

# **CCTV Survey Report Prepared For:**

**St Judes Housing Association  
St Judes House  
Plymouth  
Devon**



---

**Test 260401 - CCTV Survey Report : 26/04/18**

---

Name : CLEAR LEADERS  
Contact : Ian Robertson  
Location : Unit A, Parkway Ind. Est  
Town : Plymouth  
Region : Devon  
Postcode : PL7 5NE  
Tel : 01753 348 142  
Mobile : 07756 345 012  
Email : ian@clearleaders.co.uk  
Fax :

**Client Information**

Name : St Judes Housing Association  
Contact : Mr Jones  
Location : St Judes House  
Town : Plymouth  
Region : Devon  
Postcode : PL3 5KZ  
Tel :  
Mobile :  
Email :  
Fax :

**Site Information**

Name :  
Contact : Mr Smith  
Location : 26 Ferndale Gardens  
Town : Plymouth  
Region : Devon  
Postcode : PL4 6NW  
Tel :  
Mobile : 07733 987 234  
Email :  
Fax :

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

## Report Interpretation

### Overview

Each section of the drainage system is allocated a score indicating areas that require attention. These areas are detailed in the overview section. We use colour coding as an additional indicator of severity. Additional information concerning rehabilitation is also included in this area. This can be used as an 'at a glance' indication of condition.

**Grade A:** Drain is serviceable, no recommendations required.

**Grade B:** There is an issue that might require remedial works.

**Grade C:** There is a defect that requires remedial works. The drain is not serviceable.

### Observations

Each section of drainage reported on (manhole to manhole for example) contains header information about that drain. Any observations made concerning condition are then detailed below the header section.

The observations are colour coded and given a graded score. More significant defects are given a higher score, using a scale from 1 to 5.

**Grade 1-2:** These defects may require remedial repair or monitoring.

**Grade 3-4:** These defects probably require some form of remedial works.

**Grade 5:** Defects that will require remedial repair or replacement.

Images of individual defects are attached to each section.

The information provided is relevant to the time of survey. The coding system used for this report is based on the MSCC5 domestic codes (BS 13508, the standard for the drainage industry). The grading system is based on the Drainage Repair Book recommendations provided by the Wrc. The total number of graded defects for the project are detailed at the bottom of each page.

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

## Overview

<p><b>Section: 1</b></p> <p>From: MH F1 To: MH F2</p>	<p>The line has a number of defects that appear to be affecting the serviceability of the drain. Blockages are likely to recur. Either excavation and replacement or structurally lining the drain are remedial options.</p>	<p><b>DRB Grade: C</b> <b>Pipe Size: 100</b> <b>Material: Vitrified Clay (i.e. all clayware)</b> <b>Use: Foul</b></p>
<p><b>Section: 2</b></p> <p>From: MH F2 To: MH F3</p>	<p>The fracture has potential to increase in severity. Patch lining the defect is likely to prevent further deterioration. There is also evidence of vermin.</p>	<p><b>DRB Grade: B</b> <b>Pipe Size: 100</b> <b>Material: Vitrified Clay (i.e. all clayware)</b> <b>Use: Foul</b></p>
<p><b>Section: 3</b></p> <p>From: MH F3 To: MH F4</p>	<p>The displaced joint is affecting flow and probably allowing infiltration. The best repair recommendation would be to excavate and replace. Dependant on location there is potential for patch lining with a view to 'smoothing out' the defect and bring the pipe back to water tightness.</p>	<p><b>DRB Grade: C</b> <b>Pipe Size: 100</b> <b>Material: Vitrified Clay (i.e. all clayware)</b> <b>Use: Foul</b></p>
<p><b>Section: 4</b></p> <p>From: MH F3 To: MH F4</p>	<p>Grade A</p>	<p><b>DRB Grade: A</b> <b>Pipe Size: 100</b> <b>Material: Vitrified Clay (i.e. all clayware)</b> <b>Use: Combined</b></p>

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

**Site: 26 Ferndale Gardens, Plymouth**

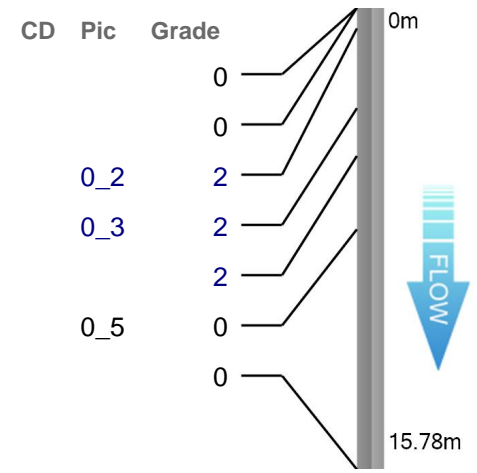
**Section 1**

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
St Judes Housing Assoc.	26 Ferndale Gardens	Plymouth			26/04/2018

Start Node Ref:	MH F1	Finish Node Ref:	MH F2	Direction:	D	Height/Dia:	100
Start Node Depth:	189	Finish Node Depth:	192	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	15.78	

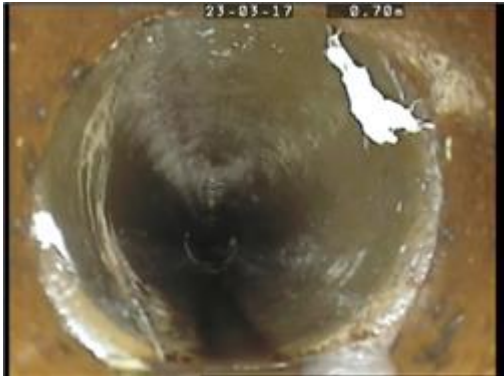
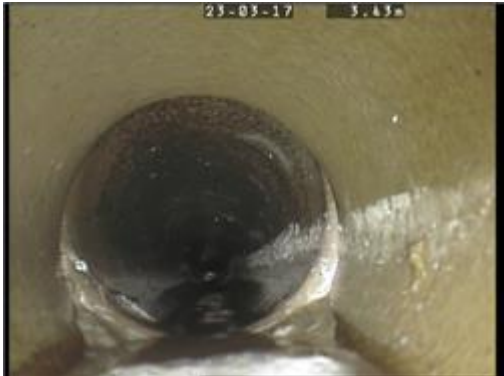

Position	Code	Description	CD	Pic	Grade
00.00m	MH	Start node type, manhole			0
00.00m	WL	Water level 0%			0
00.70m	R	Roots	0_2		2
03.43m	JDM	Joint displaced medium	0_3		2
05.06m	DES	Settled deposits fine 20%			2
07.57m	WL	Water level 15%	0_5		0
15.78m	MHF	Finish node type, manhole			0



Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

Descriptive Report with Remarks and Observation Images

Pos	Code	Description	Image
00.00m	MH	Start node type, manhole MH F1	
00.00m	WL	Water level: 0% Height/Diameter	
00.70m	R	Roots - Grade 2	Image Provided - Ref: 0_2 
03.43m	JDM	Joint displaced medium - Grade 2	Image Provided - Ref: 0_3 
05.06m	DES	Settled deposits fine: 20% Cross sectional area loss - Grade 2	
07.57m	WL	Water level: 15% Height/Diameter	Image Provided - Ref: 0_5 
15.78m	MHF	Finish node type, manhole MH F2	

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---



**Site: 26 Ferndale Gardens, Plymouth**

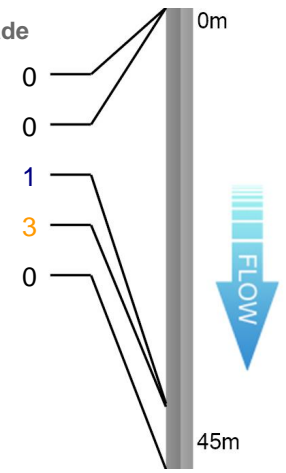
**Section 2**

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
St Judes Housing Assoc.	26 Ferndale Gardens	Plymouth			26/04/2018

Start Node Ref:	MH F2	Finish Node Ref:	MH F3	Direction:	D	Height/Dia:	100
Start Node Depth:	130	Finish Node Depth:	140	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	45	



Position	Code	Description	CD	Pic	Grade
00.00m	MH	Start node type, manhole			0
00.00m	WL	Water level 0%			0
38.60m	V	Vermin		1_2	1
38.90m	FLJ	Fracture longitudinal 09 at joint		1_3	3
45.00m	MHF	Finish node type, manhole			0



Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

Descriptive Report with Remarks and Observation Images

Pos	Code	Description	Image
00.00m	MH	Start node type, manhole MHF2	
00.00m	WL	Water level: 0% Height/Diameter	
38.60m	V	Vermin - Grade 1	Image Provided - Ref: 1_2 
38.90m	FLJ	Fracture longitudinal at 09 o'clock at joint - Grade 3	Image Provided - Ref: 1_3 
45.00m	MHF	Finish node type, manhole MHF3	

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---



**Site: 26 Ferndale Gardens, Plymouth**

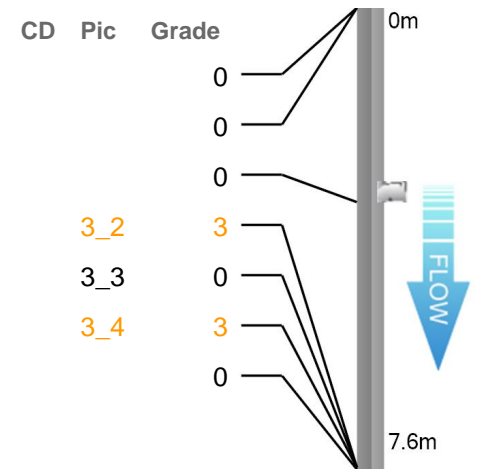
**Section 3**

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
St Judes Housing Assoc.	26 Ferndale Gardens	Plymouth			26/04/2018

Start Node Ref:	MH F3	Finish Node Ref:	MH F4	Direction:	D	Height/Dia:	100
Start Node Depth:	145	Finish Node Depth:	178	Use:	F	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	7.6	

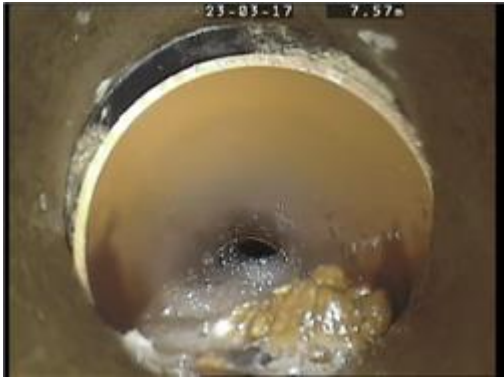
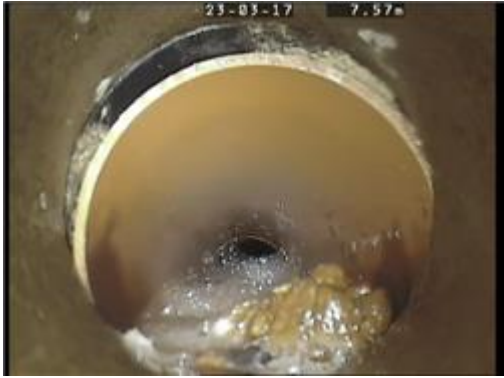
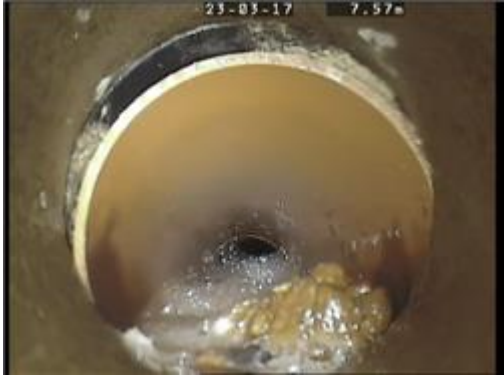
Position	Code	Description	CD	Pic	Grade
00.00m	MH	Start node type, manhole			0
00.00m	WL	Water level 0%			0
03.20m	JN	Junction 09 : 100mm Diameter			0
07.57m	JDL	Joint displaced large		3_2	3
07.57m	MC	Material of drain/sewer changes		3_3	0
07.57m	OB	Other obstacles 20%		3_4	3
07.60m	SA	Survey abandoned			0



Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

Descriptive Report with Remarks and Observation Images

Pos	Code	Description	Image
00.00m	MH	Start node type, manhole F5	
00.00m	WL	Water level: 0% Height/Diameter	
03.20m	JN	Junction at 09 o'clock: 100mm Diameter	
07.57m	JDL	Joint displaced large - Grade 3	Image Provided - Ref: 3_2 
07.57m	MCPVC	Material of pipe changes to Polyvinyl Chloride	Image Provided - Ref: 3_3 
07.57m	OB	Other obstacles: 20% Cross sectional area loss - Grade 3 Soft blockage	Image Provided - Ref: 3_4 
07.60m	SA	Survey abandoned Unwilling to continue.	

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

**Site: 26 Ferndale Gardens, Plymouth**

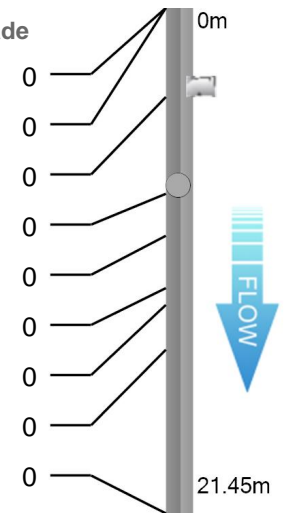
**Section 4**

Client:	Location (Street Name):	City/Town/Village	Cust Job Ref.	Surveyors Name:	Date:
St Judes Housing Assoc.	26 Ferndale Gardens	Plymouth			26/04/2018

Start Node Ref:	MH F3	Finish Node Ref:	MH F4	Direction:	D	Height/Dia:	100
Start Node Depth:	167	Finish Node Depth:	175	Use:	C	Shape:	C
Start Node Coordinate:		Finish Node Coordinate:		Material:	VC	Cleaned	N

Drain Type	Lining Type	Lining Mat.	Year Const.	Weather	Flow Cont.	Length	Remarks
A				D	N	21.45	

Position	Code	Description	CD	Pic	Grade
00.00m	MH	Start node type, manhole			0
00.00m	WL	Water level 0%			0
03.78m	JN	Junction 09 : 100mm Diameter			0
07.89m	CN	Connection other than junction 12 : 100mm Diameter			0
09.67m	LRF	Line of drain/sewer deviates right [full]			0
11.89m	SC	Dimension of drain/sewer changes : 150mm Diameter			0
12.60m	MC	Material of drain/sewer changes			0
14.50m	WL	Water level 20%			0
21.45m	MHF	Finish node type, manhole			0



Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---

## Descriptive Report with Remarks and Observation Images

Pos	Code	Description	Image
00.00m	MH	Start node type, manhole F3	
00.00m	WL	Water level: 0% Height/Diameter	
03.78m	JN	Junction at 09 o'clock: 100mm Diameter	
07.89m	CN	Connection other than junction at 12 o'clock: 100mm Diameter	
09.67m	LRF	Line of drain/sewer deviates right [full]	
11.89m	SC	Dimension of drain/sewer changes: 150mm Diameter	
12.60m	MCPVC	Material of pipe changes to Polyvinyl Chloride	
14.50m	WL	Water level: 20% Height/Diameter	
21.45m	MHF	Finish node type, manhole F4	

Total grades for project

Grade 1 Defects	1	Grade 2 Defects	3	Grade 3 Defects	3	Grade 4 Defects	0	Grade 5 Defects	0
-----------------	---	-----------------	---	-----------------	---	-----------------	---	-----------------	---