



Environmental Mapping, Surveying, and Studies Indefinite Quantity Services Andrews Air Force Base, MD

ATCS provided survey services including environmental mapping and field surveying of various on-base sites as part of a task order contract. Survey services included site boundary and topographic surveying and creation of base sheets for design of the new VIP entrance and related improvements at the proposed NCRRAF site, consisting of approximately 40 acres. Location work included existing roads, buildings, monitoring devices, and utilities. Final deliverables for this project were base sheets for use with engineering design of new facilities in AutoCAD format, as well as the associated surface provided as a TIN.

ATCS also performed topographic surveys, tree identification and locations, environmental monitoring structure location and utility as-builts at various sites throughout the base. Deliverables provided included AutoCAD drawings, hardcopy drawings, tree size and type tables, and coordinate listings in Excel.

All survey work was performed utilizing Leica TPS 1200 RTK GPS and Robotic Total Stations. Our GPS equipment is connected to the Loyola Network (N.G.S. CORS - quality data), which gives us consistent results throughout the base. By operating off of a network, we are able to maintain low costs to our client and respond to requests quickly and efficiently, as extensive control surveys are not required. A major advantage of an RTK-net is a common high accuracy reference frame by which all features across a large area can be collected using the same datum.

Survey Scope of work included the following:

- Coordinated with client for access to restricted runways and secured areas to perform survey work, occasionally with little notice (less than one business day).
- Set GPS and traditional control for use with field shot topography, as well as as-built of all existing storm drainage and sanitary sewer structures. All information was provided to the client on Maryland State Plane coordinates and vertical datum NGVD 1988 per Andrews Air Force Base requirements.
- Provided engineering base sheets (AutoCAD format) and DTM surface for use with design of all new facilities. Base sheets were produced using AutoCAD LDD and delivered to the client in digital and hard copy formats.
- Located various environmental monitoring devices throughout the base, and provided drawings, as well as spreadsheets with coordinates and elevations.
- Provided tree identification and location surveys, and delivered drawings to client showing location and drip lines, as well as tree tables, with species and size.