

DrainFix

**INVESTIGATION
REPORT**

AT

EXAMPLE REPORT

Drain Surveys

Drainage repairs

**Soil & foundation
investigations**

EXAMPLE SUMMARY

Drainage investigation summary

As instructed, the drainage layout has been plotted and the accessible drainage surveyed

From our survey we have detailed the drainage layout on the enclosed site plan.

The property is served by a combined foul and surface water system

The drainage on this site is laid to a combination of plastic and clay

Info: All accessible drainage runs were surveyed to determine the condition of the system serving No: 83.

All connections into the chamber are of plastic construction and are in good condition, it is believed that these have been replaced.

Runs B C and X are 150mm diameter vitrified clayware, these have signs of ageing with various defects present.

Run X flows under the extensions and is bellied, resulting in waste water lying in the pipeline and hindering flow - obviously defects (if any) within this area of standing waste have not been identified.

Main drainage run at rear is likely to be section 24 (local water authority drain)

No repair recommendations have been provided as all located defects were with in shared section 24 drainage runs.

Drainage runs owned by property number 83 are in a good serviceable condition.

Notes:

It is advised that contact with local water authority is made to establish ownership of shared drainage runs, if found to be local water authority responsibility all defects should be reported.

Drain Condition summary

Run description	Pressure test results	Defects found	Repair required
1 Manhole 1 Run A to Rain Water Waste Gully 1	None	No	No
2 Manhole 1 Run B to Boundary (possible section 24)	None	Yes	Yes
3 Manhole 1 Run C to Boundary	None	Yes	Yes
4 Manhole 1 Run D to Waste Gully 1	None	No	No
5 Manhole 1 Run E to Downstairs Wc	None	No	No
6 Manhole 1 Run X to Boundary(possible section 24)	None	Yes	Yes
7			

Site:

Date: 20.12.06

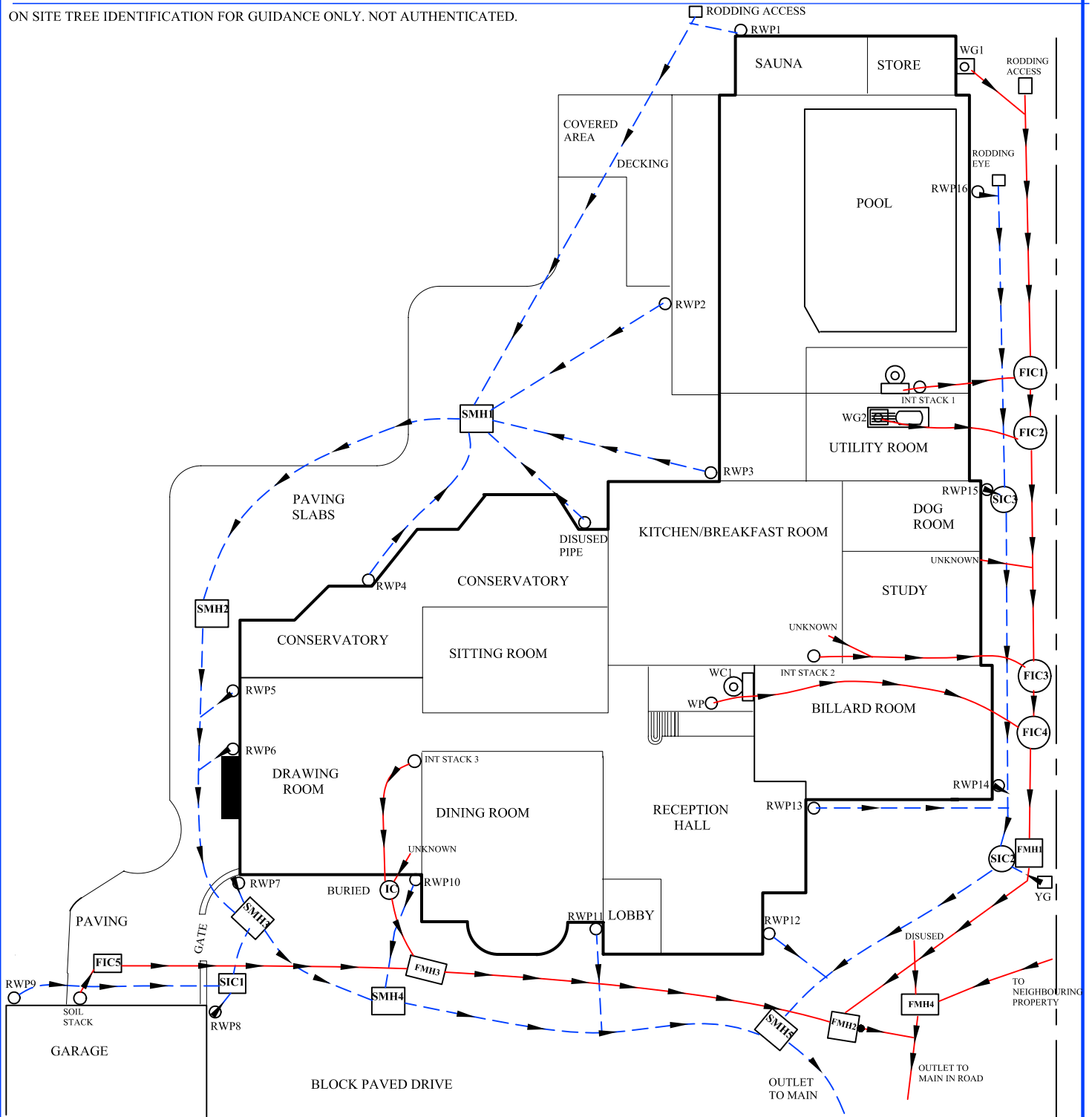
Work carried out for:

Sheet: 1 of 1

Job No: 002705

Survey type: Full Drainage Survey

ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.



Notes:

Scale: N.T.S.

Key:					
Combined Gully	RWWG	Waste pipe	WP	Tree / Bush	
Manhole	MH	Yard gully	YG	(approx. ht in m)	
Rain Water Pipe	RWP	Waste gully	WG		
Rain Water Gully	RWG	Surface Water Drain		Trial Pit	
Soil Vent Pipe	SVP	Foul Water Drain		Borehole	
		Combined Water Drain			

Contract: 2705

Date: 20.12.06

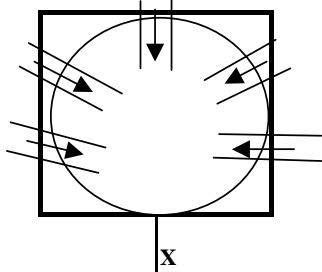
Operative Initial: LT

Site Address:

Page: 1 of 3

SURFACE MANHOLES

SM/H: 1 Depth: 450mm



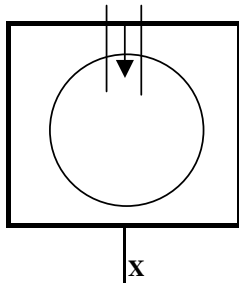
Chamber Dimension (mm): 450 x 450

Depths of run if different to invert level:-

- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____

Manhole Condition
As built

SM/H: 2 Depth: 500mm



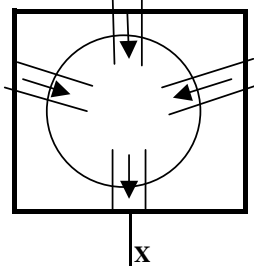
Chamber Dimension (mm): 250 x 250

Depths of run if different to invert level:-

- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____

Manhole Condition
As built

SM/H: 3 Depth: 820mm



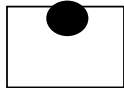
Chamber Dimension (mm): 250 x 250

Depths of run if different to invert level:-

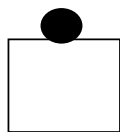
- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____

Manhole Condition
Defective
PVC chamber shaft
deformed and cracked.
replacement required.

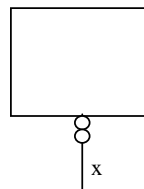
KEY....



Internal Back Drop.



External Back Drop.



Interceptor

DrainFix Drainage Report

Sheet: 1 of 17

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

MANHOLE DETAILS

Manhole	Depth to Invert	Condition
SMH1	450mm	As built
SMH2	500mm	As built
SMH3	820mm	Defective
SMH4	870mm	As built
SMH5	950mm	As built
SIC1	600mm	As built
SIC2	480mm	As built
SIC3	unknown	As built

CCTV Survey of Surface Water Drainage

CCTV Survey:-

1. Drainage Run: Surface Manhole 1 Run A to Rain Water Pipe 1 Function: Surface water

Pipe diameter: 100mm	Direction: Upstream	Main shared: No	Material: Plastic
----------------------	---------------------	-----------------	-------------------

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Paving slabs
14.6	JN	Junction at 3o'clock - 100mm to rain water pipe 1	Under decking at 8.0m
14.9	LU	Line of sewer deviates up	
15.0	FH	Camera reached rodding access	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

0 - Unable to fill	2 - Medium Loss over 2 minutes
1 - Heavy Loss	3 - Slow Loss over 5 minutes
	4 - No Loss

DrainFix Drainage Report

Sheet: 2 of 17

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

CCTV Survey:-

2. Drainage Run: Surface Manhole 1 Run B to Rain Water Pipe 2 **Function:** Surface water

Pipe diameter: 100mm Direction: Upstream Main shared: No Material: Plastic

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Paving slabs
6.0	LU	Line of sewer deviates up	
6.3	FH	Camera reached rain water pipe 2	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

- | | |
|--------------------|--------------------------------|
| 0 - Unable to fill | 2 - Medium Loss over 2 minutes |
| 1 - Heavy Loss | 3 - Slow Loss over 5 minutes |
| | 4 - No Loss |

DrainFix Drainage Report

Sheet: 3 of 17

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

CCTV Survey:-

3. Drainage Run: Surface Manhole 1 Run C to Rain Water Pipe 3 **Function:** Surface water

Pipe diameter: 100mm Direction: Upstream Main shared: No Material: Plastic

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Paving slabs
7.0	LU	Line of sewer deviates up	
7.4	FH	Camera reached rain water pipe 3	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

- | | |
|--------------------|--------------------------------|
| 0 - Unable to fill | 2 - Medium Loss over 2 minutes |
| 1 - Heavy Loss | 3 - Slow Loss over 5 minutes |
| | 4 - No Loss |

DrainFix Drainage Report

Sheet: 16 of 17

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

CCTV Survey:-

16. Drainage Run: S/Inspection Chamber 2 Run A to Head of Run **Function:** Surface water

Pipe diameter: 100mm **Direction:** Upstream **Main shared:** No **Material:** Plastic

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Block paving
0.0	LL	Line of sewer deviates left - slight	
1.1	JN	Junction to rain water pipe 13	
1.4	JN	Junction to rain water pipe 14	
1.5	WL	Water level 10%	
1.5	DES	Debris silt 5% cross sectional area loss	
4.2	WL	Water level 5%	
4.3	WL	Water level 0%	
12.1	LL	Line of sewer deviates left	
12.5	GO	General observation camera enters surface inspection chamber 3 at this point	
12.5	GO	General observation connection A to rain water pipe 15	
12.5	GO	General observation now surveying connection B Upstream	
12.6	LR	Line of sewer deviates right	
19.7	JN	Junction to rain water pipe 16	
19.8	LU	Line of sewer deviates up	
19.9	FH	Camera reached Rodding Access	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

0 - Unable to fill

1 - Heavy Loss

2 - Medium Loss over 2 minutes

3 - Slow Loss over 5 minutes

4 - No Loss

DrainFix Drainage Report

Sheet: 17 of 17

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

CCTV Survey:-

15. Drainage Run: Surface Manhole 5 Run X to Public Sewer **Function:** Surface water

Pipe diameter: 100mm Direction: Downstream Main shared: No Material: Plastic

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Paved drive
0.1	LR	Line of sewer deviates right	
22.2	LL	Line of sewer deviates left	
22.3	LD	Line of sewer deviates down	
22.5	LR	Line of sewer deviates right	
23.7	FH	Camera reached Main Sewer	

**- END OF SURVEY FOR -
- SURFACE WATER DRAINAGE -**

Water Test: None carried out

Gully condition: N/A

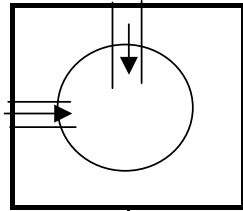
Repair required: No

Water Test Grade:

- | | |
|--------------------|--------------------------------|
| 0 - Unable to fill | 2 - Medium Loss over 2 minutes |
| 1 - Heavy Loss | 3 - Slow Loss over 5 minutes |
| | 4 - No Loss |

FOUL MANHOLES

FI/C: 1 Depth: 400mm



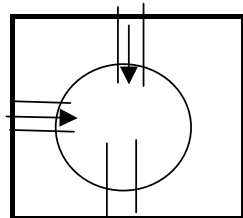
Chamber Dimension (mm): 250 x 250

Depths of run if different to invert level:-

- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____

Manhole Condition
As built

FI/C: 2 Depth: 430mm



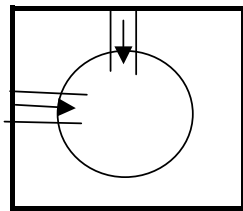
Chamber Dimension (mm): 250m x 250

Depths of run if different to invert level:-

- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____

Manhole Condition
As built

FI/C: 3 Depth: 560mm



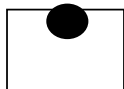
Chamber Dimension (mm): 250 x 250

Depths of run if different to invert level:-

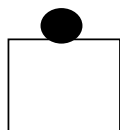
- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____

Manhole Condition
As built

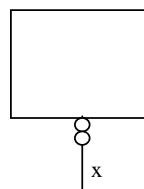
KEY....



Internal Back Drop.



External Back Drop.



Interceptor

DrainFix Drainage Report	Sheet: 1 of 15	Site:
	Job No: 2705	Work carried out for:
	Date: 20.12.06	

MANHOLE DETAILS

Manhole	Depth to Invert	Condition
FIC1	400mm	As built
FIC2	430mm	As built
FIC3	560mm	As built
FIC4	580mm	As built
FMH1	650mm	As built
FMH2	1430mm	As built
FMH3	720mm	As built
FMH4	1600mm	As built

CCTV Survey of Foul Water Drainage

CCTV Survey:-

1. Drainage Run: Foul Inspection Chamber 1 Run A to Internal Stack 1 **Function:** Foul water

Pipe diameter: 100mm	Direction: Upstream	Main shared: No	Material: Plastic
----------------------	---------------------	-----------------	-------------------

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Block paving
2.0	LU	Line of sewer deviates up	Under building at 1.1m
2.5	FH	Camera reached Internal Soil Stack 1	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

- | | |
|--------------------|--------------------------------|
| 0 - Unable to fill | 2 - Medium Loss over 2 minutes |
| 1 - Heavy Loss | 3 - Slow Loss over 5 minutes |
| | 4 - No Loss |

DrainFix Drainage Report

Sheet: 2 of 15

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

CCTV Survey:-

2. Drainage Run: Foul Inspection Chamber 1 Run B to Rodding Access **Function:** Foul water

Pipe diameter: 100mm	Direction: Upstream	Main shared: No	Material: Clay
----------------------	---------------------	-----------------	----------------

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Block paving
0.0	GO	General observation vision impaired due to foam bubbles in run at this point	
0.0	GO	General observation vision restored at this point	
10.4	JN	Junction at 9o'clock to Waste Gully 1	
10.6	LU	Line of sewer deviates up	
11.0	FH	Camera reached rodding access	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

0 - Unable to fill
1 - Heavy Loss

2 - Medium Loss over 2 minutes
3 - Slow Loss over 5 minutes
4 - No Loss

DrainFix Drainage Report

Sheet: 3 of 15

Job No: 2705

Date: 20.12.06

Site:

Work carried out for:

CCTV Survey:-

3. Drainage Run: Foul Inspection Chamber 1 Run X to Foul Insp/Cham 2 **Function:** Foul water

Pipe diameter: 100mm Direction: Downstream Main shared: No Material: Plastic

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Block paving
1.2	FH	Camera reached Foul Inspection Chamber 2	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

0 - Unable to fill
1 - Heavy Loss

2 - Medium Loss over 2 minutes
3 - Slow Loss over 5 minutes
4 - No Loss

DrainFix Drainage Report

Sheet: 14 of 15

Job No: 2705

Date: 20.12.06

Site:

Work carried
out for:

CCTV Survey:-

14. Drainage Run: Foul Manhole 2 Run X to Main Run **Function:** Foul water

Pipe diameter: 100mm Direction: Downstream Main shared: No Material: Clay

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Paved drive
0.1	JN	Junction at 6o'clock to Interceptor Trap	
0.6	LD	Line of sewer deviates down - slight	
0.7	FH	Camera reached Main Run	

Water Test: None carried out

Gully condition: N/A

Repair required: No

Water Test Grade:

0 - Unable to fill
1 - Heavy Loss

2 - Medium Loss over 2 minutes
3 - Slow Loss over 5 minutes
4 - No Loss

DrainFix Drainage Report	Sheet: 15 of 15	Site: Work carried out for:
	Job No: 2705	
	Date: 20.12.06	

CCTV Survey:-

15. Drainage Run: Foul Manhole 4 Run X to Public Sewer **Function:** Foul water

Pipe diameter: 150mm	Direction: Downstream	Main shared: Yes	Material: Clay
----------------------	-----------------------	------------------	----------------

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0	Start		Paved drive
0.3	JN	Junction to Foul Manhole 2	
0.6	FC	Fracture circumferential from 6 to 10'clock	
0.8	FL(st)	Fracture logitudinal start at 9o'clock	
1.3	FL(fh)	Fracture logitudinal end at 6o'clock	
1.3	B	Broken pipe at 6o'clock	
5.6	GO	General observation mortar in joint	
6.9	CC	Crack circumferential from 12 to 12o'clock	
8.9	FC	Fracture circumferential from 12 to 2o'clock	
10.0	CC	Crack circumferential from 12 to 12o'clock	
12.4	RFJ	Roots fine at joint	
13.1	RFJ	Roots fine at joint	
13.7	RFJ	Roots fine at joint	
14.0	RFJ	Roots fine at joint	Tarmac footpath at 14.0m
14.8	RFJ	Roots fine at joint	Road at 16.3m
19.4	LD	Line of sewer deviates down - slight	
22.2	LD	Line of sewer deviates down - slight	
24.0	JDL	Joint displaced large	
24.0	GO	General observation, JDL appears to be sealed and not open.	
24.1	SA	Survey Abandoned unable to pass joint displaced large	

**- END OF SURVEY FOR -
- FOUL WATER DRAINAGE -**

Water Test: None carried out

Gully condition: N/A

Note: JDL located on run just before entering on to public sewer, it is most likely that this JDL was formed during installation,

Repair required: Yes

Water Test Grade:

- | | |
|--------------------|--------------------------------|
| 0 - Unable to fill | 2 - Medium Loss over 2 minutes |
| 1 - Heavy Loss | 3 - Slow Loss over 5 minutes |
| | 4 - No Loss |

To:
c/o

EXAMPLE

Our Ref: 002705

Your Ref:

Date: 20.12.2006

Fiao:

Quotation

Site:-

EXAMPLE

Recommendations

- 1.0 Foul Manhole 3 Run X to Foul Manhole 2**
Insert CIPP liner from manhole 3 downstream to manhole 2.
Pipe length 10.9m.
- 2.0 Foul Manhole 4 Run X to Public Sewer**
Cut out mortar obstruction and roots using electro mechanical cable machine, line run to seal and stabilise pipe work from manhole 4 downstream 15.5m. Confined space equipment will be required to enter deep manhole chamber.
Re-open lateral connection to foul manhole 2 on completion.
Pipe diameter 150mm.

Note: Due to age of properties, shared main out let from manhole 4 may fall under section 24 (responsibility of local water authority), It is advised that local water authority is contacted to establish ownership of shared run.

Total: £0.00

plus VAT @17.5%

Quotation is binding only if accepted within 28 days from date of issue and is subject to our Standard Terms and Conditions

DrainFix undertakes to return to site free of charge to carry out remedial work to the drainage repairs set out above for a period of 3 months from the date of this invoice. The company standard charge rates will apply to the visit should the work requested be unrelated to the said repairs.