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	Constructionline CHAS *Alcumus

CCTV DRAIN SURVEY

Date of Survey -6th July 2023

Site Address -Maudsley Hospital, Denmark Hill, London, SE5 8AZ

Client -AK Design Partnership LLP

> Purchase Order No-N/A

Reason for Survey:

The reason for the CCTV Survey was to investigate the existing underground pipework serving the local foul and storm system.

We have inspected the pipework for structural defects and recorded the existing flow condition. With reference to the recent survey completed, we have pleasure in submitting the details as follows (please refer to drawing for details).

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IC1 INVERT LEVEL – 0.770mmm

	PIPE REFERENCE:	
	IC1 UPSTREAM LINE-A	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	REDUNDANT	CAST IRON

0.00m Start of Survey

2.30m Reached end of pipe (capped off)

Comments:

This section of pipe is no longer in use.

	PIPE REFERENCE:	
IC1 UPSTREAM LINE-B		
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	COMBINED	CAST IRON

0.00m Start of Survey

1.82m Reached Rainwater/Waste Gully

Comments:

This section of pipe is structurally sound and in a free flowing condition.

PIPE REFERENCE: IC1 UPSTREAM LINE-C		
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	REDUNDANT	CAST IRON

0.00m Start of Survey

1.53m Reached end of pipe (capped off)

Comments:

This section of pipe is no longer in use.

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PIPE REFERENCE:		
IC1 UPSTREAM LINE-D		
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	REDUNDANT	CLAY

0.00m Start of Survey

4.20m Reached end of pipe (capped off)

Comments:

This section of pipe is no longer in use.

PIPE REFERENCE: IC1 UPSTREAM LINE-E		
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	FOUL	CLAY

0.00m Start of Survey

2.59m Reached Waste Gully

Comments:

This section of pipe has shown scale deposits restricting the flow.

	PIPE REFERENCE: IC1 DOWNSTREAM LINE-F	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	FOUL	CLAY

0.00m Start of Survey

1.00m Debris

1.92m Radial crack

5.18m Reached Inspection Chamber 3

Comments:

This section of pipe has shown scale deposits restricting the flow.

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IC2 INVERT LEVEL – 0.770mmm

PIPE REFERENCE: IC2 UPSTREAM LINE-A		
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	COMBINED	CLAY

0.00m Start of Survey

19.98m Reached Inspection Chamber OFF BOUNDARY

Comments:

This section of pipe is structurally sound and in a free flowing condition.

	PIPE REFERENCE: IC2 DOWNSTREAM LINE-B	
PIPE SIZE: 150MM	PIPE USE: COMBINED	PIPE MATERIAL: CLAY

0.00m Start of Survey

2.83m Reached Inspection Chamber 3

Comments:

This section of pipe is structurally sound and in a free flowing condition.

IC3 INVERT LEVEL – 1.000mmm

PIPE REFERENCE:			
IC3 UPSTREAM LINE-A			
PIPE SIZE	:	PIPE USE:	PIPE MATERIAL:
100MM		STORM	CLAY

0.00m Start of Survey

1.24m Reached Rainwater Gully

Comments:

This section of pipe is structurally sound and in a free flowing condition.

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	PIPE REFERENCE:	
	IC3 DOWNSTREAM LINE-B	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
150MM	COMBINED	CLAY

0.00m Start of Survey

3.00m Lateral connection

6.33m Reached Inspection Chamber 4

Comments:

This section of pipe is structurally sound and in a free flowing condition.

IC4 INVERT LEVEL – 1.480mmm

	PIPE REFERENCE:	
	IC4 UPSTREAM LINE-A	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	FOUL	CLAY

0.00m Start of Survey

2.68m Reached Waste Gully

Comments:

This section of pipe is structurally sound and in a free flowing condition.

	PIPE REFERENCE:	
	IC4 UPSTREAM LINE-B	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	STORM	CLAY

0.00m Start of Survey

2.59m Survey abandoned due to offset joint

Comments:

This section of pipe has shown a structural defect.

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	PIPE REFERENCE:	
	IC4 DOWNSTREAM LINE-C	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
150MM	COMBINED	CLAY

0.00m Start of Survey

7.40m Lateral connection

8.19m Reached Inspection Chamber 8 under large bush

Comments:

This section of pipe has shown a structural defect.

IC5 INVERT LEVEL – 0.950mmm

	PIPE REFERENCE:	
	IC5 UPSTREAM LINE-A	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	REDUNDANT	CLAY

0.00m Start of Survey

0.76m Survey abandoned due to debris

Comments:

This section of pipe is no longer in use.

	PIPE REFERENCE:	
	IC5 UPSTREAM LINE-B	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	COMBINED	CLAY

0.00m Start of Survey

0.10m Survey abandoned due to root intrusion

Comments:

This section of pipe has shown a structural defect.

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	PIPE REFERENCE:	
	IC5 DOWNSTREAM LINE-C	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	COMBINED	CLAY
0.00m Start of Survey		
.24m Root intrusion		
3.00m Debris		
15.65m Reached Inspection Chambe	er 6	
Comments:		
This section of pipe has shown a stru	ictural defect.	
	IC6 INVERT LEVEL – 1.600mmm	
	PIPE REFERENCE:	
	IC6 UPSTREAM LINE-A	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:

FOUL

0.00m Start of Survey

0.20m Pipe material changes to cast iron

4.60m Reached base of Soil Vent Pipe

100MM

Comments:

This section of pipe has shown scale deposits restricting the flow.

PIPE MATERIAL:
CAST IRON

0.00m Start of Survey

1.05m Reached base of Soil Vent Pipe

Comments:

This section of pipe is structurally sound and in a free flowing condition.

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	PIPE REFERENCE:	
	IC6 UPSTREAM LINE-C	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	FOUL	CAST IRON

0.00m Start of Survey

6.33m Reached Waste Gully

Comments:

This section of pipe is structurally sound and in a free flowing condition.

PIPE MATERIAL:
CLAY

0.00m Start of Survey

2.30m Reached base of Soil Vent Pipe

Comments:

This section of pipe is structurally sound and in a free flowing condition.

TREAM LINE-E	
IPE USE:	PIPE MATERIAL:
STORM	CLAY
	PIPE USE: STORM

0.00m Start of Survey

0.20m Pipe collapsed

Comments:

This section of pipe has shown a structural defect.

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	PIPE REFERENCE:	
	IC6 DOWNSTREAM LINE-F	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	COMBINED	CLAY

0.00m Start of Survey

0.20m Radial crack

3.30m Reached Inspection Chamber 8 located under bushes

Comments:

This section of pipe has shown a structural defect.

IC7 INVERT LEVEL – 0.670mmm

E-A
PIPE MATERIAL:
PLASTIC

0.00m Start of Survey

3.45m Reached Rainwater Gully

Comments:

This section of pipe is structurally sound and in a free flowing condition.

PIPE REFERENCE:	
IC7 UPSTREAM LINE-B	
PIPE USE:	PIPE MATERIAL:
STORM	PLASTIC
	IC7 UPSTREAM LINE-B PIPE USE:

0.00m Start of Survey

7.97m Lateral connection serving Rainwater Gully

17.87m Reached Rainwater Gully

Comments:

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	PIPE REFERENCE:	
	IC7 DOWNSTREAM LINE-C	
PIPE SIZE:	PIPE USE:	PIPE MATERIAL:
100MM	STORM	CAST IRON

0.00m Start of Survey

6.53m Lateral connection

9.45m Poor repair to pipe, half section of clay cemented for covering

16.22m Reached Inspection Chamber 8 located under bushes

Comments:

This section of pipe has shown a structural defect and restriction to the flow.

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CONCLUSION

The survey has confirmed that the property drainage is a combined system, with the foul and storm drainage discharging into the same main drain runs.

We have carried out a CCTV Survey to the drainage surrounding the property to inspect the pipework for blockages and to check the structural condition.

The survey has revealed numerous structural defects including root intrusion, cracks and a collapsed section of pipe. This will cause water to seep into the surrounding ground which will weaken the pipework further resulting in additional collapse.

The survey has also revealed restrictions to the flow of the underground system including debris and scale deposits. This will result in regular blockages and back surges.

It must be appreciated that with all drainage systems that regular upkeep and maintenance is essential. They must be periodically inspected for any future deterioration and kept free flowing from any blockages.



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RECOMMENDATION

To attend site with 2 operative team to perform descale of the underground system. This will remove all scale, debris and root deposits from the underground system ensuring free flowing condition.

Install x1 resin liner within IC1-Line-F, this will seal the structural defect ensuring the pipework is watertight and structurally sound.

Carry out excavation to IC4-Line-B to expose the large offset joint. Once exposed we will install new plastic section of pipe with appropriate connections. Excavation will be backfilled and areas re-instated as found.

Install x1 resin liner within IC5-Line-B to seal the pipework to prevent the roots from repenetrating and causing further damage.

Install x2 resin liners within IC5-Line-C to seal the pipework to prevent the roots from repenetrating and causing further damage.

Carry out excavation to IC6-Line-E to divert the existing rainwater gully into IC6 at high level. Once exposed we will install new plastic section of pipe with appropriate connections. Excavation will be backfilled and areas re-instated as found.

Install x2 resin liners within IC7-Line-C, this will seal the structural defect ensuring the pipework is watertight and structurally sound.

We trust this meets with your requirements, however if you require any further information, please do not hesitate to contact the office.

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NOT TO SCALE (drawing only a guide)

