

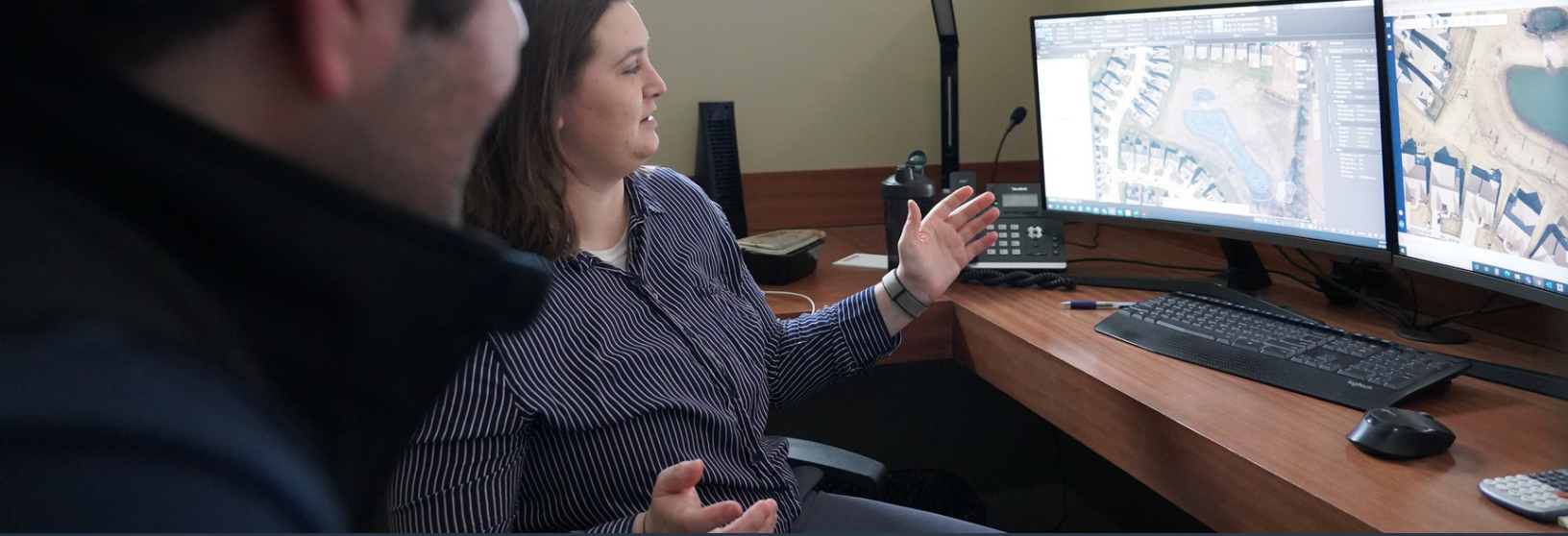


WILSON&ASSOCIATES, P.C.

Company Overview

An integrated all inclusive
Engineering & Surveying
company.





Wilson & Associates Engineering and Surveying

Over the last few years, the field of Land Surveying Industry has advanced faster than most other fields. There is still need for the surveying we all know of, collecting data with a pole, the industry is changing and has provided builders options never before imagined.

Our newest technology is more accurate, insightful, and processes much faster. This has allowed surveyors to better provide higher quality data faster, saving both time and money.

Smarter data produces smarter decision making, meaning that whatever the challenges you are facing, transforming data into actionable information is the answer. Wilson & Associates is structured to solve complex problems and maximize the application of smarter data.

Our clients deserve a partner that provides cutting edge technology now and in the future. Allow us to invest into the next generation of data collection so you can focus on growing your business.

Today we provide services ranging from:



Construction Staking



Animation



Constructability Review



Data Modeling



**Aerial & Terrestrial LiDAR
Mapping**



Hydrographic Surveying



Geodetic Surveying



Dimensional Analysis



Utility Coordination



**Boundary, ALTA, &
Topographic Surveying**



Subdivision Platting

LiDAR Technologies

Utilizing LiDAR (Light Detection and Ranging), Wilson & Associates can collect millions of 3D data points in real time to collect high-quality, accurate models of each project.

With this industry leading technology, we have many ways to collect any terrain your project may call for. This can be Aerial LiDAR to map large areas of land. Our mobile LiDAR units collect data at highway speeds. With Hydrographic units allow us to capture rivers, lakes, streams and harbors. Static LiDAR collection gives objects precise geospatial location to create design-quality surveys and densified point cloud data.

All of this allows for better, faster and much more efficient information.







Staking

Construction staking is the process of analyzing and interpreting architectural and civil engineering plans and calculating appropriate offset survey points and elevations. It also involves placing stakes in the field that mark the location and elevation of proposed grades, detention ponds, utility structures, curb and gutter, buildings or any other improvements as shown on the approved engineering design drawing or architectural plans. These stakes are set for each stage of construction, from rough grading to project completion.



To achieve maximum accuracy and productivity, our field technicians use Trimble RTK GPS along with Trimble Robotic Total Stations with data collectors for all construction staking and site layout work. These field crews are fully supported by CAD technicians and our office staff of professional land surveyors with a proven track record of providing reliable staking services.

Constructibility Review

Initially developed for TDOT, Wilson & Associates has invented an unprecedented, in-depth constructability review process built on 200 combined years of construction experience. This process looks at all phases of a project for constructability from the Contractor's perspective. This unique approach fosters very innovative solutions to challenging issues.

The completed Plans Constructibility Review promote:

- 1. Constructible / biddable project plans.**
- 2. Reductions in conflicts, disputes and change orders.**
- 3. Reductions in contract time.**
- 4. Increased construction safety.**
- 5. Improved public opinion**
- 6. Reductions in costs (construction and maintenance costs).**



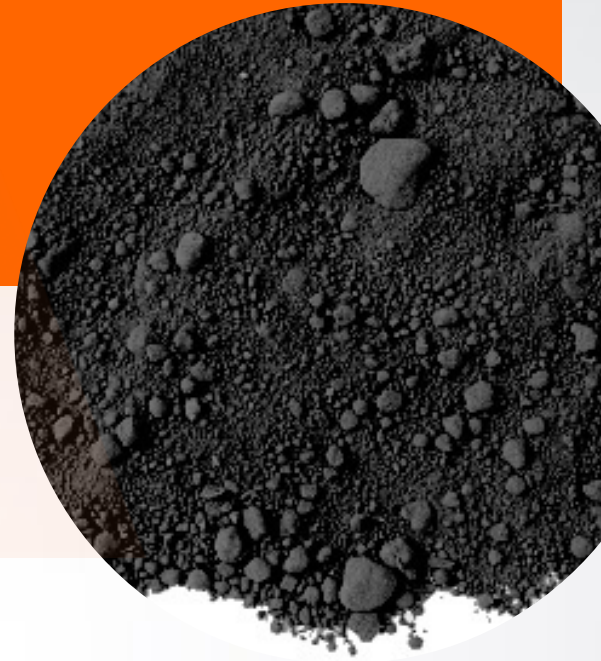
W&A

Environmental Services

Wilson & Associates has the training, field experience, and understanding to provide for all environmental regulatory compliance needs.

Environmental regulations protecting our nation's natural resources are dynamic, complex, and often difficult to understand. From permitting and regulatory compliance, to biological surveys and construction monitoring, W&A has gained the respect of the regulatory community, working side-by-side with TDOT and TDEC, while taking into account each of our clients' project specific needs. We understand the importance of building the project within the environmental guidelines and not making an environmental project out of a construction site. Our specialties include erosion inspection and obtaining environmental permits for waste and borrow.

- **Environmental Planning and Permitting**
- **Stormwater Management Plans**
- **Erosion Control**





Mobile fleet is a driving force

Wilson & Associates uses Terrestrial Mobile LiDAR extensively for an array of roadway projects because it allows our teams to collect detailed survey data from a vehicle traveling along the highway at the posted speed limit.





Aerial fleet goes beyond others

LiDAR can be used on unmanned aerial vehicles (UAV) to collect a larger data set. With our Aerial UAV fleet we have the ability to capture hundreds of acres at a time. Aerial LiDAR UAV mapping now makes surveying a possibility where it would have been extremely difficult or impossible in the past.

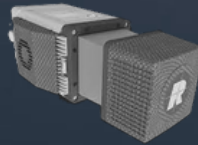
Wilson & Associates has been actively working in Aerial UAV Photogrammetry since 2014. The first company in the industry to obtain an F33 exemption in the state of Tennessee, W&A has four FAA Section-107 pilots who operate our four UAVs throughout the Southeast. We have flown hundreds of lane-miles of roadway projects for original ground and volume calculations, hundreds of stock piles for quarries and asphalt plants, and many sites for predesign information.



Our QA/QC process insures accurate topographic information is delivered to our clients on time and within budget. Our field tests, utilizing terrestrial-based LIDAR compared to Aerial UAV Photogrammetry, indicate the accuracy in volume of the UAV data to be within one to five percent of the terrestrial LIDAR.

Combining Mobile LiDAR and Aerial data collection quickly and accurately gathers information to creates options and a complete frame work of your project.

Leading the way in Aerial Mapping



Riegl miniVUX-3UAV

The RIEGL miniVUX-3UAV is an extremely lightweight airborne laser scanner, designed specifically for integration with UAS/UAV/RPAS.



Riegl miniVUX-1DL

The new RIEGL miniVUX-1DL is a sister device to the miniature UAV laser scanner RIEGL miniVUX-1UAV. The added indicator "DL" means "downward-looking"



Drones

Wilson & Associates uses a group of M600 Pros carrying two different types of Riegl units.



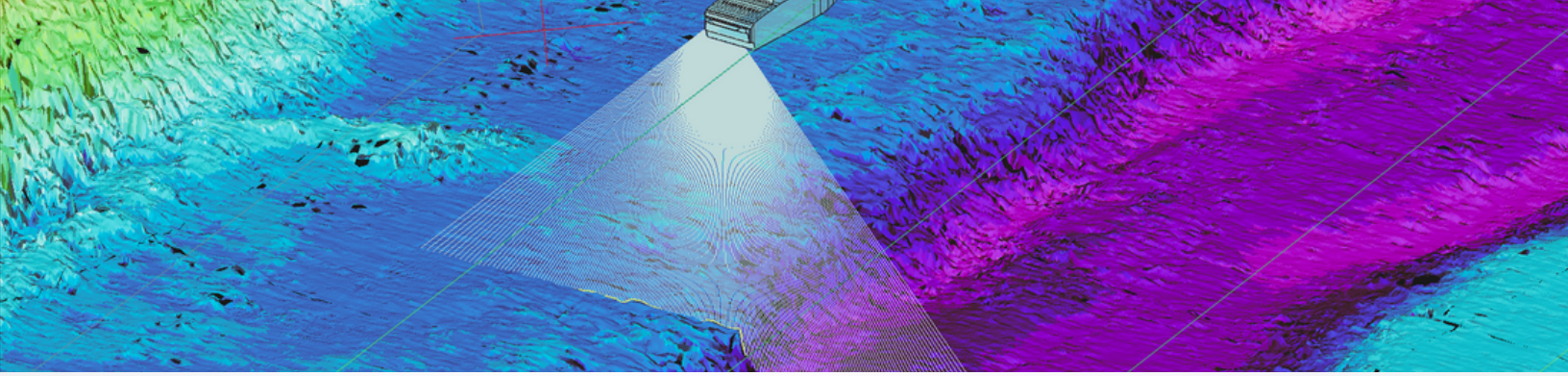
Mobile Mapping Unit Ford Transit

Wilson & Associates Mobile Mapping Unit insures each aerial scanning team carries all the tools needed to complete our clients' tasks.

"With Wilson & Associates' industry-leading drone mapping capabilities, the sky is the limit for you and your project."

-Eric Jager,
Senior LIDAR Surveyor





Hydrographic surveying

Hydrographic surveying is the practice of surveying physical underwater features of rivers, streams, lakes and harbors.

The echo sounder is mounted to a boat both large and small.

In other instances we have used weighted steel tapes and long rods with flat plate mounted on the bottom to physically measure the bottom of the water body. This method is ideal for smaller bodies of water like rivers and some reservoirs.

The ability to collect accurate, complete hydrographic information is especially critical, as below the-surface environments are always changing.

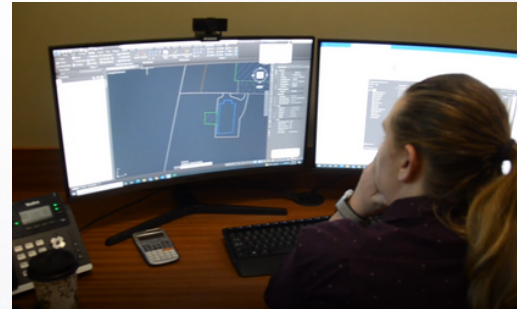
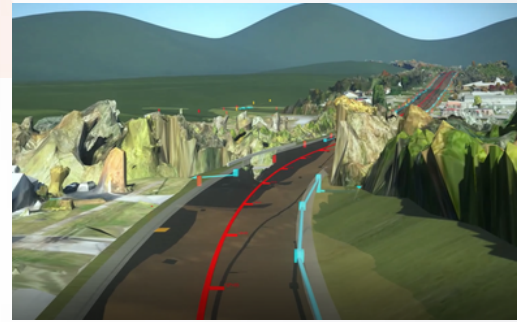


Modeling

Wilson & Associates has been providing data-rich modeling since 1996. W&A can provide a level of detail that ranges from a simple building pad to an interurban interchange with pipes, utilities, bridges, walls, and complex roadway geometry.

Wilson & Associates data modeling process involves analyzing the published plan data to produce a 3 dimensional surface model of the design. The process begins with a thorough review of the plans to identify areas of conflict, as well as contacting the contractor or engineer to furnish additional information that may be required to build an accurate representation of the designer's intent. Once all of the data meets our construction needs, we begin to create the surface model using roading and modeling software.

The model, which consists of 3D lines and triangles, is converted through proprietary software to generate files that are used in construction equipment to build the design using automated guidance systems. Wilson and Associates sets itself apart from its competitors by supplying the contractor with highly detailed and accurate models that leave nothing for the contractor to guess. Roadway corridors, intersections, special ditches, bridge abutments, and even retaining walls are included in a single homogenous model which allows the contractor to concern themselves with only one file and have access to design information anywhere within the project limits.



We can help you!

For over 50 years, Wilson & Associates is a leader in implementing technology in the Land Surveying Industry. Our experience and industry veteran staff allows us to supply real value to our clients, ensuring the highest quality data, collected safely in less time, and frequently at a more cost-effective price for our clients.

To learn more about using the most cutting-edge geospatial technologies to save you both time and money, or to simply speak with Wilson & Associates leaders, please contact:



Justin Wilson
Executive Vice President/CCO
quotes@wilsonpc.com



Wilson & Associates has a culture of strategically investing into state-of-the art software and equipment. We continually assess and incorporate new technologies to ensure our clients' have available to them the cutting edge in surveying technology for completing projects accurately and in the most efficient manner.

Our culture is one of dedication, not being afraid to try new things and hard work. We are dedicated to safety by utilizing industry leading approaches and technologies to minimize all errors, supply the most complete and accurate results, and to ensure the safest work environment for all staff.

By our implementation of portfolio technologies, perpetual training, and self-auditing, we are always prepared for efficient data collection to keep all staff safe.



Our Office
615.794.2275
wilsonpc.com



Uncompromised Engineering & Surveying

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www.wilsonpc.com