

Fall, 2009



**GEOD Offers You:**

- **Photogrammetric Mapping**
- **Land & Engineering Surveying**
- **Construction Surveys**
- **GIS Base Mapping**
- **Subsurface Utility Mapping**

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**GEOD** CORPORATION

AERIAL PHOTOGRAMMETRY • LAND SURVEYING

# INNOVATOR

## School Days.....!



Although sooner or later all of us ultimately graduates from school, the seasonal cycle remains the same. Labor Day remains the signal for the end of summer, beginning of school sessions and the coming of fall. And if you are one of GEOD's talented and experienced Project Managers, this begins a "gearing up" for the fall flying season.

Fall remains one of the absolute best times for clear aerial photography. Optimal photographic coverage, requires the project be flown after the leaves have fallen and before the snow arrives. While it's hard to anticipate the coming of the snow season anymore (didn't it start in October last year?), a glance at the Farmer's Almanac (which ruined this writer's nice summer day) predicts progressively colder, snowier winters in the northeast in years to come.

Generally, however, the flying season begins around early November for the New England states and late November for the Mid-Atlantic States. For areas south of Albany, NY and in New Jersey, the time for aerials begins in late November.

So, now is the time to schedule your project by calling GEOD at 973-697-2122. Please ask about special rates on existing Hudson Valley, NY stock photography.

Remember, the photography is the small cost of the mapping project. Once the site is flown, the film can easily be stored until the mapping phase is authorized.

## Subsurface Utility Mapping Projects Continue to Rise at GEOD

GEOD regularly uses a combination of state-of-the-art Ground Penetrating Radar and Electro-Magnetic Pipe, Cable & Box Locator Equipment to provide its clients with the most accurate subsurface utility locating and subsequent mapping services available.

Most recent project sites include areas in:

Washington Twsp., NJ,

Montgomery Twsp., NJ,

Jersey City, NJ, and

South Brunswick Twsp., Middlesex Co., NJ

GEOD identifies the existence and location of buried underground utilities, underground storage tanks, trolley tracks, and other subsurface anomalies that may exist within various design and construction projects.

Detailed maps and drawings are then provided to the client.



## From the Field: Ongoing Projects & Contract Awards

### NJ Turnpike Interchange 10, Edison, NJ

GEOD has contracted to provide design survey and aerial mapping to support the New Jersey Turnpike Authority's design project for improvements at Interchange 10 in Edison Township, Middlesex County, NJ. GEOD will establish primary and photo control and provide topo-

graphic mapping with road profiles. Supplemental surveys will include detailed surveys of bridges and

streams, preliminary and final ROW plans and, in areas of new design and within the existing ROW, GEOD will locate utility markouts and surface utilities. Once the design is completed the general and individual property parcel maps will be prepared in accordance with NJTA design standards and procedures.



Under GEOD's On Call contract with the NYCDDC, we were asked to provide topographic and utility maps as well as profile drawings for the Storm Sewer Project at 20<sup>th</sup> Avenue in Queens. The survey will include contour lines at one foot intervals, the location of the top and bottom of the bank, water levels and spot elevations on the ground surface. The project sites are comprised of 22 separate street locations for a total of approximately 30,640 linear feet.

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### NYC Transit On-Call

GEOD's On Call Term Contract with NYC Transit has resulted in a number of diverse and interesting projects over the years. Most recent assignments

have included: Setting of control monuments at the Coney Island Yard in Brooklyn, a property line and existing conditions survey in Bronx, setting of monuments at Vent Shaft#4 in Queens, and a property line and existing stairway survey at Carroll Street Station in Brooklyn. *GEOD regularly provides NYC Transit with horizontal and vertical control surveys, boundary line surveys, topographic surveys, property acquisition maps, monumentation, right-of-way mapping, cadastral surveys, construction stakeout, engineering design surveys, global positioning system surveys (GPS) and laser scanning surveys.*



### Easterly Hackensack River Bridge Reconstruction

GEOD contracted to provide aerial photography, primary control, photo control and digital mapping for 11,500 feet along the NJ Turnpike Bridge over the Hackensack River in Hudson County, NJ for the NJTA bridge reconstruction project. A corridor of 200' wide centered on the existing bridge centerline will be mapped and supplemental surveys to obtain bridge deck joints and other features not visible in the photography will be undertaken. All field and photogrammetric data will be added to MicroStation Version 8 using the NJTA CADD standards.



# From the Field: Ongoing Projects & Contract Awards

## Route 27 at Wood Avenue, Woodbridge, NJ

GEOD contracted to provide the field surveying and right-of-way documents in support of the NJDOT's project involving the widening of the Route 27/ Wood Avenue, Woodbridge. Services included obtaining new photography, establishing primary and photo control and digital topographic mapping. All mapping is being compiled in compliance with NJDOT standards and specifications to meet or exceed National Map Accuracy Standards. Records research was undertaken and tied to property monuments, baseline and highway right-of-way monuments. Information was complete and fully compatible with NJDOT's requirements for preparing general property parcel maps (GPPM) and individual parcel maps (IPPM) in compliance with the Map Filing Act and NJDOT's Procedures Manual Section 9.1

## Brookfield Landfill, Staten Island, NY

GEOD contracted to provide new aerial photography and photogrammetric mapping of the approximate 178 acre Brookfield Landfill site in Staten Island, NY, as part of the ongoing environmental remediation effort. Services included establishing control by setting 12 preflight targets and providing detailed mapping and supplemental surveys.



## ARC Tunnel Project

GEOD was requested by the NY/NJ Port Authority to review and deliver the survey parcel maps for the properties being acquired for the ACR Tunnel Project. We are currently providing the areas of the parcel taking maps and verifying the bearings and dimensions for the Con Edison, NY City and NY State impacted properties.

## Laser Scanning at the TWA Building at JFK Airport

GEOD contracted to provide floor and vertical surface photography for the TWA building tile restoration



project being undertaken by the Port Authority of NY/NJ at JFK Airport. After control targets were set throughout the project area, GEOD used laser scanning technology to obtain a point cloud of the entire project site. The client was later provided with a detailed mapping of the area to be restored.

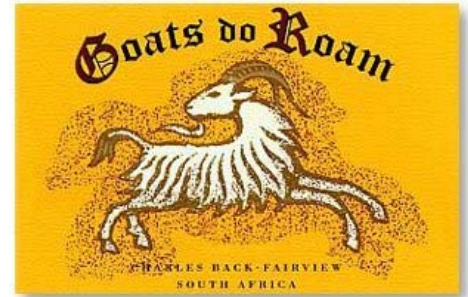
## Great Notch Reservoir Dam, Little Falls, NJ

GEOD was asked to provide the field surveying services necessary for the movement monitoring of the historic Great Notch Reservoir Dam in Passaic County, NJ. GEOD established coordinates and elevations on reference points and monuments at the dam so that any future movement would be easily identifiable.



## GEOD's Puzzle: Wine-Goats -and Math...

While shopping in my local winery, I've often been intrigued by some of the names I see on bottle labels. It's almost like the vineyard is trying to shock you into choosing their particular fermentation. Some of the stranger brands that I've noticed are **Cardinal Zin** (a Zinfandel that hails from California), **Scraping the Barrel** (a Spanish Tempranillo), **Fat Bastard Wines** (which come from grapes grown in the Languedoc region of Southern France) and my personal favorite, **Goats do Roam** (which are a selection of South African wines). I favor this brand, not because I enjoy the wine, but because it reminded me of this math puzzle:



A farmer tethers his goat to a corner of a 3 sided out building, which has corners **A**, **B** and **C**. The length of **AB** is 30ft while **BC** is 40ft. The interior angle at **B** is  $90^\circ$ . In order to limit the area that the goat can graze, the farmer uses sticks and ropes of various lengths to tether the goat to the different corners. That way, the goat won't eat all of his grass at once.

On this particular day, the stick is attached to and pivots about corner **B** and is 30ft long. The goat is attached to the other end of the stick by a piece of rope that is 10ft long. For the purposes of this exercise assume that the goat's chinny chin chin is exactly at the end of the rope, meaning that his mouth can be no further than 10ft from the end of the stick. **What is the area that the goat can graze on this day?**

Answers should be submitted to: [marketing@geodcorp.com](mailto:marketing@geodcorp.com) not later than November 20, 2009. The winner will be chosen from a random drawing of all correct answers and notified by email on November 23, 2009 when the solution will also be posted on GEOD's website.

The lucky winner will receive a \$200.00 Best Buy Gift Certificate. **HAVE FUN!**

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**GEOD: PROVIDING LAND SURVEYING & AERIAL MAPPING SERVICES SINCE 1961**

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