CASE STUDY

DISCIPLINE: REMEDIAL CONTRACTING/AERIAL SURVEYING AND 3D MODELLING
PROJECT: EARTHWORKS OPERATIONS
LOCATION: HOGMOOR
CLIENT: NATIONAL HOUSE BUILDER
VALUE: £100,000
DURATION: 8 WEEKS

Former sand quarry: Earthworks operations to use predominately site won material to backfill an existing former sand quarry.

SUMMARY

T&P Regeneration was approached by a national house building client who needed to find a cost-effective method of filling an approximate 30,000m^3 void present on site to a standard that would be suitable for the construction of residential properties.

SCOPE OF WORKS

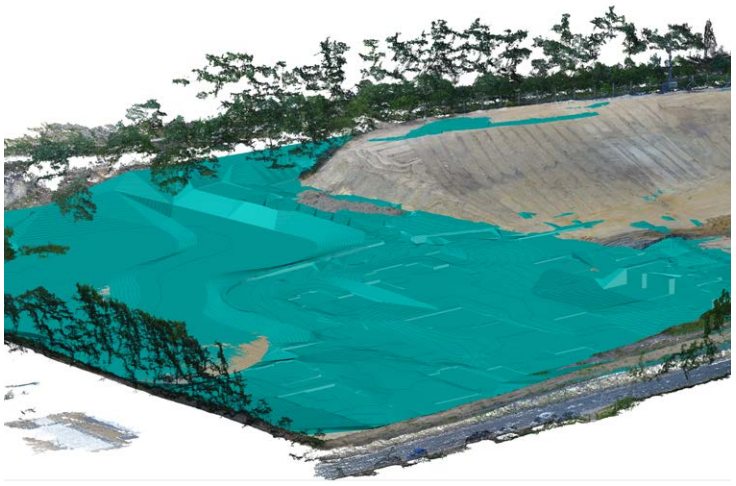
The scope of remedial contracting work included:

Assessment of on-site material from a geotechnical and environmental perspective to determine its suitability for reuse on site.

Production of a site-specific Earthworks Specification considering the potential for reuse of site won material through a Materials Management Plan (MMP). This enabled T&P Regeneration to provide a cost-effective method of reducing the volume of material that would need to be imported onto site to fill the void by 75%.

Groundworks including excavation of site won material and placement and compaction following the T&P Specification.

Geotechnical testing of the compacted layers throughout the works to demonstrate compliance. Environmental sampling was also undertaken to demonstrate that the material being used on-site would not pose a future risk to human health or the environment.



The scope of the aerial surveying and subsurface modelling work included:

Numerous aerial surveys throughout the project lifecycle to track site progress and allow accurate survey surfaces for live tracking of material volumes to be generated.

Gathering of site imagery for use within marketing material and eventual show home video reels.

Subsurface modelling of placed material, demonstrating placement thickness, geotechnical characteristics and testing locations/results.

OUTCOME

The full work package provided a streamlined audit trail to demonstrate the ongoing progress and success of the engineering infill operations. The use of aerial surveying allowed rapid computation of volumetric soil movements and aided in faster decision making between site personnel, the client and regulators.