# Utility Mapping

Utility Mapping involves the use of positioning methods and geospatial technologies to set out and identify utilities like utility poles, amenities and underground works like pipelines, cables and other installations. Our mapping services are done to the detail. We go the extra mile and dig to the sub-surface of the earth to find and record information. Our GNSS capabilities enable us to record accurate information of utilities which is then mapped in various open map-algorithm supported software platforms like Open Street maps. This type of surveying is relevant to clients who want to make either underground or surface installations, for monitoring underground works by departmental authorities, impact assessments, research programs and decision making for development and mitigation.

# Land Development Services

This field mainly focuses on providing information and advice relevant to the alteration of the landscape or use of land. It serves clients who want to establish or demolish infrastructure like buildings, residential houses and demarcating of way leaves, pathways and so on. To fulfil this purpose, our surveyors do boundary opening, subdivisions, area estimations and propose way forward action plans.

# UAV Lidar Scanning & Aerial Mapping

Here we map buildings, trees, superstructures like bridges and other terrestrial features using Drones as our aerial vehicles. Lidar means Light Detection and Ranging and is a remote sensing technology used for the acquisition of information about objects or phenomenon without making physical contact with any of them. The technology uses laser light an the data collected is in form Lidar points which are known as point clouds. A Point cloud is used to create a 3D representation of the surrounding area or object which helps in object extraction and classification. LiDAR technology is used for many different applications, ranging from topographical mapping to mapping indoor spaces for cultural heritage projects, construction and architecture. Our aerial surveys are done under National Regulations and respect people’s privacy.

# 3D Reality Capture

We use laser scan stations to translate the real world into 3D digital representations for analysis and reporting. Structures like buildings, roads, residential and office houses of all ages new, old and dire can be captured with this laser technology to come up with information and resources that are relevant to engineers, architects and planners for purposes of planning, restructuring, demolition and replicating models. Our surveyors employ the use of up-to-date viewing and processing software like Agisoft Metashape to determine geo-locational information of points of interest and identify existing features and spaces in the scanned areas. Our scan surveys are done under National Regulations and with concern of people privacy.

# GIS Surveying and Consulting

Geographic Information Systems relate specifically to the physical mapping of data within a visual representation. Collected data is imported in GIS software like ArcGIS and Quantum GIS (QGIS) and is overlaid on relevant base maps for spatial analysis and reporting. In analysis, data goes through the processes of entry, feature editing, image enhancement and feature classification. This is done based on descriptive and inferential statistical methodologies.

# Engineering Surveying

Engineering surveying involves determining the position of natural and man-made features on or beneath the earth's surface and utilizing these features in the planning, design, and construction of works. It is a critical part of any engineering project. These are works performed in preparation of, during and after construction or engineering works. Including feasibility surveys, construction setting out, verticality checks, settlement checks, as-built surveys, calculations on pipe alignment, bore placement, angle calculations and plan production.