



Taking care of your sewer network

Kinfauns Drive Sewer Repair Project

Welcome to this newsletter for our £2.5 million improvement project in Kinfauns Drive. We are taking care of the waste water services in your community by repairing the sewer network to help protect the environment.

Drumchapel Community Council Message

We want to take this opportunity to thank everyone in the Drumchapel area for their patience with regards to the road closure on Kinfauns Drive (near to the shopping centre).

This has been extremely frustrating for everyone, especially during a pandemic. We hope this major piece of complex engineering work can be completed as soon as possible.

The scale of these works has been immense, and work is being undertaken to help prevent any of the issues experienced reoccurring at a future date. Reopening dates have been delayed for several reasons which are highlighted in this newsletter.

Project Overview

On 9th March 2020, Scottish Water responded to reports of a burst water main outside the West Centre on Kinfauns Drive. After isolating the main, Scottish Water engaged with its delivery partners to initially assess the situation, restore water supplies, and carry out the repair.

Through the initial assessment it became clear that the problems were much more serious than initially anticipated. The main sewer was affected, as well as other assets belonging to multiple parties.

Utility Diversions

Before investigations could commence, the gas supplies to Drumchapel Health Centre had to be

diverted and power cables supplying Drumchapel Shopping Centre had to be re-routed. This allowed the safe demolition of a gas meter building, while keeping the supply live to the Health Centre. Only once the area was made safe to excavate could investigations begin.

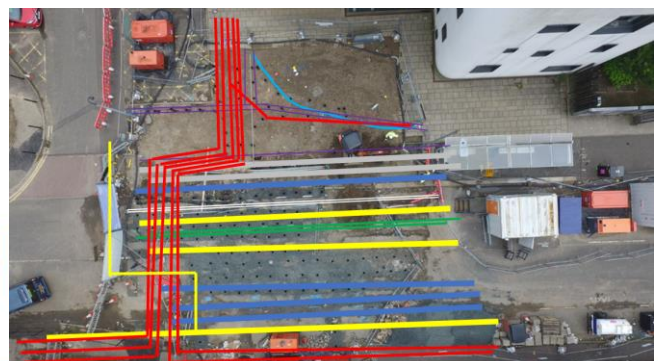
Gas Meter House Demolition

Working with the NHS, we managed to keep Drumchapel Health Centre open while their gas supplies were diverted. The existing meter house was demolished as soon as the supplies were moved.



Utility Location

From available records it was clear that there were numerous major utilities passing through the area. There were also numerous cables, pipe and ducts that were uncharted which had to be identified and traced throughout the site. In total, over 40 separate items of utility apparatus were discovered, many of which provide the main supplies of water, gas, power, broadband and TV to the Drumchapel area. Extreme caution was required to ensure these customer supplies were not interrupted.



Investigations

Investigations were carried out to locate any nearby mineshafts. Once it was deemed safe to carry out exploratory boreholes and excavations, it was found that the material making up the soil below the ground was very weak.

Further investigations concluded that a source of water had weakened the soil to such an extent that it could no longer support the utilities in the ground. This is what caused the original damage.

Ground Stabilisation

Many options were considered but only one was deemed to be feasible. The method, known as compaction grouting, was selected as this was thought to have the highest chance of success in the shortest timeframe. This involved drilling over 1500 holes into the ground at various depths to inject a geopolymer resin into the soil. This foam like material expanded and compacted the soil between the injection points making it stronger and able to carry the necessary loads.



Utility Repairs

Once the ground was strong and stable enough, multiple utilities required alteration and repair. Scottish Gas, Virgin Media and BT all required repairs to their assets. As the repairs to these utilities were less demanding than those to Scottish Water assets, these were carried out first.

Scottish Water pipelines are among the most heavily affected and need the largest amount of works in order to be repaired. Works on the 15" water main are ongoing, with further works required to ensure the quality of water it supplies meets the strictest standards.

Difficulties Faced

This project has proven to be a major challenge for everyone involved. What was already a difficult project has been made even more difficult by the restrictions faced during the coronavirus pandemic.

One of the largest challenges on this project has been working around the multitude of underground pipes and cables. Extreme caution is needed so that they are not damaged by the works and vital utilities are unaffected.

Remaining Works

Over the summer months repairs to the sewer network will be carried out 7 days a week. This will involve a large excavation outside The West Centre and the installation of a tunnel under Kinfauns Drive to replace the existing damaged pipes.

Once this has been completed, the road will be excavated to depths of approximately 1m. This is to allow a layer of stone and strengthening grid to be laid before the road surface is reinstated.

Once completed, the surrounding area will be reinstated to its former layout and it is anticipated that the road will re-open to traffic from mid-September 2021.

Making contact

If you would like to contact Scottish Water in relation to this project, you can:

Phone: Customer Helpline 0800 0778 778

Email:

MDcommunicationmanagement@scottishwater.co.uk

Please quote reference: **Capital/505675/Mackenzie** in any communication.

Drumchapel Community Council

Phone: 0734 025 9889

Email: contact@drumchapel.scot