



STATEMENT OF QUALIFICATIONS



Overview of Capabilities

82 BRAVO, LLC is a consulting firm headquartered in Glendale, Arizona. We specialize in Surveying and Mapping services using modern technologies such as GPS/GNSS, robotics, imaging laser scanning systems and 3D mobile mapping systems. Our team members have provided survey services, consulting and training for Corporations, Local, State, and Federal Government agencies throughout the United States and few places around the globe. Our company goal is to provide quality, value-added services for our clients using our unique experience and advanced knowledge in technology and application. 82B and its associates provide all aspects of surveying and mapping related services, including:

Consulting and Services

- *Construction Survey*
- *Topographic Mapping*
- *Boundary Surveys*
- *GIS Data Collection*
- *3D Mobile Mapping and Imaging*

Training and Instruction

- *Global Positioning Systems/GNSS*
- *GPS/GNSS Post Processing*
- *Conventional Optics & Robotics*
- *3D Mobile Mapping*
- *Data Collection*

Company Information

Certified Small Business Enterprise – City of Phoenix
Certified Small Business Concern – A.D.O.T.
AZBTR Firm No. 17600-0
NAICS Codes: 541370, 611430
DUNS: 078573188
CAGE CODE: 6SLU9
Registered in SAM

Consulting and Services

82 Bravo provides services and assistance based on a wide-ranging survey and mapping knowledge to clients with a partner-led approach. Our professional staff can help you assemble, optimize and manage the survey and mapping resources your business needs to achieve its objectives. Due to our extensive research, use and understanding of developing technologies we are able to provide solutions in areas where the learning curve for our clients would inhibit the feasibility of a project task or requirement.

82B is fully capable of providing complete services for Surveying and Mapping projects including Construction, Topographic, Boundary and Control surveys.

Construction Surveying

82 Bravo has an extensive background in providing construction-surveying services for commercial, private and municipal projects in Arizona. Recent and Current Projects Include:

Japanese Friendship Garden – New Construction, Phoenix Arizona
Construction staking and as-built survey for a new building and improvements.
Project Owner: City of Phoenix

Weaver Mountain Fire Station Operations Building – New Construction, Wickenburg, Arizona
Construction staking and as-built survey for a new building, site improvements and parking lot.
Project Owner: Bureau of Land Management

Helen Drake Senior Center – New Construction, Phoenix Arizona
Construction staking and as-built survey for a new recreation area and existing site improvements.
Project Owner: City of Phoenix

F-35 Training Facility – New Construction, Luke Air Force Base, Arizona
Construction staking and as-built survey for a new addition to an existing building, parking lot improvements, and site retention basins.
Project Owner: US Army Corps of Engineers

Lindo Park Improvements – New Construction, Phoenix, Arizona
Construction staking and as-built survey for a new building, site improvements and new utilities including water and sewer.
Project Owner: City of Phoenix

Boundary Surveys

82 Bravo, is Registered with the Arizona State Board of Technical Registration to provide Land Surveying services and Arizona Boundary Surveys. A Professional Land Surveyor will oversee all aspects of the survey to ensure that the project meets or exceeds the minimum standards as set forth by the State

Topographic Surveys

A topography survey shows natural ground elevations, man-made features, visible utilities, walls and fences, trees and any other relevant features. 82B can provide topographic and planimetric mapping through conventional means, LiDAR, or in conjunction with photogrammetric surveys. Various methods of data collection can be combined to meet the needs of our clients.

3D Mobile Mapping

82 BRAVO, Inc. has advanced knowledge in mobile LiDAR (Light Detection and Ranging) and photography using a wheeled vehicle mounted systems equipped with a GPS receiver, IMU (Inertial Measurement Unit), LiDAR sensors and a spherical camera. The LiDAR is collected using sensors capable of collecting millions of points per second. Photography is captured during the mapping using a High Resolution Spherical Video Camera as an added value.

With the LiDAR and photography, 82B can create an integrated database for a unique user interface and the capability to geolocate any of the items along the scan trajectory. The high density of the data points provides for three-dimensional visualization and is compatible with many mapping applications that have point clouds capabilities. With this technology, 82B can provide our clients a large amount of data in a short amount of time for measurements, volumes, cross-sections, maps and 3D models of complex surfaces and above ground structures.

Training

82 Bravo offers specialized professional and technical training courses for surveying and mapping operations including equipment and software instruction.

Our training programs offer professional curriculums, training guides, evaluations and a certificate of completion for each student. All training material is provided in an eco-friendly digital format that is user friendly and searchable. Courses are customized for the student and the environment that they work in. Workflows are developed during the course for specific work related tasks and given to each student at the end of the course.

Kenneth Shipley, Professional Land Surveyor

As President and Project Manager, Mr. Shipley's primary role will be to oversee the project as a whole, coordinating all activity between the client and the 82B team. He will supervise each phase from development and planning through final delivery to ensure 82B client standards are upheld, and overall satisfaction is maintained. He will handle project specific issues involving schedules, budgets, technical issues and client communications.



Education & Military Service

- Construction Surveyor, US Army Engineer School, Fort Leonard Wood, Missouri
- Studied Land Surveying at Longview Metropolitan College in Lee's Summit, Missouri
- Studied Land Surveying at Phoenix College in Phoenix, Arizona
- Continuing Education through numerous training seminars on Geodesy, GPS, surveying accuracy, methods and procedures
- Served in the U.S. Army National Guard from 1991 to 2004 and honorably discharged as Staff Sergeant.

Registration & Professional Affiliations

- APLS-Arizona Professional Land Surveyors Association
- NSPS - National Society of Professional Surveyors
- Certified Professional Land Surveyor by meeting the requirements set forth by NCEES, as well as successfully passing the written examination required by the Missouri Division of Professional Registration and the Arizona State Board of Technical Registration