

Memorandum

ARUP

To	Tyrone Ward	Date 22 March 2018
Copies	Matthew Perry	Reference number 244847
From	Charlie Martin	File reference 4.50
Subject	Review of CCTV Survey of Leachate Pipe - Silent Valley Landfill January 2018	

Introduction

Blaenau Gwent County Borough Council are holders of the Environmental Permit EPR/UP3335SN for the Leachate Management installation at Silent Valley Landfill, located near Cwm, Ebbw Vale.

As requested by NRW BGCBC commissioned a CCTV survey of the leachate pipe that carries leachate from the Silent Valley Landfill leachate lagoon to the DCWW foul sewer located at Cendle Terrace to the south of the landfill.

The CCTV Survey was undertaken on the 8th and 9th January 2018 by Draintech, who had undertaken the previous CCTV Survey in 2013.

The 2013 CCTV survey indicated a number of issues including displaced pipe connections and the build-up of salts deposits within the pipe. These issues were addressed by BGCBC through lining of the pipe in locations where the integrity of the pipe was compromised and cleaning of the pipe.

Results of 2018 CCTV Survey

The results of CCTV survey are presented in the attached MP4 video files – numbers 1 to 24 – and the findings of the survey are reported in the attached report provided by Draintech.

Review of these indicates the following:

- Obstruction within the pipe preventing the progress of the camera between MH5 and MH6.
- Obstruction within the pipe preventing the progress of the camera between MH13 and MH14
- Obstruction within the pipe preventing the progress of the camera between MH14 and MH15.
- The general visibility during the survey is very poor, with the camera below the water line for the majority of the survey.
- When visibility of the pipe was possible this indicated that above the water level (i.e. the top half of the pipe) the pipe was not heavily impacted by deposition.

Memorandum

Conclusions

The conclusions from the results of the CCTV survey are limited due to the very poor visibility during the survey. Where visibility was possible this indicated that build up on the pipe above the water level was minimal and obstructions were present within the pipe at three locations. However, due to the poor visibility it is not possible to confirm that the integrity of the pipe is intact.

The 2013 CCTV survey had much better visibility (near 100%) presumably because the flow to the pipe was reduced during the survey. This was clearly not the case during the 2018 survey and so it is recommended that the CCTV survey is repeated with the leachate flow to the pipe reduced.

Client :- ARUP
Location :- SILENT VALLEY
Date :- 11/01/2018
Job Ref :- 6666
Plan Ref :- 6666/01

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KEY

LENGTH SURVEYD

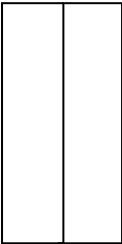


NOTES

Drawing is NOT to
scale

Draintech Surveys Ltd.

Housing Tanks



MH1b MH1a

MH1d

MH1c

MH1

MH2

MH3

MH4

MH5

MH6

MH7

MH8

MH9

MH10

MH11

MH12

MH13

MH14

MH15

MH16

MH17

MH18

MH19

SURVEY ABANDONED
DEBRIS 35%

SURVEY ABANDONED
DEBRIS 35%

CHAMBER IS SEALED
STEEL PLATE

DCWW WELSH WATER
CHAMBER

NO ACCESS TO MH14
IN FIELD WITH CATTLE

/ Main sections

Project name : 6666 SILENT VALLEY PN 1	Project number : 6666/0001	Contact :	Date : 11/01/2018
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Nr.	US MH	DS MH	Date	Road	Tape No.	Material	m	(m)
1	MH1D	MH1	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	6.12	6.12
2	MH1	MH2	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	36.99	36.99
3	MH2	MH3	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	25.42	25.42
4	MH3	MH4	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	35.79	35.79
5	MH4	MH5	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	41.00	41.00
6	MH5	MH6	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	0.70	0.70
7	MH5	MH6	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	51.23	51.23
8	MH6	MH7	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	23.94	23.94
9	MH7	MH8	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	12.00	12.00
10	MH8	MH9	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	59.70	59.70
11	MH9	MH10	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	49.81	49.81
12	MH10	MH11	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	42.04	42.04
13	MH11	MH12	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	16.58	16.58
14	MH12	MH13	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	0.20	0.20
15	MH13	MH14	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	71.28	71.28
16	MH15	MH16	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	19.79	19.79
17	MH14	MH15	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	47.32	47.32
18	MH16	MH17	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	6.27	6.27
19	MH17	MH18	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	70.26	70.26
20	MH18	MH19	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	35.67	35.67
21	MH19	DCWW	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	9.04	9.04
22	MH1A	MH1B	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	14.86	14.86
23	MH1B	MH1C	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	12.31	12.31
24	MH1C	MH1D	11/01/2018	SILENT VALLEY LANDFILL		Vitrified clay	1.75	1.75

Pipe size: CIRCULAR 150 = 690.07 m (690.07 m)

All sections = 690.07 m (690.07 m)

Service / Operational Defects (SRM 4)

 Project name :
6666 SILENT VALLEY PN 1

 Project Number :
6666/0001

Contact :

 Date :
11/01/2018

No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	MH1DX	D	T	C 150	11/01/2018	VC	6.12	6.12	-	0	1	0	0
2	MH1X	D	T	C 150	11/01/2018	VC	36.99	36.99	-	0	1	0	0
3	MH2X	D	T	C 150	11/01/2018	VC	25.42	25.42	-	0	1	0	0
4	MH3X	D	T	C 150	11/01/2018	VC	35.79	35.79	-	0	1	0	0
5	MH4X	D	T	C 150	11/01/2018	VC	41.00	41.00	-	0	1	0	0
6	MH5X	D	T	C 150	11/01/2018	VC	0.70	0.70	3	5	5	14.29	10
7	MH5X	U	T	C 150	11/01/2018	VC	51.23	51.23	3	5	4	0.1	5
8	MH6X	D	T	C 150	11/01/2018	VC	23.94	23.94	-	0	1	0	0
9	MH7X	D	T	C 150	11/01/2018	VC	12.00	12.00	-	0	1	0	0
10	MH8X	D	T	C 150	11/01/2018	VC	59.70	59.70	-				
11	MH9X	D	T	C 150	11/01/2018	VC	49.81	49.81	-	0	1	0	0
12	MH10X	D	T	C 150	11/01/2018	VC	42.04	42.04	-	0	1	0	0
13	MH11X	D	T	C 150	11/01/2018	VC	16.58	16.58	-	0	1	0	0
14	MH12X	D	T	C 150	11/01/2018	VC	0.20	0.20	-				
15	MH13X	D	T	C 150	11/01/2018	VC	71.28	71.28	3	5	4	0.07	5
16	MH15X	U	T	C 150	11/01/2018	VC	19.79	19.79	-	0	1	0	0
17	MH14X	U	T	C 150	11/01/2018	VC	47.32	47.32	3	5	4	0.11	5
18	MH16X	D	T	C 150	11/01/2018	VC	6.27	6.27	-	0	1	0	0
19	MH17X	D	T	C 150	11/01/2018	VC	70.26	70.26	-	0	1	0	0
20	MH18X	D	T	C 150	11/01/2018	VC	35.67	35.67	-	0	1	0	0
21	MH19X	D	T	C 150	11/01/2018	VC	9.04	9.04	-	0	1	0	0
22	MH1AX	D	T	C 150	11/01/2018	VC	14.86	14.86	-	0	1	0	0
23	MH1BX	D	T	C 150	11/01/2018	VC	12.31	12.31	-	0	1	0	0
24	MH1CX	D	T	C 150	11/01/2018	VC	1.75	1.75	-	0	1	0	0

Structural Defects (SRM 4)

 Project name :
6666 SILENT VALLEY PN 1

 Project Number :
6666/0001

Contact :

 Date :
11/01/2018

No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	MH1DX	D	T	C 150	11/01/2018	VC	6.12	6.12	-	0	1	0	0
2	MH1X	D	T	C 150	11/01/2018	VC	36.99	36.99	-	0	1	0	0
3	MH2X	D	T	C 150	11/01/2018	VC	25.42	25.42	-	0	1	0	0
4	MH3X	D	T	C 150	11/01/2018	VC	35.79	35.79	-	0	1	0	0
5	MH4X	D	T	C 150	11/01/2018	VC	41.00	41.00	-	0	1	0	0
6	MH5X	D	T	C 150	11/01/2018	VC	0.70	0.70	-	0	1	0	0
7	MH5X	U	T	C 150	11/01/2018	VC	51.23	51.23	-	0	1	0	0
8	MH6X	D	T	C 150	11/01/2018	VC	23.94	23.94	-	0	1	0	0
9	MH7X	D	T	C 150	11/01/2018	VC	12.00	12.00	-	0	1	0	0
10	MH8X	D	T	C 150	11/01/2018	VC	59.70	59.70	-				
11	MH9X	D	T	C 150	11/01/2018	VC	49.81	49.81	-	0	1	0	0
12	MH10X	D	T	C 150	11/01/2018	VC	42.04	42.04	-	0	1	0	0
13	MH11X	D	T	C 150	11/01/2018	VC	16.58	16.58	-	0	1	0	0
14	MH12X	D	T	C 150	11/01/2018	VC	0.20	0.20	-				
15	MH13X	D	T	C 150	11/01/2018	VC	71.28	71.28	-	0	1	0	0
16	MH15X	U	T	C 150	11/01/2018	VC	19.79	19.79	-	0	1	0	0
17	MH14X	U	T	C 150	11/01/2018	VC	47.32	47.32	-	0	1	0	0
18	MH16X	D	T	C 150	11/01/2018	VC	6.27	6.27	-	0	1	0	0
19	MH17X	D	T	C 150	11/01/2018	VC	70.26	70.26	-	0	1	0	0
20	MH18X	D	T	C 150	11/01/2018	VC	35.67	35.67	-	0	1	0	0
21	MH19X	D	T	C 150	11/01/2018	VC	9.04	9.04	-	0	1	0	0
22	MH1AX	D	T	C 150	11/01/2018	VC	14.86	14.86	-	0	1	0	0
23	MH1BX	D	T	C 150	11/01/2018	VC	12.31	12.31	-	0	1	0	0
24	MH1CX	D	T	C 150	11/01/2018	VC	1.75	1.75	-	0	1	0	0

Project-information

 Project name :
6666 SILENT VALLEY PN 1

 Project Number :
6666/0001

Contact :

 Date :
11/01/2018

Client: **ARUP**
 Contact Name: **CHARLIE MARTIN**
 Department:
 Road: **SILENT VALLEY LANDFILL**
 Town: **EBBW VALE**
 County:
 Telephone:
 Fax:
 Mobile: **07825276301**
 E-mail:

Site: **Draintech Surveys Ltd**
 Contact Name: **Mark Allen**
 Department: **CCTV Surveyor**
 Road: **SILENT VALLEY LANDFILL**
 Town: **EBBW VALE**
 County: **Crucorney**
 Telephone:
 Fax:
 Mobile:
 E-mail:

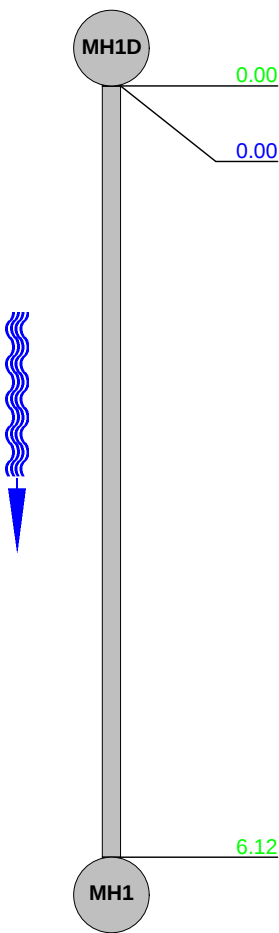
Contractor **Draintech Surveys Ltd**
 Contact Name: **RACHEL ASHONG**
 Department: **Process Coordinator**
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 County: **CF31 3PL**
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 Fax: **01656 762839**
 Mobile:
 E-mail: **brent.oneill@draintech.co.uk**

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 1	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH1D (D/S) MH1	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH1D 3.75 MH1 2.64
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	6.12 m	Lining :			

Comment :

1:60	Position	Code	Observation	MPEG	Photo	Grade
Depth: 3.75						
		MH	Start node type, manhole, reference number : MH1D	00:00:02		(Constr) 0
		WL	Water level, 40% of the vertical dimension	00:00:02		(Serv) 0
		MHF	Finish node type, manhole reference number: MH1	00:00:02		(Constr) 0
Depth: 2.64						

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

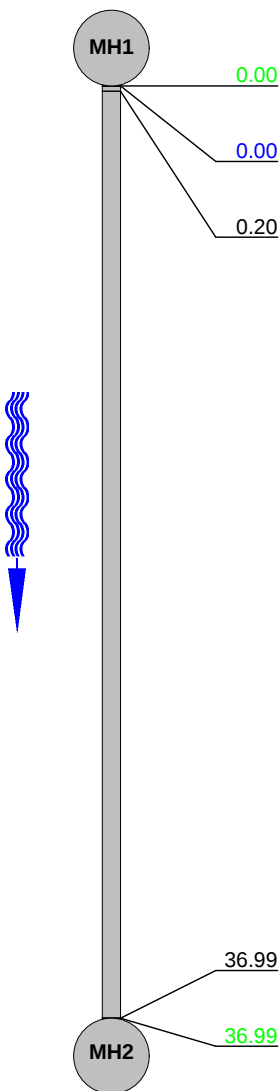
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Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 2	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH1 (D/S) MH2	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH1 2.64 MH2 1.88
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	36.99 m	Lining :			

Comment :

1:300 Depth: 2.64	Position	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node type, manhole, reference number : MH1	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
Depth: 1.88	36.99	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	36.99	MHF	Finish node type, manhole reference number: MH2	00:00:02		(Constr) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

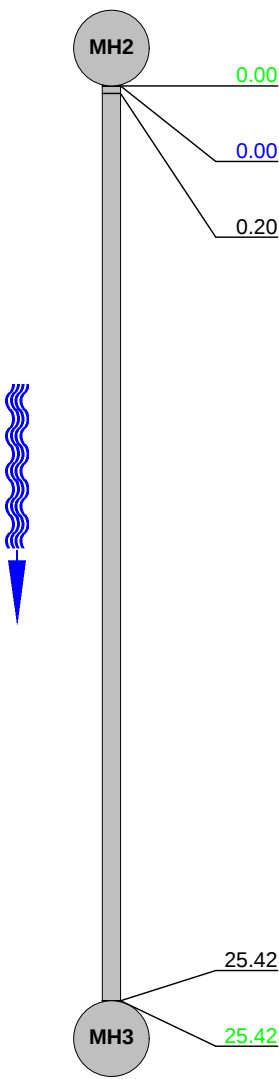
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Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 3	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH2 (D/S) MH3	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH2 1.88 MH3 1.4
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	25.42 m	Lining :			

Comment :

1:210 Depth: 1.88	Position	Code	Observation	MPEG	Photo	Grade
	MH		Start node type, manhole, reference number : MH2	00:00:02		(Constr) 0
	WL		Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	S01	CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	F01	CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
MH3	MHF		Finish node type, manhole reference number: MH3	00:00:02		(Constr) 0

Depth: 1.4

Structural Defects					Constructional Features				
Service Defects					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	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 4	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH3 (D/S) MH4	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH3 1.4 MH4 1.82
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	35.79 m	Lining :			

Comment :

1:285 Depth: 1.4	Position	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node type, manhole, reference number : MH3	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
Depth: 1.82	35.79	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	35.79	MHF	Finish node type, manhole reference number: MH4	00:00:02		(Constr) 0

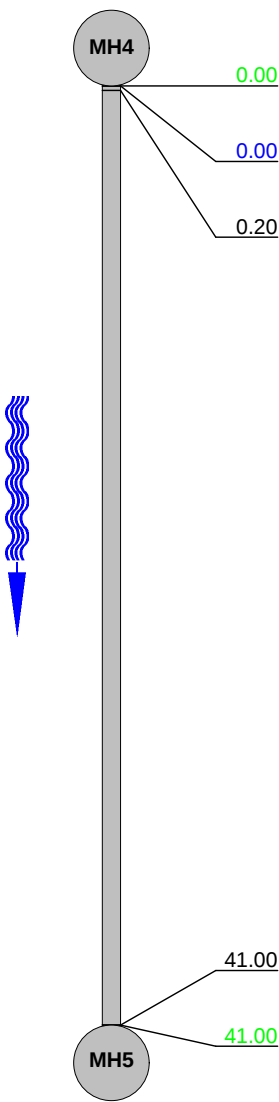
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 5	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH4 (D/S) MH5	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH4 1.82 MH5 2.76
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	41.00 m	Lining :			

Comment :

1:330	Position	Code	Observation	MPEG	Photo	Grade
Depth: 1.82						
	0.00	MH	Start node type, manhole, reference number : MH4	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT FLOW	00:00:02		(Misc) 0
	41.00	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT FLOW	00:00:02		(Misc) 0
	41.00	MHF	Finish node type, manhole reference number: MH5	00:00:02		(Constr) 0
Depth: 2.76						

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

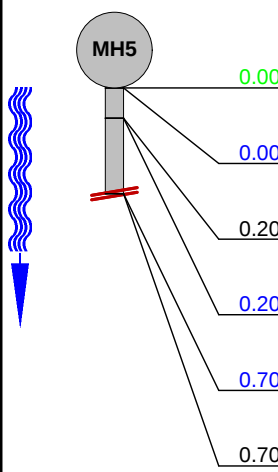
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Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 6	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH5 (D/S) MH6	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH5 2.77 MH6 1.74
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	0.70 m	Lining :			

Comment :

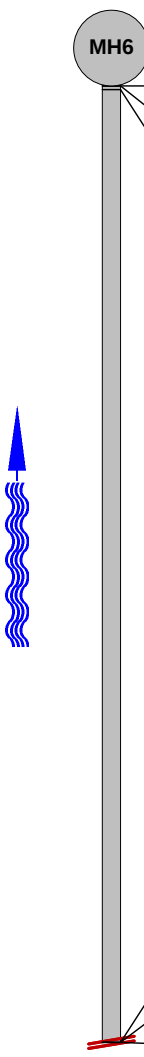
1:50	Position	Code	Observation	MPEG	Photo	Grade			
Depth: 2.77									
		MH	Start node type, manhole, reference number : MH5	00:00:02		(Constr) 0			
		WL	Water level, 80% of the vertical dimension	00:00:02		(Serv) 0			
		CUW	Loss of vision, camera under water	00:00:02		(Misc) 0			
		DER	Settled deposits, coarse, 35% cross-sectional area loss	00:00:02		(Serv) 4			
		DER	Settled deposits, coarse, 35% cross-sectional area loss	00:00:02		(Serv) 4			
		SA	Survey abandoned Remarks: NEEDS CLEANING	00:00:02		(Misc) 0			
Structural Defects					Constructional Features				
Service Defects					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	1	2	5	14.29	10	5

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 7	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH6 (U/S) MH5	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH5 2.76 MH6 1.74
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	51.23 m	Lining :			

Comment :

1:405 Depth: 1.74	Position	Code	Observation	MPEG	Photo	Grade
	<u>0.00</u>	MH	Start node type, manhole, reference number : MH6	00:00:02		(Constr) 0
	<u>0.00</u>	WL	Water level, 60% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	<u>0.20</u>	S01 CUW	Loss of vision, camera under water, Start	00:00:02		(Misc) 0
	<u>51.23</u>	F01 CUW	Loss of vision, camera under water, End	00:00:02		(Misc) 0
	<u>51.23</u>	DER	Settled deposits, coarse, 35% cross-sectional area loss	00:00:02		(Serv) 4
	<u>51.23</u>	SA	Survey abandoned Remarks: UNABLE TO PASS	00:00:02		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

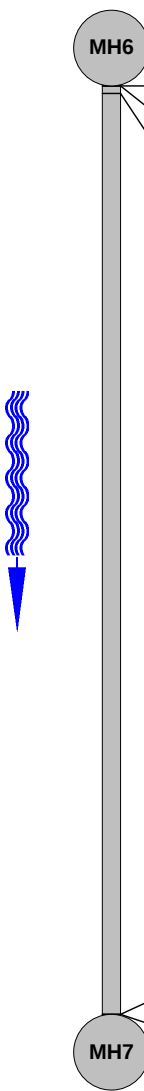
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	1	5	0.1	5	4

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 8	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH6 (D/S) MH7	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH6 1.74 MH7 2.3
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	23.94 m	Lining :			

Comment :

1:195	Position	Code	Observation	MPEG	Photo	Grade
Depth: 1.74						
	MH6					
	0.00	MH	Start node type, manhole, reference number : MH6	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
Depth: 2.3						
	23.94	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	23.94	MHF	Finish node type, manhole reference number: MH7	00:00:02		(Constr) 0
Depth: 2.3						

Structural Defects

Constructional Features

Service Defects

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	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 9	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place :	EBBW VALE	Location details:	U/S MH :	MH7
Road :	SILENT VALLEY LANDFILL	Catchment:	U/S Depth :	2.3
Location	Woodland	Tape number : 6666	D/S MH :	MH8
Inspection	MH7 (D/S) MH8	Pipe Length 1.00 m	D/S Depth :	2.4
Direction Use:	Trade effluent	Pipe shape :	Circular	
Year laid :	Z	Pipe size :	150 mm	
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay	
Total length :	12.00 m	Lining :		

Comment :

The diagram shows a vertical manhole inspection. At the top is manhole MH7 and at the bottom is manhole MH8. A vertical shaft connects them. Three observation points are marked along the shaft: 0.00, 0.20, and 12.00. The 0.00 and 0.20 points are near MH7, and the 12.00 point is near MH8. A table on the right lists the observations corresponding to these points.

Position	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node type, manhole, reference number : MH7	00:00:02		(Constr) 0
0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
0.20	S01 CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
12.00	F01 CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
12.00	MHF	Finish node type, manhole reference number: MH8	00:00:02		(Constr) 0

Depth: 2.4

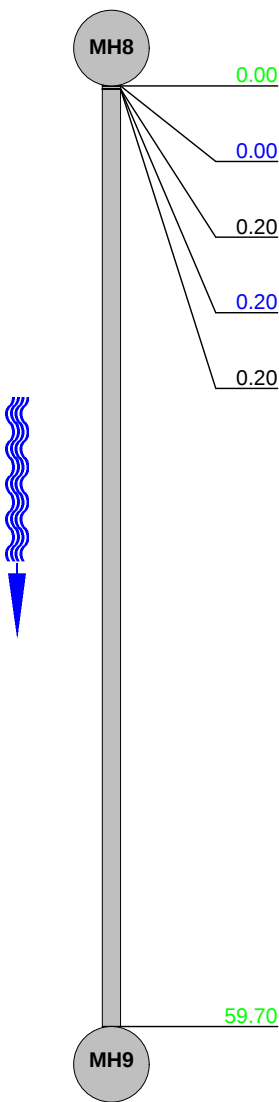
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 10	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH8 (D/S) MH9	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH8 2.4 MH9 1.62
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	59.70 m	Lining :			

Comment :

1:480 Depth: 2.4	Position	Code	Observation	MPEG	Photo	Grade
		MH	Start node type, manhole, reference number : MH8	00:00:02		(Constr) 0
		WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	S01	CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
		LD	Line deviates down, full Remarks: BACKDROP	00:00:02		(Serv) 0
	F01	CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
		MHF	Finish node type, manhole reference number: MH9	00:00:02		(Constr) 0
Depth: 1.62						

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

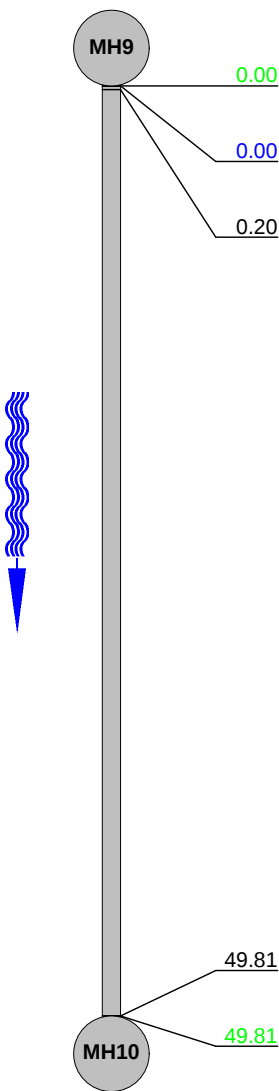
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Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 11	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH9 (D/S) MH10	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH9 1.69 MH10 1.22
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	49.81 m	Lining :			

Comment :

1:405 Depth: 1.69	Position	Code	Observation	MPEG	Photo	Grade
	<u>0.00</u>	MH	Start node type, manhole, reference number : MH9	00:00:02		(Constr) 0
	<u>0.00</u>	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	<u>0.20</u>	S01 CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	<u>49.81</u>	F01 CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	<u>49.81</u>	MHF	Finish node type, manhole reference number: MH10	00:00:02		(Constr) 0

Depth: 1.22

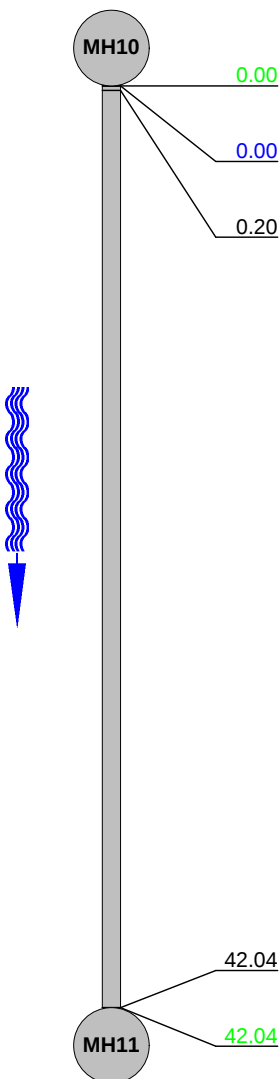
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 12	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH10 (D/S) MH11	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH10 1.22 MH11
Direction Use: Year laid : Purpose : Total length :	Trade effluent Z Routine inspection of condition 42.04 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 150 mm Vitrified clay 		

Comment :

1:345	Position	Code	Observation	MPEG	Photo	Grade
Depth: 1.22						
	0.00	MH	Start node type, manhole, reference number : MH10	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	42.04	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	42.04	MHF	Finish node type, manhole reference number: MH11	00:00:02		(Constr) 0

UNABLE TO RAISE

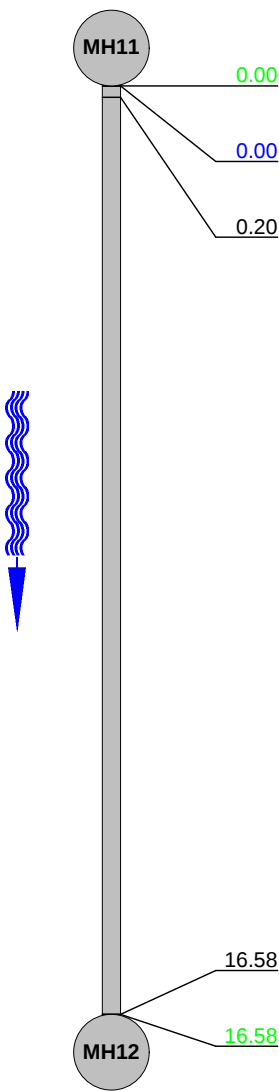
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 13	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH11 (D/S) MH12	Location details: Catchment: Tape number : Pipe Length	6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH11 MH12 0.94
Direction Use:	Trade effluent	Pipe shape :	Circular	Pipe size :	150 mm
Year laid :	Z	Pipe material :	Vitrified clay	Lining :	
Purpose :	Routine inspection of condition				
Total length :	16.58 m				

Comment :

1:135	Position	Code	Observation	MPEG	Photo	Grade
UNABLE TO RAISE						
	MH11	MH	Start node type, manhole, reference number : MH11	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	16.58	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	16.58	MHF	Finish node type, manhole reference number: MH12	00:00:02		(Constr) 0

Depth: 0.94

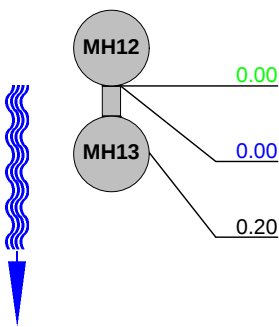
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 14	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH12 (D/S) MH13	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH12 0.94 MH13 1.24
Direction Use: Year laid : Purpose : Total length :	Trade effluent Z Routine inspection of condition 0.20 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 150 mm Vitrified clay 		

Comment :

1:50	Position	Code	Observation	MPEG	Photo	Grade
Depth: 0.94						
	MH12	MH	Start node type, manhole, reference number : MH12	00:00:02		(Constr) 0
	MH13	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20 S01	CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		
Depth: 1.24						

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 15	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place :	EBBW VALE	Location details:	U/S MH :	MH13
Road :	SILENT VALLEY LANDFILL	Catchment:	U/S Depth :	1.24
Location	Woodland	Tape number : 6666	D/S MH :	MH14
Inspection	MH13 (D/S) MH14	Pipe Length 1.00 m	D/S Depth :	
Direction	Trade effluent	Pipe shape :	Circular	
Use:		Pipe size :	150 mm	
Year laid :		Pipe material :	Vitrified clay	
Purpose :		Lining :		
Total length :	71.28 m			

Comment :

1:570	Position	Code	Observation	MPEG	Photo	Grade
Depth: 1.24						
	0.00	MH	Start node type, manhole, reference number : MH13	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01 CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	71.28	F01 CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	71.28	DER	Settled deposits, coarse, 40% cross-sectional area loss	00:00:02		(Serv) 4
	71.28	SA	Survey abandoned Remarks: UNABLE TO PASS	00:00:02		(Misc) 0

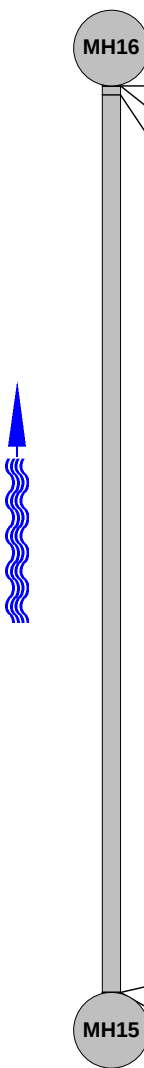
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
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0	0	0	0	1	1	5	0.07	5	4

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 16	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH16 (U/S) MH15	Location details: Catchment: Tape number : Pipe Length	6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH15 MH16 1.93
Direction Use: Year laid : Purpose : Total length :	Trade effluent Z Routine inspection of condition 19.79 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 150 mm Vitrified clay		

Comment :

1:165	Position	Code	Observation	MPEG	Photo	Grade
Depth: 1.93						
	0.00	MH	Start node type, manhole, reference number : MH16	00:00:02		(Constr) 0
	0.00	WL	Water level, 60% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start	00:00:02		(Misc) 0
	19.79	F01	CUW Loss of vision, camera under water, End	00:00:02		(Misc) 0
	19.79	MHF	Finish node type, manhole reference number: MH15	00:00:02		(Constr) 0

UNABLE TO RAISE SEALED

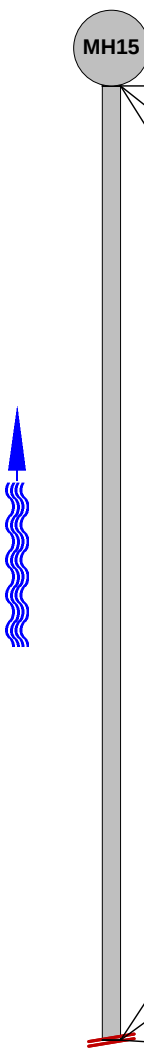
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 17	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH15 (U/S) MH14	Location details: Catchment: Tape number : Pipe Length	6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH14 MH15
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	47.32 m	Lining :			

Comment :

1:375	Position	Code	Observation	MPEG	Photo	Grade
UNABLE TO RAISE SEALED						
	MH15					
0.00		MH	Start node type, manhole, reference number : MH15	00:00:02		(Constr) 0
0.00		WL	Water level, 60% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
0.00	S01	CUW	Loss of vision, camera under water, Start	00:00:02		(Misc) 0
47.32	F01	CUW	Loss of vision, camera under water, End	00:00:02		(Misc) 0
47.32		DER	Settled deposits, coarse, 30% cross-sectional area loss	00:00:02		(Serv) 4
47.32		SA	Survey abandoned Remarks: UNABLE TO PASS	00:00:02		(Misc) 0

Structural Defects

Constructional Features

Service Defects

Miscellaneous Features

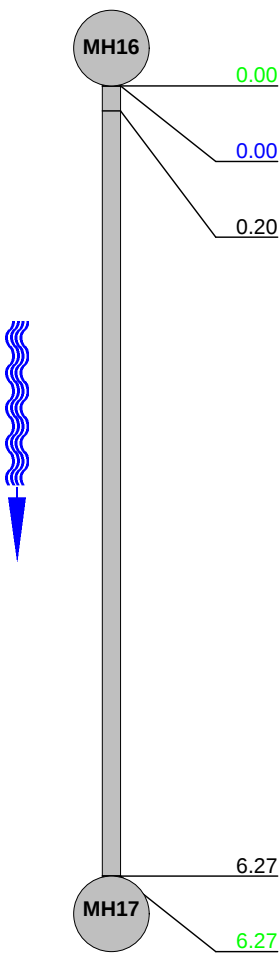
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0	0	0	0	1	1	5	0.11	5	4

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 18	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH16 (D/S) MH17	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH16 1.93 MH17 2.4
Direction Use: Year laid : Purpose : Total length :	Trade effluent Z Routine inspection of condition 6.27 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 150 mm Vitrified clay 		

Comment :

1:60 Depth: 1.93	Position	Code	Observation	MPEG	Photo	Grade
						
0.00	MH		Start node type, manhole, reference number : MH16	00:00:02		(Constr) 0
0.00	WL		Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
0.20	S01	CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
6.27	F01	CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
6.27	MHF		Finish node type, manhole reference number: MH17	00:00:02		(Constr) 0
Depth: 2.4						

Structural Defects

Service Defects

Constructional Features

Miscellaneous Features

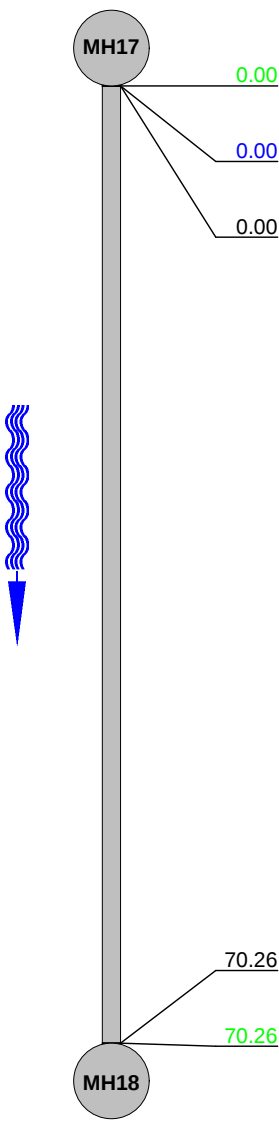
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 19	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH17 (D/S) MH18	Location details: Catchment: Tape number : Pipe Length	6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH17 2.4 MH18 1.23
Direction Use:	Trade effluent	Pipe shape :	Circular	Pipe size :	150 mm
Year laid :	Z	Pipe material :	Vitrified clay	Lining :	
Purpose :	Routine inspection of condition				
Total length :	70.26 m				

Comment :

1:555 Depth: 2.4	Position	Code	Observation	MPEG	Photo	Grade
	MH17	MH	Start node type, manhole, reference number : MH17	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.00	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	70.26	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	70.26	MHF	Finish node type, manhole reference number: MH18	00:00:02		(Constr) 0
Depth: 1.23						

Structural Defects

Constructional Features

Service Defects

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	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 20	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place :	EBBW VALE	Location details:	U/S MH :	MH18
Road :	SILENT VALLEY LANDFILL	Catchment:	U/S Depth :	1.23
Location	Woodland	Tape number : 6666	D/S MH :	MH19
Inspection	MH18 (D/S) MH19	Pipe Length 1.00 m	D/S Depth :	1.24
Direction Use:	Trade effluent	Pipe shape :	Circular	
Year laid :	Z	Pipe size :	150 mm	
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay	
Total length :	35.67 m	Lining :		

Comment :

[illegible]

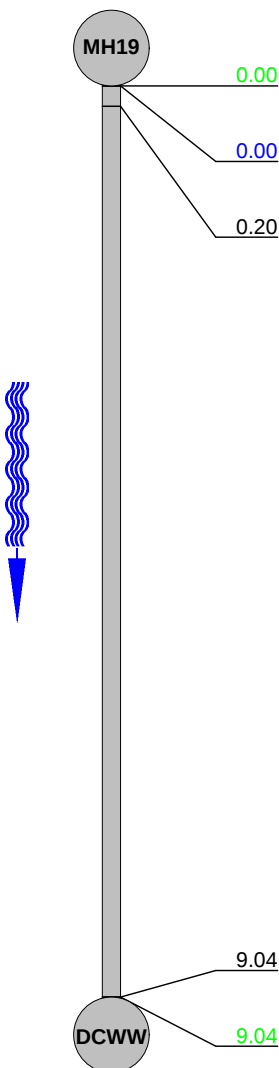
Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 21	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH19 (D/S) DCWW	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH19 1.24 DCWW
Direction Use: Year laid : Purpose : Total length :	Trade effluent Z Routine inspection of condition 9.04 m	Pipe shape : Pipe size : Pipe material : Lining :	Circular 150 mm Vitrified clay 		

Comment :

1:75 Depth: 1.24	Position	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node type, manhole, reference number : MH19	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	9.04	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	9.04	MHF	Finish node type, manhole reference number: DCWW	00:00:02		(Constr) 0

Structural Defects

Service Defects

Constructional Features

Miscellaneous Features

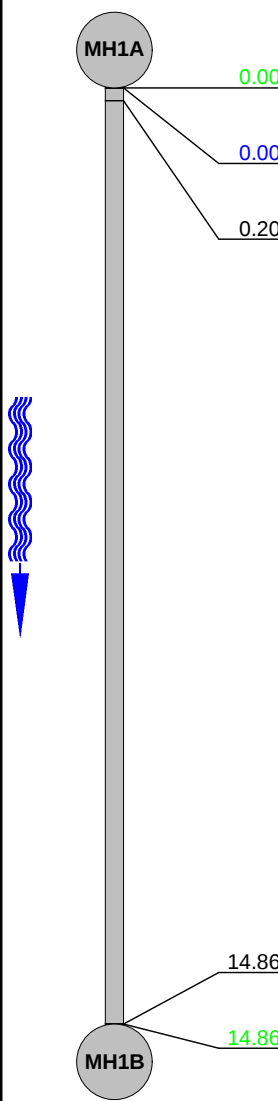
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 22	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH1A (D/S) MH1B	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH1A 1.5 MH1B 1.74
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	14.86 m	Lining :			

Comment :

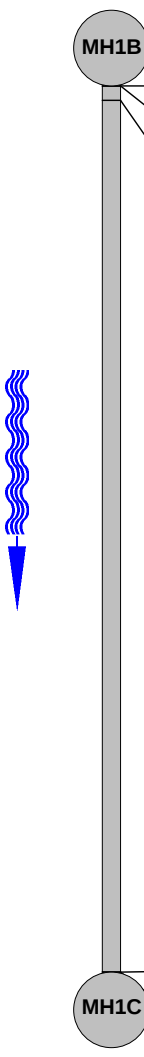
1:120	Position	Code	Observation	MPEG	Photo	Grade			
Depth: 1.5									
	MH1A	0.00	MH	Start node type, manhole, reference number : MH1A	00:00:02	(Constr) 0			
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0			
	0.20	S01	CUW	Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02	(Misc) 0			
	14.86	F01	CUW	Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02	(Misc) 0			
	14.86	MHF	Finish node type, manhole reference number: MH1B	00:00:02		(Constr) 0			
Depth: 1.74									
Structural Defects				Constructional Features					
Service Defects				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	1	0	0	0	0	1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 23	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH1B (D/S) MH1C	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH1B 1.74 MH1C 2.1
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	12.31 m	Lining :			

Comment :

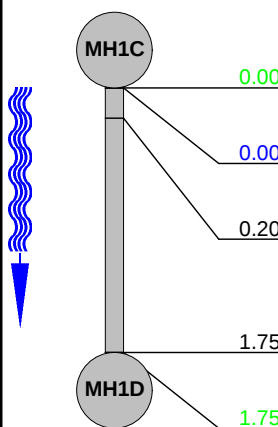
1:105	Position	Code	Observation	MPEG	Photo	Grade
Depth: 1.74						
	MH1B					
	0.00	MH	Start node type, manhole, reference number : MH1B	00:00:02		(Constr) 0
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
Depth: 2.1						
	12.31	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0
	12.31	MHF	Finish node type, manhole reference number: MH1C	00:00:02		(Constr) 0
Depth: 2.1						
Structural Defects				Constructional Features		
Service Defects				Miscellaneous Features		
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak
0	0	0	0	1	0	0
					SER mean	SER total
					0	0
						SER grade
						1

Inspection report

Date : 11/01/2018	Job number :	Weather : no rain or snow	Operator : DRAINTECH-MA	Section number : 24	PLR SUFFIX: X
Weather no rain or snow	Vehicle : CN13 BYA	Camera : MINICAM	Preset :	Cleaned : no	Operator : DRAINTECH-MA

Place : Road : Location Inspection	EBBW VALE SILENT VALLEY LANDFILL Woodland MH1C (D/S) MH1D	Location details: Catchment: Tape number : Pipe Length	 6666 1.00 m	U/S MH : U/S Depth : D/S MH : D/S Depth :	MH1C 2.1 MH1D 3.75
Direction Use:	Trade effluent	Pipe shape :	Circular		
Year laid :	Z	Pipe size :	150 mm		
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay		
Total length :	1.75 m	Lining :			

Comment :

1:50	Position	Code	Observation	MPEG	Photo	Grade			
Depth: 2.1									
	0.00	MH	Start node type, manhole, reference number : MH1C	00:00:02		(Constr) 0			
	0.00	WL	Water level, 30% of the vertical dimension Remarks: VERY FAST	00:00:02		(Serv) 0			
	0.20	S01	CUW Loss of vision, camera under water, Start Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0			
	1.75	F01	CUW Loss of vision, camera under water, End Remarks: IN AND OUT OF FLOW	00:00:02		(Misc) 0			
	1.75	MHF	Finish node type, manhole reference number: MH1D	00:00:02		(Constr) 0			
Depth: 3.75									
Structural Defects					Constructional Features				
Service Defects					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	1	0	0	0	0	1