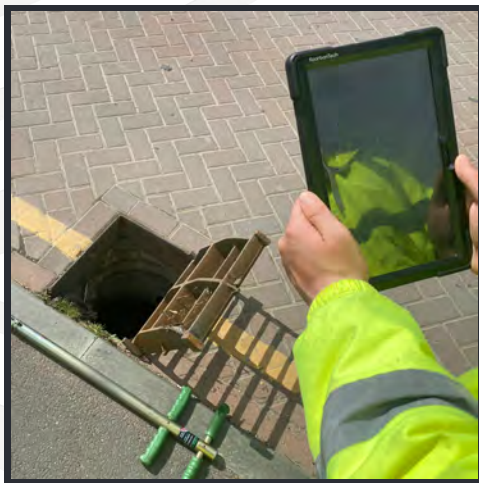


DRAINAGE INVENTORY SURVEYING

THE PROBLEM

As part of Dorset County Council's long-term plan to digitise their drainage network in order to introduce greater asset maintenance efficiencies, they secured additional funding from central government for a physical inventory and condition survey. The Dorset road network spans some 4,100 km, much of which has no digitally mapped drainage.

The council approached KaarbonTech to prioritise and complete a survey based on reviewing existing data, road hierarchy, access, productivity vs. detail, flood risk and road speed.



THE APPROACH

Existing data was incorporated into KaarbonTech's full drainage software which allowed a combination of desktop digitisation and physical surveys to be completed. Drainage connectivity, manhole configurations and dimensions were collected where possible.

The decision was made to lift all covers and record what information we could without the use of cleansing and CCTV survey vehicles. Due to the rural nature of the network and to observe traffic management regulations, we used a combination of walking, ATV or van surveying.

Safety was paramount due to the proximity of the road, so training, vehicle livery, PPE and methodology were all approved by 3rd party suppliers. 6-8 staff completed the survey over 7 months, completing 665 km of highway and collecting around 250,000 metres of drainage.

THE RESULT

During the survey 4 critical defects were found that could have caused serious injury. Each of these was reported within 2 hours and rectified by Dorset Council the following day.

Silt levels were also measured and reported to focus the gully cleaning teams. Audits were recorded and stored with the asset history as evidence. The complete data set was also imported into Pitney Bowes Confirm system which required KaarbonTech to extend existing Confirm databases.

