



SAS GEOSPATIAL

CAPABILITIES BRIEF

CAGE: 7JC81 | UEI: JQ1ZEEVMBMW6

Land / Construction / Geospatial Surveying | Drone Imagery | 3D Laser Scanning | Subsurface Utility Locating

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Company Overview

Leadership & Focus

- 20 years of Experience in Land / Geospatial / Construction Surveying
- Focused on Enhancing Project Safety and Minimizing Cost Delays & Changes.
- Serves as the Past President of the Pennsylvania Society of Land Surveyors (PSLS) Board of Directors and on the PLS Foundation Chair

Partnerships, Certifications, & Team Members

- PA Land Surveyor | Rail Safety Trained | PSEG Substation | DE Land Surveyor | NJ Land Surveyor | ENV Sustainability | SIT | DJI Mavic 4 | FAA Part 107
- PennDOT | PSEG | Delaware DOT | PECO | Pennoni



Core Competencies

Land Surveying Services

- *Boundary / ALTA / NSPS / Geodetic / Topographic*
- *Boundary Line Adjustment*
- *Land Development / Property Line*

Construction Surveying

- *Construction Staking*
- *As Built / Foundation Survey*
- *Vertical Control / Grade Checking*
- *Drone / Aerial Construction Survey*

Geospatial Services

- *3D Laser Scanning*
- *UAV / LiDAR Surveys*
- *Reality Capture / Drone Mapping*
- *Subsurface Utility Mapping / GPR*

Company Experience

Trusted Relationships



Proven Performance

- Boundary Surveying on NYC Federal Courthouses
- Amtrak Train Stop - Laser Scanning, Drone Surveying, Underground Utility
- Pre-Design Mapping of Utility Locations (multiple site contract)
- Roadway Surveying for Traffic Calming and Roadway Widening
- ALTA / NSPS Surveying for Acquisition of Pennhurst Hospital Campus
- Land Mapping in support of Newark Federal Campus Expansion
- Topographic / Location Surveying to support Facilities Upgrades of NBA Arena

Case Study | 3D Laser Scanning

Situation

Our client needed an accurate means representing changes to bridge deck during resurfacing and rehabilitation. Traditional means of measurement were insufficient for a project of this size, time restraints, and the need to maintain flow of traffic.

Approach

SAS installed a system of targets which allowed for a consistent acquisition of data over the course of the project. Laser scanning was employed to map the surface of the bridge deck through the three stages of rehabilitation and provided comparative data set to the original bridge surface.

Outcome / Value Delivered

We were able to advance the project forward by providing volumetric and surface profile data of each section. Our timely data submission allowed the construction process to be completed while maintaining bridge operations.

Solutions

- CAD Drafting
- 3D Analysis
- TIN Surfaces
- 3D Scanning

Case Study | Redevelopment

Situation

Our client wanted to reclaim areas of a mall and provide residential and multi-use developments to the site as a one-of-a-kind planning project. Portions of the existing mall structure needed substantial demolition and site reconfiguration to make way for apartment buildings, parking garage, and additional retail space.

Approach

We started by mapping the underground utilities in the subject area and then provided survey mapping and subdivision services to create the required parcels. We also provided an ALTA/NSPS land title survey of the 120 acre mall. Upon completion of the land acquisition phase, we assisted in construction stakeout services of the site.

Outcome / Value Delivered

SAS provided records critical to the site reconfiguration, land reconstruction, traffic flow, and landscaping. We also provided client with on-call site stakeout services, allowing client to make quick changes in the field without affecting construction schedules.

Solutions

- ALTA/NSPS Survey
- Utility Mapping
- Subdivision
- Stakeout Services

Case Study | Concrete GPR Scanning

Situation

Client was building a new elementary school within the Dover Air Force Base and required concrete ground penetrating radar (GPR) services in order to verify column and wall reinforcements to ensure compliance with the requirements.

Approach

In addition to providing GPR services, SAS developed an on-site indexing system allowing for the accurate location and documentation of each concrete scan.

Outcome / Value Delivered

SAS provided the client with detailed descriptions and documentation of the placement of wall and column reinforcements. This information was critical in proving that all reinforcements had been placed and met required building standards necessary for the approval of the project.

Solutions

- GPR Scanning
- Concrete Scanning
- Documentation
- Analysis

Case Study | Residential Development

Situation

In the 1,200-acre decommissioned military facility that has been under major redevelopment during the last two decades, the client requested the first of its kind residential housing development to complement the commercial and life sciences campus.

Approach

We performed an ALTA/NSPS survey for the client to satisfy the acquisition requirements and needed to provide subdivision services to create the parcel required for the design and development of the residential structure.

Outcome / Value Delivered

Our services allowed the client to acquire the land and get all necessary agency approvals for development work to proceed. We also assisted in navigating through deed restrictions as well as led in the creation of easements and other land use processes.

Solutions

- ALTA/NSPS Survey
- Subdivision
- Documentation
- Coordination



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