



NJUG CASE STUDY

CASE STUDY 18: Modernising Manchester's Water Network

The National Joint Utilities Group (NJUG) is the UK industry association representing utilities on street works issues. The thirty-eight utility companies¹ we represent work to deliver gas, electricity, water and telecommunications to both individual consumers and UK plc.

NJUG members need to continue to drive forward further improvements. We have therefore developed the NJUG Vision for Street Works, which revolves around six main principles:

1. Safety is the number one priority
2. Damage to underground assets is avoided
3. Utilities work together and in partnership with local authorities to minimise disruption
4. Utilities deliver consistent high quality
5. Utilities maximise the use of sustainable methods and materials
6. Street works in the UK are regarded as world class

This case study is an example of NJUG delivering on these principles and turning the Vision into a reality.

Overview:

As part of United Utilities commitment to improving its services to customers, the company began a two-year programme of works in the summer of 2007 towards investing £8 million in Manchester's water network. This has involved replacing old cast iron pipes with new plastic ones throughout Manchester city centre.

A large proportion of Manchester's pipes were in need of replacing, with most dating back to Victorian times. Corroded cast iron water pipes are often the cause of low water pressure and discolouration problems. It was therefore agreed that replacing them would not only improve water quality, but also reduce the number of bursts on the water network, giving Manchester a water network fit for the 21st century, bringing real long term benefits to local businesses and the community.



Case Study:

United Utilities began replacing 43km of water pipes along some of the major routes in Manchester's city centre in July 2007.

The scale of the programme is a great challenge and one of the company's key tasks is to minimise any disruption the work may cause to customers. For this reason, they are replacing the pipes using the latest techniques. In most cases, engineers use a technique called 'slip-lining'.

Slip-lining is the term used for when new plastic pipes are inserted into existing cast iron ones. This is a more cost effective way of replacing or repairing corroded pipes (and a lot less disruptive), as there is no need to dig

¹ NJUG's current members are Energy Networks Association (representing electricity and gas), Water UK (representing all water and wastewater companies), National Grid, Openreach, Virgin Media and THUS, a Cable and Wireless Business. Our associate members are Clancy Docwra, Skanska McNicholas, Balfour Beatty, Morrison, Morgan Est, NACAP, PJ Keary, First Intervention, Carillion, Enterprise and Laing O'Rourke. Including members through trade associations, NJUG represents thirty-eight utility companies.

up the road or footpath to lay a new pipe. An access hole is created to gain entry to the existing pipe and the new pipe is inserted inside it.

Since the works began, there has inevitably been some disruption to motorists on the main routes, but United Utilities have worked closely with Manchester City Council and other utilities to carry out the work in a co-ordinated and efficient manner to keep disruption to a minimum. For example, on occasion it has been necessary to turn off water supplies temporarily. When this is required, action has always been taken in advance to sufficiently warn customers.

To keep all parties up to date on the progress of the works, United Utilities has made use of the media, the company website, and also its mobile visitor centre. The latter has moved throughout the city at regular intervals, offering customers the opportunity to discuss the scheme and any issues they may have with one of United Utilities' representatives.

Up to date information on United Utilities operations can be accessed at www.unitedutilities.com/manchester.

