

11th May 2017

Our Ref: DR17/418A-2

Client: Victory Housing Trust
Cromer Road
North Walsham
Norfolk
NR28 0NB

Site: Proposed Development Site
1 Jubilee Avenue
Fakenham
Norfolk
NR21 8DG

Report To: Oxbury & Co. Ltd.
St. Thomas House
14 Central Avenue
St. Andrews Business Park
Norwich
NR7 0HR

Contact: Joshua Bell -01603 707975

P Bowyer Associates Ltd
Mahoney Green, Green Lane West,
Rackheath, Norfolk, NR13 6JY

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Company Reg No. 1895836



By Appointment to
Her Majesty The Queen
Drainage Specialists
P. Bowyer Associates Ltd.
(Dyno-Rod East Anglia)

SUMMARY

As requested, we attended site on 4th May 2017.

The purpose of the visit was to undertake an investigation of any existing drainage within the proposed development area. Specifically, to confirm the following:

- The routes of the existing foul and surface water drains on and adjacent to the site and thence to the main sewers (where access allowed).
- A C.C.T.V survey to determine the size and condition of any existing pipework.
- Identify invert levels, chamber depths and pipework diameters.

On completion of the survey to supply a marked-up plan of the drainage with all requested information (please refer to the enclosed plan for full details.)

C.C.T.V Investigation

Observations on the structural condition of the pipework have been noted in accordance with the Water Research Council's (WRc) Manual of Sewer Classification, 5th Edition. All structural defects are noted, and their severity graded 1 – 5, with 5 being the most structurally compromised (as described below)

Pipework Condition Grade	Structural Condition
1 & 2	Structurally sound with no leakage evident. Slight cracks/defects permitted.
3	Cracks and/or fractures observed but pipe provides sufficient arching support. Some leakage may be evident
4 & 5	Structurally unsound with insufficient arching support. Total collapse/blockage likely in the future.

Foul Water

The C.C.T.V survey revealed that there is an adopted, 150mm diameter Anglian Water foul sewer that travels along the western and northern sides of the proposed development area.

The pipework is serviceable but would benefit from high-pressure cleaning to remove general debris/sewage scale. Minor defects were noted. This cleaning/remedial work would fall under the responsibility of Anglian Water.

The C.C.T.V survey did not identify any additional 'blind' connections or hidden manholes. No additional drainage was located within the proposed development area, noting that at the time of our attendance there was no access available to the rear of No. 1 Jubilee Avenue to confirm the position of (suspected) Manhole 3302, although this would appear to be outside the proposed development area.

Surface Water

The survey noted that the rainwater pipes discharge to underground pipework without access or rodding-eyes. We suspect that the rainwater is dispersed via localised soakaways located close to the properties.

Cont.../

All work has been carried out in accordance with current Health and Safety Regulations and in line with our site-specific Method Statement and Risk Assessments.

We trust our findings meet with your approval and we look forward to being of continued service. Should there be any aspect that you wish to discuss further, or if you require additional information, please do not hesitate to contact this office.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Dan Bowyer', with a long horizontal flourish extending to the right.

DANIEL BOWYER
DIRECTOR

Encl. DVD

Independent licensed operator

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DYNO-ROD

Drain services

Part of **British Gas**



Freephone: 0800 112 112

CCTV SURVEY REPORT

Date of Survey: 04/05/2017
Survey Conducted by:
Log No.:
Our Reference: DR17/418A-2
Your Reference: AD01-155

CLIENT DETAILS

Client Name: Victory Housing Trust
Client Ref.: AD01-155
Contact: (Joshua Bell - Oxbury)
Position:
Address: Cromer Road, North Walsham,
Norfolk NR28 0NB
Tel: 01603 707 900
Mobile: 07939 887 529
e-mail:

SITE DETAILS

Site Contact:
Position:
Site Address: 1 Jubilee Avenue, Fakenham,
Norfolk NR21 8DG
Tel:
Mobile:
e-mail:



Inspection report

Date: 04/05/2017	Job N°: DR17/418A-2	Weather: Dry	Operator: JV	section number: 1	PLR: 4304 X
Video Volume No.:	Flow Ctrl:	Temperature:	Year laid:	Cleaned: No	Strat. Drain:

Road: 1 Jubilee Avenue	Div/Dist:	start MH: 4304
Place: Fakenham	Drain. Area:	end MH: 3301
Location:	Standard: BS EN 13508-2:2003	Total length: 32.69 m

Purpose: Other	Shape/Size: Circular 150
Type:	Material: Vitreous Clay Pipe length:
Use: Foul	Lining: Lining Type:

Comment:

1:250	position	code	observation	counter	photo	grade
Depth: 1.94						
	0.20	MH	Start node type, manhole, reference number: 4304	00:00:00		(Misc) 0
	0.70	CC	Crack Circumferential from 01 to 06 o'clock	00:00:00	2_2a	(Struct) 2
	1.35	CC	Crack Circumferential from 02 to 10 o'clock	00:00:00	3_3a	(Struct) 2
	11.28	CC	Crack Circumferential from 07 to 03 o'clock	00:00:00	4_4a	(Struct) 2
	12.04	CC	Crack Circumferential from 07 to 04 o'clock	00:00:00	5_5a	(Struct) 2
	32.69	MHF	Finish node type, manhole, reference number: 3301	00:00:00		
Depth: 1.78						

Structural Defects	Constructional Features
Service Defects	Miscellaneous Features

Inspection photos

Place: Fakenham	Road: 1 Jubilee Avenue	Date: 04/05/2017	section number: 1	PLR: 4304 X
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Photo: 2_2a, 00:00:00
0.7m, Crack Circumferential from 01 to 06 o'clock



Photo: 3_3a, 00:00:00
1.35m, Crack Circumferential from 02 to 10 o'clock



Photo: 4_4a, 00:00:00
11.28m, Crack Circumferential from 07 to 03 o'clock



Photo: 5_5a, 00:00:00
12.04m, Crack Circumferential from 07 to 04 o'clock

Inspection report

Date: 04/05/2017	Job N°: DR17/418A-2	Weather: Dry	Operator: JV	section number: 2	PLR: MH 1 X
Video Volume No.:	Flow Ctrl:	Temperature:	Year laid:	Cleaned: No	Strat. Drain:

Road: 1 Jubilee Avenue	Div/Dist:	start MH: MH 1
Place: Fakenham	Drain. Area:	end MH: 3301
Location:	Standard: BS EN 13508-2:2003	Total length: 24.28 m

Purpose: Other	Shape/Size: Circular 150
Type:	Material: Vitreous Clay Pipe length:
Use: Foul	Lining Type:

Comment:

1:200	position	code	observation	counter	photo	grade
Depth: 0.70						
	MH 1	MH	Start node type, manhole, reference number: MH 1	00:00:00		(Misc) 0
	0.20	LD	Line of drain/sewer deviates down 45 degrees	00:00:00		
	0.40	REM	General remark - junction with mains	00:00:00		
	0.85	REM	General remark - camera enters mains	00:00:00		
	1.00	REM	General remark - camera enters mains	00:00:00		
	6.90	JN	Junction at 10 o'clock dia 100 mm	00:00:00		(Constr) 0
	11.46	REM	General remark : manhole - suspect 3302 (no access to prove)	00:00:00		
	24.28	MHF	Finish node type, manhole, reference number: 3301	00:00:00		
Depth: 1.78						

Structural Defects	Constructional Features
Service Defects	Miscellaneous Features