



RYEBANK, CHORLTON

LONGFORD BROOK TECHNICAL NOTE

Project No: 2011-11

March 2026

Rev: P02

RBM-REN-XX-XX-RP-C-90001

Rev.	Description	Author	Checked	Date
P01	For Information	J Bullough	P Clayton	19.11.2025
P02	Updated following site visits	J Bullough	P Clayton	03.03.2026

1. INTRODUCTION

This document has been produced to summarise our investigation into the historic Longford Brook in Manchester, and specifically how it relates to the proposed development at Ryebank.

This document provides a summary of the correspondence to date with the relevant authorities, our review of historic maps and records relating to Longford Brook, and finally a summary of findings from the various surveys that have been completed.

2. CORRESPONDANCE TO DATE

The correspondence to date with Manchester City Council includes:

- Pre-Development enquiry submitted to LLFA 25/11/2024
- LLFA Data screen requested 04/12/2024
- LLFA Data screen received 02/02/2025
- Pre-Development enquiry response received 04/02/2025
- LLFA Objection received 04/04/2025
- MS Teams Meeting with LLFA 09/05/2025
- Survey overlay as requested in meeting provided to LLFA 09/06/2025
- Feedback received from LLFA requesting additional survey work 21/07/2025
- Email to LLFA requesting feedback on potential drone survey 25/09/2025



Figure 2.1 – Ryebank Location Plan

3. HISTORIC MAPS

Historic maps of the Ryebank site and the surrounding areas have been used to understand the context of the site and the historic brook that once passed through it, with the earliest available maps dating from approximately 1840.

The site was undeveloped in 1840, with minimal urbanisation of any nearby sites. Longford Brook can be seen running from the east of the site through to the west, as seen in figure 3.1.



Figure 3.1 – 1840 map of Ryebank, showing Longford Brook running through the site.

Between 1840 and 1889, the Ryebank site remained undeveloped, although urbanisation of the nearby area intensified in this period, see in figure 3.2. This shows that the head of Longford Brook was to the west of Oswald Road, indicating that the upstream extent had been lost due to residential development in the east.

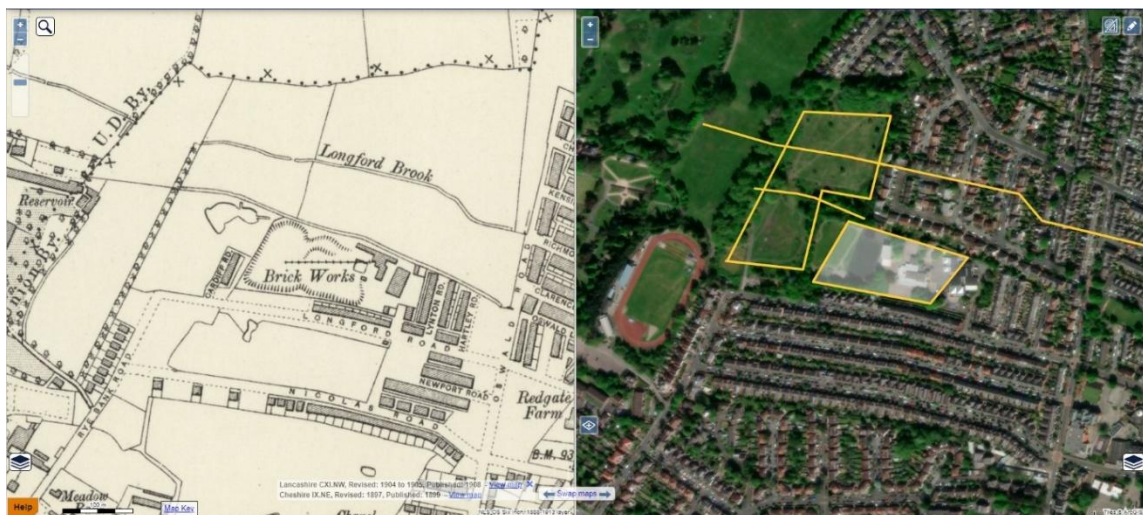


Figure 3.2 – 1889 Map of Ryebank, showing Longford Brook running through the site.

A 1935 map of the site, see figure 3.3, shows a large clay pit has been formed on site over the historic alignment of the Longford Brook. The Longford brook is now shown to stop at the eastern boundary.

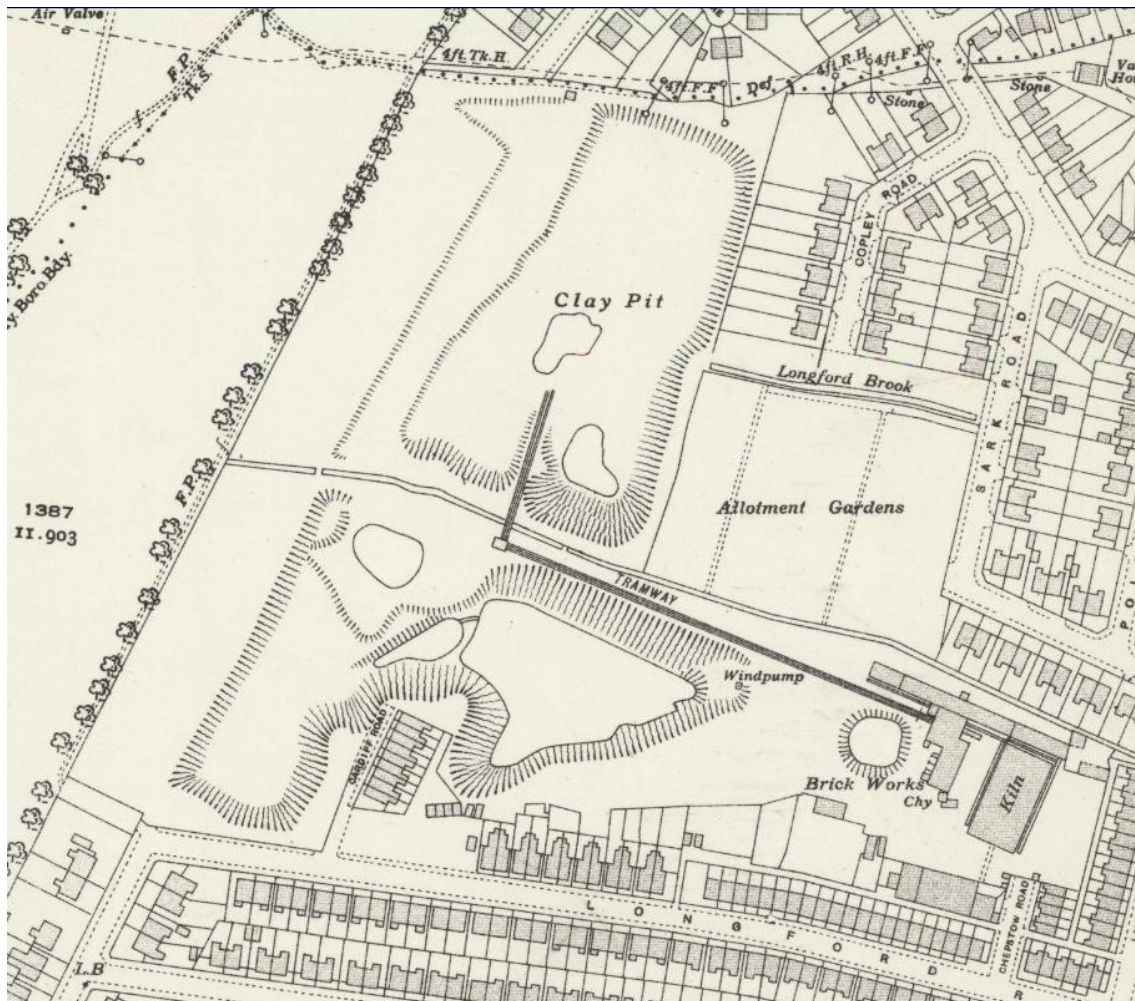


Figure 3.3 – 1935 Map of Ryebank, with an unnamed watercourse and Longford Brook no longer crossing the site.

A 1951 map of Ryebank no longer shows the clay pit seen in the 1935 map, with Longford Brook to the east now shown to divert to the south via a 'drain'. A second linear drain feature is shown to cross through the middle of the site. This is shown in figure 3.4.



Figure 3.4 – 1951 Map of Ryebank, showing the Removal of the Clay Pit and a drain diverting the Longford Brook.

A 1980-1984 dated map shows the construction of Peveril Crescent over the remaining length of the Longford Brook. It is therefore assumed that the Longford Brook will have been lost as part of this development.

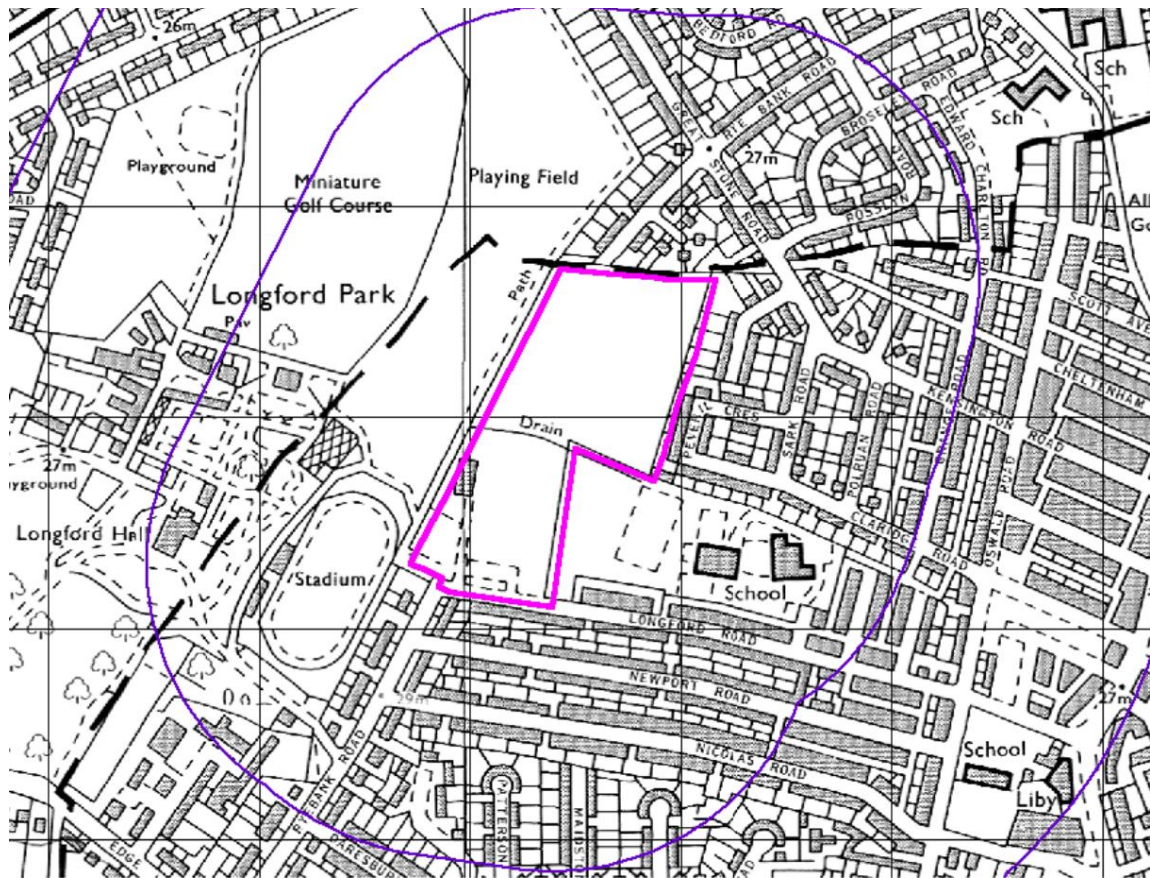


Figure 3.5 – 1980-1984 Map of Ryebank, Showing the Construction of Peveril Crescent, and loss of the remaining length of brook

The present day known extent of the Longford is shown by the Environment Agency statutory main river map, Figure 3.6 below. This shows the head of the Longford Brook to originate within Longford Park which correlates with the historic maps that indicate the extent of the brook has been reduced over time due to development in the east.

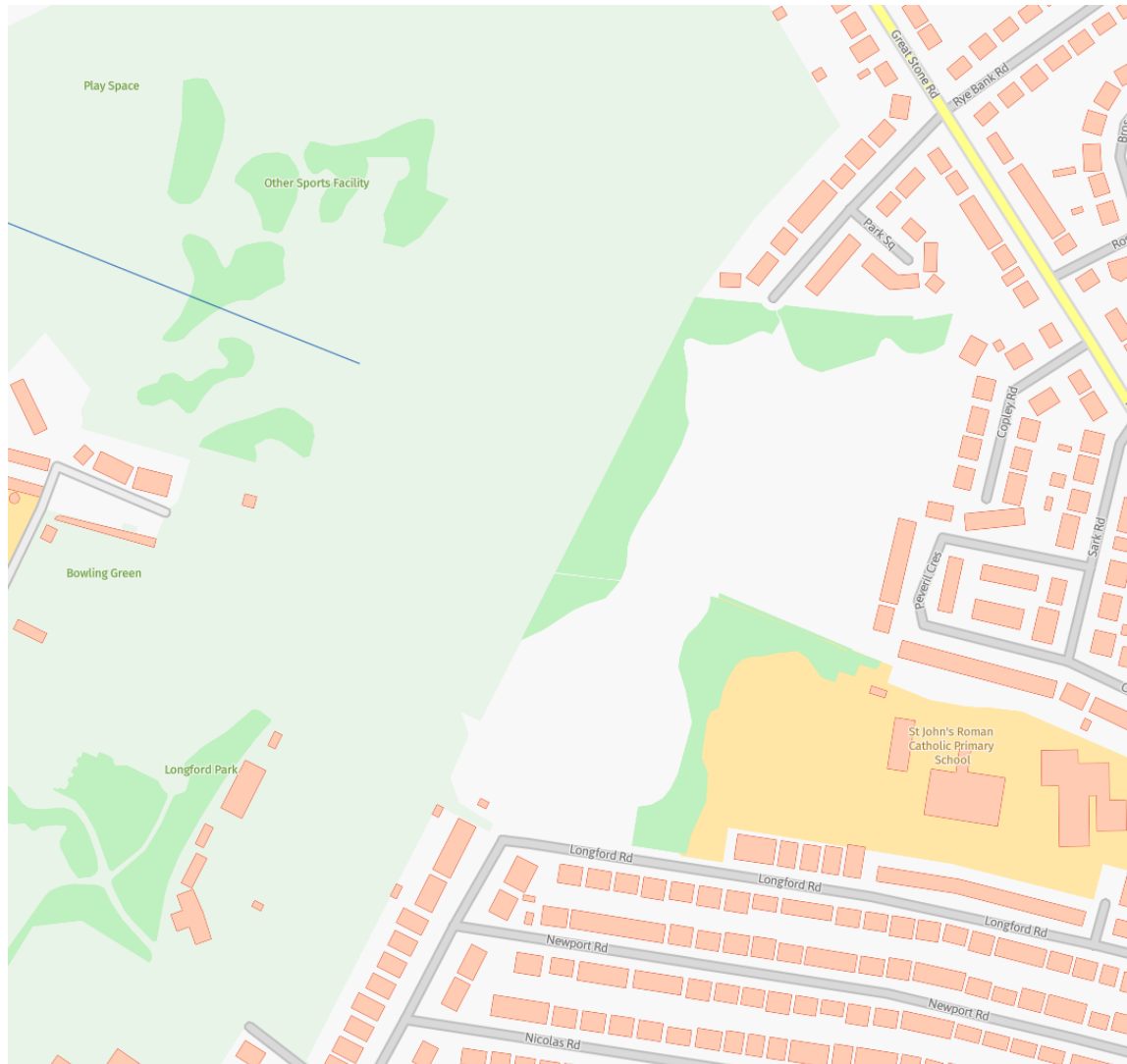


Figure 3.6 – Environment Agency – Statutory Main River Map Extract

The surface water flood susceptibility map produced as part of the Manchester, Salford & Trafford Level 2 SFRA indicates the historic alignment of the Longford Brook and classifies the sections upstream and downstream of the site as lost watercourse.

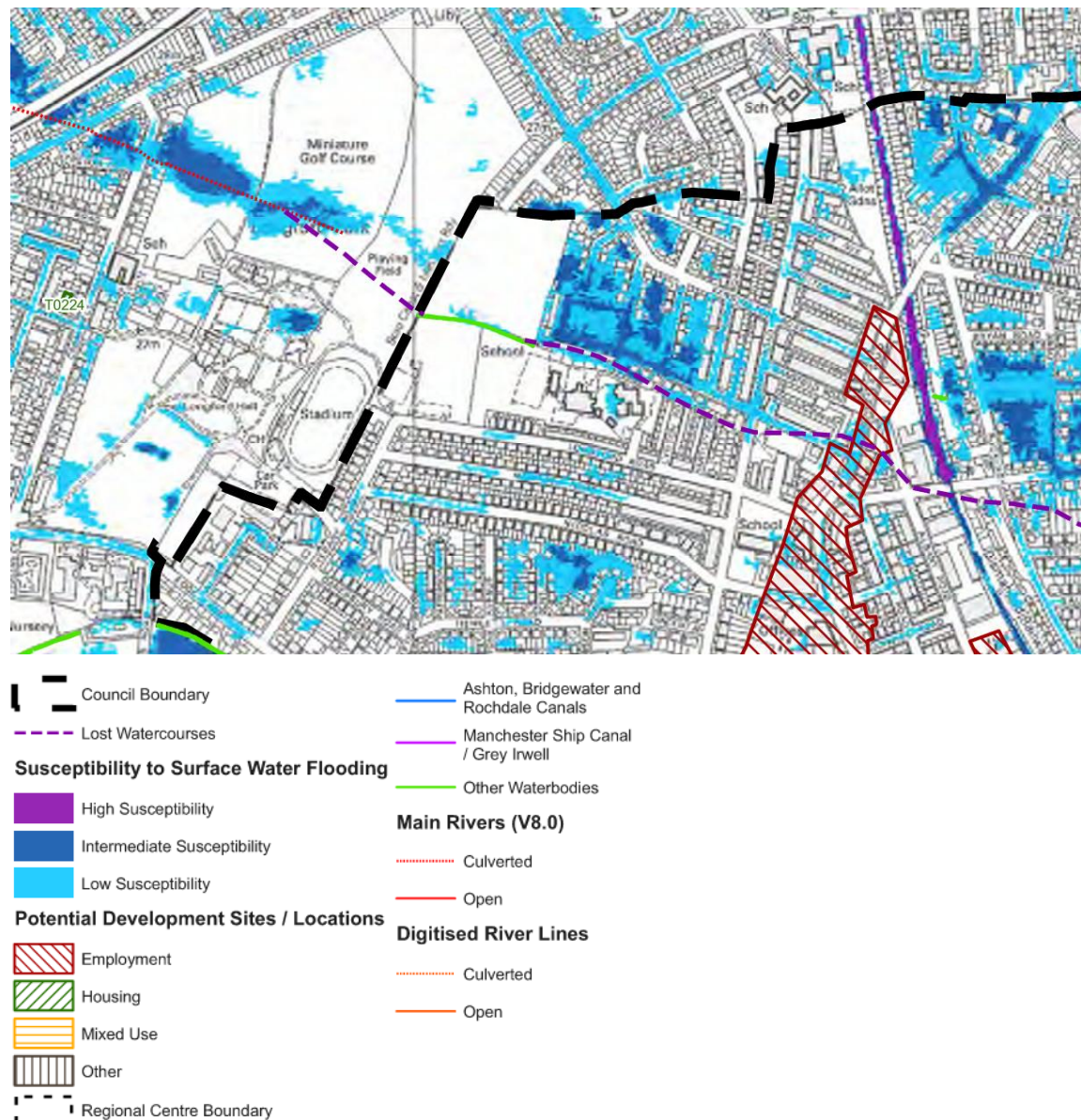


Figure 3.7 – Manchester, Salford & Trafford SFRA – Surface Water Flood Susceptibility 2011

Based on the evidence gathered via desk study it appears that the historic Longford Brook has been lost due to urbanisation of the upstream catchment. The current day origin of Longford Brook appears to be within Longford Park to the West of the Ryebank site.

Further on-site survey works have been carried out to provide further evidence of this conclusion at the request of the LLFA and is presented in Section 4.

4. SITE SURVEYS

A topographical survey was conducted in November 2019 by CT Surveys. The survey found remnants of a drainage ditch through the centre of the site however due to dense vegetation it did not provide any detail along the eastern boundary where it is known the Longford Brook historically entered the site. Refer to Appendix A

A drainage CCTV survey was conducted in October 2024 by Layer Surveys to investigate whether the Longford Brook had previously been culverted. The survey found the presence of a culvert outfall within the drainage ditch identified by the previous topographical survey. The results from survey are presented in Appendix B. The site photos show the outfall is in very poor condition and is heavily silted. The surveyors concluded that this pipe was redundant and no longer conveyed flow. The pipe was identified as 450 diameter and at a depth of 300mm below ground with the remaining 150mm protruding out of the ground. The invert level is therefore calculated to be 25.920mAOD.

Due to the presence of the outfall pipe the LLFA requested for the eastern boundary to be investigated to look for a potential incoming pipe. In order to complete this survey work, the vegetation along the eastern boundary needed to be removed prior to the surveyors attending site. Unfortunately attempts to remove the vegetation where unsuccessful due to resistance from protestors and therefore the survey works could not be completed.



Figure 4.1 – Aerial site photo showing dense vegetation.

As an alternative a drone survey was completed by Sky Scan Surveys on 14/10/2025 to survey the ground profile beneath the vegetation. The point cloud data was processed to create a topographical map of the whole site, which has been colour coded to clearly show the topography along the eastern boundary. The results are presented in Appendix C with an extract shown in Figure 4.2 below.

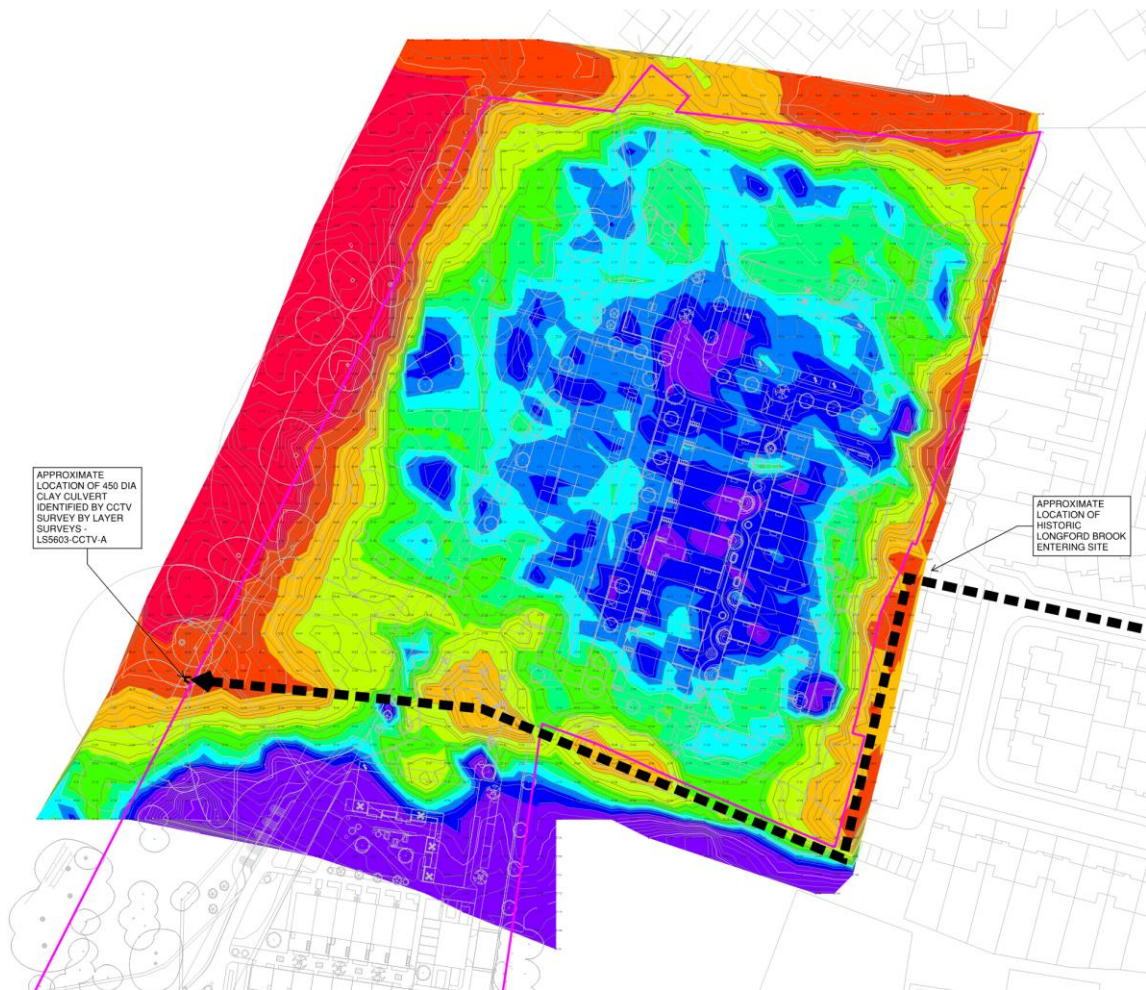


Figure 4.2 –Topographical Drone Survey Extract

The survey indicates there is not a consistent above ground drainage channel along the eastern boundary that would convey flow through the site.

The survey also shows that it would not be possible for the brook to be culverted through the site due to insufficient cover. The western outfall is calculated to have an invert level of 25.920 and the route to the eastern boundary is circa 250m. Assuming a very shallow gradient of 1:500 and a 450mm diameter pipe, based on the survey findings at the western boundary, the soffit level at the eastern boundary would be 26.870mAOD, which is above the ground level in this area. Therefore, it is not possible for the brook to exist as a culvert through the site.

Therefore, it is not considered feasible for the brook to be culverted on site, due to the level of the outfall relative to the topographical surveys measured upstream across the site to the Eastern boundary.

In addition to these surveys, a site walkover has also been undertaken to look for any further evidence of the Brook on site. This is presented in the following section.

5. SITE WALKOVER STUDY

Two site walkovers were undertaken on 7th December 2025 and 12th January 2026 respectively. The weather on both days was overcast with rain showers and there had been heavy rainfall on the day's prior. Site photographs and the associated key plan are included in Appendix D.

The site walkover was focused along the eastern boundary to investigate the presence of an open ditch or culvert associated with the Longford Brook.

Overall, the topographic levels on site are higher than along the eastern boundary and adjacent land with slopes towards the boundary fences. In some instances, the boundary fences appear to be acting as retaining features between the site and neighbouring residential gardens.

As shown by the photos the site boundary is typically lined with dense vegetation and mature trees which limits the possibility of traversing the full boundary. Instead, there are informal access points to the boundary which coincide with gateways from residential properties. The presence of dense vegetation and mature trees means there is no continuous longitudinal fall along the boundary that would constitute a drainage ditch. It was noted that the ground was relatively firm underfoot and not boggy given the recent rainfall which suggests that the ground was naturally infiltrating and there were no inflows from a watercourse east of the development.

During the survey no evidence of a culvert was found along the assumed alignment and there were no inlet structures along the boundary. In addition, the mature trees make it unlikely for a culvert to be present due to the vast root system.

Photographs 17, 18 & 19 show the ditch through the middle of the development that is indicated on the topographical survey. There is a small volume of ponding in the bottom of the ditch which is to be expected given the recent rainfall. Sections of the ditch are heavily vegetated and there was no evidence of running water at the time of the survey. No large volumes of water were found which would suggest there are no inflows from a watercourse in the east.

Towards the western boundary the ditch is visible again (Photograph 20) and this coincides with the locations of the fords indicated on OS mapping. Again, there was no evidence of running water within the ditch.

Photograph 21 shows an outfall head wall previously identified by the 2024 drainage survey undertaken by Layer Surveys. The pipe is heavily silted and does not convey any flow downstream.

Therefore, based on the site walkover and the lack of evidence found, it is concluded that the Longford Brook has been lost due to urbanisation of the upstream catchment and the current day origin appears to be within Longford Park as indicated by the United Utilities and Environment Agency maps.

6. CONCLUSION

A desktop study has been undertaken that has reviewed historic maps and records from various sources. This indicates that the alignment of the Longford Brook has been altered over the years due to past development on the site and the urbanisation of the upstream catchment.

Various onsite surveys, in the form of topographical, CCTV and drone surveys, have been completed across the site. Attempts to clear vegetation to undertake additional surveys was unsuccessful due to resistance from protestors. The topographical survey identified the remnants of drainage ditch through the centre of the site. The CCTV survey found the presence of a culvert outfall within the drainage ditch however concluded this was redundant. The drone survey was conducted to understand the ground profile in the areas of the site that could not be accessed due to vegetation. The survey found that there was no consistent above ground channel that could convey flow and confirmed it was not feasible for the brook to have been culverted due to the level of the outfall relative to the site levels.

Two site walkovers were undertaken during periods of wet weather to investigate the presence of an open ditch or culvert. No evidence of a culvert was found, and the presence of dense vegetation and mature trees mean there is no continuous longitudinal fall that could convey flow and limits the chance of a culvert due to the vast root system. It was noted that ground was relatively firm and not boggy which suggests there are no inflows from a watercourse east of the development.

Therefore, based on the review of the historic maps, site walkover surveys and after exhausting all the available survey techniques it is concluded that the Longford Brook no longer passes through the Ryebank site. The current day origin of Longford Brook appears to be within Longford Park to the West of the Ryebank site as shown by the Environment Agency main river maps.

APPENDIX A

TOPOGRAPHICAL SURVEY 2019



THE OLD MILL
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WAKEFIELD
WF3 1LA

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email : mail@ct-surveys.com
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ABBREVIATIONS

AB	ASSUMED ROUTE	OSA	OUTSIDE SURVEY AREA
AV	AIR VALVE	P	POST / POLE
B	BOLLARD	RL	ROCK LEVEL
BS	BUS STOP	RS	ROAD SIGN
BT	BRITISH TELECOM CHAMBER	RSP	ROADSIDE PIPE
CA	CABLE TV	S	STOP
CL	CABLE LEVEL	ST	STOP COCK
CP	CABLE PIT	SV	STOP VALVE
CR	CABLE RESSER	ST	STOP TAP
CP	CORNER PIPE	SV	STOP VALVE
EL	EAVES LEVEL	SV	SOIL VENT PIPE
EP	ELECTRICITY POLE	TC	TRAFFIC CONTROL
ES	EARTH ROD	TOR	TELEPHONE CALL BOX
FR	FIRE HYDRANT	TFR	TAKEN FROM RECORDS
FL	FLOOR LEVEL W/FENCE LEVEL	TL	TRAFFIC LIGHTS
FR	FLAT ROOF LEVEL	TP	TELEGRAPH POLE
G	GAS VALVE	UTGA	UNABLE TO GAIN ACCESS
GPR	TRACED BY G.P.R.	UTL	UNABLE TO LOCATE
IC	INSPECTION CHAMBER	UTL	UNABLE TO RAISE
I	INVERT LEVEL	UTL	UNABLE TO SURVEY
J	JUNCTION BOX	UTL	UNABLE TO TRACE
K	KUTB WIRE	WL	WATER LEVEL W/WALL LEVEL
L	LETTER BOX	WM	WATER METER
LP	LAMP POST	WD	WASH OUT VALVE
MP	MANHOLE	WP	WATER PIPE
NE	NOT LOCATED		
NT	NOT TRACE		

ALL SERVICES TO BE FIELD VERIFIED.
ALL DRAWINGS REMAIN THE PROPERTY OF CT SURVEYS LTD UNTIL
ALL PAYMENTS HAVE BEEN MADE.

CT SURVEYS IS A MEMBER OF:



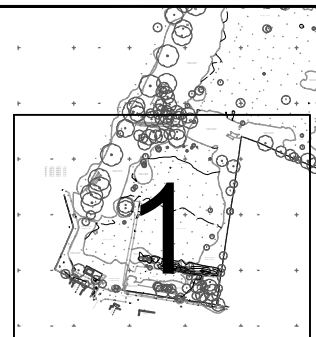
SURVEY NOTES:
The survey is filed to National Grid and Datum using GPS, and has been drawn at a scale
factor of 1:500
Due to the scale factor any setting out or design works should strictly use the control
coordinates as shown on the drawing

SURVEY REVISIONS

PREVIOUS DWG NO:	-
REVISION NO:	-
ORIGINAL SURVEY DATE:	-

REVISION NOTES:

LAYOUT VIEWS



CLIENT:

Cushman & Wakefield

PROJECT TITLE:

Land off Ryebank Rd/Langford Rd,
Manchester, M21 9WW

DRAWING NUMBER:

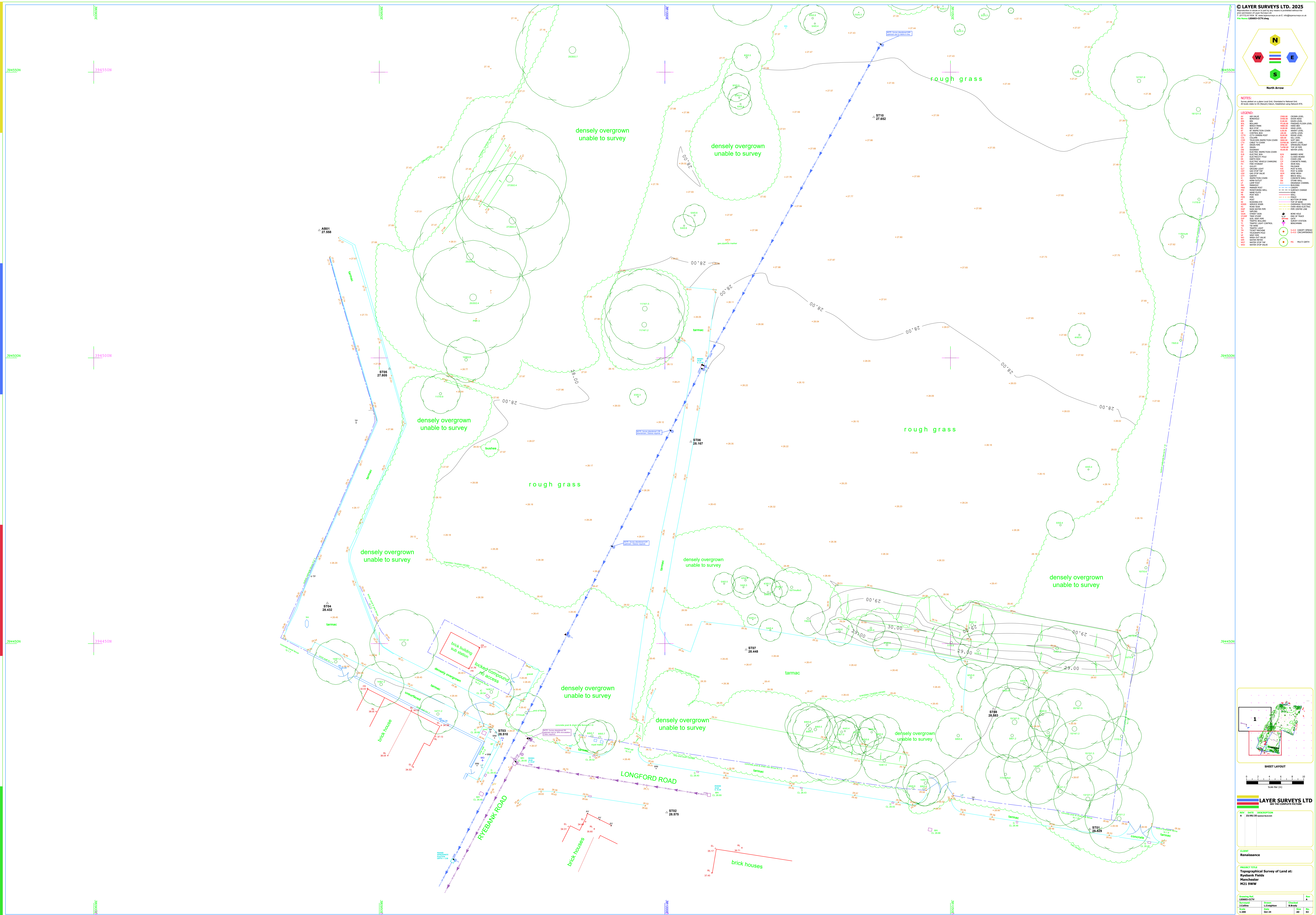
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SCALE	1:500 @ A0	SURVEY DATE	November 2019
LEVEL DATUM	OSGB by GPS	GRID DATUM	OSGB fixed at ST06
BENCH MARK USED	Real at ST06 surveyed by GPS	GRID VALUE	26.167m
		SHEET NUMBER	1 of 1

APPENDIX B

CCTV SURVEY 2024



LOCATION SKETCH



PLAN OF MANHOLE



STATUS	PU : Public	PR : Private	WC : Culverted Watercourse	} Applies to main outlet
	24 : Section 24	HD : Highway Drain		
FUNCTION	F : Foul	C : Combined	S : Surface Water	} Applies to main outlet
MANHOLE TYPE	IF : Infall	MH : Manhole	CP : Catchpit	CSO : Consented Sewer Overflow
	LH : Lamphole	RE : Rodding Eye	SO : Storm Overflow	DS : Dual system Manhole
	GU : Gully	OF : Outfall	SA : Soakaway	PS : Pumping Station
COVER DUTY	L : Light Duty	M : Medium Duty	H : Heavy Duty	
SHAPE	C : Circular	E : Egg	R : Rectangular	
	S : Square	T : Trapezoidal	A : Arched	
	B : Barrel	H : Horseshoe (Inverted U)	U : U-shaped with flat top	
	X : Other (state in words)			
PIPE (OR LINING) MATERIAL	AK : Alkathene	AC : Asbestos Cement	BR : Brick	
	CI : Cast Iron	SI : Spun (Grey) Iron	CO : Concrete	
	CSB : Concrete Segments (Bolted)	CSU : Concrete Segments (Unbolted)	CC : Concrete Box Culvert	
	DI : Ductile Iron	GRC : Glass Reinforced Concrete	GRP : Glass Reinforced Plastic	
	PSC : Plastic/Steel Composite	PVC : Polyvinyl Chloride	PE : Polyethylene	
	RPM : Reinforced Plastic Matrix	ST : Steel	VC : Vitrified Clay	
	PP : Polypropylene	PF : Pitch Fibre	MAC : Masonry, Coursed	
	MAR : Masonry, Randon Courses	XXX : Other (State in remarks)		
LINING	BL : Bitumen	RL : Resin	IS : Insituform	
	CL : Cement	PI : Plastic		



Surveyed by (Operator) Joe COLLINS	Job Number LS5603	Pipe Length Reference(PLR) CULVERT1 X	Date 09/10/2024	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 4/0	Base Unit DJVV56JNNH	Section Number 7
Road Ryebank Fields, Place Manchester, Location M21 9WW		Division District Location Details		
Purpose Duty Combined Catchment	Shape/Size 450mm Material Vitrified clay Category		Start Node CULVERT1 End Node OUTFALL1 Total length 50 metres	

Scale **1:2.62**
Direction **Downstream**

Start Node Ref:CULVERT1 | I/L : metres | Depth: 0.3 metres

Position	Code	Description	Photo	Type/Grade
	0.00	SN		Start node type: Source
	0.00	WL		Water level 5% height/diameter
	0.07	DER (S01)		Settled deposits coarse 60% cross-sectional area loss, Start
	7.33	DER (F01)		Settled deposits coarse 60% cross-sectional area loss, Finished
	7.33	SA		Survey abandoned - Remark: 75% FULL DEBRIS AND ROOTS

10485875 Comment / 0
10485876 Comment / 0
10485877 Service / 4

10485882 Service / 4
10485884 Comment / 0

End Node Ref:OUTFALL1 | I/L : metres



Job Number
LS5603

Surveyed by (Operator)
Joe COLLINS

Base Unit
DJVV56JNNH

Date
09/10/2024



Start node type: Source



Water level 5% height/diameter



Settled deposits coarse 60% cross-sectional area loss, Start



Settled deposits coarse 60% cross-sectional area loss, Finished



Survey abandoned - Remark: 75% FULL DEBRIS AND ROOTS

APPENDIX C

DRONE SURVEY



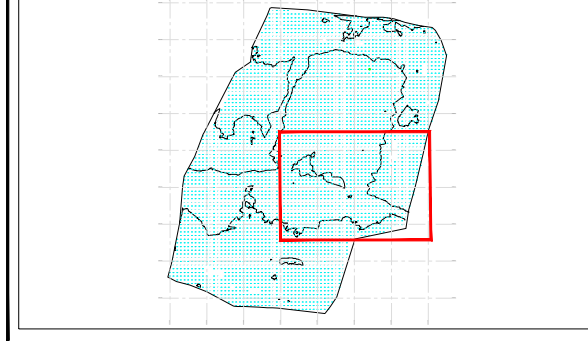
0 5 10 15 20 25m
1:500



Email: p.hardy@skyscansurveys.co.uk
Phone: +44-7518-511623
Website: www.skyscansurveys.co.uk
Address: 5 Hardman Street, 10th Floor, Manchester M3 3AP

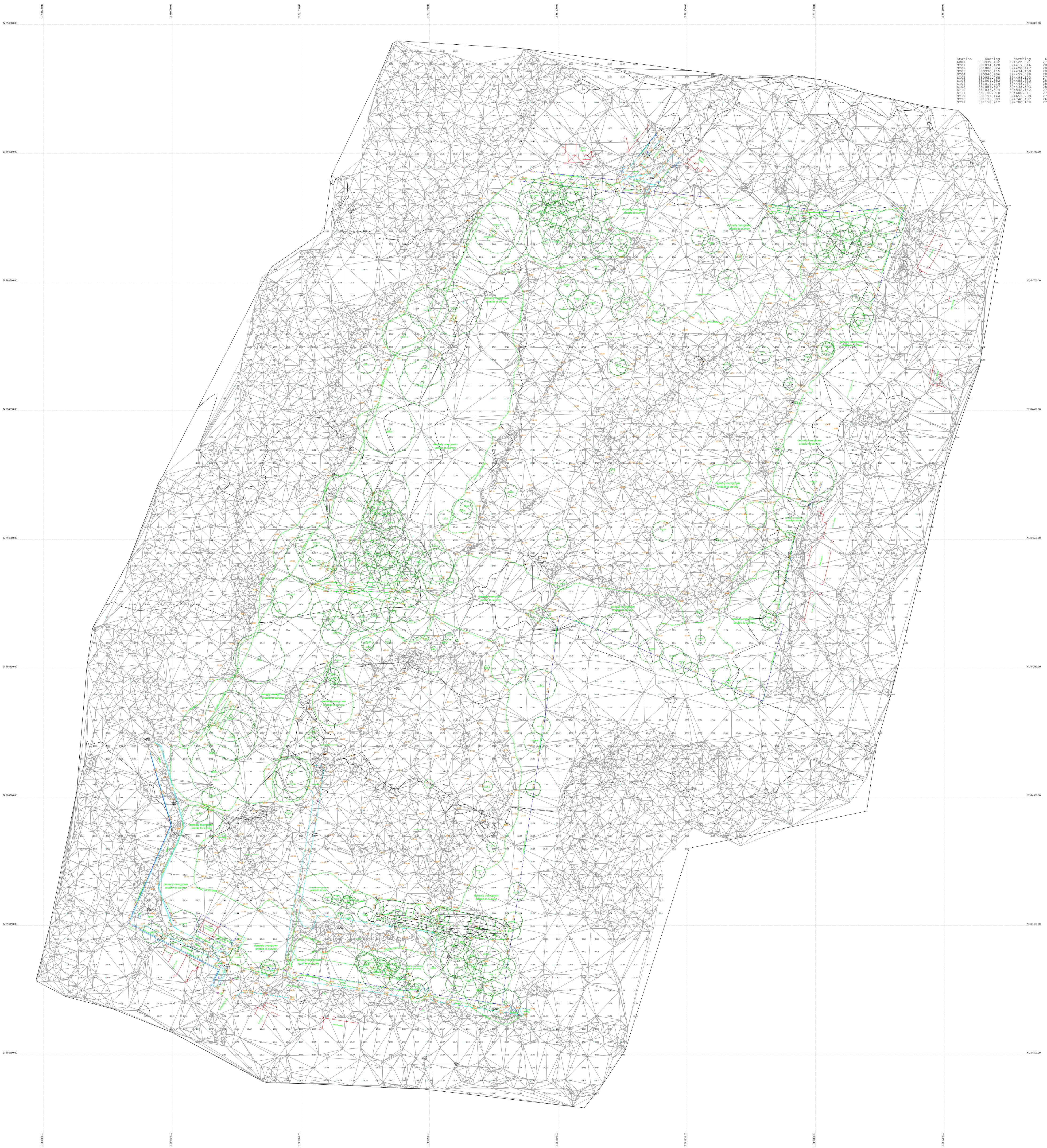
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- Point Cloud Processing
- Topographic Surveys
- Measured Building Surveys
- Utility Surveys (GPR)
- Setting Out
- Land Registry Mapping

Key Plan:

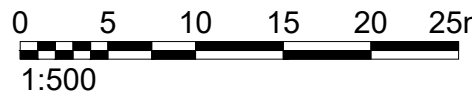


www.skyscansurveys.co.uk			
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Drawn by: SJ		Date: 13-10-2025	
Checked by: PA		Date: 14-10-2025	
No.	Draw	Description	Revisions
A.	14-10-25	First Drawing	

Client :	
Cushman & Wakefield	
Project : Land off RyebankRD/Langford Rd, Manchester, M21 9WW	
Date :	Scale :
14-10-2025	1:500 - A0
Description : Boundary Topography	
Drawing Number : SKY_2025_ADAPT3_3A4.1_001/Sheet_01	



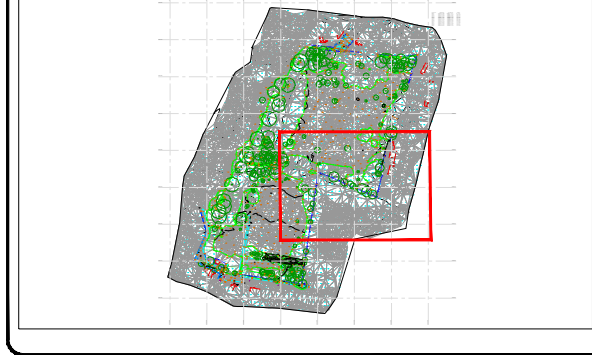
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0002	394000.00	544000.00	100.00
0003	394000.00	544000.00	100.00
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0021	394000.00	544000.00	100.00
0022	394000.00	544000.00	100.00



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Address: 3, Hardman Street, 10th Floor, Manchester M2 3JE

- 3D Laser Scanning
- Point Cloud Processing
- Topographic Surveys
- Measured Building Surveys
- Utility Surveys (GPR)
- Setting Out
- Land Registry Mapping

Key Plan:



www.skyscansurveys.co.uk

Surveyed by : PA/C	Date: 08-10-2025	
Drawn by : BJ	Date: 13-10-2025	
Checked by : PA	Date: 14-10-2025	
Revisions		
No.	Date	Description
A	14-10-25	First Drawing

Client :

Cushman & Wakefield	
Project : Land off RyebankRD/Langford Rd, Manchester, M21 9WW	
Date : 14-10-2025	Scale : 1:500 - A0
Description : Boundary Topography	
Drawing Number : SKY_2025_ADAPT3_3A4.1_001/Sheet_01	

APPENDIX D

SITE WALKOVER PHOTOS





Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21