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No Compromise
When It Comes to
The Cost Effective
Renewal Of Drainage
Pipes

ROBOTIC CUTTING

Preparation of host pipe using the ultimate Prokasro cutting equipment.

UV LINING

Pipe rehabilitation using Ultra violet light.

SUMMARY

Break down of works completed on Hanger Lane. Please see cctv report appendix 1.

Hanger Lane Robotic Cutting

MD Infrastructure support services were recently commissioned by a principal Contractor (Vinci Construction UK Ltd) to Transport For London to rehabilitate surface water pipes running beneath one of the busiest roads in London; Hanger Lane.

The pipes in question were 150 mm diameter VC pipes running from roadside gullies to unknown positions through out the network.

To begin with, MDISS used one of their 32t dirty water recyclers and off road reels to de-silt the drainage lines without

causing any disruption to traffic movement.

The off-road hose reels are 3.5 dumper conversions with an auxiliary hose which can be fed from the main recycling unit.

Post de-silt CCTV revealed that all the siltation had been removed however it also revealed that mass and tap roots were growing throughout the system.

MDISS quickly deployed their Prokasro 4.0 Robot to cut out the roots.

As this robot is able to cut with full movement in pipe sizes down to 130 mm it quickly and effortlessly removed the roots from the system to enable the following Ultra Violet pipe line rehabilitation works to be carried out.

ROBOTIC CUTTING



Left: Roots within Pipe
Top: Operating Cutting Rig
Middle: Robotic Cutter
Bottom: Off Road Reel.

UV LINING



MDISS UV Lining

TOP; UV Liner Setting Up.
Middle; UV Pod
Bottom; Inserted UV Liner
Right; UV Control Panel

UV Lining

Due to the location and condition of the pipes Transport for London were aware that removal of the roots was only a short term measure as it was inevitable that the roots would soon grow back.

To prevent re-growth of the roots MDISS recommended the installation of glass fibre reinforced structural liners.

These liners would then provide a 70 year guarantee against any further defects and root intrusion.

Based on this guarantee and the proven track record of MDISS the instruction was given to proceed with the installation of the liners and to cure with **Ultra Violet Light**.

The UV Liners are glass fibre pre-impregnated liners with a quality that is second to none.

All sewer pipes are individual. they all have different dimensions,

profiles, special requirements regarding aggressive flows and mechanical load bearing capabilities-there is a long list of local condition differences.

Flexible solutions are therefore in demand in order to save time and money and to ensure the long working life.

Both its excellent material characteristics and the extremely economical installation method satisfy the highest requirements with regard to modern sewer pipe rehabilitation.

One thing is for certain, in most cases these days, the rehabilitation of sewer pipes no longer means that entire streets have to be paralysed for several weeks at a time due to excavation work.

Major inconvenience to a large number of homes and commercial buildings can also be avoided.



SUMMARY

MDISS Successfully completed;

Jetting & CCTV

- Successfully completed over 200m of de-silting and CCTV works including data capture cards on all assets surveyed.

Civils

- De - Vegetation of 2 x 52m ditches

REHABILITATION

- 3m/150mm VC Pipe - MH4 to G15
Robotic cut and lined.
- 12m/150mm VC Pipe - MH4 to OF2
Robotic cut and lined.
- 14m/150mm VC Pipe - G13 to OF1
Robotic cut and lined.



MID INFRASTRUCTURE SUPPORT SERVICE

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BRIDGEND

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