

Project Information

Project Name	Project Number	Project Date
10793 Barrington Close Kingswood Report	10793	04/10/2023

Client

Company: E.G. Carter & Co. Ltd.
Contact: Natalie Taylor-Pockett
Department: Bybrook House
Street: Lower Tuffley Lane
Town or City: Gloucester
Post Code: GL2 6EE



Site

Street: Barrington Close
Town or City: Kingswood
County: Bristol
Post Code: BS15 4QD

Contractor

Company: Solum Surveying Ltd
Contact: Adam Smothers
Department: Operations Manager
Street: The Old Stables, Pines Courtyard
Town or City: Stone
County: Berkeley
Post Code: GL13 9LE
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Solum Surveying Ltd

Scoring Summary

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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
3	MH1X	4	Multiple defects
4	MH116X	4	Fractures, multiple at joint from 8 o'clock to 5 o'clock
5	MH4X	4	Broken pipe at joint from 7 o'clock to 9 o'clock
6	MH6X	4	Multiple defects
8	MH5X	3	Multiple defects
14	MH13X	3	Multiple defects
15	MH12X	4	Multiple defects
16	MH16X	3	Fracture, circumferential from 7 o'clock to 10 o'clock
17	MH15X	4	Multiple defects
19	MH18X	5	Deformed sewer or drain, 10%, finish
20	MH17X	4	Multiple defects
22	MH19X	3	Multiple defects
24	MH21X	4	Fractures, multiple from 12 o'clock to 12 o'clock, finish
27	MH24X	4	Multiple defects
28	MH25X	4	Multiple defects
29	MH26X	4	Multiple defects
31	MH27X	4	Multiple defects
33	MH28X	4	Multiple defects
34	MH29X	3	Fracture, longitudinal at 11 o'clock, finish
37	MH32X	4	Multiple defects
38	MH36X	4	Fractures, multiple from 12 o'clock to 12 o'clock, finish
41	MH39X	4	Broken pipe from 12 o'clock to 12 o'clock, finish
42	MH40X	4	Multiple defects
43	MH41X	4	Fractures, multiple from 11 o'clock to 4 o'clock, finish
44	MH42X	4	Fractures, multiple from 12 o'clock to 12 o'clock, finish
45	MH43X	4	Fractures, multiple at joint from 12 o'clock to 12 o'clock
48	MH44X	4	Multiple defects
49	MH45X	3	Fracture, circumferential from 1 o'clock to 5 o'clock
50	MH47X	4	Fracture, spiral at joint from 11 o'clock to 5 o'clock
53	MH49X	3	Multiple defects
58	MH54X	3	Multiple defects
67	MH64X	4	Fractures, multiple from 12 o'clock to 12 o'clock
72	MH69X	4	Multiple defects
73	MH70X	4	Fractures, multiple at joint from 12 o'clock to 12 o'clock
78	MH74X	3	Fracture, longitudinal at 2 o'clock
79	USX	4	Fractures, multiple from 12 o'clock to 12 o'clock, finish

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Section	PLR	Grade	Description
88	MH83X	3	Multiple defects
91	MH85X	4	Multiple defects
92	MH89X	3	Fracture, circumferential from 12 o'clock to 12 o'clock
94	MH91X	4	Fractures, multiple at joint from 11 o'clock to 3 o'clock
95	MH92X	4	Multiple defects
96	MH87X	3	Multiple defects
97	MH93X	3	Multiple defects
104	MH99X	3	Multiple defects
106	MH100X	4	Multiple defects
107	MH101X	3	Cracks, multiple from 12 o'clock to 12 o'clock, finish
108	MH102X	4	Fractures, multiple from 12 o'clock to 12 o'clock, finish
109	MH103X	4	Multiple defects
111	MH106X	3	Cracks, spiral at joint from 12 o'clock to 12 o'clock
114	MH109X	4	Multiple defects
115	MH110X	4	Multiple defects
116	MH111X	5	Hole in drain or sewer from 8 o'clock to 11 o'clock
118	MH113X	3	Multiple defects

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	MH2X	3	Multiple defects
2	MH3X	3	Multiple defects
3	MH1X	3	Multiple defects
4	MH116X	3	Settled deposits, other, 5% cross-sectional area loss, finish
6	MH6X	2	Multiple defects
8	MH5X	2	Multiple defects
11	MH10X	3	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish
12	MH9X	3	Joint displaced, medium
13	MH11X	3	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish
14	MH13X	3	Multiple defects
15	MH12X	2	Multiple defects
16	MH16X	3	Settled deposits, other, 10% cross-sectional area loss
17	MH15X	3	Connection defective, connecting pipe is intruding at 2 o'clock, 150mm dia, intrusion: 10%
19	MH18X	4	Deformed sewer or drain, 10%, finish

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Section	PLR	Grade	Description
20	MH17X	2	Multiple defects
24	MH21X	3	Settled deposits, other at joint, 10% cross-sectional area loss
27	MH24X	3	Multiple defects
28	MH25X	2	Multiple defects
29	MH26X	3	Multiple defects
31	MH27X	3	Multiple defects
32	MH33X	3	Multiple defects
33	MH28X	3	Settled deposits, coarse, 10% cross-sectional area loss, finish
34	MH29X	3	Settled deposits, other, 5% cross-sectional area loss
36	MH38X	4	Settled deposits, hard or compacted, 25% cross-sectional area loss
37	MH32X	3	Settled deposits, other, 5% cross-sectional area loss
38	MH36X	4	Roots, tap, finish
41	MH39X	2	Multiple defects
42	MH40X	3	Multiple defects
48	MH44X	3	Multiple defects
51	MH48X	3	Attached deposits, other from 9 o'clock to 3 o'clock, 5% cross-sectional area loss, finish
53	MH49X	3	Connection defective, connecting pipe is intruding at 9 o'clock, 150mm dia, intrusion: 5%
65	MH62X	3	Settled deposits, other at joint, 5% cross-sectional area loss
67	MH64X	3	Multiple defects
68	MH65X	3	Joint displaced, medium
70	MH67X	3	Attached deposits, other from 4 o'clock to 8 o'clock, 5% cross-sectional area loss, finish
72	MH69X	3	Attached deposits, other from 4 o'clock to 8 o'clock, 5% cross-sectional area loss, finish
73	MH70X	2	Multiple defects
74	MH71X	3	Joint displaced, medium
75	USX	5	Other obstacles, pipe material in invert from 10 o'clock to 2 o'clock, 15% cross-sectional area loss
76	MH72X	3	Attached deposits, other at joint from 4 o'clock to 5 o'clock, 5% cross-sectional area loss
77	MH73X	4	Settled deposits, coarse, 30% cross-sectional area loss, finish
81	MH76X	3	Multiple defects
82	MH77X	3	Settled deposits, hard or compacted, 5% cross-sectional area loss, finish
85	MH80X	3	Joint displaced, medium
86	MH81X	3	Attached deposits, other at joint from 2 o'clock to 10 o'clock, 5% cross-sectional area loss
87	MH82X	3	Multiple defects
88	MH83X	3	Roots, mass at joint, 15% cross-sectional area loss
91	MH85X	3	Multiple defects
92	MH89X	3	Multiple defects
94	MH91X	3	Settled deposits, other, 10% cross-sectional area loss, finish
95	MH92X	5	Roots, mass at joint, 30% cross-sectional area loss
96	MH87X	3	Settled deposits, hard or compacted, 10% cross-sectional area loss
100	MH97X	3	Joint displaced, medium

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Section	PLR	Grade	Description
101	MH104X	3	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish
104	MH99X	4	Roots, tap at joint
106	MH100X	3	Multiple defects
108	MH102X	5	Multiple defects
109	MH103X	4	Multiple defects
110	MH105X	3	Attached deposits, other from 9 o'clock to 3 o'clock, 5% cross-sectional area loss, finish
111	MH106X	2	Multiple defects
112	MH107X	3	Settled deposits, fine, 50% cross-sectional area loss, finish
113	MH108X	4	Multiple defects
114	MH109X	3	Multiple defects
115	MH110X	2	Multiple defects
118	MH113X	2	Multiple defects
121	USX	5	Settled deposits, other, 90% cross-sectional area loss
122	MH200X	3	Multiple defects

Abandoned Surveys

Section	PLR	Description
7	USX	Survey abandoned
19	MH18X	Survey abandoned
21	MH20X	Survey abandoned
21	MH20X	Survey abandoned
26	USX	Survey abandoned
36	MH38X	Survey abandoned
40	USX	Survey abandoned
47	USX	Survey abandoned
58	MH54X	Survey abandoned
72	MH69X	Survey abandoned
72	MH69X	Survey abandoned
75	USX	Survey abandoned
77	MH73X	Survey abandoned
77	MH73X	Survey abandoned
79	USX	Survey abandoned
80	MH75X	Survey abandoned
82	MH77X	Survey abandoned
96	MH87X	Survey abandoned
102	USX	Survey abandoned
112	MH107X	Survey abandoned
113	MH108X	Survey abandoned
121	USX	Survey abandoned

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Information

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

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Pipe Summary

No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
1	SEC	MH2X	MH2	MH1 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	20.58 m
2	SEC	MH3X	MH3	MH1 (B)	Barrington Close	Kingswood	F	VC	Circular 100mm	7.05 m
3	SEC	MH1X	MH1	MH4	Barrington Close	Kingswood	F	VC	Circular 150mm	14.13 m
4	SEC	MH116X	MH116	MH3 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	8.96 m
5	SEC	MH4X	MH4	MH8	Barrington Close	Kingswood	F	VC	Circular 150mm	23.54 m
6	SEC	MH6X	MH6	MH5 (A)	Barrington Close	Kingswood	S	VC	Circular 150mm	20.97 m
7	SEC	USX	US	MH5 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	8.37 m
8	SEC	MH5X	MH5	MH7	Barrington Close	Kingswood	S	VC	Circular 150mm	13.03 m
9	SEC	MH7X	MH7	MH14	Barrington Close	Kingswood	S	VC	Circular 150mm	24.40 m
10	SEC	MH8X	MH8	MH15	Barrington Close	Kingswood	F	VC	Circular 225mm	21.25 m
11	SEC	MH10X	MH10	MH9 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	5.81 m
12	SEC	MH9X	MH9	MH8	Barrington Close	Kingswood	F	VC	Circular 100mm	15.71 m
13	SEC	MH11X	MH11	MH10 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	7.49 m
14	SEC	MH13X	MH13	MH12 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	17.98 m
15	SEC	MH12X	MH12	MH14	Barrington Close	Kingswood	S	VC	Circular 150mm	15.03 m
16	SEC	MH16X	MH16	MH15 (B)	Barrington Close	Kingswood	F	VC	Circular 100mm	16.36 m
17	SEC	MH15X	MH15	MH19	Barrington Close	Kingswood	F	VC	Circular 225mm	23.18 m
18	SEC	MH14X	MH14	MH17 (A)	Barrington Close	Kingswood	S	VC	Circular 150mm	20.85 m
19	SEC	MH18X	MH18	MH17 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	3.46 m
20	SEC	MH17X	MH17	MH25	Barrington Close	Kingswood	S	VC	Circular 225mm	22.99 m
21	SEC	MH20X	MH20	MH19 (B)	Barrington Close	Kingswood	F	VC	Circular 100mm	16.56 m
22	SEC	MH19X	MH19	MH21	Barrington Close	Kingswood	F	VC	Circular 225mm	22.99 m
23	SEC	MH22X	MH22	MH20 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	3.82 m
24	SEC	MH21X	MH21	MH29	Barrington Close	Kingswood	F	VC	Circular 225mm	22.13 m
25	SEC	MH23X	MH23	MH22 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	9.61 m
26	SEC	USX	US	MH24 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	1.64 m
27	SEC	MH24X	MH24	MH25	Barrington Close	Kingswood	S	VC	Circular 150mm	14.83 m
28	SEC	MH25X	MH25	MH26	Barrington Close	Kingswood	S	VC	Circular 225mm	23.22 m
29	SEC	MH26X	MH26	MH32	Barrington Close	Kingswood	S	VC	Circular 225mm	19.73 m
30	SEC	MH30X	MH30	MH27 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	3.32 m

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No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
31	SEC	MH27X	MH27	MH21	Barrington Close	Kingswood	F	VC	Circular 100mm	15.31 m
32	SEC	MH33X	MH33	MH28 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	16.94 m
33	SEC	MH28X	MH28	MH26	Barrington Close	Kingswood	S	VC	Circular 150mm	14.85 m
34	SEC	MH29X	MH29	MH34	Barrington Close	Kingswood	F	VC	Circular 225mm	45.40 m
35	SEC	MH31X	MH31	MH30 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	9.80 m
36	SEC	MH38X	MH38	MH32 (C)	Barrington Close	Kingswood	S	VC	Circular 100mm	2.67 m
37	SEC	MH32X	MH32	MH35	Barrington Close	Kingswood	S	CO	Circular 400mm	45.04 m
38	SEC	MH36X	MH36	MH32	Barrington Close	Kingswood	S	VC	Circular 225mm	13.32 m
39	SEC	MH37X	MH37	MH29	Barrington Close	Kingswood	F	VC	Circular 225mm	12.70 m
40	SEC	USX	US	MH39 (A)	Barrington Close	Kingswood	F	VC	Circular 150mm	0.13 m
41	SEC	MH39X	MH39	MH40	Barrington Close	Kingswood	F	VC	Circular 225mm	7.00 m
42	SEC	MH40X	MH40	MH41	Barrington Close	Kingswood	F	VC	Circular 225mm	10.54 m
43	SEC	MH41X	MH41	MH42	Barrington Close	Kingswood	F	VC	Circular 225mm	6.00 m
44	SEC	MH42X	MH42	MH43	Barrington Close	Kingswood	F	VC	Circular 225mm	9.04 m
45	SEC	MH43X	MH43	MH113	Barrington Close	Kingswood	F	VC	Circular 225mm	10.38 m
46	SEC	MH46X	MH46	MH44 (A)	Barrington Close	Kingswood	S	VC	Circular 150mm	7.47 m
47	SEC	USX	US	MH44 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	0.23 m
48	SEC	MH44X	MH44	MH45	Barrington Close	Kingswood	S	VC	Circular 225mm	21.42 m
49	SEC	MH45X	MH45	MH49	Barrington Close	Kingswood	S	VC	Circular 225mm	13.43 m
50	SEC	MH47X	MH47	MH46 (A)	Barrington Close	Kingswood	S	PVC	Circular 150mm	13.56 m
51	SEC	MH48X	MH48	MH47 (A)	Barrington Close	Kingswood	S	VC	Circular 150mm	12.18 m
52	SEC	MH50X	MH50	MH48 (A)	Barrington Close	Kingswood	S	VC	Circular 150mm	11.63 m
53	SEC	MH49X	MH49	MH111	Barrington Close	Kingswood	S	VC	Circular 225mm	11.31 m
54	SEC	MH55X	MH55	MH51 (C)	Barrington Close	Kingswood	F	VC	Circular 150mm	6.33 m
55	SEC	MH51X	MH51	MH52	Barrington Close	Kingswood	F	VC	Circular 150mm	6.26 m
56	SEC	MH52X	MH52	MH53	Barrington Close	Kingswood	F	VC	Circular 150mm	4.45 m
57	SEC	MH53X	MH53	MH54	Barrington Close	Kingswood	F	VC	Circular 150mm	5.74 m
58	SEC	MH54X	MH54	MH39	Barrington Close	Kingswood	F	VC	Circular 150mm	15.12 m
59	SEC	MH56X	MH56	MH55 (C)	Barrington Close	Kingswood	F	VC	Circular 150mm	4.53 m
60	SEC	MH57X	MH57	MH66	Barrington Close	Kingswood	F	VC	Circular 150mm	20.53 m
61	SEC	MH58X	MH58	MH59	Barrington Close	Kingswood	F	VC	Circular 100mm	5.37 m
62	SEC	MH59X	MH59	MH60	Barrington Close	Kingswood	F	VC	Circular 100mm	6.05 m

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No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
63	SEC	MH60X	MH60	MH61	Barrington Close	Kingswood	F	VC	Circular 100mm	5.68 m
64	SEC	MH61X	MH61	MH57	Barrington Close	Kingswood	F	VC	Circular 150mm	12.67 m
65	SEC	MH62X	MH62	MH63	Barrington Close	Kingswood	F	VC	Circular 100mm	4.98 m
66	SEC	MH63X	MH63	MH64	Barrington Close	Kingswood	F	VC	Circular 100mm	6.15 m
67	SEC	MH64X	MH64	MH57	Barrington Close	Kingswood	F	VC	Circular 100mm	3.70 m
68	SEC	MH65X	MH65	MH57	Barrington Close	Kingswood	F	VC	Circular 100mm	18.22 m
69	SEC	MH66X	MH66	MH67	Barrington Close	Kingswood	F	VC	Circular 150mm	10.48 m
70	SEC	MH67X	MH67	MH68	Barrington Close	Kingswood	F	VC	Circular 150mm	6.07 m
71	SEC	MH68X	MH68	MH69	Barrington Close	Kingswood	F	VC	Circular 150mm	8.30 m
72	SEC	MH69X	MH69	MH70	Barrington Close	Kingswood	F	VC	Circular 150mm	7.90 m
73	SEC	MH70X	MH70	MH74	Barrington Close	Kingswood	F	VC	Circular 150mm	17.08 m
74	SEC	MH71X	MH71	MH72	Barrington Close	Kingswood	S	VC	Circular 100mm	17.08 m
75	SEC	USX	US	MH72 (A)	Barrington Close	Kingswood	S	VC	Circular 100mm	15.54 m
76	SEC	MH72X	MH72	MH73	Barrington Close	Kingswood	S	VC	Circular 150mm	21.22 m
77	SEC	MH73X	MH73	MH75	Barrington Close	Kingswood	S	VC	Circular 150mm	32.00 m
78	SEC	MH74X	MH74	MH83	Barrington Close	Kingswood	F	VC	Circular 150mm	7.99 m
79	SEC	USX	US	MH75 (B)	Barrington Close	Kingswood	S	VC	Circular 150mm	12.94 m
80	SEC	MH75X	MH75	DS	Barrington Close	Kingswood	S	VC	Circular 150mm	6.64 m
81	SEC	MH76X	MH76	MH77	Barrington Close	Kingswood	S	VC	Circular 100mm	29.44 m
82	SEC	MH77X	MH77	DS	Barrington Close	Kingswood	S	VC	Circular 150mm	7.75 m
83	SEC	MH79X	MH79	MH78 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	4.86 m
84	SEC	MH78X	MH78	MH74	Barrington Close	Kingswood	F	VC	Circular 100mm	8.58 m
85	SEC	MH80X	MH80	MH79 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	10.89 m
86	SEC	MH81X	MH81	MH80 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	4.98 m
87	SEC	MH82X	MH82	MH81 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	11.34 m
88	SEC	MH83X	MH83	MH84	Barrington Close	Kingswood	F	VC	Circular 225mm	28.32 m
89	SEC	MH84X	MH84	MH91	Barrington Close	Kingswood	F	VC	Circular 225mm	10.75 m
90	SEC	MH86X	MH86	MH85 (C)	Barrington Close	Kingswood	S	VC	Circular 150mm	10.11 m
91	SEC	MH85X	MH85	MH87	Barrington Close	Kingswood	S	VC	Circular 150mm	17.57 m
92	SEC	MH89X	MH89	MH88 (B)	Barrington Close	Kingswood	S	VC	Circular 100mm	14.78 m
93	SEC	MH88X	MH88	MH90	Barrington Close	Kingswood	S	VC	Circular 100mm	2.57 m
94	SEC	MH91X	MH91	MH92	Barrington Close	Kingswood	F	VC	Circular 225mm	3.54 m

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No.	Type	PLR	Upstream Node	Downstream Node	Road	Town	Use	Mat.	Profile	Length
95	SEC	MH92X	MH92	MH99	Barrington Close	Kingswood	F	VC	Circular 225mm	40.34 m
96	SEC	MH87X	MH87	MH93 (A)	Barrington Close	Kingswood	S	VC	Circular 150mm	10.32 m
97	SEC	MH93X	MH93	MH94	Barrington Close	Kingswood	S	VC	Circular 150mm	14.90 m
98	SEC	MH96X	MH96	MH95 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	4.55 m
99	SEC	MH95X	MH95	MH92	Barrington Close	Kingswood	F	VC	Circular 100mm	5.38 m
100	SEC	MH97X	MH97	MH96 (A)	Barrington Close	Kingswood	F	VC	Circular 100mm	10.59 m
101	SEC	MH104X	MH104	MH97	Barrington Close	Kingswood	F	VC	Circular 100mm	5.35 m
102	SEC	USX	US	MH98 (A)	Barrington Close	Kingswood	S	VC	Circular 100mm	16.91 m
103	SEC	MH98X	MH98	MH94	Barrington Close	Kingswood	S	VC	Circular 100mm	3.81 m
104	SEC	MH99X	MH99	MH110	Barrington Close	Kingswood	F	VC	Circular 225mm	25.61 m
105	SEC	MH94X	MH94	MH100 (B)	Barrington Close	Kingswood	S	VC	Circular 225mm	1.68 m
106	SEC	MH100X	MH100	MH101	Barrington Close	Kingswood	S	VC	Circular 225mm	13.14 m
107	SEC	MH101X	MH101	MH102	Barrington Close	Kingswood	S	VC	Circular 225mm	5.62 m
108	SEC	MH102X	MH102	MH103	Barrington Close	Kingswood	S	VC	Circular 225mm	20.04 m
109	SEC	MH103X	MH103	MH109	Barrington Close	Kingswood	S	VC	Circular 225mm	25.51 m
110	SEC	MH105X	MH105	MH104	Barrington Close	Kingswood	F	VC	Circular 100mm	9.62 m
111	SEC	MH106X	MH106	MH107	Barrington Close	Kingswood	S	VC	Circular 150mm	34.06 m
112	SEC	MH107X	MH107	MH108	Barrington Close	Kingswood	S	VC	Circular 150mm	32.00 m
113	SEC	MH108X	MH108	MH103	Barrington Close	Kingswood	S	VC	Circular 150mm	6.00 m
114	SEC	MH109X	MH109	MH49	Barrington Close	Kingswood	S	VC	Circular 225mm	20.10 m
115	SEC	MH110X	MH110	MH43	Barrington Close	Kingswood	F	VC	Circular 225mm	20.13 m
116	SEC	MH111X	MH111	MH112	Barrington Close	Kingswood	S	VC	Circular 225mm	11.91 m
117	SEC	MH112X	MH112	MH36	Barrington Close	Kingswood	S	VC	Circular 225mm	12.52 m
118	SEC	MH113X	MH113	MH114	Barrington Close	Kingswood	F	VC	Circular 225mm	11.71 m
119	SEC	MH114X	MH114	MH115	Barrington Close	Kingswood	F	VC	Circular 225mm	9.05 m
120	SEC	MH115X	MH115	MH37	Barrington Close	Kingswood	F	VC	Circular 225mm	3.36 m
121	SEC	USX	US	MH93 (A)	Barrington Close	Kingswood	S	VC	Circular 100mm	12.29 m
122	SEC	MH200X	MH200	MH109 (A)	Barrington Close	Kingswood	S	VC	Circular 100mm	15.87 m

Total: 1616.21 m

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Pipe Levels									
No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
1	MH2X	MH2			0.000 m	MH1 (A)			0.000 m
2	MH3X	MH3			0.000 m	MH1 (B)			0.000 m
3	MH1X	MH1			0.000 m	MH4			0.000 m
4	MH116X	MH116			0.000 m	MH3 (A)			0.000 m
5	MH4X	MH4			0.000 m	MH8			0.000 m
6	MH6X	MH6			0.000 m	MH5 (A)			0.000 m
7	USX	US			0.000 m	MH5 (B)			0.000 m
8	MH5X	MH5			0.000 m	MH7			0.000 m
9	MH7X	MH7			0.000 m	MH14			0.000 m
10	MH8X	MH8			0.000 m	MH15			0.000 m
11	MH10X	MH10			0.000 m	MH9 (A)			0.000 m
12	MH9X	MH9			0.000 m	MH8			0.000 m
13	MH11X	MH11			0.000 m	MH10 (A)			0.000 m
14	MH13X	MH13			0.000 m	MH12 (B)			0.000 m
15	MH12X	MH12			0.000 m	MH14			0.000 m
16	MH16X	MH16			0.000 m	MH15 (B)			0.000 m
17	MH15X	MH15			0.000 m	MH19			0.000 m
18	MH14X	MH14			0.000 m	MH17 (A)			0.000 m
19	MH18X	MH18			0.000 m	MH17 (B)			0.000 m
20	MH17X	MH17			0.000 m	MH25			0.000 m
21	MH20X	MH20			0.000 m	MH19 (B)			0.000 m
22	MH19X	MH19			0.000 m	MH21			0.000 m
23	MH22X	MH22			0.000 m	MH20 (A)			0.000 m
24	MH21X	MH21			0.000 m	MH29			0.000 m
25	MH23X	MH23			0.000 m	MH22 (A)			0.000 m
26	USX	US			0.000 m	MH24 (B)			0.000 m
27	MH24X	MH24			0.000 m	MH25			0.000 m
28	MH25X	MH25			0.000 m	MH26			0.000 m
29	MH26X	MH26			0.000 m	MH32			0.000 m
30	MH30X	MH30			0.000 m	MH27 (A)			0.000 m

Project Summary

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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
31	MH27X	MH27			0.000 m	MH21			0.000 m
32	MH33X	MH33			0.000 m	MH28 (B)			0.000 m
33	MH28X	MH28			0.000 m	MH26			0.000 m
34	MH29X	MH29			0.000 m	MH34			0.000 m
35	MH31X	MH31			0.000 m	MH30 (A)			0.000 m
36	MH38X	MH38			0.000 m	MH32 (C)			0.000 m
37	MH32X	MH32			0.000 m	MH35			0.000 m
38	MH36X	MH36			0.000 m	MH32			0.000 m
39	MH37X	MH37			0.000 m	MH29			0.000 m
40	USX	US			0.000 m	MH39 (A)			0.000 m
41	MH39X	MH39			0.000 m	MH40			0.000 m
42	MH40X	MH40			0.000 m	MH41			0.000 m
43	MH41X	MH41			0.000 m	MH42			0.000 m
44	MH42X	MH42			0.000 m	MH43			0.000 m
45	MH43X	MH43			0.000 m	MH113			0.000 m
46	MH46X	MH46			0.000 m	MH44 (A)			0.000 m
47	USX	US			0.000 m	MH44 (B)			0.000 m
48	MH44X	MH44			0.000 m	MH45			0.000 m
49	MH45X	MH45			0.000 m	MH49			0.000 m
50	MH47X	MH47			0.000 m	MH46 (A)			0.000 m
51	MH48X	MH48			0.000 m	MH47 (A)			0.000 m
52	MH50X	MH50			0.000 m	MH48 (A)			0.000 m
53	MH49X	MH49			0.000 m	MH111			0.000 m
54	MH55X	MH55			0.000 m	MH51 (C)			0.000 m
55	MH51X	MH51			0.000 m	MH52			0.000 m
56	MH52X	MH52			0.000 m	MH53			0.000 m
57	MH53X	MH53			0.000 m	MH54			0.000 m
58	MH54X	MH54			0.000 m	MH39			0.000 m
59	MH56X	MH56			0.000 m	MH55 (C)			0.000 m
60	MH57X	MH57			0.000 m	MH66			0.000 m
61	MH58X	MH58			0.000 m	MH59			0.000 m
62	MH59X	MH59			0.000 m	MH60			0.000 m

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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
63	MH60X	MH60			0.000 m	MH61			0.000 m
64	MH61X	MH61			0.000 m	MH57			0.000 m
65	MH62X	MH62			0.000 m	MH63			0.000 m
66	MH63X	MH63			0.000 m	MH64			0.000 m
67	MH64X	MH64			0.000 m	MH57			0.000 m
68	MH65X	MH65			0.000 m	MH57			0.000 m
69	MH66X	MH66			0.000 m	MH67			0.000 m
70	MH67X	MH67			0.000 m	MH68			0.000 m
71	MH68X	MH68			0.000 m	MH69			0.000 m
72	MH69X	MH69			0.000 m	MH70			0.000 m
73	MH70X	MH70			0.000 m	MH74			0.000 m
74	MH71X	MH71			0.000 m	MH72			0.000 m
75	USX	US			0.000 m	MH72 (A)			0.000 m
76	MH72X	MH72			0.000 m	MH73			0.000 m
77	MH73X	MH73			0.000 m	MH75			0.000 m
78	MH74X	MH74			0.000 m	MH83			0.000 m
79	USX	US			0.000 m	MH75 (B)			0.000 m
80	MH75X	MH75			0.000 m	DS			0.000 m
81	MH76X	MH76			0.000 m	MH77			0.000 m
82	MH77X	MH77			0.000 m	DS			0.000 m
83	MH79X	MH79			0.000 m	MH78 (A)			0.000 m
84	MH78X	MH78			0.000 m	MH74			0.000 m
85	MH80X	MH80			0.000 m	MH79 (A)			0.000 m
86	MH81X	MH81			0.000 m	MH80 (A)			0.000 m
87	MH82X	MH82			0.000 m	MH81 (A)			0.000 m
88	MH83X	MH83			0.000 m	MH84			0.000 m
89	MH84X	MH84			0.000 m	MH91			0.000 m
90	MH86X	MH86			0.000 m	MH85 (C)			0.000 m
91	MH85X	MH85			0.000 m	MH87			0.000 m
92	MH89X	MH89			0.000 m	MH88 (B)			0.000 m
93	MH88X	MH88			0.000 m	MH90			0.000 m
94	MH91X	MH91			0.000 m	MH92			0.000 m

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No.	PLR	Upstream Node	Upstream C.L.	Upstream I.L.	Upstream I.D.	Downstream Node	Downstream C.L.	Downstream I.L.	Downstream I.D.
95	MH92X	MH92			0.000 m	MH99			0.000 m
96	MH87X	MH87			0.000 m	MH93 (A)			0.000 m
97	MH93X	MH93			0.000 m	MH94			0.000 m
98	MH96X	MH96			0.000 m	MH95 (A)			0.000 m
99	MH95X	MH95			0.000 m	MH92			0.000 m
100	MH97X	MH97			0.000 m	MH96 (A)			0.000 m
101	MH104X	MH104			0.000 m	MH97			0.000 m
102	USX	US			0.000 m	MH98 (A)			0.000 m
103	MH98X	MH98			0.000 m	MH94			0.000 m
104	MH99X	MH99			0.000 m	MH110			0.000 m
105	MH94X	MH94			0.000 m	MH100 (B)			0.000 m
106	MH100X	MH100			0.000 m	MH101			0.000 m
107	MH101X	MH101			0.000 m	MH102			0.000 m
108	MH102X	MH102			0.000 m	MH103			0.000 m
109	MH103X	MH103			0.000 m	MH109			0.000 m
110	MH105X	MH105			0.000 m	MH104			0.000 m
111	MH106X	MH106			0.000 m	MH107			0.000 m
112	MH107X	MH107			0.000 m	MH108			0.000 m
113	MH108X	MH108			0.000 m	MH103			0.000 m
114	MH109X	MH109			0.000 m	MH49			0.000 m
115	MH110X	MH110			0.000 m	MH43			0.000 m
116	MH111X	MH111			0.000 m	MH112			0.000 m
117	MH112X	MH112			0.000 m	MH36			0.000 m
118	MH113X	MH113			0.000 m	MH114			0.000 m
119	MH114X	MH114			0.000 m	MH115			0.000 m
120	MH115X	MH115			0.000 m	MH37			0.000 m
121	USX	US			0.000 m	MH93 (A)			0.000 m
122	MH200X	MH200			0.000 m	MH109 (A)			0.000 m

Project Summary

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Pipe Summary by Profile

Profile	Total Length	No. Pipes
Circular 100mm	20.58 m	
Circular 100mm	7.05 m	
Circular 100mm	8.96 m	
Circular 100mm	5.81 m	
Circular 100mm	15.71 m	
Circular 100mm	7.49 m	
Circular 100mm	16.36 m	
Circular 100mm	16.56 m	
Circular 100mm	3.82 m	
Circular 100mm	9.61 m	
Circular 100mm	3.32 m	
Circular 100mm	15.31 m	
Circular 100mm	9.80 m	
Circular 100mm	2.67 m	
Circular 100mm	5.37 m	
Circular 100mm	6.05 m	
Circular 100mm	5.68 m	
Circular 100mm	4.98 m	
Circular 100mm	6.15 m	
Circular 100mm	3.70 m	
Circular 100mm	18.22 m	
Circular 100mm	17.08 m	
Circular 100mm	15.54 m	
Circular 100mm	29.44 m	
Circular 100mm	4.86 m	
Circular 100mm	8.58 m	
Circular 100mm	10.89 m	
Circular 100mm	4.98 m	
Circular 100mm	11.34 m	
Circular 100mm	14.78 m	
Circular 100mm	2.57 m	
Circular 100mm	4.55 m	
Circular 100mm	5.38 m	
Circular 100mm	10.59 m	
Circular 100mm	5.35 m	
Circular 100mm	16.91 m	
Circular 100mm	3.81 m	
Circular 100mm	9.62 m	
Circular 100mm	12.29 m	
Circular 100mm	15.87 m	
Circular 100mm	= 397.63 m	40

Project Summary

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Profile	Total Length	No. Pipes
Circular 150mm	14.13 m	
Circular 150mm	23.54 m	
Circular 150mm	20.97 m	
Circular 150mm	8.37 m	
Circular 150mm	13.03 m	
Circular 150mm	24.40 m	
Circular 150mm	17.98 m	
Circular 150mm	15.03 m	
Circular 150mm	20.85 m	
Circular 150mm	3.46 m	
Circular 150mm	1.64 m	
Circular 150mm	14.83 m	
Circular 150mm	16.94 m	
Circular 150mm	14.85 m	
Circular 150mm	0.13 m	
Circular 150mm	7.47 m	
Circular 150mm	0.23 m	
Circular 150mm	13.56 m	
Circular 150mm	12.18 m	
Circular 150mm	11.63 m	
Circular 150mm	6.33 m	
Circular 150mm	6.26 m	
Circular 150mm	4.45 m	
Circular 150mm	5.74 m	
Circular 150mm	15.12 m	
Circular 150mm	4.53 m	
Circular 150mm	20.53 m	
Circular 150mm	12.67 m	
Circular 150mm	10.48 m	
Circular 150mm	6.07 m	
Circular 150mm	8.30 m	
Circular 150mm	7.90 m	
Circular 150mm	17.08 m	
Circular 150mm	21.22 m	
Circular 150mm	32.00 m	
Circular 150mm	7.99 m	
Circular 150mm	12.94 m	
Circular 150mm	6.64 m	
Circular 150mm	7.75 m	
Circular 150mm	10.11 m	
Circular 150mm	17.57 m	
Circular 150mm	10.32 m	
Circular 150mm	14.90 m	
Circular 150mm	34.06 m	
Circular 150mm	32.00 m	

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Profile		Total Length	No. Pipes
Circular 150mm		6.00 m	
Circular 150mm	=	594.18 m	46
Circular 225mm		21.25 m	
Circular 225mm		23.18 m	
Circular 225mm		22.99 m	
Circular 225mm		22.99 m	
Circular 225mm		22.13 m	
Circular 225mm		23.22 m	
Circular 225mm		19.73 m	
Circular 225mm		45.40 m	
Circular 225mm		13.32 m	
Circular 225mm		12.70 m	
Circular 225mm		7.00 m	
Circular 225mm		10.54 m	
Circular 225mm		6.00 m	
Circular 225mm		9.04 m	
Circular 225mm		10.38 m	
Circular 225mm		21.42 m	
Circular 225mm		13.43 m	
Circular 225mm		11.31 m	
Circular 225mm		28.32 m	
Circular 225mm		10.75 m	
Circular 225mm		3.54 m	
Circular 225mm		40.34 m	
Circular 225mm		25.61 m	
Circular 225mm		1.68 m	
Circular 225mm		13.14 m	
Circular 225mm		5.62 m	
Circular 225mm		20.04 m	
Circular 225mm		25.51 m	
Circular 225mm		20.10 m	
Circular 225mm		20.13 m	
Circular 225mm		11.91 m	
Circular 225mm		12.52 m	
Circular 225mm		11.71 m	
Circular 225mm		9.05 m	
Circular 225mm		3.36 m	
Circular 225mm	=	579.36 m	35
Circular 400mm		45.04 m	
Circular 400mm	=	45.04 m	1
Total	=	1616.21 m	122

Project Summary

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Inspection Summary

Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
1	1	MH2	MH1 (A)	US	Jh	21/09/2023	13:23	1	3	MHF	20.58 m
2	1	MH3	MH1 (B)	US	Jh	21/09/2023	13:23	1	4	MHF, BURIED	7.05 m
3	1	MH1	MH4	DS	Jh	21/09/2023	13:23	4	3	MHF	14.13 m
4	1	MH116	MH3 (A)	US	Jh	21/09/2023	13:40	4	3	MHF, BURIED	8.96 m
5	1	MH4	MH8	DS	Jh	21/09/2023	13:25	4	1	MHF	23.54 m
6	1	MH6	MH5 (A)	US	Jh	21/09/2023	13:24	4	3	MHF	20.97 m
7	1	US	MH5 (B)	US	Jh	21/09/2023	13:24	3	3	SA, UNABLE TO PUSH FURTHER PAST SETTLED DEPOSE	8.37 m
8	1	MH5	MH7	DS	Jh	21/09/2023	13:24	3	3	MHF	13.03 m
9	1	MH7	MH14	DS	Jh	21/09/2023	13:26	1	1	MHF	24.40 m
10	1	MH8	MH15	DS	Jh	21/09/2023	12:12	2	2	MHF	21.25 m
11	1	MH10	MH9 (A)	US	Jh	21/09/2023	13:25	1	3	MHF	5.81 m
12	1	MH9	MH8	DS	Jh	21/09/2023	13:25	1	3	MHF	15.71 m
13	1	MH11	MH10 (A)	US	Jh	21/09/2023	13:25	1	3	MHF	7.49 m
14	1	MH13	MH12 (B)	US	Jh	21/09/2023	13:25	3	4	MHF	17.98 m
15	1	MH12	MH14	DS	Jh	21/09/2023	13:26	4	3	MHF	15.03 m
16	1	MH16	MH15 (B)	US	Jh	21/09/2023	13:26	3	3	MHF, BURIED	16.36 m
17	1	MH15	MH19	DS	Jh	21/09/2023	12:12	4	3	MHF	23.18 m
18	1	MH14	MH17 (A)	US	Jh	21/09/2023	13:27	2	2	MHF	20.85 m
19	1	MH18	MH17 (B)	US	Jh	21/09/2023	13:27	5	5	SA, UNABLE TO PUSH FURTHER DUE TO DEFORMED PI	3.46 m
20	1	MH17	MH25	DS	Jh	21/09/2023	12:13	4	3	MHF	22.99 m
21	1	MH20	MH19 (B)	US	Jh	21/09/2023	13:28	1	2	SA, UNABLE TO PUSH FURTHER	13.56 m
21	2	MH20	MH19 (B)	DS	Jh	21/09/2023	13:27	1	1	SA, UNABLE TO PUSH FURTHER DUE TO LOSS OF VISIC	3.00 m
22	1	MH19	MH21	DS	Jh	21/09/2023	12:12	3	2	MHF	22.99 m
23	1	MH22	MH20 (A)	US	Jh	21/09/2023	13:27	1	1	MHF	3.82 m
24	1	MH21	MH29	DS	Jh	21/09/2023	12:13	4	3	MHF	22.13 m
25	1	MH23	MH22 (A)	US	Jh	21/09/2023	13:27	1	1	MHF	9.61 m
26	1	US	MH24 (B)	US	Jh	21/09/2023	13:27	3	2	SA, UNABLE TO PUSH FURTHER DUE TO LOSS OF VISIC	1.64 m
27	1	MH24	MH25	DS	Jh	21/09/2023	13:27	4	4	MHF	14.83 m
28	1	MH25	MH26	DS	Jh	21/09/2023	12:13	4	3	MHF	23.22 m
29	1	MH26	MH32	DS	Jh	21/09/2023	12:13	4	3	MHF	19.73 m

Project Summary

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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
30	1	MH30	MH27 (A)	US	Jh	21/09/2023	13:28	1	1	MHF	3.32 m
31	1	MH27	MH21	DS	Jh	21/09/2023	13:28	4	4	MHF	15.31 m
32	1	MH33	MH28 (B)	DS	Jh	21/09/2023	13:28	1	3	MHF	16.94 m
33	1	MH28	MH26	DS	Jh	21/09/2023	13:28	4	3	MHF	14.85 m
34	1	MH29	MH34	DS	Jh	21/09/2023	12:14	3	3	MHF	45.40 m
35	1	MH31	MH30 (A)	US	Jh	21/09/2023	13:28	1	1	MHF	9.80 m
36	1	MH38	MH32 (C)	US	Jh	21/09/2023	13:29	2	5	SA, UNABLE TO PUSH FURTHER DUE TO HARD SETTLE	2.67 m
37	1	MH32	MH35	DS	Jh	21/09/2023	12:14	4	3	MHF	45.04 m
38	1	MH36	MH32	DS	Jh	21/09/2023	13:29	4	4	MHF	13.32 m
39	1	MH37	MH29	DS	Jh	21/09/2023	13:29	1	1	MHF	12.70 m
40	1	US	MH39 (A)	US	Jh	21/09/2023	13:43	3	5	SA, UNABLE TO PUSH FURTHER	0.13 m
41	1	MH39	MH40	DS	Jh	21/09/2023	13:43	4	3	MHF, BURIED	7.00 m
42	1	MH40	MH41	DS	Jh	21/09/2023	13:29	4	3	MHF, BURIED	10.54 m
43	1	MH41	MH42	DS	Jh	21/09/2023	13:29	4	2	MHF, BURIED	6.00 m
44	1	MH42	MH43	DS	Jh	21/09/2023	13:29	4	2	MHF	9.04 m
45	1	MH43	MH113	DS	Jh	21/09/2023	13:40	4	2	MHF	10.38 m
46	1	MH46	MH44 (A)	US	Jh	21/09/2023	13:43	1	1	MHF	7.47 m
47	1	US	MH44 (B)	US	Jh	21/09/2023	13:43	1	1	SA, MASS ROOTS AHEAD UNABLE TO DRIVE FURTHER	0.23 m
48	1	MH44	MH45	DS	Jh	21/09/2023	13:29	4	3	MHF	21.42 m
49	1	MH45	MH49	DS	Jh	21/09/2023	13:30	3	2	MHF	13.43 m
50	1	MH47	MH46 (A)	US	Jh	21/09/2023	13:47	4	2	MHF	13.56 m
51	1	MH48	MH47 (A)	US	Jh	21/09/2023	13:47	1	3	MHF	12.18 m
52	1	MH50	MH48 (A)	US	Jh	21/09/2023	13:30	1	1	MHF	11.63 m
53	1	MH49	MH111	DS	Jh	21/09/2023	13:39	3	3	MHF	11.31 m
54	1	MH55	MH51 (C)	US	Jh	21/09/2023	13:31	2	2	MHF	6.33 m
55	1	MH51	MH52	DS	Jh	21/09/2023	13:30	2	2	MHF	6.26 m
56	1	MH52	MH53	DS	Jh	21/09/2023	13:30	1	1	MHF	4.45 m
57	1	MH53	MH54	DS	Jh	21/09/2023	13:30	1	1	MHF	5.74 m
58	1	MH54	MH39	DS	Jh	21/09/2023	13:30	3	2	SA, UNABLE TO PUSH FURTHER DUE TO LOSS OF VISIC	15.12 m
59	1	MH56	MH55 (C)	US	Jh	21/09/2023	13:31	1	1	MHF	4.53 m
60	1	MH57	MH66	DS	Jh	21/09/2023	13:47	1	1	MHF	20.53 m
61	1	MH58	MH59	DS	Jh	21/09/2023	13:31	1	1	MHF	5.37 m

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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
62	1	MH59	MH60	DS	Jh	21/09/2023	13:31	1	1	MHF, UNABLE TO LOCATE	6.05 m
63	1	MH60	MH61	DS	Jh	21/09/2023	13:31	1	1	MHF	5.68 m
64	1	MH61	MH57	DS	Jh	21/09/2023	13:31	1	1	MHF	12.67 m
65	1	MH62	MH63	DS	Jh	21/09/2023	13:31	1	3	MHF	4.98 m
66	1	MH63	MH64	DS	Jh	21/09/2023	13:31	1	1	MHF	6.15 m
67	1	MH64	MH57	DS	Jh	21/09/2023	13:32	4	3	MHF	3.70 m
68	1	MH65	MH57	DS	Jh	21/09/2023	13:32	1	3	MHF	18.22 m
69	1	MH66	MH67	DS	Jh	21/09/2023	13:47	1	1	MHF	10.48 m
70	1	MH67	MH68	DS	Jh	21/09/2023	13:47	1	3	MHF	6.07 m
71	1	MH68	MH69	DS	Jh	21/09/2023	13:47	1	2	MHF, BURIED	8.30 m
72	1	MH69	MH70	DS	Jh	21/09/2023	13:48	4	3	SA, SURVEY OVERLAP	5.84 m
72	2	MH69	MH70	US	Jh	21/09/2023	12:35	1	1	SA, SURVEY OVERLAP	2.06 m
73	1	MH70	MH74	DS	Jh	21/09/2023	12:35	4	3	MHF	17.08 m
74	1	MH71	MH72	DS	Jh	21/09/2023	12:34	2	3	MHF	17.08 m
75	1	US	MH72 (A)	US	Jh	21/09/2023	12:34	1	5	SA, UNABLE TO PUSH FURTHER DUE TO SETTLED DEP	15.54 m
76	1	MH72	MH73	DS	Jh	21/09/2023	12:34	1	3	MHF	21.22 m
77	1	MH73	MH75	US	Jh	21/09/2023	12:35	1	3	SA, UNABLE TO PUSH FURTHER DUE TO SETTLED DEP	14.51 m
77	2	MH73	MH75	DS	Jh	21/09/2023	12:35	1	4	SA, UNABLE TO PUSH FURTHER DUE TO SETTLED DEP	5.37 m
78	1	MH74	MH83	DS	Jh	21/09/2023	13:33	3	2	MHF	7.99 m
79	1	US	MH75 (B)	US	Jh	21/09/2023	12:35	4	3	SA, UNABLE TO PUSH FURTHER DUE TO ROOTS	12.94 m
80	1	MH75	DS	DS	Jh	21/09/2023	12:35	1	1	SA, UNABLE TO PUSH FURTHER DUE TO LOSS OF VISIC	6.64 m
81	1	MH76	MH77	DS	Jh	21/09/2023	12:36	1	3	MHF, BURIED	29.44 m
82	1	MH77	DS	DS	Jh	21/09/2023	12:36	2	3	SA, UNABLE TO PUSH FURTHER DUE TO LOSS OF VISIC	7.75 m
83	1	MH79	MH78 (A)	US	Jh	21/09/2023	13:32	1	2	MHF	4.86 m
84	1	MH78	MH74	DS	Jh	21/09/2023	13:33	1	1	MHF	8.58 m
85	1	MH80	MH79 (A)	US	Jh	21/09/2023	13:32	1	3	MHF, BURIED	10.89 m
86	1	MH81	MH80 (A)	US	Jh	21/09/2023	13:33	1	3	MHF, BURIED	4.98 m
87	1	MH82	MH81 (A)	US	Jh	21/09/2023	13:33	1	3	MHF, BURIED	11.34 m
88	1	MH83	MH84	DS	Jh	21/09/2023	13:33	3	4	MHF	28.32 m
89	1	MH84	MH91	DS	Jh	21/09/2023	13:34	1	1	MHF	10.75 m
90	1	MH86	MH85 (C)	US	Jh	21/09/2023	13:34	1	1	MHF, BURIED	10.11 m
91	1	MH85	MH87	DS	Jh	21/09/2023	13:34	4	3	MHF, BURIED	17.57 m

Project Summary

Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
92	1	MH89	MH88 (B)	US	Jh	21/09/2023	13:34	3	3	MHF, BURIED	14.78 m
93	1	MH88	MH90	DS	Jh	21/09/2023	13:34	2	2	MHF, UNABLE TO RAISE	2.57 m
94	1	MH91	MH92	DS	Jh	21/09/2023	13:34	4	3	MHF	3.54 m
95	1	MH92	MH99	DS	Jh	21/09/2023	13:36	4	5	MHF	40.34 m
96	1	MH87	MH93 (A)	US	Jh	21/09/2023	13:35	3	3	SA, UNABLE TO PUSH FURTHER PAST HARD DEPOSITS	10.32 m
97	1	MH93	MH94	DS	Jh	21/09/2023	13:35	3	2	MHF	14.90 m
98	1	MH96	MH95 (A)	US	Jh	21/09/2023	13:35	2	2	MHF	4.55 m
99	1	MH95	MH92	DS	Jh	21/09/2023	13:35	1	1	MHF	5.38 m
100	1	MH97	MH96 (A)	US	Jh	21/09/2023	13:35	2	3	MHF	10.59 m
101	1	MH104	MH97	US	Jh	21/09/2023	13:37	2	3	MHF	5.35 m
102	1	US	MH98 (A)	US	Jh	21/09/2023	13:36	3	3	SA, UNABLE TO PUSH FURTHER RUN POSSIBLY COLLA	16.91 m
103	1	MH98	MH94	DS	Jh	21/09/2023	13:36	1	1	MHF	3.81 m
104	1	MH99	MH110	DS	Jh	21/09/2023	13:38	3	4	MHF	25.61 m
105	1	MH94	MH100 (B)	US	Jh	21/09/2023	13:36	1	1	MHF	1.68 m
106	1	MH100	MH101	DS	Jh	21/09/2023	13:37	4	3	MHF	13.14 m
107	1	MH101	MH102	DS	Jh	21/09/2023	13:37	3	2	MHF, BURIED	5.62 m
108	1	MH102	MH103	DS	Jh	21/09/2023	13:37	4	5	MHF	20.04 m
109	1	MH103	MH109	DS	Jh	21/09/2023	13:38	4	5	MHF	25.51 m
110	1	MH105	MH104	US	Jh	21/09/2023	13:37	1	3	MHF	9.62 m
111	1	MH106	MH107	DS	Jh	21/09/2023	13:38	3	3	MHF	34.06 m
112	1	MH107	MH108	DS	Jh	21/09/2023	13:38	1	3	SA, UNABLE TO PUSH FURTHER DUE TO SILT	6.08 m
113	1	MH108	MH103	DS	Jh	21/09/2023	13:38	2	4	SA, UNABLE TO PUSH FURTHER DUE TO TAP ROOT	5.38 m
114	1	MH109	MH49	DS	Jh	21/09/2023	13:39	4	3	MHF	20.10 m
115	1	MH110	MH43	DS	Jh	21/09/2023	13:39	4	3	MHF	20.13 m
116	1	MH111	MH112	DS	Jh	21/09/2023	13:39	5	2	MHF, BURIED	11.91 m
117	1	MH112	MH36	DS	Jh	21/09/2023	13:40	1	1	MHF	12.52 m
118	1	MH113	MH114	DS	Jh	21/09/2023	13:40	3	3	MHF, BURIED	11.71 m
119	1	MH114	MH115	DS	Jh	21/09/2023	13:40	1	1	MHF, BURIED	9.05 m
120	1	MH115	MH37	DS	Jh	21/09/2023	13:40	1	1	MHF	3.36 m
121	1	US	MH93 (A)	US	Jh	13/11/2023	15:37	1	5	SA, UNABLE TO PUSH FURTHER DUE TO RUN BEING BI	12.29 m
122	1	MH200	MH109 (A)	US	Jh	13/11/2023	15:35	2	4	MHF	15.87 m

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Pipe No.	Insp. No.	Upstream Node	Downstream Node	Dir.	Operator	Insp. Date	Insp. Time	Str	Ser	Final Observation	Length
Total:											1577.55 m

Inspection Summary by Profile

Profile	Total Length	No. Inspections
Circular 100mm	20.58 m	
Circular 100mm	7.05 m	
Circular 100mm	8.96 m	
Circular 100mm	5.81 m	
Circular 100mm	15.71 m	
Circular 100mm	7.49 m	
Circular 100mm	16.36 m	
Circular 100mm	13.56 m	
Circular 100mm	3.00 m	
Circular 100mm	3.82 m	
Circular 100mm	9.61 m	
Circular 100mm	3.32 m	
Circular 100mm	15.31 m	
Circular 100mm	9.80 m	
Circular 100mm	2.67 m	
Circular 100mm	5.37 m	
Circular 100mm	6.05 m	
Circular 100mm	5.68 m	
Circular 100mm	4.98 m	
Circular 100mm	6.15 m	
Circular 100mm	3.70 m	
Circular 100mm	18.22 m	
Circular 100mm	17.08 m	
Circular 100mm	15.54 m	
Circular 100mm	29.44 m	
Circular 100mm	4.86 m	
Circular 100mm	8.58 m	
Circular 100mm	10.89 m	
Circular 100mm	4.98 m	
Circular 100mm	11.34 m	
Circular 100mm	14.78 m	
Circular 100mm	2.57 m	
Circular 100mm	4.55 m	
Circular 100mm	5.38 m	
Circular 100mm	10.59 m	
Circular 100mm	5.35 m	
Circular 100mm	16.91 m	

Project Summary

Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Profile	Total Length	No. Inspections
Circular 100mm	3.81 m	
Circular 100mm	9.62 m	
Circular 100mm	12.29 m	
Circular 100mm	15.87 m	
Circular 100mm =	397.63 m	41
Circular 150mm	14.13 m	
Circular 150mm	23.54 m	
Circular 150mm	20.97 m	
Circular 150mm	8.37 m	
Circular 150mm	13.03 m	
Circular 150mm	24.40 m	
Circular 150mm	17.98 m	
Circular 150mm	15.03 m	
Circular 150mm	20.85 m	
Circular 150mm	3.46 m	
Circular 150mm	1.64 m	
Circular 150mm	14.83 m	
Circular 150mm	16.94 m	
Circular 150mm	14.85 m	
Circular 150mm	0.13 m	
Circular 150mm	7.47 m	
Circular 150mm	0.23 m	
Circular 150mm	13.56 m	
Circular 150mm	12.18 m	
Circular 150mm	11.63 m	
Circular 150mm	6.33 m	
Circular 150mm	6.26 m	
Circular 150mm	4.45 m	
Circular 150mm	5.74 m	
Circular 150mm	15.12 m	
Circular 150mm	4.53 m	
Circular 150mm	20.53 m	
Circular 150mm	12.67 m	
Circular 150mm	10.48 m	
Circular 150mm	6.07 m	
Circular 150mm	8.30 m	
Circular 150mm	5.84 m	
Circular 150mm	2.06 m	
Circular 150mm	17.08 m	
Circular 150mm	21.22 m	
Circular 150mm	14.51 m	
Circular 150mm	5.37 m	
Circular 150mm	7.99 m	
Circular 150mm	12.94 m	

Project Summary

Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Profile	Total Length	No. Inspections
Circular 150mm	6.64 m	
Circular 150mm	7.75 m	
Circular 150mm	10.11 m	
Circular 150mm	17.57 m	
Circular 150mm	10.32 m	
Circular 150mm	14.90 m	
Circular 150mm	34.06 m	
Circular 150mm	6.08 m	
Circular 150mm	5.38 m	
Circular 150mm =	555.52 m	48
Circular 225mm	21.25 m	
Circular 225mm	23.18 m	
Circular 225mm	22.99 m	
Circular 225mm	22.99 m	
Circular 225mm	22.13 m	
Circular 225mm	23.22 m	
Circular 225mm	19.73 m	
Circular 225mm	45.40 m	
Circular 225mm	13.32 m	
Circular 225mm	12.70 m	
Circular 225mm	7.00 m	
Circular 225mm	10.54 m	
Circular 225mm	6.00 m	
Circular 225mm	9.04 m	
Circular 225mm	10.38 m	
Circular 225mm	21.42 m	
Circular 225mm	13.43 m	
Circular 225mm	11.31 m	
Circular 225mm	28.32 m	
Circular 225mm	10.75 m	
Circular 225mm	3.54 m	
Circular 225mm	40.34 m	
Circular 225mm	25.61 m	
Circular 225mm	1.68 m	
Circular 225mm	13.14 m	
Circular 225mm	5.62 m	
Circular 225mm	20.04 m	
Circular 225mm	25.51 m	
Circular 225mm	20.10 m	
Circular 225mm	20.13 m	
Circular 225mm	11.91 m	
Circular 225mm	12.52 m	
Circular 225mm	11.71 m	
Circular 225mm	9.05 m	

Project Summary

Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Profile	Total Length	No. Inspections
Circular 225mm	3.36 m	
Circular 225mm =	579.36 m	35
Circular 400mm	45.04 m	
Circular 400mm =	45.04 m	1
Total =	1577.55 m	125

Defect Summary				CCTV Drainage Survey Observation Count																				
				General				Structural Condition								Service Condition					Misc			
Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
1	1	MH2	MH1 (A)	20.6																			1	
2	1	MH3	MH1 (B)	7.1			2																1	1
3	1	MH1	MH4	14.1	2			2	3		2									1			1	
4	1	MH116	MH3 (A)	9.0	1			1	1														3	
5	1	MH4	MH8	23.5	1					1													1	
6	1	MH6	MH5 (A)	21.0	2			7	4	1	4												1	
7	1	US	MH5 (B)	8.4		1		3												4			1	
8	1	MH5	MH7	13.0				6	2														1	1
9	1	MH7	MH14	24.4																			1	
10	1	MH8	MH15	21.3				4															1	
11	1	MH10	MH9 (A)	5.8			2																1	
12	1	MH9	MH8	15.7											1		1						3	
13	1	MH11	MH10 (A)	7.5			2																1	
14	1	MH13	MH12 (B)	18.0				5															3	
15	1	MH12	MH14	15.0	4			8	6		1		1										1	
16	1	MH16	MH15 (B)	16.4				1	1														3	
17	1	MH15	MH19	23.2	3			3	4	1							1						1	
18	1	MH14	MH17 (A)	20.9				1															2	

Project Summary

Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
19	1	MH18	MH17 (B)	3.5	6	1			2	4	6						2			2			1	
20	1	MH17	MH25	23.0	2			2	6														1	
21	1	MH20	MH19 (B)	13.6		1	2										4						2	
21	2	MH20	MH19 (B)	3.0		1	2																2	
22	1	MH19	MH21	23.0				5	2														1	
23	1	MH22	MH20 (A)	3.8			2																1	
24	1	MH21	MH29	22.1	1			2	3								1						1	
25	1	MH23	MH22 (A)	9.6			2																1	
26	1	US	MH24 (B)	1.6		1	2		2														1	1
27	1	MH24	MH25	14.8	2				6		2						6						4	
28	1	MH25	MH26	23.2	3			14	5	1							1						2	
29	1	MH26	MH32	19.7	4		2		8		1						2						6	
30	1	MH30	MH27 (A)	3.3																			1	
31	1	MH27	MH21	15.3	2		6	1		2	1				1							4	6	
32	1	MH33	MH28 (B)	16.9																3			1	
33	1	MH28	MH26	14.9	3			1	4	1							3						2	
34	1	MH29	MH34	45.4				1	2								1						5	
35	1	MH31	MH30 (A)	9.8																			1	
36	1	MH38	MH32 (C)	2.7		1		1							1		2						1	
37	1	MH32	MH35	45.0	3				2	1			1				3						3	
38	1	MH36	MH32	13.3	2				2								2						1	
39	1	MH37	MH29	12.7																			1	
40	1	US	MH39 (A)	0.1		1			1														1	
41	1	MH39	MH40	7.0	1					2	2						1						3	
42	1	MH40	MH41	10.5	2			3	2														2	
43	1	MH41	MH42	6.0	1				4														1	
44	1	MH42	MH43	9.0	1				2														3	
45	1	MH43	MH113	10.4	1			1	3														1	
46	1	MH46	MH44 (A)	7.5																			1	

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Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
47	1	US	MH44 (B)	0.2		1																	1	
48	1	MH44	MH45	21.4	3		4	6	7											2			1	1
49	1	MH45	MH49	13.4					1													1		
50	1	MH47	MH46 (A)	13.6	1				1													1		
51	1	MH48	MH47 (A)	12.2																		1		
52	1	MH50	MH48 (A)	11.6																		1		
53	1	MH49	MH111	11.3				5	1													1		
54	1	MH55	MH51 (C)	6.3				1														1		
55	1	MH51	MH52	6.3				2														1		
56	1	MH52	MH53	4.5																		1		
57	1	MH53	MH54	5.7																		1		
58	1	MH54	MH39	15.1		1	2		2													2		
59	1	MH56	MH55 (C)	4.5																		1		
60	1	MH57	MH66	20.5																		5	2	
61	1	MH58	MH59	5.4																		1		
62	1	MH59	MH60	6.1																		1		
63	1	MH60	MH61	5.7																		1		
64	1	MH61	MH57	12.7																		2	1	
65	1	MH62	MH63	5.0																		1		
66	1	MH63	MH64	6.2																		1		
67	1	MH64	MH57	3.7	1				1						1					2		2		
68	1	MH65	MH57	18.2											1							1	2	
69	1	MH66	MH67	10.5																		4		
70	1	MH67	MH68	6.1																		1		
71	1	MH68	MH69	8.3													2					2		
72	1	MH69	MH70	5.8	2	1			1	1							2					3		
72	2	MH69	MH70	2.1		1	2															1		
73	1	MH70	MH74	17.1	1			1	1								1					1		
74	1	MH71	MH72	17.1				1							1							1		

Project Summary

Project Name 10793 Barrington Close Kingswood Report	Project Number 10793	Project Date 04/10/2023
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Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
75	1	US	MH72 (A)	15.5	2	1														3		1	3	
76	1	MH72	MH73	21.2													2						2	
77	1	MH73	MH75	14.5		1											1			7			1	
77	2	MH73	MH75	5.4		1	2																2	
78	1	MH74	MH83	8.0			2		1								1						1	
79	1	US	MH75 (B)	12.9	1	1		1	4								7						2	2
80	1	MH75	DS	6.6		1	2																1	
81	1	MH76	MH77	29.4																			1	
82	1	MH77	DS	7.8		1	2	1															1	
83	1	MH79	MH78 (A)	4.9			2										1						2	
84	1	MH78	MH74	8.6			2																2	
85	1	MH80	MH79 (A)	10.9											1		2						1	
86	1	MH81	MH80 (A)	5.0																			1	
87	1	MH82	MH81 (A)	11.3											1		1						1	
88	1	MH83	MH84	28.3				6	3								8						1	
89	1	MH84	MH91	10.8																			1	
90	1	MH86	MH85 (C)	10.1			2																1	
91	1	MH85	MH87	17.6	3		1	2	9	2	2						7		1				2	
92	1	MH89	MH88 (B)	14.8				2	1						1								1	1
93	1	MH88	MH90	2.6				1															1	1
94	1	MH91	MH92	3.5	1		2		2														2	
95	1	MH92	MH99	40.3	6		2	6	11	1							10						1	
96	1	MH87	MH93 (A)	10.3		1		4	3														1	
97	1	MH93	MH94	14.9			2	2	2														3	
98	1	MH96	MH95 (A)	4.6				1															2	
99	1	MH95	MH92	5.4																			1	
100	1	MH97	MH96 (A)	10.6				2							1								3	
101	1	MH104	MH97	5.4				1															2	
102	1	US	MH98 (A)	16.9		1		2	1											2			2	

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Project Name
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Project Number
10793

Project Date
04/10/2023

Sect. No.	Insp. No.	Upstream Node	Downstream Node	Insp. Length (m)	No. Grade 4/5 Obs.	Survey Abandoned	Camera Under Water	Cracks	Fractures	Broken	Deformed	Collapsed	Holes	Surface Damage	Displaced Joints	Open Joints	Roots	Infiltration	Encrustation	Silt	Grease	Obstruction	Water Level	Line Deviates
103	1	MH98	MH94	3.8																			1	1
104	1	MH99	MH110	25.6	1			6	1								11						1	
105	1	MH94	MH100 (B)	1.7																			1	
106	1	MH100	MH101	13.1	3			5	6	1													1	
107	1	MH101	MH102	5.6				2															1	
108	1	MH102	MH103	20.0	4			3	2								12						1	
109	1	MH103	MH109	25.5	11		2	5	5	1				1			21						1	
110	1	MH105	MH104	9.6																			1	
111	1	MH106	MH107	34.1				6															1	
112	1	MH107	MH108	6.1		1											1			3			1	
113	1	MH108	MH103	5.4	2	1		1									9						1	2
114	1	MH109	MH49	20.1	6			2	4	4	5						4						2	
115	1	MH110	MH43	20.1	4			2	8	1	2						6	1					1	
116	1	MH111	MH112	11.9	1				1				1										1	
117	1	MH112	MH36	12.5																			1	
118	1	MH113	MH114	11.7					2														1	
119	1	MH114	MH115	9.1																			1	
120	1	MH115	MH37	3.4																			1	
121	1	US	MH93 (A)	12.3		1																	2	
122	1	MH200	MH109 (A)	15.9				1							1		2			2			6	1
Total:				1,577.6	100	22	55	152	158	25	28		3	1	11		141	1	1	31	4	1	198	17

Section Inspection - 21/09/2023 - MH2X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
1	1	21/09/23	13:23	10793	No Rain Or Snow	No	MH2X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JH		Ford Transit		Solo Pro/Crawler	Not Specified	Not Specified	Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH2
Road:	Barrington Close	Inspected Length:	20.58 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.58 m	Downstream Node:	MH1 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:179	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH1 (a)							
	0.00	MH	Start node, manhole, reference: MH1 (a)		00:00:00		
	0.00	WL	Water level, 0% of the vertical dimension		00:00:07		
	16.54	DEZ	Attached deposits, other from 9 o'clock to 2 o'clock, 5% cross-sectional area loss		00:00:54		3
	16.98	DEZ	Attached deposits, other from 5 o'clock to 6 o'clock, 5% cross-sectional area loss		00:00:56		3
	20.24	DEZ	Attached deposits, other from 5 o'clock to 7 o'clock, 5% cross-sectional area loss		00:01:07		3
	20.58	MHF	Finish node, manhole, reference: MH2		00:01:11		
MH2							
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	3		2.0	0.3	6.0	3.0

Section Inspection - 21/09/2023 - MH3X

Item No. 2	Insp. No. 1	Date 21/09/23	Time 13:23	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH3X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH3
Road:	Barrington Close	Inspected Length:	7.05 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.05 m	Downstream Node:	MH1 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:62	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: m MH1 (b)</p> <p>0.00</p> <p>0.00</p> <p>0.01 S01</p> <p>0.01 S02</p> <p>0.87</p> <p>2.84</p> <p>5.81</p> <p>6.12 F01</p> <p>6.12 F02</p> <p>7.05</p> <p>MH3 Depth: m</p>	0.00	MH	Start node, manhole, reference: MH1 (b)	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:00			
	0.01	S01	DEZ Attached deposits, other from 7 o'clock to 8 o'clock, 5% cross-sectional area loss, start	00:00:00			
	0.01	S02	DEZ Attached deposits, other from 4 o'clock to 5 o'clock, 5% cross-sectional area loss, start	00:00:00			
	0.87	LR	Line deviates right: SLIGHT	00:00:08			
	2.84	CUW	Loss of vision, camera under water	00:00:21			
	5.81	CUW	Loss of vision, camera under water	00:00:25			
	6.12	F01	DEZ Attached deposits, other from 7 o'clock to 8 o'clock, 5% cross-sectional area loss, finish	00:00:24		3	
	6.12	F02	DEZ Attached deposits, other from 4 o'clock to 5 o'clock, 5% cross-sectional area loss, finish	00:00:24		3	
	7.05	MHF	Finish node, manhole, reference: MH3: BURIED	00:00:29			

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	4.0	4.0	28.0	4.0

Section Inspection - 21/09/2023 - MH1X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
3	1	21/09/23	13:23	10793	No Rain Or Snow	No	MH1X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JH		Ford Transit		Solo Pro/Crawler	Not Specified	Not Specified	Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH1
Road:	Barrington Close	Inspected Length:	14.13 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	14.13 m	Downstream Node:	MH4
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:123	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH1	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:14			
	2.10	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:21		3	
	4.98	CLJ	Crack, longitudinal at joint at 12 o'clock	00:00:23		2 / 2	
	6.55	CC	Crack, circumferential from 7 o'clock to 2 o'clock	00:00:26		2 / 2	
	8.69	FLJ	Fracture, longitudinal at joint at 12 o'clock	00:00:31		3 / 2	
	10.03	S01	FM	Fractures, multiple from 12 o'clock to 3 o'clock, start	00:00:35		
	10.86	S02	D	Deformed sewer or drain, 10%, start	00:00:37		
	11.71	F02	D	Deformed sewer or drain, 10%, finish	00:00:41		4 / 3
	12.33	F01	FM	Fractures, multiple from 12 o'clock to 3 o'clock, finish	00:00:42		4 / 2
	14.13	MHF	Finish node, manhole, reference: MH4	00:00:51			

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
5		160.0	26.9	380.0	4.0	6		3.0	0.7	10.0	3.0

Section Inspection - 21/09/2023 - MH116X

Item No. 4	Insp. No. 1	Date 21/09/23	Time 13:40	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH116X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH116
Road:	Barrington Close	Inspected Length:	8.96 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	8.96 m	Downstream Node:	MH3 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:78	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH3 (a): BURIED	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	0.24	CC	Crack, circumferential from 8 o'clock to 4 o'clock	00:00:04			2 / 2
	0.70	FMJ	Fractures, multiple at joint from 8 o'clock to 5 o'clock	00:00:06			4 / 2
	0.92	S01	DEX Settled deposits, other, 5% cross-sectional area loss, start	00:00:06			
	1.82	WL	Water level, 10% of the vertical dimension	00:00:10			
	1.93	F01	DEX Settled deposits, other, 5% cross-sectional area loss, finish	00:00:15			3
	3.15	WL	Water level, 5% of the vertical dimension	00:00:16			
	8.96	MHF	Finish node, manhole, reference: MH116: BURIED	00:00:38			

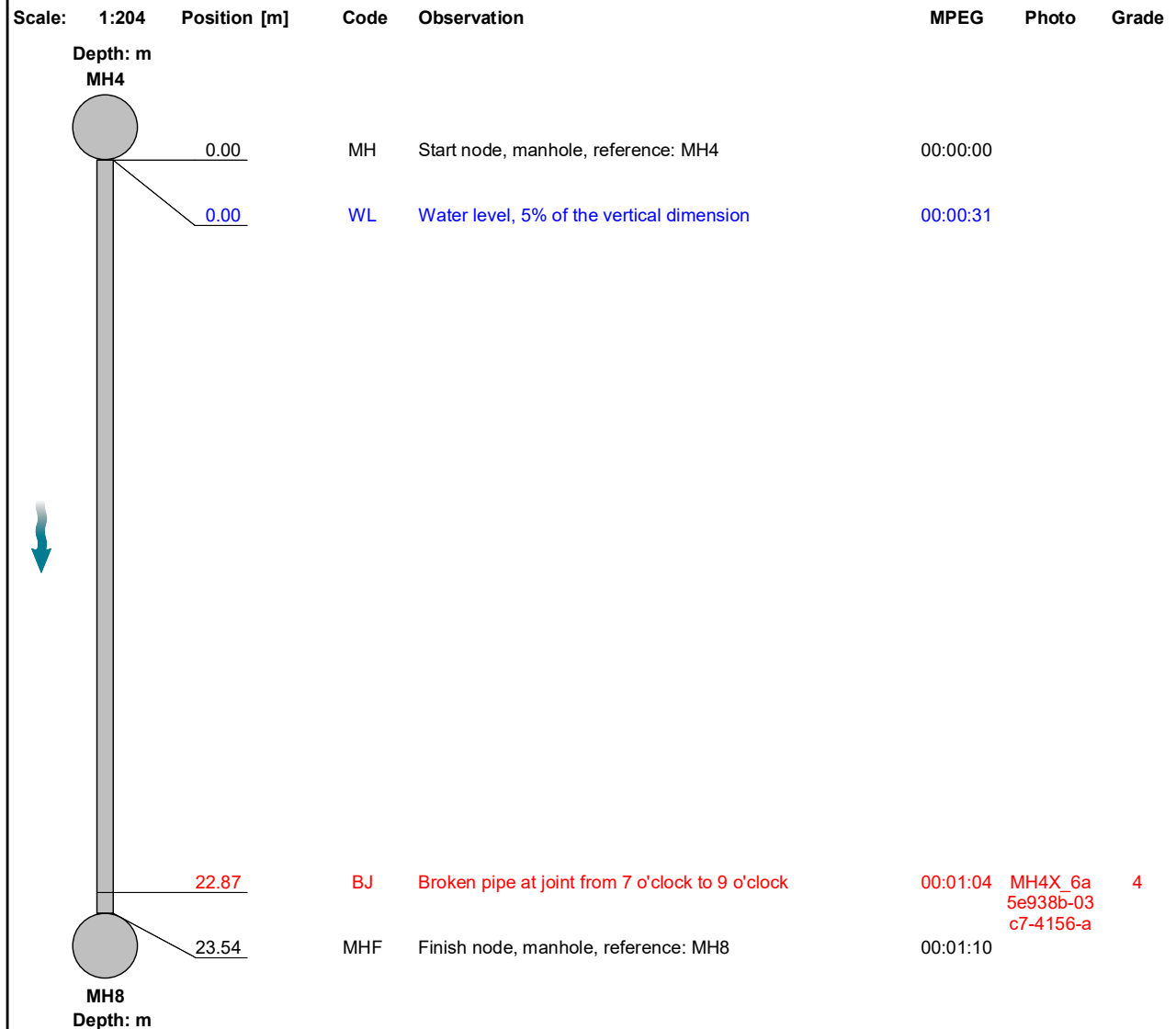
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	80.0	10.0	90.0	4.0	3	3.0	0.7	6.0	3.0

Section Inspection - 21/09/2023 - MH4X

Item No. 5	Insp. No. 1	Date 21/09/23	Time 13:25	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH4X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH4
Road:	Barrington Close	Inspected Length:	23.54 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	23.54 m	Downstream Node:	MH8
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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	80.0	3.4	80.0	4.0	0	0.0	0.0	0.0	1.0

Section Pictures - 21/09/2023 - MH4X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
5	Downstream	MH4X	10793	10793



MH4X_6a5e938b-03c7-4156-a8c1-0e94677db67a_20231004_150639_924.jpg, 00:01:04, 22.87 m
Broken pipe at joint from 7 o'clock to 9 o'clock

Section Inspection - 21/09/2023 - MH6X

Item No. 6	Insp. No. 1	Date 21/09/23	Time 13:24	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH6X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH6
Road:	Barrington Close	Inspected Length:	20.97 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.97 m	Downstream Node:	MH5 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:139	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH5 (a)	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:11			
	0.31	CLJ	Crack, longitudinal at joint at 10 o'clock	00:00:07		2 / 2	
	0.75	S01	FL	Fracture, longitudinal at 11 o'clock, start	00:00:09		
	0.75	S02	CM	Cracks, multiple from 10 o'clock to 3 o'clock, start	00:00:09		
	1.28	F02	CM	Cracks, multiple from 10 o'clock to 3 o'clock, finish	00:00:11		3 / 2
	1.28	D	D	Deformed sewer or drain, 5%: AT JOINT	00:00:11		2 / 2
	1.28	BJ	BJ	Broken pipe at joint from 4 o'clock to 7 o'clock	00:00:11	MH6X_7f7 9ca1b-f45 9-435c-90f	4
	1.60	F01	FL	Fracture, longitudinal at 11 o'clock, finish	00:00:12		3 / 2
	2.01	S03	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:14		
	2.73	F03	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:17		3 / 2
	2.74	S04	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:17		
	3.93	S05	D	Deformed sewer or drain, 5%, start	00:00:20		
	4.71	F05	D	Deformed sewer or drain, 5%, finish	00:00:23		2 / 2
14.43	D	D	Deformed sewer or drain, 5%: AT JOINT	00:00:52		2 / 2	

Section Inspection - 21/09/2023 - MH6X

Item No. 6	Insp. No. 1	Date 21/09/23	Time 13:24	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH6X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:139	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH6 Depth: m</p>	17.55	F04	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:13		4 / 2
	17.56	S06	CM	Cracks, multiple from 12 o'clock to 3 o'clock, start	00:01:13		
	19.58	F06	CM	Cracks, multiple from 12 o'clock to 3 o'clock, finish	00:01:13		3 / 2
	20.97		MHF	Finish node, manhole, reference: MH6	00:01:25		

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
10	180.0	75.8	1590.0	4.0	9	3.0	1.2	25.0	3.0

Section Pictures - 21/09/2023 - MH6X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
6	Upstream	MH6X	10793	10793



MH6X_7f79ca1b-f459-435c-90fc-8602aeb7b4ea_20231004_1
51019_865.jpg, 00:00:11, 1.28 m
Broken pipe at joint from 4 o'clock to 7 o'clock

Section Inspection - 21/09/2023 - USX

Item No. 7	Insp. No. 1	Date 21/09/23	Time 13:24	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	8.37 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	8.37 m	Downstream Node:	MH5 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:73	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH5 (b)	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:11			
	0.91	S01	DES	Settled deposits, fine, 10% cross-sectional area loss, start	00:00:11		
	1.64	CC	CC	Crack, circumferential from 7 o'clock to 10 o'clock	00:00:15		2 / 2
	3.64		CN	Connection other than junction at 2 o'clock, 100mm dia	00:00:21		
	4.83	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, finish	00:00:27		3
	6.23	S02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:31		
	6.95	F02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:34		3 / 2
	6.95	S03	DES	Settled deposits, fine, 10% cross-sectional area loss, start	00:00:34		
	8.26	DEX	DEX	Settled deposits, other, 10% cross-sectional area loss	00:00:38		3
	8.36	F03	DES	Settled deposits, fine, 10% cross-sectional area loss, finish	00:00:50		3
	8.37	SA	SA	Survey abandoned: UNABLE TO PUSH FURTHER PAST SETTLED DEPOSITS	00:00:50		

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
2	40.0	6.0	50.0	3.0	5	4.0	1.9	16.0	3.0

Section Inspection - 21/09/2023 - MH5X

Item No. 8	Insp. No. 1	Date 21/09/23	Time 13:24	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH5X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH5
Road:	Barrington Close	Inspected Length:	13.03 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	13.03 m	Downstream Node:	MH7
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:113	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH5	00:00:00		
	0.00	WL		Water level, 0% of the vertical dimension	00:00:11		
	2.08	S01	CL	Crack, longitudinal at 12 o'clock, start	00:00:13		
	3.05	F01	CL	Crack, longitudinal at 12 o'clock, finish	00:00:13		2 / 2
	8.19	S02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:26		
	9.22	F02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:28		3 / 2
	9.43	S03	CL	Crack, longitudinal at 10 o'clock, start	00:00:28		
	9.43	LR		Line deviates right: SLIGHT	00:00:28		
	10.39	F03	CL	Crack, longitudinal at 10 o'clock, finish	00:00:31		2 / 2
	10.39	S04	FL	Fracture, longitudinal at 12 o'clock, start	00:00:31		
	11.67	F04	FL	Fracture, longitudinal at 12 o'clock, finish	00:00:35		3 / 2
	13.03	MHF		Finish node, manhole, reference: MH7	00:00:41		

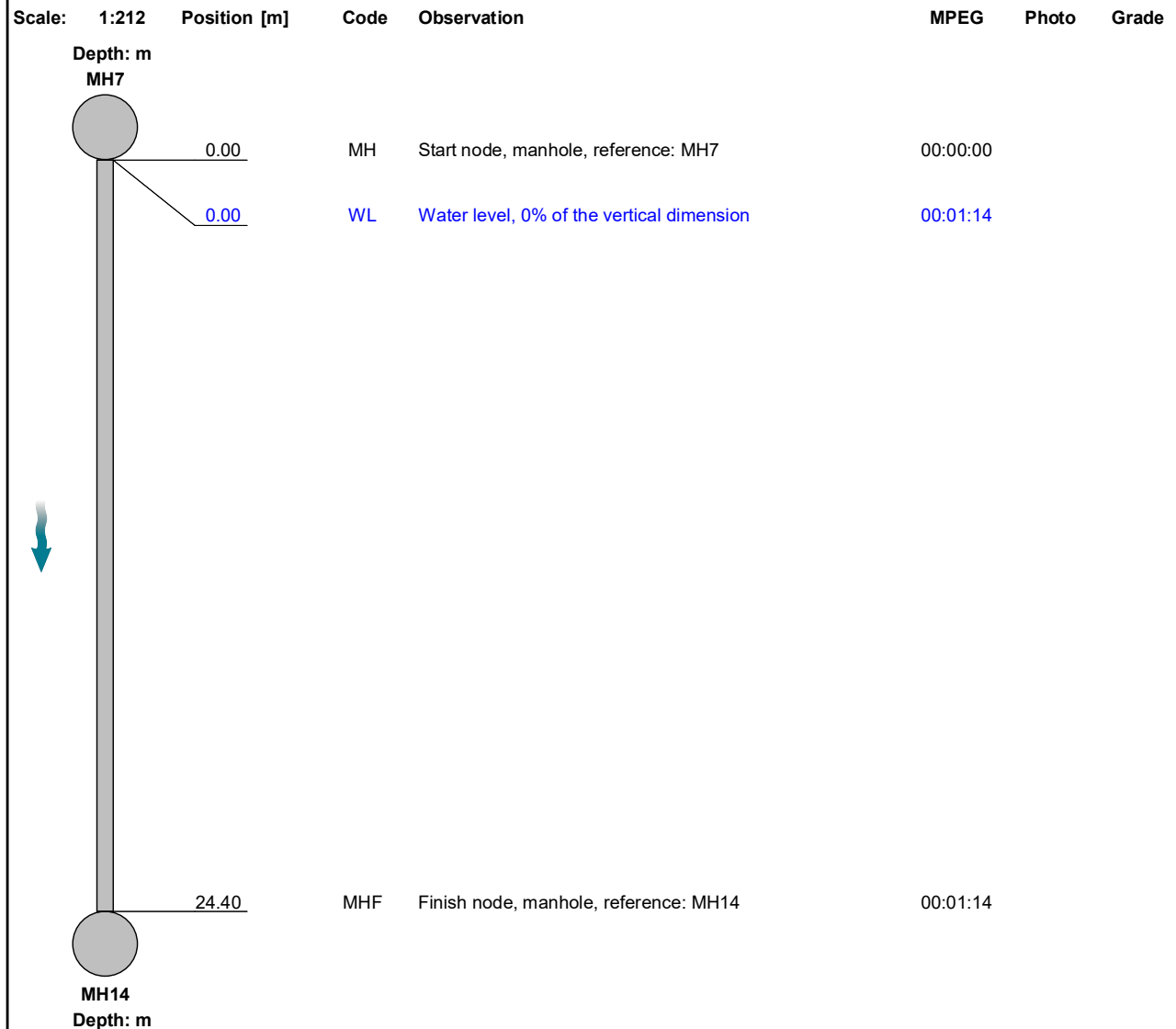
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
4	50.0	13.8	180.0	3.0	4	2.0	0.5	6.0	3.0

Section Inspection - 21/09/2023 - MH7X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
9	1	21/09/23	13:26	10793	No Rain Or Snow	No	MH7X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JH		Ford Transit		Solo Pro/Crawler	Not Specified	Not Specified	Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH7
Road:	Barrington Close	Inspected Length:	24.40 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	24.40 m	Downstream Node:	MH14
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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 - 21/09/2023 - MH8X

Item No. 10	Insp. No. 1	Date 21/09/23	Time 12:12	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH8X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH8
Road:	Barrington Close	Inspected Length:	21.25 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	21.25 m	Downstream Node:	MH15
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	225 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:184	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH8							
	0.00	MH	Start node, manhole, reference: MH8		00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension		00:00:00		
	0.32	CC	Crack, circumferential from 2 o'clock to 8 o'clock		00:00:06		2 / 2
	5.61	CC	Crack, circumferential from 6 o'clock to 9 o'clock		00:00:56		2 / 2
	6.46	CC	Crack, circumferential from 12 o'clock to 12 o'clock		00:01:03		2 / 2
	13.66	CC	Crack, circumferential from 8 o'clock to 4 o'clock		00:01:38		2 / 2
	21.25	MHF	Finish node, manhole, reference: MH15		00:02:12		
MH15							
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
4	10.0	1.9	40.0	2.0	4	1.0	0.2	4.0	2.0

Section Inspection - 21/09/2023 - MH10X

Item No. 11	Insp. No. 1	Date 21/09/23	Time 13:25	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH10X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH10
Road:	Barrington Close	Inspected Length:	5.81 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.81 m	Downstream Node:	MH9 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:51	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH9 (a)	00:00:00		
	0.00	WL		Water level, 15% of the vertical dimension	00:00:00		
	0.01	S01	DEZ	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, start	00:00:00		
	0.19	S02	CUW	Loss of vision, camera under water, start	00:00:53		
	5.80	F01	DEZ	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish	00:01:22		3
	5.80	F02	CUW	Loss of vision, camera under water, finish	00:01:22		
	5.81	MHF		Finish node, manhole, reference: MH10	00:01:22		

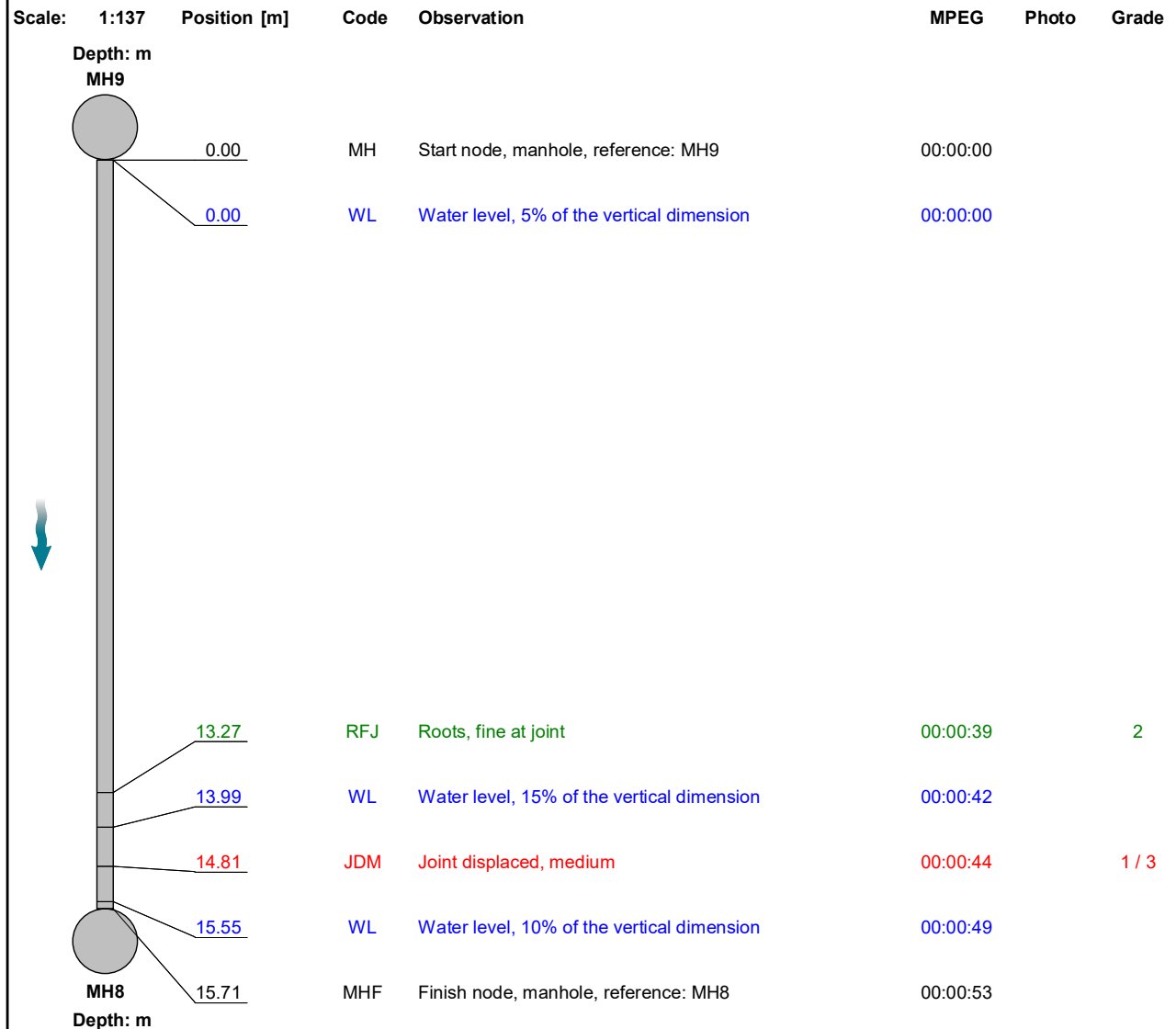
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	1	2.0	2.1	12.0	3.0

Section Inspection - 21/09/2023 - MH9X

Item No. 12	Insp. No. 1	Date 21/09/23	Time 13:25	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH9X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH9
Road:	Barrington Close	Inspected Length:	15.71 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.71 m	Downstream Node:	MH8
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



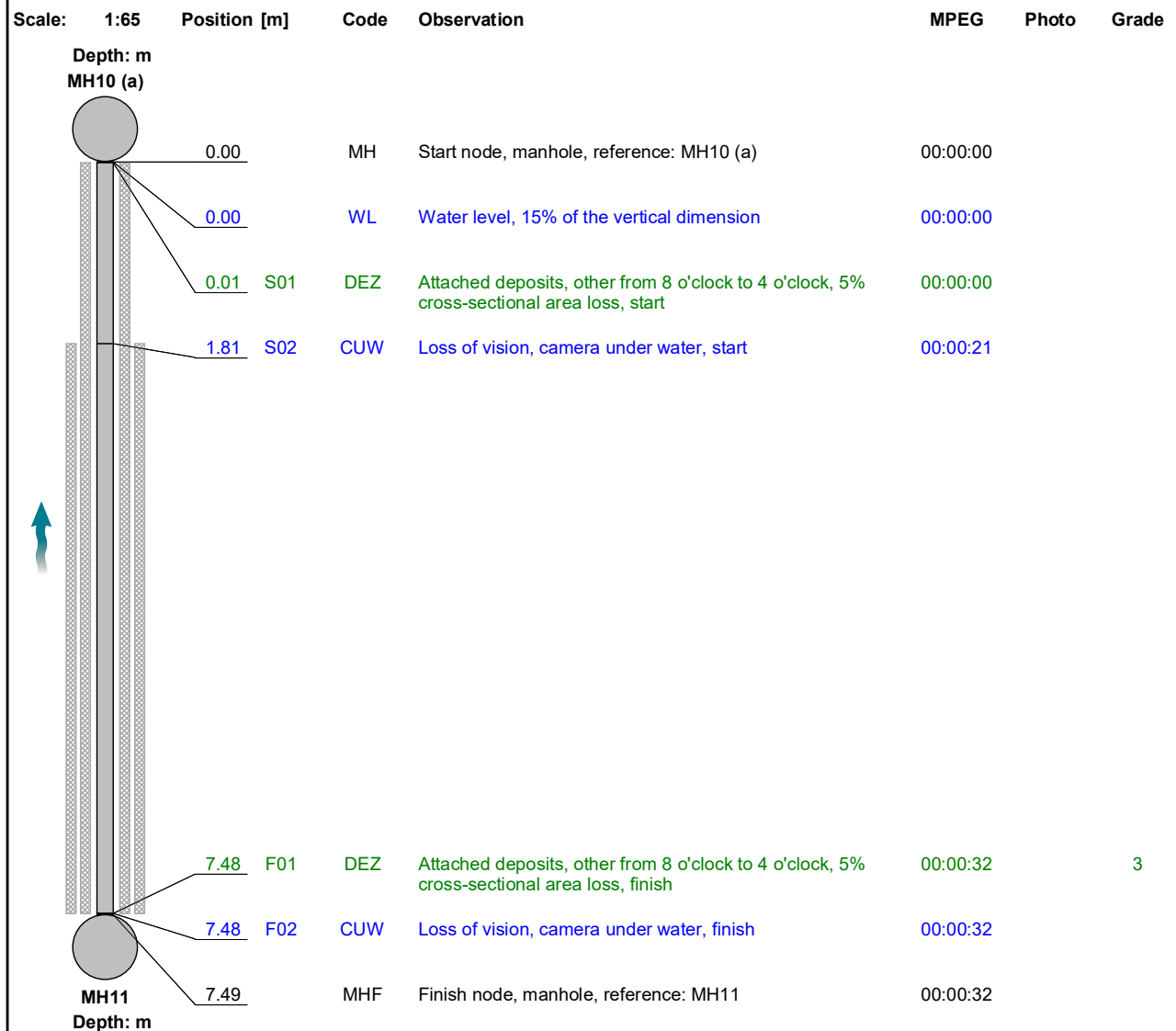
Construction Features					Miscellaneous Features						
Structural Defects					Service & Operational Observations						
STR No.	Def	STR Peak	STR Mean	STR Total	STR Grade	SER No.	Def	SER Peak	SER Mean	SER Total	SER Grade
1		1.0	0.1	1.0	1.0	2		2.0	0.2	3.0	3.0

Section Inspection - 21/09/2023 - MH11X

Item No. 13	Insp. No. 1	Date 21/09/23	Time 13:25	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH11X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH11
Road:	Barrington Close	Inspected Length:	7.49 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.49 m	Downstream Node:	MH10 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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	2.0	2.1	16.0	3.0

Section Inspection - 21/09/2023 - MH13X

Item No. 14	Insp. No. 1	Date 21/09/23	Time 13:25	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH13X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

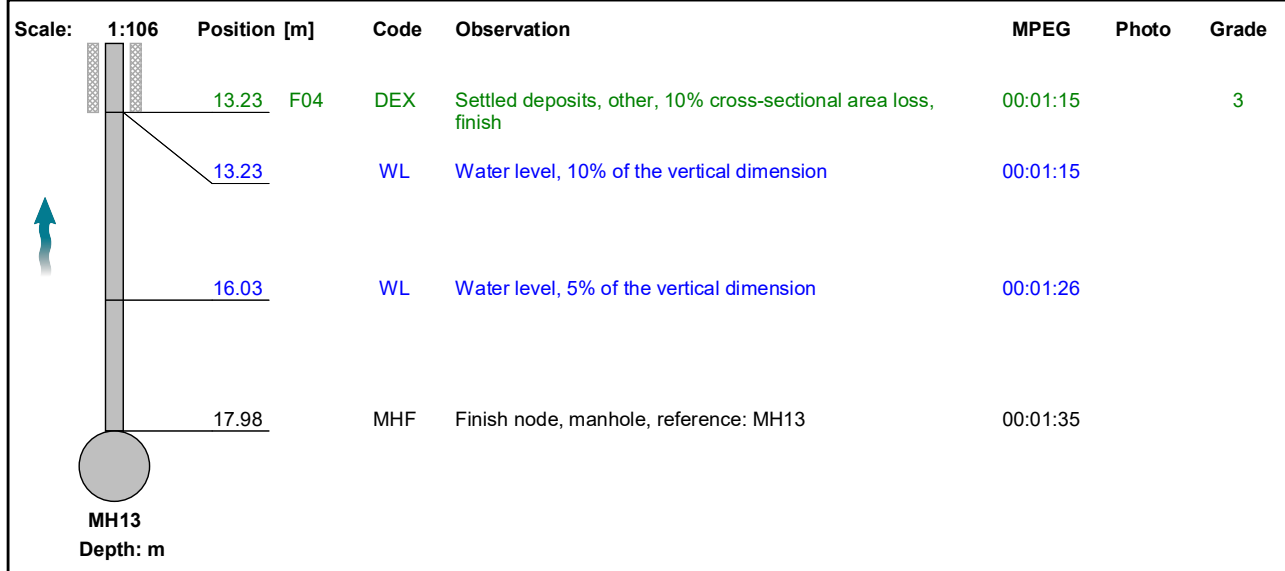
Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH13
Road:	Barrington Close	Inspected Length:	17.98 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	17.98 m	Downstream Node:	MH12 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:106	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH12 (b)	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:03			
	0.47	S01	DER	Settled deposits, coarse, 10% cross-sectional area loss, start	00:00:04		
	0.77	CM	Cracks, multiple from 2 o'clock to 10 o'clock	00:00:05		3 / 2	
	1.01	F01	DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:00:10		3
	1.89	CLJ	Crack, longitudinal at joint at 12 o'clock	00:00:10		2 / 2	
	2.41	S02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:11		
	2.96	JN	Junction at 10 o'clock, 150mm dia	00:00:18			
	3.42	F02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:22		3 / 2
	3.46	S03	DEZ	Attached deposits, other from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, start	00:00:22		
	3.46	S04	DEX	Settled deposits, other, 10% cross-sectional area loss, start	00:00:22		
	5.69	REM	General remark: POSSIBLY JUNCTION AT 10 O CLOCK, NEEDS JETTING TO CONFIRM	00:00:31			
	6.93	CC	Crack, circumferential from 7 o'clock to 5 o'clock	00:00:35		2 / 2	
	11.17	F03	DEZ	Attached deposits, other from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, finish	00:01:00		3

Section Inspection - 21/09/2023 - MH13X

Item No. 14	Insp. No. 1	Date 21/09/23	Time 13:25	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH13X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified



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
4	50.0	7.8	140.0	3.0	7	5.0	2.4	43.0	4.0

Section Inspection - 21/09/2023 - MH12X

Item No. 15	Insp. No. 1	Date 21/09/23	Time 13:26	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH12X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH12
Road:	Barrington Close	Inspected Length:	15.03 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.03 m	Downstream Node:	MH14
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:100	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH12	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:12			
	0.83	S01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:11		
	1.46	F01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:13		4 / 2
	2.24	S02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:15		
	2.91	D	D	Deformed sewer or drain, 5%	00:00:17		2 / 2
	4.33	F02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:21		4 / 2
	6.03	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:25		
	6.66	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:29		4 / 2
	7.31	S04	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:32		
	7.89	F04	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:32		3 / 2
	8.42	CLJ	CLJ	Crack, longitudinal at joint at 10 o'clock	00:00:33		2 / 2
	8.59	CC	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:34		2 / 2
	11.39	CC	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:42		2 / 2
11.39	H	H	Hole in drain or sewer from 10 o'clock to 11 o'clock	00:00:42	MH12X_7 9d11ca6-e 9fb-4ecf-b	4	

Section Inspection - 21/09/2023 - MH12X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
15	1	21/09/23	13:26	10793	No Rain Or Snow	No	MH12X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JH		Ford Transit		Solo Pro/Crawler	Not Specified	Not Specified	Not Specified

Scale:	1:100	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH14 Depth: m</p>	11.69		CS	Cracks, spiral from 12 o'clock to 12 o'clock	00:00:43		3 / 2
	12.13	S05	CS	Cracks, spiral from 2 o'clock to 10 o'clock, start	00:00:48		
	12.65	F05	CS	Cracks, spiral from 2 o'clock to 10 o'clock, finish	00:00:50		3 / 2
	15.03		MHF	Finish node, manhole, reference: MH14	00:01:01		

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
11	130.0	43.2	650.0	4.0	10	2.0	0.8	12.0	3.0

Section Pictures - 21/09/2023 - MH12X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
15	Downstream	MH12X	10793	10793



MH12X_79d11ca6-e9fb-4ecf-b7cf-a9e6f7051d44_20231005_091439_599.jpg, 00:00:42, 11.39 m

Hole in drain or sewer from 10 o'clock to 11 o'clock

Section Inspection - 21/09/2023 - MH16X

Item No. 16	Insp. No. 1	Date 21/09/23	Time 13:26	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH16X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH16
Road:	Barrington Close	Inspected Length:	16.36 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	16.36 m	Downstream Node:	MH15 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:142	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH15 (b)							
	0.00	MH		Start node, manhole, reference: MH15 (b)	00:00:00		
	0.00	WL		Water level, 0% of the vertical dimension	00:00:00		
	0.37	DEX		Settled deposits, other, 10% cross-sectional area loss	00:00:07		3
	2.29	REM		General remark: POSSIBLE HOLE OR CONNECTION AT 12 O CLOCK	00:00:15	MH16X_6 743155c-b 319-4636-	
	2.29	FC		Fracture, circumferential from 7 o'clock to 10 o'clock	00:00:16		3 / 2
	11.20	WL		Water level, 10% of the vertical dimension	00:00:43		
	11.82	WL		Water level, 5% of the vertical dimension	00:00:43		
	15.36	CC		Crack, circumferential from 12 o'clock to 12 o'clock	00:00:54		2 / 2
	16.36	MHF		Finish node, manhole, reference: MH16: BURIED	00:01:00		
MH16							
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
2	40.0	3.1	50.0	3.0	3	2.0	0.2	4.0	3.0

Section Pictures - 21/09/2023 - MH16X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
16	Upstream	MH16X	10793	10793



MH16X_6743155c-b319-4636-a4e1-6ab9b0ba6bbe_20231005_092050_334.jpg, 00:00:15, 2.29 m
General remark, POSSIBLE HOLE OR CONNECTION AT 12 O CLOCK

Section Inspection - 21/09/2023 - MH15X

Item No. 17	Insp. No. 1	Date 21/09/23	Time 12:12	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH15X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH15
Road:	Barrington Close	Inspected Length:	23.18 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	23.18 m	Downstream Node:	MH19
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:201	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH15	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		0.53	S01	CS Cracks, spiral from 8 o'clock to 4 o'clock, start	00:00:03		
		1.42	F01	CS Cracks, spiral from 8 o'clock to 4 o'clock, finish	00:00:07		3 / 2
		2.24	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:11		2 / 2
		3.04	S02	FM Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:31		
		5.10	F02	FM Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:36		4 / 2
		13.53	CXI	Connection defective, connecting pipe is intruding at 2 o'clock, 150mm dia, intrusion: 10%	00:01:33	MH15X_d 63fadcb-f4 bc-4ce1-bf	3
		13.68	S03	FM Fractures, multiple from 12 o'clock to 12 o'clock, start: AT CONNECTION	00:01:34		
		14.26	F03	FM Fractures, multiple from 12 o'clock to 12 o'clock, finish: AT CONNECTION	00:01:37		4 / 2
		15.39	BJ	Broken pipe at joint from 11 o'clock to 2 o'clock	00:01:44	MH15X_4 16a6b17-5 e09-4cf9-8	4
		21.37	RFJ	Roots, fine at joint	00:02:16		2
		23.18	MHF	Finish node, manhole, reference: MH19	00:02:27		

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
5	80.0	19.4	450.0	4.0	6	3.0	0.4	9.0	3.0

Section Pictures - 21/09/2023 - MH15X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
17	Downstream	MH15X	10793	10793



MH15X_d63fadcb-f4bc-4ce1-bf2c-d67bd93a6ca3_20231005_093226_393.jpg, 00:01:33, 13.53 m
 Connection defective, connecting pipe is intruding at 2 o'clock, 150mm dia, intrusion: 10%



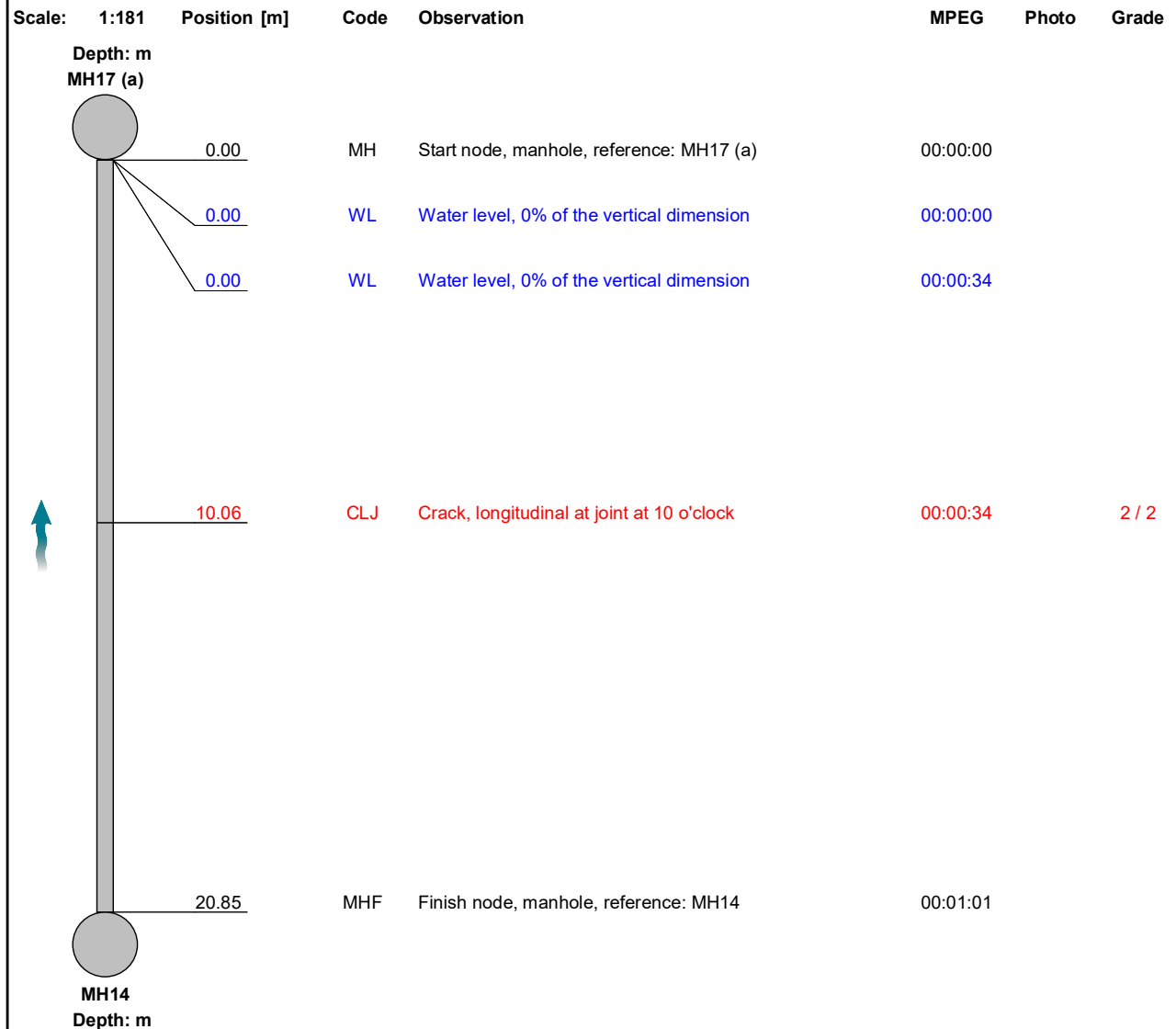
MH15X_416a6b17-5e09-4cf9-8eb4-2279ff69c08e_20231005_093340_645.jpg, 00:01:44, 15.39 m
 Broken pipe at joint from 11 o'clock to 2 o'clock

Section Inspection - 21/09/2023 - MH14X

Item No. 18	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH14X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH14
Road:	Barrington Close	Inspected Length:	20.85 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.85 m	Downstream Node:	MH17 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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	0.5	10.0	2.0	1	1.0	0.0	1.0	2.0

Section Inspection - 21/09/2023 - MH18X

Item No. 19	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH18X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH18
Road:	Barrington Close	Inspected Length:	3.46 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.46 m	Downstream Node:	MH17 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH17 (b)	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:00			
	0.01	S01	RF	Roots, fine, start	00:00:00		
	0.03	S02	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:06		
	0.43	F01	RF	Roots, fine, finish	00:00:09		2
	0.43	S03	B	Broken pipe from 12 o'clock to 12 o'clock, start	00:00:09	MH18X_5 88d93d8-0 691-423b-	
	0.43	S04	D	Deformed sewer or drain, 20%, start	00:00:09		
	1.37	C04	D	Deformed sewer or drain, 10%, change	00:00:17		
	1.82	F03	B	Broken pipe from 12 o'clock to 12 o'clock, finish	00:00:18		4
	1.83	S05	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:18		
	2.36	F04	D	Deformed sewer or drain, 10%, finish	00:00:19		5 / 4
	2.88	F05	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:21		4 / 2
	2.88	S06	D	Deformed sewer or drain, 10%, start	00:00:21		
	2.89	S07	B	Broken pipe from 12 o'clock to 12 o'clock, start	00:00:21	MH18X_5 1db5a45-6 395-4f44-8	
3.44	C07	D	Deformed sewer or drain, 20%, change	00:00:39			

Section Inspection - 21/09/2023 - MH18X

Item No. 19	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH18X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		3.45 F02	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:39		3
		3.45 F07	D	Deformed sewer or drain, 20%, finish	00:00:39		4 / 3
		3.45 F06	B	Broken pipe from 12 o'clock to 12 o'clock, finish	00:00:39		4
		3.46	SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO DEFORMED PIPE	00:00:39		



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
5	405.0	234.1	810.0	5.0	5	10.0	6.6	23.0	5.0

Section Pictures - 21/09/2023 - MH18X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
19	Upstream	MH18X	10793	10793



MH18X_588d93d8-0691-423b-9591-348c62ca6498_20231005_095307_681.jpg, 00:00:09, 0.43 m
Broken pipe from 12 o'clock to 12 o'clock, start



MH18X_51db5a45-6395-4f44-8e17-cb4a92bb53c2_20231005_095448_313.jpg, 00:00:21, 2.89 m
Broken pipe from 12 o'clock to 12 o'clock, start

Section Inspection - 21/09/2023 - MH17X

Item No. 20	Insp. No. 1	Date 21/09/23	Time 12:13	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH17X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH17
Road:	Barrington Close	Inspected Length:	22.99 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	22.99 m	Downstream Node:	MH25
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:200	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH17	00:00:00		
	0.00	WL		Water level, 0% of the vertical dimension	00:00:00		
	0.70	S01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:07		
	2.79	F01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:16		4 / 2
	7.49		FLJ	Fracture, longitudinal at joint at 12 o'clock	00:00:39		3 / 2
	11.54		FC	Fracture, circumferential from 3 o'clock to 9 o'clock	00:01:00		3 / 2
	12.04	S02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:01:02		
	13.09	F02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:07		4 / 2
	18.15	S03	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:01:33		
	19.77	F03	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:01:40		3 / 2
	22.99	MHF		Finish node, manhole, reference: MH25	00:00:00		

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
5	120.0	24.4	560.0	4.0	5	2.0	0.4	9.0	3.0

Section Inspection - 21/09/2023 - MH20X

Item No. 21	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH20X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH20
Road:	Barrington Close	Inspected Length:	13.56 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	16.56 m	Downstream Node:	MH19 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:144	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH19 (b)	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:07		
	0.59	RFJ		Roots, fine at joint	00:00:08		2
	2.56	WL		Water level, 10% of the vertical dimension	00:00:14		
	3.16	RFJ		Roots, fine at joint	00:00:14		2
	8.12	RFJ		Roots, fine at joint	00:00:26		2
	10.62	RFJ		Roots, fine at joint	00:00:32		2
	11.54	S01	CUW	Loss of vision, camera under water, start	00:00:38		
	13.55	F01	CUW	Loss of vision, camera under water, finish	00:00:53		
	13.56	SA		Survey abandoned: UNABLE TO PUSH FURTHER	00:00:53		
	16.56			End of pipe			

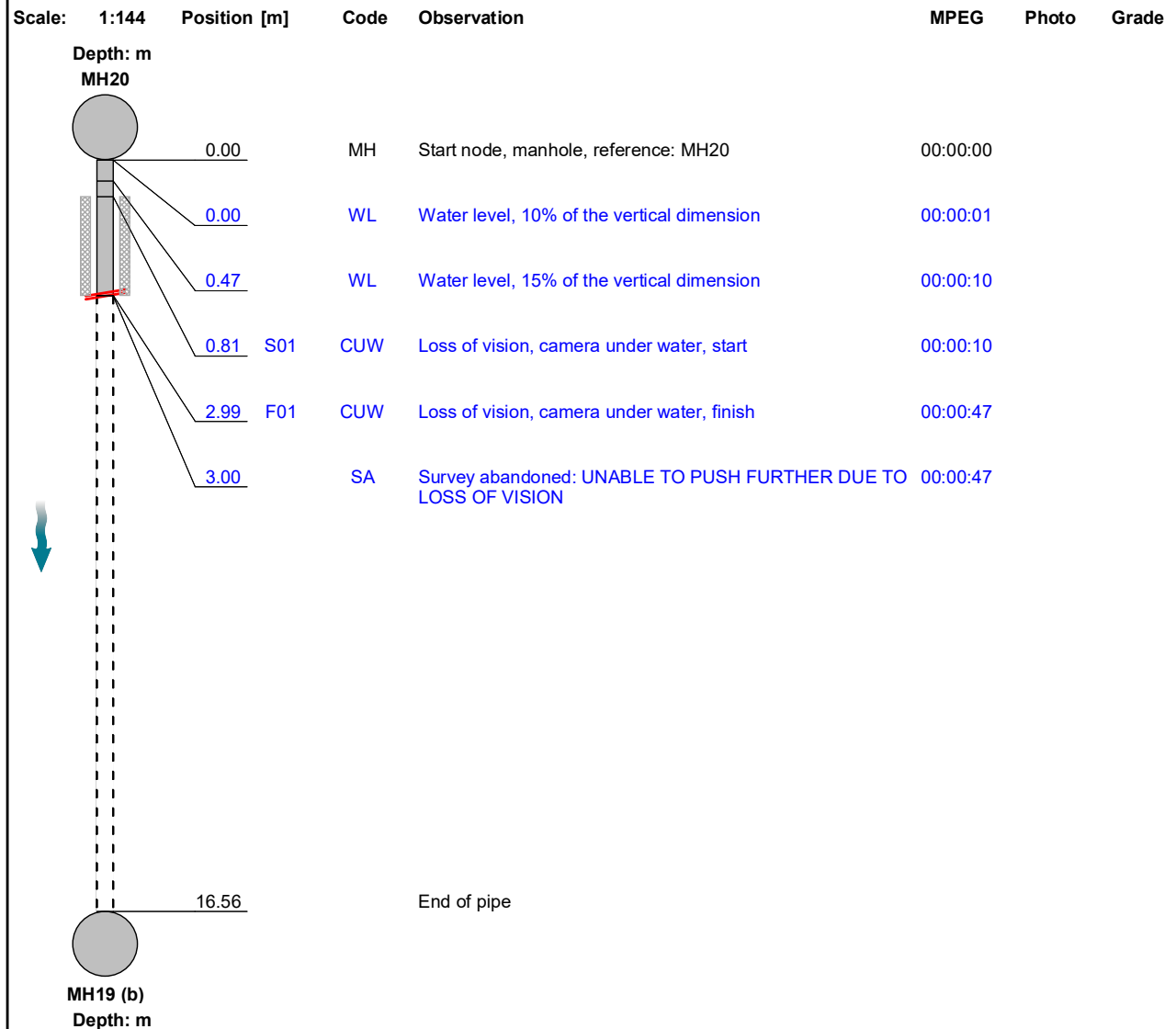
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	4	1.0	0.3	4.0	2.0

Section Inspection - 21/09/2023 - MH20X

Item No. 21	Insp. No. 2	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH20X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH20
Road:	Barrington Close	Inspected Length:	3.00 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	16.56 m	Downstream Node:	MH19 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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 - 21/09/2023 - MH19X

Item No. 22	Insp. No. 1	Date 21/09/23	Time 12:12	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH19X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH19
Road:	Barrington Close	Inspected Length:	22.99 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	22.99 m	Downstream Node:	MH21
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:200	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH19	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:00		
	3.58	CC		Crack, circumferential from 8 o'clock to 4 o'clock	00:00:18		2 / 2
	6.04	S01	CS	Cracks, spiral from 10 o'clock to 5 o'clock, start	00:00:29		
	6.72	F01	CS	Cracks, spiral from 10 o'clock to 5 o'clock, finish	00:00:40		3 / 2
	10.73		FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:53		3 / 2
	12.27		FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:01:00		3 / 2
	14.07		CC	Crack, circumferential from 12 o'clock to 5 o'clock	00:01:09		2 / 2
	16.55		CCJ	Crack, circumferential at joint from 9 o'clock to 5 o'clock	00:01:21		2 / 2
	21.54		REM	General remark: FOUL DEPOSITS	00:01:47		
	22.99	MHF		Finish node, manhole, reference: MH21	00:01:57		

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
6	40.0	6.5	150.0	3.0	6	1.0	0.3	6.0	2.0

Section Inspection - 21/09/2023 - MH22X

Item No. 23	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH22X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH22
Road:	Barrington Close	Inspected Length:	3.82 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.82 m	Downstream Node:	MH20 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH20 (a)	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:09		
	0.01	S01	CUW	Loss of vision, camera under water, start	00:00:09		
	3.81	F01	CUW	Loss of vision, camera under water, finish	00:00:21		
	3.82	MHF		Finish node, manhole, reference: MH22	00:00:21		

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 - 21/09/2023 - MH21X

Item No. 24	Insp. No. 1	Date 21/09/23	Time 12:13	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH21X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH21
Road:	Barrington Close	Inspected Length:	22.13 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	22.13 m	Downstream Node:	MH29
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:192	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m		0.00	MH	Start node, manhole, reference: MH21	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
		3.31	DEXJ	Settled deposits, other at joint, 10% cross-sectional area loss	00:00:25		3
		5.14	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:36		2 / 2
		13.19	FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:01:28		3 / 2
		14.47	CC	Crack, circumferential from 9 o'clock to 5 o'clock	00:01:36		2 / 2
		18.64	S01	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:02:03		
		18.96	RF	Roots, fine	00:02:05		2
		19.19	F01	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:02:07		4 / 2
		22.13	MHF	Finish node, manhole, reference: MH29	00:02:29		

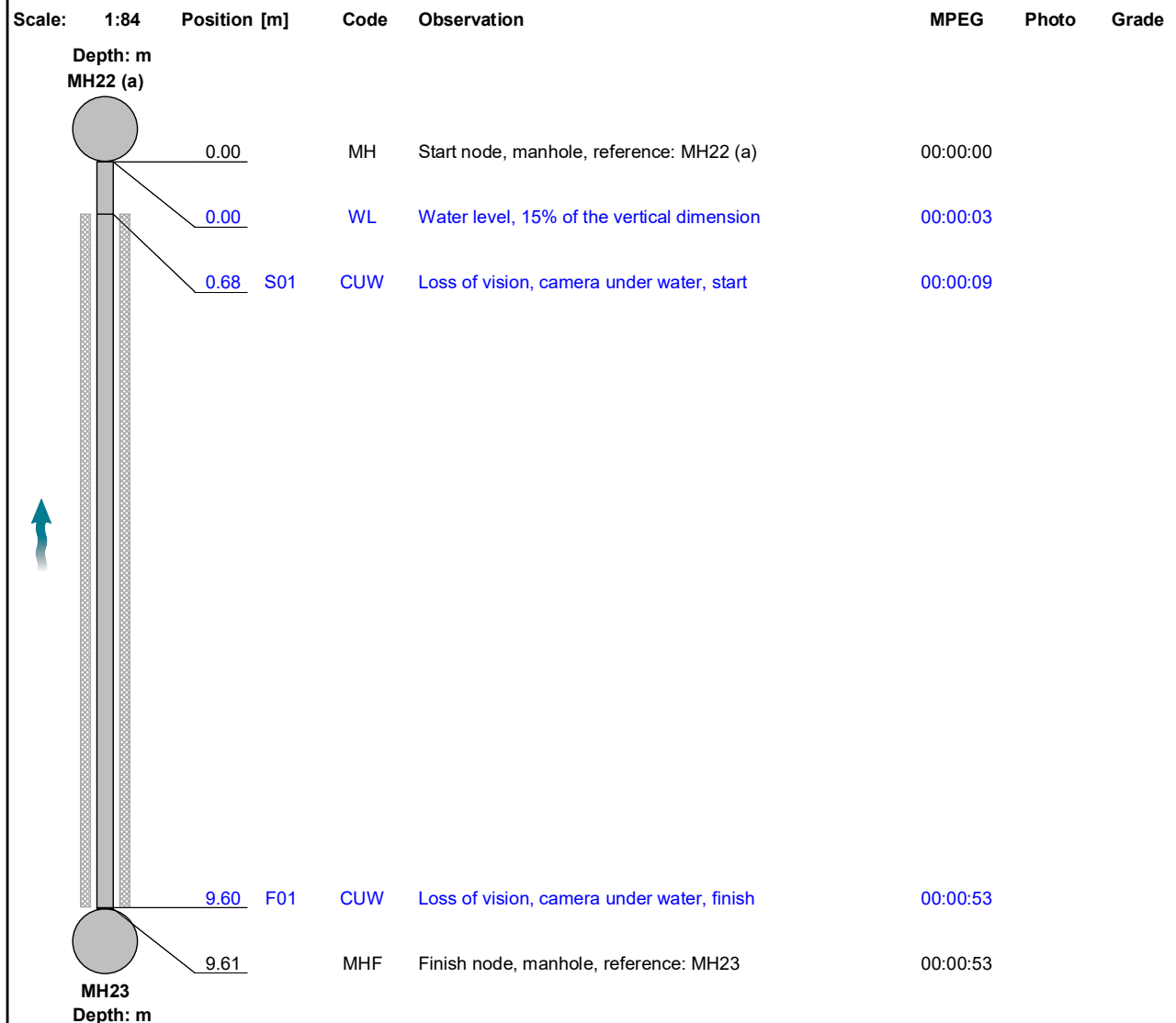
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
4	80.0	6.3	140.0	4.0	6	2.0	0.3	7.0	3.0

Section Inspection - 21/09/2023 - MH23X

Item No. 25	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH23X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH23
Road:	Barrington Close	Inspected Length:	9.61 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	9.61 m	Downstream Node:	MH22 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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 - 21/09/2023 - USX

Item No. 26	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	1.64 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	1.64 m	Downstream Node:	MH24 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH24 (b)	00:00:00		
	0.00	WL		Water level, 50% of the vertical dimension	00:00:01		
	0.01	S01	FL	Fracture, longitudinal at 3 o'clock, start	00:00:11		
	0.04	LL		Line deviates left	00:00:11		
	0.08	F01	FL	Fracture, longitudinal at 3 o'clock, finish	00:00:11		3 / 2
	0.87	S02	CUW	Loss of vision, camera under water, start	00:00:19		
	1.63	F02	CUW	Loss of vision, camera under water, finish	00:00:32		
	1.64	SA		Survey abandoned: UNABLE TO PUSH FURTHER DUE TO LOSS OF VISION	00:00:32		

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	40.0	24.4	40.0	3.0	1	1.0	0.6	1.0	2.0

Section Inspection - 21/09/2023 - MH24X

Item No. 27	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH24X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH24
Road:	Barrington Close	Inspected Length:	14.83 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	14.83 m	Downstream Node:	MH25
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:90	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH24	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	1.60	DEZJ	Attached deposits, other at joint from 7 o'clock to 9 o'clock, 5% cross-sectional area loss	00:00:11		3	
	1.60	RFJ	Roots, fine at joint	00:00:11		2	
	1.95	WL	Water level, 10% of the vertical dimension	00:00:12			
	2.51	S01	DER	Settled deposits, coarse, 15% cross-sectional area loss, start	00:00:14		
	3.12	RFJ	Roots, fine at joint	00:00:15		2	
	4.64	WL	Water level, 5% of the vertical dimension	00:00:29			
	4.64	F01	DER	Settled deposits, coarse, 15% cross-sectional area loss, finish	00:00:29		3
	8.65	S02	DER	Settled deposits, coarse, 10% cross-sectional area loss, start	00:00:38		
	9.63	RFJ	Roots, fine at joint	00:00:41		2	
	9.63	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:41		
	9.98	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:42		4 / 2
	9.98	S04	FL	Fracture, longitudinal at 11 o'clock, start	00:00:42		
10.25	WL	Water level, 10% of the vertical dimension	00:00:42				

Section Inspection - 21/09/2023 - MH24X

Item No. 27	Insp. No. 1	Date 21/09/23	Time 13:27	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH24X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:90	Position [m]	Code	Observation	MPEG	Photo	Grade
	10.35	F02	DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:00:43		3
	10.76	F04	FL	Fracture, longitudinal at 11 o'clock, finish	00:00:45		3 / 2
	11.33	S05	RF	Roots, fine, start	00:00:46		
	11.33	S06	FM	Fractures, multiple from 8 o'clock to 4 o'clock, start	00:00:46		
	11.91	S07	DER	Settled deposits, coarse, 10% cross-sectional area loss, start	00:00:47		
	12.11	S08	D	Deformed sewer or drain, 5%, start	00:00:48		
	12.56	F05	RF	Roots, fine, finish	00:00:49		2
	12.56	F06	FM	Fractures, multiple from 8 o'clock to 4 o'clock, finish	00:00:49		4 / 2
	12.56	F08	D	Deformed sewer or drain, 5%, finish	00:00:49		2 / 2
	13.30	F07	DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:00:51		3
13.33		RFJ	Roots, fine at joint	00:00:51		2	
14.83		MHF	Finish node, manhole, reference: MH25	00:00:57			

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
4	120.0	20.2	300.0	4.0	13	5.0	1.8	27.0	4.0

Section Inspection - 21/09/2023 - MH25X

Item No. 28	Insp. No. 1	Date 21/09/23	Time 12:13	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH25X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH25
Road:	Barrington Close	Inspected Length:	23.22 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	23.22 m	Downstream Node:	MH26
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:117	Position [m]	Code	Observation	MPEG	Photo	Grade	
	Depth: m							
	MH25	0.00	MH	Start node, manhole, reference: MH25	00:00:00			
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
		0.00	WL	Water level, 5% of the vertical dimension	00:00:01			
		0.18	CC	Crack, circumferential from 8 o'clock to 5 o'clock	00:00:03		2 / 2	
		4.52	CMJ	Cracks, multiple at joint from 12 o'clock to 12 o'clock	00:00:18		3 / 2	
		4.52	S01	CL	Crack, longitudinal at 7 o'clock, start	00:00:20		
		4.52	S02	CL	Crack, longitudinal at 12 o'clock, start	00:00:24		
		6.05	F02	CL	Crack, longitudinal at 12 o'clock, finish	00:00:24		2 / 2
		7.08	F01	CL	Crack, longitudinal at 7 o'clock, finish	00:00:28		2 / 2
		7.62	FLJ	Fracture, longitudinal at joint at 6 o'clock	00:00:30		3 / 2	
		7.62	CLJ	Crack, longitudinal at joint at 2 o'clock	00:00:30		2 / 2	
		10.11	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:39		2 / 2	
		12.16	CMJ	Cracks, multiple at joint from 12 o'clock to 12 o'clock	00:00:47		3 / 2	
		12.16	S03	CL	Crack, longitudinal at 5 o'clock, start	00:00:54		
	13.03	F03	CL	Crack, longitudinal at 5 o'clock, finish	00:00:54		2 / 2	

Section Inspection - 21/09/2023 - MH25X

Item No. 28	Insp. No. 1	Date 21/09/23	Time 12:13	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH25X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:117	Position [m]	Code	Observation	MPEG	Photo	Grade
		13.91	S04	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:59	
		14.74	F04	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:01:03	3 / 2
		16.32	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:01:13		2 / 2
		17.97	S05	FS	Fracture, spiral from 12 o'clock to 12 o'clock, start	00:01:22	
		19.91	F05	FS	Fracture, spiral from 12 o'clock to 12 o'clock, finish	00:01:31	4 / 2
		19.92	S06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:01:31	
		21.24	BJ	Broken pipe at joint from 11 o'clock to 2 o'clock	00:01:38	MH25X_8f 274589-b9 4c-46e7-b	4
		21.49	RFJ	Roots, fine at joint	00:01:39		2
		23.03	F06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:45	4 / 2
		23.22	MHF	Finish node, manhole, reference: MH26	00:01:46		

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
14	160.0	35.3	820.0	4.0	14	3.0	0.9	21.0	3.0

Section Pictures - 21/09/2023 - MH25X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
28	Downstream	MH25X	10793	10793



MH25X_8f274589-b94c-46e7-b1d7-ca2fcd8f8a65_20231005_132932_738.jpg, 00:01:38, 21.24 m
Broken pipe at joint from 11 o'clock to 2 o'clock

Section Inspection - 21/09/2023 - MH26X

Item No. 29	Insp. No. 1	Date 21/09/23	Time 12:13	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH26X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH26
Road:	Barrington Close	Inspected Length:	19.73 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	19.73 m	Downstream Node:	MH32
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:148	Position [m]	Code	Observation	MPEG	Photo	Grade	
	Depth: m							
	MH26	0.00	MH	Start node, manhole, reference: MH26	00:00:00			
		0.00	WL	Water level, 5% of the vertical dimension	00:00:01			
		0.01	DEC	Settled deposits, hard or compacted, 10% cross-sectional area loss	00:00:01		3	
		0.46	S01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:06		
		0.76	D	D	Deformed sewer or drain, 5%	00:00:09		2 / 2
		1.24	F01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:13		4 / 2
		6.57	DEC	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss	00:00:44		3
		7.18	S02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:47		
		10.02	F02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:03		4 / 2
		10.61	FC	FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:01:06		3 / 2
		14.39	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:01:28		
		14.90	RFJ	RFJ	Roots, fine at joint	00:01:31		2
		14.90	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:31		4 / 2
		16.17	WL	WL	Water level, 15% of the vertical dimension	00:01:38		
	16.79	WL	WL	Water level, 20% of the vertical dimension	00:01:41			

Section Inspection - 21/09/2023 - MH26X

Item No. 29	Insp. No. 1	Date 21/09/23	Time 12:13	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH26X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:148	Position [m]	Code	Observation	MPEG	Photo	Grade	
		17.34	WL	Water level, 40% of the vertical dimension	00:01:44			
		18.13	S04	CUW	Loss of vision, camera under water, start	00:01:47		
		19.12	F04	CUW	Loss of vision, camera under water, finish	00:01:51		
		19.12		WL	Water level, 20% of the vertical dimension	00:01:51		
		19.27		FM	Fractures, multiple from 12 o'clock to 12 o'clock	00:01:52		4 / 2
		19.27		RF	Roots, fine	00:01:52		2
		19.30		WL	Water level, 5% of the vertical dimension	00:02:15		
		19.73		MHF	Finish node, manhole, reference: MH32	00:02:15		

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
6	100.0	27.4	540.0	4.0	10	3.0	0.7	14.0	3.0

Section Inspection - 21/09/2023 - MH30X

Item No. 30	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH30X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH30
Road:	Barrington Close	Inspected Length:	3.32 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.32 m	Downstream Node:	MH27 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:50 Position [m] Code Observation MPEG Photo 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	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH27X

Item No. 31	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH27X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH27
Road:	Barrington Close	Inspected Length:	15.31 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.31 m	Downstream Node:	MH21
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:80	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH27	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:00			
	0.56	S01	B	Broken pipe from 9 o'clock to 3 o'clock, start	00:00:08	MH27X_d b4a563b-b 4b5-4986-	
	0.89	D	D	Deformed sewer or drain, 10%	00:00:09		4 / 3
	1.14	F01	B	Broken pipe from 9 o'clock to 3 o'clock, finish	00:00:09		4
	1.14	WL	WL	Water level, 30% of the vertical dimension	00:00:09		
	1.40	S02	DEG	Attached deposits, grease from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, start	00:00:11		
	1.58	WL	WL	Water level, 40% of the vertical dimension	00:00:16		
	1.70	S03	CUW	Loss of vision, camera under water, start	00:00:15		
	1.70	F02	DEG	Attached deposits, grease from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish	00:00:26		3
	4.82	F03	CUW	Loss of vision, camera under water, finish	00:00:25		
	5.73	WL	WL	Water level, 20% of the vertical dimension	00:00:24		
	6.92	S04	DEG	Attached deposits, grease from 3 o'clock to 9 o'clock, 5% cross-sectional area loss, start	00:00:28		
	7.66	F04	DEG	Attached deposits, grease from 3 o'clock to 9 o'clock, 5% cross-sectional area loss, finish	00:00:31		3
	7.66	S05	CUW	Loss of vision, camera under water, start	00:00:31		

Section Inspection - 21/09/2023 - MH27X

Item No. 31	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH27X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:80	Position [m]	Code	Observation	MPEG	Photo	Grade
	10.66	F05	CUW	Loss of vision, camera under water, finish	00:00:39		
	11.13		WL	Water level, 10% of the vertical dimension	00:00:35		
	12.64		JDM	Joint displaced, medium	00:00:39		1 / 3
	13.44		WL	Water level, 15% of the vertical dimension	00:00:42		
	13.63	S06	CUW	Loss of vision, camera under water, start	00:00:42		
	15.07	F06	CUW	Loss of vision, camera under water, finish	00:00:50		
	15.07		CC	Crack, circumferential from 1 o'clock to 3 o'clock	00:00:50		2 / 2
15.31		MHF	Finish node, manhole, reference: MH21	00:01:00			

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
4	160.0	11.2	171.0	4.0	5	6.0	0.8	13.0	4.0

Section Pictures - 21/09/2023 - MH27X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
31	Downstream	MH27X	10793	10793



MH27X_db4a563b-b4b5-4986-9509-74b73bd5f2af_20231005_134650_419.jpg, 00:00:08, 0.56 m
Broken pipe from 9 o'clock to 3 o'clock, start

Section Inspection - 21/09/2023 - MH33X

Item No. 32	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH33X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH33
Road:	Barrington Close	Inspected Length:	16.94 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	16.94 m	Downstream Node:	MH28 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:147	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH33	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:09			
	0.01	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:09		
	13.29	S02	DER	Settled deposits, coarse, 5% cross-sectional area loss, start	00:00:33		
	13.29	C01	DES	Settled deposits, fine, 10% cross-sectional area loss, change	00:00:36		
	15.42	C02	DER	Settled deposits, coarse, 10% cross-sectional area loss, change	00:00:37		
	16.93	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, finish	00:00:52		3
	16.93	F02	DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:00:52		3
	16.94	MHF	MHF	Finish node, manhole, reference: MH28 (b)	00:00:52		

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	4.0	2.5	42.0	3.0

Section Inspection - 21/09/2023 - MH28X

Item No. 33	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH28X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH28
Road:	Barrington Close	Inspected Length:	14.85 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	14.85 m	Downstream Node:	MH26
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:129	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH28	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:08			
	0.61	WL	Water level, 10% of the vertical dimension	00:00:08			
	2.13	S01	DER	Settled deposits, coarse, 10% cross-sectional area loss, start	00:00:15		
	2.17	S02	RFJ	Roots, fine at joint, start	00:00:13		
	3.77	F02	RFJ	Roots, fine at joint, finish			2
	5.06	F01	DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:00:23		3
	5.15	RFJ	RFJ	Roots, fine at joint	00:00:24		2
	5.73	BJ	BJ	Broken pipe at joint from 1 o'clock to 5 o'clock	00:00:26	MH28X_a 1b8e47f-4 4b9-4217-	4
	8.59	CC	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:33		2 / 2
	9.31	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:37		
	9.86	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:39		4 / 2
	12.51	S04	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:46		
	14.09	F04	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:51		4 / 2
	14.85	MHF	MHF	Finish node, manhole, reference: MH26	00:00:56		

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
4	80.0	22.2	330.0	4.0	6	3.0	0.9	13.0	3.0

Section Pictures - 21/09/2023 - MH28X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
33	Downstream	MH28X	10793	10793



MH28X_a1b8e47f-44b9-4217-b8c7-c67eff98a3eb_20231005_140825_157.jpg, 00:00:26, 5.73 m
Broken pipe at joint from 1 o'clock to 5 o'clock

Section Inspection - 21/09/2023 - MH29X

Item No. 34	Insp. No. 1	Date 21/09/23	Time 12:14	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH29X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH29
Road:	Barrington Close	Inspected Length:	45.40 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	45.40 m	Downstream Node:	MH34
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:394	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH29	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:01		
	2.67	WL		Water level, 15% of the vertical dimension	00:00:22		
	3.52	S01	FL	Fracture, longitudinal at 11 o'clock, start	00:00:28		
	3.95	DEX		Settled deposits, other, 5% cross-sectional area loss	00:00:31		3
	4.97	F01	FL	Fracture, longitudinal at 11 o'clock, finish	00:00:36		3 / 2
	4.99	CC		Crack, circumferential from 8 o'clock to 4 o'clock	00:00:36		2 / 2
	7.89	WL		Water level, 10% of the vertical dimension	00:00:51		
	13.87	WL		Water level, 15% of the vertical dimension	00:01:21		
	19.70	WL		Water level, 10% of the vertical dimension	00:01:49		
	40.30	RFJ		Roots, fine at joint	00:03:32		2
	45.40	MHF		Finish node, manhole, reference: MH34	00:00:00		

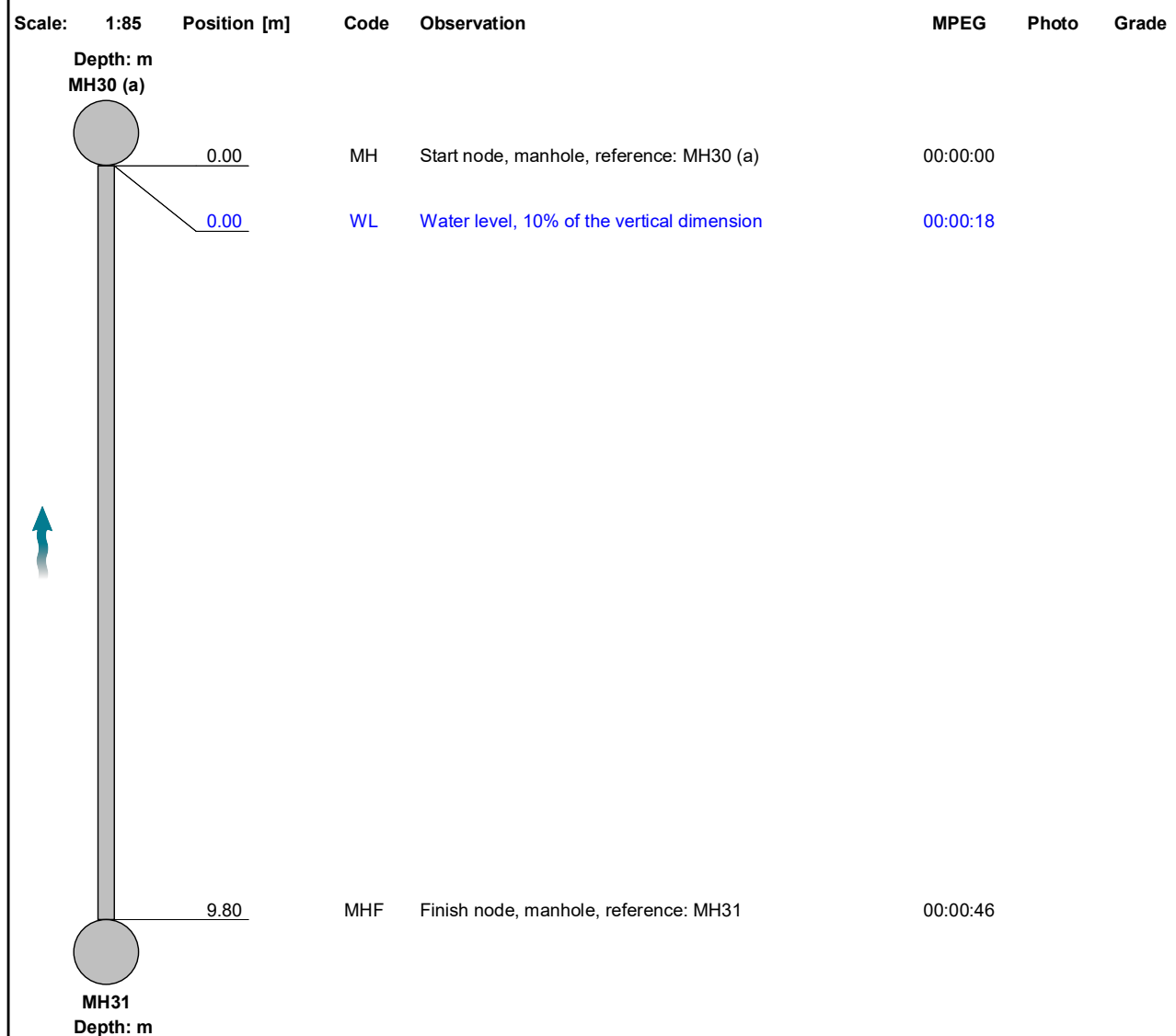
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	50.0	2.0	90.0	3.0	4	3.0	0.1	6.0	3.0

Section Inspection - 21/09/2023 - MH31X

Item No. 35	Insp. No. 1	Date 21/09/23	Time 13:28	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH31X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH31
Road:	Barrington Close	Inspected Length:	9.80 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	9.80 m	Downstream Node:	MH30 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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 - 21/09/2023 - MH38X

Item No. 36	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH38X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH38
Road:	Barrington Close	Inspected Length:	2.67 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	2.67 m	Downstream Node:	MH32 (C)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH32 (c)	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:02		
		0.01	S01 DER	Settled deposits, coarse, 5% cross-sectional area loss, start	00:00:02		
		0.49	CC	Crack, circumferential from 8 o'clock to 4 o'clock	00:00:06		2 / 2
		1.05	JDM	Joint displaced, medium	00:00:08		1 / 3
		1.39	S02 RF	Roots, fine, start	00:00:10		
		1.39	C01 DER	Settled deposits, coarse, 10% cross-sectional area loss, change	00:00:24		
		1.72	F02 RF	Roots, fine, finish	00:00:10		2
		2.66	DEC	Settled deposits, hard or compacted, 25% cross-sectional area loss	00:00:24		4
		2.66	JN	Junction at 9 o'clock, 100mm dia	00:00:24		
		2.66	F01 DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:00:24		3
		2.67	SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO HARD SETTLED DEPOSITS	00:00:24		

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
2	10.0	4.1	11.0	2.0	5	5.0	5.6	15.0	5.0

Section Inspection - 21/09/2023 - MH32X

Item No. 37	Insp. No. 1	Date 21/09/23	Time 12:14	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH32X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH32
Road:	Barrington Close	Inspected Length:	45.04 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	45.04 m	Downstream Node:	MH35
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	400 mm		
Flow Control:	No flow control	Material:	Concrete		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:390	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH32	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:00		
	4.99	BJ		Broken pipe at joint from 7 o'clock to 9 o'clock	00:00:32	MH32X_b b127f40-8 b4d-4311-	4
	8.03	WL		Water level, 15% of the vertical dimension	00:00:54		
	9.33	S01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:54		
	9.33	WL		Water level, 10% of the vertical dimension	00:00:54		
	11.28	F01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:02		4 / 2
	24.36	DEX		Settled deposits, other, 5% cross-sectional area loss	00:01:56		3
	25.60	RFJ		Roots, fine at joint	00:02:02		2
	33.18	S02	RFJ	Roots, fine at joint, start	00:02:33		
	39.08	F02	RFJ	Roots, fine at joint, finish	00:02:33		2
	40.16	H		Hole in drain or sewer at 12 o'clock	00:03:06	MH32X_3 8f532f4-52 d5-430e-b	4
	45.04	MHF		Finish node, manhole, reference: MH35	00:03:30		

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
3	80.0	7.1	320.0	4.0	4	2.0	0.2	11.0	3.0

Section Pictures - 21/09/2023 - MH32X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
37	Downstream	MH32X	10793	10793



MH32X_bb127f40-8b4d-4311-a8cb-ed932acd47ee_20231009_112338_379.jpg, 00:00:32, 4.99 m
Broken pipe at joint from 7 o'clock to 9 o'clock



MH32X_38f532f4-52d5-430e-b97b-07a4197883f7_20231009_112625_027.jpg, 00:03:06, 40.16 m
Hole in drain or sewer at 12 o'clock

Section Inspection - 21/09/2023 - MH36X

Item No. 38	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH36X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH36
Road:	Barrington Close	Inspected Length:	13.32 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	13.32 m	Downstream Node:	MH32
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:116	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH36	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:19		
	9.16	S01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:32		
	9.91	S02	RT	Roots, tap, start	00:00:54		
	10.50	F01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:36		4 / 2
	11.28	F02	RT	Roots, tap, finish	00:00:53		4
	13.32	MHF		Finish node, manhole, reference: MH32	00:00:59		

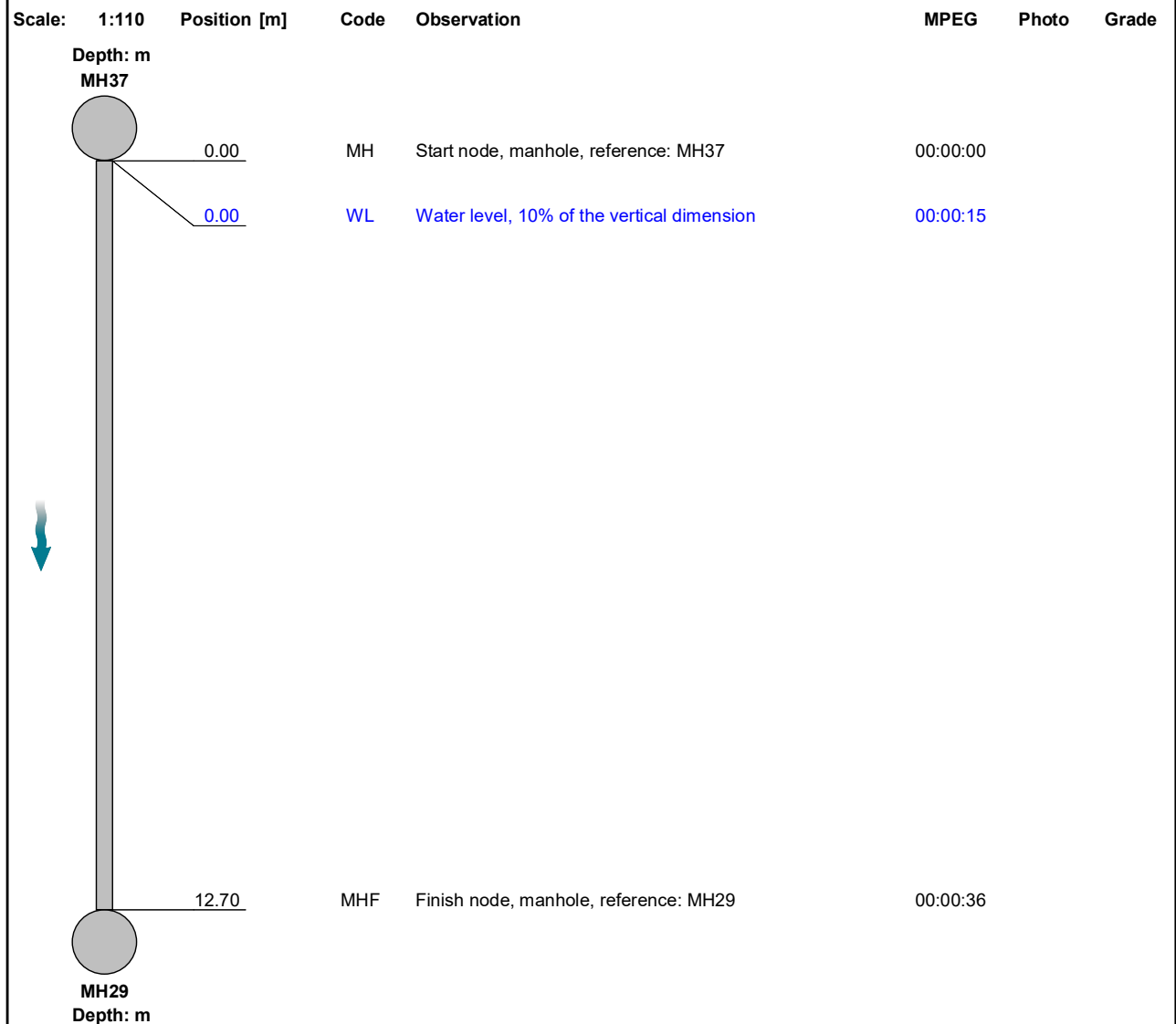
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	80.0	12.0	160.0	4.0	2	6.0	0.9	12.0	4.0

Section Inspection - 21/09/2023 - MH37X

Item No. 39	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH37X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH37
Road:	Barrington Close	Inspected Length:	12.70 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.70 m	Downstream Node:	MH29
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	225 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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 - 21/09/2023 - USX

Item No. 40	Insp. No. 1	Date 21/09/23	Time 13:43	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	0.13 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	0.13 m	Downstream Node:	MH39 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH39 (a)	00:00:00			
	0.00	WL	Water level, 70% of the vertical dimension	00:00:01			
	0.01	FC	Fracture, circumferential from 9 o'clock to 12 o'clock	00:00:01			3 / 2
	0.13	SA	Survey abandoned: UNABLE TO PUSH FURTHER	00:00:10			

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	40.0	307.7	40.0	3.0	1	1.0	7.7	1.0	5.0

Section Inspection - 21/09/2023 - MH39X

Item No. 41	Insp. No. 1	Date 21/09/23	Time 13:43	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH39X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH39
Road:	Barrington Close	Inspected Length:	7.00 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.00 m	Downstream Node:	MH40
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:61	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH39	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	1.67	WL	Water level, 10% of the vertical dimension	00:00:08			
	2.16	S01	B Broken pipe from 12 o'clock to 12 o'clock, start	00:00:09			
	2.16	S02	D Deformed sewer or drain, 5%, start	00:00:09			
	2.63	RFJ	Roots, fine at joint	00:00:11		2	
	2.87	F01	B Broken pipe from 12 o'clock to 12 o'clock, finish	00:00:12		4	
	2.87	F02	D Deformed sewer or drain, 5%, finish	00:00:12		2 / 2	
	3.02	WL	Water level, 5% of the vertical dimension	00:00:12			
	7.00	MHF	Finish node, manhole, reference: MH40: BURIED	00:00:27			

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
2	100.0	14.3	100.0	4.0	2	2.0	0.3	2.0	3.0

Section Inspection - 21/09/2023 - MH40X

Item No. 42	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH40X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH40
Road:	Barrington Close	Inspected Length:	10.54 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.54 m	Downstream Node:	MH41
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:92	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH40: BURIED	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:06		
	0.07	CC		Crack, circumferential from 3 o'clock to 5 o'clock	00:00:06		2 / 2
	0.62	WL		Water level, 10% of the vertical dimension	00:00:08		
	1.08	S01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:10		
	1.08	DEX		Settled deposits, other, 15% cross-sectional area loss	00:00:10		3
	2.04	F01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:10		3 / 2
	2.86	CXI		Connection defective, connecting pipe is intruding at 9 o'clock, 150mm dia, intrusion: 15%	00:00:12	MH40X_b 2c4e567-2 2d3-473a-	3
	4.57	FM		Fractures, multiple from 12 o'clock to 12 o'clock	00:00:16		4 / 2
	7.53	FS		Fracture, spiral from 1 o'clock to 12 o'clock	00:00:21		4 / 2
	10.54	MHF		Finish node, manhole, reference: MH41: BURIED	00:00:28		

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
4	80.0	19.9	210.0	4.0	6	3.0	0.8	8.0	3.0

Section Pictures - 21/09/2023 - MH40X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
42	Downstream	MH40X	10793	10793



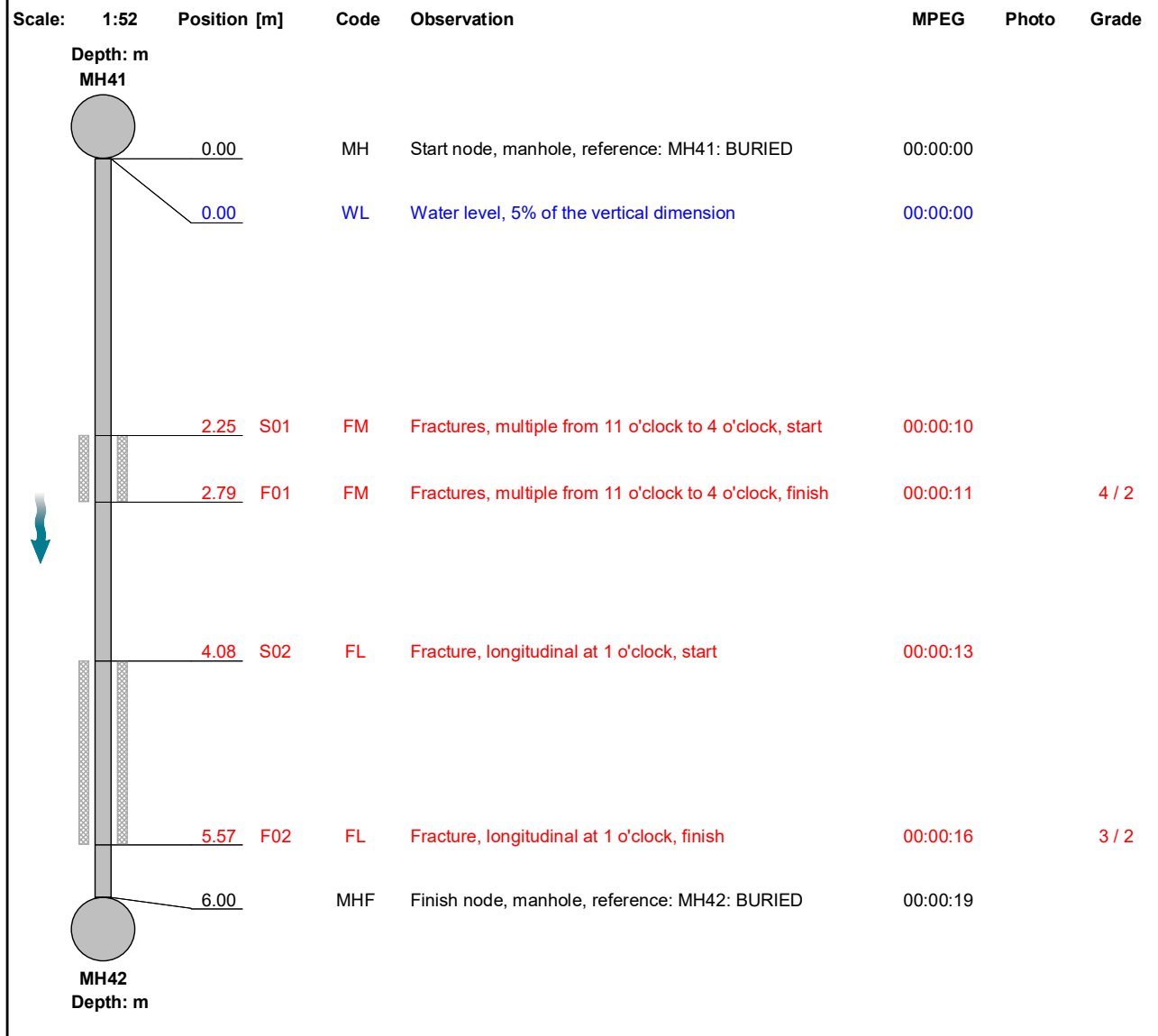
MH40X_b2c4e567-22d3-473a-81bf-3acf1dde1ad3_20231009_115330_022.jpg, 00:00:12, 2.86 m
Connection defective, connecting pipe is intruding at 9 o'clock, 150mm dia, intrusion: 15%

Section Inspection - 21/09/2023 - MH41X

Item No. 43	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH41X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH41
Road:	Barrington Close	Inspected Length:	6.00 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.00 m	Downstream Node:	MH42
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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
2	80.0	26.7	160.0	4.0	2	1.0	0.5	3.0	2.0

Section Inspection - 21/09/2023 - MH42X

Item No. 44	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH42X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH42
Road:	Barrington Close	Inspected Length:	9.04 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	9.04 m	Downstream Node:	MH43
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:79	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: m MH42</p> <p>0.00</p> <p>0.81 S01</p> <p>1.68 F01</p> <p>2.44</p> <p>4.39</p> <p>9.04</p> <p>MH43 Depth: m</p>	0.00	MH	Start node, manhole, reference: MH42: BURIED	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	0.81	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:07			
	1.68	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:09		4 / 2	
	1.68	WL	Water level, 10% of the vertical dimension	00:00:09			
	2.44	CN	Connection other than junction at 9 o'clock, 150mm dia	00:00:11			
	4.39	WL	Water level, 5% of the vertical dimension	00:00:18			
	9.04	MHF	Finish node, manhole, reference: MH43	00:00:26			

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	80.0	8.8	80.0	4.0	1	1.0	0.1	1.0	2.0

Section Inspection - 21/09/2023 - MH43X

Item No. 45	Insp. No. 1	Date 21/09/23	Time 13:40	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH43X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH43
Road:	Barrington Close	Inspected Length:	10.38 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.38 m	Downstream Node:	MH113
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:90	Position [m]	Code	Observation	MPEG	Photo	Grade																																										
<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 20px;"> <p>Depth: m</p> <p>MH43</p> <p>MH113</p> <p>Depth: m</p> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: right;">0.00</td> <td style="width: 10%;">MH</td> <td style="width: 45%;">Start node, manhole, reference: MH43</td> <td style="width: 10%;">00:00:00</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: right;">0.00</td> <td>WL</td> <td>Water level, 10% of the vertical dimension</td> <td>00:00:05</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">1.09</td> <td>FMJ</td> <td>Fractures, multiple at joint from 12 o'clock to 12 o'clock</td> <td>00:00:05</td> <td></td> <td style="text-align: right;">4 / 2</td> </tr> <tr> <td style="text-align: right;">2.72</td> <td>CCJ</td> <td>Crack, circumferential at joint from 7 o'clock to 11 o'clock</td> <td>00:00:09</td> <td></td> <td style="text-align: right;">2 / 2</td> </tr> <tr> <td style="text-align: right;">5.46</td> <td>FCJ</td> <td>Fracture, circumferential at joint from 7 o'clock to 11 o'clock</td> <td>00:00:15</td> <td></td> <td style="text-align: right;">3 / 2</td> </tr> <tr> <td style="text-align: right;">7.12</td> <td>FCJ</td> <td>Fracture, circumferential at joint from 7 o'clock to 9 o'clock</td> <td>00:00:18</td> <td></td> <td style="text-align: right;">3 / 2</td> </tr> <tr> <td style="text-align: right;">10.38</td> <td>MHF</td> <td>Finish node, manhole, reference: MH113</td> <td>00:00:52</td> <td></td> <td></td> </tr> </table> </div>								0.00	MH	Start node, manhole, reference: MH43	00:00:00			0.00	WL	Water level, 10% of the vertical dimension	00:00:05			1.09	FMJ	Fractures, multiple at joint from 12 o'clock to 12 o'clock	00:00:05		4 / 2	2.72	CCJ	Crack, circumferential at joint from 7 o'clock to 11 o'clock	00:00:09		2 / 2	5.46	FCJ	Fracture, circumferential at joint from 7 o'clock to 11 o'clock	00:00:15		3 / 2	7.12	FCJ	Fracture, circumferential at joint from 7 o'clock to 9 o'clock	00:00:18		3 / 2	10.38	MHF	Finish node, manhole, reference: MH113	00:00:52		
0.00	MH	Start node, manhole, reference: MH43	00:00:00																																														
0.00	WL	Water level, 10% of the vertical dimension	00:00:05																																														
1.09	FMJ	Fractures, multiple at joint from 12 o'clock to 12 o'clock	00:00:05		4 / 2																																												
2.72	CCJ	Crack, circumferential at joint from 7 o'clock to 11 o'clock	00:00:09		2 / 2																																												
5.46	FCJ	Fracture, circumferential at joint from 7 o'clock to 11 o'clock	00:00:15		3 / 2																																												
7.12	FCJ	Fracture, circumferential at joint from 7 o'clock to 9 o'clock	00:00:18		3 / 2																																												
10.38	MHF	Finish node, manhole, reference: MH113	00:00:52																																														

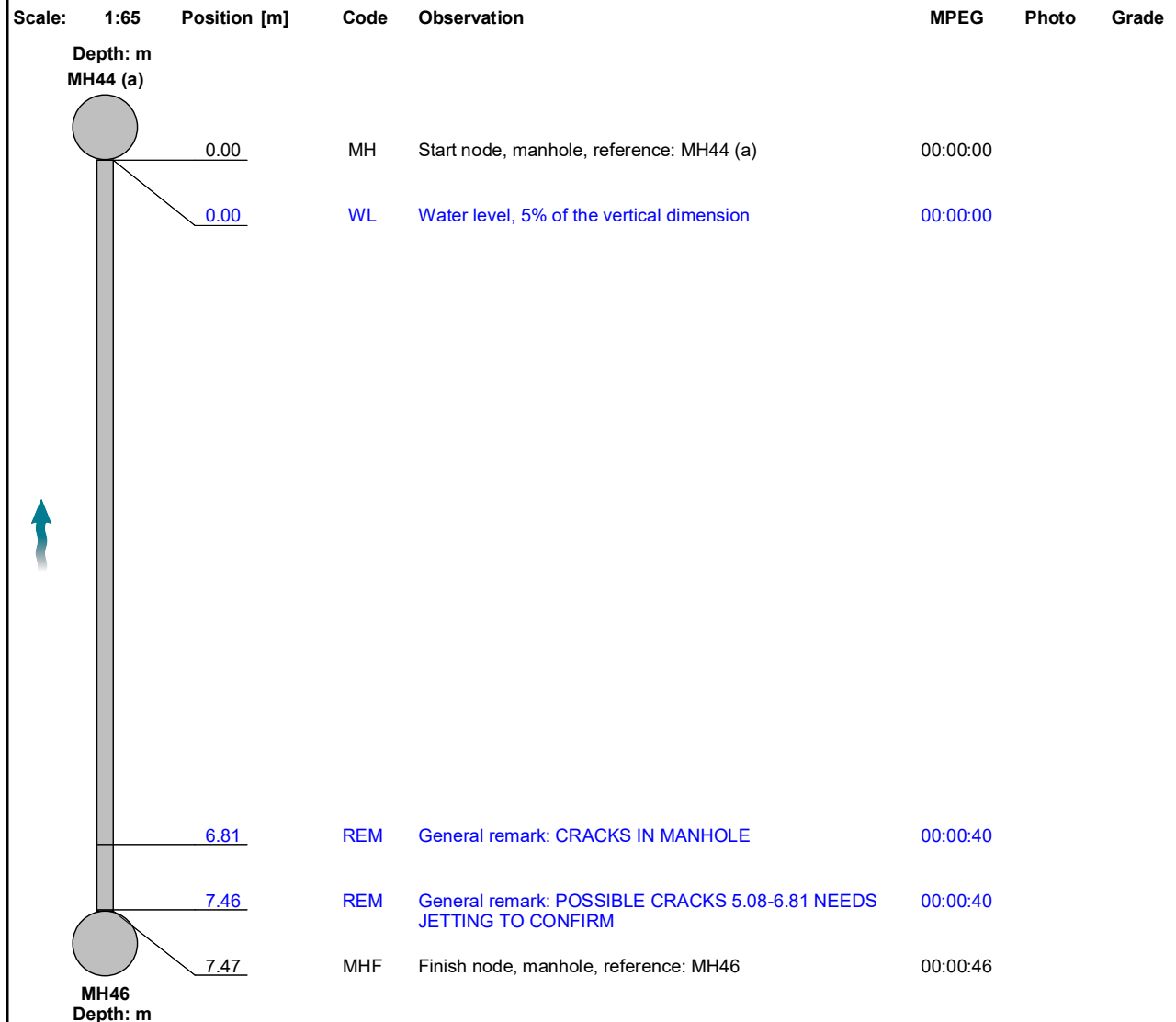
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
4	80.0	16.4	170.0	4.0	4	1.0	0.4	4.0	2.0

Section Inspection - 21/09/2023 - MH46X

Item No. 46	Insp. No. 1	Date 21/09/23	Time 13:43	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH46X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH46
Road:	Barrington Close	Inspected Length:	7.47 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.47 m	Downstream Node:	MH44 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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 - 21/09/2023 - USX

Item No. 47	Insp. No. 1	Date 21/09/23	Time 13:43	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	0.23 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	0.23 m	Downstream Node:	MH44 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH44 (b)	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		0.23	SA	Survey abandoned: MASS ROOTS AHEAD UNABLE TO DRIVE FURTHER	00:00:10		

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 - 21/09/2023 - MH44X

Item No. 48	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH44X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH44
Road:	Barrington Close	Inspected Length:	21.42 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	21.42 m	Downstream Node:	MH45
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:77	Position [m]	Code	Observation	MPEG	Photo	Grade	
	0.00	MH	Start node, manhole, reference: MH44	00:00:00				
	0.00	WL	Water level, 10% of the vertical dimension	00:00:01				
	0.01	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:07			
	0.52	DEZJ	Attached deposits, other at joint from 7 o'clock to 9 o'clock, 5% cross-sectional area loss	00:00:06			3	
	0.58	CC	Crack, circumferential from 7 o'clock to 10 o'clock	00:00:07			2 / 2	
	1.80	DEX	Settled deposits, other, 10% cross-sectional area loss	00:00:10			3	
	2.07	JN	Junction at 10 o'clock, 100mm dia	00:00:11				
	2.07	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:12			3
	2.97	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:13			2 / 2	
	3.96	S02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:15			
	4.72	F02	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:17			4 / 2
	5.58	CN	Connection other than junction at 12 o'clock, 150mm dia	00:00:19				
	5.58	DEZ	Attached deposits, other from 4 o'clock to 5 o'clock, 5% cross-sectional area loss	00:00:19				3
	5.58	DEZ	Attached deposits, other from 7 o'clock to 8 o'clock, 5% cross-sectional area loss	00:00:19				3
	6.29	CM	Cracks, multiple from 12 o'clock to 12 o'clock	00:00:21				3 / 2

Section Inspection - 21/09/2023 - MH44X

Item No. 48	Insp. No. 1	Date 21/09/23	Time 13:29	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH44X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:77	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH45 Depth: m</p>	8.56	S03	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:29		
	8.82	FLJ	FLJ	Fracture, longitudinal at joint at 4 o'clock	00:00:29		3 / 2
	10.48	F03	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:33		3 / 2
	11.26	S04	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:34		
	12.38	F04	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:40		4 / 2
	12.38	S05	CUW	Loss of vision, camera under water, start	00:00:40		
	13.38	LL	LL	Line deviates left	00:00:44		
	13.85	F05	CUW	Loss of vision, camera under water, finish	00:00:44		
	14.26	S06	DER	Settled deposits, coarse, 10% cross-sectional area loss, start	00:00:45		
	14.54	S07	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:45		
	15.73	F06	DER	Settled deposits, coarse, 10% cross-sectional area loss, finish	00:01:04		3
	15.73	F07	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:04		4 / 2
	16.63	S08	CUW	Loss of vision, camera under water, start: INTERMITTENT	00:01:10		
18.50	F08	CUW	Loss of vision, camera under water, finish: INTERMITTENT	00:01:19			
19.38	CCJ	CCJ	Crack, circumferential at joint from 9 o'clock to 12 o'clock	00:01:20		2 / 2	
21.42	MHF	MHF	Finish node, manhole, reference: MH45	00:01:27			

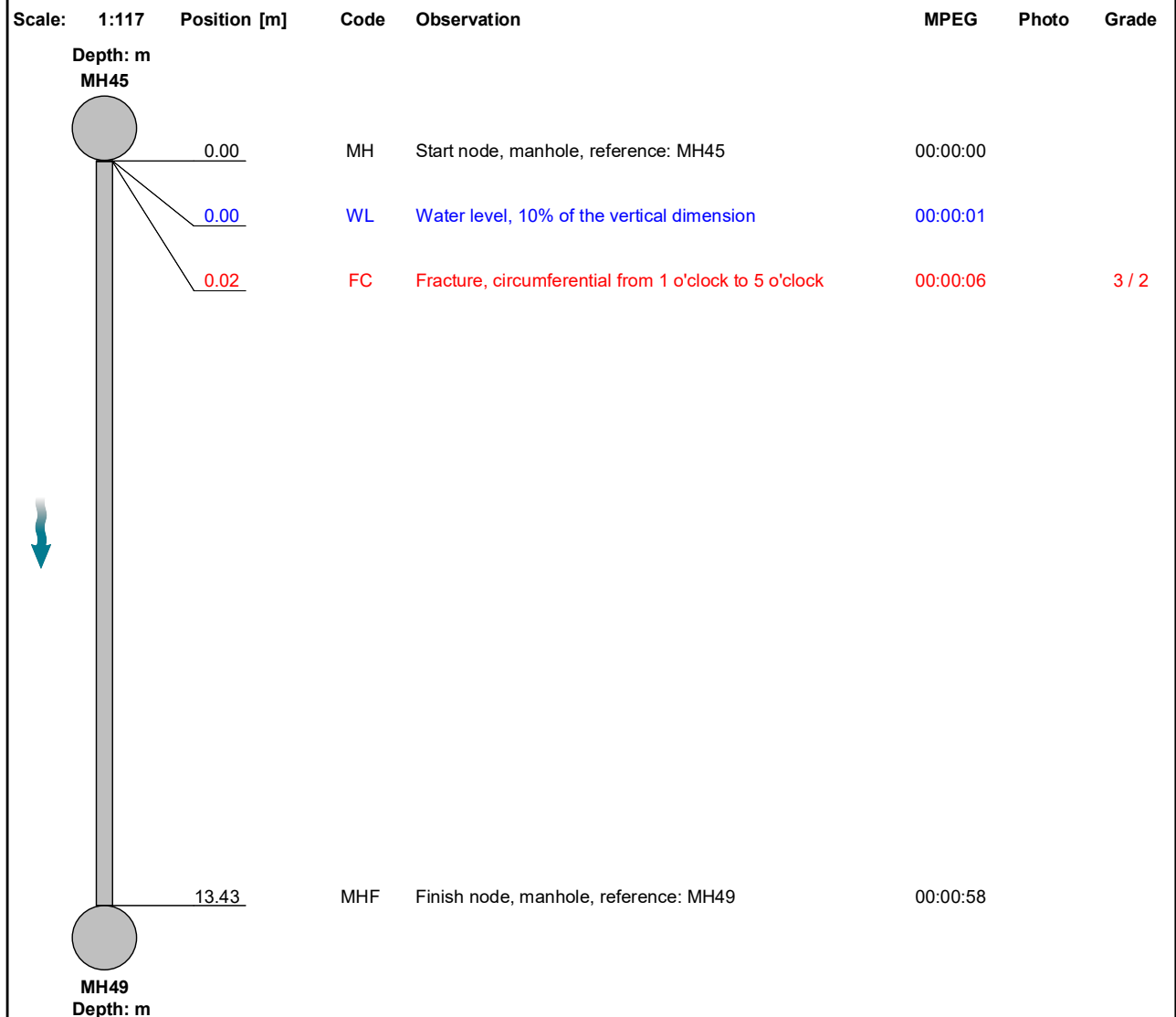
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
9	120.0	27.5	590.0	4.0	15	4.0	1.4	30.0	3.0

Section Inspection - 21/09/2023 - MH45X

Item No. 49	Insp. No. 1	Date 21/09/23	Time 13:30	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH45X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH45
Road:	Barrington Close	Inspected Length:	13.43 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	13.43 m	Downstream Node:	MH49
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



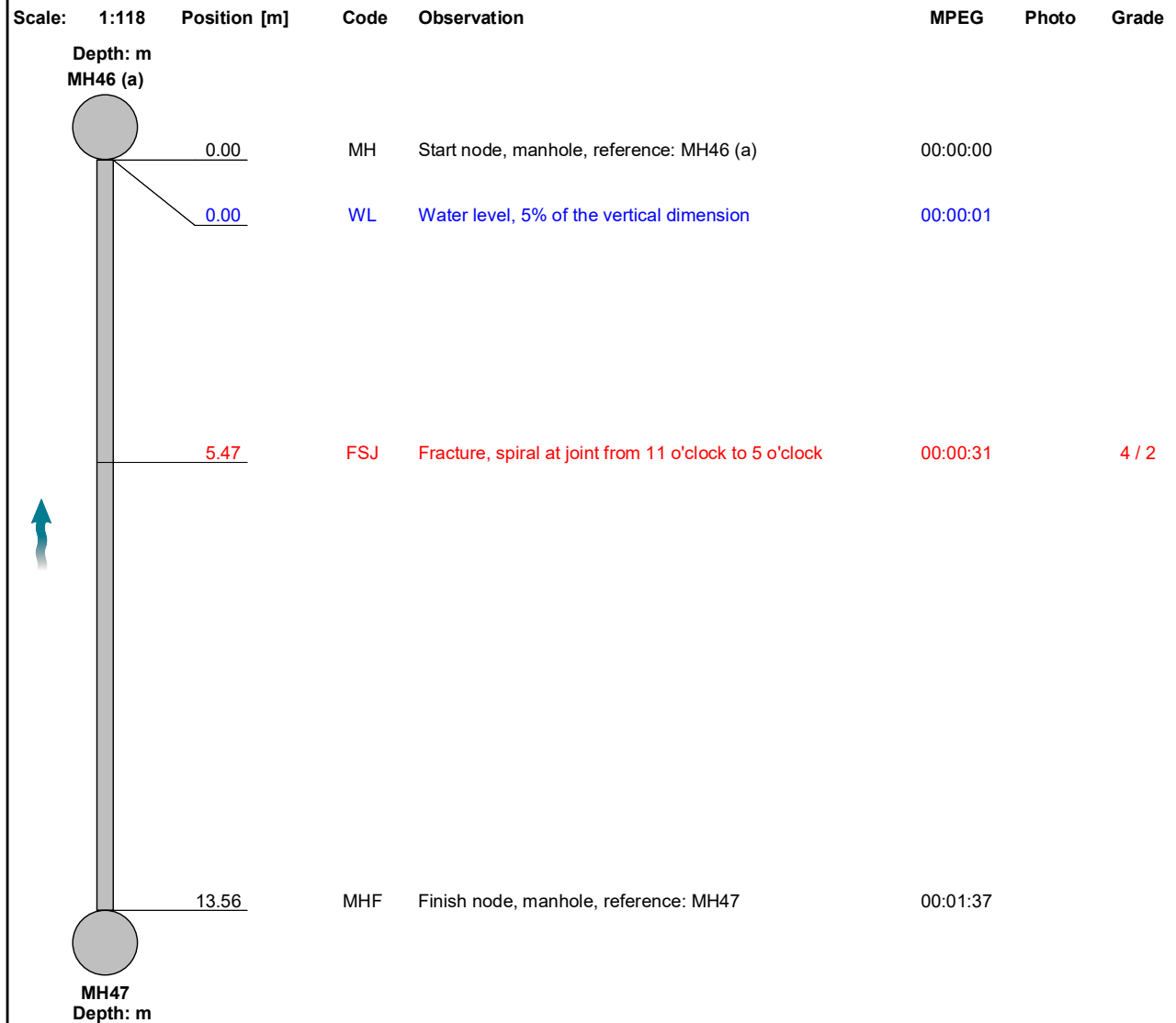
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	40.0	3.0	40.0	3.0	1	1.0	0.1	1.0	2.0

Section Inspection - 21/09/2023 - MH47X

Item No. 50	Insp. No. 1	Date 21/09/23	Time 13:47	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH47X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH47
Road:	Barrington Close	Inspected Length:	13.56 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	13.56 m	Downstream Node:	MH46 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Polyvinyl chloride		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



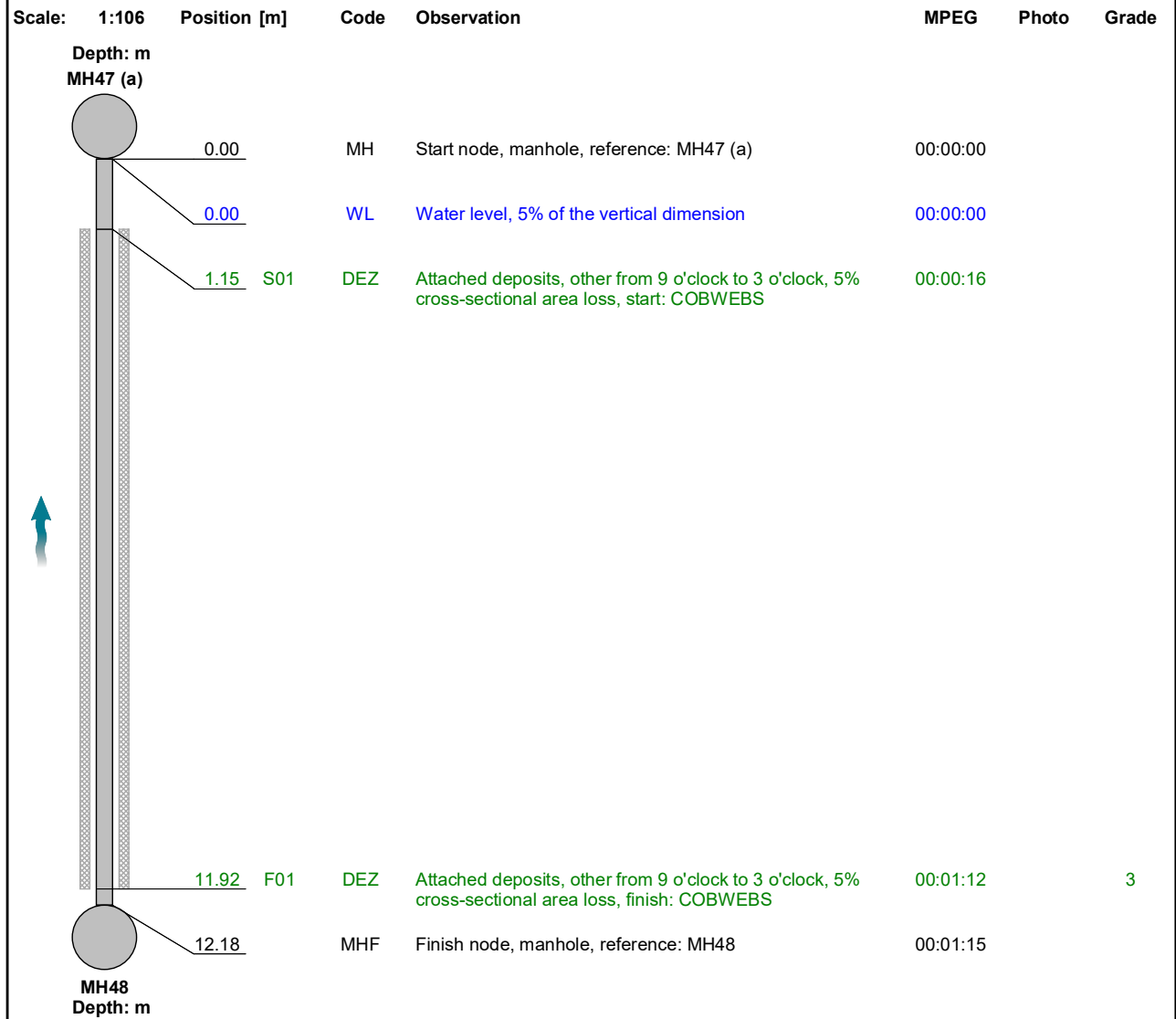
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	80.0	5.9	80.0	4.0	1	1.0	0.1	1.0	2.0

Section Inspection - 21/09/2023 - MH48X

Item No. 51	Insp. No. 1	Date 21/09/23	Time 13:47	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH48X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH48
Road:	Barrington Close	Inspected Length:	12.18 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.18 m	Downstream Node:	MH47 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



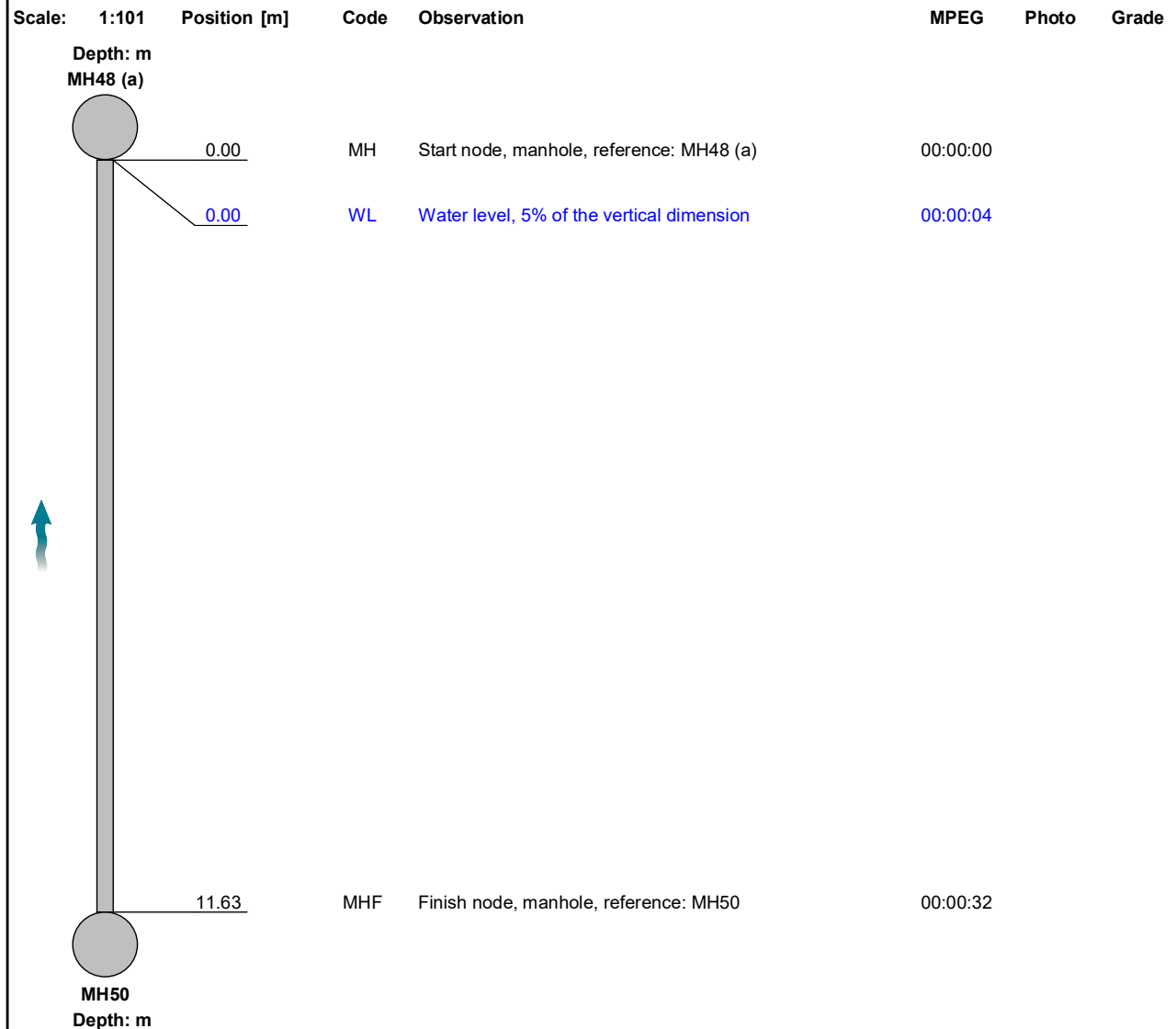
Construction Features					Miscellaneous Features						
Structural Defects					Service & Operational Observations						
STR No.	Def	STR Peak	STR Mean	STR Total	STR Grade	SER No.	Def	SER Peak	SER Mean	SER Total	SER Grade
0		0.0	0.0	0.0	1.0	1		2.0	1.8	22.0	3.0

Section Inspection - 21/09/2023 - MH50X

Item No. 52	Insp. No. 1	Date 21/09/23	Time 13:30	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH50X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH50
Road:	Barrington Close	Inspected Length:	11.63 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	11.63 m	Downstream Node:	MH48 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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 - 21/09/2023 - MH49X

Item No. 53	Insp. No. 1	Date 21/09/23	Time 13:39	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH49X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH49
Road:	Barrington Close	Inspected Length:	11.31 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	11.31 m	Downstream Node:	MH111
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:98	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH49	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:03		
	0.01	S01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:00		
	1.28	F01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:08		3 / 2
	1.97		CC	Crack, circumferential from 2 o'clock to 5 o'clock	00:00:10		2 / 2
	4.72		CCJ	Crack, circumferential at joint from 8 o'clock to 4 o'clock	00:00:18		2 / 2
	7.75		FL	Fracture, longitudinal at 11 o'clock	00:00:26		3 / 2
	8.09		CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:27		2 / 2
	8.09		CXI	Connection defective, connecting pipe is intruding at 9 o'clock, 150mm dia, intrusion: 5%	00:00:27		3
	11.31	MHF		Finish node, manhole, reference: MH111	00:00:43		

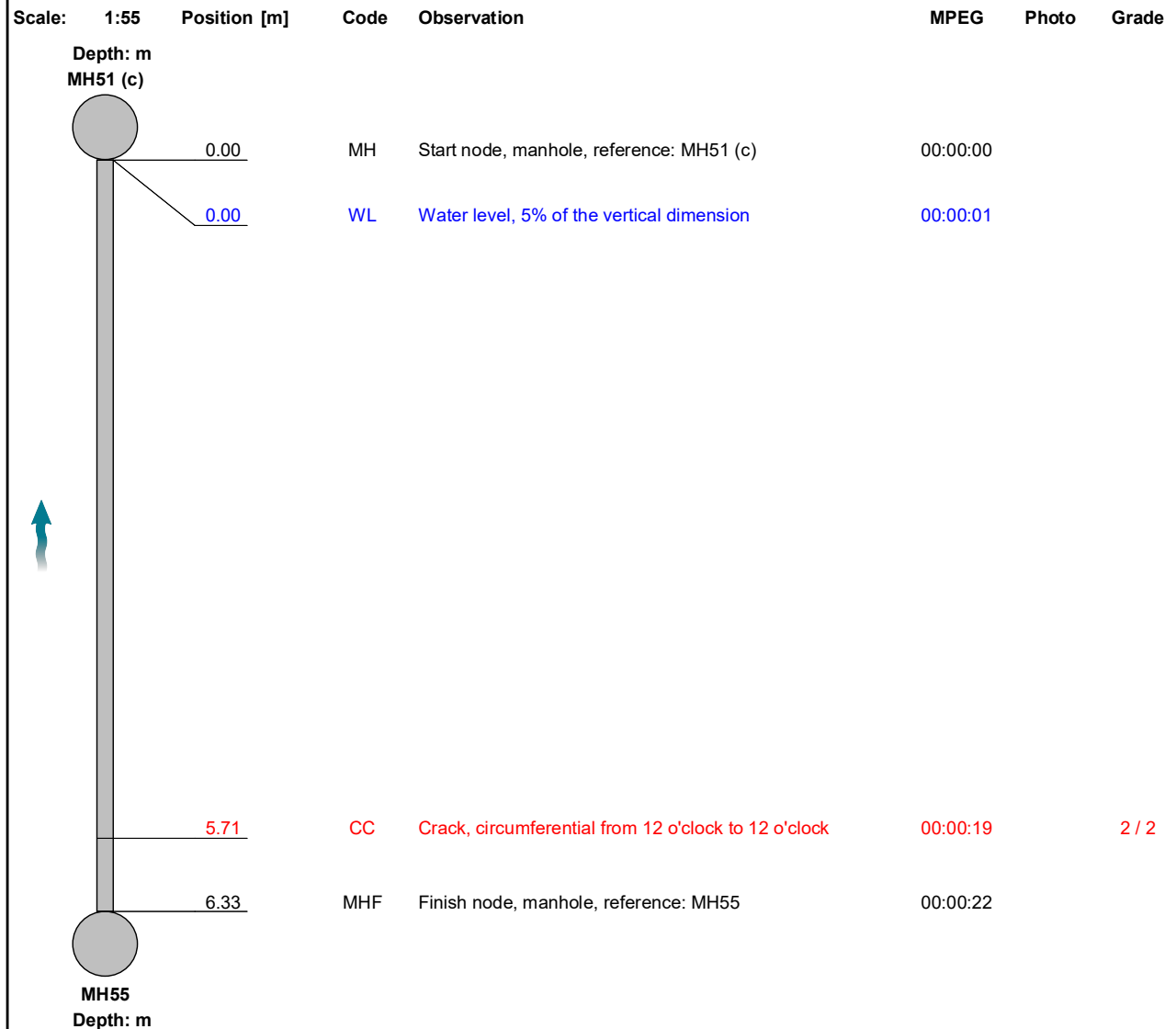
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
5	50.0	13.3	150.0	3.0	6	4.0	0.7	8.0	3.0

Section Inspection - 21/09/2023 - MH55X

Item No. 54	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH55X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH55
Road:	Barrington Close	Inspected Length:	6.33 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.33 m	Downstream Node:	MH51 (C)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



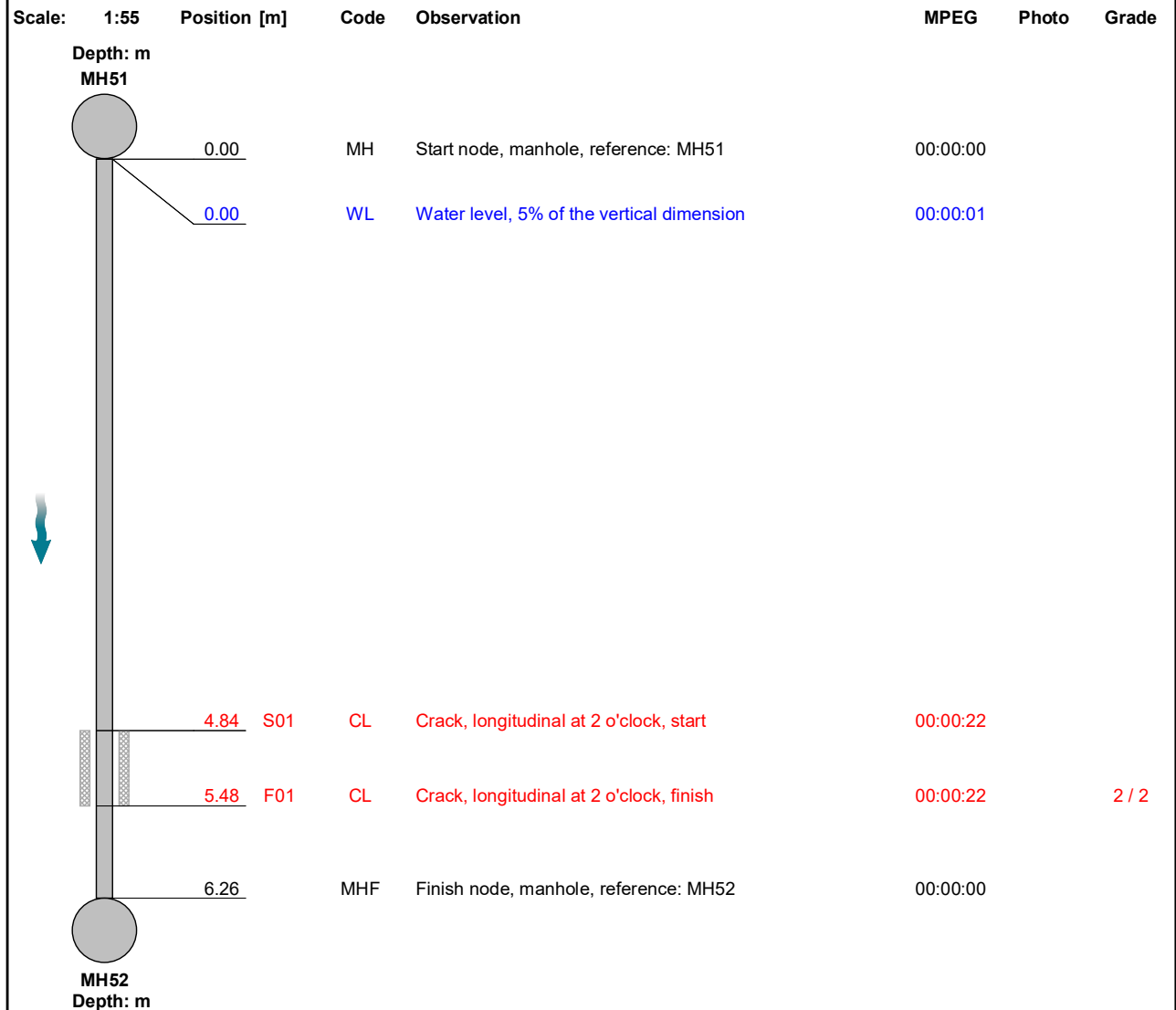
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	10.0	1.6	10.0	2.0	1	1.0	0.2	1.0	2.0

Section Inspection - 21/09/2023 - MH51X

Item No. 55	Insp. No. 1	Date 21/09/23	Time 13:30	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH51X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH51
Road:	Barrington Close	Inspected Length:	6.26 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.26 m	Downstream Node:	MH52
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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	1.6	10.0	2.0	1	1.0	0.2	1.0	2.0

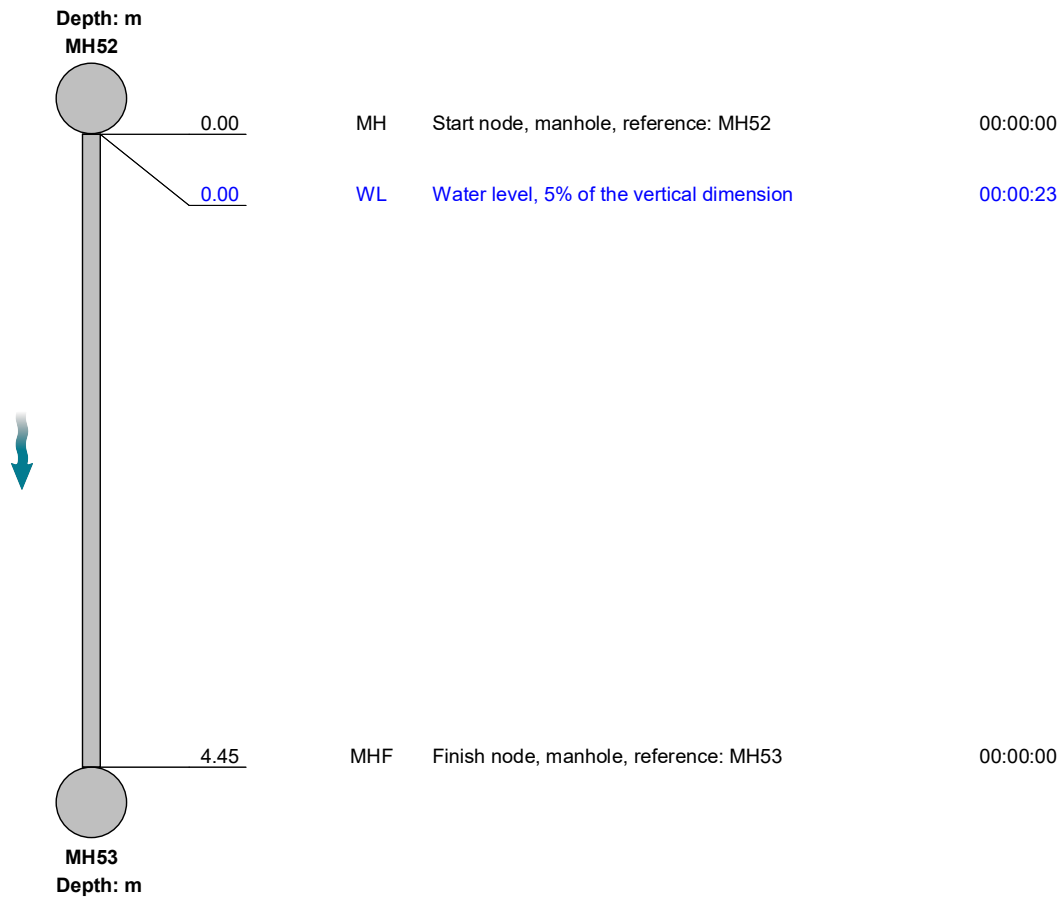
Section Inspection - 21/09/2023 - MH52X

Item No. 56	Insp. No. 1	Date 21/09/23	Time 13:30	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH52X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH52
Road:	Barrington Close	Inspected Length:	4.45 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	4.45 m	Downstream Node:	MH53
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

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



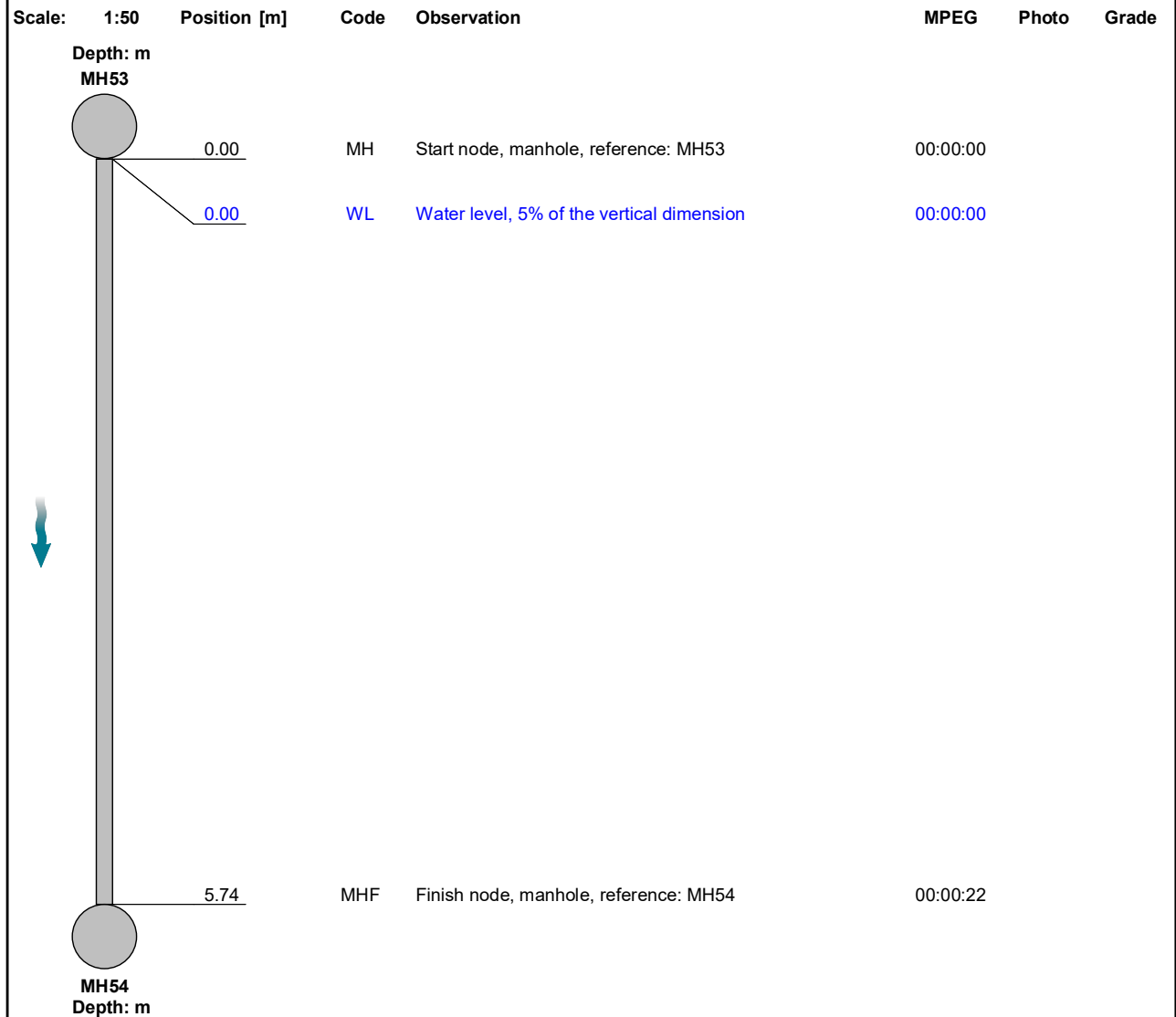
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH53X

Item No. 57	Insp. No. 1	Date 21/09/23	Time 13:30	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH53X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH53
Road:	Barrington Close	Inspected Length:	5.74 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.74 m	Downstream Node:	MH54
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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 - 21/09/2023 - MH54X

Item No. 58	Insp. No. 1	Date 21/09/23	Time 13:30	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH54X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH54
Road:	Barrington Close	Inspected Length:	15.12 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.12 m	Downstream Node:	MH39
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:131	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH54							
	0.00	MH		Start node, manhole, reference: MH54	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:00		
	7.87	FC		Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:25		3 / 2
	9.75	FC		Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:28		3 / 2
	10.22	REM		General remark: POSSIBLE ROOTS AT JOINT, NEEDS JETTING TO CONFIRM	00:00:30		
	14.52	WL		Water level, 30% of the vertical dimension	00:00:39		
	14.79	S01 CUW		Loss of vision, camera under water, start	00:00:42		
	15.11	F01 CUW		Loss of vision, camera under water, finish	00:00:45		
	15.12	SA		Survey abandoned: UNABLE TO PUSH FURTHER DUE TO LOSS OF VISION	00:00:00		

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
2	40.0	5.3	80.0	3.0	2	1.0	0.1	2.0	2.0

Section Inspection - 21/09/2023 - MH56X

Item No. 59	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH56X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH56
Road:	Barrington Close	Inspected Length:	4.53 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	4.53 m	Downstream Node:	MH55 (C)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:50 Position [m] Code Observation MPEG Photo 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	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH57X

Item No. 60	Insp. No. 1	Date 21/09/23	Time 13:47	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH57X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH57
Road:	Barrington Close	Inspected Length:	20.53 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.53 m	Downstream Node:	MH66
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:178	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH57	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	0.51	LL	Line deviates left	00:00:03			
	3.63	LR	Line deviates right: SLIGHT	00:00:28			
	8.30	WL	Water level, 10% of the vertical dimension	00:01:07			
	9.72	WL	Water level, 5% of the vertical dimension	00:01:22			
	13.38	WL	Water level, 15% of the vertical dimension	00:01:46			
	16.25	REM	General remark: FOUL DEPOSITS	00:02:03			
	16.25	WL	Water level, 5% of the vertical dimension	00:02:03			
	20.53	MHF	Finish node, manhole, reference: MH66	00:02:48			

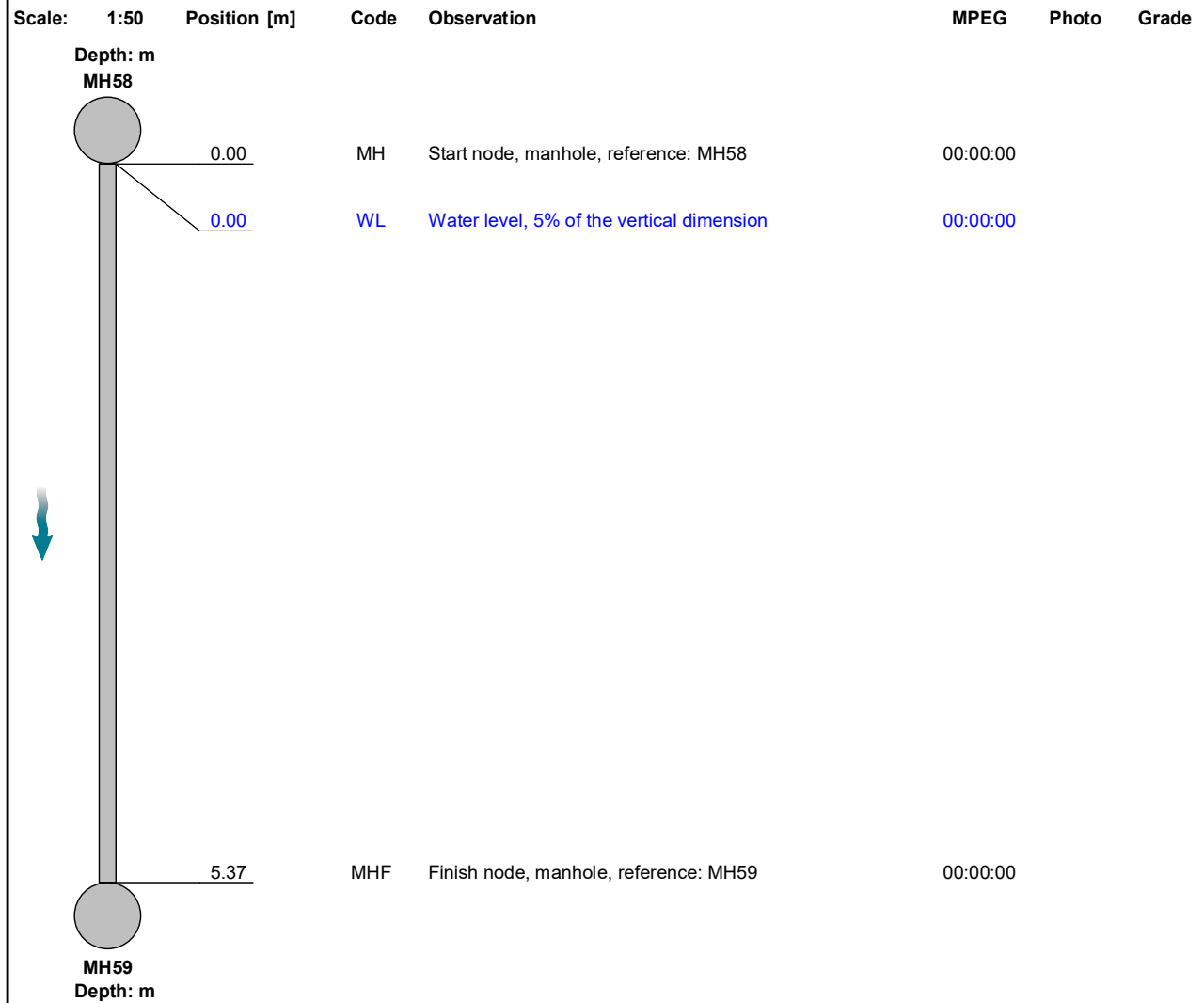
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH58X

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
61	1	21/09/23	13:31	10793	No Rain Or Snow	No	MH58X
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JH		Ford Transit		Solo Pro/Crawler	Not Specified	Not Specified	Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH58
Road:	Barrington Close	Inspected Length:	5.37 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.37 m	Downstream Node:	MH59
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



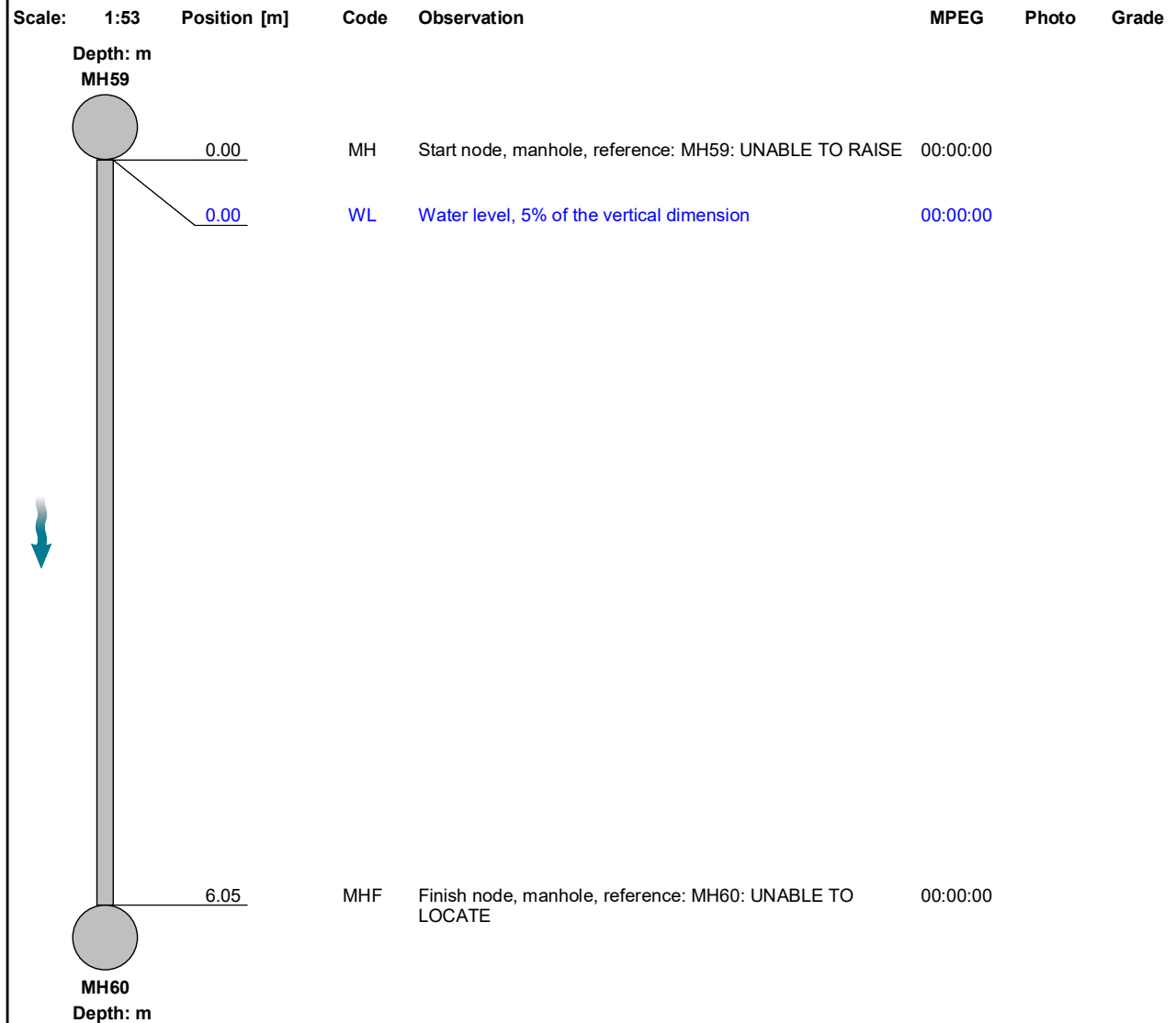
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH59X

Item No. 62	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH59X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH59
Road:	Barrington Close	Inspected Length:	6.05 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.05 m	Downstream Node:	MH60
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



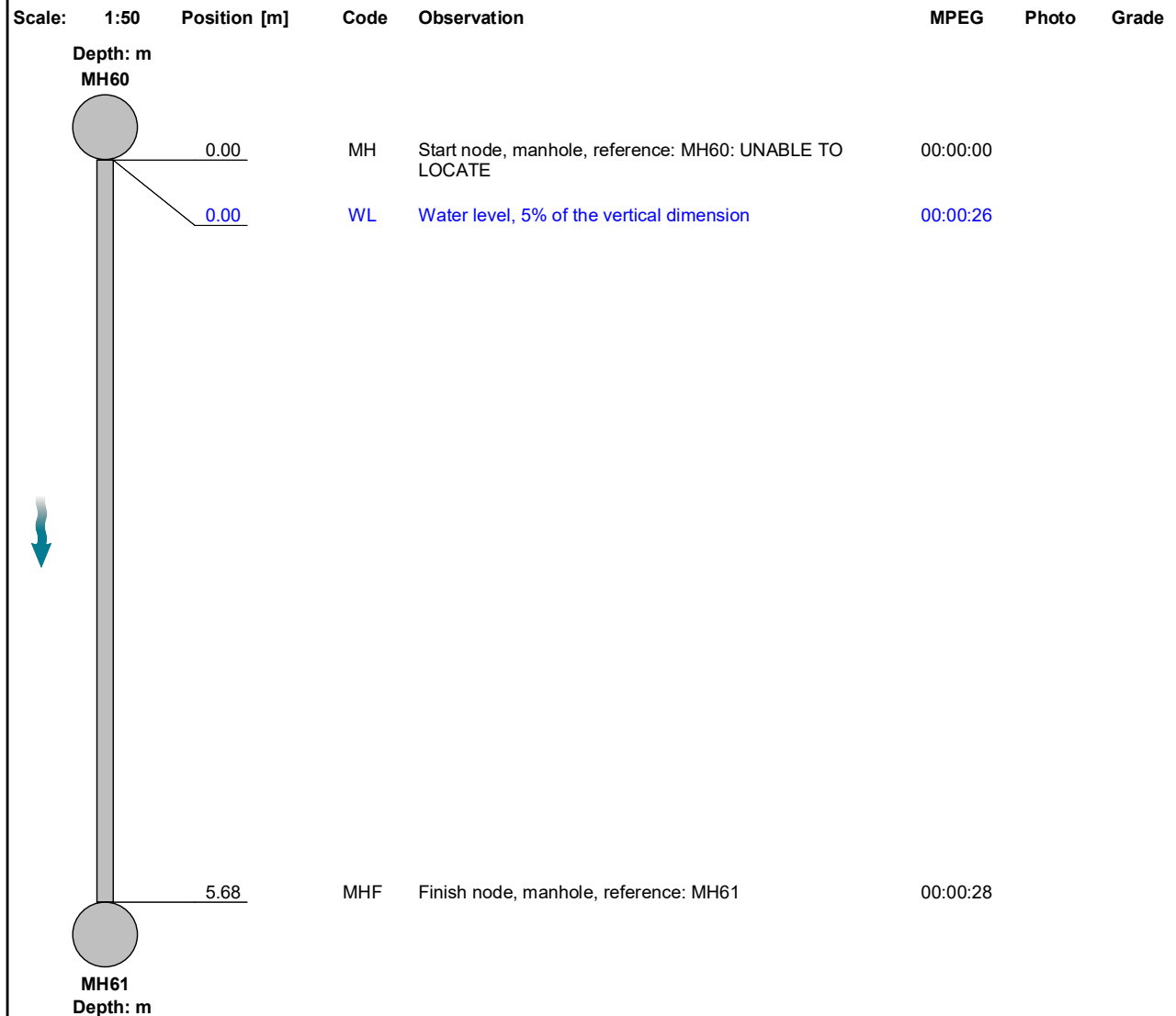
Construction Features					Miscellaneous Features						
Structural Defects					Service & Operational Observations						
STR No.	Def	STR Peak	STR Mean	STR Total	STR Grade	SER No.	Def	SER Peak	SER Mean	SER Total	SER Grade
0		0.0	0.0	0.0	1.0	0		0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH60X

Item No. 63	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH60X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH60
Road:	Barrington Close	Inspected Length:	5.68 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.68 m	Downstream Node:	MH61
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



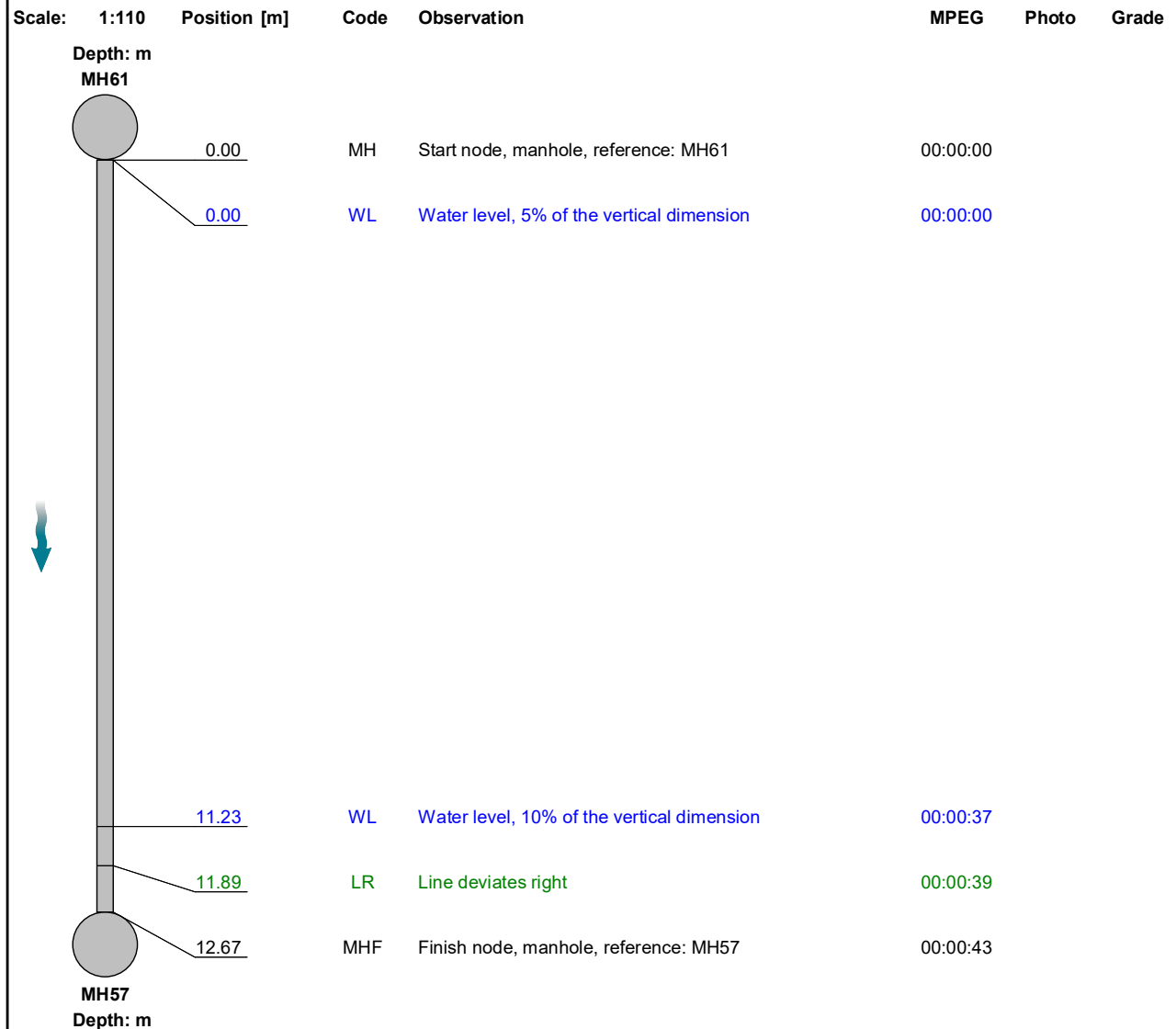
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH61X

Item No. 64	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH61X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH61
Road:	Barrington Close	Inspected Length:	12.67 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.67 m	Downstream Node:	MH57
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



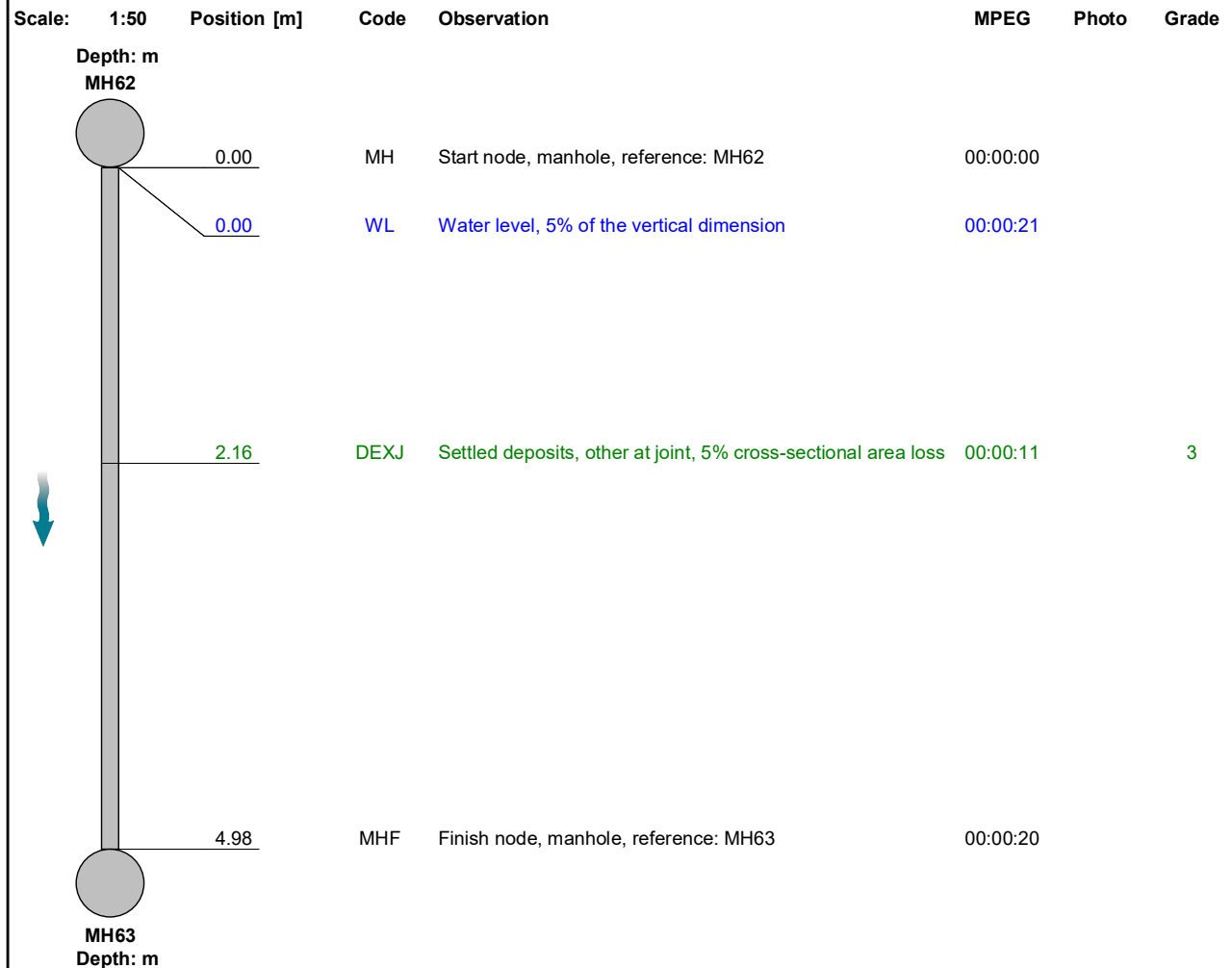
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH62X

Item No. 65	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH62X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH62
Road:	Barrington Close	Inspected Length:	4.98 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	4.98 m	Downstream Node:	MH63
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



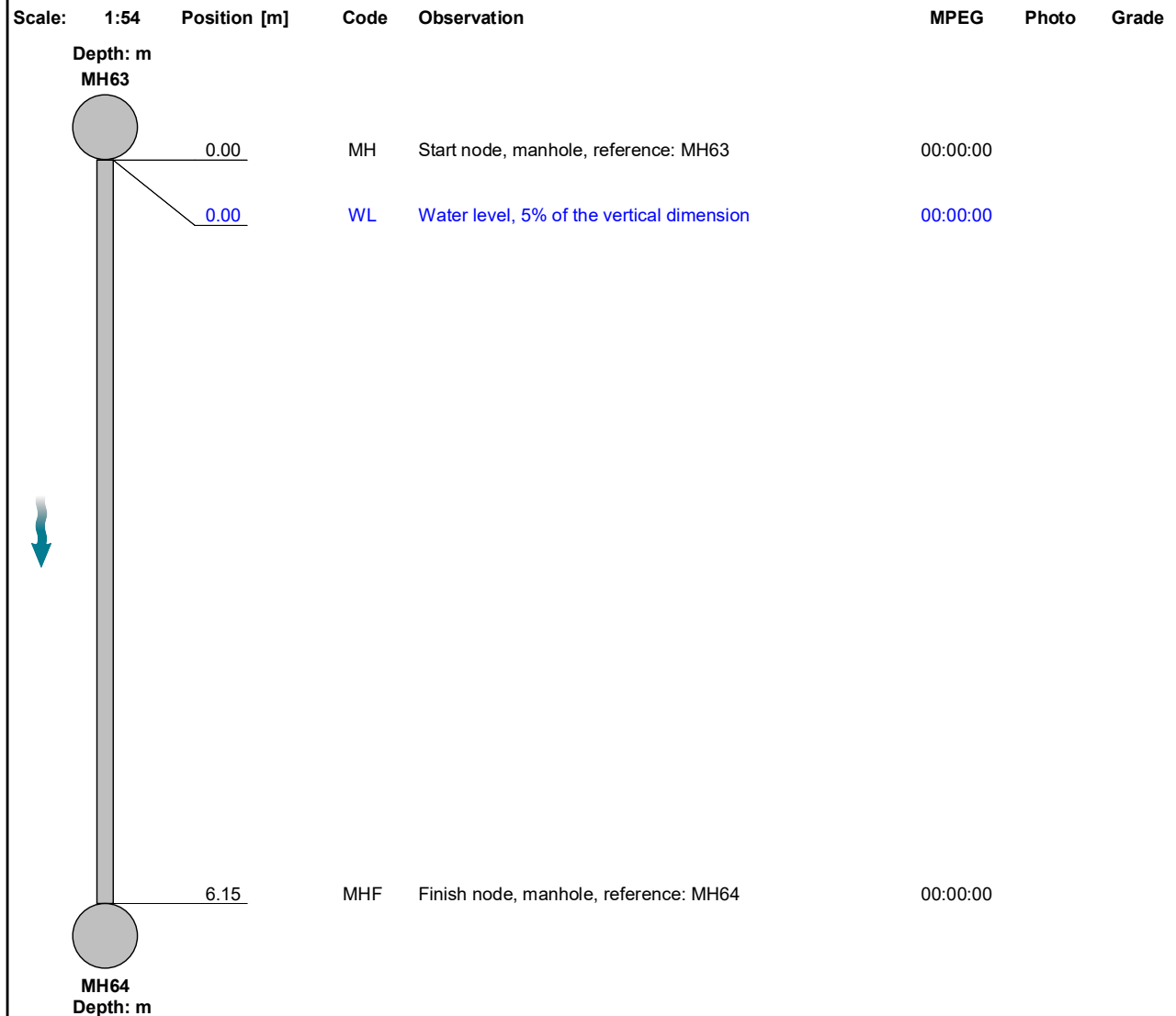
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	1	2.0	0.4	2.0	3.0

Section Inspection - 21/09/2023 - MH63X

Item No. 66	Insp. No. 1	Date 21/09/23	Time 13:31	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH63X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH63
Road:	Barrington Close	Inspected Length:	6.15 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.15 m	Downstream Node:	MH64
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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 - 21/09/2023 - MH64X

Item No. 67	Insp. No. 1	Date 21/09/23	Time 13:32	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH64X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH64
Road:	Barrington Close	Inspected Length:	3.70 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.70 m	Downstream Node:	MH57
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH64	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:00		
	0.39	JDM		Joint displaced, medium	00:00:06		1 / 3
	1.02	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:26		
	1.57	WL		Water level, 10% of the vertical dimension	00:00:10		
	1.66	FM		Fractures, multiple from 12 o'clock to 12 o'clock	00:00:22		4 / 2
	3.69	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:19		3
	3.70	MHF		Finish node, manhole, reference: MH57	00:00:19		

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
2	80.0	21.9	81.0	4.0	3	3.0	2.4	9.0	3.0

Section Inspection - 21/09/2023 - MH65X

Item No. 68	Insp. No. 1	Date 21/09/23	Time 13:32	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH65X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH65
Road:	Barrington Close	Inspected Length:	18.22 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	18.22 m	Downstream Node:	MH57
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:158	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m	MH65	0.00	MH	Start node, manhole, reference: MH65	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		1.12	LD	Line deviates down	00:00:09		
		1.12	JDM	Joint displaced, medium	00:00:09		1 / 3
		17.47	LD	Line deviates down	00:00:58		
		17.85	REM	General remark: BACKDROP	00:00:59		
		18.22	MHF	Finish node, manhole, reference: MH57	00:01:02		
Depth: m	MH57						

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	1.0	0.1	1.0	1.0	1	2.0	0.1	2.0	3.0

Section Inspection - 21/09/2023 - MH66X

Item No. 69	Insp. No. 1	Date 21/09/23	Time 13:47	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH66X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH66
Road:	Barrington Close	Inspected Length:	10.48 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.48 m	Downstream Node:	MH67
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:91	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH66	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		5.11	WL	Water level, 10% of the vertical dimension	00:00:26		
		7.00	WL	Water level, 15% of the vertical dimension	00:00:35		
		7.05	REM	General remark: FOUL DEPOSITS	00:00:36		
		9.81	WL	Water level, 10% of the vertical dimension	00:00:50		
		10.48	MHF	Finish node, manhole, reference: MH67	00:00:56		

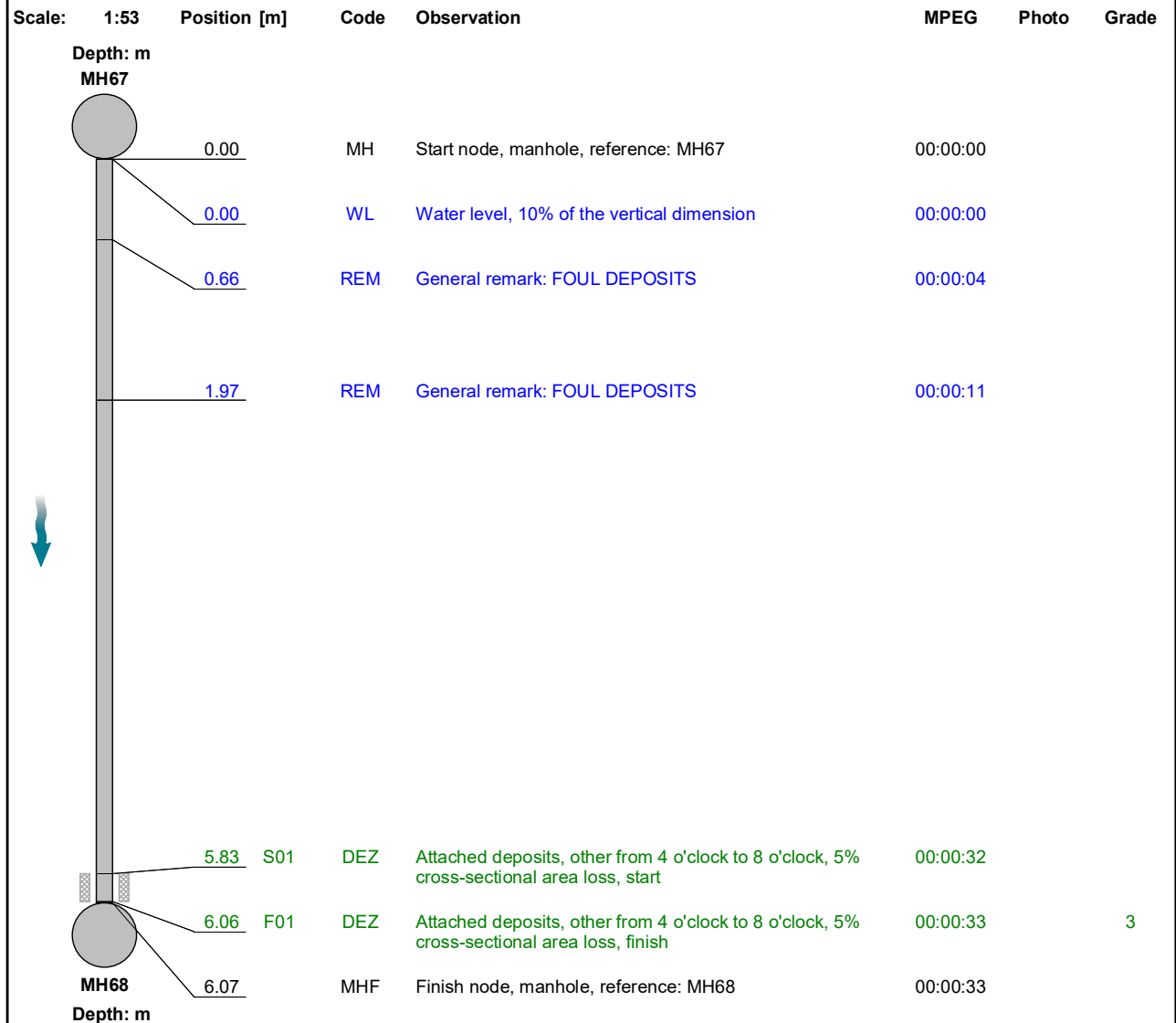
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH67X

Item No. 70	Insp. No. 1	Date 21/09/23	Time 13:47	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH67X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH67
Road:	Barrington Close	Inspected Length:	6.07 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.07 m	Downstream Node:	MH68
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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	2.0	0.3	2.0	3.0

Section Inspection - 21/09/2023 - MH68X

Item No. 71	Insp. No. 1	Date 21/09/23	Time 13:47	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH68X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH68
Road:	Barrington Close	Inspected Length:	8.30 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	8.30 m	Downstream Node:	MH69
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:72	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH68							
	0.00		MH	Start node, manhole, reference: MH68	00:00:00		
	0.00		WL	Water level, 5% of the vertical dimension	00:00:00		
	4.42	S01	RFJ	Roots, fine at joint, start	00:00:26		
	4.60		WL	Water level, 10% of the vertical dimension	00:00:27		
	5.95	F01	RFJ	Roots, fine at joint, finish	00:00:26		2
	8.30		MHF	Finish node, manhole, reference: MH69: BURIED	00:00:48		
MH69							
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	1	1.0	0.2	2.0	2.0

Section Inspection - 21/09/2023 - MH69X

Item No. 72	Insp. No. 2	Date 21/09/23	Time 13:48	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH69X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH69
Road:	Barrington Close	Inspected Length:	5.84 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.90 m	Downstream Node:	MH70
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:69	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH69	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:01			
	1.19	S01 DEZ	Attached deposits, other from 4 o'clock to 8 o'clock, 5% cross-sectional area loss, start	00:00:12			
	1.41	WL	Water level, 10% of the vertical dimension	00:00:12			
	3.22	WL	Water level, 15% of the vertical dimension	00:00:21			
	3.40	FS	Fracture, spiral from 2 o'clock to 10 o'clock	00:00:23		4 / 2	
	3.40	RF	Roots, fine	00:00:24		2	
	4.19	F01 DEZ	Attached deposits, other from 4 o'clock to 8 o'clock, 5% cross-sectional area loss, finish	00:00:27		3	
	4.95	BJ	Broken pipe at joint from 9 o'clock to 1 o'clock	00:00:31	MH69X_d 9ec47a4-5 5a2-49e9-	4	
	5.02	RFJ	Roots, fine at joint	00:00:31		2	
	5.84	SA	Survey abandoned: SURVEY OVERLAP	00:00:00			
	7.90		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
2	80.0	20.3	160.0	4.0	4	4.0	1.1	9.0	3.0

Section Pictures - 21/09/2023 - MH69X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
72	Downstream	MH69X	10793	10793



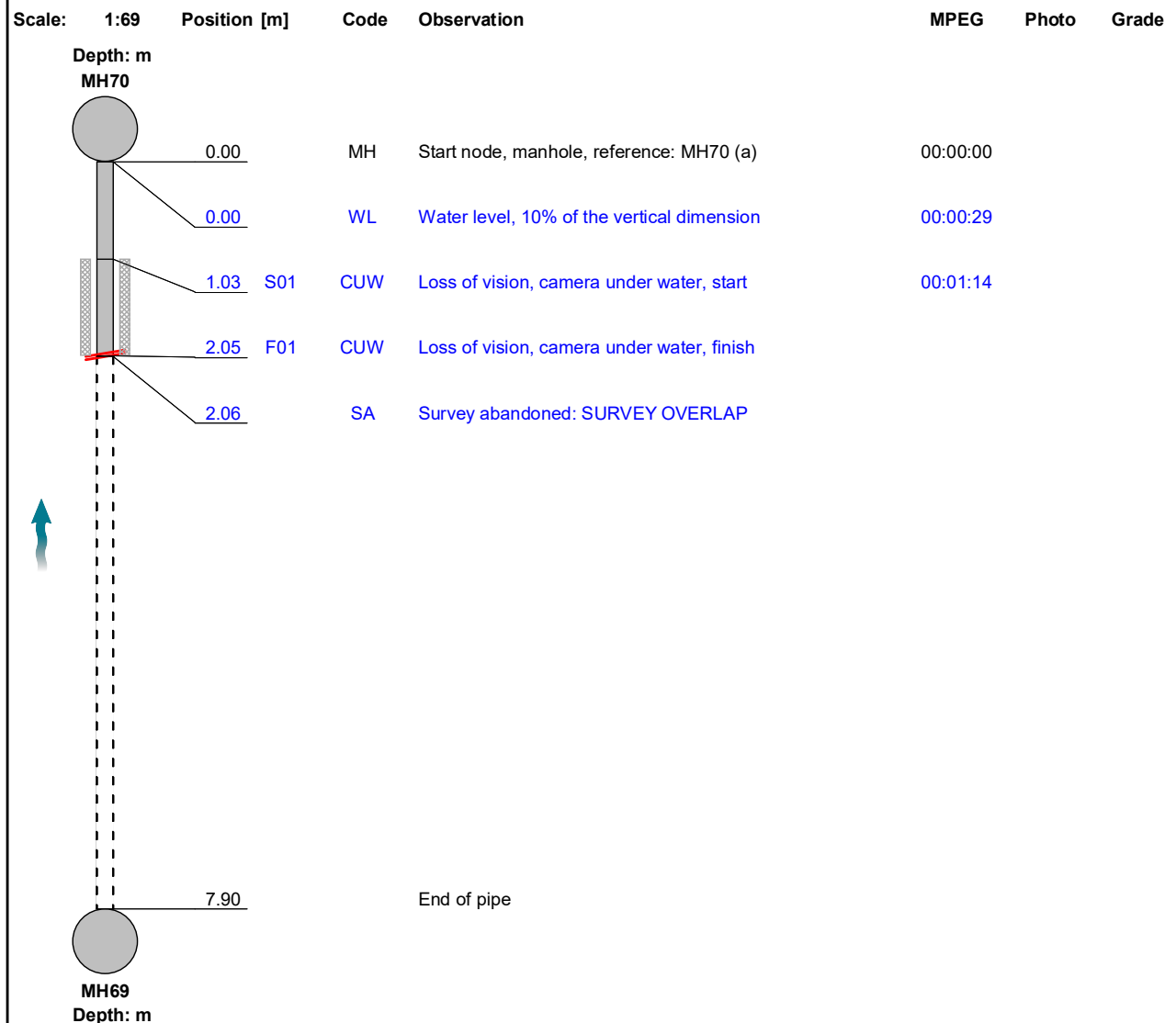
MH69X_d9ec47a4-55a2-49e9-aba4-c6384b44d033_20231009_143550_266.jpg, 00:00:31, 4.95 m
Broken pipe at joint from 9 o'clock to 1 o'clock

Section Inspection - 21/09/2023 - MH69X

Item No. 72	Insp. No. 1	Date 21/09/23	Time 12:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH69X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH69
Road:	Barrington Close	Inspected Length:	2.06 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.90 m	Downstream Node:	MH70
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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 - 21/09/2023 - MH70X

Item No. 73	Insp. No. 1	Date 21/09/23	Time 12:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH70X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH70
Road:	Barrington Close	Inspected Length:	17.08 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	17.08 m	Downstream Node:	MH74
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:148	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m	MH70	0.00	MH	Start node, manhole, reference: MH70	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:05		
		2.98	FMJ	Fractures, multiple at joint from 12 o'clock to 12 o'clock	00:00:08		4 / 2
		2.98	RF	Roots, fine	00:00:08		2
		16.03	CC	Crack, circumferential from 7 o'clock to 11 o'clock	00:00:36		2 / 2
		16.38	SC	Pipe size changes, new size(s), 225mm high	00:00:40		
		17.08	MHF	Finish node, manhole, reference: MH74	00:00:00		
Depth: m	MH74						

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
2	80.0	5.3	90.0	4.0	3	2.0	0.2	3.0	3.0

Section Inspection - 21/09/2023 - MH71X

Item No. 74	Insp. No. 1	Date 21/09/23	Time 12:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH71X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH71
Road:	Barrington Close	Inspected Length:	17.08 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	17.08 m	Downstream Node:	MH72
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:148	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH71							
	0.00	MH		Start node, manhole, reference: MH71	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:00		
	0.02	CC		Crack, circumferential from 9 o'clock to 4 o'clock	00:00:04		2 / 2
	0.75	JDM		Joint displaced, medium	00:00:06		1 / 3
	1.86	SC		Pipe size changes, new size(s), 150mm high	00:00:09		
	6.45	JN		Junction at 2 o'clock, 100mm dia	00:00:22		
	16.76	REM		General remark: BACKDROP	00:00:42		
	17.08	MHF		Finish node, manhole, reference: MH72	00:00:44		
MH72							
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
2	10.0	0.6	11.0	2.0	2	2.0	0.2	3.0	3.0

Section Inspection - 21/09/2023 - USX

Item No.	Insp. No.	Date	Time	Client's Job Ref	Weather	Pre Cleaned	PLR
75	1	21/09/23	12:34	10793	No Rain Or Snow	No	USX
Operator		Vehicle		Camera	Preset Length	Legal Status	Alternative ID
JH		Ford Transit		Solo Pro/Crawler	Not Specified	Not Specified	Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	15.54 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.54 m	Downstream Node:	MH72 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:135	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH72 (a)	00:00:00		
	0.00	WL		Water level, 0% of the vertical dimension	00:00:02		
	0.26	WL		Water level, 10% of the vertical dimension	00:00:06		
	0.54	WL		Water level, 0% of the vertical dimension	00:00:07		
	0.54	S01	DES	Settled deposits, fine, 10% cross-sectional area loss, start	00:00:07		
	1.96	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, finish	00:00:12		3
	2.39	JN		Junction at 3 o'clock, 100mm dia	00:00:14		
	15.23	JN		Junction at 3 o'clock, 100mm dia	00:00:48		
	15.53		DES	Settled deposits, fine, 60% cross-sectional area loss	00:01:09		4
	15.53		OBM	Other obstacles, pipe material in invert from 10 o'clock to 2 o'clock, 15% cross-sectional area loss	00:01:09		5
	15.54		SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO SETTLED DEPOSITS	00:01:09		

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	3	18.0	1.4	22.0	5.0

Section Inspection - 21/09/2023 - MH72X

Item No. 76	Insp. No. 1	Date 21/09/23	Time 12:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH72X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH72
Road:	Barrington Close	Inspected Length:	21.22 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	21.22 m	Downstream Node:	MH73
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:184	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00		MH	Start node, manhole, reference: MH72	00:00:00		
	0.00		WL	Water level, 0% of the vertical dimension	00:00:07		
	0.89		DEZJ	Attached deposits, other at joint from 4 o'clock to 5 o'clock, 5% cross-sectional area loss	00:00:08		3
	7.06	S01	RFJ	Roots, fine at joint, start	00:00:19		
	12.29	F01	RFJ	Roots, fine at joint, finish	00:00:37		2
	15.13		WL	Water level, 5% of the vertical dimension	00:00:37		
	21.22		MHF	Finish node, manhole, reference: MH73	00:00:55		

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	2.0	0.4	8.0	3.0

Section Inspection - 21/09/2023 - MH73X

Item No. 77	Insp. No. 1	Date 21/09/23	Time 12:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH73X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH73
Road:	Barrington Close	Inspected Length:	14.51 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	32.00 m	Downstream Node:	MH75
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:278	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH75 (a)	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:16		
	0.01	S01	DES	Settled deposits, fine, 10% cross-sectional area loss, start	00:00:16		
	1.60	RFJ		Roots, fine at joint	00:00:21		2
	2.16	C01	DES	Settled deposits, fine, 25% cross-sectional area loss, change	00:00:24		
	3.73	C01	DES	Settled deposits, fine, 10% cross-sectional area loss, change	00:00:35		
	4.43	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, finish	00:00:37		3
	4.82	JN		Junction at 10 o'clock, 150mm dia	00:00:37		
	10.52	S02	DES	Settled deposits, fine, 10% cross-sectional area loss, start	00:00:50		
	11.84	C02	DES	Settled deposits, fine, 20% cross-sectional area loss, change	00:00:53		
	14.12	CXI		Connection defective, connecting pipe is intruding at 10 o'clock, 100mm dia, intrusion: 10%	00:01:14	MH73X_2 2f6e67d-f3 a7-48f1-b0	3
	14.50	F02	DES	Settled deposits, fine, 20% cross-sectional area loss, finish	00:01:20		3
	14.51	SA		Survey abandoned: UNABLE TO PUSH FURTHER DUE TO SETTLED DEPOSITS	00:01:20		
	32.00			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
0	0.0	0.0	0.0	1.0	4	4.0	1.4	21.0	3.0

Section Pictures - 21/09/2023 - MH73X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
77	Upstream	MH73X	10793	10793



MH73X_22f6e67d-f3a7-48f1-b0f6-ed899fecf2e7_20231009_150523_113.jpg, 00:01:14, 14.12 m
Connection defective, connecting pipe is intruding at 10 o'clock, 100mm dia, intrusion: 10%

Section Inspection - 21/09/2023 - MH74X

Item No. 78	Insp. No. 1	Date 21/09/23	Time 13:33	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH74X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH74
Road:	Barrington Close	Inspected Length:	7.99 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.99 m	Downstream Node:	MH83
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:70	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: m MH74</p> <p>0.00</p> <p>0.00</p> <p>0.74</p> <p>6.20</p> <p>6.22</p> <p>7.04</p> <p>7.99</p> <p>MH83 Depth: m</p>	0.00	MH	Start node, manhole, reference: MH74	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:10			
	0.74	S01	CUW	Loss of vision, camera under water, start	00:00:10		
	6.20	F01	CUW	Loss of vision, camera under water, finish	00:00:46		
	6.22		RFJ	Roots, fine at joint	00:00:44		2
	7.04		FL	Fracture, longitudinal at 2 o'clock	00:00:47		3 / 2
	7.99		MHF	Finish node, manhole, reference: MH83	00:00:54		

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	40.0	5.0	40.0	3.0	2	1.0	0.3	2.0	2.0

Section Inspection - 21/09/2023 - USX

Item No. 79	Insp. No. 1	Date 21/09/23	Time 12:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	12.94 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.94 m	Downstream Node:	MH75 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:97	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH75 (b)	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:01			
	0.01	S01	LU	Line deviates up, start	00:00:08		
	1.53	S02	RFJ	Roots, fine at joint, start	00:00:08		
	1.53	DEZJ	Attached deposits, other at joint from 5 o'clock to 7 o'clock, 10% cross-sectional area loss	00:00:08			3
	1.82	F02	LU	Line deviates up, finish	00:00:15		
	1.82	F01	RFJ	Roots, fine at joint, finish	00:00:22		2
	4.43	RFJ	Roots, fine at joint	00:00:24			2
	7.55	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:30		
	8.06	S04	RFJ	Roots, fine at joint, start	00:00:33		
	8.06	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:33		4 / 2
	8.23	CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:34			2 / 2
	9.38	FCJ	Fracture, circumferential at joint from 12 o'clock to 12 o'clock	00:00:38			3 / 2
	9.70	F04	RFJ	Roots, fine at joint, finish	00:00:42		2
10.18	FC	Fracture, circumferential from 12 o'clock to 12 o'clock: ROOTS GROWING THROUGH FRACTURE	00:00:42			3 / 2	

Section Inspection - 21/09/2023 - USX

Item No. 79	Insp. No. 1	Date 21/09/23	Time 12:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:97	Position [m]	Code	Observation	MPEG	Photo	Grade
	12.16	WL	Water level, 10% of the vertical dimension	00:00:47			
	12.26	S05	RF	Roots, fine, start	00:00:49		
	12.93	F05	RF	Roots, fine, finish	00:01:27		2
	12.94	SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO ROOTS	00:01:27			

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
4	80.0	13.1	170.0	4.0	9	3.0	0.9	11.0	3.0

Section Inspection - 21/09/2023 - MH75X

Item No. 80	Insp. No. 1	Date 21/09/23	Time 12:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH75X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH75
Road:	Barrington Close	Inspected Length:	6.64 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.64 m	Downstream Node:	DS
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Material:	Vitrified clay
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:58	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m	MH75	0.00	MH	Start node, manhole, reference: MH75	00:00:00		
		0.00	WL	Water level, 10% of the vertical dimension	00:00:06		
		3.14	S01 CUW	Loss of vision, camera under water, start	00:00:20		
		6.63	F01 CUW	Loss of vision, camera under water, finish	00:00:26		
		6.64	SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO LOSS OF VISION	00:00:26		

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 - 21/09/2023 - MH76X

Item No. 81	Insp. No. 1	Date 21/09/23	Time 12:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH76X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH76
Road:	Barrington Close	Inspected Length:	29.44 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	29.44 m	Downstream Node:	MH77
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:255	Position [m]	Code	Observation	MPEG	Photo	Grade
		0.00	MH	Start node, manhole, reference: MH76	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:10		
		0.01	S01 DEX	Settled deposits, other, 5% cross-sectional area loss, start	00:00:10		
		0.44	F01 DEX	Settled deposits, other, 5% cross-sectional area loss, finish	00:00:10		3
		2.15	DEZJ	Attached deposits, other at joint from 6 o'clock to 7 o'clock, 5% cross-sectional area loss: POSSIBLE ROOT	00:00:14		3
		4.84	CXI	Connection defective, connecting pipe is intruding at 10 o'clock, 100mm dia, intrusion: 10%	00:00:21	MH76X_3 9ae886e-d 3eb-443a-	3
		15.20	JN	Junction at 9 o'clock, 100mm dia	00:00:50		
		22.86	CN	Connection other than junction at 10 o'clock, 100mm dia	00:01:15		
		28.84	SC	Pipe size changes, new size(s), 150mm high	00:01:30		
		29.44	MHF	Finish node, manhole, reference: MH77: BURIED	00:01:37		

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	3	2.0	0.2	6.0	3.0

Section Pictures - 21/09/2023 - MH76X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
81	Downstream	MH76X	10793	10793



MH76X_39ae886e-d3eb-443a-ac5e-132a0f62dc9e_20231009_153203_374.jpg, 00:00:21, 4.84 m
Connection defective, connecting pipe is intruding at 10 o'clock, 100mm dia, intrusion: 10%

Section Inspection - 21/09/2023 - MH77X

Item No. 82	Insp. No. 1	Date 21/09/23	Time 12:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH77X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH77
Road:	Barrington Close	Inspected Length:	7.75 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	7.75 m	Downstream Node:	DS
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:68	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00		MH	Start node, manhole, reference: MH77	00:00:00		
	0.00		WL	Water level, 5% of the vertical dimension	00:00:00		
	0.01	S01	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss, start	00:00:06		
	0.70	F01	DEC	Settled deposits, hard or compacted, 5% cross-sectional area loss, finish	00:00:06		3
	2.47	S02	CUW	Loss of vision, camera under water, start: INTERMITTENT	00:00:18		
	6.48		CLJ	Crack, longitudinal at joint at 3 o'clock	00:00:34		2 / 2
	7.74	F02	CUW	Loss of vision, camera under water, finish: INTERMITTENT	00:00:52		
	7.75		SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO LOSS OF VISION	00:00:52		

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	1.3	10.0	2.0	2	2.0	0.4	3.0	3.0

Section Inspection - 21/09/2023 - MH79X

Item No. 83	Insp. No. 1	Date 21/09/23	Time 13:32	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH79X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH79
Road:	Barrington Close	Inspected Length:	4.86 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	4.86 m	Downstream Node:	MH78 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH78 (a)	00:00:00		
	0.00	WL		Water level, 30% of the vertical dimension	00:00:11		
	0.83	RFJ		Roots, fine at joint	00:00:11		2
	0.89	S01	CUW	Loss of vision, camera under water, start	00:00:25		
	2.39	F01	CUW	Loss of vision, camera under water, finish	00:00:25		
	2.57	WL		Water level, 5% of the vertical dimension	00:00:33		
	4.86	MHF		Finish node, manhole, reference: MH79	00:00:45		

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		1.0	0.2	1.0	2.0

Section Inspection - 21/09/2023 - MH78X

Item No. 84	Insp. No. 1	Date 21/09/23	Time 13:33	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH78X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH78
Road:	Barrington Close	Inspected Length:	8.58 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	8.58 m	Downstream Node:	MH74
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:75	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH78	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:00		
	3.10	WL		Water level, 15% of the vertical dimension	00:00:19		
	4.54	S01	CUW	Loss of vision, camera under water, start	00:00:22		
	4.80	REM		General remark: POSSIBLE HOLE AT JUNCTION WATER LEVEL TOO HIGH TO SEE	00:00:34		
	4.80	JN		Junction at 10 o'clock, 100mm dia	00:00:34		
	7.59	F01	CUW	Loss of vision, camera under water, finish	00:00:49		
	8.58	MHF		Finish node, manhole, reference: MH74	00:00:56		

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 - 21/09/2023 - MH80X

Item No. 85	Insp. No. 1	Date 21/09/23	Time 13:32	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH80X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH80
Road:	Barrington Close	Inspected Length:	10.89 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.89 m	Downstream Node:	MH79 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:95	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m	MH79 (a)	0.00	MH	Start node, manhole, reference: MH79 (a): BURIED	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:12		
		1.17	S01	RFJ	Roots, fine at joint, start	00:00:12	
		2.61	F01	RFJ	Roots, fine at joint, finish		2
		9.77	JDM	Joint displaced, medium	00:00:50		1 / 3
		10.89	MHF	Finish node, manhole, reference: MH80: BURIED	00:01:02		
				MH80			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
1	1.0	0.1	1.0	1.0	2	2.0	0.4	4.0	3.0

Section Inspection - 21/09/2023 - MH81X

Item No. 86	Insp. No. 1	Date 21/09/23	Time 13:33	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH81X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH81
Road:	Barrington Close	Inspected Length:	4.98 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	4.98 m	Downstream Node:	MH80 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade																												
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Depth: m MH80 (a)</p> </div> <table border="1"> <tr> <td>0.00</td> <td>MH</td> <td>Start node, manhole, reference: MH80 (a): BURIED</td> <td>00:00:00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.00</td> <td>WL</td> <td>Water level, 5% of the vertical dimension</td> <td>00:00:00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4.59</td> <td>DEZJ</td> <td>Attached deposits, other at joint from 2 o'clock to 10 o'clock, 5% cross-sectional area loss</td> <td>00:00:25</td> <td></td> <td></td> <td>3</td> </tr> <tr> <td>4.98</td> <td>MHF</td> <td>Finish node, manhole, reference: MH81: BURIED</td> <td>00:00:40</td> <td></td> <td></td> <td></td> </tr> </table> </div>								0.00	MH	Start node, manhole, reference: MH80 (a): BURIED	00:00:00				0.00	WL	Water level, 5% of the vertical dimension	00:00:00				4.59	DEZJ	Attached deposits, other at joint from 2 o'clock to 10 o'clock, 5% cross-sectional area loss	00:00:25			3	4.98	MHF	Finish node, manhole, reference: MH81: BURIED	00:00:40			
0.00	MH	Start node, manhole, reference: MH80 (a): BURIED	00:00:00																																
0.00	WL	Water level, 5% of the vertical dimension	00:00:00																																
4.59	DEZJ	Attached deposits, other at joint from 2 o'clock to 10 o'clock, 5% cross-sectional area loss	00:00:25			3																													
4.98	MHF	Finish node, manhole, reference: MH81: BURIED	00:00:40																																

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	2.0	0.4	2.0	3.0

Section Inspection - 21/09/2023 - MH82X

Item No. 87	Insp. No. 1	Date 21/09/23	Time 13:33	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH82X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH82
Road:	Barrington Close	Inspected Length:	11.34 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	11.34 m	Downstream Node:	MH81 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:99	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: m MH81 (a)</p> <p>0.00</p> <p>0.00</p> <p>1.08</p> <p>2.46</p> <p>4.52</p> <p>8.63</p> <p>10.58</p> <p>11.33</p> <p>11.33</p> <p>11.33</p> <p>MH82</p> <p>Depth: m</p>	0.00	MH	Start node, manhole, reference: MH81 (a): BURIED	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:12			
	1.08	JDM	Joint displaced, medium	00:00:12			1 / 3
	2.46	S01	DEZ	Attached deposits, other from 9 o'clock to 3 o'clock, 5% cross-sectional area loss, start	00:00:18		
	4.52		RFJ	Roots, fine at joint	00:00:27		2
	8.63	S02	DEX	Settled deposits, other, 10% cross-sectional area loss, start	00:00:45		
	10.58	C02	DEX	Settled deposits, other, 15% cross-sectional area loss, change	00:00:55		
	11.33	F01	DEZ	Attached deposits, other from 9 o'clock to 3 o'clock, 5% cross-sectional area loss, finish	00:01:04		3
	11.33	F02	DEX	Settled deposits, other, 15% cross-sectional area loss, finish	00:01:04		3
	11.33		REM	General remark: ATTACHED DEPOSITS IN MANHOLE	00:01:04		
	11.34		MHF	Finish node, manhole, reference: MH82: BURIED	00:01:04		

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	1.0	0.1	1.0	1.0	4	4.0	2.4	27.0	3.0

Section Inspection - 21/09/2023 - MH83X

Item No. 88	Insp. No. 1	Date 21/09/23	Time 13:33	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH83X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH83
Road:	Barrington Close	Inspected Length:	28.32 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	28.32 m	Downstream Node:	MH84
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:157	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH83	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:01			
	2.25	S01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:10		
	2.25	S02	RF	Roots, fine, start	00:00:18		
	4.98	F01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:18		3 / 2
	4.98	F02	RF	Roots, fine, finish	00:00:18		2
	5.87	RFJ	Roots, fine at joint	00:00:20		2	
	7.60	S03	RFJ	Roots, fine at joint, start	00:00:24		
	7.60	S04	RF	Roots, fine, start	00:00:24		
	8.44	RMJ	Roots, mass at joint, 15% cross-sectional area loss	00:00:27		3	
	12.32	CM	Cracks, multiple from 12 o'clock to 12 o'clock	00:00:38		3 / 2	
	14.38	F03	RFJ	Roots, fine at joint, finish	00:00:43		2
	14.38	F04	RF	Roots, fine, finish	00:00:43		2
	14.38	S05	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:47		
	16.04	F05	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:47		3 / 2

Section Inspection - 21/09/2023 - MH83X

Item No. 88	Insp. No. 1	Date 21/09/23	Time 13:33	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH83X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:157	Position [m]	Code	Observation	MPEG	Photo	Grade
	20.06	FC	Fracture, circumferential from 4 o'clock to 8 o'clock	00:00:56		3 / 2	
	21.39	FC	Fracture, circumferential from 2 o'clock to 10 o'clock	00:00:59		3 / 2	
	22.02	CCJ	Crack, circumferential at joint from 9 o'clock to 12 o'clock	00:01:01		2 / 2	
	22.74	FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:01:02		3 / 2	
	28.32	MHF	Finish node, manhole, reference: MH84	00:01:17			

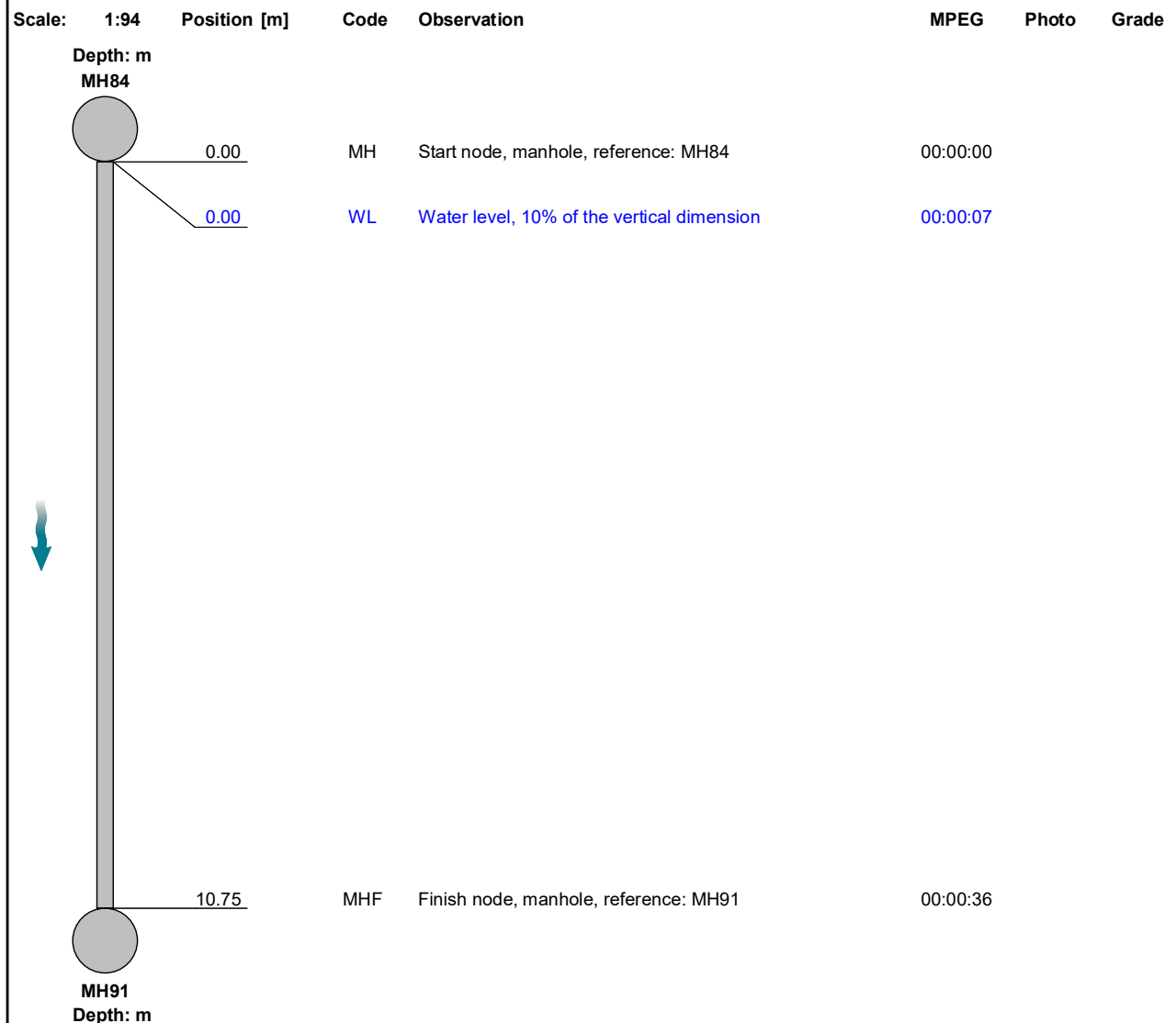
Construction Features					Miscellaneous Features						
Structural Defects					Service & Operational Observations						
STR No.	Def	STR Peak	STR Mean	STR Total	STR Grade	SER No.	Def	SER Peak	SER Mean	SER Total	SER Grade
7		40.0	13.1	370.0	3.0	12		5.0	1.1	32.0	4.0

Section Inspection - 21/09/2023 - MH84X

Item No. 89	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH84X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH84
Road:	Barrington Close	Inspected Length:	10.75 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.75 m	Downstream Node:	MH91
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	225 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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 - 21/09/2023 - MH86X

Item No. 90	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH86X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH86
Road:	Barrington Close	Inspected Length:	10.11 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.11 m	Downstream Node:	MH85 (C)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular	Dia/Height:	150 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:

Scale:	1:88	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m		0.00	MH	Start node, manhole, reference: MH85 (c)	00:00:00		
		0.00	WL	Water level, 20% of the vertical dimension	00:00:07		
		0.20	S01 CUW	Loss of vision, camera under water, start	00:00:07		
		10.10	F01 CUW	Loss of vision, camera under water, finish	00:00:58		
		10.11	MHF	Finish node, manhole, reference: MH86: BURIED	00:00:58		

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 - 21/09/2023 - MH85X

Item No. 91	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH85X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH85
Road:	Barrington Close	Inspected Length:	17.57 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	17.57 m	Downstream Node:	MH87
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:113	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH85	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:02		
	0.18	DEEJ		Attached deposits, encrustation at joint from 2 o'clock to 5 o'clock, 5% cross-sectional area loss	00:00:05		3
	0.74	FC		Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:06		3 / 2
	0.74	RF		Roots, fine	00:00:06		2
	5.38	CC		Crack, circumferential from 7 o'clock to 2 o'clock	00:00:21		2 / 2
	6.14	S01	RFJ	Roots, fine at joint, start	00:00:23		
	7.22	F01	RFJ	Roots, fine at joint, finish	00:00:23		2
	7.46	FMJ		Fractures, multiple at joint from 12 o'clock to 12 o'clock	00:00:26		4 / 2
	7.46	FC		Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:26		3 / 2
	8.66	CMJ		Cracks, multiple at joint from 12 o'clock to 12 o'clock	00:00:30		3 / 2
	12.11	RFJ		Roots, fine at joint	00:00:39		2
	12.32	S02	FL	Fracture, longitudinal at 10 o'clock, start	00:00:39		

Section Inspection - 21/09/2023 - MH85X

Item No. 91	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH85X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:113	Position [m]	Code	Observation	MPEG	Photo	Grade
		13.58	F02	FL	Fracture, longitudinal at 10 o'clock, finish	00:00:44	3 / 2
		13.58	S03	B	Broken pipe from 12 o'clock to 12 o'clock, start	00:00:44	MH85X_a ad4b9dc-b 431-400a-
		13.58	S04	D	Deformed sewer or drain, 5%, start	00:00:45	
		13.66	S05	RF	Roots, fine, start	00:00:45	
		14.05	WL	WL	Water level, 15% of the vertical dimension	00:00:47	
		14.26	F05	RF	Roots, fine, finish	00:00:48	2
		14.26	DEX	DEX	Settled deposits, other, 5% cross-sectional area loss	00:00:48	3
		14.26	F03	B	Broken pipe from 12 o'clock to 12 o'clock, finish	00:00:50	4
		14.26	F04	D	Deformed sewer or drain, 5%, finish	00:00:50	2 / 2
		14.27	S06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:54	
		14.56	CUW	CUW	Loss of vision, camera under water	00:00:58	
		15.10	RFJ	RFJ	Roots, fine at joint	00:00:57	2
		15.14	F06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:59	4 / 2
		15.15	S07	FL	Fracture, longitudinal at 11 o'clock, start	00:00:59	
		16.07	F07	FL	Fracture, longitudinal at 11 o'clock, finish	00:01:01	3 / 2
		17.57	MHF	MHF	Finish node, manhole, reference: MH87: BURIED	00:01:10	

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
10	220.0	29.0	510.0	4.0	16	4.0	1.1	20.0	3.0

Section Pictures - 21/09/2023 - MH85X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
91	Downstream	MH85X	10793	10793



MH85X_aad4b9dc-b431-400a-b544-8d6517d1163e_20231010_085405_737.jpg, 00:00:44, 13.58 m
Broken pipe from 12 o'clock to 12 o'clock, start

Section Inspection - 21/09/2023 - MH89X

Item No. 92	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH89X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH89
Road:	Barrington Close	Inspected Length:	14.78 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	14.78 m	Downstream Node:	MH88 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:128	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m							
MH88 (b)							
	0.00	MH		Start node, manhole, reference: MH88 (b)	00:00:00		
	0.00	WL		Water level, 0% of the vertical dimension	00:00:05		
	0.22	FC		Fracture, circumferential from 12 o'clock to 12 o'clock	00:00:05		3 / 2
	2.71	CC		Crack, circumferential from 7 o'clock to 9 o'clock	00:00:13		2 / 2
	9.94	CC		Crack, circumferential from 11 o'clock to 4 o'clock	00:00:34		2 / 2
	13.00	JDM		Joint displaced, medium	00:00:43		1 / 3
	14.28	LL		Line deviates left	00:00:48		
	14.28	DEZJ		Attached deposits, other at joint from 1 o'clock to 5 o'clock, 5% cross-sectional area loss	00:00:48		3
	14.78	MHF		Finish node, manhole, reference: MH89: BURIED	00:01:01		
MH89							
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
4		40.0	4.1	61.0	3.0	5		2.0	0.5	7.0	3.0

Section Inspection - 21/09/2023 - MH88X

Item No. 93	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH88X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH88
Road:	Barrington Close	Inspected Length:	2.57 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	2.57 m	Downstream Node:	MH90
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m		0.00	MH	Start node, manhole, reference: MH88	00:00:00		
		0.00	WL	Water level, 0% of the vertical dimension	00:00:24		
		0.23	LD	Line deviates down	00:00:13		
		1.07	CC	Crack, circumferential from 4 o'clock to 7 o'clock	00:00:13		2 / 2
		2.57	MHF	Finish node, manhole, reference: MH90: UNABLE TO RAISE	00:00:23		

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	3.9	10.0	2.0	1	1.0	0.4	1.0	2.0

Section Inspection - 21/09/2023 - MH91X

Item No. 94	Insp. No. 1	Date 21/09/23	Time 13:34	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH91X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH91
Road:	Barrington Close	Inspected Length:	3.54 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.54 m	Downstream Node:	MH92
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	MH	Start node, manhole, reference: MH91	00:00:00		
	0.00	WL	WL	Water level, 15% of the vertical dimension	00:00:15		
	0.30	S01	CUW	Loss of vision, camera under water, start	00:00:15		
	1.74	S02	DEX	Settled deposits, other, 10% cross-sectional area loss, start	00:00:18		
	1.78	FL	FL	Fracture, longitudinal at 2 o'clock	00:00:18		3 / 2
	2.82	WL	WL	Water level, 10% of the vertical dimension	00:00:23		
	2.93	F01	CUW	Loss of vision, camera under water, finish	00:00:24		
	3.02	FMJ	FMJ	Fractures, multiple at joint from 11 o'clock to 3 o'clock	00:00:24		4 / 2
	3.53	F02	DEX	Settled deposits, other, 10% cross-sectional area loss, finish	00:00:00		3
	3.54	MHF	MHF	Finish node, manhole, reference: MH92	00:00:00		

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
2	80.0	33.9	120.0	4.0	3	3.0	1.7	6.0	3.0

Section Inspection - 21/09/2023 - MH92X

Item No. 95	Insp. No. 1	Date 21/09/23	Time 13:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH92X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH92
Road:	Barrington Close	Inspected Length:	40.34 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	40.34 m	Downstream Node:	MH99
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:204	Position [m]	Code	Observation	MPEG	Photo	Grade
	Depth: m MH92	0.00	MH	Start node, manhole, reference: MH92	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:15			
	4.11	CLJ	Crack, longitudinal at joint at 1 o'clock	00:00:15		2 / 2	
	5.04	CC	Crack, circumferential from 4 o'clock to 9 o'clock	00:00:17		2 / 2	
	13.09	CLJ	Crack, longitudinal at joint at 11 o'clock	00:00:34		2 / 2	
	16.30	S01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:40		
	16.30	S02	RF	Roots, fine, start	00:00:40		
	17.02	F02	RF	Roots, fine, finish	00:00:48		2
	19.35	F01	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:48		3 / 2
	19.36	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:48		
	19.36	S04	RF	Roots, fine, start	00:00:49		
	20.81	REM	General remark: POSSIBLE INFILTRATION AT 6 O CLOCK	00:00:51			
	20.81	DEXJ	Settled deposits, other at joint, 10% cross-sectional area loss	00:00:51		3	
	23.05	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:58		4 / 2
	23.05	S05	FL	Fracture, longitudinal at 10 o'clock, start	00:01:00		

Section Inspection - 21/09/2023 - MH92X

Item No. 95	Insp. No. 1	Date 21/09/23	Time 13:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH92X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:204	Position [m]	Code	Observation	MPEG	Photo	Grade
		23.91	C05	FL	Fracture, longitudinal at 12 o'clock, change	00:01:00	
		25.23	F05	FL	Fracture, longitudinal at 12 o'clock, finish	00:01:03	3 / 2
		25.23	S06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:01:03	
		25.29		BJ	Broken pipe at joint from 5 o'clock to 7 o'clock	00:01:06	MH92X_3 3d811c1-2 1be-4341- 4
		26.73	F04	RF	Roots, fine, finish	00:01:09	2
		26.73	F06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:09	4 / 2
		28.22		FMJ	Fractures, multiple at joint from 12 o'clock to 12 o'clock	00:01:12	4 / 2
		28.23	S07	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:01:12	
		29.18	F07	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:01:15	4 / 2
		31.89		CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:01:20	2 / 2
		32.66		RMJ	Roots, mass at joint, 15% cross-sectional area loss	00:01:22	3
		34.28	S09	RFJ	Roots, fine at joint, start	00:01:25	
		34.28	S08	RF	Roots, fine, start	00:01:28	
		37.18		RMJ	Roots, mass at joint, 30% cross-sectional area loss	00:01:31	5
		37.86		FC	Fracture, circumferential from 12 o'clock to 12 o'clock	00:01:33	3 / 2
		37.86	F08	RF	Roots, fine, finish	00:01:35	2
		38.84	S10	CUW	Loss of vision, camera under water, start	00:01:43	
		38.84	F09	RFJ	Roots, fine at joint, finish	00:01:43	2
		40.33	F10	CUW	Loss of vision, camera under water, finish	00:02:18	
		40.34		MHF	Finish node, manhole, reference: MH99	00:02:18	

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
12	200.0	26.8	1080.0	4.0	18	11.0	1.3	54.0	5.0

Section Pictures - 21/09/2023 - MH92X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
95	Downstream	MH92X	10793	10793



MH92X_33d811c1-21be-4341-8c1e-9bb512064dab_20231010_093544_866.jpg, 00:01:06, 25.29 m
Broken pipe at joint from 5 o'clock to 7 o'clock

Section Inspection - 21/09/2023 - MH87X

Item No. 96	Insp. No. 1	Date 21/09/23	Time 13:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH87X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH87
Road:	Barrington Close	Inspected Length:	10.32 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.32 m	Downstream Node:	MH93 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:90	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH93 (a)	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:01		
	0.91	CLJ		Crack, longitudinal at joint at 11 o'clock	00:00:07		2 / 2
	2.19	CLJ		Crack, longitudinal at joint at 1 o'clock	00:00:12		2 / 2
	3.32	S01	CS	Cracks, spiral from 7 o'clock to 1 o'clock, start	00:00:19		
	3.87	F01	CS	Cracks, spiral from 7 o'clock to 1 o'clock, finish	00:00:24		3 / 2
	4.94	FC		Fracture, circumferential from 7 o'clock to 5 o'clock	00:00:24		3 / 2
	5.18	S02	FL	Fracture, longitudinal at 11 o'clock, start	00:00:25		
	5.73	F02	FL	Fracture, longitudinal at 11 o'clock, finish	00:00:29		3 / 2
	10.31	DEC		Settled deposits, hard or compacted, 10% cross-sectional area loss	00:01:22		3
	10.32	SA		Survey abandoned: UNABLE TO PUSH FURTHER PAST HARD DEPOSITS MANHOLE IN VIEW	00:01:22		

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
5	80.0	13.6	140.0	3.0	6	2.0	0.7	7.0	3.0

Section Inspection - 21/09/2023 - MH93X

Item No. 97	Insp. No. 1	Date 21/09/23	Time 13:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH93X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH93
Road:	Barrington Close	Inspected Length:	14.90 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	14.90 m	Downstream Node:	MH94
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:130	Position [m]	Code	Observation	MPEG	Photo	Grade		
	Depth: m								
	MH93								
	0.00	MH		Start node, manhole, reference: MH93	00:00:00				
	0.00	WL		Water level, 10% of the vertical dimension	00:01:05				
	1.28	FCJ		Fracture, circumferential at joint from 12 o'clock to 5 o'clock	00:00:08		3 / 2		
	2.25	S01	CL	Crack, longitudinal at 2 o'clock, start	00:00:12				
	2.82	F01	CL	Crack, longitudinal at 2 o'clock, finish	00:00:17		2 / 2		
	4.11	FC		Fracture, circumferential from 11 o'clock to 5 o'clock	00:00:17		3 / 2		
	10.36	WL		Water level, 15% of the vertical dimension	00:00:39				
	11.86	S02	CUW	Loss of vision, camera under water, start	00:00:43				
	14.08	F02	CUW	Loss of vision, camera under water, finish	00:00:56				
	14.09	WL		Water level, 10% of the vertical dimension	00:00:56				
	14.40	SC		Pipe size changes, new size(s), 225mm high	00:00:56				
	14.90	MHF		Finish node, manhole, reference: MH94	00:01:01				
	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
3	40.0	6.0	90.0	3.0	3	1.0	0.2	3.0	2.0

Section Inspection - 21/09/2023 - MH96X

Item No. 98	Insp. No. 1	Date 21/09/23	Time 13:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH96X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH96
Road:	Barrington Close	Inspected Length:	4.55 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	4.55 m	Downstream Node:	MH95 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH95 (a)	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:43			
	1.49	CC	Crack, circumferential from 2 o'clock to 10 o'clock	00:00:11			2 / 2
	1.88	WL	Water level, 5% of the vertical dimension	00:00:14			
	4.55	MHF	Finish node, manhole, reference: MH96	00:00:27			

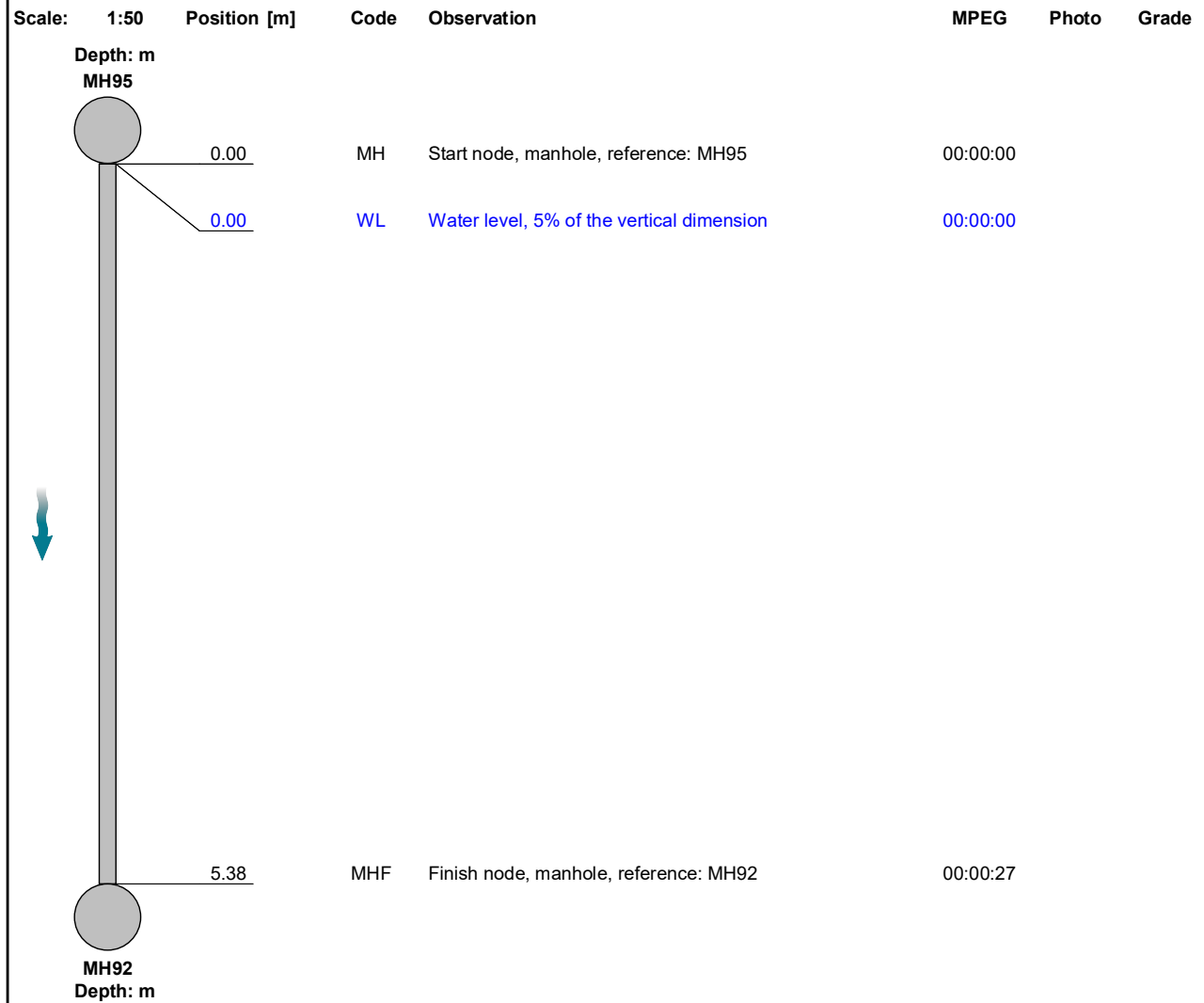
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
1	10.0	2.2	10.0	2.0	1	1.0	0.2	1.0	2.0

Section Inspection - 21/09/2023 - MH95X

Item No. 99	Insp. No. 1	Date 21/09/23	Time 13:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH95X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH95
Road:	Barrington Close	Inspected Length:	5.38 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.38 m	Downstream Node:	MH92
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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 - 21/09/2023 - MH97X

Item No. 100	Insp. No. 1	Date 21/09/23	Time 13:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH97X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH97
Road:	Barrington Close	Inspected Length:	10.59 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	10.59 m	Downstream Node:	MH96 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:92	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH		Start node, manhole, reference: MH96 (a)	00:00:00		
	0.00	WL		Water level, 5% of the vertical dimension	00:00:00		
	0.15	CC		Crack, circumferential from 7 o'clock to 4 o'clock	00:00:08		2 / 2
	5.77	WL		Water level, 10% of the vertical dimension	00:00:43		
	7.75	CC		Crack, circumferential from 4 o'clock to 10 o'clock	00:00:50		2 / 2
	8.80	WL		Water level, 5% of the vertical dimension	00:00:54		
	10.35	JDM		Joint displaced, medium	00:01:17		1 / 3
	10.59	MHF		Finish node, manhole, reference: MH97	00:01:26		

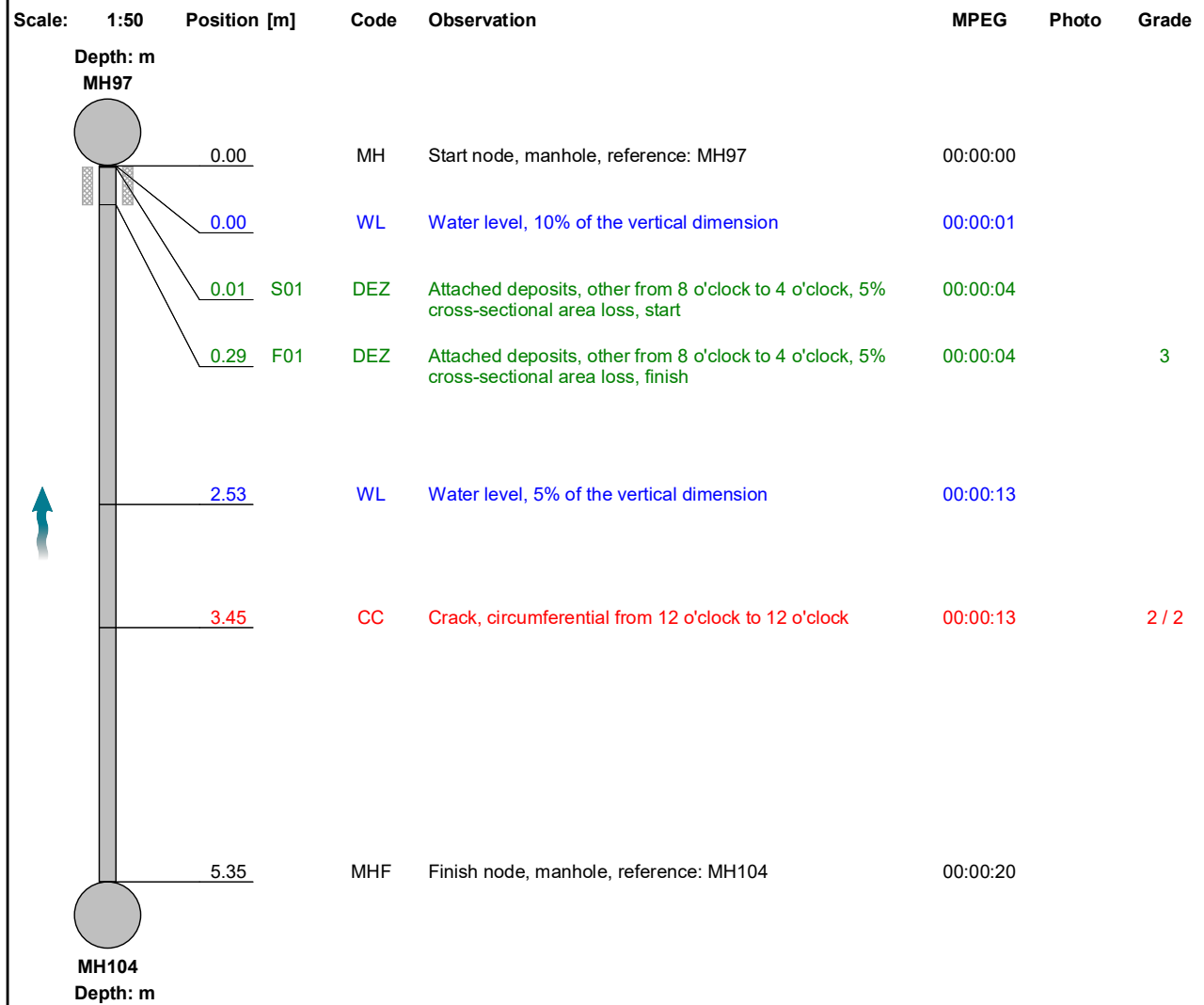
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	10.0	2.0	21.0	2.0	3	2.0	0.4	4.0	3.0

Section Inspection - 21/09/2023 - MH104X

Item No. 101	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH104X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH104
Road:	Barrington Close	Inspected Length:	5.35 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.35 m	Downstream Node:	MH97
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	100 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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	1.9	10.0	2.0	2	2.0	0.6	3.0	3.0

Section Inspection - 21/09/2023 - USX

Item No. 102	Insp. No. 1	Date 21/09/23	Time 13:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	16.91 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	16.91 m	Downstream Node:	MH98 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:147	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH98 (a)	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:00			
	0.58	CC	Crack, circumferential from 8 o'clock to 4 o'clock	00:00:07			2 / 2
	1.67	JN	Junction at 1 o'clock, 100mm dia	00:00:13			
	2.08	CC	Crack, circumferential from 8 o'clock to 4 o'clock	00:00:14			2 / 2
	7.24	WL	Water level, 5% of the vertical dimension	00:00:46			
	10.53	S03	DES	Settled deposits, fine, 15% cross-sectional area loss, start	00:00:53		
	10.53	CXD	Connection defective, connecting pipe is damaged at 1 o'clock, 100mm dia	00:00:53		USX_f286 5516-4e09 -4abd-a0f9	
	10.74	FL	Fracture, longitudinal at 10 o'clock	00:01:07			3 / 2
	11.06	F03	DES	Settled deposits, fine, 15% cross-sectional area loss, finish	00:01:26		
	13.50	DEX	Settled deposits, other, 10% cross-sectional area loss	00:01:47			3
	16.90	REM	General remark: POSSIBLE JUNCTION AT 3 O CLOCK	00:03:23			
	16.91	SA	Survey abandoned: UNABLE TO PUSH FURTHER RUN POSSIBLY COLLAPSED	00:03:19		USX_d8f7 1e67-36f7- 4359-99cd	

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
3	40.0	3.5	60.0	3.0	5	3.0	0.4	7.0	3.0

Section Pictures - 21/09/2023 - USX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
102	Upstream	USX	10793	10793



USX_f2865516-4e09-4abd-a0f9-6cf901975f0f_20231129_080052_211.jpg, 00:00:53, 10.53 m
 Connection defective, connecting pipe is damaged at 1 o'clock, 100mm dia



USX_d8f71e67-36f7-4359-99cd-8fe50519a856_20231129_080729_282.jpg, 00:03:19, 16.91 m
 Survey abandoned, UNABLE TO PUSH FURTHER RUN
 POSSIBLY COLLAPSED

Section Inspection - 21/09/2023 - MH98X

Item No. 103	Insp. No. 1	Date 21/09/23	Time 13:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH98X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH98
Road:	Barrington Close	Inspected Length:	3.81 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.81 m	Downstream Node:	MH94
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:50 Position [m] Code Observation MPEG Photo 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	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH99X

Item No. 104	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH99X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH99
Road:	Barrington Close	Inspected Length:	25.61 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	25.61 m	Downstream Node:	MH110
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:124	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH99	00:00:00			
	0.00	WL	Water level, 10% of the vertical dimension	00:00:00			
	1.20	S01	CL	Crack, longitudinal at 12 o'clock, start	00:00:06		
	1.37	FC	Fracture, circumferential from 3 o'clock to 9 o'clock	00:00:06		3 / 2	
	1.37	S02	RF	Roots, fine, start	00:00:06		
	2.28	RFJ	Roots, fine at joint	00:00:07		2	
	2.81	F01	CL	Crack, longitudinal at 12 o'clock, finish	00:00:11		2 / 2
	2.81	F02	RF	Roots, fine, finish	00:00:11		2
	4.90	S05	RFJ	Roots, fine at joint, start	00:00:13		
	4.90	S04	RF	Roots, fine, start	00:00:14		
	8.53	F04	RF	Roots, fine, finish	00:00:24		2
	11.53	F05	RFJ	Roots, fine at joint, finish	00:00:30		2
	12.41	CC	Crack, circumferential from 8 o'clock to 4 o'clock	00:00:29		2 / 2	
	14.04	CM	Cracks, multiple from 12 o'clock to 12 o'clock	00:00:33		3 / 2	

Section Inspection - 21/09/2023 - MH99X

Item No. 104	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH99X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:124	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH110 Depth: m</p>	14.49	RFJ	Roots, fine at joint	00:00:34		2	
	14.49	S06	RF	Roots, fine, start	00:00:41		
	17.60	S07	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:44		
	18.98		RTJ	Roots, tap at joint	00:00:44		4
	18.98	F06	RF	Roots, fine, finish	00:00:58		2
	18.98	F07	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:58		3 / 2
	25.61		MHF	Finish node, manhole, reference: MH110	00:01:04		

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
5	50.0	7.4	190.0	3.0	12	7.0	1.2	32.0	4.0

Section Inspection - 21/09/2023 - MH94X

Item No. 105	Insp. No. 1	Date 21/09/23	Time 13:36	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH94X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH94
Road:	Barrington Close	Inspected Length:	1.68 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	1.68 m	Downstream Node:	MH100 (B)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH100 (b)	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:07			
	1.68	MHF	Finish node, manhole, reference: MH94	00:00:14			

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 - 21/09/2023 - MH100X

Item No. 106	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH100X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH100
Road:	Barrington Close	Inspected Length:	13.14 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	13.14 m	Downstream Node:	MH101
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:90	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH100	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	1.05	S01	FSJ	Fracture, spiral at joint from 12 o'clock to 12 o'clock, start	00:00:08		
	1.66	F01	FSJ	Fracture, spiral at joint from 12 o'clock to 12 o'clock, finish	00:00:09		4 / 2
	2.55	S02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:12		
	2.83	S03	FL	Fracture, longitudinal at 12 o'clock, start	00:00:13		
	2.83	F02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:16		3 / 2
	5.61	F03	FL	Fracture, longitudinal at 12 o'clock, finish	00:00:23		3 / 2
	7.06	S04	CL	Crack, longitudinal at 11 o'clock, start	00:00:23		
	8.66	CCJ	CCJ	Crack, circumferential at joint from 12 o'clock to 4 o'clock	00:00:26		2 / 2
	8.66	F04	CL	Crack, longitudinal at 11 o'clock, finish	00:00:26		2 / 2
	9.28	FMJ	FMJ	Fractures, multiple at joint from 12 o'clock to 12 o'clock	00:00:28		4 / 2
	9.28	DEZJ	DEZJ	Attached deposits, other at joint from 4 o'clock to 5 o'clock, 5% cross-sectional area loss	00:00:28		3
	9.28	BJ	BJ	Broken pipe at joint from 1 o'clock to 3 o'clock	00:00:28	MH100X_45827f3d-dbab-42b7	4
	10.12	FCJ	FCJ	Fracture, circumferential at joint from 10 o'clock to 2 o'clock	00:00:29		3 / 2

Section Inspection - 21/09/2023 - MH100X

Item No. 106	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH100X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:90	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH101 Depth: m</p>	10.58	S05	DEX	Settled deposits, other, 15% cross-sectional area loss, start	00:00:32		
	11.66	F05	DEX	Settled deposits, other, 15% cross-sectional area loss, finish	00:00:35		3
	12.22		JN	Junction at 10 o'clock, 150mm dia	00:00:38		
	13.14		MHF	Finish node, manhole, reference: MH101	00:00:55		

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
8	160.0	35.8	470.0	4.0	9	3.0	1.2	16.0	3.0

Section Pictures - 21/09/2023 - MH100X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
106	Downstream	MH100X	10793	10793



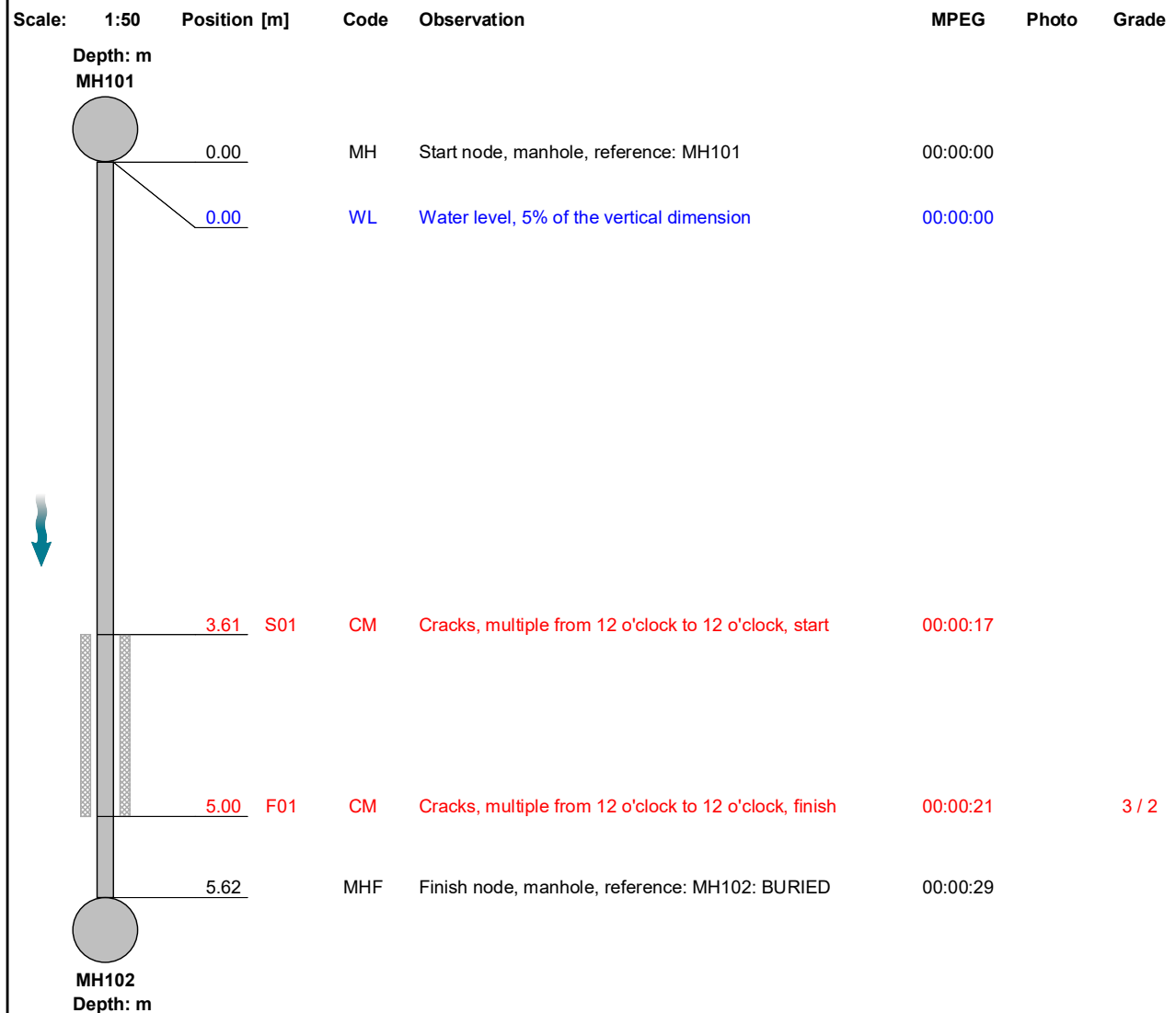
MH100X_45827f3d-dbab-42b7-94f4-a32c2b7531d5_20231010_105807_665.jpg, 00:00:28, 9.28 m
Broken pipe at joint from 1 o'clock to 3 o'clock

Section Inspection - 21/09/2023 - MH101X

Item No. 107	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH101X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH101
Road:	Barrington Close	Inspected Length:	5.62 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	5.62 m	Downstream Node:	MH102
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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	40.0	14.2	80.0	3.0	1	1.0	0.4	2.0	2.0

Section Inspection - 21/09/2023 - MH102X

Item No. 108	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH102X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH102
Road:	Barrington Close	Inspected Length:	20.04 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.04 m	Downstream Node:	MH103
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:146	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: m MH102</p>	0.00	MH		Start node, manhole, reference: MH102: BURIED	00:00:00		
	0.00	WL		Water level, 10% of the vertical dimension	00:00:00		
	1.37	S01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:08		
	2.15		RF	Roots, fine	00:00:11		2
	4.98	F01	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:19		4 / 2
	10.51	S02	CL	Crack, longitudinal at 12 o'clock, start	00:00:26		
	11.01		CC	Crack, circumferential from 12 o'clock to 12 o'clock	00:00:27		2 / 2
	11.01	S03	RF	Roots, fine, start	00:00:27		
	11.70	F03	RF	Roots, fine, finish	00:00:29		2
	12.47	F02	CL	Crack, longitudinal at 12 o'clock, finish	00:00:31		2 / 2
	13.51	S04	RF	Roots, fine, start	00:00:35		
	14.65		RMJ	Roots, mass at joint, 30% cross-sectional area loss	00:00:35		5
	14.84	S05	RFJ	Roots, fine at joint, start	00:00:40		
	15.59		RT	Roots, tap	00:00:39		4
	16.56	F05	RFJ	Roots, fine at joint, finish	00:00:40		2

Section Inspection - 21/09/2023 - MH102X

Item No. 108	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH102X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:146	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH103</p>	16.96	F04	RF	Roots, fine, finish	00:00:42		2
	18.46		RM	Roots, mass, 15% cross-sectional area loss	00:00:45		3
	19.36	S06	RM	Roots, mass, 80% cross-sectional area loss, start	00:00:51		
	20.03	F06	RM	Roots, mass, 80% cross-sectional area loss, finish	00:00:59		5
	20.03		REM	General remark: MASS ROOTS IN MANHOLE	00:00:59		
	20.04		MHF	Finish node, manhole, reference: MH103	00:00:59		

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
3	80.0	0.2	350.0	4.0	11	20.0	0.0	54.0	5.0

Section Inspection - 21/09/2023 - MH103X

Item No. 109	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH103X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH103
Road:	Barrington Close	Inspected Length:	25.51 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	25.51 m	Downstream Node:	MH109
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:80	Position [m]	Code	Observation	MPEG	Photo	Grade	
	Depth: m							
	MH103	0.00	MH	Start node, manhole, reference: MH103	00:00:00			
		0.00	WL	Water level, 10% of the vertical dimension	00:00:01			
		0.38	SZ	Surface damage, other from 12 o'clock to 2 o'clock	00:00:05			
		0.38	RFJ	Roots, fine at joint	00:00:05		2	
		0.89	S01	CL	Crack, longitudinal at 12 o'clock, start	00:00:10		
		1.79	RFJ	Roots, fine at joint	00:00:10		2	
		1.79	F01	CL	Crack, longitudinal at 12 o'clock, finish	00:00:13		2 / 2
		1.79	S02	RF	Roots, fine, start	00:00:13		
		3.26	F02	RF	Roots, fine, finish	00:00:14		2
		3.26	S03	FS	Fracture, spiral from 12 o'clock to 5 o'clock, start	00:00:14		
		4.05	C03	FS	Fracture, spiral from 12 o'clock to 12 o'clock, change	00:00:15		
		5.20	RF	Roots, fine	00:00:18		2	
		5.44	F03	FS	Fracture, spiral from 12 o'clock to 12 o'clock, finish	00:00:21		4 / 2
	5.45	S04	CM	Cracks, multiple from 9 o'clock to 4 o'clock, start	00:00:21			
	8.29	JN	JN	Junction at 10 o'clock, 150mm dia	00:00:26			

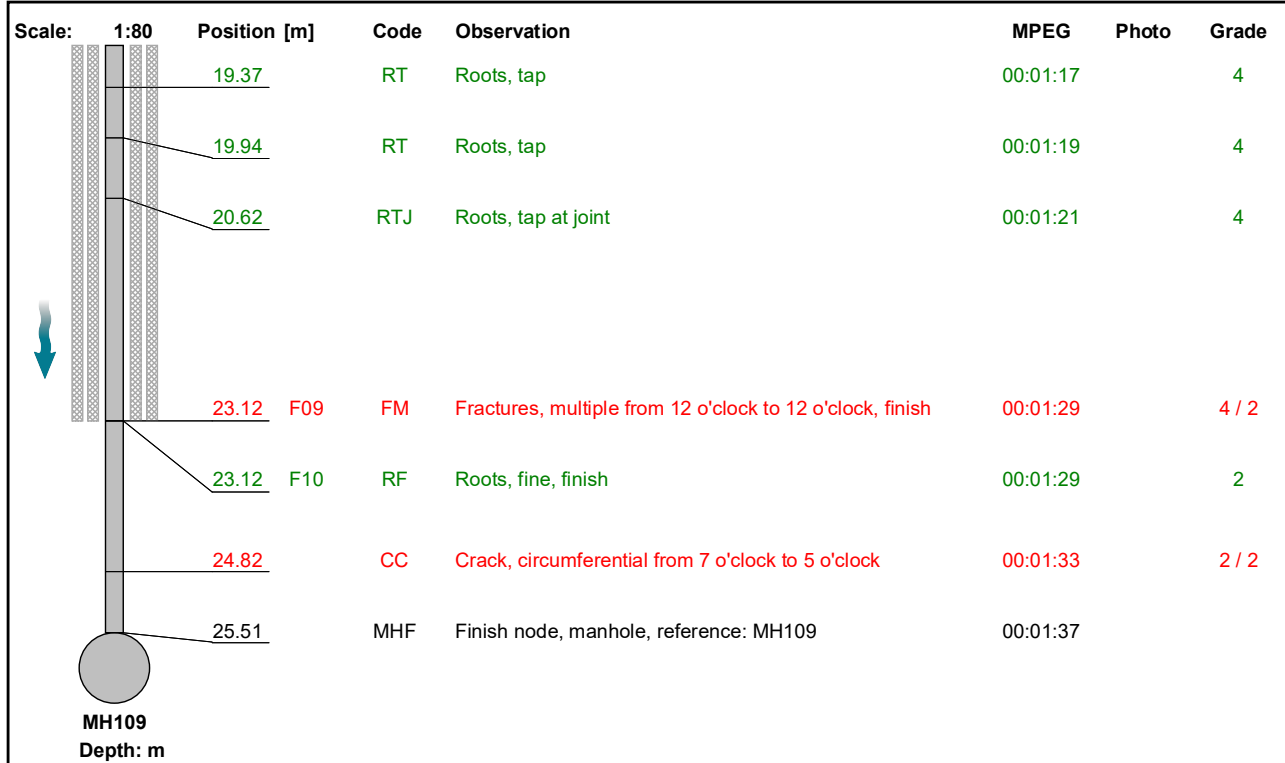
Section Inspection - 21/09/2023 - MH103X

Item No. 109	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH103X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:80	Position [m]	Code	Observation	MPEG	Photo	Grade
		10.15	B	Broken pipe from 3 o'clock to 5 o'clock	00:00:29	MH103X_f c04fbc2-a 940-4b29-	4
		10.15	RTJ	Roots, tap at joint	00:00:29		4
		10.57	CN	Connection other than junction at 10 o'clock, 150mm dia	00:00:30		
		11.67	S05 RFJ	Roots, fine at joint, start	00:00:39		
		11.91	JN	Junction at 2 o'clock, 150mm dia	00:00:39		
		12.11	S06 RF	Roots, fine, start	00:00:47		
		12.47	F05 RFJ	Roots, fine at joint, finish	00:00:47		2
		13.89	JN	Junction at 9 o'clock, 150mm dia	00:00:47		
		15.39	S07 CUW	Loss of vision, camera under water, start	00:01:01		
		15.39	F04 CM	Cracks, multiple from 9 o'clock to 4 o'clock, finish	00:01:01		3 / 2
		15.39	F06 RF	Roots, fine, finish	00:01:01		2
		16.30	F07 CUW	Loss of vision, camera under water, finish	00:01:10		
		16.31	S08 RT	Roots, tap, start	00:01:08		
		16.31	RTJ	Roots, tap at joint	00:01:08		4
		16.31	S09 FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:01:08		
		16.95	F08 RT	Roots, tap, finish	00:01:10		4
		17.12	S10 RF	Roots, fine, start	00:01:11		
		17.68	RTJ	Roots, tap at joint	00:01:13		4
		17.68	S11 RT	Roots, tap, start	00:01:13		
		18.42	F11 RT	Roots, tap, finish	00:01:14		4

Section Inspection - 21/09/2023 - MH103X

Item No. 109	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH103X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified



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
6	120.0	51.0	1300.0	4.0	20	12.0	3.1	78.0	5.0

Section Pictures - 21/09/2023 - MH103X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
109	Downstream	MH103X	10793	10793



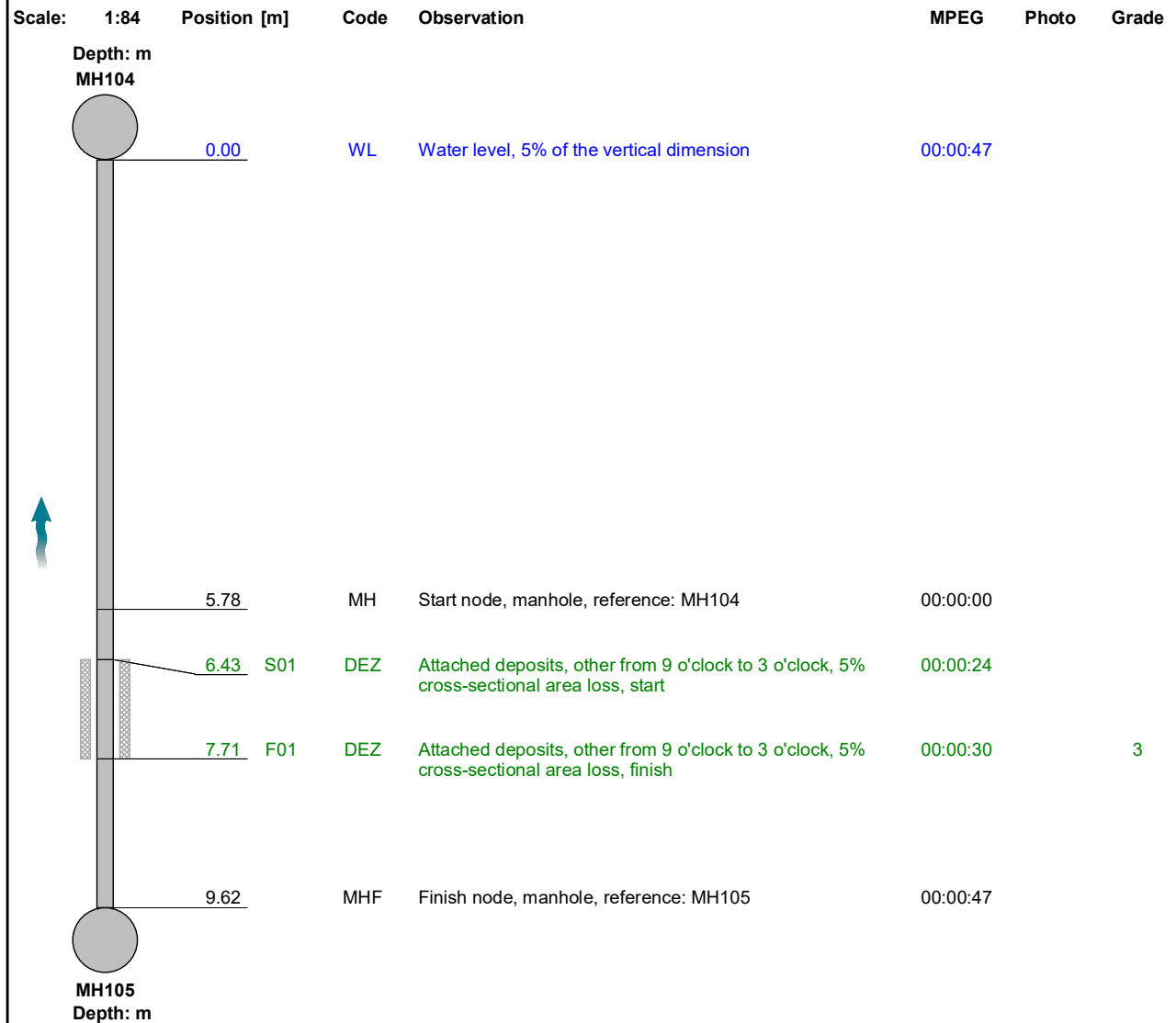
MH103X_fc04fbc2-a940-4b29-af7a-296cc7654755_20231010_114540_106.jpg, 00:00:29, 10.15 m
Broken pipe from 3 o'clock to 5 o'clock

Section Inspection - 21/09/2023 - MH105X

Item No. 110	Insp. No. 1	Date 21/09/23	Time 13:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH105X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH105
Road:	Barrington Close	Inspected Length:	9.62 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	9.62 m	Downstream Node:	MH104
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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	2.0	0.4	4.0	3.0

Section Inspection - 21/09/2023 - MH106X

Item No. 111	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH106X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH106
Road:	Barrington Close	Inspected Length:	34.06 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	34.06 m	Downstream Node:	MH107
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:295	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH106	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:00			
	0.04	CCJ	Crack, circumferential at joint from 8 o'clock to 4 o'clock	00:00:04		2 / 2	
	5.84	S01	Crack, longitudinal at 12 o'clock, start	00:00:21			
	7.41	CC	Crack, circumferential from 9 o'clock to 3 o'clock	00:00:25		2 / 2	
	7.41	F01	Crack, longitudinal at 12 o'clock, finish	00:00:29		2 / 2	
	8.66	CLJ	Crack, longitudinal at joint at 1 o'clock	00:00:29		2 / 2	
	8.87	JN	Junction at 11 o'clock, 150mm dia	00:00:29			
	11.64	CSJ	Cracks, spiral at joint from 12 o'clock to 12 o'clock	00:00:36		3 / 2	
	16.64	JN	Junction at 11 o'clock, 150mm dia	00:00:53			
	24.82	CN	Connection other than junction at 11 o'clock, 100mm dia	00:01:22			
	34.05	REM	General remark: MANHOLE FULL OF SILT	00:01:58			
	34.06	MHF	Finish node, manhole, reference: MH107	00:01:58			

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
5	40.0	2.6	90.0	3.0	5	2.0	0.2	6.0	3.0

Section Inspection - 21/09/2023 - MH107X

Item No. 112	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH107X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village: Kingswood	Inspection Direction: Downstream	Upstream Node: MH107
Road: Barrington Close	Inspected Length: 6.08 m	Upstream Pipe Depth:
Location: Property or buildings	Total Length: 32.00 m	Downstream Node: MH108
Surface Type:	Joint Length:	Downstream Pipe Depth:
Use: Surface water	Pipe Shape: Circular	
Type of Pipe: Gravity drain/sewer	Dia/Height: 150 mm	
Flow Control: No flow control	Material: Vitrified clay	
Year Constructed: Not Specified	Lining Type: No Lining	
Inspection Purpose: Routine inspection	Lining Material: No Lining	

Comments:
Recommendations:

Scale: 1:278	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>Depth: m MH107</p> <p>0.00</p> <p>0.01</p> <p>0.01 S01</p> <p>0.99</p> <p>0.99 RFJ</p> <p>5.85</p> <p>5.85 C01</p> <p>6.07</p> <p>6.07 F01</p> <p>6.08</p> <p>6.08 SA</p> <p>32.00</p> <p>MH108</p> <p>Depth: m</p> <p>End of pipe</p>	0.00	MH	Start node, manhole, reference: MH107	00:00:00		
	0.00	WL	Water level, 0% of the vertical dimension	00:00:05		
	0.01	S01	DES Settled deposits, fine, 5% cross-sectional area loss, start	00:00:05		
	0.99	RFJ	RFJ Roots, fine at joint	00:00:05		2
	5.85	C01	DES Settled deposits, fine, 50% cross-sectional area loss, change	00:00:17		
	6.07	F01	DES Settled deposits, fine, 50% cross-sectional area loss, finish	00:00:24		3
	6.08	SA	SA Survey abandoned: UNABLE TO PUSH FURTHER DUE TO SILT	00:00:24		

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		3.0	2.5	15.0	3.0

Section Inspection - 21/09/2023 - MH108X

Item No. 113	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH108X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH108
Road:	Barrington Close	Inspected Length:	5.38 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	6.00 m	Downstream Node:	MH103
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	150 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH108	00:00:00			
	0.00	WL	Water level, 0% of the vertical dimension	00:00:06			
	0.01	S01	RF	Roots, fine, start	00:00:00		
	0.28	RFJ	Roots, fine at joint	00:00:06		2	
	0.28	F01	RF	Roots, fine, finish	00:00:06		2
	1.43	LL	Line deviates left: SLIGHT	00:00:08			
	1.68	CC	Crack, circumferential from 7 o'clock to 5 o'clock	00:00:09		2 / 2	
	1.68	RF	Roots, fine	00:00:09		2	
	2.35	LL	Line deviates left	00:00:11			
	3.84	S03	RF	Roots, fine, start	00:00:00		
	3.84	RTJ	Roots, tap at joint	00:00:13		4	
	4.11	F03	RF	Roots, fine, finish	00:00:29		2
	5.10	JN	Junction at 10 o'clock, 150mm dia	00:00:30			
	5.10	S04	RT	Roots, tap, start: GROWING FROM JUNCTION	00:00:30		
	5.37	F04	RT	Roots, tap, finish: GROWING FROM JUNCTION	00:00:41		4

Section Inspection - 21/09/2023 - MH108X

Item No. 113	Insp. No. 1	Date 21/09/23	Time 13:38	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH108X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	Position [m]	Code	Observation	MPEG	Photo	Grade
1:50	5.38	SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO TAP ROOT	00:00:41		
	6.00		End of pipe			

MH103
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
1		10.0	1.9	10.0	2.0	7		6.0	2.8	15.0	4.0

Section Inspection - 21/09/2023 - MH109X

Item No. 114	Insp. No. 1	Date 21/09/23	Time 13:39	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH109X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH109
Road:	Barrington Close	Inspected Length:	20.10 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.10 m	Downstream Node:	MH49
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:87	Position [m]	Code	Observation	MPEG	Photo	Grade
	Depth: m						
	MH109	0.00	MH	Start node, manhole, reference: MH109	00:00:00		
		0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
		0.01	S01	CM Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:05		
		1.05	RFJ	Roots, fine at joint	00:00:06		2
		2.52	S02	B Broken pipe from 12 o'clock to 12 o'clock, start	00:00:08	MH109X_4b2bd999-5c50-4281	
		2.52	F01	CM Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:08		3 / 2
		2.52	S03	D Deformed sewer or drain, 10%, start	00:00:08		
		2.52	RFJ	Roots, fine at joint	00:00:09		2
		4.08	RF	Roots, fine	00:00:12		2
		4.67	F02	B Broken pipe from 12 o'clock to 12 o'clock, finish	00:00:14		4
		4.67	F03	D Deformed sewer or drain, 10%, finish	00:00:14		4 / 3
		4.67	S04	FM Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:14		
		6.96	S05	D Deformed sewer or drain, 10%, start	00:00:20		
		8.71	C05	D Deformed sewer or drain, 15%, change	00:00:24		
	10.00	F04	FM Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:28		4 / 2	

Section Inspection - 21/09/2023 - MH109X

Item No. 114	Insp. No. 1	Date 21/09/23	Time 13:39	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH109X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:87	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH49 Depth: m</p>	10.01	S06	B	Broken pipe from 12 o'clock to 12 o'clock, start	00:00:28	MH109X_0fd30f89-2d30-4b81-	
	10.85	F05	D	Deformed sewer or drain, 15%, finish	00:00:30		4 / 3
	10.85	F06	B	Broken pipe from 12 o'clock to 12 o'clock, finish	00:00:30		4
	10.86	S07	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:33		
	15.17	JN		Junction at 2 o'clock, 150mm dia	00:00:41		
	15.42	RFJ		Roots, fine at joint	00:00:42		2
	15.79	CN		Connection other than junction at 1 o'clock, 150mm dia	00:00:43		
	18.52	F07	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:49		4 / 2
	18.52	WL		Water level, 10% of the vertical dimension	00:00:49		
	20.10	MHF		Finish node, manhole, reference: MH49	00:00:57		

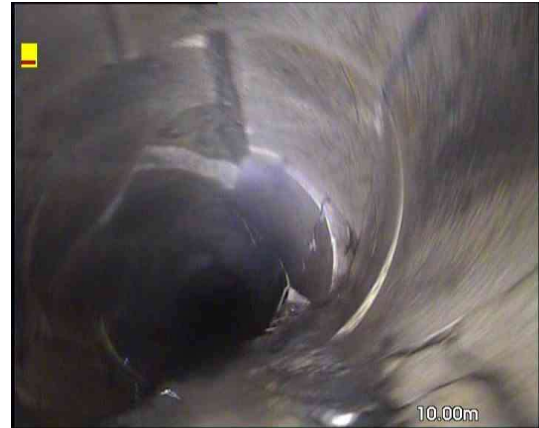
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
7	320.0	105.5	2120.0	4.0	9	4.0	1.7	35.0	3.0

Section Pictures - 21/09/2023 - MH109X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
114	Downstream	MH109X	10793	10793



MH109X_4b2bd999-5c50-4281-97c5-ff718d8d337c_20231010_124514_836.jpg, 00:00:08, 2.52 m
Broken pipe from 12 o'clock to 12 o'clock, start



MH109X_0fd30f89-2d30-4b81-8da3-756a7e1c8300_20231010_124744_483.jpg, 00:00:28, 10.01 m
Broken pipe from 12 o'clock to 12 o'clock, start

Section Inspection - 21/09/2023 - MH110X

Item No. 115	Insp. No. 1	Date 21/09/23	Time 13:39	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH110X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH110
Road:	Barrington Close	Inspected Length:	20.13 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	20.13 m	Downstream Node:	MH43
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:123	Position [m]	Code	Observation	MPEG	Photo	Grade	
	Depth: m							
	MH110	0.00	MH	Start node, manhole, reference: MH110	00:00:00			
		0.00	WL	Water level, 10% of the vertical dimension	00:00:06			
		0.93	S02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, start	00:00:06		
		1.13	S01	RF	Roots, fine, start	00:00:07		
		2.13		RFJ	Roots, fine at joint	00:00:07		2
		2.50	F02	CM	Cracks, multiple from 12 o'clock to 12 o'clock, finish	00:00:08		3 / 2
		2.50	F01	RF	Roots, fine, finish	00:00:11		2
		4.13	S03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:11		
		4.51	S04	D	Deformed sewer or drain, 5%, start	00:00:15		
		5.82	F04	D	Deformed sewer or drain, 5%, finish	00:00:19		2 / 2
		7.69	F03	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:19		4 / 2
		9.27		BJ	Broken pipe at joint from 11 o'clock to 3 o'clock	00:00:22	MH110X_89f44c82-90f9-47f9-	4
		9.58	S05	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:22		
	11.13	F05	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish	00:00:26		4 / 2	
	12.76		RFJ	Roots, fine at joint	00:00:28		2	

Section Inspection - 21/09/2023 - MH110X

Item No. 115	Insp. No. 1	Date 21/09/23	Time 13:39	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH110X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:123	Position [m]	Code	Observation	MPEG	Photo	Grade
	15.43	RFJ	Roots, fine at joint	00:00:34		2	
	15.56	FL	Fracture, longitudinal at 4 o'clock	00:00:35		3 / 2	
	15.56	IRJ	Infiltration, running at joint at 4 o'clock	00:00:35			
	16.53	FC	Fracture, circumferential from 3 o'clock to 9 o'clock	00:00:40		3 / 2	
	17.06	RFJ	Roots, fine at joint	00:00:42		2	
	17.06	S06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, start	00:00:42		
	18.76	F06	FM	Fractures, multiple from 12 o'clock to 12 o'clock, finish			4 / 2
20.13	MHF	Finish node, manhole, reference: MH43	00:00:00				

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
8	160.0	45.7	920.0	4.0	12	3.0	1.0	20.0	3.0

Section Pictures - 21/09/2023 - MH110X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
115	Downstream	MH110X	10793	10793



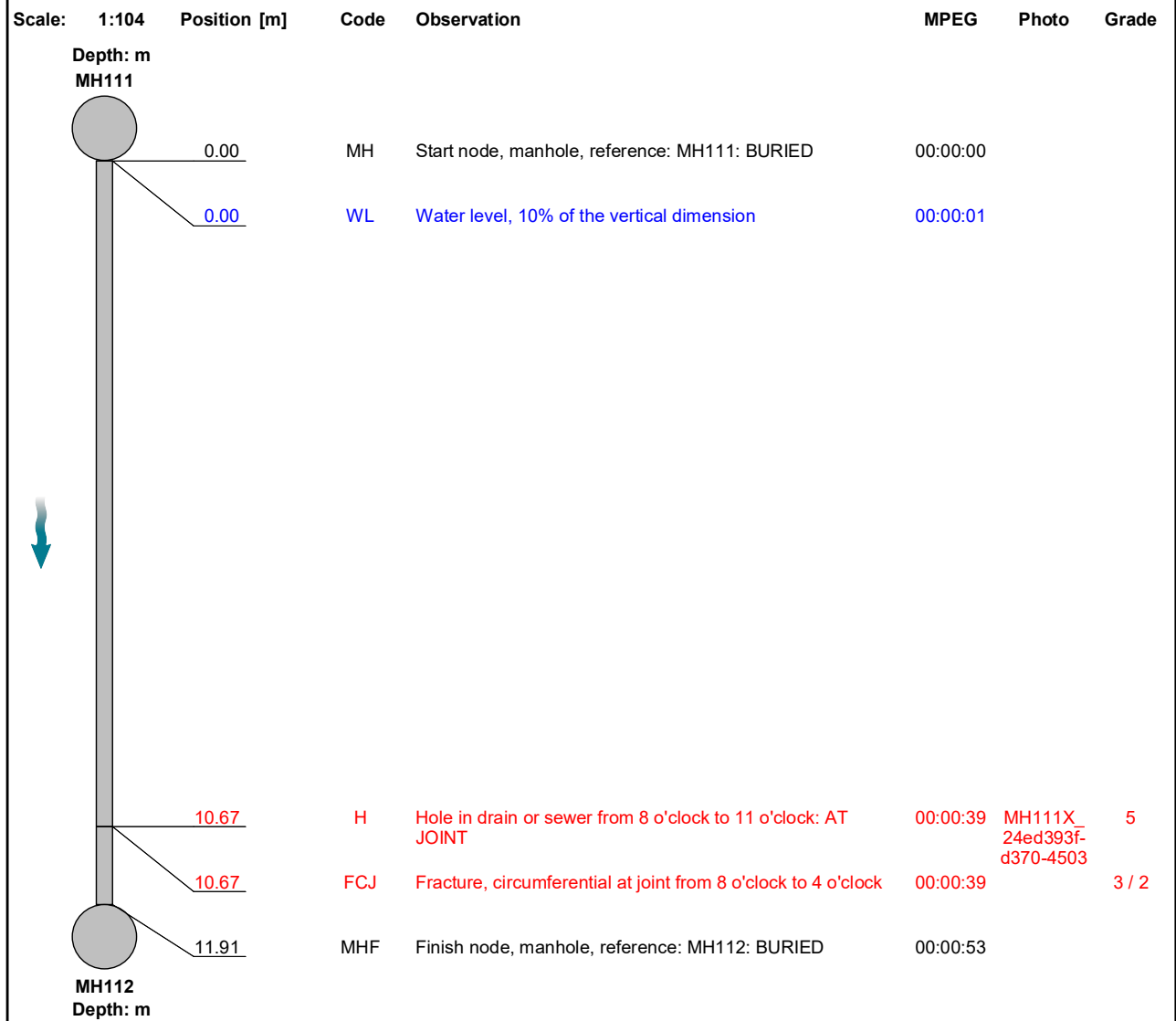
MH110X_89f44c82-90f9-47f9-b718-c8fdcbcd1237_20231010_130203_874.jpg, 00:00:22, 9.27 m
Broken pipe at joint from 11 o'clock to 3 o'clock

Section Inspection - 21/09/2023 - MH111X

Item No. 116	Insp. No. 1	Date 21/09/23	Time 13:39	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH111X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH111
Road:	Barrington Close	Inspected Length:	11.91 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	11.91 m	Downstream Node:	MH112
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



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
2	205.0	17.2	205.0	5.0	1	1.0	0.1	1.0	2.0

Section Pictures - 21/09/2023 - MH111X

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
116	Downstream	MH111X	10793	10793



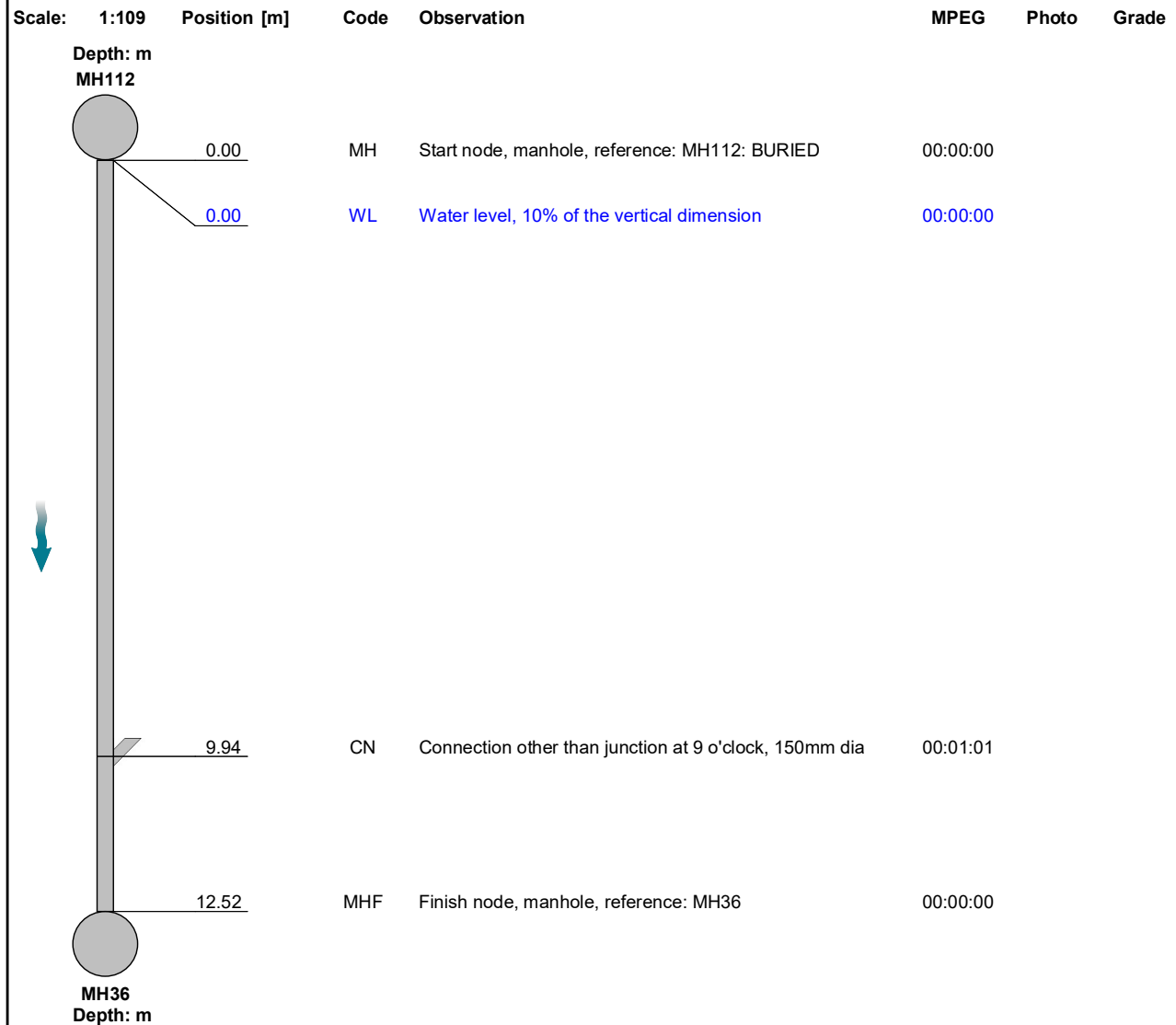
MH111X_24ed393f-d370-4503-8dd2-ed27a5e1a155_20231010_130829_433.jpg, 00:00:39, 10.67 m
Hole in drain or sewer from 8 o'clock to 11 o'clock, AT JOINT

Section Inspection - 21/09/2023 - MH112X

Item No. 117	Insp. No. 1	Date 21/09/23	Time 13:40	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH112X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH112
Road:	Barrington Close	Inspected Length:	12.52 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.52 m	Downstream Node:	MH36
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



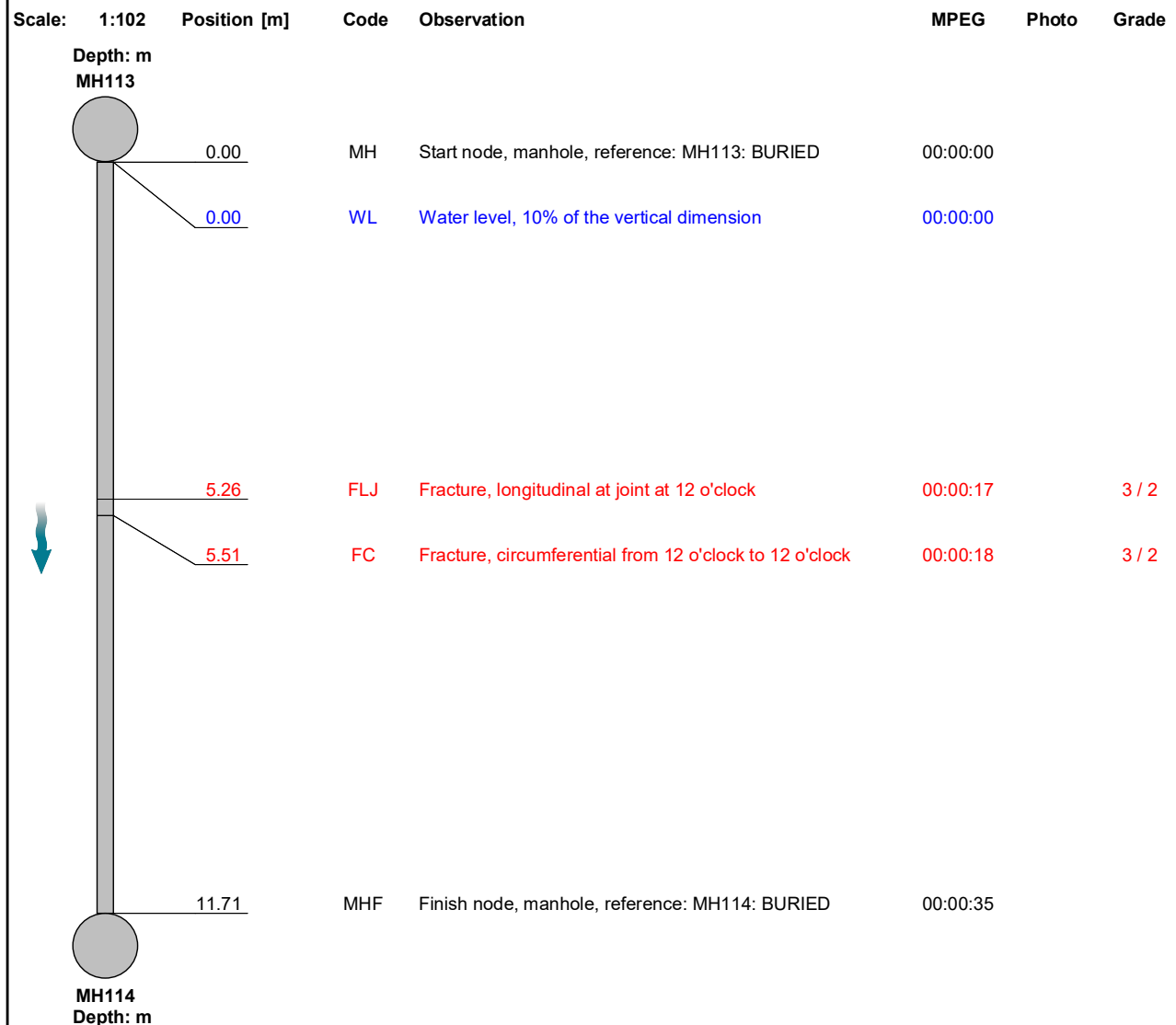
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

Section Inspection - 21/09/2023 - MH113X

Item No. 118	Insp. No. 1	Date 21/09/23	Time 13:40	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH113X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH113
Road:	Barrington Close	Inspected Length:	11.71 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	11.71 m	Downstream Node:	MH114
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:



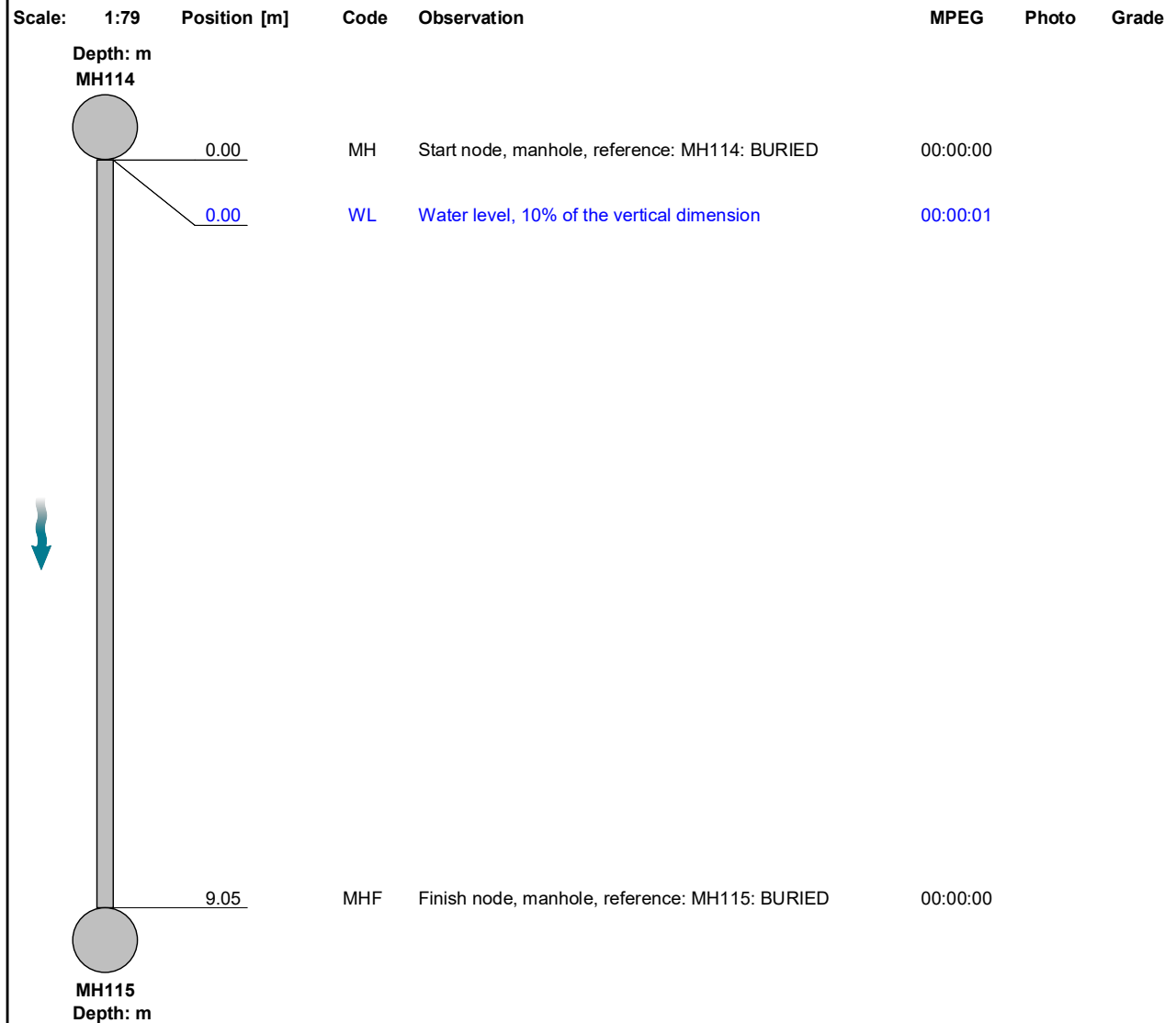
Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	80.0	6.8	80.0	3.0	2	2.0	0.2	2.0	3.0

Section Inspection - 21/09/2023 - MH114X

Item No. 119	Insp. No. 1	Date 21/09/23	Time 13:40	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH114X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH114
Road:	Barrington Close	Inspected Length:	9.05 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	9.05 m	Downstream Node:	MH115
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular	Dia/Height:	225 mm
Type of Pipe:	Gravity drain/sewer	Material:	Vitrified clay	Lining Type:	No Lining
Flow Control:	No flow control	Lining Material:	No Lining		
Year Constructed:	Not Specified				
Inspection Purpose:	Routine inspection				

Comments:
Recommendations:



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

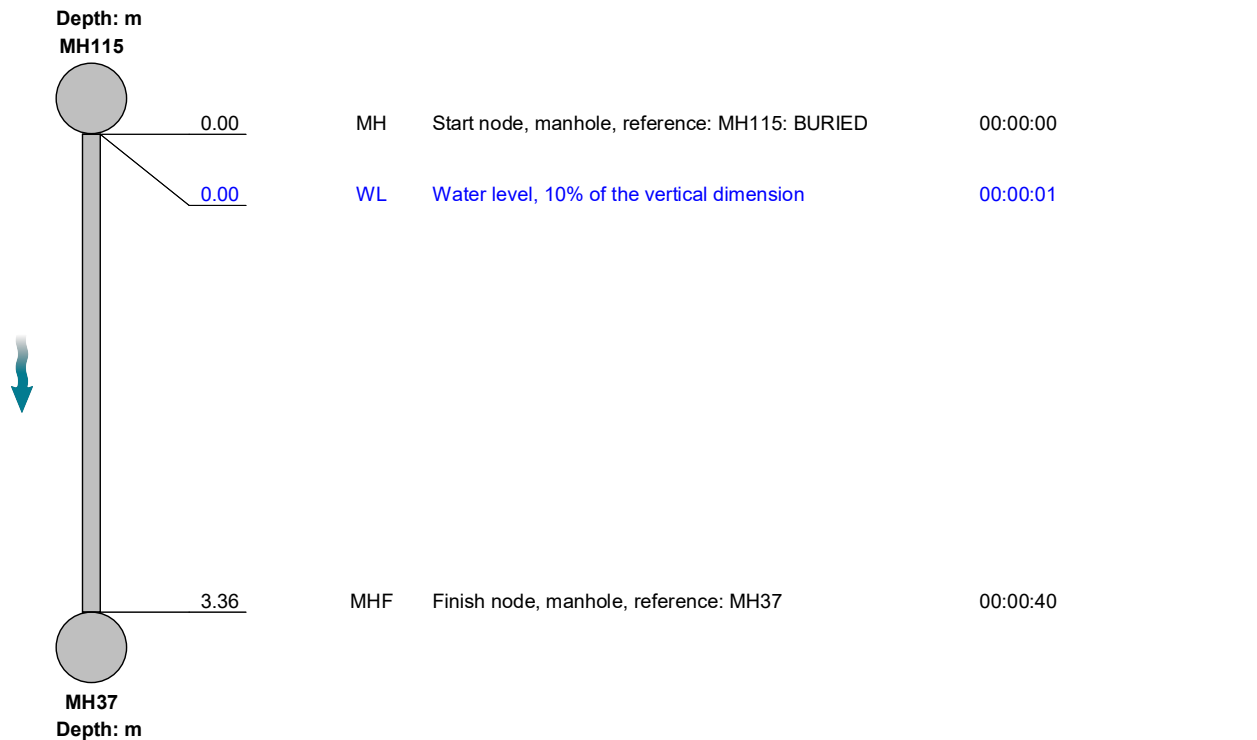
Section Inspection - 21/09/2023 - MH115X

Item No. 120	Insp. No. 1	Date 21/09/23	Time 13:40	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH115X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Downstream	Upstream Node:	MH115
Road:	Barrington Close	Inspected Length:	3.36 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	3.36 m	Downstream Node:	MH37
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	225 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale: 1:50 Position [m] Code Observation MPEG Photo 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	0	0.0	0.0	0.0	1.0

Section Inspection - 13/11/2023 - USX

Item No. 121	Insp. No. 1	Date 13/11/23	Time 15:37	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR USX
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	US
Road:	Barrington Close	Inspected Length:	12.29 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	12.29 m	Downstream Node:	MH93 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:107	Position [m]	Code	Observation	MPEG	Photo	Grade
	Depth: m MH93 (a)	0.00	MH	Start node, manhole, reference: MH93 (a)	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00			
	2.04	JN	Junction at 2 o'clock, 100mm dia	00:00:10			
	5.40	S01	DEZ	Attached deposits, other from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, start	00:00:22		
	5.40	WL	Water level, 10% of the vertical dimension	00:00:25			
	7.38	F01	DEZ	Attached deposits, other from 7 o'clock to 5 o'clock, 5% cross-sectional area loss, finish	00:00:30		3
	12.28	DEX	Settled deposits, other, 90% cross-sectional area loss	00:00:48	USX_01b4 1d0b-e175 -4bf8-9f72-	5	
	12.29	SA	Survey abandoned: UNABLE TO PUSH FURTHER DUE TO RUN BEING BLOCKED WITH DEBRIS	00:02:21			

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	10.0	1.1	14.0	5.0

Section Pictures - 13/11/2023 - USX

Item No.	Inspection Direction	PLR	Client's Job Ref	Contractor's Job Ref
121	Upstream	USX	10793	10793



USX_01b41d0b-e175-4bf8-9f72-47c53c03f0bb_20231129_075333_931.jpg, 00:00:48, 12.28 m
Settled deposits, other, 90% cross-sectional area loss

Section Inspection - 13/11/2023 - MH200X

Item No. 122	Insp. No. 1	Date 13/11/23	Time 15:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH200X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Kingswood	Inspection Direction:	Upstream	Upstream Node:	MH200
Road:	Barrington Close	Inspected Length:	15.87 m	Upstream Pipe Depth:	
Location:	Property or buildings	Total Length:	15.87 m	Downstream Node:	MH109 (A)
Surface Type:		Joint Length:		Downstream Pipe Depth:	
Use:	Surface water	Pipe Shape:	Circular		
Type of Pipe:	Gravity drain/sewer	Dia/Height:	100 mm		
Flow Control:	No flow control	Material:	Vitrified clay		
Year Constructed:	Not Specified	Lining Type:	No Lining		
Inspection Purpose:	Routine inspection	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:123	Position [m]	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node, manhole, reference: MH109 (a)	00:00:00			
	0.00	WL	Water level, 5% of the vertical dimension	00:00:01			
	0.24	WL	Water level, 5% of the vertical dimension	00:00:06			
	0.24	LR	Line deviates right	00:00:06			
	0.73	WL	Water level, 10% of the vertical dimension	00:00:09			
	0.73	S03	DEZ	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, start	00:00:13		
	0.83	S01	RF	Roots, fine, start	00:00:12		
	0.83	S02	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:12		
	1.03	WL	Water level, 15% of the vertical dimension	00:00:17			
	1.80	F01	RF	Roots, fine, finish	00:00:23		2
	1.90	F03	DEZ	Attached deposits, other from 8 o'clock to 4 o'clock, 5% cross-sectional area loss, finish	00:00:23		3
	1.90	F02	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:23		3
	2.96	WL	Water level, 10% of the vertical dimension	00:00:40			
	3.96	WL	Water level, 5% of the vertical dimension	00:00:42			
	13.49	CC	Crack, circumferential from 2 o'clock to 9 o'clock	00:02:06		2 / 2	

Section Inspection - 13/11/2023 - MH200X

Item No. 122	Insp. No. 1	Date 13/11/23	Time 15:35	Client's Job Ref 10793	Weather No Rain Or Snow	Pre Cleaned No	PLR MH200X
Operator JH		Vehicle Ford Transit		Camera Solo Pro/Crawler	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Scale:	1:123	Position [m]	Code	Observation	MPEG	Photo	Grade
<p>MH200 Depth: m</p>	14.85	JDM	Joint displaced, medium	00:02:43		1 / 3	
	15.87	MHF	Finish node, manhole, reference: MH200	00:03:25			

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
2	10.0	0.7	11.0	2.0	5	5.0	0.8	12.0	4.0