

CASE STUDY



# Culvert 34 Whitchurch Canal Breach Site

*Culvert Cleaning & CCTV Survey | Kier NR&N*

**50m**

Culvert Length

**8 Days**

Completed In

**£19,490**

Contract Value



# PROJECT OVERVIEW



Excavated culvert inlet - breach site

## PROJECT REF

**LA-022-003 Culvert 34**

## LOCATION

**Whitchurch, SY13 1RS**

## CLIENT

**Kier - NR&N Networks**

## PROJECT TYPE

**Culvert Cleaning & CCTV Survey**

## CONTRACT VALUE

**£19,490**

## PROGRAMME

**Est. 10 Days - Delivered in 8**

# SCOPE OF WORKS



*IPEK CCTV survey crawler inside brick culvert*

*Culvert cleaning and CCTV survey following a major breach on the Llangollen Canal, restoring drainage and assessing structural condition.*

1

## **Culvert Clean & CCTV**

~50m of 1200mm x 1200mm brick culvert cleaned and surveyed to full WRc standard

2

## **Downstream Twin Pipes**

~33m of twin 225mm clay pipes cleaned and CCTV completed (Stage 2)

3

## **100% Silt Removal**

All pipes 100% full of debris due to the breach - finished silt levels reduced to less than 10%

4

## **Portable Equipment Deployed**

Kaiser Whale recycling unit, remote reel, de-watering pump and portable IPEK system utilised due to access constraints

# KEY CHALLENGES & HIGHLIGHTS



*Kaiser Whale recycling unit - remote field deployment*



*De-watering setup at culvert outlet with twin pipe connection*

## Difficult Access

Inlet side became a sand pit from the canal breach. Outlet accessed via active plant track across wet farmland, requiring full portable setup.

## Live Site Co-ordination

Works ran in tandem with ongoing major earthmoving operations, requiring continuous programme co-ordination to keep both scopes on track.

## Technical Complexity

Culvert location and 100% silt blockage required multiple equipment configurations and expert planning to safely clean and survey.

# SITE PHOTOGRAPHY



*Silent reel unit - remote deployment in field*



*MRMS mobilisation to breach location*



*Exposed brick culvert arch at inlet - pre-clean*

## PROJECT SUMMARY

**Culvert cleaned, CCTV completed, and drainage restored - allowing water to drain naturally off the field and the watercourse to function as intended.**

**50m**

Culvert Cleaned

**33m**

Twin Pipes Cleaned

**8 Days**

Programme Delivered

**<10%**

Final Silt Level

LA-022-003 | Kier - Natural Resources & Nuclear Networks | Whitchurch, SY13 1RS