

Environmental – Environment Agency River Tame, Flood Alleviation Scheme, Birmingham

Utility Location and Mapping Services

Client

Environment Agency and Associated Consultants



Drivers/Benefits

A need to minimise road closures/trial holes in rural areas (potentially causing long diversions for commuters).

40SEVEN Capabilities

Providing a fast, cost effective alternative to road closures and trial holes on rural narrow bridges. Full Utility Surveys were able to bring up any potential problems with the up and coming bridge improvements. Statutory Records did not provide Lancashire County Council with the confidence to start works and trial holes would add unnecessary road closures and extra cost for both Traffic Management and labour to the project.

Service

Street works and road closures can provide a Local Authority with bad PR should an apparent excessive amount of time be taken over a project.

Highways/Bridge improvements are an important part of every Local Authority where poor quality road surfaces can result in legal costs following any damage to private vehicles and pedestrians.

Other issues addressed by the sub-surface survey include :

- **H & S** – utility strike
- **Financial** – road closures and trial holes, repair costs to damaged utilities and delays to the project.
- **Bad PR** – road closures/delays – rural, therefore access

With many of its key projects being close to urban areas of dense population, buried utilities that supply the area are often nestled alongside an area where excavation works may be required. 40SEVEN has delivered extensive above and below ground surveys of the extents of a proposed scheme in order to mitigate the risks involved, which can include :

- **Health & Safety** – in the case of a pipe or cable strike
- **Environmental** – pollution prevention from contamination
- **Financial** – the cost of repair of any damaged services, potential cost of 'disconnection', delay and possible re-routing of services
- **Poor Publicity** – in the case of unplanned road closures, potential evacuations, interrupted service from utilities

40SEVEN were contracted to carry out a comprehensive survey of a section of River Tame at Birmingham in order to support an evaluation of the proposed increasing of flood defences at this location.

Summary

The comprehensive survey, which was conducted over a three week period, included the Topographical Survey of the land and profile of the riverbed, a Full Utility Location and Mapping Survey using both Electromagnetic Location Equipment and Ground Penetrating Radar (GPR) in order to locate both metallic and non-metallic buried services. The results were presented as hard copy drawings in plan and cross-section form as well as electronic AutoCAD dwg. format with data being made available for use with modelling software such as MX.

If you are interested in finding out more about how we can help with your project, please contact us on t: 08450 179 300 or alternatively email: info@40seven.com.