

CASE STUDY



Project: Blockage clearance

Sector: Sport and leisure

Client: Leeds United Football Club

Location: Elland Road, Leeds, West Yorkshire



THE CHALLENGE

Grounds staff at Leeds United FC had been battling worsening pitch drainage problems underneath the West Stand during the 2015-16 season. They had even feared matches might be called off.

Playing styles had to continuously adapt to changing conditions. Sports pitch experts had recommended that the drainage and underground heating system would have to be replaced, at a cost of over £600,000. Before taking this drastic step, the club sought a second opinion from UKDN Waterflow (LG) Ltd.

THE SOLUTION

- ▶ Carry out a CCTV drainage survey of the network of perforated plastic drainage pipes alongside and under the pitch
- ▶ Analyse the images and data to locate hidden assets – chambers and silt traps – that might be blocked or damaged, and so causing the problems
- ▶ Clean and repair the assets so they worked properly.

“The work done by UKDN Waterflow (LG) was very impressive. We believe they’ve extended the life of our pitch drainage system by five years or more. We were potentially facing a huge bill and a great deal of upheaval. Now our plans for preparing an excellent playing surface for next season are on track, and we have confidence in the long-term performance of our pitch drainage system.”

Kiel Barrett, Head Groundsman, Leeds United FC

THE CUSTOMER

Leeds United Football Club plays in the Championship, the second tier of professional football in England. It is one of the most successful football clubs in the history of English football. The club plays at the Elland Road Stadium, which has a capacity of 39,460.



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We are UKDN Waterflow (LG) Ltd

We are part of Lanes Group plc, the UK's largest independent supplier of specialist drainage and structure maintenance solutions.

We have two operational hubs, in Birmingham and Slough, Berkshire, and 10 depots delivering a national clean water and drainage maintenance and engineering service.





CASE STUDY CONT.

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THE IMPLEMENTATION

It was apt that good teamwork was central to the project's success. A CCTV drainage survey team from UKDN Waterflow (LG) worked with a jet vac tanker crew from the Lanes Leeds depot.

Project lead Dave Flowers first listened carefully to what the grounds team knew about the pitch drainage. What was known, and what might be hidden.

About 500m of the perforated plastic 100mm diameter drainage pipe running out to the centre of the pitch was cleaned by the jet vac tanker team, then surveyed using a push-rod camera.

Careful analysis of the HD video survey footage identified the location of a hidden silt trap that grounds staff said they believed was next to the pitch near the halfway line. This was excavated and found to be blocked.

The UKDN Waterflow (LG) team had a hunch that there was a second hidden silt trap, not known to the grounds team. Further investigation found it, at one end of the pitch. This was also excavated and found to be blocked.

Both silt traps were dug out, then fitted with new access chambers. This will allow quick and easy access to the silt traps in future, so they can be kept clean and clear.

During the excavation work, the underground heating system had to be carefully disconnected and reconnected.

THE RESULTS

- ▶ Since the work was completed, the pitch has been reseeded, and heavily watered – and for the first time in years, both sides of the pitch are draining evenly.
- ▶ The grounds team is confident that the drainage problem has been solved at a tiny fraction of the cost of replacing the drainage system
- ▶ The Leeds United team can look forward to playing one style of attractive football on an ideal pitch, all year round
- ▶ UKDN Waterflow (LG) is now talking to Leeds United FC about providing a planned and preventative maintenance programme to keep the drainage system in optimum condition.



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Front cover – The UKDN Waterflow (LG) CCTV drainage survey engineer gets to work capturing HD video of the pitch drainage system.
This page – A Lanes Group jet vac tanker crew prepares to clean the pitch drainage pipes.