



Happy Drains Ltd

Unit 12A Chalex Industrial Estate, Manor Hall Road, Southwick, BN42 4NH

Tel: 0800 849 8099 Email: service@happydrains.co.uk

Ref C0010505

Date 29th May 2019

Darwin Group
41 – 43 London Road
Reading
RG1 5BN

Dear Sir/Madam,

1. DESCRIPTION OF PROPERTY

Secondary School

2. DRAINAGE SYSTEM

This is a foul and surface water drainage system accessible by Manhole (FW1). The pipework is circular in shape, 100mm in diameter and vitrified clay material. Further specific variations can be found in the report content.

3. SHARED

The sections identified within the property boundary are for the sole use of this property and therefore the responsibility of the site owner to maintain.

The sections as shared or beyond the property boundary generally are the legal responsibility of the local water company to maintain.

4. CIRCUMSTANCES

- General investigation Works.

5. SUMMARY

The defects are fully noted in the attached report. No access to SW1A - behind fence.

6. Quotation and Specification of Repairs

To attend above site and provide skilled crew, labour, plant and equipment to supply and install insitu repair and renewal system of –

Repair 1) - High pressure jet the drainage system in preparation

Repair 2) - Carry out a pre-and post-installation CCTV inspection

Company No: 08267396
Registered office:
100 Church Street
Brighton, East Sussex
BN1 1UJ





Happy Drains Ltd

Unit 12A Chalex Industrial Estate, Manor Hall Road, Southwick, BN42 4NH

Tel: 0800 849 8099 Email: service@happydrains.co.uk

Repair 3) – Section 6 - Install a 100mm diameter by 600mm long silicate patch repair at 6.4m upstream from Sw1 between Sw1 to Rwp

Repair 4) Section 9 - Install a 100mm diameter by 600mm long silicate patch repair at 16.6m downstream from Sw1 between Sw1a to Sw2

The following method will be applied: -

To high pressure jet the system, to clean and remove all debris for lining acceptance. To carry out CCTV survey to ensure the systems are clear of obstructions to control lining. To install lining process. Inspect & test on completion.

Water Supply and access to be provided by the client for the installation purposes.

We will be pleased to carry out the above works for the sum of £790.00 + VAT.

7. COST SAVINGS

The proposed repair methods have been specifically selected as the most cost effective method and expedient to rectify the defects noted.

8. GUARANTEE

Please note that all repair works proposed are guaranteed for up to 5 years for repairs and our guarantee does not affect your statutory rights.

Due to the nature of working underground it is not possible to state conclusively that there will be no further damage discovered once the repairs are commenced, if this occurs, we will make all efforts to mitigate the costs and seek the authority through the proper channels before carrying out additional repairs.

Please ensure that appropriate access to water and electricity are provided on site to complete the repair (the engineer will confirm these details with you) If you require more information or wish to discuss this matter, please contact us.

Yours sincerely

Happy Drains Ltd

Company No: 08267396
Registered office:
100 Church Street
Brighton, East Sussex
BN1 1UJ





Project

Project Description: General CCTV

Project Number: C0010505

Project Date: 29/05/2019

Project Standard: MSCC4 Sewers & Drainage GB (SRM4 Scoring)



Table of Contents

Project Name	Project Number	Project Date
	C0010505	29/05/2019

Scoring Summary	P-1
Project Information	P-2
Section Profile	P-4
Section Summary	P-5
Section: 1; FWG > GREASETRAP (FWGX)	1
Section: 2; GREASETRAP > FW1 (GREASETRAPX)	3
Section: 3; SP > FW1 (SPX)	5
Section: 4; SVP > FW1 (SVPX)	7
Section: 5; FW1 > FW2 (FW1X)	9
Section: 6; RWG > SW1 (RWGX)	11
Section: 7; RWG > SW1 (RWGX)	13
Section: 8; SW1 > SW2 (SW1X)	15
Section: 9; SW1A > SW2 (SW1AX)	17
Section: 10; SW2 > JN (SW2X)	19



Scoring Summary

Project Name

Project Number
C0010505Project Date
29/05/2019

Structural Defects

Section	PLR	Grade	Description
All inspected pipes are in an acceptable structural condition (< grade 3).			

Service / Operational Condition

Section	PLR	Grade	Description
All inspected pipes are in an acceptable service condition (< grade 3).			

Abandoned Surveys

Section	PLR	Description
1	FWGX	Survey abandoned

Information

These scoring summaries are based on the SRM grading from the WRc.

**Happy Drains LTD**

Unit 12a Chalex Industrial Estate Manor Hall Road, Southwick
Tel. 0800 849 8099
service@happydrains.co.uk

Project Information**Project Name****Project Number**
C0010505**Project Date**
29/05/2019**Site**

Company: Darwin Group Ltd
Street: 41 - 43 London Road
Town or City: Reading
County: Berkshire
Post Code: RG1 5BN
Phone: 01939 252 909

Contractor

Company: Happy Drains LTD
Contact: David/Will
Street: Unit 12a Chalex Industrial Estate Manor Hall Road
Town or City: Southwick
County: East Sussex
Post Code: BN42 4NH
Phone: 0800 849 8099
Mobile: 07824757572
Email: service@happydrains.co.uk



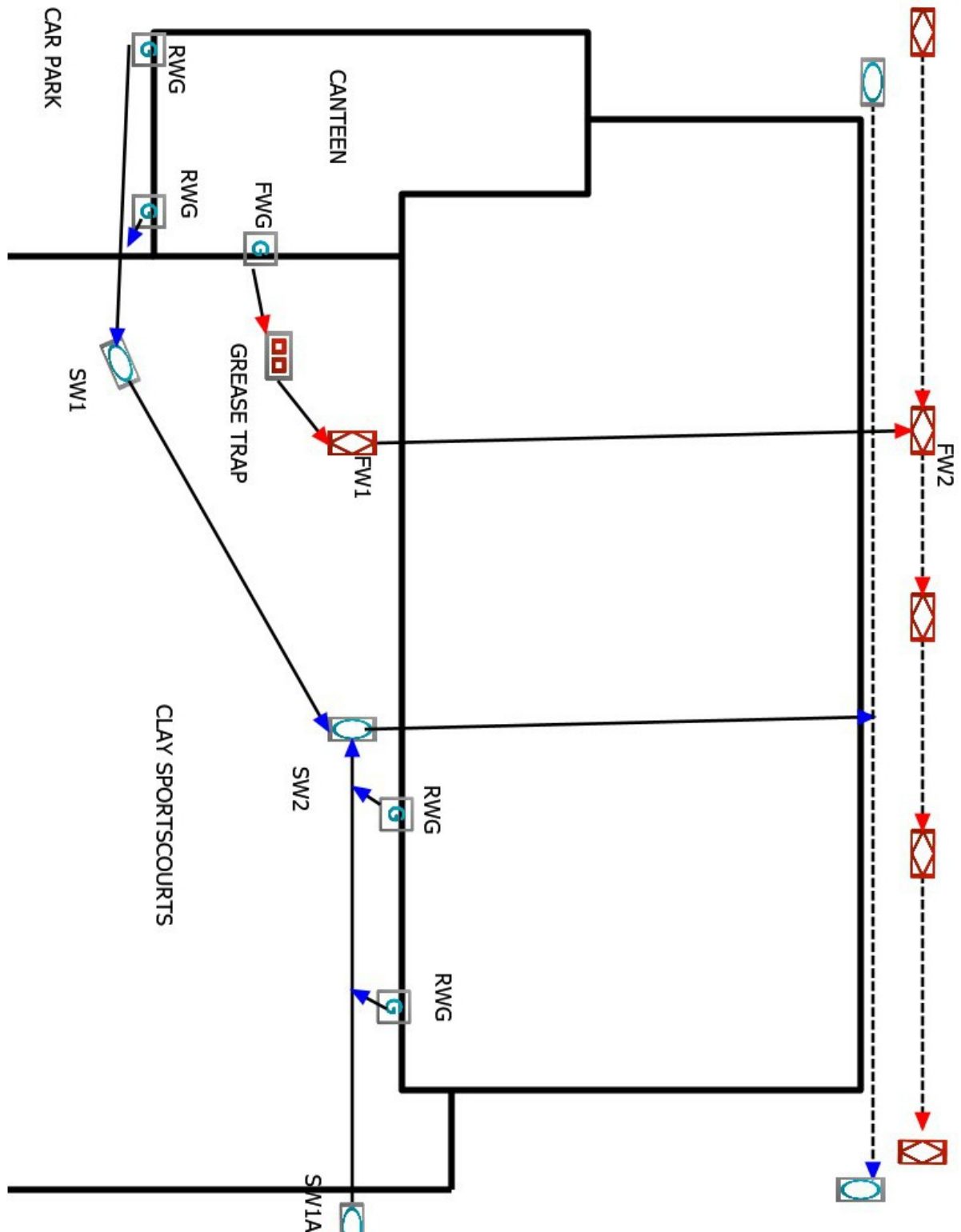
Project Information

Project Name

Project Number
C0010505

Project Date
29/05/2019

Project Drawing



**Section Profile****Project Name****Project Number**
C0010505**Project Date**
29/05/2019**Circular, 100 mm, 100 mm**

Section	Upstream Node	Downstream Node	Date	Road	Pipe Material	Total Length	Inspected Length
1	FWG	GREASETRAP	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Polyvinyl chloride	0.08 m	0.08 m
2	GREASETRAP	FW1	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	2.70 m	2.70 m
3	SP	FW1	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	7.11 m	7.11 m
4	SVP	FW1	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	4.79 m	4.79 m
6	RWG	SW1	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	13.76 m	13.76 m
7	RWG	SW1	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	0.42 m	0.42 m
8	SW1	SW2	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	15.69 m	15.69 m
9	SW1A	SW2	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	18.05 m	18.05 m
10	SW2	JN	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	28.80 m	28.80 m

Total: 9 Sections x Circular 100 mm, 100 mm = 91.39 m Total Length and 91.39 m Inspected Length**Circular, 150 mm, 150 mm**

Section	Upstream Node	Downstream Node	Date	Road	Pipe Material	Total Length	Inspected Length
5	FW1	FW2	29/05/2019	KENDRICK SCHOOL 41-43 LONDON ROAD	Vitrified clay pipe (i.e. all clayware)	30.63 m	30.63 m

Total: 1 Section x Circular 150 mm, 150 mm = 30.63 m Total Length and 30.63 m Inspected Length**Total: 10 Sections = 122.02 m Total Length and 122.01 m Inspected Length**



Section Summary

Project Name	Project Number C0010505	Project Date 29/05/2019
---------------------	-----------------------------------	-----------------------------------

Number of sections	10
Total length of sewer network	122.02 m
Inspected length of sewer network	122.01 m
Not inspected length of sewer network	0.00 m
Total abandoned inspections	1
Number of section inspection photos	32
Number of section inspection videos	10
Number of section inspection scans	0
Number of section inclination measurements	0

PLR:	FWGX	Upstream Node:	FWG
Inspection Direction:	Downstream	Downstream Node:	GREASETRAP
Inspected Length:	0.08 m	Dia/Height:	100 mm
Total Length:	0.08 m	Pipe Material:	Polyvinyl chloride

No.	m+	Code	Observation
1	0.00	GY	Start node type, gully, reference number: FWG
2	0.00	WL	Water level, 0 % of the vertical dimension
3	0.04	LL	Line deviates left
4	0.08	SA	Survey abandoned, WOULD NOT TRAVERSE AROUND CORNER

PLR:	GREASETRAPX	Upstream Node:	GREASETRAP
Inspection Direction:	Downstream	Downstream Node:	FW1
Inspected Length:	2.70 m	Dia/Height:	100 mm
Total Length:	2.70 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: GREASETRAP
2	0.00	WL	Water level, 0 % of the vertical dimension
3	2.01	LL	Line deviates left
4	2.70	MHF	Finish node type, manhole, reference number: FW1

PLR:	SPX	Upstream Node:	SP
Inspection Direction:	Upstream	Downstream Node:	FW1
Inspected Length:	7.11 m	Dia/Height:	100 mm
Total Length:	7.11 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: FW1
2	0.00	WL	Water level, 0 % of the vertical dimension
3	6.65	LU	Line deviates up



Section Summary

Project Name	Project Number C0010505	Project Date 29/05/2019
---------------------	-----------------------------------	-----------------------------------

No.	m+	Code	Observation
4	7.11	MHF	Finish node type, manhole, reference number: SP
PLR: SVPX Inspection Direction: Upstream Inspected Length: 4.79 m Total Length: 4.79 m Upstream Node: SVP Downstream Node: FW1 Dia/Height: 100 mm Pipe Material: Vitrified clay pipe (i.e. all clayware)			
No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: FW1
2	0.00	WL	Water level, 0 % of the vertical dimension
3	1.82	JN	Junction, at 09 o'clock, diameter: 100 mm
4	4.45	LU	Line deviates up
5	4.79	MHF	Finish node type, manhole, reference number: SVP
PLR: FW1X Inspection Direction: Downstream Inspected Length: 30.63 m Total Length: 30.63 m Upstream Node: FW1 Downstream Node: FW2 Dia/Height: 150 mm Pipe Material: Vitrified clay pipe (i.e. all clayware)			
No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: FW1
2	0.00	WL	Water level, 0 % of the vertical dimension
3	29.49	LD	Line deviates down
4	30.63	MHF	Finish node type, manhole, reference number: FW2
PLR: RWGX Inspection Direction: Upstream Inspected Length: 13.76 m Total Length: 13.76 m Upstream Node: RWG Downstream Node: SW1 Dia/Height: 100 mm Pipe Material: Vitrified clay pipe (i.e. all clayware)			
No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: SW1
2	0.00	WL	Water level, 0 % of the vertical dimension
3	5.78	JN	Junction, at 03 o'clock, diameter: 100 mm, RWP
4	6.42	JDM	Joint displaced, medium
5	13.76	GYF	Finish node type, gully, reference number: RWG
PLR: RWGX Inspection Direction: Upstream Inspected Length: 0.42 m Total Length: 0.42 m Upstream Node: RWG Downstream Node: SW1 Dia/Height: 100 mm Pipe Material: Vitrified clay pipe (i.e. all clayware)			
No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: SW1
2	0.00	WL	Water level, 0 % of the vertical dimension
3	0.15	LR	Line deviates right
4	0.42	GYF	Finish node type, gully, reference number: RWG



Section Summary

Project Name	Project Number C0010505	Project Date 29/05/2019
---------------------	-----------------------------------	-----------------------------------

PLR:	SW1X	Upstream Node:	SW1
Inspection Direction:	Downstream	Downstream Node:	SW2
Inspected Length:	15.69 m	Dia/Height:	100 mm
Total Length:	15.69 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: SW1
2	0.00	WL	Water level, 0 % of the vertical dimension
3	5.59	JN	Junction, at 09 o'clock, diameter: 100 mm
4	11.67	JN	Junction, at 09 o'clock, diameter: 100 mm
5	15.69	MHF	Finish node type, manhole, reference number: SW2

PLR:	SW1AX	Upstream Node:	SW1A
Inspection Direction:	Upstream	Downstream Node:	SW2
Inspected Length:	18.05 m	Dia/Height:	100 mm
Total Length:	18.05 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: SW2
2	0.00	WL	Water level, 0 % of the vertical dimension
3	2.47	JN	Junction, at 09 o'clock, diameter: 100 mm, RWG
4	16.61	JDM	Joint displaced, medium
5	16.68	JN	Junction, at 09 o'clock, diameter: 100 mm, RWG
6	18.05	MHF	Finish node type, manhole, reference number: SW1A, CONCELED CHAMBER

PLR:	SW2X	Upstream Node:	SW2
Inspection Direction:	Downstream	Downstream Node:	JN
Inspected Length:	28.80 m	Dia/Height:	100 mm
Total Length:	28.80 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: SW2
2	0.00	WL	Water level, 0 % of the vertical dimension
3	28.80	MHF	Finish node type, manhole, reference number: JN



Section Inspection - 29/05/2019 - FWGX

Section 1	Inspection 1	Date 29/05/19	Time 15:49	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Y	PLR FWGX
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Downstream	Upstream Node:	FWG
Road:	Kendrick School 41-43 London	Inspected Length:	0.08 m	Upstream Pipe Depth:	0.120 m
Location:	Other pedestrian area	Total Length:	0.08 m	Downstream Node:	GREASETRAP
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.000 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Polyvinyl chloride		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition	Lining Material:	No lining		
Comments:					
Recommendations:					

Scale: 1:50	Position [m]	Code	Observation	Grade
Depth: 0.12 m FWG				
	0.00	GY	Start node type, gully, reference number: FWG	
	0.00	WL	Water level, 0 % of the vertical dimension	
	0.04	LL	Line deviates left	
	0.08	SA	Survey abandoned: WOULD NOT TRAVERSE AROUND CORNER	

Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - FWGX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
1	Downstream	FWGX	C0010505	C0010505



20190529-155231-snap0000.jpg, 00:00:02, 0.00 m
Start node type, gully, reference number: FWG



20190529-155231-snap0001.jpg, 00:00:15, 0.04 m
Line deviates left



20190529-155231-snap0002.jpg, 00:00:40, 0.08 m
Survey abandoned, WOULD NOT TRAVERSE AROUND
CORNER



Section Inspection - 29/05/2019 - GREASETRAPX

Section 2	Inspection 2	Date 29/05/19	Time 15:55	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Y	PLR GREASETRAPX
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

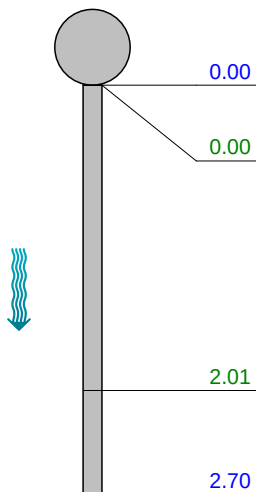
Town or Village:	Reading	Inspection Direction:	Downstream	Upstream Node:	GREASETRAP
Road:	Kendrick School 41-43 London	Inspected Length:	2.70 m	Upstream Pipe Depth:	0.400 m
Location:	Other pedestrian area	Total Length:	2.70 m	Downstream Node:	FW1
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.000 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition	Lining Material:	No lining		

Comments:

Recommendations:

Scale: 1:50 Position [m] Code Observation Grade

Depth: 0.40 m
GREASETRAP



MH Start node type, manhole, reference number: GREASETRAP

WL Water level, 0 % of the vertical dimension

LL Line deviates left

MHF Finish node type, manhole, reference number: FW1



FW1

Depth: 0.00 m



2.01m // 00:00:19 //



2.70m // 00:00:28 //

Structural Defects

Service & Operational Observations

Construction Features

Miscellaneous Features

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - GREASETRAPX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
2	Downstream	GREASETRAPX	C0010505	C0010505



20190529-155647-snap0000.jpg, 00:00:19, 2.01 m
Line deviates left



20190529-155647-snap0001.jpg, 00:00:28, 2.70 m
Finish node type, manhole, reference number: FW1



Section Inspection - 29/05/2019 - SPX

Section 3	Inspection 3	Date 29/05/19	Time 15:59	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Y	PLR SPX
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Upstream	Upstream Node:	SP
Road:	Kendrick School 41-43 London	Inspected Length:	7.11 m	Upstream Pipe Depth:	0.000 m
Location:	Other pedestrian area	Total Length:	7.11 m	Downstream Node:	FW1
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.400 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition	Lining Material:	No lining		

Comments:

Recommendations:

Scale: 1:62 Position [m] Code Observation Grade

Depth: 0.40 m

FW1



0.00

MH

Start node type, manhole, reference number: FW1

0.00

WL

Water level, 0 % of the vertical dimension



0.00m // 00:00:01 //



6.65m // 00:00:32 //



7.11m // 00:00:40 //

6.65

LU

Line deviates up

7.11

MHF

Finish node type, manhole, reference number: SP



SP
Depth: 0.00 m

Structural Defects

Service & Operational Observations

Construction Features

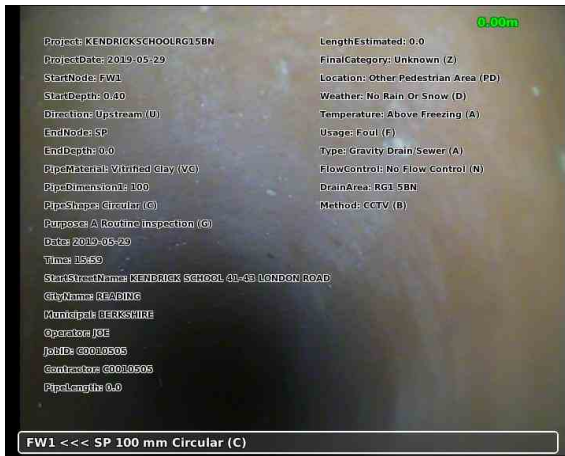
Miscellaneous Features

STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - SPX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
3	Upstream	SPX	C0010505	C0010505



20190529-160652-snap0000.jpg, 00:00:01, 0.00 m
Start node type, manhole, reference number: FW1



20190529-160652-snap0001.jpg, 00:00:32, 6.65 m
Line deviates up



20190529-160652-snap0002.jpg, 00:00:40, 7.11 m
Finish node type, manhole, reference number: SP



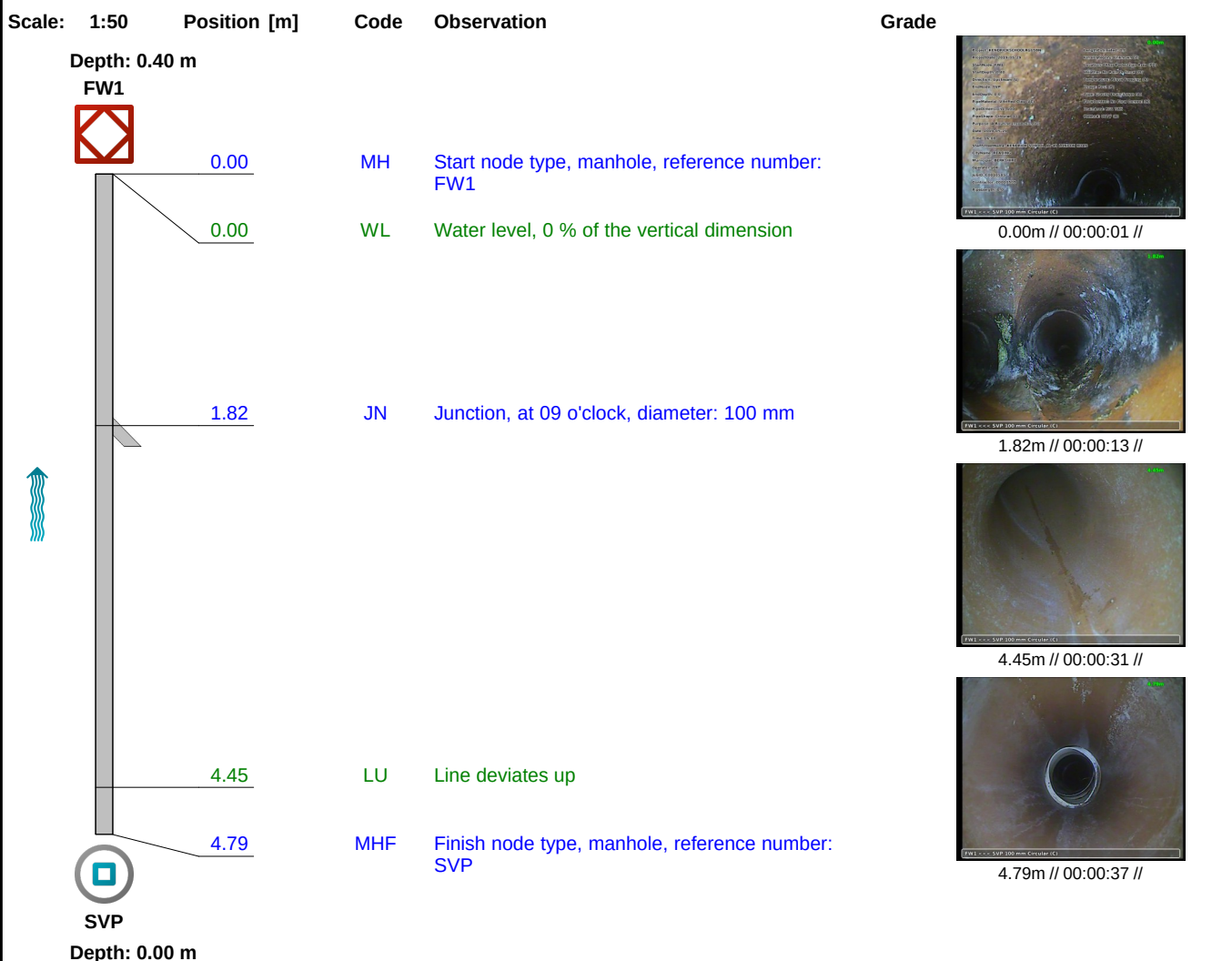
Section Inspection - 29/05/2019 - SVPX

Section	Inspection	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
4	4	29/05/19	16:08	C0010505	No Rain Or Snow	Y	SVPX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JOE		LD17 HBU		Scanprobe	Not Specified	Private Drain	Not Specified

Town or Village:	Reading	Inspection Direction:	Upstream	Upstream Node:	SVP
Road:	Kendrick School 41-43 London	Inspected Length:	4.79 m	Upstream Pipe Depth:	0.000 m
Location:	Other pedestrian area	Total Length:	4.79 m	Downstream Node:	FW1
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.400 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition		Lining Material:	No lining	

Comments:

Recommendations:



Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - SVPX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
4	Upstream	SVPX	C0010505	C0010505



20190529-160922-snap0000.jpg, 00:00:01, 0.00 m
Start node type, manhole, reference number: FW1



20190529-160922-snap0001.jpg, 00:00:13, 1.82 m
Junction, at 09 o'clock, diameter: 100 mm



20190529-160922-snap0002.jpg, 00:00:31, 4.45 m
Line deviates up



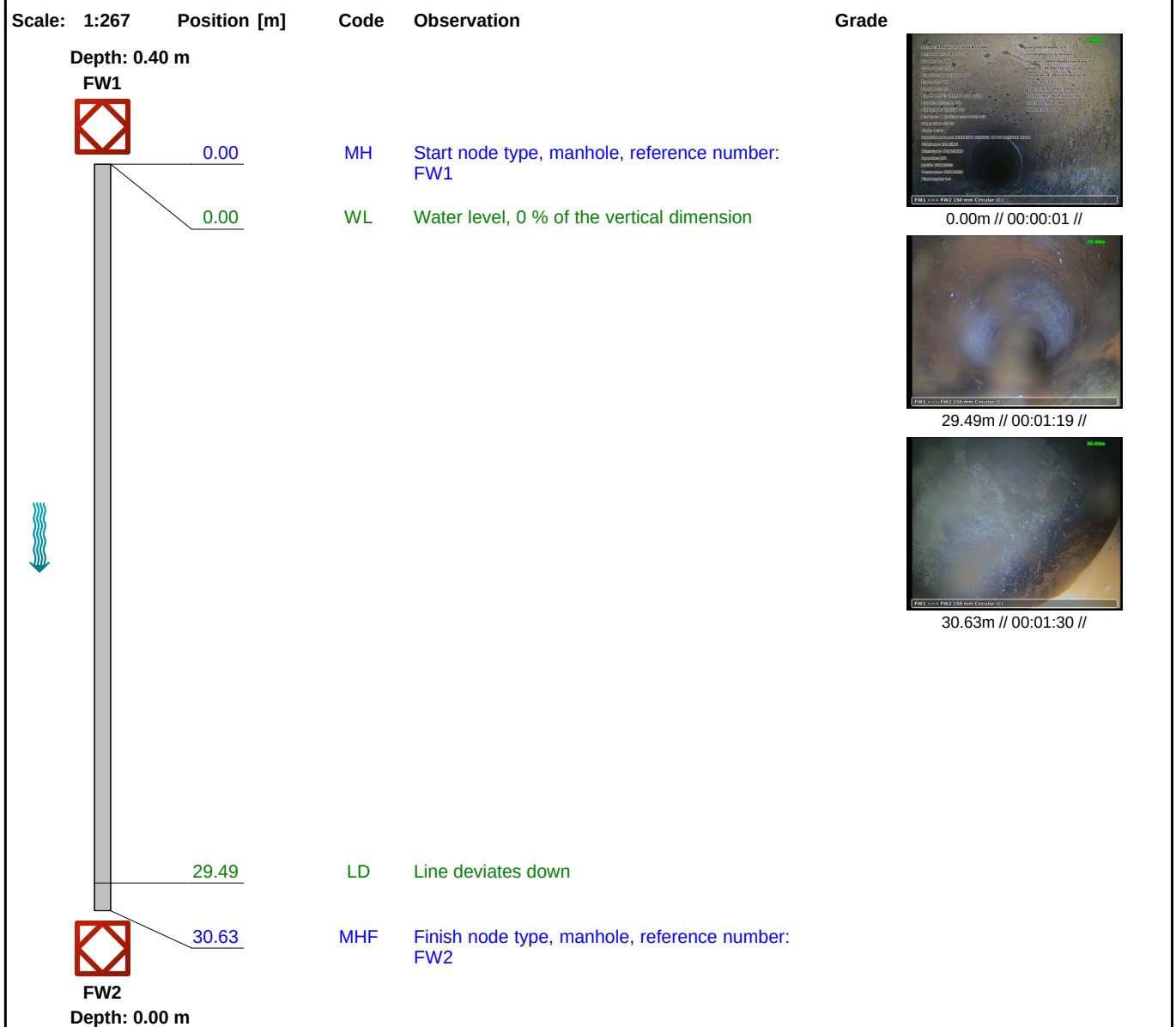
20190529-160922-snap0003.jpg, 00:00:37, 4.79 m
Finish node type, manhole, reference number: SVP



Section Inspection - 29/05/2019 - FW1X

Section 5	Inspection 5	Date 29/05/19	Time 16:12	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR FW1X
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Downstream	Upstream Node:	FW1
Road:	Kendrick School 41-43 London	Inspected Length:	30.63 m	Upstream Pipe Depth:	0.400 m
Location:	Other pedestrian area	Total Length:	30.63 m	Downstream Node:	FW2
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.000 m
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm	Width:	150 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition	Lining Material:	No lining		
Comments:					
Recommendations:					



Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - FW1X

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
5	Downstream	FW1X	C0010505	C0010505



20190529-161316-snap0000.jpg, 00:00:01, 0.00 m
Start node type, manhole, reference number: FW1



20190529-161316-snap0001.jpg, 00:01:19, 29.49 m
Line deviates down



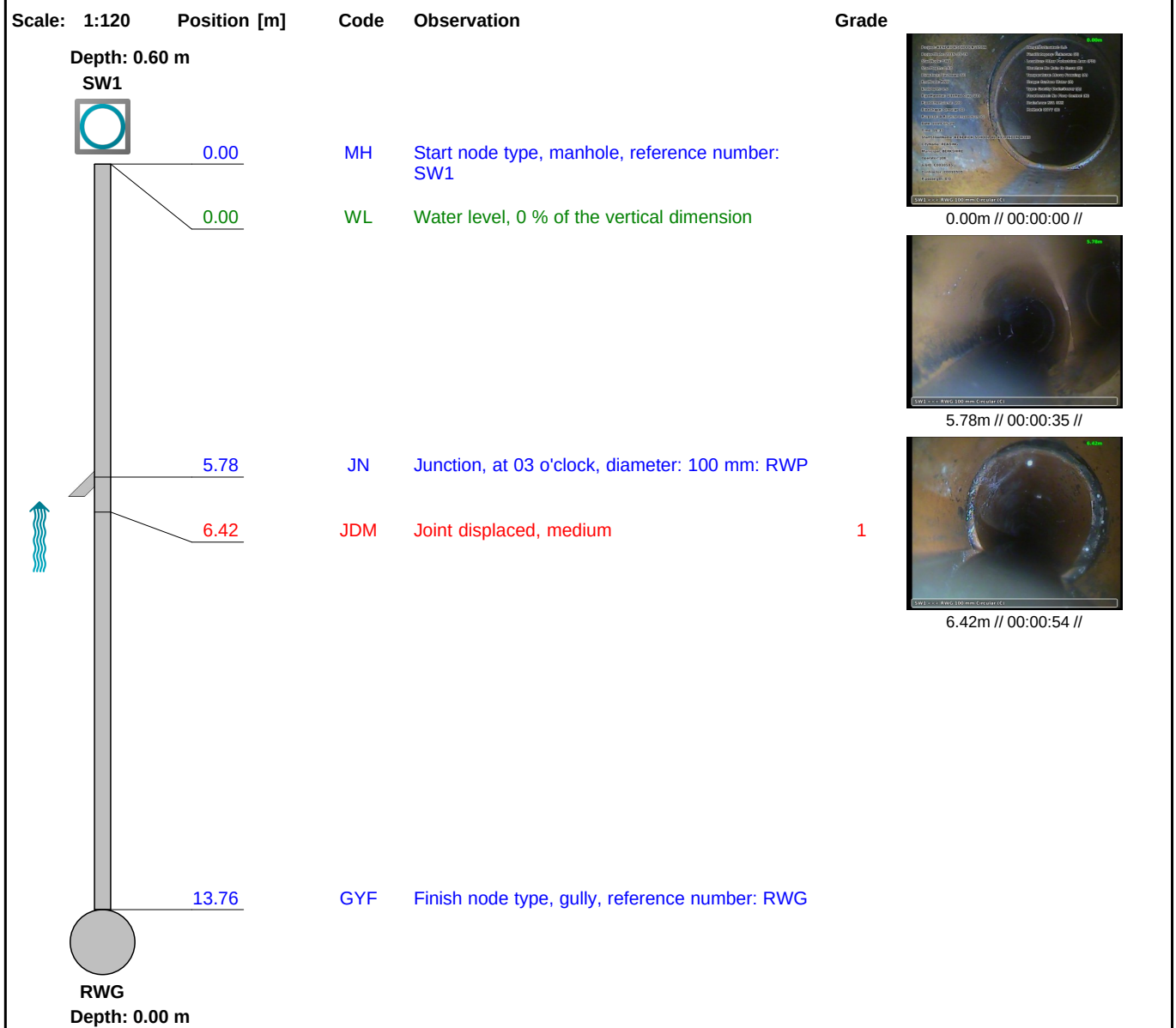
20190529-161316-snap0002.jpg, 00:01:30, 30.63 m
Finish node type, manhole, reference number: FW2



Section Inspection - 29/05/2019 - RWGX

Section 6	Inspection 6	Date 29/05/19	Time 16:35	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR RWGX
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Upstream	Upstream Node:	RWG
Road:	Kendrick School 41-43 London	Inspected Length:	13.76 m	Upstream Pipe Depth:	0.000 m
Location:	Other pedestrian area	Total Length:	13.76 m	Downstream Node:	SW1
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.600 m
Use:	Surface water		Pipe Shape:	Circular	
Type of Pipe:	Gravity drain/sewer		Dia/Height:	100 mm	Width: 100 mm
Year Constructed:			Pipe Material:	Vitrified clay pipe (i.e. all clayware)	
Flow Control:	No flow control		Lining Type:	No lining	
Inspection Purpose:	Routine inspection of condition		Lining Material:	No lining	
Comments:					
Recommendations:					



Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	1.0	0.1	1.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - RWGX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
6	Upstream	RWGX	C0010505	C0010505



20190529-163553-snap0000.jpg, 00:00:00, 0.00 m
Start node type, manhole, reference number: SW1



20190529-163553-snap0002.jpg, 00:00:35, 5.78 m
Junction, at 03 o'clock, diameter: 100 mm, RWP



20190529-163553-snap0003.jpg, 00:00:54, 6.42 m
Joint displaced, medium



Section Inspection - 29/05/2019 - RWGX

Section 7	Inspection 7	Date 29/05/19	Time 16:39	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR RWGX
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Upstream	Upstream Node:	RWG
Road:	Kendrick School 41-43 London	Inspected Length:	0.42 m	Upstream Pipe Depth:	0.000 m
Location:	Other pedestrian area	Total Length:	0.42 m	Downstream Node:	SW1
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.600 m
Use:	Surface water	Pipe Shape: Circular Dia/Height: 100 mm Width: 100 mm Pipe Material: Vitrified clay pipe (i.e. all clayware) Lining Type: No lining Lining Material: No lining			
Type of Pipe:	Gravity drain/sewer				
Year Constructed:					
Flow Control:	No flow control				
Inspection Purpose:	Routine inspection of condition				
Comments:					
Recommendations:					

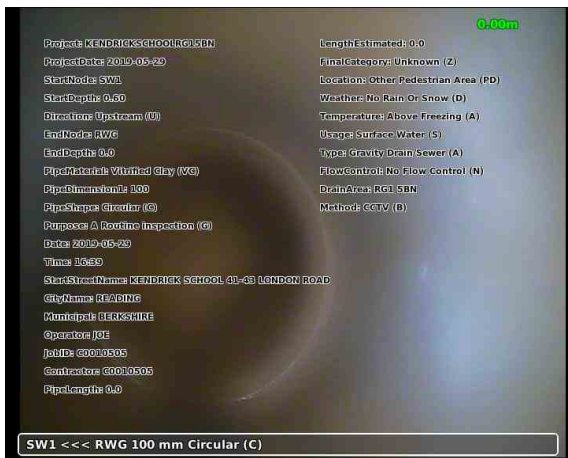
Scale: 1:50	Position [m]	Code	Observation	Grade
Depth: 0.60 m	0.00	MH	Start node type, manhole, reference number: SW1	0.00m // 00:00:01 //
	0.00	WL	Water level, 0 % of the vertical dimension	
	0.15	LR	Line deviates right	0.15m // 00:00:09 //
	0.42	GYF	Finish node type, gully, reference number: RWG	0.42m // 00:00:17 //
Depth: 0.00 m				

Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - RWGX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
7	Upstream	RWGX	C0010505	C0010505



20190529-163921-snap0000.jpg, 00:00:01, 0.00 m
Start node type, manhole, reference number: SW1



20190529-163921-snap0001.jpg, 00:00:09, 0.15 m
Line deviates right



20190529-163921-snap0002.jpg, 00:00:17, 0.42 m
Finish node type, gully, reference number: RWG

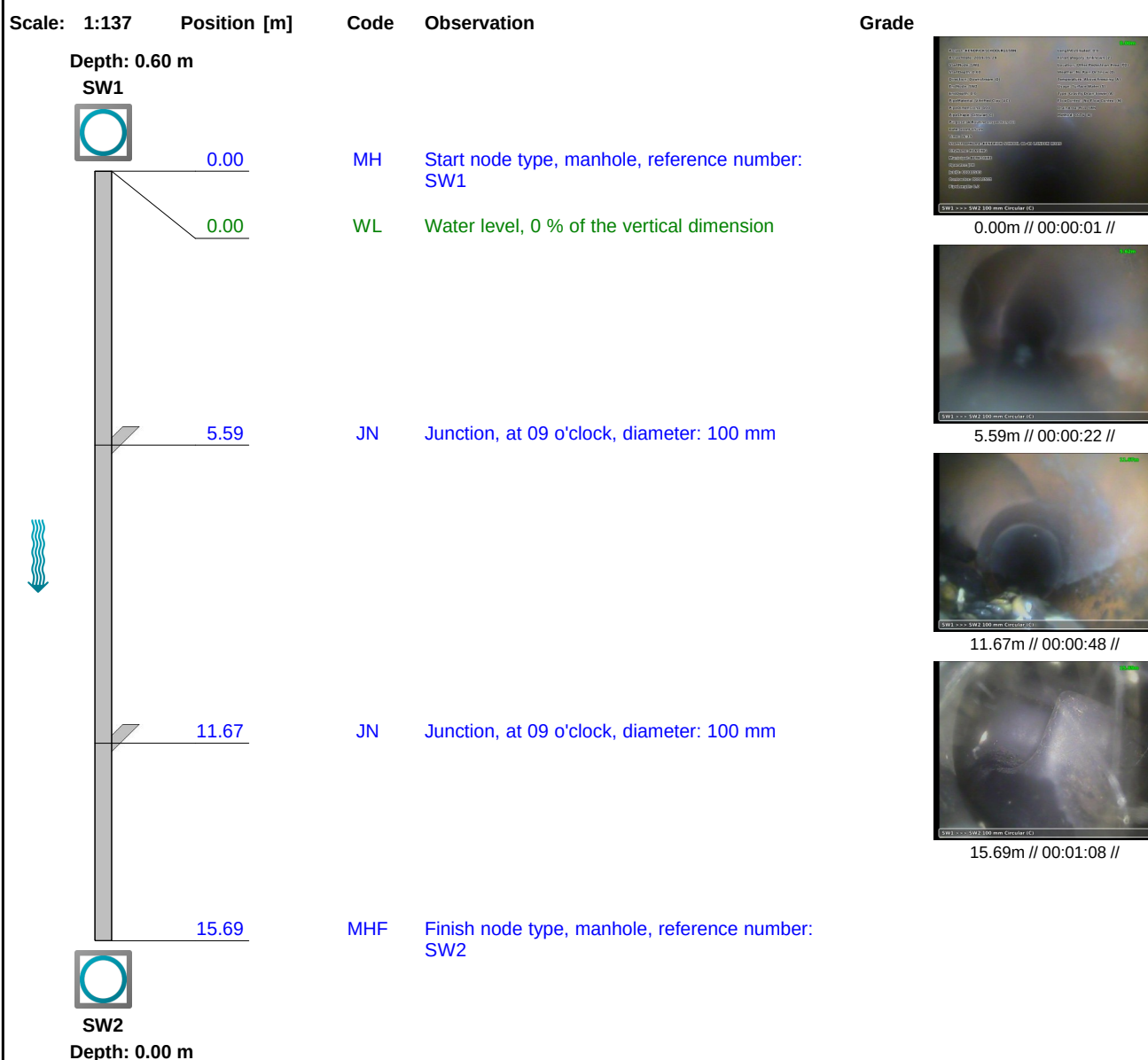
Section Inspection - 29/05/2019 - SW1X

Section 8	Inspection 8	Date 29/05/19	Time 16:39	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR SW1X
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Downstream	Upstream Node:	SW1
Road:	Kendrick School 41-43 London	Inspected Length:	15.69 m	Upstream Pipe Depth:	0.600 m
Location:	Other pedestrian area	Total Length:	15.69 m	Downstream Node:	SW2
Surface Type:	Concrete Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.000 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition	Lining Material:	No lining		

Comments:

Recommendations:



Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - SW1X

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
8	Downstream	SW1X	C0010505	C0010505



20190529-164119-snap0000.jpg, 00:00:01, 0.00 m
Start node type, manhole, reference number: SW1



20190529-164119-snap0001.jpg, 00:00:22, 5.59 m
Junction, at 09 o'clock, diameter: 100 mm



20190529-164119-snap0002.jpg, 00:00:48, 11.67 m
Junction, at 09 o'clock, diameter: 100 mm



20190529-164119-snap0003.jpg, 00:01:08, 15.69 m
Finish node type, manhole, reference number: SW2



Section Inspection - 29/05/2019 - SW1AX

Section 9	Inspection 9	Date 29/05/19	Time 16:45	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR SW1AX
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Upstream	Upstream Node:	SW1A
Road:	Kendrick School 41-43 London	Inspected Length:	18.05 m	Upstream Pipe Depth:	0.000 m
Location:	Other pedestrian area	Total Length:	18.05 m	Downstream Node:	SW2
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.900 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition	Lining Material:	No lining		

Comments:

Recommendations:

Scale: 1:157	Position [m]	Code	Observation	Grade
Depth: 0.90 m SW2				
	0.00	MH	Start node type, manhole, reference number: SW2	
	0.00	WL	Water level, 0 % of the vertical dimension	
	2.47	JN	Junction, at 09 o'clock, diameter: 100 mm: RWG	
	16.61	JDM	Joint displaced, medium	
	16.68	JN	Junction, at 09 o'clock, diameter: 100 mm: RWG	
	18.05	MHF	Finish node type, manhole, reference number: SW1A: CONCELED CHAMBER	

Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Pictures - 29/05/2019 - SW1AX

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
9	Upstream	SW1AX	C0010505	C0010505



20190529-164610-snap0000.jpg, 00:00:02, 0.00 m
 Start node type, manhole, reference number: SW2



20190529-164610-snap0001.jpg, 00:00:19, 2.47 m
 Junction, at 09 o'clock, diameter: 100 mm, RWG



20190529-164610-snap0002.jpg, 00:01:05, 16.61 m
 Joint displaced, medium



20190529-164610-snap0003.jpg, 00:01:17, 16.68 m
 Junction, at 09 o'clock, diameter: 100 mm, RWG



20190529-164610-snap0004.jpg, 00:01:41, 18.05 m
 Finish node type, manhole, reference number: SW1A,
 CONCELED CHAMBER



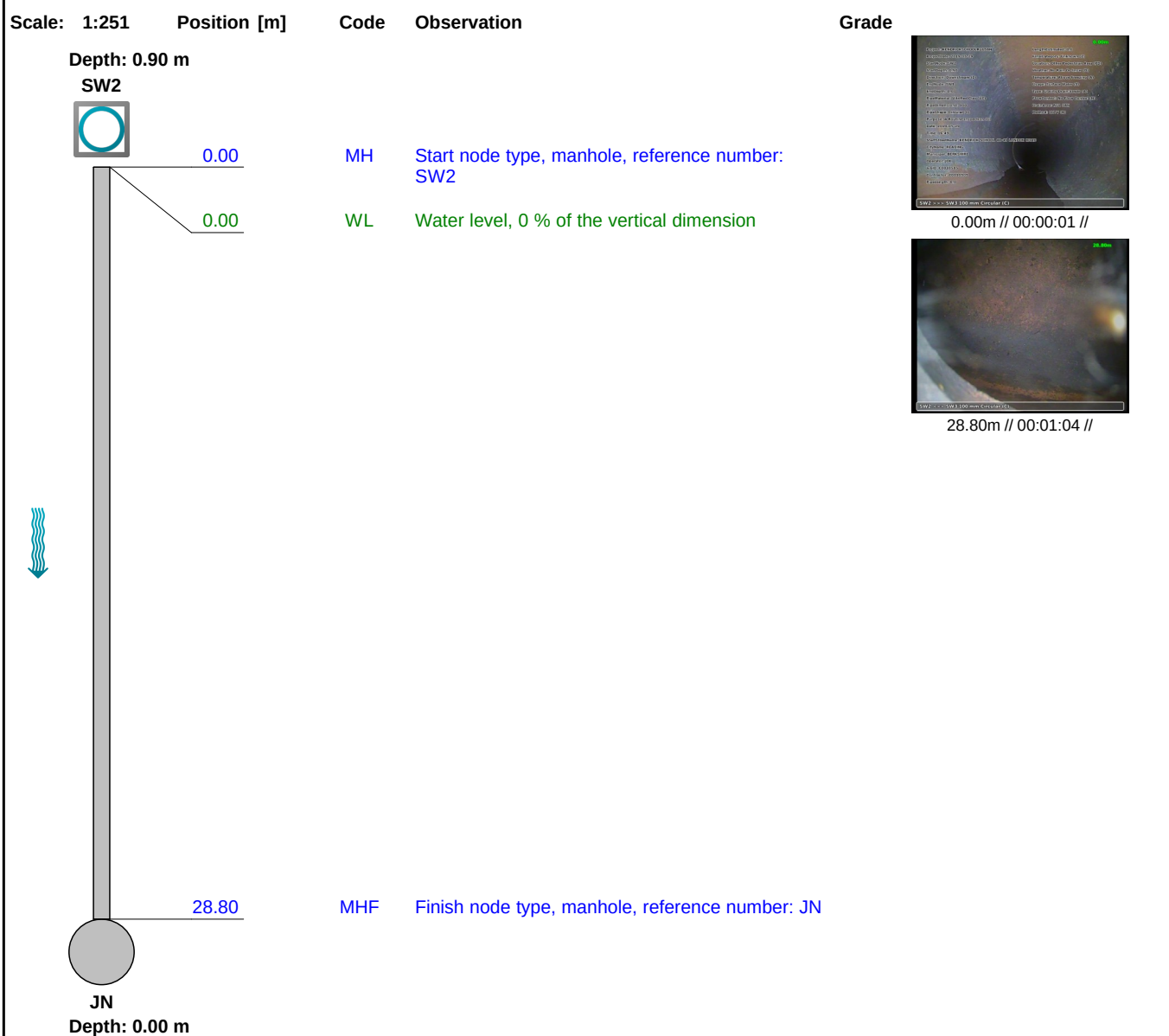
Section Inspection - 29/05/2019 - SW2X

Section 10	Inspection 10	Date 29/05/19	Time 16:49	Client's Job Ref C0010505	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR SW2X
Operator JOE		Vehicle LD17 HBU		Camera Scanprobe	Preset Length Not Specified	Legal Status Private Drain	Alternative ID Not Specified

Town or Village:	Reading	Inspection Direction:	Downstream	Upstream Node:	SW2
Road:	Kendrick School 41-43 London	Inspected Length:	28.80 m	Upstream Pipe Depth:	0.900 m
Location:	Other pedestrian area	Total Length:	28.80 m	Downstream Node:	JN
Surface Type:	Asphalt Footway	Joint Length:	0.00 m	Downstream Pipe Depth:	0.000 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm	Width:	100 mm
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No lining		
Inspection Purpose:	Routine inspection of condition		Lining Material:	No lining	

Comments:

Recommendations:

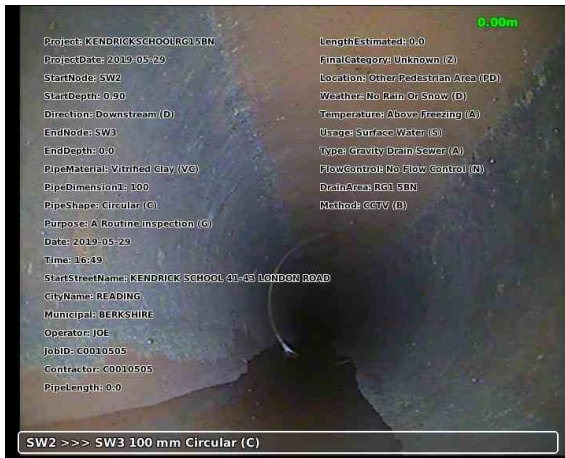


Structural Defects					Construction Features				
Service & Operational Observations					Miscellaneous Features				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 29/05/2019 - SW2X

Section	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
10	Downstream	SW2X	C0010505	C0010505



20190529-165059-snap0000.jpg, 00:00:01, 0.00 m
Start node type, manhole, reference number: SW2



20190529-165059-snap0001.jpg, 00:01:04, 28.80 m
Finish node type, manhole, reference number: JN