



Client:



Location:

Edinburgh, Scotland



Products Used:



SOUNDEX®  
Noise Control



MONITEX®  
Monitoring Solutions

## Specialist Noise Control Solutions Supports a Major Sewer Replacement Project

### Project Overview

The Clancy Group provide infrastructure support to the utilities, civil engineering, traffic management and plant sectors. On this particular project, The Clancy Group were tasked by their client to carry out major sewer replacement works. This project required a road closure in the city centre of Edinburgh, near to Haymarket Station. The area features a number of hotels, guest houses, as well as residential properties immediately adjacent to, and over looking the site, as well as pedestrians walking past regularly.

The full scope of the project was to replace a 60m stretch of sewer pipes, working in 12m sections at a time. Equipment being used included a hydraulic breaker attached to a digger to break up sections of the road, followed by vacuum excavation to safely excavate around the underground utilities. Both of these activities would create significant noise pollution.

### Challenge

The Clancy Group identified noise control was imperative to the job due to the excessive noise levels being created. Protecting the hearing of the workers, hotels guests, residents and pedestrians was imperative throughout the project.

Hydraulic breakers are high performing mechanical devices used to demolish concrete. When in use they can create noise pollution reaching between 120-130dB. When noise levels reach 85dB or above, employers must provide hearing protection, and hearing protection zones.

Following the use of the hydraulic breaker, a vacuum excavation was used to safely excavate around the underground utilities, this was going to create substantial noise, causing disruption.

## Benefits of SOUNDEX® noise control solutions

- All SOUNDEX® products use made with fire resistant materials.
- The patented SOUNDEX® design incorporates a Velcro connection enabling faster installation, and a virtually unbroken noise barrier.
- SOUNDEX® acoustic barriers are certified to conform with BS7955 making them suitable for suspension on scaffolding, other structures, fences or hoardings.
- Our noise solutions have water resistant technology of the highest integrity making the equipment safe to suspend from secondary structures.
- Independently tested and certified to BS EN standards, SOUNDEX® offers the highest attenuation in the industry with noise reduction up to 59.9dB.
- All SOUNDEX® products are manufactured to ISO 9001, ISO 14001 and ISO 45001 standards in the UK.



**MONITEX® Environmental Noise Monitor in use on the project.**

## Solution

RVT Group carried out a free site survey to truly understand the challenges Clancy Group were facing. Our experienced consultants were then able to provide a bespoke, effective noise control solution suitable for the project.

RVT installed a SOUNDEX® Breaker Shroud for the hydraulic breaker activities.



**SOUNDEX® Breaker Shroud in use on the project.**

The SOUNDEX® Breaker Shroud was used for its effective ability in creating acoustic shadows, and providing a noise reduction of up to 32.2dB. The SOUNDEX® Breaker Shroud is made up of an acoustic roof and walls, these create an acoustic shadow that absorb the soundwaves and prevent them from travelling. This reduces the level of noise that is heard in the 'shadow zone', which is anywhere outside the shroud. With this equipment being on wheels, it was easy for the contractor to erect the equipment on top of the hydraulic breaking as the works moved along the 60m stretch.

The vacuum excavation activities provided a more difficult challenge. Due to the size of the lorry and what's involved with vacuum excavating, noise control on top of the works is not possible. RVT provided eight SOUNDEX® Acoustic Quilts to reduce the noisy activities.



**SOUNDEX® Acoustic Quilts in use on the project.**

The SOUNDEX® Acoustic Quilt provided a reduction in noise of up to 28.2dB. The acoustic quilt fit perfectly on to the temporary fence panels, creating an acoustic and visual screen between the noisy works and the immediate area outside the site.

The final solution RVT Group provided was the MONITEX® Environmental Noise Monitor. This unit measures a considerable sound in a range between 30dB to 120dB with a highly accurate response. Throughout the project, the monitor provided live data and reporting, giving the contractor data that could demonstrate they were doing all that was possible to reduce the noise levels throughout this project.

Following the implementation of RVT Group's solutions, The Clancy Group successfully reduced the noise levels that workers, hotels guests, residents and pedestrians were exposed to.