



Project

Project Name: R&R Engineering, Wreham Ind Est 21-04-2021

Project Date: 4/21/2021

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

Table of Contents		
Project Name R&R Engineering, Wreham Ind Est 21-04-2021	Project Number	Project Date 4/21/2021
Project Information		P-1
Scoring Summary		P-3
Section Summary		P-4
Section: 1; S1 > S2 (S1X)		1
Section: 2; S2 > S3 (S2X)		2
Section: 3; S2A > S2 (S2AX)		3
Section: 4; S1 > S2 (S1X)		4
Section: 5; S1A > S1 (S1AX)		5
Section: 6; S1B > S1 (S1BX)		6
Section: 7; GU1 > S1B (GU1X)		7
Section: 8; S3 > S4 (S3X)		8

Project Information

Project Name
R&R Engineering, Wrexham Ind Est 21-04-2021

Project Number

Project Date
4/21/2021

Client

Company: R&R Engineering Ltd
Contact: Steve Wingett
Street: Oak Road
Town or City: Wrexham Ind Est
Post Code: LL13 9RG
Phone: 01978 661523

Manager

Company: R&R Engineering Ltd
Street: Oak Road
Town or City: Wrexham Ind Est

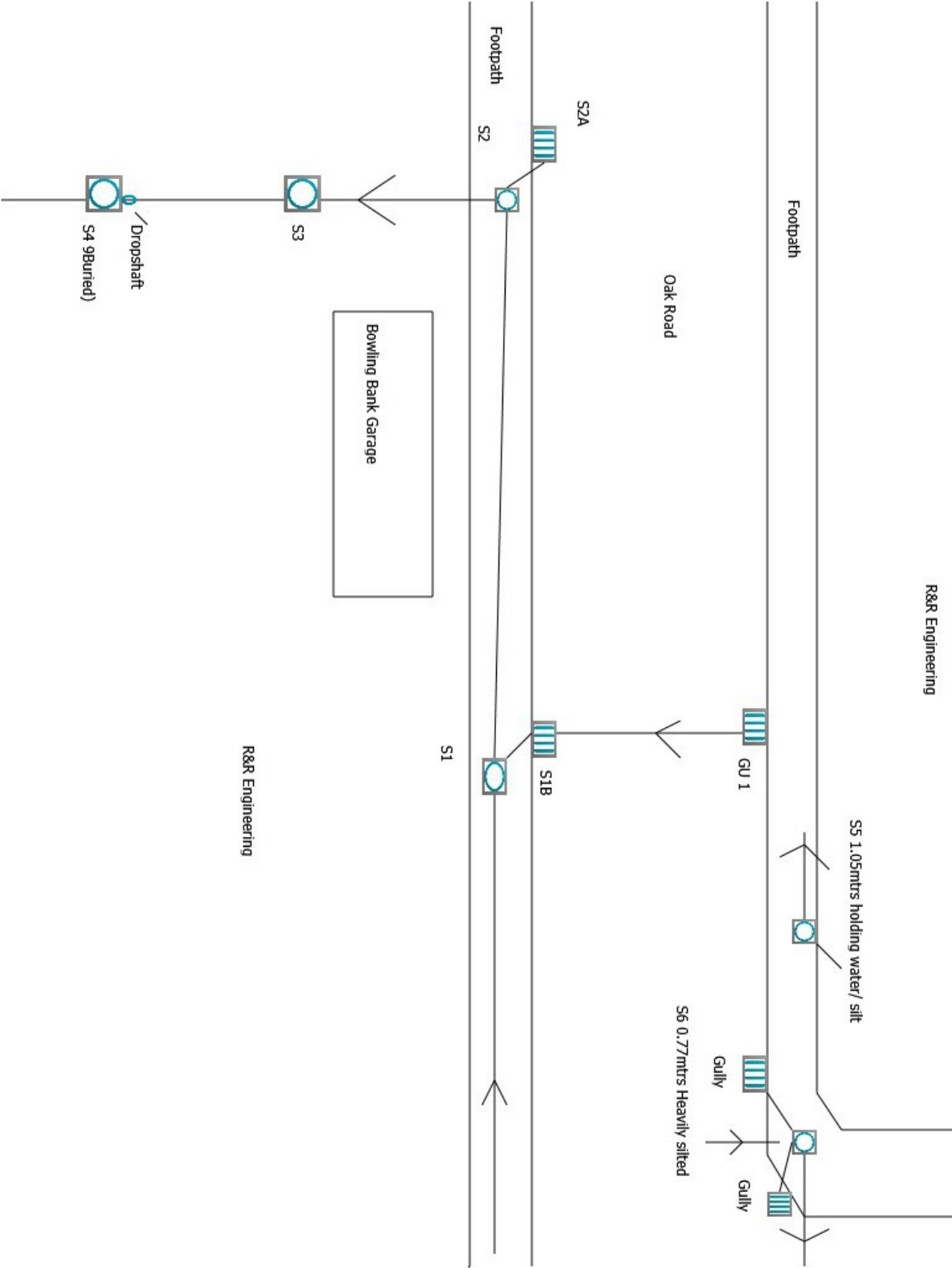
Contractor

Company: Drain Busters (NW) Ltd
Contact: Martin Hughes
Street: Greenfield Road
Town or City: Greenfield
County: Flintshire
Post Code: CH8 7GR
Phone: 01352 755405
Mobile: 07709 318516
Email: drainbustersnw@aol.com

Project Information

Project Name R&R Engineering, Wreham Ind Est 21-04-2021	Project Number	Project Date 4/21/2021
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Project Drawing



Scoring Summary

Project Name
R&R Engineering, Wreham Ind Est 21-04-2021

Project Number

Project Date
4/21/2021

Structural Defects

- Grade 3: Best practice suggests consideration should be given to repairs in the medium term.
- Grade 4: Best practice suggests consideration should be given to repairs to avoid a potential collapse.
- Grade 5: Best practice suggests that this pipe is at risk of collapse at any time. Urgent consideration should be given to repairs to avoid total failure.

Section	PLR	Grade	Description
8	S3X	4	Fracture, multiple from 12 o'clock to 11 o'clock

Service / Operational Condition

- Grade 3: Best practice suggests consideration should be given to maintenance activities in the medium term.
- Grade 4: Best practice suggests consideration should be given to maintenance activity to avoid potential blockages.
- Grade 5: Best practice suggests that this pipe is at a high risk of backing up or causing flooding.

Section	PLR	Grade	Description
1	S1X	3	Settled deposits, fine, 15% cross-sectional area loss
2	S2X	3	Multiple defects
4	S1X	4	Settled deposits, fine, 30% cross-sectional area loss
5	S1AX	3	Settled deposits, fine, 20% cross-sectional area loss, finish
8	S3X	3	Multiple defects

Abandoned Surveys

Section	PLR	Description
1	S1X	Survey abandoned
4	S1X	Survey abandoned
5	S1AX	Survey abandoned
7	GU 1X	Survey abandoned

Information

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

Section Summary

Project Name R&R Engineering, Wreham Ind Est 21-04-2021	Project Number	Project Date 4/21/2021
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Number of sections	8
Total length of sewer network	236.26 m
Inspected length of sewer network	169.79 m
Not inspected length of sewer network	66.47 m
Total abandoned inspections	4
Number of section inspection photos	0
Number of section inspection videos	0
Number of section inspection scans	0
Number of section inclination measurements	0

PLR:	S1X	Upstream Node:	S1
Inspection Direction:	Upstream	Downstream Node:	S2
Inspected Length:	17.20 m	Dia/Height:	300 mm
Total Length:	54.00 m	Pipe Material:	Concrete

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: S2
2	0.01	WL	Water level, 5% of the vertical dimension
3	1.38	LR	Line deviates right
4	2.29	JDL	Joint displaced, large
5	10.36	WL	Water level, 10% of the vertical dimension
6	13.30	DES	Settled deposits, fine, 15% cross-sectional area loss
7	16.56	CUW	Loss of vision, camera under water
8	17.20	SA	Survey abandoned

PLR:	S2X	Upstream Node:	S2
Inspection Direction:	Downstream	Downstream Node:	S3
Inspected Length:	37.24 m	Dia/Height:	300 mm
Total Length:	37.24 m	Pipe Material:	Concrete

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: S2
2	0.01	WL	Water level, 5% of the vertical dimension
3	0.15	DER	Settled deposits, coarse, 20% cross-sectional area loss
4	1.34	DES	Settled deposits, fine, 15% cross-sectional area loss
5	30.25	CC	Crack, circumferential from 1 o'clock to 4 o'clock
6	37.24	MHF	Finish node type, manhole, reference number: S3

Section Summary

Project Name R&R Engineering, Wreham Ind Est 21-04-2021				Project Number		Project Date 4/21/2021	
PLR:		S2AX		Upstream Node:		S2A	
Inspection Direction:		Upstream		Downstream Node:		S2	
Inspected Length:		6.91 m		Dia/Height:		150 mm	
Total Length:		6.91 m		Pipe Material:		Polyvinyl chloride	
No.	m+	Code	Observation				
1	0.00	MH	Start node type, manhole, reference number: S2				
2	0.01	WL	Water level, 5% of the vertical dimension				
3	6.33	D	Deformed drain or sewer, 10%				
4	6.91	GYF	Finish node type, gully, reference number: S2A				
PLR:		S1X		Upstream Node:		S1	
Inspection Direction:		Downstream		Downstream Node:		S2	
Inspected Length:		24.33 m		Dia/Height:		225 mm	
Total Length:		54.00 m		Pipe Material:		Concrete	
No.	m+	Code	Observation				
1	0.00	MH	Start node type, manhole, reference number: S1				
2	0.01	WL	Water level, 20% of the vertical dimension				
3	0.05	DES	Settled deposits, fine, 30% cross-sectional area loss				
4	1.53	CUD	Loss of vision, silt				
5	24.33	SA	Survey abandoned				
PLR:		S1AX		Upstream Node:		S1A	
Inspection Direction:		Upstream		Downstream Node:		S1	
Inspected Length:		16.56 m		Dia/Height:		225 mm	
Total Length:		16.56 m		Pipe Material:		Concrete	
No.	m+	Code	Observation				
1	0.00	MH	Start node type, manhole, reference number: S1				
2	0.01	WL	Water level, 5% of the vertical dimension				
3	0.05	DES	Settled deposits, fine, 20% cross-sectional area loss, start				
4	0.05	REM	General remark				
5	16.56	DES	Settled deposits, fine, 20% cross-sectional area loss, finish				
6	16.56	SA	Survey abandoned				
PLR:		S1BX		Upstream Node:		S1B	
Inspection Direction:		Upstream		Downstream Node:		S1	
Inspected Length:		0.57 m		Dia/Height:		150 mm	
Total Length:		0.57 m		Pipe Material:		Concrete	
No.	m+	Code	Observation				
1	0.00	MH	Start node type, manhole, reference number: S1				
2	0.01	WL	Water level, 5% of the vertical dimension				
3	0.38	LR	Line deviates right				
4	0.57	GYF	Finish node type, gully, reference number: S1B				
PLR:		GU 1X		Upstream Node:		GU 1	
Inspection Direction:		Upstream		Downstream Node:		S1B	
Inspected Length:		1.15 m		Dia/Height:		150 mm	
Total Length:		1.15 m		Pipe Material:		Vitrified clay pipe (i.e. all clayware)	

Section Summary			
Project Name R&R Engineering, Wreham Ind Est 21-04-2021		Project Number	Project Date 4/21/2021

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: S1B
2	0.01	WL	Water level, 5% of the vertical dimension
3	0.15	DES	Settled deposits, fine, 20% cross-sectional area loss
4	1.15	DES	Settled deposits, fine, 40% cross-sectional area loss
5	1.15	SA	Survey abandoned

PLR:	S3X	Upstream Node:	S3
Inspection Direction:	Downstream	Downstream Node:	S4
Inspected Length:	65.83 m	Dia/Height:	300 mm
Total Length:	65.83 m	Pipe Material:	Concrete

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: S3
2	0.01	WL	Water level, 5% of the vertical dimension
3	10.69	CN	Connection other than junction at 3 o'clock, diameter: 150mm
4	16.32	FM	Fracture, multiple from 12 o'clock to 11 o'clock
5	16.52	JN	Junction at 2 o'clock, diameter: 150mm
6	18.46	CL	Crack, longitudinal at 2 o'clock
7	18.46	CL	Crack, longitudinal at 10 o'clock
8	48.26	DES	Settled deposits, fine, 10% cross-sectional area loss
9	51.90	CC	Crack, circumferential from 1 o'clock to 5 o'clock
10	56.34	DES	Settled deposits, fine, 10% cross-sectional area loss
11	59.14	DES	Settled deposits, fine, 20% cross-sectional area loss
12	65.81	JN	Junction at 6 o'clock, diameter: 300mm
13	65.83	MHF	Finish node type, manhole, reference number: S4

Section Inspection - 4/21/2021 - S1X									
Section 1	Inspection 1	Date 21/04/21	Time 10:10	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR S1X		
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified		

Town or Village:	Wrexham Ind Est	Inspection Direction:	Upstream	Upstream Node:	S1
Road:	Oak Road	Inspected Length:	17.20 m	Upstream Pipe Depth:	
Location:		Total Length:	54.00 m	Downstream Node:	S2
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	2.620 m
Use:	Surface water			Pipe Shape:	Circular
Type of Pipe:				Dia/Height:	300 mm
Year Constructed:				Pipe Material:	Concrete
Flow Control:	No flow control			Lining Type:	No Lining
Inspection Purpose:	Sample survey to determine asset condition			Lining Material:	No Lining
Comments:					
Recommendations:					

Scale:	1:470	Position [m]	Code	Observation	Grade																																				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: right;">0.00</td> <td style="width: 10%;">MH</td> <td style="width: 70%;">Start node type, manhole, reference number: S2</td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: right;">0.01</td> <td>WL</td> <td>Water level, 5% of the vertical dimension</td> <td></td> </tr> <tr> <td style="text-align: right;">1.38</td> <td>LR</td> <td>Line deviates right</td> <td></td> </tr> <tr> <td style="text-align: right;">2.29</td> <td>JDL</td> <td>Joint displaced, large</td> <td style="text-align: center; color: red;">1</td> </tr> <tr> <td style="text-align: right;">10.36</td> <td>WL</td> <td>Water level, 10% of the vertical dimension</td> <td></td> </tr> <tr> <td style="text-align: right;">13.30</td> <td>DES</td> <td>Settled deposits, fine, 15% cross-sectional area loss</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: right;">16.56</td> <td>CUW</td> <td>Loss of vision, camera under water</td> <td></td> </tr> <tr> <td style="text-align: right;">17.20</td> <td>SA</td> <td>Survey abandoned: Due to silt</td> <td></td> </tr> <tr> <td style="text-align: right;">54.00</td> <td colspan="2">End of pipe</td> <td></td> </tr> </table>						0.00	MH	Start node type, manhole, reference number: S2		0.01	WL	Water level, 5% of the vertical dimension		1.38	LR	Line deviates right		2.29	JDL	Joint displaced, large	1	10.36	WL	Water level, 10% of the vertical dimension		13.30	DES	Settled deposits, fine, 15% cross-sectional area loss	3	16.56	CUW	Loss of vision, camera under water		17.20	SA	Survey abandoned: Due to silt		54.00	End of pipe		
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16.56	CUW	Loss of vision, camera under water																																							
17.20	SA	Survey abandoned: Due to silt																																							
54.00	End of pipe																																								

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	2.0	0.1	2.0	1.0	1	2.0	0.1	2.0	3.0

Section Inspection - 4/21/2021 - S2X										
Section 2	Inspection 2	Date 21/04/21	Time 10:37	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR S2X			
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified			
Town or Village:		Wrexham Ind Est		Inspection Direction:		Downstream		Upstream Node:		S2
Road:		Oak Road		Inspected Length:		37.24 m		Upstream Pipe Depth:		
Location:				Total Length:		37.24 m		Downstream Node:		S3
Surface Type:				Joint Length:		0.00 m		Downstream Pipe Depth:		
Use:		Surface water			Pipe Shape:		Circular			
Type of Pipe:					Dia/Height:		300 mm			
Year Constructed:					Pipe Material:		Concrete			
Flow Control:		No flow control			Lining Type:		No Lining			
Inspection Purpose:		Sample survey to determine asset condition			Lining Material:		No Lining			
Comments:										
Recommendations:										
Scale:	1:324	Position [m]	Code	Observation				Grade		
Construction Features					Miscellaneous Features					
Structural Defects					Service & Operational Observations					
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade	
1	10.0	0.3	10.0	2.0	2	2.0	0.1	4.0	3.0	

Section Inspection - 4/21/2021 - S2AX

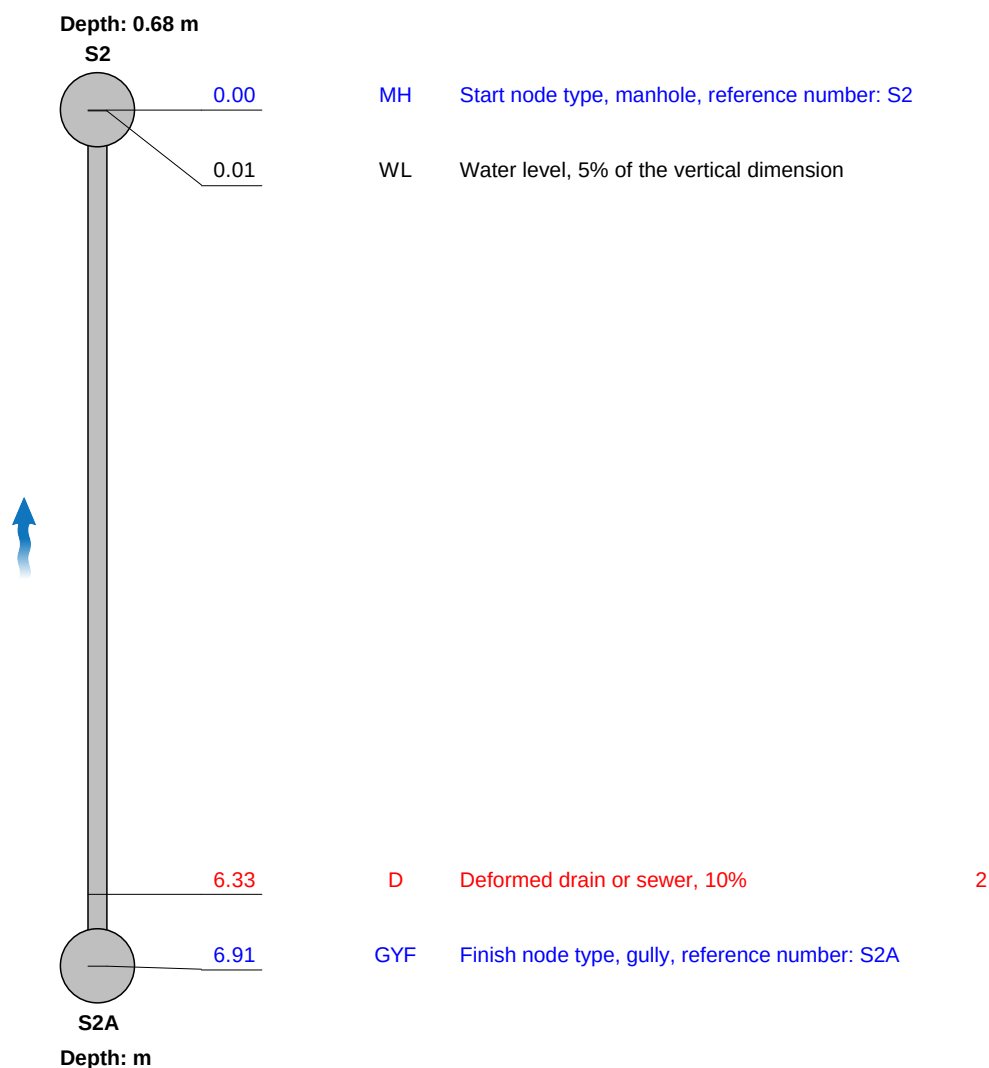
Section 3	Inspection 3	Date 21/04/21	Time 10:48	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR S2AX
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham Ind Est	Inspection Direction:	Upstream	Upstream Node:	S2A
Road:	Oak Road	Inspected Length:	6.91 m	Upstream Pipe Depth:	
Location:		Total Length:	6.91 m	Downstream Node:	S2
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	0.680 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	150 mm		
Year Constructed:		Pipe Material:	Polyvinyl chloride		
Flow Control:	No flow control	Lining Type:	No Lining		
Inspection Purpose:	Sample survey to determine asset condition	Lining Material:	No Lining		

Comments:

Recommendations:

Scale: 1:61 Position [m] Code Observation Grade



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	20.0	3.2	20.0	2.0	0	0.0	0.0	0.0	1.0

Section Inspection - 4/21/2021 - S1X							
Section	Inspection	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
4	4	21/04/21	11:07	Not Specified	No Rain Or Snow	Not Specified	S1X
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham Ind Est	Inspection Direction:	Downstream	Upstream Node:	S1
Road:	Oak Road	Inspected Length:	24.33 m	Upstream Pipe Depth:	1.520 m
Location:		Total Length:	54.00 m	Downstream Node:	S2
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	2.620 m
Use:	Surface water			Pipe Shape:	Circular
Type of Pipe:				Dia/Height:	225 mm
Year Constructed:				Pipe Material:	Concrete
Flow Control:	No flow control			Lining Type:	No Lining
Inspection Purpose:	Sample survey to determine asset condition			Lining Material:	No Lining
Comments:					
Recommendations:					

Scale:	1:470	Position [m]	Code	Observation	Grade

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	1	5.0	3.3	5.0	4.0

Section Inspection - 4/21/2021 - S1AX

Section 5	Inspection 5	Date 21/04/21	Time 11:22	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR S1AX
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham Ind Est	Inspection Direction:	Upstream	Upstream Node:	S1A
Road:	Oak Road	Inspected Length:	16.56 m	Upstream Pipe Depth:	
Location:		Total Length:	16.56 m	Downstream Node:	S1
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	1.520 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	225 mm		
Year Constructed:		Pipe Material:	Concrete		
Flow Control:	No flow control	Lining Type:	No Lining		
Inspection Purpose:	Sample survey to determine asset condition	Lining Material:	No Lining		

Comments:

Recommendations:

Scale: 1:144 Position [m] Code Observation Grade

Depth: 1.52 m

S1



0.00

MH

Start node type, manhole, reference number: S1

0.01

WL

Water level, 5% of the vertical dimension

0.05

S01

DES

Settled deposits, fine, 20% cross-sectional area loss, start

0.05

REM

General remark: Camera to one side due to silt

16.56

F01

DES

Settled deposits, fine, 20% cross-sectional area loss, finish

3

16.56

SA

Survey abandoned: Due to silt

Construction Features

Structural Defects

Miscellaneous Features

Service & Operational Observations

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	1	2.0	2.1	34.0	3.0

Section Inspection - 4/21/2021 - S1BX

Section 6	Inspection 6	Date 21/04/21	Time 11:30	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR S1BX
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham Ind Est	Inspection Direction:	Upstream	Upstream Node:	S1B
Road:	Oak Road	Inspected Length:	0.57 m	Upstream Pipe Depth:	
Location:		Total Length:	0.57 m	Downstream Node:	S1
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	0.740 m
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	150 mm		
Year Constructed:		Pipe Material:	Concrete		
Flow Control:	No flow control	Lining Type:	No Lining		
Inspection Purpose:	Sample survey to determine asset condition	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	Grade
		0.00	MH	Start node type, manhole, reference number: S1	
		0.01	WL	Water level, 5% of the vertical dimension	
		0.38	LR	Line deviates right	
		0.57	GYF	Finish node type, gully, reference number: S1B	
Depth: m					

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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 Inspection - 4/21/2021 - GU 1X

Section 7	Inspection 7	Date 21/04/21	Time 11:40	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR GU 1X
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham Ind Est	Inspection Direction:	Upstream	Upstream Node:	GU 1
Road:	Oak Road	Inspected Length:	1.15 m	Upstream Pipe Depth:	
Location:		Total Length:	1.15 m	Downstream Node:	S1B
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	150 mm		
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No Lining		
Inspection Purpose:	Sample survey to determine asset condition	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	Grade
		0.00	MH	Start node type, manhole, reference number: S1B	
		0.01	WL	Water level, 5% of the vertical dimension	
		0.15	DES	Settled deposits, fine, 20% cross-sectional area loss	3
		1.15	DES	Settled deposits, fine, 40% cross-sectional area loss	4
		1.15	SA	Survey abandoned: Due to silt	

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
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	2	5.0	6.1	7.0	5.0

Section Inspection - 4/21/2021 - S3X									
Section 8	Inspection 8	Date 21/04/21	Time 12:58	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR S3X		
Operator Martin		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified		

Town or Village:	Wrexham Ind Est	Inspection Direction:	Downstream	Upstream Node:	S3
Road:	Oak Road	Inspected Length:	65.83 m	Upstream Pipe Depth:	2.890 m
Location:		Total Length:	65.83 m	Downstream Node:	S4
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	
Use:	Surface water			Pipe Shape:	Circular
Type of Pipe:				Dia/Height:	300 mm
Year Constructed:				Pipe Material:	Concrete
Flow Control:	No flow control			Lining Type:	No Lining
Inspection Purpose:	Sample survey to determine asset condition			Lining Material:	No Lining
Comments:					
Recommendations:					

Scale:	1:573	Position [m]	Code	Observation	Grade																																																																	
Depth: 2.89 m S3 Depth: m <table style="width: 75%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: right;">0.00</td> <td style="width: 10%;">MH</td> <td colspan="3">Start node type, manhole, reference number: S3</td> </tr> <tr> <td style="text-align: right;">0.01</td> <td>WL</td> <td colspan="3">Water level, 5% of the vertical dimension</td> </tr> <tr> <td style="text-align: right;">10.69</td> <td>CN</td> <td colspan="3">Connection other than junction at 3 o'clock, diameter: 150mm</td> </tr> <tr> <td style="text-align: right;">16.32</td> <td>FM</td> <td colspan="3">Fracture, multiple from 12 o'clock to 11 o'clock</td> </tr> <tr> <td style="text-align: right;">16.52</td> <td>JN</td> <td colspan="3">Junction at 2 o'clock, diameter: 150mm</td> </tr> <tr> <td style="text-align: right;">18.46</td> <td>CL</td> <td colspan="3">Crack, longitudinal at 2 o'clock</td> </tr> <tr> <td style="text-align: right;">18.46</td> <td>CL</td> <td colspan="3">Crack, longitudinal at 10 o'clock</td> </tr> <tr> <td style="text-align: right;">48.26</td> <td>DES</td> <td colspan="3">Settled deposits, fine, 10% cross-sectional area loss</td> </tr> <tr> <td style="text-align: right;">51.90</td> <td>CC</td> <td colspan="3">Crack, circumferential from 1 o'clock to 5 o'clock</td> </tr> <tr> <td style="text-align: right;">56.34</td> <td>DES</td> <td colspan="3">Settled deposits, fine, 10% cross-sectional area loss</td> </tr> <tr> <td style="text-align: right;">59.14</td> <td>DES</td> <td colspan="3">Settled deposits, fine, 20% cross-sectional area loss</td> </tr> <tr> <td style="text-align: right;">65.81</td> <td>JN</td> <td colspan="3">Junction at 6 o'clock, diameter: 300mm</td> </tr> <tr> <td style="text-align: right;">65.83</td> <td>MHF</td> <td colspan="3">Finish node type, manhole, reference number: S4</td> </tr> </table>						0.00	MH	Start node type, manhole, reference number: S3			0.01	WL	Water level, 5% of the vertical dimension			10.69	CN	Connection other than junction at 3 o'clock, diameter: 150mm			16.32	FM	Fracture, multiple from 12 o'clock to 11 o'clock			16.52	JN	Junction at 2 o'clock, diameter: 150mm			18.46	CL	Crack, longitudinal at 2 o'clock			18.46	CL	Crack, longitudinal at 10 o'clock			48.26	DES	Settled deposits, fine, 10% cross-sectional area loss			51.90	CC	Crack, circumferential from 1 o'clock to 5 o'clock			56.34	DES	Settled deposits, fine, 10% cross-sectional area loss			59.14	DES	Settled deposits, fine, 20% cross-sectional area loss			65.81	JN	Junction at 6 o'clock, diameter: 300mm			65.83	MHF	Finish node type, manhole, reference number: S4		
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4	80.0	1.7	110.0	4.0	3	2.0	0.1	6.0	3.0																																																													