Hillside community centre
Hillside
Stowmarket
IP14 2BD

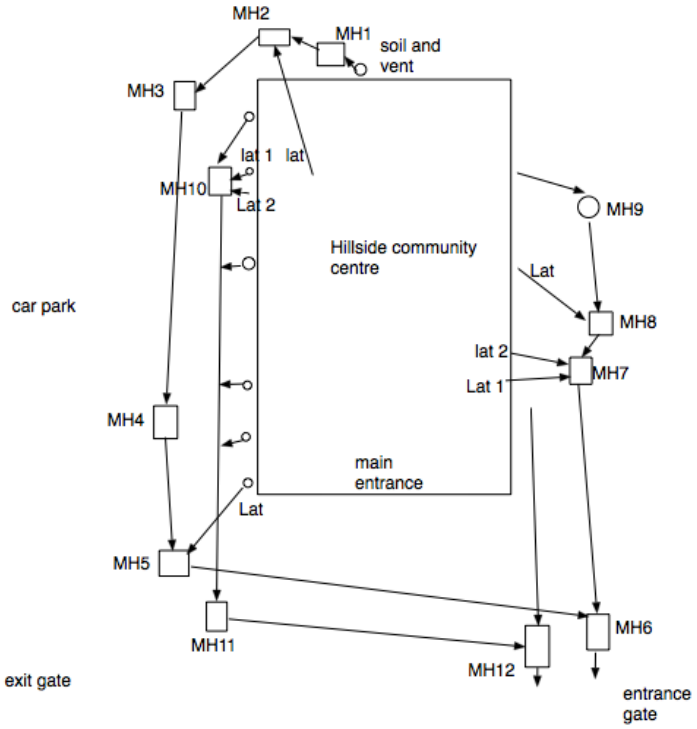
1. DESCRIPTION OF PROPERTY
Community centre

2. DRAINAGE SYSTEM
This is a foul drainage system accessible by 12 manholes, the foul pipework is circular in shape, 100mm in diameter and UPVC and clay material.

3. SHARED
The sections identified within the property boundary are for the sole use of this property and therefore the responsibility of the property owner to maintain.
The sections as shared or beyond the property boundary generally are the legal responsibility of the local water company to maintain.

4. CIRCUMSTANCES
General inspection prior to resurfacing car park.

5. CAUSE AND EXTENT OF DAMAGE
The surveyed network does have faults, details are shown in the survey notes.



CCTV SURVEY REPORT INTRODUCTION
This survey report was commissioned to find out the condition of the drainage system. The surveyed network consists of 100mm UPVC pipework.
On arrival to carry out the survey the network was not blocked and not cleaned prior to survey.

CHAMBERS	INVERT DEPTH	LOCATION	CONDITION
MH1	0.27m	At rear of centre	Serviceable
MH2	0.38m	At rear of centre	Serviceable
MH3	0.58m	In car park area	Serviceablewith a dead leg upstream
MH4	1.2m	In car park area	Serviceablewith a dead leg
MH5	1.32m	In car park area	Serviceablewith a dead leg
MH6	1.25m	Adjacent to entrance gate	Serviceable
MH7	0.27m	Adjacent to nursery	Serviceable
MH8	0.9m	Adjacent to nursery	Serviceable
MH9	0.55m	Adjacent to shed	Serviceable, laterals not terminated correctly.
MH10	0.4m	In car park area	Serviceable
MH11	1.25m	In car park area	Serviceablewith a dead leg
MH12	1.35m	Adjacent to entrance gate	Serviceable

SURVEY REPORT

Section 1) MH1 upstream
Size 100mm / Material UPVC

0.00m Survey start
0.46m ends at rest bend

Section 2) MH1 downstream MH2
Size 100mm / Material clay

0.00m survey start
0.34m open joint
2.74m ends at MH2

Section 3) MH2 upstream Lat
Size 100mm / Material clay

0.00m start
0.27m multiple fracture
1.25m junction at 12 o'clock
2.74m junction at 12 o'clock
3.88m junction at 12 o'clock
4.41m open joint

4.41m open joint
5.47m survey ends at bottom of rest bend

Section 4) MH2 downstream MH3
Size 100mm / Material clay

0.00m start
0.49m radial fracture
2.43m multiple fracture/partial collapse
3.57m ends at MH3

Section 5) MH3 downstream MH4
Size 100mm / Material clay

0.00m start
0.57m displaced joint
2.89m displaced joint
3.69m spiral casting marks start
5.09m spiral casting marks end
8.02m longitudinal fracture at 1 o'clock
30.32m roots at 10 o'clock
33.33m multiple fractures
43.09m ends at MH4

HEAVY SCALE THROUGHOUT
Section 6) MH4 downstream MH5
Size 100mm / Material clay

0.00m Survey starts
6.31m ends at MH5

HEAVY SCALE THROUGHOUT
Section 7) MH5 upstream Lat
Size 100mm / Material clay

0.00m Survey start
0.23m fractures
0.72m displaced joint
1.37m displaced joint
2.93m radial fracture
3.42m displaced joint
3.95m ends at gully

Section 8) MH5 downstream MH6
Size 100mm / Material clay

0.00m survey start
11.7m spiral casting mark fractures
18.5m displaced joint
18.81m heavy fat deposits
20.6m ends at MH6

Section 9) MH7 upstream Lat 1
Size 100mm / Material clay

0.00m start
5.02m survey ends at gully

Section 10) MH7 upstream Lat2
Size 100mm / Material clay

0.00m start
0.11m dropfall
5.62m junction at 12 o'clock
8.25m ends at rest bend

Section 11) MH7 downstream MH6
Size 100mm / Material clay

0.00m start
3.12m root ingress
4.94m concrete lump deposit
15.2m displaced joint
15.69m displaced joint
18.85m displaced joint
20.98m heavy fat deposits
24.66m ends at MH6

Section 12) MH8 upstream lat
Size 100mm / Material UPVC

0.00m Survey starts
2.20m unable to push further due to too many bends

Section 13) MH8 downstream MH7
Size 100mm / Material UPVC

0.00m Survey start
2.20m ends at MH7

Section 14) MH9 downstream MH8
Size 100mm / Material UPVC

0.00m survey start
20.22m ends at MH8

Section 15) MH9 upstream
Size 100mm / Material UPVC

0.00m start
9.16m survey ends at gully

Section 16) MH10 upstream Lat
Size 100mm / Material clay

0.00m start
0.46m displaced joint
1.52m displaced joint
1.86m radial fracture
2.20m ends at gully

Section 17) MH10 downstream MH11
Size 100mm / Material clay

0.00m start
0.46m heavy silt
9.12m heavy silt ends
9.88m junction at 9 o'clock
12.88m heavy silt
13,76m mortar in joint
14.48m mortar in joint
14.90m displaced joint
17.44m fractured joint
17.97m radial fracture
25.31m broken joint
17.97m fracture
25.31m broken joint
39.10m junction at 9 o'clock
41.95m displaced joint
43.13m radial fracture
43.97m MH11 reached

Section 18) MH10 upstream
Size 100mm / Material clay

0.00m Survey starts
0.42m fractures
1.29m displaced joint
3.34m displaced joint and fracture
3.95m displaced joint and fracture
4.41m displaced joint
4.48m displaced joint
5.66m fracture
5.85m ends at gully

Section 19) MH11 upstream Lat
Size 100mm / Material clay

0.00m Survey start
0.04m fractures
0.08m junction at 3 o'clock
4.26m fracture
4.98m fractures
6.35m partial collapse (unable to pass)

Section 20) MH11 downstream MH12
Size 100mm / Material clay

0.00m Survey starts
12.58m junction at 9 o'clock
16.38m junction at 9 o'clock
20.48m MH12 reached

Section 21) MH12 upstream
Size 100mm / Material clay

0.00m Survey start
7.94m miss junction at 2 o'clock
12.84m miss junction at 12 o'clock
19.57m junction at 10 o'clock
27.06m junction at 10 o'clock
30.02m ends at possible collapse

RECOMMENDATIONS
1. clean/descale entire underground network.
2. Patch open joint at 0.34m downstream from MH1, using CIPP patch kit.
3. Patch fractures at 0.27m upstream lat from MH2, using CIPP patch kit.
4. Patch open joint at 4.41m upstream lat from MH2, using CIPP patch kit.
5. Reline using CIPP liner from MH2 downstream to MH3 in order to seal fractures, approx 3.5m.
6. Reline using CIPP liner approx 8m downstream from MH3 in order to seal displaced joints and fractures.
7. Patch root ingress at 30.32m downstream from MH3, using CIPP patch kit.
8. Patch fractures at 33.33m downstream from MH3, using CIPP patch kit.
9. Reline using CIPP liner approx 4m upstream lat from MH5 in order to seal displaced joints and fractures
10. Reline approx 9m downstream from, 11.5m downstream from MH5 to 6 in order to seal fractures and displaced joints.
11. Patch root ingress at 3.12m downstream from MH7, using CIPP patch kit.
12. Reline using CIPP liner approx 9m from, 15.2m downstream from MH7 in order to seal displaced joints.
13. Terminate dead legs and laterals inside MH9 correctly, in order to prevent vermin ingress.
14. Reline using CIPP liner approx 2m upstream MH10 lat in order to seal displaced joints and fractures.
15. Patch displaced joint at 14.9m downstream from MH10, using CIPP patch kit.
16. Dig up and replace broken junction at 17.44m downstream from MH10
17. Dig up and replace fractured junction at 25.31m downstream from MH10
18. Reline using CIPP liner, approx 3m downstream from 41m downstream MH10 to 11 in order to seal displaced joints and fracture.
19. Reline using CIPP liner approx 6m upstream MH10 in order to seal fractures and displaced joints
20. Dig up and repair partial collapse at 6.55m upstream MH11 lat
21. Reline using CIPP liner, approx 7m upstream MH11 lat in order to seal fractures
22. Dig up and replace miss junction at 7.94m upstream from MH12
23. Dig up and replace miss junction at 12.84m upstream from MH12
24. Dig up and repair possible collapse at 30.02m upstream from MH12 in order to investigate further