XO SQUARE
Consulting Civil & Structural Engineers

XOsquare Limited
54 Oak Street
Manchester
M4 5JA

Ref: 180-XOS-XX-XX-CS-LET-5701

16 January 2025

Richard Coathup
BARNFIELD CONSTRUCTION LIMITED

[redacted]

BY EMAIL

Dear Richard

DESIGN COMPLIANCE STATEMENT – SMITHFIELD MARKET, MANCHESTER

We confirm that the constructed drainage system for both foul and surface water at Barton & Redman, Smithfield Market has been adequately surveyed and all results, from both measured and CCTV Survey, meet the design requirement of the SuDS design.

The As-Built drainage drawing Ref: 180-XOS-XX-XX-C-DR-5570 - Proposed Drainage AB1 and the As-built CCTV Survey is appended to this statement for record.

Additionally, we also confirm that the building substructure, superstructure and external works have also been constructed in accordance with the detailed design drawings and specifications issued for this project.

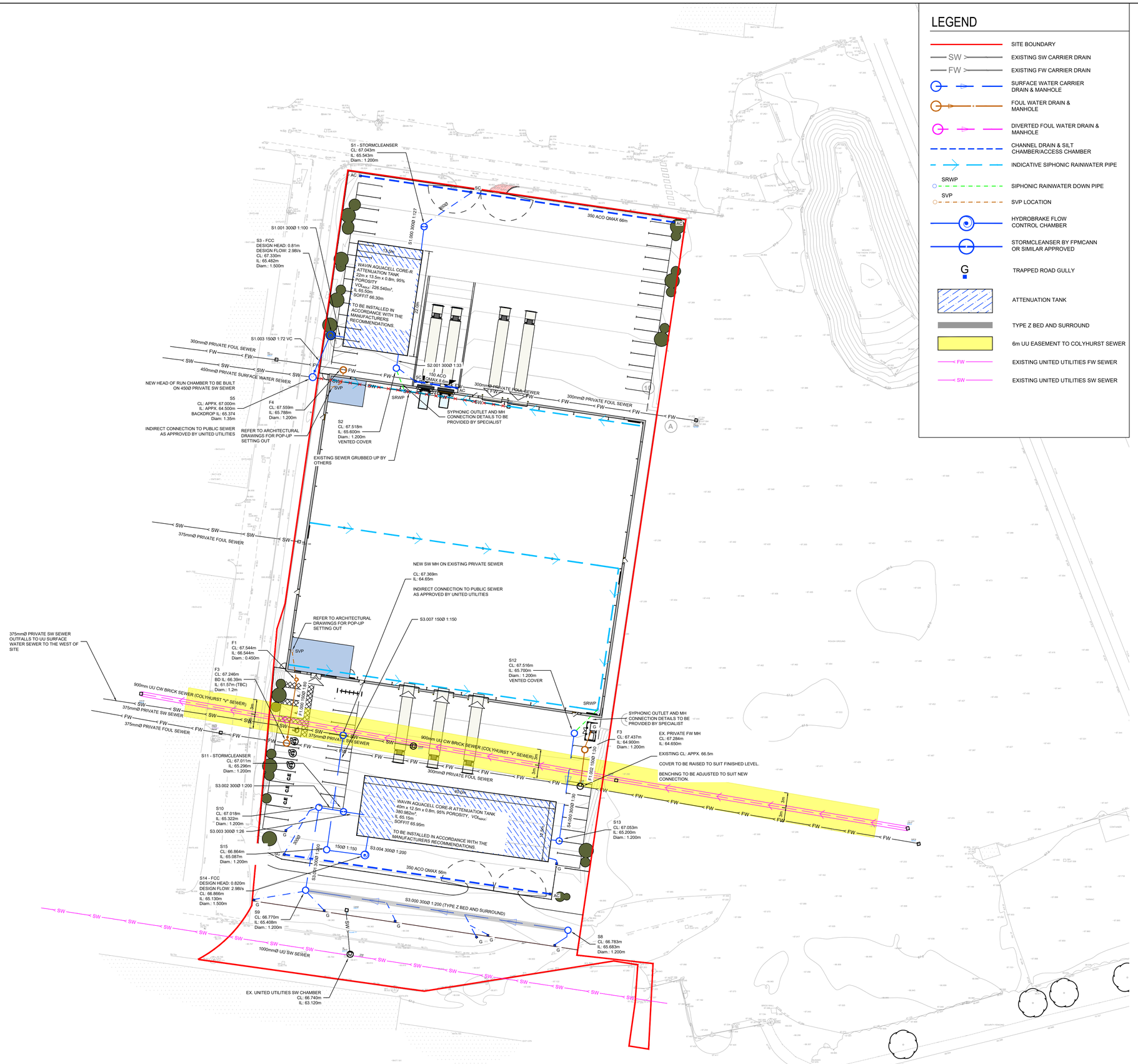
Yours sincerely

[redacted]

Elton Parry
Director

For and on behalf of XOsquare Limited

Enc.: As Built Drainage Drawing & CCTV Survey



LEGEND

- SITE BOUNDARY
- EXISTING SW CARRIER DRAIN
- EXISTING FW CARRIER DRAIN
- SURFACE WATER CARRIER DRAIN & MANHOLE
- FOUL WATER DRAIN & MANHOLE
- DIVERTED FOUL WATER DRAIN & MANHOLE
- CHANNEL DRAIN & SILT CHAMBER/ACCESS CHAMBER
- INDICATIVE SIPHONIC RAINWATER PIPE
- SRWP — SIPHONIC RAINWATER DOWN PIPE
- SVP — SVP LOCATION
- HYDROBRAKE FLOW CONTROL CHAMBER
- STORMCLEANSER BY FPMCANN OR SIMILAR APPROVED
- G — TRAPPED ROAD GULLY
- ATTENUATION TANK
- TYPE Z BED AND SURROUND
- 6m UU EASEMENT TO COLYHURST SEWER
- FW — EXISTING UNITED UTILITIES FW SEWER
- SW — EXISTING UNITED UTILITIES SW SEWER

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USE FIGURED DIMENSIONS, DO NOT SCALE. CHECK ALL DIMENSIONS ON SITE BEFORE FABRICATION OR SETTING OUT.

GENERAL NOTES

1. DO NOT SCALE.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.
3. SHOULD THERE BE ANY DISCREPANCY BETWEEN DETAILS INDICATED ON THIS DRAWING AND THOSE INDICATED ON OTHER DRAWINGS THE ENGINEER SHOULD BE INFORMED PRIOR TO CONSTRUCTION ON SITE.
4. UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT AUTHORITIES IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ISSUED ARE PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR START SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.
5. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
6. ALL SURVEY INFORMATION IS PROVIDED BY THE SURVEYING COMPANY AND XOSQUARE LIMITED CANNOT ACCEPT ANY LIABILITY FOR ANY DISCREPANCIES THERE IN. ALL SURVEY INFORMATION TO BE VERIFIED ON SITE BY CONTRACTOR. SHOULD DISCREPANCIES BE IDENTIFIED, XOSQUARE LIMITED TO BE NOTIFIED IMMEDIATELY.
7. POSITION AND NUMBER OF PROPOSED SIPHONIC RWP's IS INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN BY OTHERS
8. POSITION AND NUMBER OF ALL FOUL WATER POP-UPS IS TO BE CONFIRMED BY THE ARCHITECT/ MEP ENGINEER.
9. ALL MANHOLE/ INSPECTION CHAMBERS IN SERVICE YARDS TO BE FITTED WITH E600 SCORPION SERIES CAST IRON COVERS BY EJ GROUP OR EQUIVALENT APPROVED. 150m FRAME DEPTH, 600x600 CLEAR OPENING.
10. ALL MANHOLE/ INSPECTION CHAMBERS IN OTHER TRAFFICKED AREAS TO BE FITTED WITH D400 SCORPION SERIES CAST IRON ACCESS COVERS BY EJ GROUP OR EQUIVALENT APPROVED. 100m FRAME DEPTH, 600x600 CLEAR OPENING.
11. ACO QMAX CHANNEL TO BE FITTED WITH Q-FLOW DUCTILE IRON EDGE RAIL (32801). ACCESS & SILT CHAMBER TO BE FITTED WITH E600 DUCTILE IRON SOLD COVER & FRAME (44317).
12. SURFACE WATER DRAINAGE DESIGN HAS BEEN DEVELOPED ON THE BASIS OF RESTRICTING DISCHARGE BASED ON THE FOLLOWING AS DETAILED IN THE CJEMM LTD FLOOD RISK ASSESSMENT & DRAINAGE STRATEGY REPORT 146B31-FRDA/03 (AUGUST 2022).
13. UNITS 1: Q_{MAX} = 5.96 l/s (APPLIED PRO-RATA FOR 2 OUTLETS ACROSS SITE)
14. ATTENUATION VOLUMES INCLUDE A CLIMATE CHANGE ALLOWANCE OF 45% .
15. NO ALLOWANCE HAS BEEN INCLUDED FOR URBAN CREEP BASED ON THE TYPE OF DEVELOPMENT. TO BE AGREED WITH THE LLFA.
16. BRANCHED GULLY CONNECTIONS OF Ø150mm PIPES TO ALL SURFACE WATER SEWER MAINS OF Ø375mm AND ABOVE TO BE MADE AS SADDLE CONNECTIONS.

Rev	Date	By	Description
AB1	06.11.24	UM	AS-BUILT

REVISIONS

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W: www.xosquare.co.uk

Client

BARTON AND REDMAN

Project Name

NEW SMITHFIELD MARKET

Drawing Title

NEW SMITHFIELD MARKET
PROPOSED DRAINAGE

Drawing Status	Project No
AS-BUILT	180

Drawn	Approved	Scale	First Issue	Size
UM	EP	1:400	19.03.24	A1

JOB No.	COMPANY	ZONE	LEVEL	TYPE	ROLE	DRAWING No.	REVISION
180	XOS	XX	XX	DR	C	5570	AB1

NorthWest DrainServices

Inspection Report

Project Name:	New Smithfield Market 041124
Start Date:	04/11/2024
Client:	Barnfield Construction Ltd 8 Kenyon Road, Lomeshaye Industrial Estate Nelson



NorthWest DrainServices

North West Drain Services Ltd
Unit G10 Falcon mill, Bolton
Tel. 07756631110 / 07429611080
drainservices@googlemail.com

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New Smithfield Market 041124		04/11/2024

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North West Drain Services Ltd
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drainservices@googlemail.com

Project Information

Project Name	Project Number	Project Date
New Smithfield Market 041124		04/11/2024

Client

Company: Barnfield Construction Ltd
Street: 8 Kenyon Road, Lomeshaye Industrial Estate
Town or City: Nelson
County: Lancashire
Post Code: BB9 5SP

Site

Company: Barton and Redman Ltd
Department: New Smithfield Market
Street: Lawton Street
Town or City: Manchester
Post Code: M11 2WW

Contractor

Company: North West Drain Services Ltd
Street: Unit G10 Falcon mill
Town or City: Bolton
County: Greater Manchester
Post Code: BL1 8BL
Phone: 07756631110 / 07429611080
Email: drainservices@googlemail.com

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Section Inspection - 04/11/2024 - SC1X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
1	1	04/11/24	8:59	Not Specified	No Rain Or Snow	Yes	SC1X

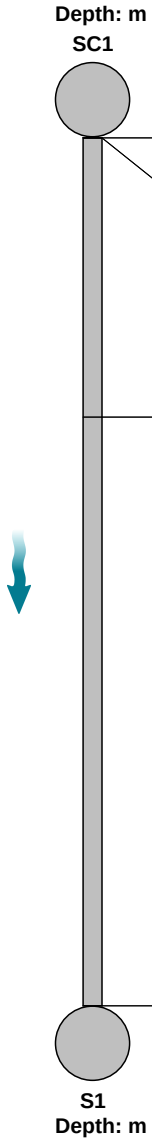
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SC1
Road:	New Smithfield Market	**Inspected Length:**	8.72 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	8.72 m	**Downstream Node:**	S1
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:76



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	GY	Start node, gully, reference: SC1	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.81	LD	Line deviates down	00:00:20		
8.72	OCF	Finish node, other special chamber, reference: S1: ATTENUATION TANK	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

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Section Inspection - 04/11/2024 - S2X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
2	1	04/11/24	9:24	Not Specified	No Rain Or Snow	Yes	S2X

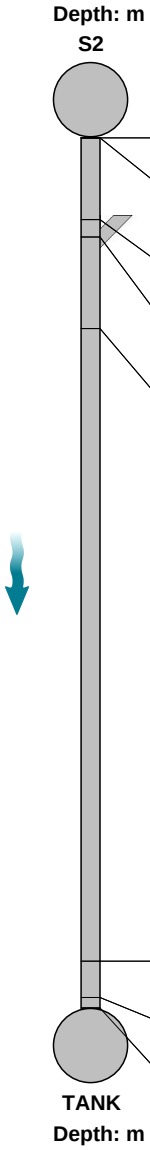
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	S2
Road:	New Smithfield Market	**Inspected Length:**	27.15 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	27.15 m	**Downstream Node:**	TANK
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:236



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S2	00:00:00		
0.00	WL	Water level, 15% of the vertical dimension	00:00:00		
2.56	OJM	Open joint, medium	00:00:20	S2X_a6d13c1d-3f1f-4086-8546	1
3.11	JN	Junction at 9 o'clock, 300mm dia	00:00:30		
5.96	WL	Water level, 10% of the vertical dimension	00:01:12		
25.68	OJM	Open joint, medium	00:04:14	S2X_f7222f66-3294-4dcc-8600-	1
26.82	LU	Line deviates up	00:04:36		
27.15	OCF	Finish node, other special chamber, reference: TANK: ATTENUATION TANK	00:04:46		

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	1.0	0.1	2.0	1.0	0	0.0	0.0	0.0	1.0

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Section Pictures - 04/11/2024 - S2X

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
2	Downstream	S2X		



S2X_a6d13c1d-3f1f-4086-8546-778b02011d1c_20241104_092512_015.jpg, 00:00:20, 2.56 m
Open joint, medium



S2X_f7222f66-3294-4dcc-8600-5484e84aa56d_20241104_092943_480.jpg, 00:04:14, 25.68 m
Open joint, medium

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Section Inspection - 04/11/2024 - SC2X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
3	1	04/11/24	9:40	Not Specified	No Rain Or Snow	Yes	SC2X

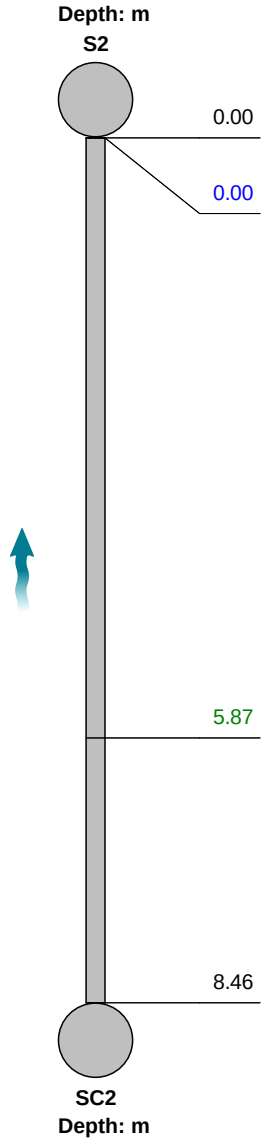
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	SC2
Road:	New Smithfield Market	**Inspected Length:**	8.46 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	8.46 m	**Downstream Node:**	S2
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:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:74



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S2	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
5.87	LR	Line deviates right	00:00:31		
8.46	GYF	Finish node, gully, reference: SC2	00:00:49		

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

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Section Inspection - 04/11/2024 - PIPE AX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
4	1	04/11/24	9:41	Not Specified	No Rain Or Snow	Yes	PIPE AX

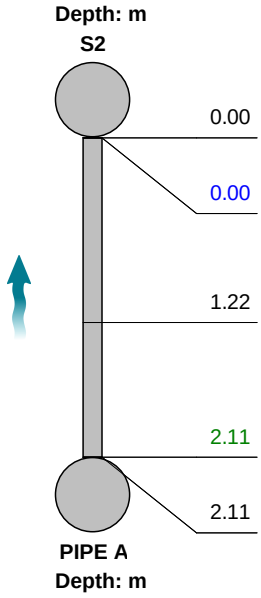
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	New Smithfield Market	**Inspected Length:**	2.11 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	2.11 m	**Downstream Node:**	S2
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:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S2	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
1.22	SC	Pipe size changes, new size(s), 100mm high	00:00:06		
2.11	LU	Line deviates up	00:00:31		
2.11	OCF	Finish node, other special chamber, reference: PIPE A: RWPIPE	00:00:34		

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

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Section Inspection - 04/11/2024 - TANKX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
5	1	04/11/24	10:17	Not Specified	No Rain Or Snow	Yes	TANKX

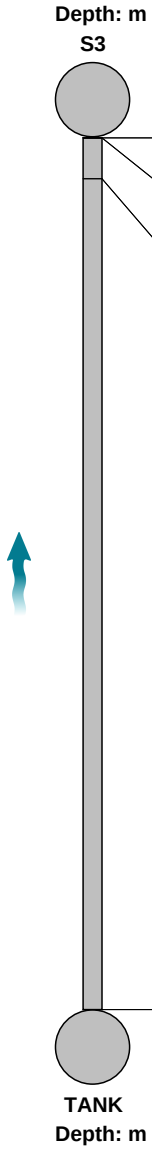
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	TANK
Road:	New Smithfield Market	**Inspected Length:**	13.02 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	13.02 m	**Downstream Node:**	S3
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:113



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	CP	Start node, catchpit, reference: S3	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.62	LR	Line deviates right	00:00:07		
13.02	OCF	Finish node, other special chamber, reference: TANK: OUTLET OF ATTENUIATION TANK	00:01:24		

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	0	0.0	0.0	0.0	1.0

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Section Inspection - 04/11/2024 - S3X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
6	1	04/11/24	10:28	Not Specified	No Rain Or Snow	Yes	S3X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	S3
Road:	New Smithfield Market	**Inspected Length:**	7.60 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	7.60 m	**Downstream Node:**	S5
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:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:66

Position [m]	Code	Observation	MPEG	Photo	Grade
		Depth: m			
		S5			
0.00	MH	Start node, manhole, reference: S5	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
7.60	CPF	Finish node, catchpit, reference: S3	00:00:54		
		S3			
		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	0	0.0	0.0	0.0	1.0

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Section Inspection - 04/11/2024 - F4X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
7	1	04/11/24	12:52	Not Specified	No Rain Or Snow	Yes	F4X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	F4
Road:	New Smithfield Market	**Inspected Length:**	14.03 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	14.03 m	**Downstream Node:**	MAIN
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Combined	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Concrete
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:122	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m MAIN						
	0.00	MH	Start node, manhole, reference: MAIN	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:01		
	0.82	JN	Junction at 9 o'clock, 150mm dia	00:00:10		
	14.03	MHF	Finish node, manhole, reference: F4	00:01:34		
F4 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - PIPE AX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
8	1	05/11/24	9:26	Not Specified	No Rain Or Snow	Yes	PIPE AX

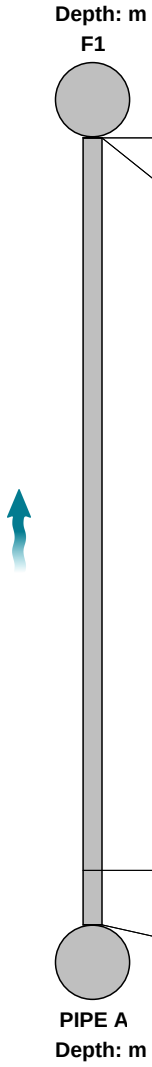
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	New Smithfield Market	**Inspected Length:**	5.20 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	5.20 m	**Downstream Node:**	F1
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:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: F1	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
4.84	LU	Line deviates up	00:00:27		
5.20	OCF	Finish node, other special chamber, reference: PIPE A: REST BEND	00:00:33		

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

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Section Inspection - 05/11/2024 - PIPE BX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
9	1	05/11/24	9:32	Not Specified	No Rain Or Snow	Yes	PIPE BX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	New Smithfield Market	**Inspected Length:**	8.64 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	8.64 m	**Downstream Node:**	F1
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:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:75



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: F1	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
0.28	LU	Line deviates up	00:00:06		
0.28	SC	Pipe size changes, new size(s), 100mm high	00:00:10		
8.51	LU	Line deviates up	00:00:39		
8.64	OCF	Finish node, other special chamber, reference: PIPE B: REST BEND	00:00:44		

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

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Section Inspection - 05/11/2024 - PIPE AX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
10	1	05/11/24	9:33	Not Specified	No Rain Or Snow	Yes	PIPE AX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	New Smithfield Market	**Inspected Length:**	7.75 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	7.75 m	**Downstream Node:**	F4
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:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:68



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: F4	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
7.65	LU	Line deviates up	00:00:39		
7.75	OCF	Finish node, other special chamber, reference: PIPE A: REST BEND	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**
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - F1X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
11	1	05/11/24	9:35	Not Specified	No Rain Or Snow	Yes	F1X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	F1
Road:	New Smithfield Market	**Inspected Length:**	13.00 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	13.00 m	**Downstream Node:**	F3
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:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:113



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: F1	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
13.00	JN	Junction at 6 o'clock, 150mm dia: DROPSHAFT INTO MANHOLE	00:00:47		
13.00	REM	General remark: MANHOLE IN VIEW	00:00:49		
13.00	MHF	Finish node, manhole, reference: F3	00:00:49		

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

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Section Inspection - 05/11/2024 - S9X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
12	1	05/11/24	12:28	Not Specified	No Rain Or Snow	Yes	S9X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	S9
Road:	New Smithfield Market	**Inspected Length:**	15.19 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	15.19 m	**Downstream Node:**	S10
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:132	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m S10						
	0.00	MH	Start node, manhole, reference: S10	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:00		
	15.19	MHF	Finish node, manhole, reference: S9	00:01:24		
S9 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - S8X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
13	1	05/11/24	12:30	Not Specified	No Rain Or Snow	Yes	S8X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	S8
Road:	New Smithfield Market	**Inspected Length:**	45.57 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	45.57 m	**Downstream Node:**	S9
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:395	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m S9						
	0.00	MH	Start node, manhole, reference: S9	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:00		
	14.14	CN	Connection other than junction at 2 o'clock, 150mm dia	00:01:21		
	29.21	CN	Connection other than junction at 2 o'clock, 150mm dia	00:02:51		
	45.57	MHF	Finish node, manhole, reference: S8	00:04:16		
S8 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - S10X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
14	1	05/11/24	12:44	Not Specified	No Rain Or Snow	Yes	S10X

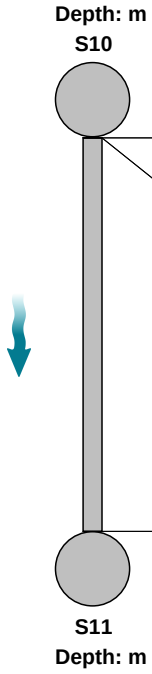
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	S10
Road:	New Smithfield Market	**Inspected Length:**	2.60 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	2.60 m	**Downstream Node:**	S11
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S10	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.60	OSF	Finish node, oil separator, reference: S11: STORMCLEANSER	00:00:16		

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

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Section Inspection - 05/11/2024 - SC3X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
15	1	05/11/24	12:49	Not Specified	No Rain Or Snow	Yes	SC3X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	SC3
Road:	New Smithfield Market	**Inspected Length:**	11.54 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	11.54 m	**Downstream Node:**	S10
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:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:100	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m S10						
	0.00	MH	Start node, manhole, reference: S10	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
	2.08	LL	Line deviates left	00:00:12		
	3.16	LL	Line deviates left	00:00:19		
	11.16	LR	Line deviates right	00:01:07		
	11.54	GYF	Finish node, gully, reference: SC3: STORCHATCHER	00:01:11		
SC3 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - SUC01X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
16	1	05/11/24	13:52	Not Specified	No Rain Or Snow	Yes	SUC01X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Pushrod	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SUC01
Road:	New Smithfield Market	**Inspected Length:**	23.39 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	23.39 m	**Downstream Node:**	SUC02
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:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:203



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SUC01					
0.00	CP	Start node, catchpit, reference: SUC01	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
23.28	LL	Line deviates left	00:01:32		
23.39	MHF	Finish node, manhole, reference: SUC02	00:01:36		
SUC02 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - SUC03X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
17	1	05/11/24	13:56	Not Specified	No Rain Or Snow	Yes	SUC03X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	SUC03
Road:	New Smithfield Market	**Inspected Length:**	5.72 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	5.72 m	**Downstream Node:**	SUC01
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m SUC01						
	0.00	CP	Start node, catchpit, reference: SUC01	00:00:00		
	0.00	WL	Water level, 10% of the vertical dimension	00:00:00		
	5.72	CPF	Finish node, catchpit, reference: SUC03	00:00:28		
SUC03 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - TANKX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
18	1	05/11/24	14:02	Not Specified	No Rain Or Snow	Yes	TANKX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	TANK
Road:	New Smithfield Market	**Inspected Length:**	5.20 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	5.20 m	**Downstream Node:**	SUC03
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50

Position [m]	Code	Observation	MPEG	Photo	Grade
		Depth: m			
		SUC03			
0.00	CP	Start node, catchpit, reference: SUC03	00:00:00		
0.00	WL	Water level, 10% of the vertical dimension	00:00:00		
5.20	OCF	Finish node, other special chamber, reference: TANK: ATTENUATION TANK	00:00:28		
		TANK			
		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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - S12X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
19	1	05/11/24	14:27	Not Specified	No Rain Or Snow	Yes	S12X

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	S12
Road:	New Smithfield Market	**Inspected Length:**	22.31 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	22.31 m	**Downstream Node:**	S12A
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:194	Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: m S12						
	0.00	MH	Start node, manhole, reference: S12	00:00:00		
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
	22.31	MHF	Finish node, manhole, reference: S12A	00:01:58		
S12A 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	0	0.0	0.0	0.0	1.0

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Section Inspection - 05/11/2024 - PIPE AX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
20	1	05/11/24	14:33	Not Specified	No Rain Or Snow	Yes	PIPE AX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	New Smithfield Market	**Inspected Length:**	2.29 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	2.31 m	**Downstream Node:**	S12
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:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S12	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.29	SC	Pipe size changes, new size(s), 150mm high	00:00:26	PIPE AX_f6dae6dc-38bd-4	
2.29	LU	Line deviates up: TO RWP	00:00:30		
2.29	OCF	Finish node, other special chamber, reference: PIPE A: SWRP	00:00:31		

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

NorthWest DrainServices

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Section Pictures - 05/11/2024 - PIPE AX

Item No.	Inspection Direction	PLR	Client`s Job Ref	Contractor`s Job Ref
20	Upstream	PIPE AX		



PIPE
AX_f6dae6dc-38bd-4364-afa4-7698d6535c87_20241105_143406_868.jpg, 00:00:26, 2.29 m
Pipe size changes, new size(s), 150mm high

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Section Inspection - 05/11/2024 - S12AX

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
21	1	05/11/24	14:58	Not Specified	No Rain Or Snow	Yes	S12AX

Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	S12A
Road:	New Smithfield Market	**Inspected Length:**	2.65 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	2.65 m	**Downstream Node:**	TANK
Surface Type:		**Joint Length:**		**Downstream Pipe Depth:**	

Use:	Surface water	**Pipe Shape:**	Circular
Type of Pipe:	Gravity drain/sewer	**Dia/Height:**	300 mm
Flow Control:	No flow control	**Material:**	Polyvinyl chloride
Year Constructed:	Not Specified	**Lining Type:**	No Lining
Inspection Purpose:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S12A	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.65	REM	General remark: LINE DROPS ONTO PIPE RUNNING THROUGH TANK	00:00:13		
2.65	OCF	Finish node, other special chamber, reference: TANK: ATTENUATION TANK	00:00:16		

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

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Section Inspection - 05/11/2024 - SC4X

Item No.	Insp. No.	Date	Time	Client`s Job Ref	Weather	Pre Cleaned	PLR
22	1	05/11/24	15:04	Not Specified	No Rain Or Snow	Yes	SC4X

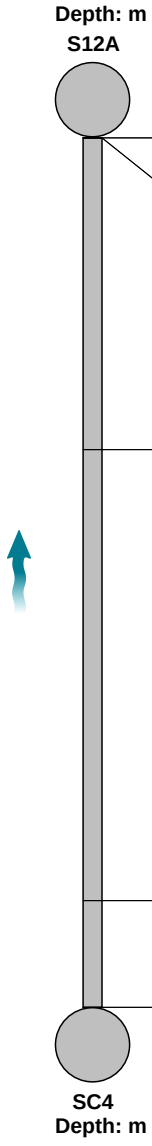
Operator	Vehicle	Camera	Preset Length	Legal Status	Alternative ID
A Wharton	ML23 SUH	Crawler	Not Specified	Private Sewer	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	SC4
Road:	New Smithfield Market	**Inspected Length:**	10.92 m	**Upstream Pipe Depth:**	
Location:	Road	**Total Length:**	10.92 m	**Downstream Node:**	S12A
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:	Post completion condition survey	**Lining Material:**	No Lining

Comments:
Recommendations:

Scale: 1:95



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: S12A	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
3.92	LR	Line deviates right	00:00:27		
9.58	LR	Line deviates right	00:01:09		
10.92	GYF	Finish node, gully, reference: SC4	00:02:23		

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**
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0

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North West Drain Services Ltd

Thank you for choosing to use North West Drain Services Ltd to carry out your drainage investigation works.

The results and views carried in this report are those of the engineer(s) appointed to carry out the investigation and are considered relevant on the day of the survey. Drain and sewer performance is known to alter over time, so liability cannot be accepted for differences between the recorded data and the actual data at a time after this report was generated.

This survey has been created in accordance with the drainage standard used in the country and language settings for this PC.

If a DVD has been supplied with this report, please not that it can only be used in a Windows based PC. Please browse the DVD and navigate to the PDF folder to find project-based documents such as drawings, engineer's site notes and survey specifications amongst others.

CCTV subsidence investigations do not account for the water tightness of the pipes and are merely a visual inspection of inside of the drains. CCTV drainage engineers are generally not qualified to comment on the causes of subsidence, and can only suggest required remedial actions for the pipes, and not the affected buildings.

Subsidence is a building structural failure, which can occur for many reasons. Although drainage failures can contribute to subsidence problems, other causes should always be investigated as part of a considered approach. In order to eliminate drains from suspicion, North West Drain Services Ltd suggests that all pipes within at least 10m of the subsidence area be pressure tested over and above a CCTV inspection, and remedial suggestions considered based on the findings.

Unless otherwise specified in an associated task order (or similar), the data gathered in this report may not be suitable for use as a pre-lining investigation. North West Drain Services Ltd are happy to carry out such surveys, but this must be agreed prior to the commencement of the works, and a the client must specify the data they wish to capture and the acceptable tolerances.

All measurements including depths, meterage, locations are given as an approximate guide only and not to be used for piling purposes. We do no offer pin-point locating of drainage.