

Eastern Drainage

Services^{Ltd}

Drainage investigations for surveyors, engineers and loss adjusters

Specialists in all drainage renovation techniques including in-situ repairs and sewer connections

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Drainage Investigation Report

Site Address:

The House, The Street
The Town

Date of Investigation:

20th May 2010

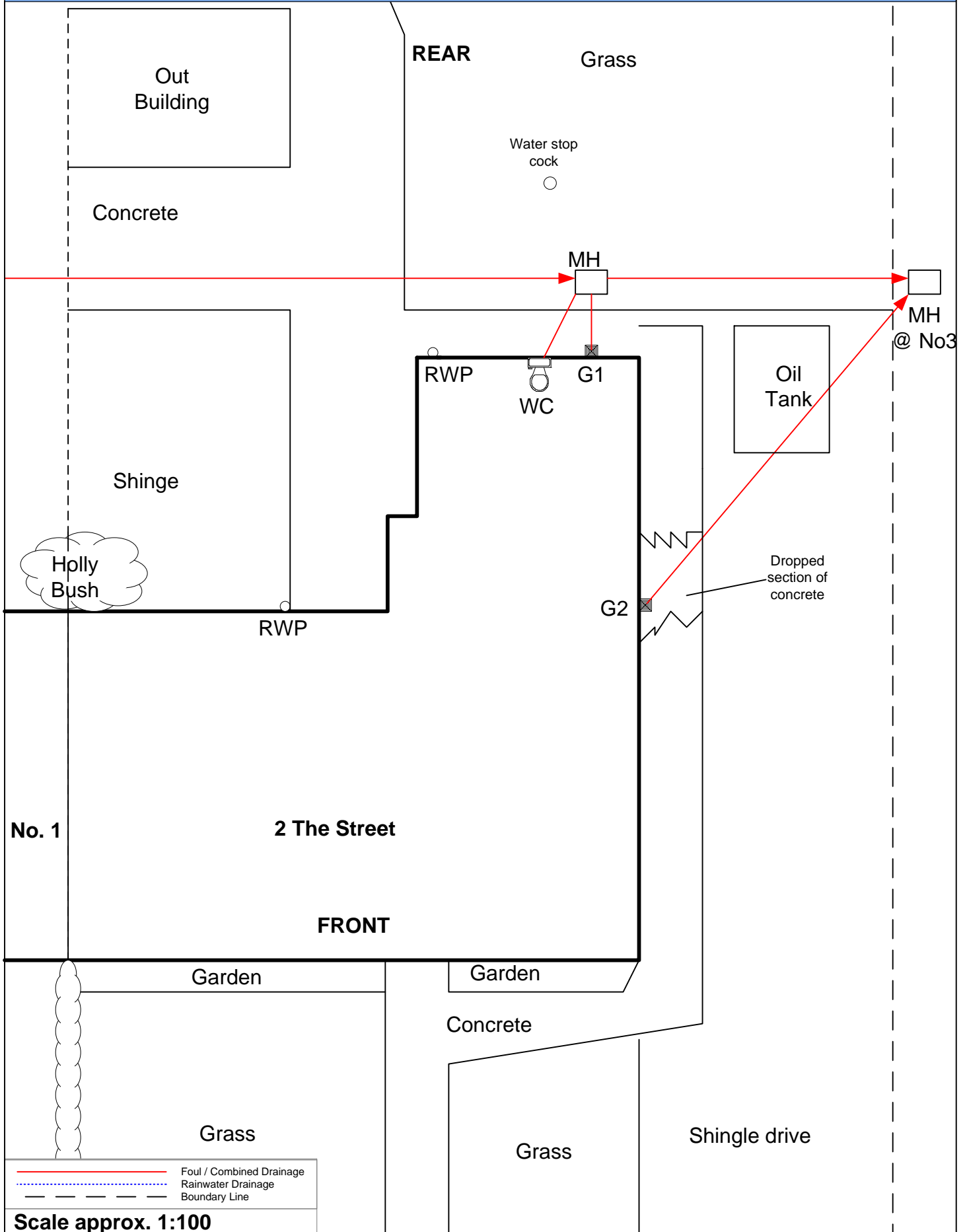
Client:

The Client

Client ref:

001

Drainage Layout Plan



Report Summary and Recommendations

A shared drain runs from left to right across the rear approximately 0.5m from the rear building line. The private branch drains all join via manholes within the boundary or via the manhole at the neighbouring property (No. 1 The Street).

The drainage is constructed from original clay. The three privately owned branch drains were found to be damaged whilst the shared drains were found to be in good condition.

The results of the CCTV survey is as follows:

Manhole upstream to boundary with No. 1 The Street (Survey 1)

The CCTV survey shows the drain to be in good condition with no obvious damage. The drain is not used by No. 2 St Lawrence Close and so will be the responsibility of others.

Manhole to WC (Survey 2)

This drain has a crack at 0.9m. The water pressure testing recorded a severe leakage. We would recommend the drain is repaired and this could be achieved without excavation through the insertion of a structural liner.

Manhole to Gully 1 (Survey 3)

The CCTV survey highlights a crack and what appears to be fibrous to roots. The water pressure testing recorded a severe leakage and we would recommend the drain is replaced including the gully hopper which is badly damaged. The benching around the gully is also damaged and could be allowing water to escape next to the building line.

Manhole downstream to manhole at No. 3 The Street (survey 4)

This drain is shared. It was found to be in good condition and free from any obvious damage.

Manhole at No. 3 The Street to Gully 2 (survey 5)

The concrete path around this gully has dropped. The below ground drain is also damaged with a number of cracks. Unusually, only a slight leak was recorded during testing.

The benching around the gully is defective and could allow water to escape in to the ground next to the building line. As the drain leaks, we would suggest replacing the gully and installing a structural liner as far as the manhole next door. The concrete around the gully would be reinstated as part of the works and if required the section of dropped concrete path could be cut out and replaced.

The drains serving the rainwater pipes are inaccessible and are assumed to connect to soakaways.

We have contacted Anglian Water and they have confirmed that they do not own the shared drain passing across the rear.

We have attached a quotation to repair the defective private branch drains. If we can be of any further assistance please do not hesitate to contact this office.

Manhole condition and test results

Manholes

Manhole	Depth in mm	Condition and comments
MH MH at No. 3	900 700	No damage No damage

Results of Water Pressure Testing

Drain Run Tested	Result	CCTV Survey No.
1. Manhole to Gully 1	Severe leakage	2
2. Manhole to WC	Severe leakage	3
3. Manhole at No. 3 to Gully 2	Slight leakage	5

CCTV Survey

Survey No.	1	Drain Run:	Manhole upstream to boundary with No. 1		
Diameter:	100mm	Pipe Material:	Salt Glazed Clay	Drain Type:	Foul

Meter Counter	Observations	Remarks
0.0	Manhole	Start Survey
0.7	Misaligned joint Debris	Slight 20% of diameter
7.0	Boundary with No.1	
9.0	Survey ends beyond boundary	

CCTV Survey

Survey No.	2	Drain Run:	Manhole to WC		
Diameter:	100mm	Pipe Material:	Salt Glazed Clay	Drain Type:	Foul

Meter Counter	Observations	Remarks
0.0	Manhole	Start Survey
0.9	Crack	Circumferential
1.3	Bend	Upwards
1.7	Misaligned joint Open joint	Slight Slight
1.8	Survey Ends	WC

CCTV Survey

Survey No.	3	Drain Run:	Manhole to Gully 1		
Diameter:	100mm	Pipe Material:	Salt Glazed Clay	Drain Type:	Foul

Meter Counter	Observations	Remarks
0.0	Manhole	Start Survey
0.1	Crack Roots	Circumferential Fibrous
0.4	Survey Ends	Gully

CCTV Survey

Survey No.	4	Drain Run:	Manhole to Manhole at No. 3 The Street		
Diameter:	100mm	Pipe Material:	Salt Glazed Clay	Drain Type:	Foul

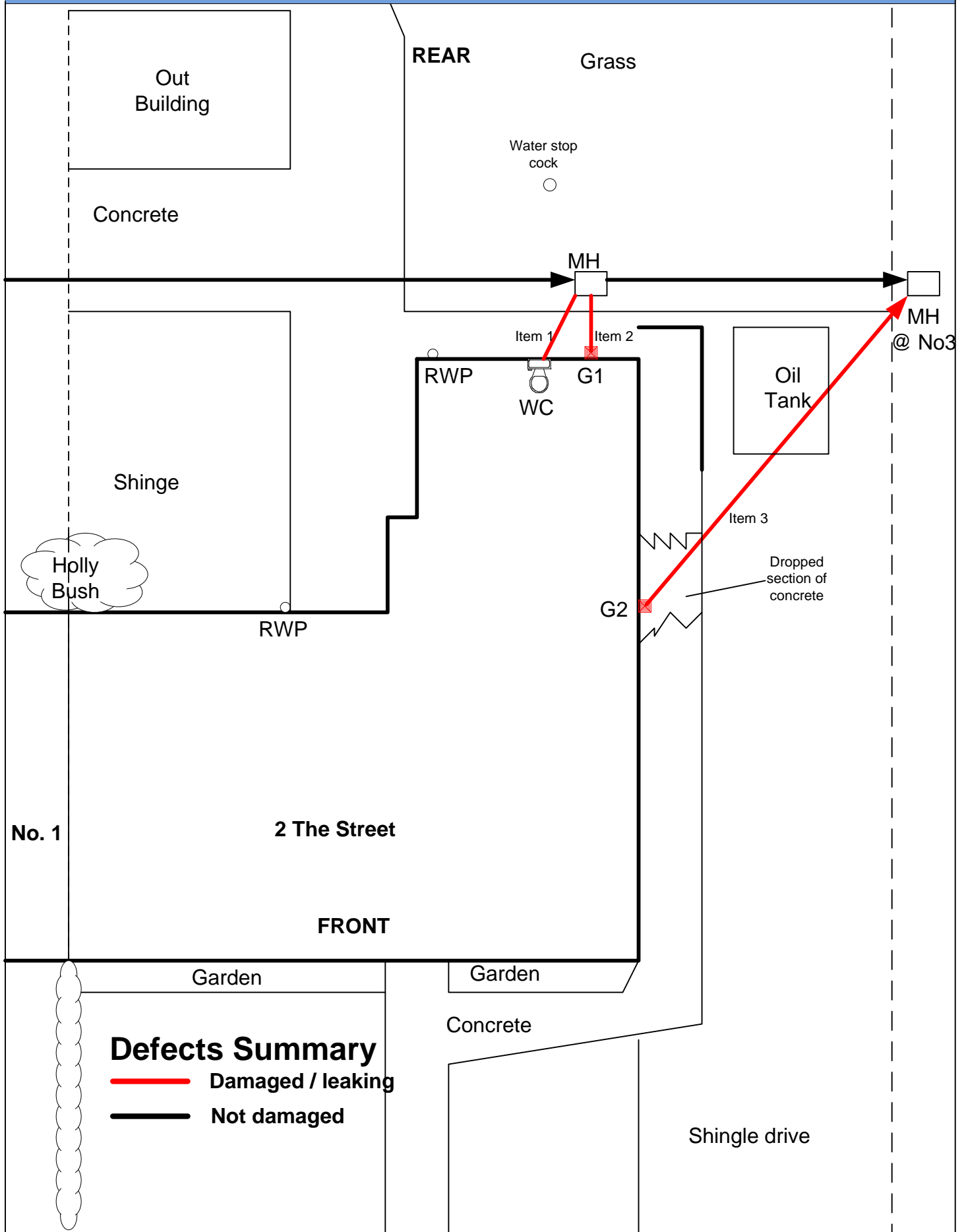
Meter Counter	Observations	Remarks
0.0	Manhole	Start Survey
3.8	Boundary with No. 3	
4.1	Survey Ends	Manhole at No. 3

CCTV Survey

Survey No.	5	Drain Run:	Manhole at No. 3 The Street to Gully 2		
Diameter:	100mm	Pipe Material:	Salt Glazed Clay	Drain Type:	Foul

Meter Counter	Observations	Remarks
0.0	Manhole at No. 3	Start Survey
0.1	Crack Misaligned joint	Circumferential Slight
0.4	Debris Misaligned joint	10% of diameter Slight
4.0	Crack Debris	Circumferential 10% of diameter
4.6	Crack	Circumferential
5.4	Survey Ends	Gully 3

Defects Summary Plan



Quotation

The costs of the repairs recommended in this report are as follows:

Item 1 Manhole to WC £

Repair drain without excavation through the insertion of a structural liner

Item 2 Manhole to Gully 1 £

Replace gully and drain into the manhole using modern flexible jointed uPVC. Replace benching around gully. Reinststate disturbed area.

Item 3 Manhole at No. 3 to Gully 2 £

Replace gully and benching around gully. Repair drain between excavation and manhole without further excavation through the insertion of a structural liner.

Cut out dropped section of concrete path and reinststate.

Price includes adjusting all waste pipes (if necessary) in to the new gullies.

Total cost	£
VAT	£
Total	£