



Layout Inc.

BUILDING BLOCKS

Introducing Laser Scanning at Layout

Services Provided:

- Professional Land Surveying
- Construction Surveying Specialists
- GPS Consultants
- Subsurface Utility Markouts
- Laser Scanning

Layout continues to provide high quality construction surveying utilizing the most advanced survey equipment. Recently, the benefits of laser scanning services have become obvious to the construction industry.

Laser scanning, also referred to as high definition surveying, delivers an accurate 3D representation of a job site from pre-construction surveys to as-built locations of constructed improvements.

Laser scanning is a great tool for limited access areas, monitoring building movement, and structural steel improvements. *Greater detail in less time with no need to revisit the site equals dollars saved on a construction project.*

Read about Layout's most recent laser scanning project in support of the NYC DDC's design/build ramp rehabilitation at the St. George Ferry Terminal on Staten Island, NY, page two.



Complex Projects Handled with Laser Scanning

Inside this issue:

- St. George's Ferry Terminal **2**
- Turnpike Dump #5 Remediation **2**
- GSP Widening MP 75-80.8 **2**
- Annadale Road Bridge **3**
- Phase II Astoria Energy **3**
- Rt. 120 Paterson Plank Rd. **3**

Subsurface Utility Markouts at Layout

Layout continues to expand its project experience in providing subsurface utility markouts using ground penetrating radar and electro magnetic location technology services throughout the tri-state area.

The general focus of an investigation is to identify the possible existence and location of buried underground utilities, storage tanks, piles, and any other subsurface anomalies that may exist within various construction projects. Detailed

maps and drawings are provided to the client.

Layout is currently providing such services at the Consolidated Edison site in Astoria, NY.



Ramp rehabilitation project at St. George Ferry Terminal

St. George's Ferry Terminal-Staten Island

Layout contracted to provide surveying services to support the NYCDOT's design/build ramp rehabilitation/reconstruction project at the 32 acre St. George Ferry Terminal in Staten Island. This project requires the contractor and design firm to accurately map existing

conditions so that the elevated decks can be replaced in a safe, economic manner. Designing the new deck while keeping the existing structural framework presents many surveying challenges that can be solved by using our laser scanning technology.

Laser scanning the structural components allows us to map and 3-dimensionally model the structure with minimal field time and maximum data collection. Layout is also providing aerial photogrammetric mapping, boundary, topo, and utility surveys.

Turnpike Dump #5 Site Remediation

Layout successfully bid the contract to provide surveying services in support of the site remediation project of city owned property and associated improvements in the Grand Jersey Redevelopment

Area located in Jersey City, NJ. Services included topographical survey, construction layout for grid areas and as-built documentation for excavation areas.

As-built survey plans were required on a monthly basis as the remediation progressed.

*Proud member of
Local Operating
Engineers 825 and
15D*



GSP Widening Includes Four Separate Bridges

Garden State Parkway Widening MP 75-80.8

Layout was recently awarded the construction survey contract for the NJTA's widening project on the Garden State Parkway from milepost 75 through 80.8.

Services will include recovering and establishing all site control, layout of baseline, pavement, drainage structures, fences, median barrier, and curbing.

Four bridges on this project will also be reconstructed requiring layout of piles, footings, abutments, bearing seats, decks, and approach slabs.

Annadale Road Bridge, Staten Island

Layout was pleased to be awarded the contract to provide the surveying services in support of the NYCDOT's project to reconstruct the Annadale Road Bridge over Staten Island Rapid Transit.

Services include: recovering and establishing control, layout of demolition lines for the existing structure, new footings, abutments, bearing pedestals, deck, and approach slabs.

Layout will also monitor the SIRT rails to detect any possible movement during the construction process.



Staten Island Rapid Transit—Annadale

Phase II Astoria Energy Expansion, Queens

Layout has been issued a contract to provide construction survey services for the Phase II Astoria Energy Expansion Project. This project consists of the construction of a new 1240

MW gas-fired electric generating facility. Services include setting up all primary and secondary control, tie-in to Phase I, layout of piles, foundation, structural slabs, gas, electric, and mechanical components.

Markouts for subsurface utilities using GPR and M-Scoping are also being provided throughout the site.

Layout's staff of 20 field crews and seven PM's allows quick response for tight schedules.

Route 120 Paterson Plank Rd, Bergen Co.

Layout was awarded the contract to provide the construction surveying services in support of the NJDOT project to rehabilitate Route 120, Paterson Plank

Road in Bergen County, NJ. The project includes the widening of the Route 17 bridge and a railroad bridge. Services included: establishing control, placing of ROW

monuments, baseline markouts, railroad monitoring; and location of surface utility and other roadway, pavement and drainage structures.



Rt. 120 Connector

Hi-Tech Equipment Inventory: A Priority At Layout

Layout, Inc. prides itself on its tradition of using *state-of-the-art equipment* to obtain the most precise level of results for its clients.

Our equipment inventory includes ever-increasing numbers of robotic total stations enabling the field personnel to work accurately and efficiently with one or two person crews.

Layout's recent enrollment in the new Leica "Live" network is allowing us to operate our GPS units "base free". This means more reliability combined with higher accuracies enabling GPS to be

used on more projects than ever before. Layout's ability to instantly transfer field data to and from the office via the internet while the crew continues working results in increased productivity, "zero" downtime and fast turn-around of time sensitive data.

Layout's most recent equipment additions include the Leica ZNL Optical Plummet. This instrument allows surveyors to maintain horizontal accuracy in vertical planes for high-rise buildings, vertical shaft surveys, smoke stacks, and deformation surveys.

Other recent additions to Layout's equipment line include the UtilityScan 5103 and Pipehorn 800 which are the most accurate subsurface utility mapping systems available for non-destructive location of all subsurface utilities.

PLS, Mike Lamplugh, Sr. to join Layout in our soon-to-be-opened South Jersey office.



One Entin Road, Unit 8
Clifton, NJ 07014

Corporate Headquarters:
Newfoundland, NJ 07435

Phone: 973-249-0900
Fax: 973-249-0988
Email: bdecker@layoutinc.net

www.layoutinc.net