality Control Observations**. Services provided included:

- Our field representative observed subgrade preparation including installation and compaction

of engineered fill, subbase, and aggregate base materials, as appropriate.

- Our field technician sampled and evaluated fill soils, and determined the moisture content and in-place dry density of engineered fill materials.
- In order to expedite testing operations and to minimize delays to the contractor, our field representative used a nuclear moisture-density gauge to observe compliance of fill materials with compaction specifications.
- G2 performed appropriate field-testing and observations to document building foundations had been placed on the recommended bearing soils at the design bearing elevation. Also, the design dimensions of the foundations were verified and the bearing surface observed to confirm the foundation excavation had been properly cleaned and prepared prior to placement of cast-in-place concrete.
- We observed placement of reinforcing steel, concrete placement operations, performed appropriate field testing (temperature, slump, air content, unit weight, and yield), molded compressive strength test cylinders, and observed concrete finishing and curing operations.



- Laboratory Testing consisted principally of testing concrete cylinders for compressive strength.