

DRAIN 247

A Trusted Family-Run Drainage Business in Watford

CCTV Inspection Report

CCTV DRAIN SURVEYS - DOMESTIC & COMMERCIAL



Call 0208 387 5591 | Drain 247

SITE ADDRESS

44 Clarendon Road

Job Number: JB010XX

Client Job Number: **JB010XX**

Job Number
JB010XX

Surveyed by (Operator)
TG/CM

Base Unit
CAMERA UNIT

Date
17/03/2026

Client Details:

CLIENT DETAILS
SITE ADDRESS

Client Contact Name: CLIENT DETAILS
Client Contact Tel:

Site Details:

SITE ADDRESS

Site Contact Name: CLIENT DETAILS
Site Contact Tel:

Contractor Details:

Civil Connect PLC
Kinetic Business Centre
Theobald Street
WD6 4PJ

Office Contact Number: 0800 488 0658

Purpose of Survey:

CCTV survey and Drain mapping

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
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24 March 2026

CLIENT DETAILS
SITE ADDRESS
JB010XX

CONDITION SURVEY REPORT

Further to your recent instructions, our engineers attended the site and carried out CCTV Drain Inspection and drain mapping to determine the condition and layout of the underground drainage system at SITE ADDRESS.

Upon completion of the CCTV survey, it was confirmed that the drainage system on site forms part of a **private separate foul system**. Based on the observations recorded during the survey, this section of drainage infrastructure serves the property privately and is therefore considered to fall within the responsibility of the property owner for ongoing maintenance, repair, and any remedial works identified, including defects recorded within the surveyed area.

For clarification, drainage infrastructure is typically classified as **public** once it extends beyond the property boundary and either becomes shared with neighboring properties or connects directly to the adopted public sewer or storm water network. At this point, responsibility generally transfers to the relevant local water authority, who assume responsibility for the maintenance and management of that section of the network.

Based on the findings outlined above, the manhole identified as **MH1 Downstream, after approximately 14.34m**, has been confirmed as forming part of the **public separate foul system**. As such, any defects or issues identified within this section should be reported directly to the relevant local water authority, as they are responsible for the inspection, maintenance, and repair of public sewer assets.

Prompt reporting is recommended to allow the water authority to assess the condition of the asset and undertake any necessary remedial works, helping to prevent potential system deterioration or failure and maintain the integrity of the wider drainage network.

Additionally, the drainage system is constructed from **Vitrified clay**, with pipework diameters of **100mm and 150mm**.

These conclusions are based on the CCTV survey observations and site conditions available at the time of inspection.

In our assessment, **the sections of the pipe works that fall under your responsibility are in a reasonable condition and are classed as serviceable**. However, the CCTV survey has identified:

- I Medium displaced joints and settled deposits in MH1 Downstream to Main sewer (Defects are within the property boundary)

Therefore, we recommend the following actions to restore and maintain the **private foul system's** efficiency:

1. **Intensive High-Pressure Water Jetting:** To remove the settled hard deposits and ensuring the system is fully cleared and preventing future blockages.
2. **Structural Patch Lining:** To seal all the the displaced joints identified during the survey. This repair will help extend the lifespan of the existing system and ensure its continued structural integrity.
3. **Post-Cleaning & Repair CCTV Survey:** After completing the intensive cleaning and structural patch lining, we suggest conducting another CCTV survey to thoroughly assess the condition of the pipework.

These measures will restore the drainage system to optimal performance, ensuring it remains watertight, free-flowing, and fully functional, ultimately safeguarding against future issues.

COST ESTIMATE:

We anticipate completing the intensive cleaning, structural patch lining, and post-cleaning & repair CCTV survey outlined above within 1 shift, with an estimated cost of £X

BREADOWN OF COST:-

- | **Intensive High-Pressure Water Jetting and post- cleaning & repair CCTV Survey**
- | **Installation of 13 Structural Patches (150mm x 500mm)**

GUARANTEE:

- | All replacement remedial works are guaranteed for 5 years from the date of completion.
- | All structural and patch-lining works are guaranteed for 10 years from the date of completion.

DISCLAIMER:

Drain 247 has diligently conducted a comprehensive survey, detailing all significant observations and, where applicable, recommending appropriate remedial actions. However, we disclaim any liability for misinterpretations of the information by third parties. Please note that the conditions described in this report reflect only those observed on the days of the survey.

The primary recording of this report will be securely stored on www.itouch-live.com for a duration of 30 days following the survey date, with additional copies available upon request for purchase. Subsequently, the primary recording may be permanently deleted.

Quotations provided for any necessary remedial actions within this report will remain valid for 30 days only from the survey date.

Should certain sections of the drainage system remain inaccessible due to the current condition of the pipework, further recommendations may be required and the cost of repairs may be subject to adjustment.

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
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Job Information

Total Distance Surveyed: 24.75 meters
 Engineer: TG/CM
 Number of Surveys: 4
 Number of Surveys grade 4 or above: 0

Section 1 Overview (17/03/2026)

Manholes: MH1 to CAPPED OFF
 Pipe Length: 1.21 metres
 Structural Grade: 0
 Service Grade: 0
 Material: Vitrified clay
 Pipe Size: 150mm
 Use: Foul

CAPPED OFF

Section 2 Overview (17/03/2026)

Manholes: MH1-BC1 to BOTTOM STACK
 Pipe Length: 0.02 metres
 Structural Grade: 0
 Service Grade: 0
 Material: Vitrified clay
 Pipe Size: 100mm
 Use: Foul

LINE CLEAR

Section 3 Overview (17/03/2026)

Manholes: MH1-BC2 to BOTTOM STACK
 Pipe Length: 4.45 metres
 Structural Grade: 0
 Service Grade: 0
 Material: Vitrified clay
 Pipe Size: 100mm
 Use: Foul

LINE CLEAR

Section 4 Overview (17/03/2026)

Manholes: MH1 to MAIN SEWER
 Pipe Length: 19.07 metres
 Structural Grade: 3
 Service Grade: 3
 Material: Vitrified clay
 Pipe Size: 150mm
 Use: Foul

PRIVATE UNTIL APPROX. 14.34m- REQUIRES 13 PATCHES AND HPWJ

Surveyed by (Operator) TG/CM	Job Number JB010XX	Pipe Length Reference(PLR) CAPPED OFFX	Date 17/03/2026	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit CAMERA UNIT	Section Number 1
Road SITE ADDRESS Place Location		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 150mm Material Vitrified clay Category		Start Node MH1 End Node CAPPED OFF Total length 1.21 metres	
Scale 1:0.06 Direction Upstream				

Start Node Ref:MH1 | I/L :mm | Depth: 820mm

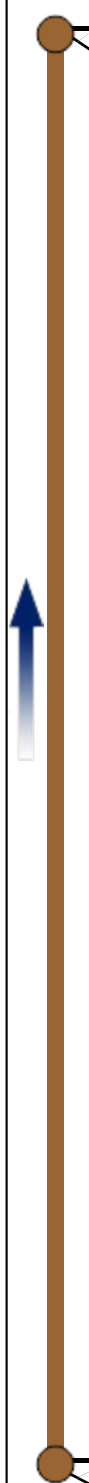
Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH1	14440373	Comment / 0
0.00	WL	Water level 0% height/diameter	14440374	Comment / 0
0.60	REM	LINE CLEAR	14481221	Comment / 0
1.21	SA	Survey abandoned - Remark: CAPPED OFF	14440375	Comment / 0

End Node Ref:CAPPED OFF | I/L :mm

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
 0.00 M Start node type, manhole, reference MH1			
 0.00 M Water level 0% height/diameter			
 From: MH1 / To: CAPPED OFF Size: 150mm 0.60 M LINE CLEAR			
 From: MH1 / To: CAPPED OFF Size: 150mm 1.21 M Survey abandoned - Remark: CAPPED OFF			

Surveyed by (Operator) TG/CM	Job Number JB010XX	Pipe Length Reference(PLR) BOTTOM STAX	Date 17/03/2026	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit CAMERA UNIT	Section Number 2
Road SITE ADDRESS Place Location		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category		Start Node MH1-BC1 End Node BOTTOM STACK Total length 0.02 metres	
Scale 1:0.00 Direction Upstream				

Start Node Ref:MH1-BC1 | I/L :mm | Depth: 820mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH1-BC1	14440378	Comment / 0
0.00	WL	Water level 0% height/diameter	14440379	Comment / 0
				
0.02	REM	LINE CLEAR	14481227	Comment / 0
0.02	BRF	Finish node type, major connection without manhole, reference BOTTOM STACK	14440380	Comment / 0

End Node Ref:BOTTOM STACK | I/L :mm

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
 Start node type, manhole, reference MH1-BC1		 Water level 0% height/diameter	
From: MH1-BC1 / To: BOTTOM STACK Size: 100mm  LINE CLEAR		From: MH1-BC1 / To: BOTTOM STACK Size: 100mm  Finish node type, major connection without manhole, reference BOTTOM STACK	

Surveyed by (Operator) TG/CM	Job Number JB010XX	Pipe Length Reference(PLR) BOTTOM STAX	Date 17/03/2026	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit CAMERA UNIT	Section Number 3
Road SITE ADDRESS Place Location		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category		Start Node MH1-BC2 End Node BOTTOM STACK Total length 4.45 metres	
Scale 1:0.23 Direction Upstream				

Start Node Ref:MH1-BC2 | I/L :mm | Depth: 820mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH1-BC2	14440381	Comment / 0
0.00	WL	Water level 0% height/diameter	14440382	Comment / 0
0.83	REM	LINE CLEAR	14481252	Comment / 0
1.64	REM	LINE CLEAR	14440383	Comment / 0
2.81	REM	LINE CLEAR	14481265	Comment / 0
3.17	CN	Connection other than junction at 9 o'clock, diameter 40mm	14440384	Comment / 0
3.67	LR	Line of drain/sewer deviates right	14440386	Comment / 0
4.07	REM	LINE CLEAR	14481271	Comment / 0
4.45	BRF	Finish node type, major connection without manhole, reference BOTTOM STACK	14440388	Comment / 0

End Node Ref:BOTTOM STACK | I/L :mm

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
 0.00 M Start node type, manhole, reference MH1-BC2			
 0.00 M Water level 0% height/diameter			
From: MH1-BC2 / To: BOTTOM STACK Size: 100mm  0.83 M LINE CLEAR			
From: MH1-BC2 / To: BOTTOM STACK Size: 100mm  1.64 M LINE CLEAR			
From: MH1-BC2 / To: BOTTOM STACK Size: 100mm  2.81 M LINE CLEAR			
From: MH1-BC2 / To: BOTTOM STACK Size: 100mm  3.17 M Connection other than junction at 9 o'clock, diameter 40mm			

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
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Line of drain/sewer deviates right



LINE CLEAR



Finish node type, major connection without manhole, reference BOTTOM STACK

Surveyed by (Operator) TG/CM	Job Number JB010XX	Pipe Length Reference(PLR) MH1	Date 17/03/2026	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/3	Base Unit CAMERA UNIT	Section Number 4
Road SITE ADDRESS Place Location			Division District Location Details	
Purpose Duty Foul Catchment		Shape/Size 150mm Material Vitrified clay Category		Start Node MH1 End Node MAIN SEWER Total length 19.07 metres
Scale 1:1.00 Direction Downstream				

Start Node Ref:MH1 | I/L :mm | Depth: 820mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH1	14440391	Comment / 0
0.00	WL	Water level 0% height/diameter	14440393	Comment / 0
0.21	JD	Joint displaced 15mm	14440394	Structural / 3
0.43	JD	Joint displaced 15mm	14440395	Structural / 3
1.45	JD	Joint displaced 15mm	14440396	Structural / 3
2.38	JD	Joint displaced 15mm	14440397	Structural / 3
3.62	DESJ	Settled deposits fine 10% cross-sectional area loss, at joint	14440398	Service / 3
4.21	JD	Joint displaced 15mm	14440399	Structural / 3
4.83	DESJ	Settled deposits fine 10% cross-sectional area loss, at joint	14440400	Service / 3
6.12	JD	Joint displaced 15mm	14440401	Structural / 3
6.12	DESJ	Settled deposits fine 10% cross-sectional area loss, at joint	14440402	Service / 3
6.67	JD	Joint displaced 15mm	14440403	Structural / 3
7.24	JD	Joint displaced 15mm	14440407	Structural / 3
7.88	JD	Joint displaced 15mm	14440409	Structural / 3
8.64	JD	Joint displaced 15mm	14440410	Structural / 3
9.14	JD	Joint displaced 15mm	14440430	Structural / 3
9.83	JD	Joint displaced 15mm	14440432	Structural / 3
10.40	JD	Joint displaced 15mm	14440434	Structural / 3
12.14	RFJ	Roots fine, at joint	14440435	Service / 2
12.14	JD	Joint displaced 5mm	14487239	Structural / 1
12.71	JD	Joint displaced 15mm	14440436	Structural / 3
13.93	JD	Joint displaced 15mm	14440437	Structural / 3
14.60	JD	Joint displaced 15mm	14440438	Structural / 3
15.21	JD	Joint displaced 15mm	14440439	Structural / 3
15.71	JD	Joint displaced 15mm	14440441	Structural / 3
16.21	JD	Joint displaced 15mm	14440445	Structural / 3
19.07	LHF	Finish node type, lamphole, reference MAIN SEWER	14440447	Comment / 0

End Node Ref:MAIN SEWER | I/L :mm

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
 0.02 M Start node type, manhole, reference MH1			
 0.02 M Water level 0% height/diameter			
From: MH1 / To: MAIN SEWER Size: 150mm  0.21 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  0.43 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  1.45 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  2.38 M Joint displaced 15mm			

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
From: MH1 / To: MAIN SEWER Size: 150mm  3.62 M Settled deposits fine 10% cross-sectional area loss, at joint From: MH1 / To: MAIN SEWER Size: 150mm  4.21 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  4.83 M Settled deposits fine 10% cross-sectional area loss, at joint From: MH1 / To: MAIN SEWER Size: 150mm  6.12 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  6.12 M Settled deposits fine 10% cross-sectional area loss, at joint From: MH1 / To: MAIN SEWER Size: 150mm  6.67 M Joint displaced 15mm			

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
From: MH1 / To: MAIN SEWER Size: 150mm  7.24 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  7.88 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  8.64 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  9.14 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  9.83 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  10.40 M Joint displaced 15mm			

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
From: MH1 / To: MAIN SEWER Size: 150mm  12.14 M Roots fine, at joint			
From: MH1 / To: MAIN SEWER Size: 150mm  12.14 M Joint displaced 5mm			
From: MH1 / To: MAIN SEWER Size: 150mm  12.71 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  13.93 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  14.60 M Joint displaced 15mm			
From: MH1 / To: MAIN SEWER Size: 150mm  15.21 M Joint displaced 15mm			

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
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Joint displaced 15mm



Joint displaced 15mm



Finish node type, lamphole, reference MAIN SEWER

Structural Defects (SRM 4)

Job Number JB010XX				Surveyed by (Operator) TG/CM		Base Unit CAMERA UNIT			Date 17/03/2026				
No.	PLR	Dir.	Use	Shape/Size	Date	Mat.	Total Length	Inspection Length	Cat.	Peak Score	Grade	Mean Score	Total Score
1	CAPPED OFFX	U	F	150	17/03/2026	Vitrified clay	1.21 metres	1.21		0	1	0	0
2	BOTTOM STAX	U	F	100	17/03/2026	Vitrified clay	0.02 metres	0.02		0	1	0	0
3	BOTTOM STAX	U	F	100	17/03/2026	Vitrified clay	4.45 metres	4.45		0	1	0	0
4	MH1	D	F	150	17/03/2026	Vitrified clay	19.07 metres	19.07		40	3	39.96	762

Service Defects (SRM 4)

Job Number JB010XX				Surveyed by (Operator) TG/CM		Base Unit CAMERA UNIT			Date 17/03/2026				
No.	PLR	Dir.	Use	Shape/Size	Date	Mat.	Total Length	Inspection Length	Cat.	Peak Score	Grade	Mean Score	Total Score
1	CAPPED OFFX	U	F	150	17/03/2026	Vitrified clay	1.21 metres	1.21		0	1	0	0
2	BOTTOM STAX	U	F	100	17/03/2026	Vitrified clay	0.02 metres	0.02		0	1	0	0
3	BOTTOM STAX	U	F	100	17/03/2026	Vitrified clay	4.45 metres	4.45		0	1	0	0
4	MH1	D	F	150	17/03/2026	Vitrified clay	19.07 metres	19.07		2	3	0.37	7

Job Number JB010XX	Surveyed by (Operator) TG/CM	Base Unit CAMERA UNIT	Date 17/03/2026
1: Occurences without damage. For example, laterals, joints,etc. NO DEFECTS WERE DETECTED.			
2: Constructional deficiencies or occurences with insignificant influence to tightness, hydraulic or static pressure or pipe: Eg. wide joints, badly torched intakes, minor deformation of plastic pipes, minor erosions etc. REHABILITATION CAN BE SCHEDULED LONG-TERM.			
3: Constructional deficiencies diminishing static, hydraulic and tightness: Eg. untorched intakes, cracks, minor drainage obstructions such as calcite build ups, protruding laterals, minor damages to pipe wall, individual root penetrations, corroded pipe walls etc. REHABILITATION IS NECESSARY MEDIUM-TERM WITHIN 3 TO 5 YEARS.			
4: Constructional damages with insufficient static safety, hydraulic or tightness: Eg. axial/radial pipe bursts, pipe deformations, visually noticeable infiltration/exfiltration, cavities, in pipe-wall, severe protruding, laterals severe root penetrations, severe corrosion of pipe wall etc. REHABILITATION PROCEDURE IS URGENT AND HAS TO BE COMPLETED WITHIN 1 TO 2 YEARS. NECESSITY FOR EMERGENCY OPERATIONS HAS TO BE EXAMINED.			
5: Pipe is already or will shortly be impermeable: Eg. collapsed pipe, deeply rooted pipe or other drainage obstructions. Pipe loses water or danger of backwater in basements etc. REHABILITATION IS URGENT AND SHORT-TERM. IN ORDER TO PREVENT FURTHER DAMAGE, NECESSARY TEMPORARY SPOT REPAIR HAS TO BE CONDUCTED ON EMERGENCY LEVEL.			