

MGISS Helps Highways Sector Adopt New Highways England Standards



Liverpool-based Mobile GIS Services (MGISS) has released a new toolkit specifically designed to help highways contractors adopt recently published Highways England standards. As part of the new Design Manual for Roads and Bridges (DMRB) – the ‘highways bible’ – the requirement to manage drainage asset data and conduct specialist drainage surveys has changed.

Designed to improve asset management, highways maintenance and reduce the risk of flooding and pollution, the new MGISS toolkit uses mobile devices running advanced mapping software to improve the planning of inspections, automate the collection of site data and facilitate the organization-wide use of drainage asset data.

Standards Document

“By using existing technology and workflows, we have been able to improve the efficiency of inspection planning, automate the capture of locationally-accurate, detail-rich data, and ensure that this information is usable and consumable throughout an organization,” commented Mike Darracott, managing director of [MGISS](#). “This ultimately leads to savings in time and resources, improved decision-making and better collaboration both within and between organizations.”

The [new DMRB](#) is designed to promote innovation in the design, construction and operation of the highway network. Essentially a standards document, it is hoped the new DMRB will reduce the need for departures from standard by around 60%, saving the equivalent of £10 million per year.

“To help the highways industry operate more efficiently, and to encourage more innovation, we have updated 300 standards used on a daily basis by anyone working on motorways and trunk roads,” commented Steve Davy, Highways England’s head of technical standards. “Anyone working on the design and maintenance of roads infrastructure will need to be aware of the changes.”

Requirements for Recording of Drainage Assets

As part of the newly published DMRB, standard CD535 defines the requirements for recording the inventory and condition of drainage assets and the management of flooding, pollution and cross-asset risks related to drainage, while CS551 provides the requirements for the specialist activity of surveying highway drainage systems by a number of different methods.

The MGISS solution specifically relates to these two standards, with tools to extract historical data from Drainage Data Management System (DDMS, previously known as HADDMS) surveys into ArcGIS online. This information can then be accessed in the field using a variety of internet-enabled devices to validate existing data and collect and record new information using Collector for ArcGIS and Survey 123 software. The MGISS tools are then used to extract inspection data, including photographs, back into the DDMS to complete a full ‘round-trip’.