

APPENDIX A - TABLE E14.1: SITE SPECIFIC DESIGN CONDITIONS AND REPAIR REQUIREMENTS PRIOR TO PERFORMING SEWER LINING

Bower Boulevard (Asset No. MA60004428) Land Drainage Sewer	1st MH N of Mountbatten Ave (MH60003222) to 2nd MH N of Mountbatten Ave (MH60003227)
Drawng Number	13055
Size / Shape	750mm Circular
Material Type	Concrete
Total Length	95.8m
Maximum Sewer Depth to Invert	3.66m
Design Condition	Fully Deteriorated Ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH60003222 (m)	
2.1	Remove encrustation below connection from 3:00 to 6:00
12.7	Remove encrustation below connection from 7:00 to 9:00
14.1	Remove roots from joint at 7:00
24.7	Remove encrustation below connection from 2:00 to 5:00
28.7	Remove encrustation below connection from 2:00 to 6:00
34.8	Remove encrustation below connection from 6:00 to 10:00
40.9	Remove roots from joint
47	Caution: WWS service running through crown of pipe
47	Remove encrustation from pipe wall from 1:00 to 11:00
48	Remove encrustation below connection from 6:00 to 9:00
54.5	Remove encrustation below connection from 3:00 to 6:00
66.3	Remove encrustation below connection from 6:00 to 9:00
79.5	Remove encrustation below connection from 3:00 to 6:00

Sargent Avenue (Asset No. MA20009893)	MH at Dundas St (MH20009064) to Tee at Milt Stegal Dr
Combined Sewer	
Drawng Number	13056
Size / Shape	750mm Circular
Material Type	Concrete
Total Length	84.6m
Maximum Sewer Depth to Invert	6.13m
Design Condition	Fully Deteriorated Ovality 7%
Site Specific Repairs	
Location	Action Required
Distance From MH20009064 (m)	
4.8	Remove encrustation at joint from 11:00 to 2:00
5.9	Remove encrustation at joint from 11:00 to 2:00
7.2	Remove encrustation from joint at 12:00
8.2	Remove encrustation from pipe wall from 9:00 to 12:00
9.2	Remove encrustation from pipe wall at 12:00
9.7	Remove encrustation from pipe wall at 2:00
10.1	Remove encrustation at joint from 9:00 to 1:00
14.2	Remove encrustation from pipe wall from 9:00 to 2:00
15	Remove encrustation from pipe wall from 11:00 to 5:00
15.7	Remove encrustation from pipe wall from 6:00 to 6:00
17.0 To 19.0	Remove encrustation from pipe wall from 6:00 to 6:00
20.4	Remove encrustation below connection from 2:00 to 5:00
21.2 to 23.6	Remove encrustation from pipe wall from 6:00 to 6:00
24.4	Remove encrustation at joint from 9:00 to 12:00
25	Remove encrustation below connection from 7:00 to 10:00
25.3 to 28.7	Remove encrustation from pipe wall
29.3	Remove encrustation at joint from 9:00 to 3:00
30.6	Remove encrustation at joint from 9:00 to 3:00
31.6	Remove encrustation at joint
32.5	Remove encrustation at joint
33.9 to 39.0	Remove encrustation from pipe wall
40.9	Remove encrustation at joint
41.9	Remove encrustation at joint
42.8	Remove encrustation at joint
44.7	Remove encrustation at joint
45.9	Remove encrustation at joint
47.8	Remove encrustation at joint
52	Remove encrustation at joint
52.1	Remove encrustation from pipe wall
53.1	Remove encrustation from pipe wall
54.2	Remove encrustation at joint
55.1	Remove encrustation at joint
55	Remove encrustation from pipe wall at 12:00
56	Remove encrustation at joint
56.8	Remove encrustation at joint
57.8	Remove encrustation at joint
60	Remove encrustation at joint
62.5	Remove encrustation at joint
70.0 to 71.0	Remove encrustation from pipe wall
74	Remove encrustation below connection from 2:00 to 5:00
74	Remove encrustation below connection from 7:00 to 10:00
74.7	Remove encrustation at joint
76.2 to 77.2	Remove encrustation from pipe wall
78.1	Remove encrustation below connection from 7:00 to 10:00
78.1	Remove roots from pipe joint
78.7	Remove encrustation at joint
79.8	Remove encrustation at joint
80.4	Remove encrustation from pipe wall at 9:00
80.7	Note: bend in mainline pipe
84.5	Remove encrustation from pipe wall at 5:00

Cecil Street (Asset No. MA20011968)	MH at Roy Ave (MH20010899) to MH at Pacific Avenue (MH20010900)
Combined Sewer	
Drawng Number	13057
Size / Shape	750mm Circular
Material Type	Concrete
Total Length	38.0m
Maximum Sewer Depth to Invert	4.68m
Design Condition	Fully Deteriorated Ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH20010899 (m)	
0.0 to 0.3	Remove encrustation from pipe wall
2.5 to 8.1	Remove encrustation from pipe wall
9.4 to 15.8	Remove encrustation from pipe wall
13.9	Remove metal debris from pipe invert
17.5 to 24.5	Remove encrustation from pipe wall
27	Remove encrustation from pipe wall from 12:00 to 4:00
28.9 to 36.1	Remove encrustation from pipe wall

Colony Street (Asset No. MA20016628)	MH at Balmoral St (MH20014958) to 1st MH N of Portage Ave (MH20014928)
Combined Sewer	
Drawng Number	13058
Size / Shape	800mm x 1200mm egg
Material Type	Brick
Total Length	137.2m
Maximum Sewer Depth to Invert	5.74m
Design Condition	Fully Deteriorated
Site Specific Repairs	
Location	Action Required
Distance From MH20014958 (m)	
3.0 to 26.6	Remove encrustation from pipe wall at 4:00 and 8:00
16.4	Remove encrustation below connection from 8:00 to 10:00
18.8	Remove encrustation below connection from 2:00 to 5:00
22	Remove encrustation below connection from 8:00 to 10:00
26.6	Remove encrustation below connection from 3:00 to 5:00
30.4	Remove encrustation below connection from 8:00 to 10:00
35	Remove encrustation below connection from 9:00 to 10:00
38.5	Remove encrustation below connection from 8:00 to 10:00
41.6	Remove encrustation below connection at 3:00
44.6	Remove encrustation below connection from 7:00 to 9:00
47.9 to 57.5	Remove grease from pipe wall at 4:00 and 8:00
50	Note: bend in main
52.2	Remove encrustation below connection at 9:00
56.5	Remove encrustation below connection at 10:00
74.7	Remove encrustation below connection from 1:00 to 6:00
74.9	Remove encrustation below connection from 6:00 to 11:00
74.9	Sewer Service Grouting prior to lining at 11:00
85.9	Remove encrustation below connection from 3:00 to 5:00
102.9	Remove encrustation below connection from 2:00 to 5:00
117.3	Remove encrustation below connection from 3:00 to 5:00
122.6	Remove encrustation below connection from 3:00 to 5:00
128.6	Remove encrustation from pipe wall at 11:00
132.5	Remove encrustation below connection from 7:00 to 9:00

Gauvin Street (Asset No. MA50004057)	1st MH S of Coniston St (MH50003521) to 2nd MH S of Coniston St (MH50003522)
Combined Sewer	
Drawng Number	13059
Size / Shape	600mm Circular
Material Type	Concrete
Total Length	61.0m
Maximum Sewer Depth to Invert	4.54m
Design Condition	Fully Deteriorated Ovality 4%
Site Specific Repairs	
Location	Action Required
Distance From MH50003521 (m)	
3	Remove intruding service at 10:00
3	Remove encrustation below connection from 7:00 to 9:00
6.1	Remove encrustation from joint at 5:00 to 7:00
7	Remove encrustation from joint at 4:00 to 8:00
8	Remove encrustation from joint at 4:00 to 7:00
9	Remove encrustation from joint at 4:00 to 7:00
11.8	Remove encrustation from joint at 8:00
13.7	Remove intruding service at 2:00
13.7	Remove encrustation from pipe wall at 5:00
19.4	Remove encrustation from joint
20.2	Remove encrustation from joint
21.1	Remove encrustation from joint
23.1	Remove encrustation from joint
24.1	Remove encrustation from joint
25	Remove encrustation from joint
29.7	Remove encrustation from joint
30.7	Remove encrustation from joint
31.4 to 31.9	Remove encrustation from pipe wall at 8:00
31.8	Remove intruding service at 11:00
32.4	Remove encrustation from joint
33.4	Remove encrustation from joint
34.4	Remove encrustation from joint
34.4 to 36.9	Remove encrustation from pipe wall from 3:00 to 5:00
36.9	Remove encrustation below connection at 2:00
39.2 to 40.9	Remove grease from pipe wall
40.1	Remove encrustation from joint
40.9	Remove encrustation from joint
41.3	Remove encrustation from pipe wall fat 8:00
41.9	Remove encrustation from joint
42.8	Remove encrustation from joint
42.8 to 46.6	Remove grease from pipe wall
43.9	Remove encrustation from joint
44.9	Remove encrustation from joint
45.8	Remove encrustation from joint
46.6	Remove encrustation from joint
46.7	Note: pipe diameter Change
47.7	Remove intruding service at 10:00
48.3	Remove intruding service at 2:00
49.3	Note: pipe diameter Change
50.6	Remove roots from pipe joint
50.8	Remove intruding service at 2:00
51.7	Remove roots from pipe joint
52.8	Remove roots from pipe joint
54	Remove encrustation from joint
55.1	Remove encrustation from joint
56.9	Remove encrustation from joint
58.9	Remove encrustation from joint

Hill Street (Asset No. MA50007514)	MH at Niverville Ave (MH50006432) to 1st MH S of Niverville Ave (MH50006439)
Combined Sewer	
Drawng Number	13060
Size / Shape	600mm Circular
Material Type	Concrete
Total Length	93.5m
Maximum Sewer Depth to Invert	6.61m
Design Condition	Fully Deteriorated Ovality 5%
Site Specific Repairs	
Location	Action Required
Distance From MH50006432 (m)	
11.1	Remove encrustation below connection from 7:00 to 11:00
18	Remove intruding service at 11:00
22.1	Remove roots at connection at 12:00
35.5	Remove encrustation from joint
35.6	Remove encrustation from pipe wall
35.7	Remove intruding service at 2:00
37.1 to 38.2	Remove encrustation from pipe wall
47.1	Remove roots at connection at 11:00
58.0 to 58.5	Remove encrustation from pipe wall
62	Remove intruding service at 11:00
62	Remove encrustation below connection from 7:00 to 11:00
75.7 to 76.7	Remove encrustation from pipe wall from 2:00 to 5:00
76.6	Remove roots at connection at 1:00
78.4	Remove intruding service at 11:00
81.0 to 82.0	Remove encrustation from pipe wall from 2:00 to 5:00
85.7 to 86.7	Remove encrustation from pipe wall from 7:00 to 5:00
86.6	Remove roots at connection at 1:00

Brazier Street (Asset No. MA40006736)	MH at Greene Ave (MH40006193) to MH at Linden Ave (MH40006162)
Combined Sewer	
Drawng Number	13061
Size / Shape	900mm Circular
Material Type	Clay
Total Length	80.2m
Maximum Sewer Depth to Invert	5.4m
Design Condition	Fully Deteriorated ovality 9%
Site Specific Repairs	
Location	Action Required
Distance From MH40006193 (m)	
0 to 80.1	Remove encrustation from pipe wall
34.6	Remove intruding service at 2:00
34.6	Remove encrustation below connection from 2:00 to 3:00
52	Remove encrustation at connection at 2:00
52.1	Remove encrustation at connection at 10:00
59	Remove encrustation at connection at 2:00
59	Remove encrustation at connection at 10:00
60.3	Remove roots from joint at 12:00
80.1m	Caution: wier wall at manhole connection

Day Street (Asset No. MA40012891) Land Drainage Sewer	MH at McMeans Ave (MH40011664) to MH at Thom Avenue (MH40011703)
Drawng Number	13062
Size / Shape	750mm Circular
Material Type	Concrete
Total Length	170.3m
Maximum Sewer Depth to Invert	3.84m
Design Condition	Partially Deteriorated ovality 4%
Site Specific Repairs	
Location	Action Required
Distance From MH40011664 (m)	
4.9	Remove encrustation from joint
5.5	Remove encrustation below connection from 7:00 to 10:00
5.5	Remove intruding service at 11:00
16	Remove encrustation from pipe joint from 4:00 to 6:00
54.1	Remove encrustation from joint at 7:00
85	Remove encrustation below connection from 3:00 to 5:00
119.2	Remove and renew existing sewer service, EPR fom 118.4 to 120.4
131.4	Remove and renew existing sewer service, EPR from 129.4 to 131.4
148.1	Remove encrustation from pipe wall from 5:00 to 7:00