

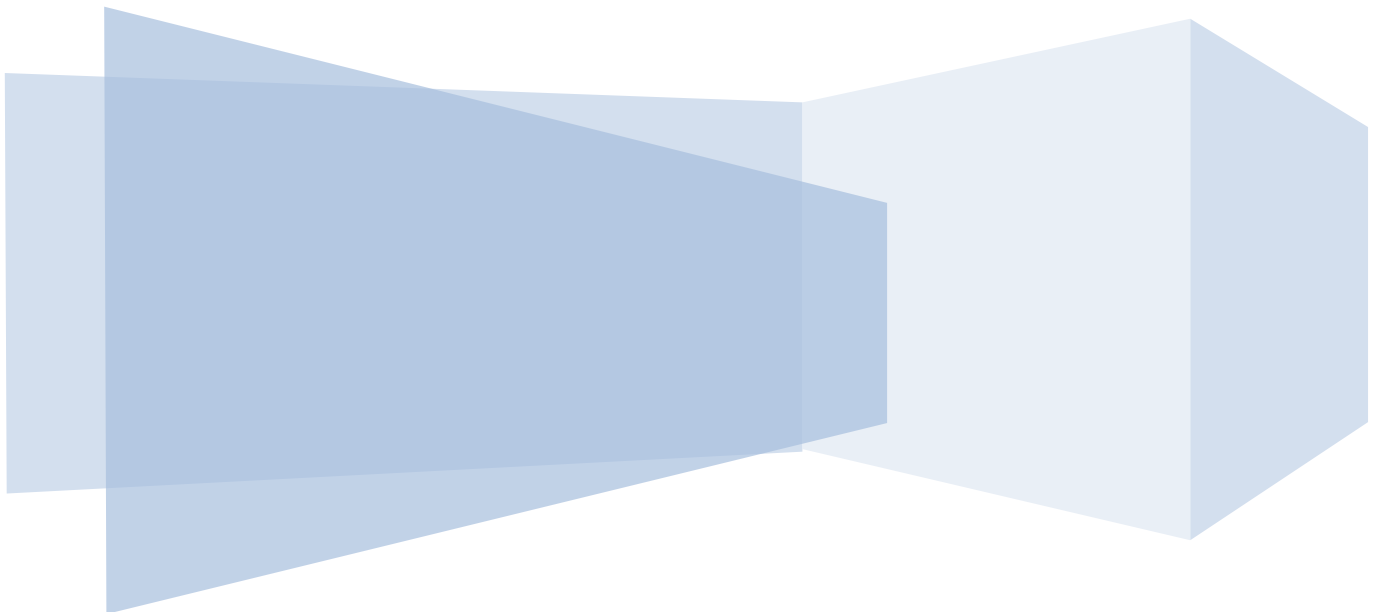
COMPANY PROFILE

Civil Engineering Department



Atlantic Surveyors (Pvt) Limited

A Company of Atlantic Group



ATLANTIC SURVEYORS (PVT) LTD.

Company Overview:

Atlantic Surveyors is a Private Limited Company engaged in providing various type of surveys including topographic survey, aerial mapping, as built survey, stockpile volume survey, 3D modelling and road survey. Moreover, we provide soil investigation services.

The Company has license from PEC (Pakistan Engineering Council) in the specialized category of civil engineering services.

We have the privilege of having highly experienced professionals to provide an entire range of topographic solutions, including investigations and consultancy.

We provide a broad range of Digital Land Surveying and Mapping Services, Topographic Surveys using DGPS, Total station, Auto level and Drones.

Our dedicated team of professionals work closely with our client and offer personalized and cost-effective solutions.

Accreditations: Certifications / Licenses

- Licensed by Pakistan Engineering Council (PEC)
- Registration with Pakistan Standards & Quality Control Authority (PSQCA)
- Surveying License for Master Mariner, Marine Surveyor, Insurance & Fire Surveyor, Machinery & Breakdown Survey issued by SECP
- ISO-9001-2015, ISO/IEC 17020:2012 (Practicing),
- ISO-45001:2018
- ISO 14001:2015
- Licensed by Weights & Measures Department, Govt of Sindh
- Member – Association of Surveyors & Loss Adjusters of Pakistan,
- Member - Karachi Chamber of Commerce Association

World-wide Coverage

Atlantic Surveyors (pvt) Ltd being the parent company and its sister concern CISCO LTD under the ownership of same Directors have their own network of offices in 4 countries

- Pakistan (Head Office in Karachi, + sub-offices in all major Cities)
- United Arab Emirates

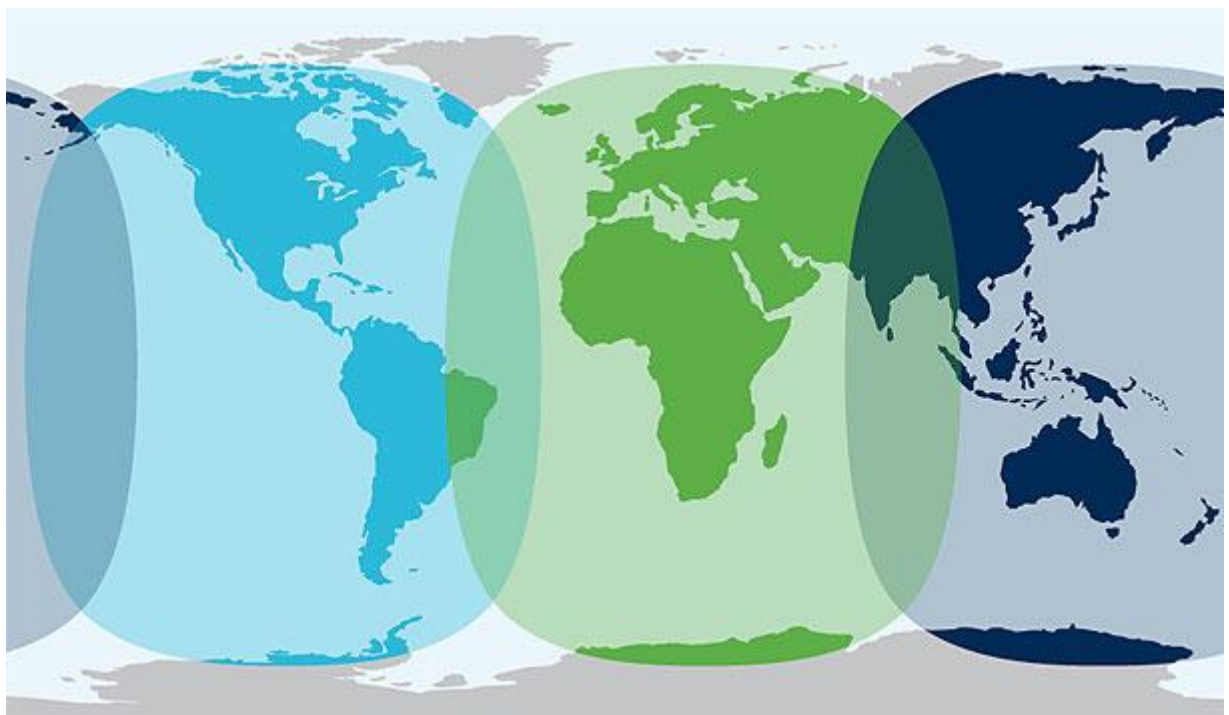
- United States of America
- Afghanistan

providing surveying services to our prestigious clients including national, multinational and government institutions.

Global Partners

Through our global affiliates M/s Geo-Ghem (Middle East) and TCI (Belgium), we are also providing our services at load ports in

- USA, China
- European countries
- African countries
- Middle East
- Far East



Our Services

ENGINEERING SERVICES

ATLANTIC SURVEYORS (PVT.) LTD is a professionally managed organization committed to providing dedicated services of construction services, marine survey, topographic survey, aerial mapping, as built survey, stockpile volume survey, 3D modelling and road survey. Highly trained and Professional attitude is what you get from our rich pool of human resource.

High-tech equipment ensures authentic results and the dedicated team delivers time-oriented accomplishments. Sophisticated state-of-the-art technologies and manpower facilities are what make ATLANTIC SURVEYORS (PVT.) LTD a reliable procurement source. The wide area of its application in the industry is its key characteristics. customer-satisfaction being its core goal, efficiency in all its wings is a norm here.

Adequate support, trained manpower and high-tech equipment, services are all there with ATLANTIC SURVEYORS (PVT.) LTD.

- Construction Work
- Topographic Surveys
- Drone imagery / Aerial Mapping
- 3D scanning & modelling
- Civil construction surveys
- Geotechnical surveys / Soil Investigation
- Construction and as-built surveys
- Structural surveys
- Earthwork and volume surveys
- Pipeline surveys
- Engineering surveys for future construction and expansion projects
- Integrity Assessment of Buildings

LIST OF EQUIPMENT:

1 Concrete Mixer Machine	02 No.
02 Trolley left	02 No.
03 Tractor Trolley	01 No.
04 Compaction Roller 1 ton	01 No.
05 Plate Compactor	01 No.
06 Jumping Compactor	01 No.
07 Power Floor	01 No.
08 Vibrate with shaft	01 No.

09 Vibrator with shaft (Electric)	01 No.
10 Water Pump 02 HP	02 No.
11 Water Tank Capacity 15 KL	02 No
12 Total station	03 No
13 DGPS	02 No.
14 Auto Level	02 No.
15 Drone Phantom 4 DJI	01No.
16 Drone DJI RTK	01No.
17 Drone Matrix 300 RTK	01No.
18 FDT Set 06''	02 No.
19 FDT Set 08''	02 No.
20 Weight Balance Digital	04 No.

List of Employees:

Sr. No.	Details	Designation
01	Syed Mumtaz Hussain	HOD Civil Works
02	Juned Hussain	HOD Survey Department
04	Usman Arshad	Project Managers
05	Waqas Abid	Construction Manager
06	Malik Izhar Nabi	Site Engineer/Planning
07	Malik Waqar Nabi	Site Manager Finishing Work
08	Sohail Ahmad	Site In-charge
09	M Shahid	Site Surveyor
10	Ramiz Ansari	Purchaser

List of Projects:

Construction Services:

Atlantic Surveyors is a one-stop platform for turnkey construction services. A renowned construction company and contractor of Pakistan having diverse team of engineers, architects, project manager, and other professionals who provide seamless and quality construction services for small to complex building requirements. Our key to success is quality and economical services, on-time delivery, a better understanding of the client's needs, and good client assistance. Our services are not confined to only one sector; we provide residential construction, industrial construction, institutional construction, commercial construction services at par with the set standards. `

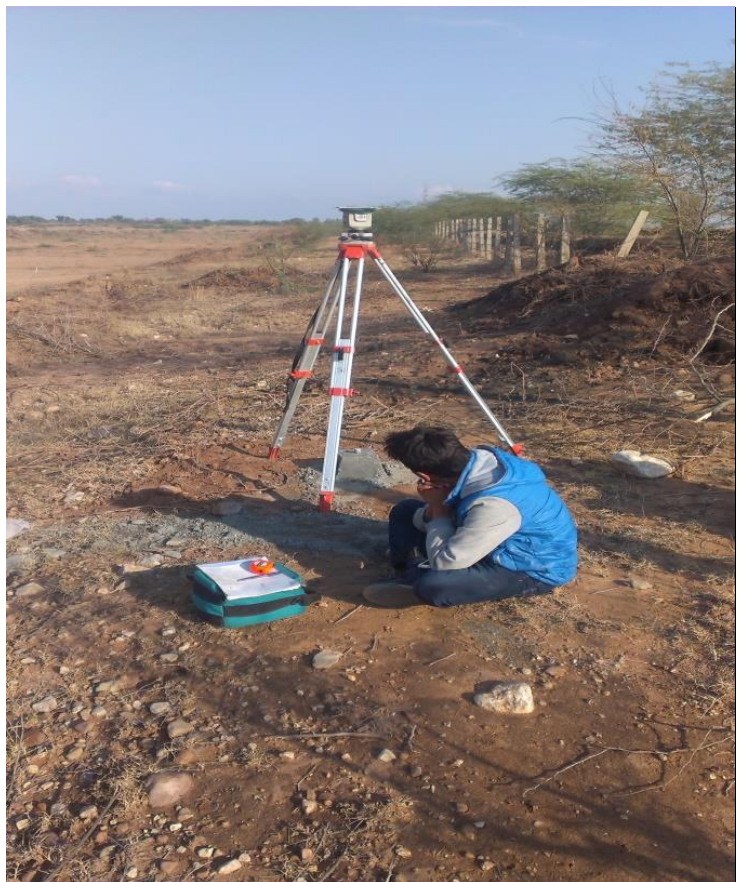


Topographic Survey

Primary objective for Topographic Survey is to produce a three-dimensional drawing of a particular piece of land or area. Our Topographical Surveys

include all natural and man-made features which are represented by text, lines and symbols on the drawing. The drawing of topographic survey also includes heights and elevations which are represented by spot levels and contours for the execution of engineering projects.

We have extensive experience in topographic surveying utilizing latest and state of the art high precision differential GPS for control setup. Our experienced team of professionals has conducted control surveys of high accuracy.



Drone-based Surveying.

Atlantic Surveyors' aerial mapping services allow stakeholders to receive high-definition low-altitude aerial maps delivered in a timely fashion in the form of updated Google Earth layers and ortho-mosaic maps. Our customers enjoy real-time, high-definition, actionable data, eliminating the need to spend their

budget on expensive satellite imagery or wait for weeks to get traditional ground survey results.

Advantages of Aerial Mapping

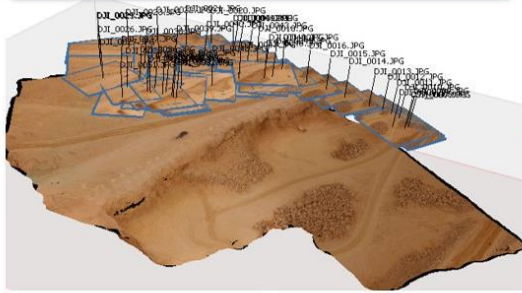
- Simplify topographic surveys for land management & planning.
- Detailed models of site topography
- Highly accurate distance and surface measurements
- Condition Monitoring of Bridge powered by AI
- Thermal Imagery to provide meaningful insights
- Higher speed and accuracy than conventional inspection methods
- Streamline workflows in significantly less time in inspecting faults and damages.
- Relatively less time & lower costs as compared to conventional methods.

**Atlantic Team at Work for Drone Imagery of
Quaid-e-Azam Mausoleum**



Typical Steps in Drone Topography

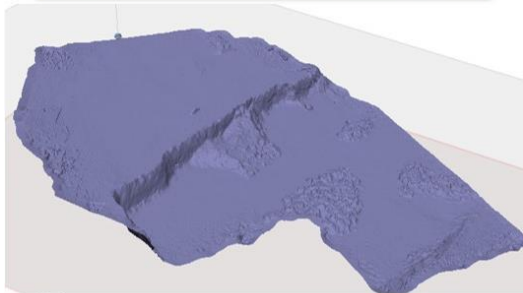
Total Flight time	2 minutes
Image Transfer	3 minutes



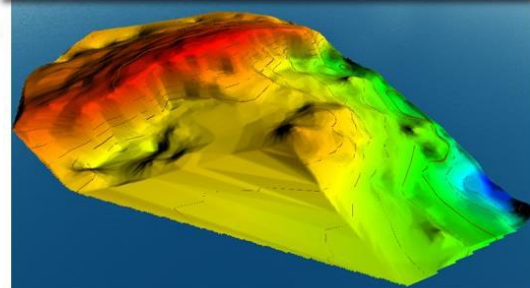
Dense Clouding	20 minutes
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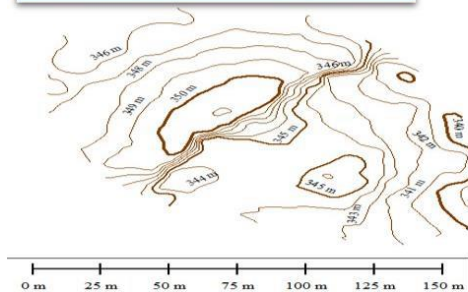
DEM	15 minutes
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DEM Export to Third Party Software/s Global Mapper or ArcGIS	1 minute
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Contour Maps	0.25 minute
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3D Scanning & Modelling

We create 3D architectural models from laser survey data. 3D modelling is the process of creating a three-dimensional computer model which represents a 'real-world' object. It is used in a wide variety of industries.

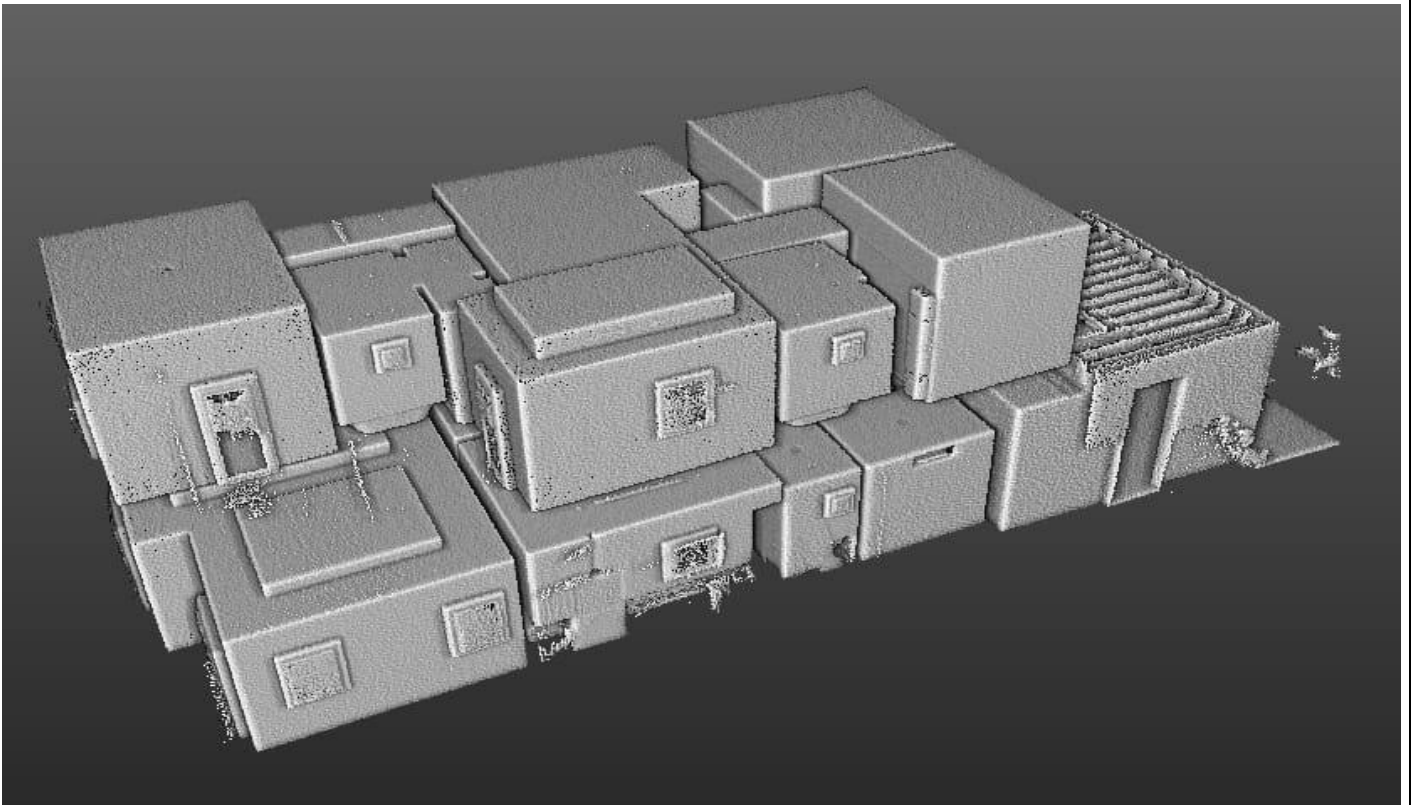
3D modeling can be used in a range of applications, mostly to visualize different parts of a structure.

Modeling programs allow us to

- Create and picture final products.
- Modify and enhance the designs.
- Document designs, materials, and measurements easily

3D modeling entails employing specialized 3D software to manipulate an object's edges, vertices, and polygons within a virtual 3D space. The 3D artist scans real-world items and converts them into digital objects with data points.

The model's core is the mesh, described as a compendium of spatial points. These points get mapped into a grid and merged as polygonal shapes, typically quads or triangles. Each vertex or point has its own grid position, and by linking these vertices into shapes, an object's surface is created.



3D Scanning by LiDAR

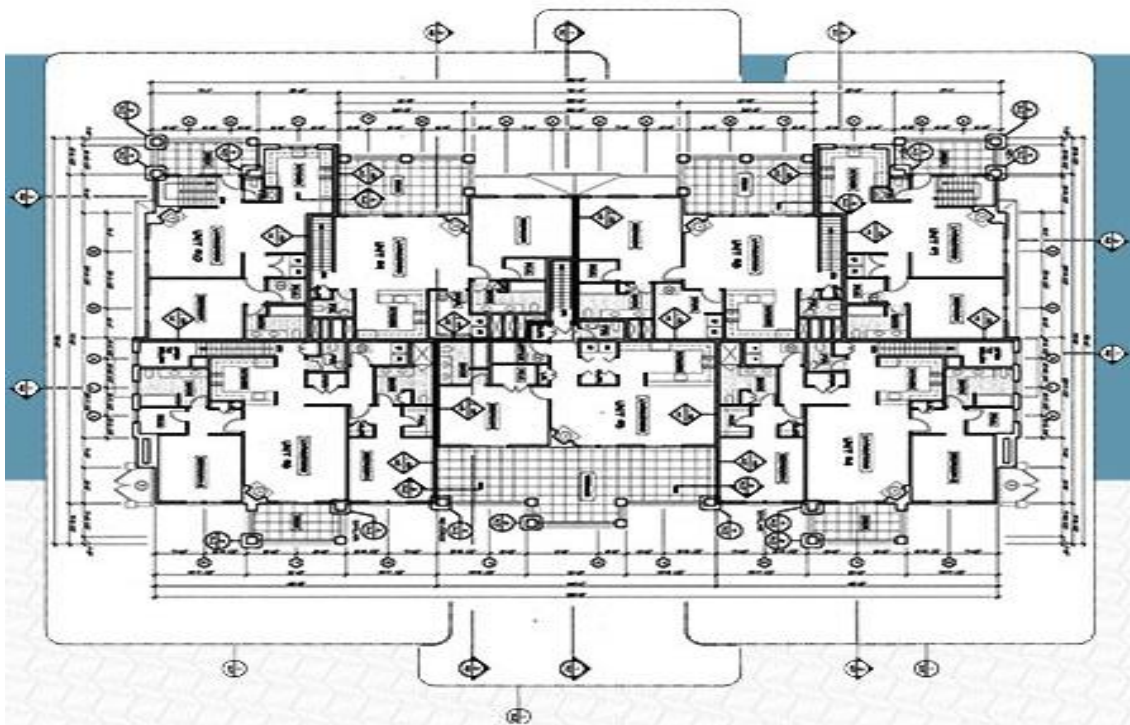
As Built Surveys

Atlantic Surveyors provides high-quality as-built surveys of existing properties. Our as-built drafting services help our clients use the existing space efficiently by eliminating the costly changes that might appear due to inaccurate sets of drawings. Our as-built drawings can be used as a reference for future maintenance and planning, providing an exact outline of the existing design.

We have a well-trained team of CAD technicians to apply a variety of toolsets to deliver accurate as-built drawings. As-built drawings are completed and submitted once the project is completed. Drawings are revised from original design drawings to reflect any changes in the on-site such as component relocations for coordination, rerouting of distribution systems, etc.

As-Built Drawings specify locations and dimensions of all the structures along with specification of walls, doors, HVAC systems, electrical fixtures and any other element which is vital for the project.

It is essential for the owners as it can be used in the future for existing restructures or grasping any change in the built model. It is crucial as it furnishes the representation of the entire project on completion.



Soil Investigation

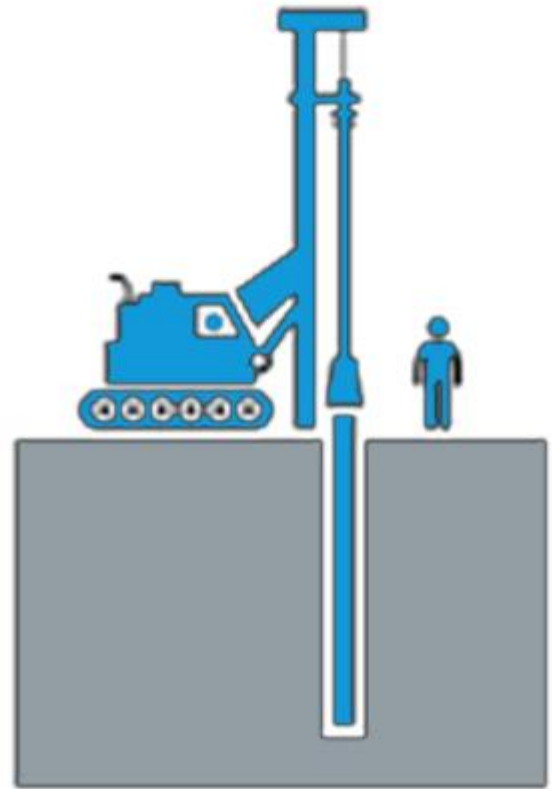
Geotechnical investigation is the procedure of acquiring information on subsurface soil condition and synthesizing them in order to determine geomaterial parameters required for design.

Geotechnical engineers obtain information on the physical properties of soil earthworks and foundations for proposed structures and for repair of distress to earthworks and structures caused by subsurface conditions.

Geotechnical investigations specify water table with a variety of complications (including a layer of soil, layers of soap-work waste, dredging deposits, arsenic and other substances).

Whilst carrying out the site investigation, our team comply with the following.

1. To ensure that the investigation is carried out smoothly and completed on time.
2. To ensure the site investigation is conducted in a proper manner so as to collect the correct information regarding the soil/rock properties in the project site
3. To minimize project cost as much as possible
4. To avoid any dispute between the owner and contractor (on financial matters related to the scope of work, extra payments due to unexpected subsurface conditions encountered at the site or due to low-quality work, or undue delay).
5. Prepare technical specification precisely and in a very careful manner.



Geotechnical Investigation Services



Stockpile Volume Computation

We provide our expert services in conducting survey stockpiles for the purpose of calculating volume and tonnage.

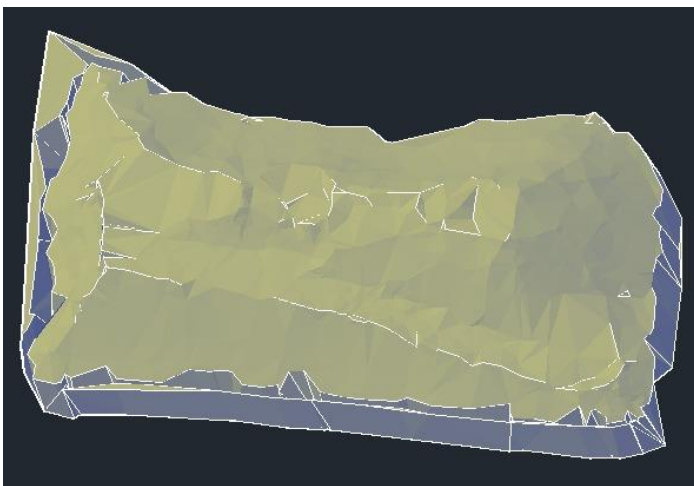
We use modern state-of-the-art equipment of optical measurement. Total Station is an instrument of laser technology trusted for accurate results and precise measurement of horizontal and vertical angles.

This method is widely used for measuring the stockpiles of various commodities such as:

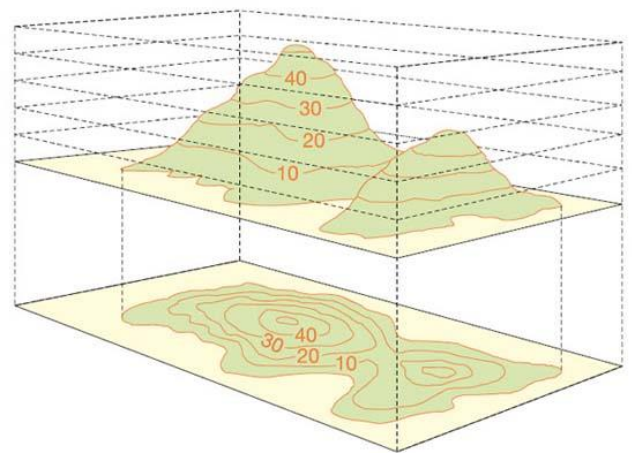
- 01- Coal
- 02- Cement
- 03- Rock Phosphate
- 04 Fertilizer

Contour Mapping on CAD Software

Total Station data is downloaded to a computer for generating contour map on a corresponding CAD software. The software calculates the volume or space occupied by the stockpile and generates results in cubic feet or cubic meter as per requirement.



Stockpile Image after data processing



Civil NDT / Structural Integrity Assessment

Atlantic Surveyors provides integrity assessment of buildings and structures to assess the current condition, serviceability and earthquake resistance and enhance the remaining life through retrofitting techniques.

We are trained to understand, predict, and calculate the stability, strength and rigidity of built structures.

We combine an array of considerations into the design process, such as materials performance, stress analysis and fracture mechanics.

Once built, a construction will need inspection and maintenance to maintain its integrity. To do this, an engineer might:

- Carry out inspections to identify damage. This might involve the use of non-destructive testing (NDT)
- Check that a structure has been built according to the appropriate designs, procedures and standards.
- Check that a structure is being used appropriately for the environment it was designed for.
- Recommend and design modifications to address areas of concern.
- Estimate the remaining life of structures and enhance the life of your building through re-strengthening.
- Locate reinforcement mesh, bar size and concrete covers in existing structural members.
- Evaluate concrete strength, and chlorides and sulphate quantities.
- Evaluate the risk of corrosion in existing reinforcement bars.
- Evaluate earthquake resistance.

Relevant standards for integrity assessment of civil structures

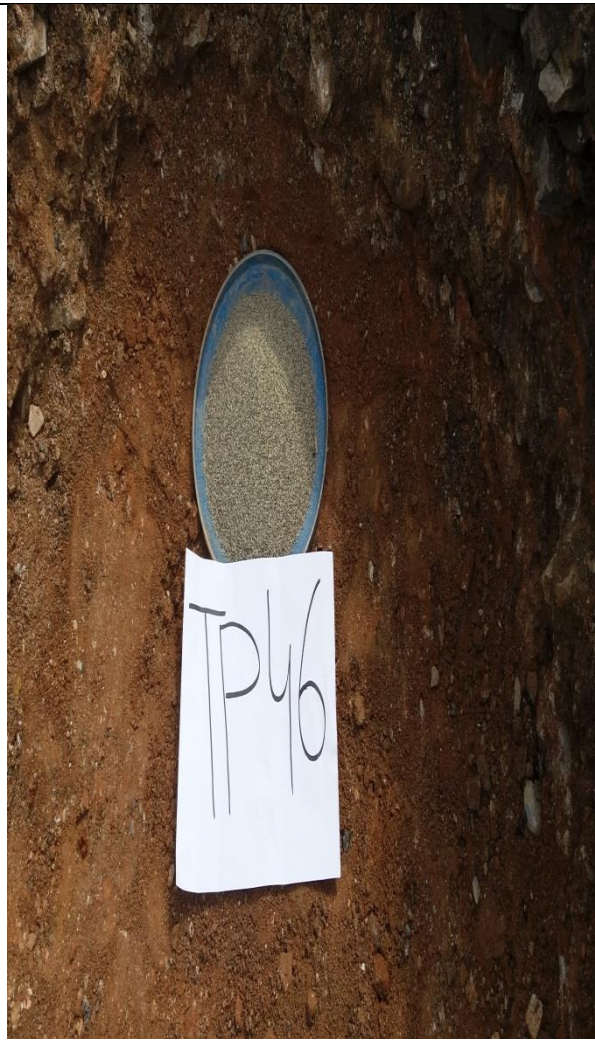
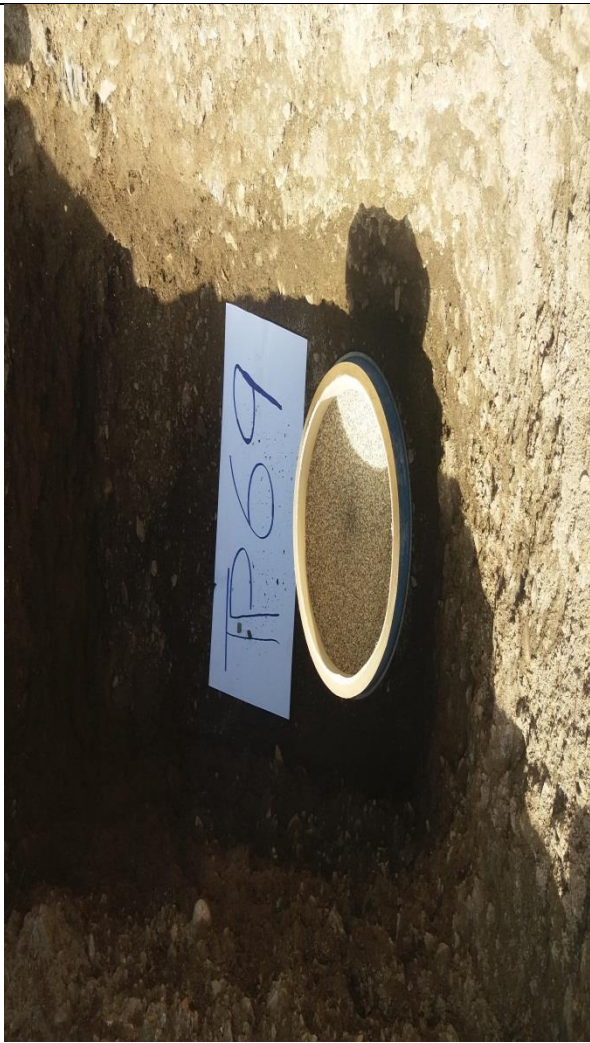
- ISO 13822 Guide for the Assessment of Existing Structures
- ACI-318 Building Code Requirement for Structural Concrete
- UBC-97 Earthquake-Resistant Design
- ASCE-07 Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- ACI-530 Building Code Requirements for Masonry Structures
- ACI 228.1R In-Place Strength of Concrete Structures

- ACI562M Assessment, Repair and Rehabilitation of Existing Concrete Structures
- ACI 201.1R Guide for Conducting the Visual Inspection of Concrete in Service
- ACI-365.1R Predict the Service Life of Concrete Structures
- ACI 228.2R Non-Destructive Test Methods for Evaluation of Concrete Structures

EARTH RESISTIVITY SURVEY



SOIL COMPACTION TEST



SOIL INVESTIGATION



CONCRETE PULSE VELOCITY



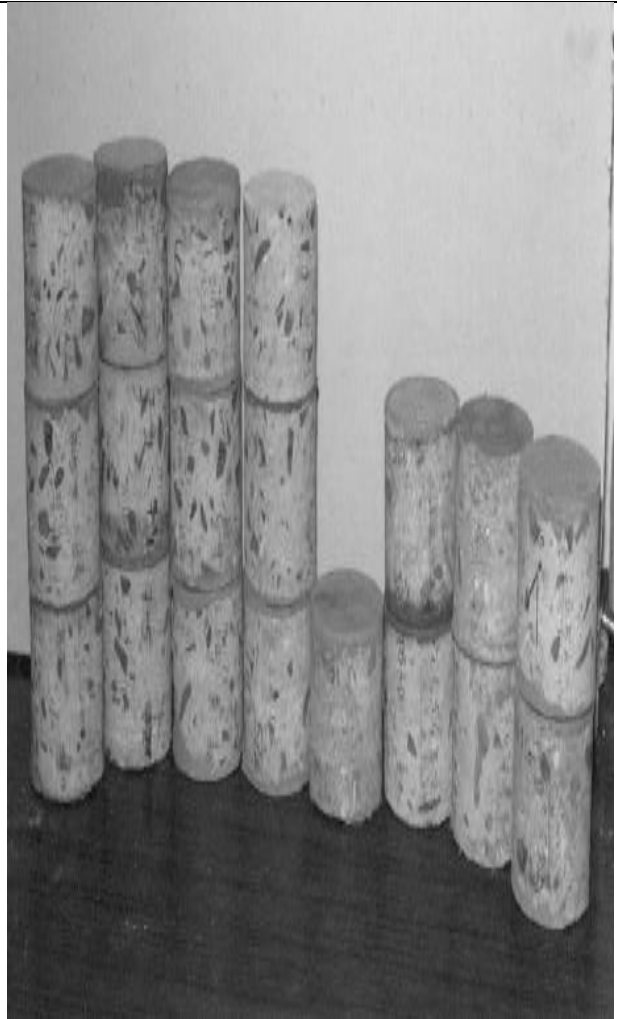
PILE LOAD TEST



PLATE LOAD TEST



CONCRETE CORE

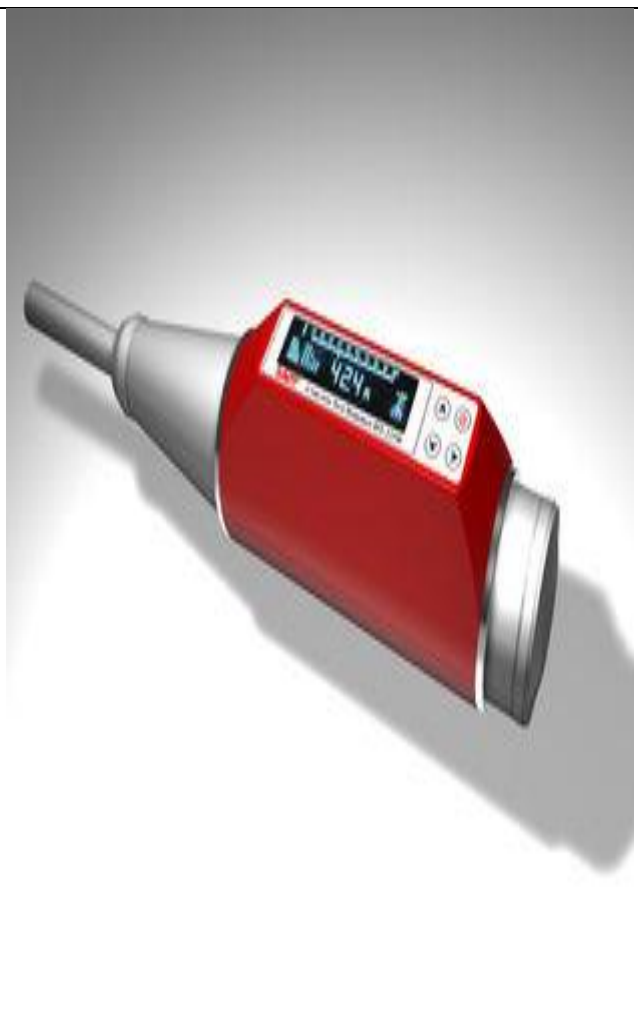


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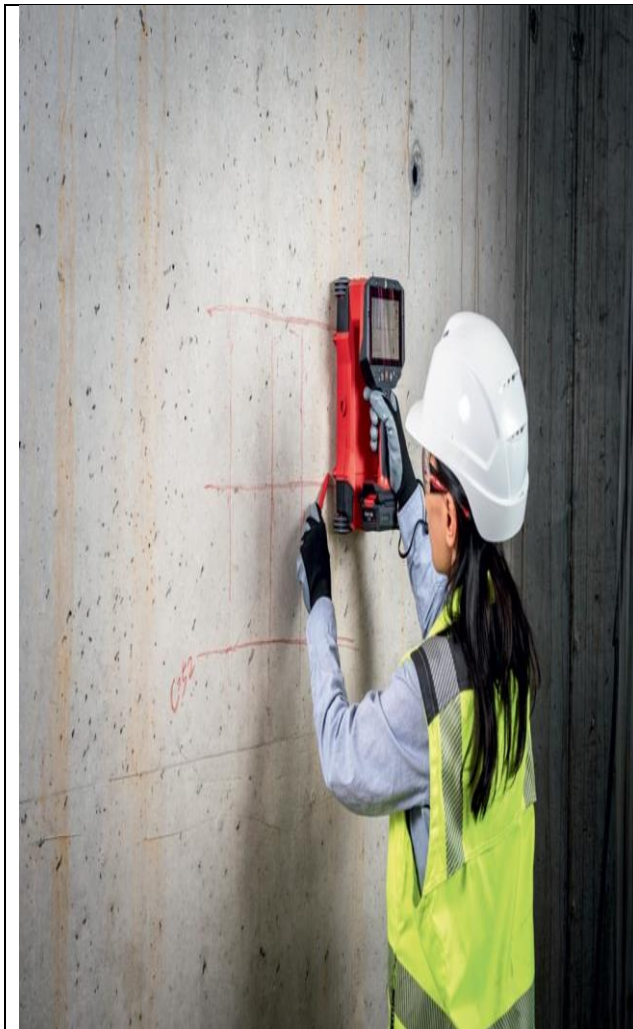
ASPHALT CORE



SCHMIT HAMMER



FERRO SCANNING



ATLANTIC SURVEYORS (PVT) LIMITED
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