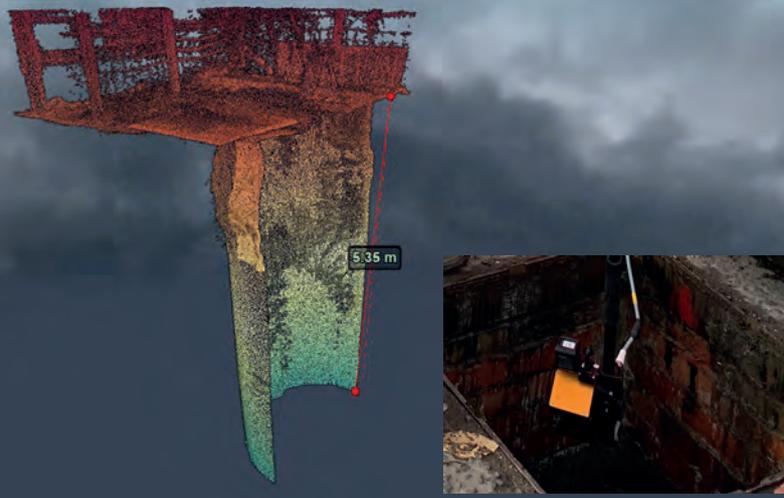


**Customer:**  
Enviroflow Management Ltd

**Project:**  
Managed motorway drainage  
survey

**Solution:**  
GeoSLAM ZEB-REVO, K-Mobile  
software, Trimble Geo7

# Case Study



clicks and was 'process led'.

3. Ability to create accurate internal 3D profiles of all the manholes without the risk of sending a surveyor into each chamber.

4. A streamlined, automated system that would enable Enviroflow to deliver data in real-time, directly to a portal where all the information on the scheme could be accessed remotely by the client.

### When technologies combine...

Mark had previously worked with KOREC on the successful delivery of an intelligence-based drainage maintenance programme. He therefore contacted the company confident that a solution for the

Smart Motorway tender could be found.

"We completed two weeks early thanks to a workflow that combined ease of use with a high degree of automation."

**Mark Jordan,**  
**Enviroflow**

The obvious starting point was KOREC's existing K-Mobile Drainage Edition software which had been designed for the efficient capture of connected drainage surveys and manhole inspections for the generation of STC25 manhole cards. Easy to use, with drop down picklists and

'process led' data entry, the software ran on a variety of handheld devices including tablets and smartphones. Based on



▲ Trimble Geo7 and K-Mobile Drainage Edition software

## When technologies combine, innovation happens

A tight schedule, along with health and safety considerations, were the drivers behind an imaginative and effective data capture solution that enabled waste management specialists Enviroflow to complete a managed motorway drainage survey just four weeks into a six-week project.

The M6 motorway is a key corridor in the Strategic Road Network (SRN) and the North West section is one of its busiest stretches. To ease congestion and improve traffic flow, a Smart Motorway scheme will see a 16km stretch of hard shoulder converted into a permanent live lane. The contract is worth approximately £150m and is due for completion by Spring 2021.

A tender was therefore put out for the collection of all drainage information required for the advanced design work between J21A and J26. This would include STC25 industry standard manhole cards (GPS location for cover levels, photographic evidence of asset condition with specifically highlighted areas, dimensions of inlets/outlets and other connections etc), backed up by 3D profiles of all manhole chambers and a CCTV drainage survey. Work was to be completed in live traffic, at night, and within a tight six-week window.

### Key to a successful drainage tender

The contract was won by Yorkshire based Enviroflow Management Ltd, a water management company that specialises in solving problems and removing risk from complex jobs by using a combination of new technology and a practical common-sense approach. The successful tender was led by Enviroflow Operations Director, Mark Jordan, who felt that the key to a successful submission would lie in the delivery of a system that could meet four important criteria:

1. A pen and paper free solution that would ensure high quality, consistent, digital STC25 standard data with no need for transcription or checking back at the office.
2. A system that reflected the needs of surveyors working at night on a tight schedule and was therefore, reliable, rugged, easy to use, required minimal

