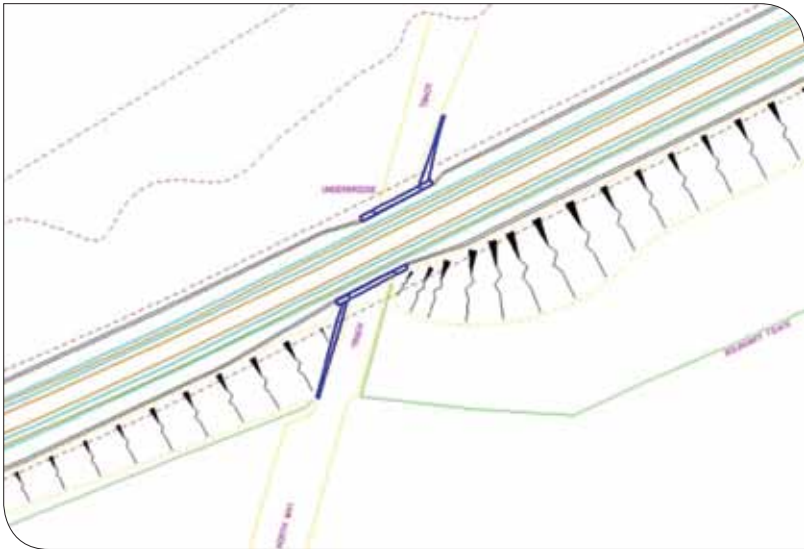


**Coastal & Marine**

- Shoreline mapping
- Erosion monitoring
- Change assessment
- Sea/river bed modelling
- Flood modelling
- Run off analysis

**Infrastructure**

- Pipeline feasibility studies
- Highway asset management
- Cutting and embankment cross sections
- Earthwork design & as-built
- Pipeline corridor mapping
- Abnormal load clearances
- City modelling
- Intervisibility analysis



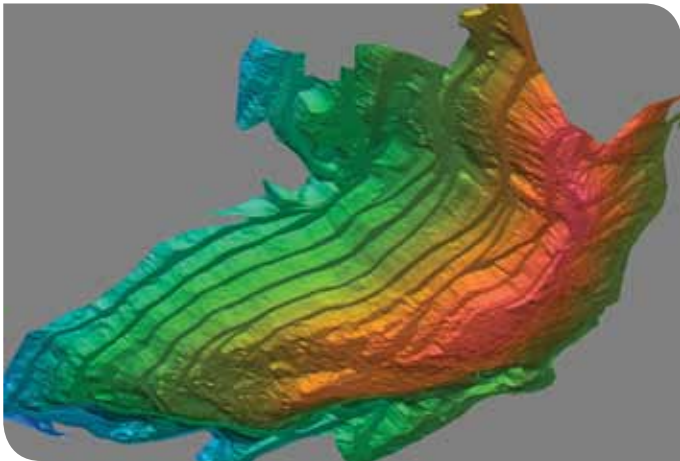
**High Definition Data**

- Primitive 3D modelling
- Intelligent 3D modelling
- Clash checking
- Scan to BIM
- As-built 2D drawing creation/extraction

# REDUCE YOUR WORKLOAD WITH MDL'S DATA PROCESSING SERVICES

Measurement Devices Ltd (MDL) is pleased to introduce its new Data Processing Service.

As a worldwide leader in the laser measurement industry MDL has almost three decades of experience in the acquisition and processing of LiDAR data. This expertise is now encapsulated in our value added data processing services which aim to offer quality services, on time, on budget and to satisfied customers.



**Measurement Devices Ltd.**

MDL has been established for 28 years and are world leaders in the design and manufacture of high speed laser measurement and surveying systems for use in harsh environments. MDL is an ISO 9001:2008 certified organisation with five offices in the UK, US, Australia, and Canada.

MDL products include the Dynascan mobile mapping LiDAR system, the Quarryman® Pro terrestrial laser scanner, cavity scanner, void scanner, and other industrial laser modules.

**BENEFITS**

- Extensive range of services and deliverables
- Access to a large team of experienced professionals
- Unparalleled industry knowledge
- Reduced software overheads
- Quick turnaround times
- Quality assured deliverables
- Available worldwide
- Receive a quotation within hours
- Secure web based file transfer and compression capability

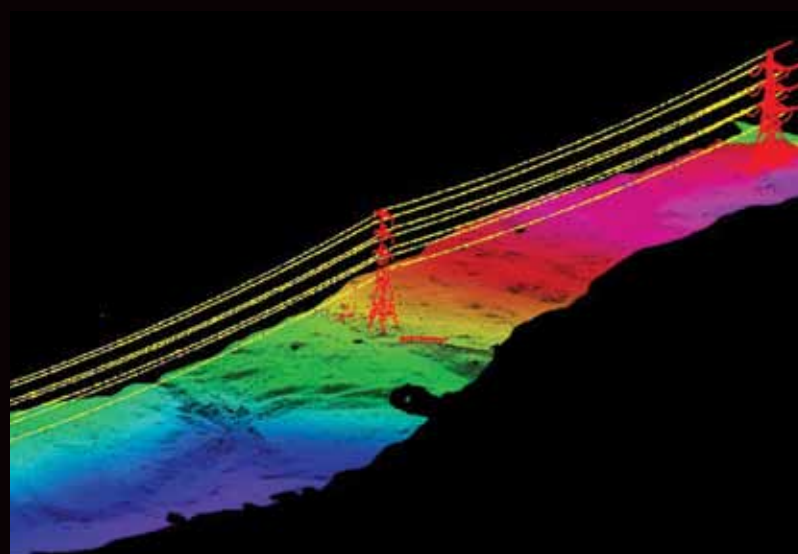
## MDL DATA PROCESSING

Advancements in laser measurement technology now mean it is possible to collect huge amounts of survey data quickly and efficiently, however this is often at the cost of increased office based data processing times. MDL recognise this and have therefore launched the data processing service to assist customers in processing, editing, and managing LiDAR data without the large capital investment needed in specialised resource, software, and training. MDL has brought together a team of industry professionals to offer a comprehensive turnkey service with an emphasis on quality and reliability.

### Services

MDL offer a wide range of services and deliverables in industry standard CAD/GIS formats.

- Data cleaning & noise removal
- Bare earth & non ground classification
- Digital terrain models (DTM) & contouring
- Volumetric calculations
- Vectorisation & feature extraction
- Preparation of CAD drawings and GIS datasets
- 3D modelling & texturing
- Image overlay and point cloud colourisation
- Visualisations and flythroughs
- Data archiving & management

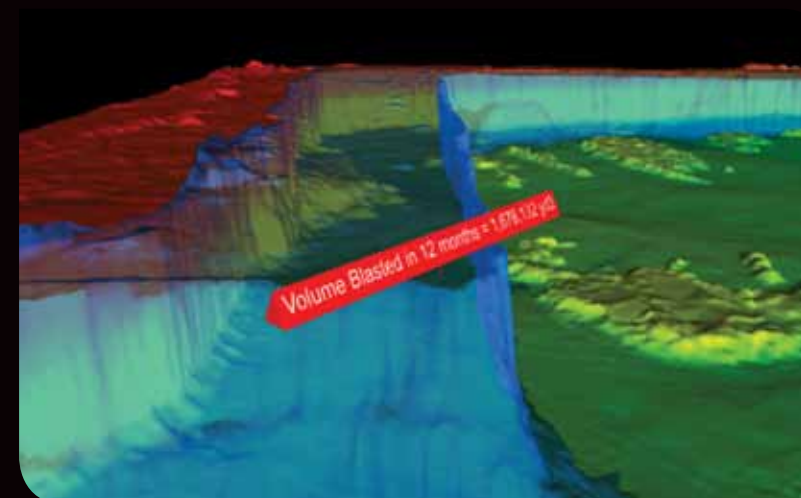


- ✓ Airborne
- ✓ Terrestrial
- ✓ Mobile
- ✓ Bathymetric

## TOOLS/DELIVERABLES

Terrasolid, I-site Studio, Pointtools, Cyclone, LFM, SCENE, Microstation, AutoCAD, Revit, PLS CAD, ArcGIS, Mapinfo, PDMS, SmartPlant, PDS, AutoPlant

## APPLICATIONS

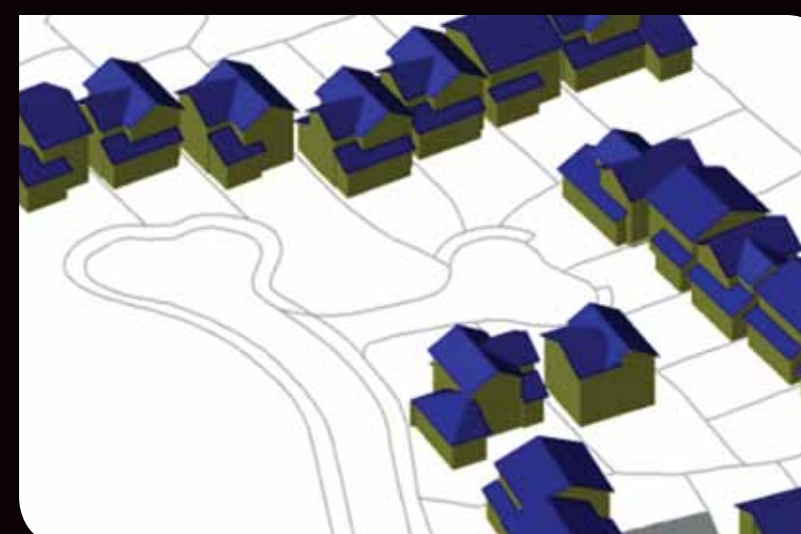
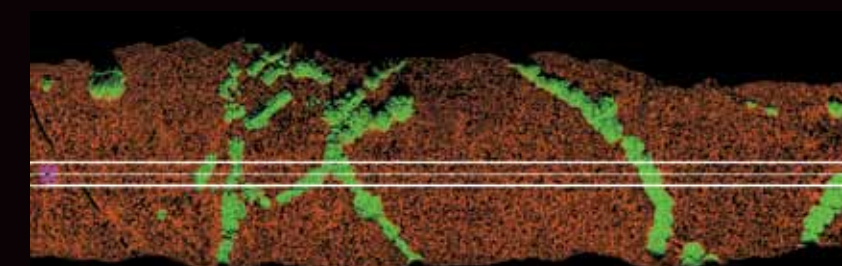


### Quarry & Mining

- Calculation of stockpile volumes
- Preparation of CAD quarry maps
- Pre and post blast comparisons
- Cavity and void calculations
- Toe and crest extraction
- Digitising of paper archives

### Utilities

- CAD plan and profile drawings inc: co-ordinates of towers, attachment points, and sag of wires
- Feature coded data sets for input into design applications (PLS-CADD)
- Automatic clearance surveys and danger detection of vegetation and features
- Crossing survey layouts
- 3D tower and span models



### GIS/Topography

- DTM's (Digital Terrain Models) and DEM's (Digital Elevation Models)
- Breakline identification & contour models
- Topographical layouts
- Survey data integration
- Cross section and long sections
- GIS positioned data sets (geodatabases)
- Conversion and update of legacy mapping
- Document scanning & format conversion