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Swan House, Manchester

Verification Report & Drainage Maintenance

Curtins Ref: **067266-CUR-00-XX-RP-C-92002**
Revision: CR03
Issue Date: 23 April 2024

Client Name: RG - Group

Client Address: Unit A,
Icon Building,
Firstpoint,
Balby Carr Bank,
Doncaster,
DN4 5JQ

Site Address: Cable Street, Manchester M4 5DF.

Rev	Description	Issued by	Checked	Date
CR01	Final Construction	KS	MW	01 December 2023
CR02	Final Construction	KS	MW	06 December 2023
CR03	Hydrobrake drawing updated	HS	HS	23 April 2024

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Reviewed	Signature	Date
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Appendices

Appendix A

Proposed Drainage Layout

Appendix B

CCTV survey report

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Attenuation tank detail

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1.0 Introduction

1.1 Project Background

1.1.1 Curtins was appointed by RG-Group to provide a Verification and Drainage Maintenance Strategy for the Swan House development. The site address is Cable Street, Manchester M4 5DF.

1.1.2 This report is intended to give an overview of the operation and maintenance for the drainage features, included with the drainage strategy provided by Curtins.

1.1.3 The recommended operations and frequencies are typical only and should be more frequent initially to ensure that there are no unforeseen issues with the operation and then adjusted to suit the site requirements.

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2.0 Verification

2.1.1 **T**he surface and foul water as built CCTV drainage survey have been reviewed.

2.1.2 The CCTV survey report indicates the internal foul and surface water drainage has been installed correctly and to Curtins design.

2.1.3 The surface water drainage and permeable pavement in front of the building needs to still be constructed.

3.0 Foul water drainage

3.1.1 The private foul water drainage is split into 2 runs, one in the north of the site and one in the southeast. Both networks connect to the existing private manholes which are connected to the public combined sewer within Cable Street.

4.0 Surface water drainage

4.1.1 Surface water drainage has been designed to accommodate the flows for 1 in 100+40 Climate change.

4.1.2 The Surface water drainage is split into 2 runs, one internal network that discharges to the existing combined private manhole EXMH4 in the southeast of the site, this is discharged via a Hydrobrake to a restricted rate of 4 l/s, and one external run that connects to existing combined private manhole EXMH4.1 in the north of the site, this is discharged via a Hydrobrake to a restricted rate of 2 l/s. Both networks connect to the existing private manholes which are connected to the public combined sewer within Cable Street.

4.1.3 Based on the provided photographs from the site, the attenuation tank has been installed correctly and according to the design.

Attenuation tank pictures



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4.1.4 The external drainage including permeable paving and Hydrobrake located in the northwest has not yet been built.

5.0 General Maintenance

5.1 Components

5.1.1 This section is intended to give an overview of the operation and maintenance for the drainage features included with the drainage strategy and in relation to typical details. Where proprietary products are specified, the manufacturer's instructions and recommendations should be followed in priority to this document unless specifically noted otherwise due to project constraints.

5.1.2 The recommended operations and frequencies are typical only and should be more frequent initially to ensure that there are no unforeseen issues with the operation and then adjusted to suit the site requirements.

5.1.3 The following components have been included within the drainage design for the proposed development:

- Inspection, Manhole and Catchpit Chambers
- Pipes
- Drainage Channels and Gullies
- Permeable Paving
- Attenuation Tank
- Flow Control Unit – Hydrobrake

5.1.4 The location of all drainage is indicated on Curtins drainage drawings enclosed in Appendix A.

5.1.5 A suitable maintenance strategy should be adopted to ensure the drainage network is cleaned regularly and the routine maintenance and cleansing regime should be documented.

5.1.6 It is assumed that the maintenance of the private drainage network will be the responsibility of an on-site facilities management team.

5.1.7 The surface water network has been designed to accommodate the 1 in 100 year storm rainfall event plus an allowance for 40% climate change particular to the requirements of the site. As the flows are generally being attenuated on site and within SuDs features there will be a period of time after storm events where the network is still partially or fully surcharged and is draining down. Where this surcharging is still present after 48hrs appropriate action should be taken as noted below.

5.1.8 It is recommended that the drainage system is inspected as a minimum twice a year, with the system also being inspected after any major storm event.

5.1.9 Significant sediment deposition is likely in areas used for storage, so a post clean-up operation may be required including the removal of litter, vegetation, sewerage debris and larger objects.

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5.1.10 Long-term management practices include monthly sweeping of external paved areas. The sweeping program will remove sand and contaminants directly from paved surfaces before they become mobilised during storm events and transported to the drainage system.

5.1.11 During the winter months, drainage features such as gullies and channels should be cleared of ice, snow, debris or litter.

5.1.12 Sediment/material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols; especially where run-off is taken from potentially contaminated areas such as the filter drains and the upstream/downstream chambers.

5.2 Inspection, Manhole and Catchpit Chambers

5.2.1 Access points have been located at the head of each run, at a change in direction and at a change of pipe size in accordance with Building Regulations Part H.

5.2.2 The appropriate health and safety equipment must be used when accessing manholes. Confined space certificates must be held by any personnel entering a manhole and the appropriate permits should be obtained from the Maintenance Manager prior to any access.

5.3 Pipes

5.3.1 Pipes are proprietary products and the materials can vary across the site and as such where used the manufacture's recommendations should be followed. Regardless of the product used the pipes will be fully compliant with the Curtins drainage specification.

5.3.2 Pipes are intended to be the main conveyance across the development. They are intended to be dry except for during rainfall events. These have been designed to be self-cleaning velocity.

5.3.3 Access for maintenance is provided through access chambers and manholes.

5.3.4 Regular inspection and maintenance is important to identify areas which may have been obstructed/clogged and may not be drainage correctly thus exposing the development to a greater level of flood risk.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Initial Inspection should be provided as post construction CCTV survey.	N/A
Regular maintenance\ inspection	Inspect for evidence of poor operation via water level in chambers. If required, take remedial action.	3-monthly, 48 hours after large storms.

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	Check and remove large vegetation growth near pipe runs.	Monthly or as required
Remedial Action	Rod through poorly performing runs as initial remediation.	As required.
	If continued poor performance jet and CCTV survey poorly performing runs.	As required.
	Seek advice as to remediation techniques suitable for the type of performance issue and location.	As required If above does not improve performance.

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5.4 Drainage Channels and Gullies

5.4.1 Channels and gullies should be inspected and cleaned in accordance with the manufacturer's details. Channel units can be cleaned through the use of a high-pressure hose; this can be fed into the channel system through access units strategically placed along the channel run. The throat section of channel units should be kept clear at all times to ensure uninterrupted flow of surface water into the drainage channel and any debris within the throat should be removed.

5.4.2 Locking bolts should be replaced and sufficiently tightened, taking care that the bolt heads do not stand above the top surface of the cover or grate. If covers are allowed to move within their frame, this may cause damage to the frame or seating.

5.4.3 Sediment\material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols; especially where run-off is taken from potentially contaminated areas such as the car park channels.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Initial Inspection.	Half yearly and after large storms.
Regular maintenance\ inspection	Litter and debris removal	Monthly or as required.
	Check and remove large vegetation growth near gully gratings.	Monthly or as required
	Inspect for evidence of poor operation and/or weed growth. If required, take remedial action. Inspect silt accumulation rates and establish appropriate brushing frequencies. Silt can also be caused by adjacent landscaping areas which should be reprofiled to provide a flat area or berm adjacent to the paving.	3-monthly, 48 hours after large storms.
Remedial Action	Inspect sumps and outlet pipes and rod through poorly	As required.

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	performing channels and outlets as initial remediation.	
	Inspect for evidence of poor operation and/or weed growth. If required, take remedial action. Inspect silt accumulation rates and establish appropriate brushing frequencies. Silt can also be caused by adjacent landscaping areas which should be reprofiled to provide a flat area or berm adjacent to the paving.	3-monthly, 48 hours after large storms.
Regular maintenance\ inspection	Brushing and Vacuuming	Three times/year at end of winter, mid-summer, after autumn leaf fall, or as required based on site specific observations of clogging or manufacturers' recommendations.
Occasional maintenance	Stabilise and mow contributing and adjacent areas.	As required and as per landscape architect's specification.
	Removal of weeds	As required.
Remedial Action	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving.	As required.
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users.	As required.
	Rehabilitation of surface and upper sub-structure. This could include replacement of the jointing and bedding material. The upper geotextiles layer may also need replacing if clogged and Terram 1000 has a life span of 25 years.	As required (if infiltration performance is reduced as a result of significant clogging).

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5.5 Permeable pavements

5.5.1 The pavement should be inspected regularly for clogging, litter, weeds and water ponding, preferably during and after heavy rainfall to check effective operation. Permeable pavements need to be regularly cleaned of silt and other sediments to preserve their infiltration capacity. The SuDS Manual indicates that sweeping once per year is sufficient for most sites, however the sweeping frequency should be adjusted to suit site specific conditions and should also be informed by annual inspection reports.

5.5.2 The below table outlines the proposed operation and maintenance regime for permeable pavements. This is adapted from The SuDS Manual (C753).

Maintenance Schedule	Required Action	Frequency
Regular maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Once a year, after autumn leaf fall or reduced frequency as required, based on site- specific observations of clogging - pay particular attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect the most sediments
Occasional maintenance	Stabilise and mow contributing and advancement areas	As required
	Removal of weeds or management using glyphosphate applied directly into the weeds by an applicator rather than spraying	As required –once per year on less frequently used pavements
Remedial actions	Remediate any landscaping which through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving	As required
	Remedial work to any depressions rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost jointing material	As required

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5.6 Attenuation Tanks

5.6.1 The attenuation tanks are currently specified as geocellular units and are intended for storage of surface water run-off from the site up to and including the 1 in 100 year plus 40% climate change event to reduce the rate of run-off into the downstream network and to minimise flood risk.

5.6.2 The geocellular units are proprietary products and therefore manufacturer's recommendations should also be taken in to consideration.

5.6.3 Access for maintenance has been provided by an access shaft located on the tank and from the manhole chambers downstream of the tank.

5.6.4 Geocellular units are proprietary products and therefore manufacturer's recommendations should also be taken in to consideration. Additionally different manufacturers may have different connection types and arrangements which will need to be taken in to consideration.

5.6.5 Regular inspection and maintenance is important for the effective operation of attenuation tanks as designed. As the feature is buried, a regular inspection regime is very important to ensure the correction functionality of the surface water drainage network.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Inspect inlets, outlets and overflows for blockages, and clear if required. If faults persist jetting and CCTV survey may be required.	Monthly and after large storms.
Regular maintenance\ inspection	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly.
	Debris removal from catchment surface (where may cause risks to performance).	Monthly
	Remove sediment from pre-treatment structures.	Annually (or as required after heavy rainfall events)
Remedial Actions	Repair/rehabilitation of inlets, outlets and overflows.	As required.

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5.7 Flow Control Units

5.7.1 The flow control units are intended for flood control and flow restriction.

5.7.2 The flow controls are specified as Hydro-brake or similar approved and are proprietary products; therefore manufacturer's recommendations should also be taken in to consideration.

5.7.3 Access for maintenance has been provided by locating within manhole chambers.

Maintenance Schedule	Required Action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Inspect inlets for blockages, and clear if required. If faults persist jetting and CCTV survey may be required.	Monthly and after large storms.
Regular maintenance\ inspection	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly.
	Debris removal from catchment surface (where may cause risks to performance).	Monthly
	Remove sediment from pre-treatment structures and flow control chambers.	Annually (or as required after heavy rainfall events)
Remedial Actions	Repair/rehabilitation of inlets.	As required.

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Appendix A

Drainage Drawings

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CL: 49.59
IL: UNRECORDED

EXISTING 150Ø CONNECTION HAS SUFFICIENT CAPACITY FOR PROPOSED FLOWS, S106 INDIRECT CONNECTION HAS BEEN APPROVED BY UU REF EC5501

IDENTIFIED AS 'HEAD OF SYSTEM' ON PUBLIC SEWER RECORDS, WITH JUNCTIONS (UNIDENTIFIED CONNECTIONS) DOWNSTREAM

EXISTING PIPE TO BE REPAIRED

EXMH4.1
CL:49.75
IL:46.20

FW5
Ø450
CL49.54
IL 48.44

BD 47:54

3.1

CW1
Ø450
CL49.48
IL47.29

EXTENT OF EXISTING PRIVATE DRAIN TO BE CONFIRMED AND ABANDONED WHERE POSSIBLE. ANY THIRD PARTY CONNECTIONS TO BE MAINTAINED.

Rochdale Road

SW1CP
Ø450
CL49.54
IL 48.39

FW6
Ø450
CL49.54
IL 48.79

SW9
Ø1500 HYDROBRAKE CHAMBER
CL49.200
IL 48.120
PERFORATED PIPE 49.05
FLOW LIMITED TO 2L/S
MD-SHE-0067-2000-1000-2000
OVERFLOW Ø100 IL48.95

FW7
Ø450
CL49.54
IL 48.62

FW4
Ø450
CL49.54
IL48.50

SW2
Ø450
CL50.10
IL 48.12

FFL:VARIES
SSL:49.455

FW3
Ø450
CL50.10
IL 48.66

IT HAS BEEN AGREED WITH COUNCIL THAT FOOTWYA WILL BE OFFERED FOR ADOPTION TOWARDS BUILDING EDGE, THEREFORE PRIAVTE SLOT DRAIN IS NOT PROVIDED

DP
IL 49.00

FW2
Ø450
CL49.48
IL 48.75

SW3
Ø450
CL50.10
IL 48.00

FW1a
Ø450
CL49.48
IL:48.93

DP
IL 49.00

ASSUMED ROUTE OF 450 X 750 PUBLIC COMBINED SEWER - CONFIRMED BY INTERPOLATION BETWEEN PUBLIC SEWER RECORDS AND CCTV DRAINAGE SURVEY.

FFL:50.205
SSL:50.205

Cable Street

FW10
Ø450
CL50.205
IL 49.16
BD:49.68

FW16
Ø450
CL50.205
IL48.85
BD1:49.46
BD2:49.60

SW7
Ø1200
HYDROBRAKE
CHAMBER
CL50.205
IL 46.90
FLOW LIMITED
TO 4L/S
MD-SHE-0077-4000-2500-4000
OVERFLOW
PIPE 100 Ø
49.40

FW3a
Ø450
CL50.10
IL 48.68

FW11A
Ø450
CL50.205
IL 48.95
BD:49.65

SW4CP
Ø1200
CL50.205
IL 47.00

FW11
Ø450
CL50.205
IL 48.96
BD 49.65

FW13
Ø1200
CL50.205
IL48.80

CW2 1200Ø
CL:50.42
IL:46.25 (APPROX)
BD1: 47.55
BD2: 47.24

RWP LOCATION FROM CANOPIE TBC, SHOULD BE CONNECTED TO SW9

SW8b
Ø450
CL49.30
IL 48.61

150mm PERFORATED PIPE

SW3a
Ø450
CL:49.48
IL 48.24

AREA IN ABAYENCE

PROPOSED PERMEABLE CONSTRUCTION FOR ATTENUATION AREA 142M²
THICKENS 350MM
VOLUME 16.4M³
IMPERMEABLE MEMBRANE- SEALED SYSTEM, PERFORATED PIPE WITH INSPECTION REQUIRED WITHIN SUB-BASE.

FW1
Ø450
CL49.48
IL 48.79

SW5CP
Ø1200
CL50.205
IL 46.95
ILA:48.38
ILB:49.58

FW13A
Ø450
CL50.205
IL48.60
BD:49.64

EXMH4
CL:50.41
IL:46.11

SW8a
Ø450
CL49.42
IL 48.70

ATTENUATION TANK IN ACCORDANCE WITH CIRIA C687 PROVIDING 72.2m³ STORAGE (4X9.5)38m² x 2m DP (95% VOID)
BASE 46.977
TOP 48.98

GROUNDWATER LEVEL 48.40 mAOD

GROUNDWATER LEVEL 48.40 mAOD TANK SHOULD BE CHECKED AGAINST FLOATATION

FW14
Ø450
CL50.205
IL 49.48

UTILISE EXISTING OUTFALL. CONNECTION AGREEMENT WITH UNITED UTILITIES. ref EC5502

EXMH4a

EXISTING PIPE TO BE REPAIRED.

EX 150Ø

3.1 5.4

FW10a
Ø450
CL50.205
IL 49.62

FW12
Ø450
CL50.205
IL 49.51

SW6CP
Ø450
CL50.205
IL 49.53

SW6aCP
Ø450
CL50.205
IL48.48
A:49.35

FW15
Ø450
CL50.205
IL 49.12

FW18
Ø450
CL50.42
IL 47.65
BD1 49.63
BD2 49.65
BD3 49.63
BD4 49.51

AREA WILL BE ADOPTED BY MCC UNDER DEED OF DEDICATION

UUMH 4802
CL:49.38
IL: UNRECORDED

Swan Street

SEWER RECORDS SHOW CONNECTION TO NORTHERN PUBLIC SEWER; CCTV SURVEY INDICATES CONNECTION TO SOUTHERN PUBLIC SEWER.
THIS SEWER DOES NOT FORM PART OF THE DRAINAGE PROPOSALS FOR THE SITE.

IDENTIFIED ON PUBLIC SEWER RECORDS AS 'HEAD OF SYSTEM'

All REST BEND STARTS WITHIN SLAB

FW17
Ø450
CL50.42
IL 47.80
BD1 49.59
BD2 49.67

CANOPIES RWPS CONNECTIONS TO A PRIVATE EXTERNAL DRAIN IS SHOWN ON S278 DRAWINGS

IDENTIFIED ON PUBLIC SEWER RECORDS, NOT IDENTIFIED ON GPR UTILITY SURVEY OR CCTV DRAINAGE SURVEY - THEREFORE ASSUMED TO HAVE BEEN ABANDONED,BURIED OR NOT IN THIS LOCATION.

EXTENT OF EXISTING PRIVATE DRAIN TO BE ABANDONED

EXTENT OF UU RECORDS ON THIS SEWER

REQUIRED INFORMATION
- LANDSCAPE LAYOUT & EXTERNAL LEVELS
- INTERNAL COVER LEVELS TBC FOR GF RETAIL AREA

ALL PIPE SIZES NOT SHOWN FOR CLARITY, REFER TO DRAINAGE LAYOUTS 1:100
32073-CUR-Z0-C-G581-PL-00-008
32073-CUR-Z0-C-G581-PL-00-009

CONSTRUCTION RECORD - FINAL CONSTRUCTION

THE INFORMATION IS BASED ON CONFIRMATION FROM THE CONTRACTOR OF THE INSTALLED WORKS. THERE MAY BE VARIATIONS ON SITE WHICH ARE NOT REFLECTED ON THIS DRAWING AND HAS NOT BEEN VERIFIED BY CURTINS.

RESIDUAL HAZARD REGISTER
HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS.

HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
3.1	CONSTRUCTION	EXCAVATION NEAR EXISTING DRAINAGE
5.4	CONSTRUCTION	EXCAVATION DEEPER THAN 3M

DESIGN PHILOSOPHY

SURFACE WATER DESIGN
THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR 40% CLIMATE CHANGE EVENT.
SW FLOW RATE:6L/S REQUESTED BY UNITED UTILITIES
LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED.
POLLUTION TREATMENT: NOT REQUIRED
SUSTAINABLE DRAINAGE: PERMEABLE PAVING EXTERNAL AREA.
INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME, SPACE CONSTRAINTS

FOUL WATER DESIGN
FW PEAK FLOW RATE :
LOWER GROUND 22.5L/S (1674 DU)
GF 18.9L/S (1428DU)
LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED.

EXISTING OUTFALL PIPES CAPACITY HAVE BEEN CHECKED FOR ASSUMED SLOPE ASSETS BASED ON CCTV SURVEY
EXMH4.1 1:10
EXMH4A 1:33
PIPES HAVE SUFFICIENT CAPPACITY

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. ALL ADOPTABLE DRAINAGE WORKS INCLUDING WORKS TO EXISTING PUBLIC SEWERS TO BE UNDERTAKEN IN ACCORDANCE WITH "SEWERS FOR ADOPTION 7th EDITION" AND "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION" AND CONSTRUCTED TO THE RELEVANT STATUTORY UNDERTAKERS DETAILS.
3. ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH CURTINS DRAINAGE SPECIFICATION, "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION", BS EN 752 2017 'DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS' AND THE BUILDING REGULATIONS APPROVED 'DOCUMENT H'.
4. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
5. DESIGN BASED ON TOPOGRAPHICAL SURVEY AND CCTV SURVEY INFORMATION AVAILABLE AT THE TIME OF THE DESIGN.
6. OUTFALL CONNECTION(S) SUBJECT TO AGREEMENT WITH THE APPROVING AUTHORITY.
7. ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.
8. COVER LEVELS, GULLY POSITIONS, AND BUILDINGS LOCATION ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/ LANDSCAPE ARCHITECT. CONTRACTOR TO ALLOW FOR ADJUSTMENT TO SUIT AGREED POSITIONS AND FINISHED LEVELS, AND CONFIRM ALL COVER LEVELS ON SITE.
9. ALL INTERNAL DRAINAGE CONNECTIONS ARE PROVIDED TO THE PENETRATION POSITIONS SHOWN ON ARCHITECT AND M&E DRAWINGS. REFER TO DIMENSIONED LOCATIONS AND DIAMETERS ON ARCHITECT'S GROUND FLOOR SETTING-OUT PLANS.
10. ALL UNDERGROUND FOUL DRAINAGE SHOULD BE SUITABLY VENTED AT OR NEAR TO THE HEAD OF RUNS.
11. ALL ACCESS FITTINGS, STACKS, RWP'S AND GULLIES TO BE RODDABLE. ALL TO HAVE LOW LEVEL RODDING ACCESS PLATES UNLESS AN ALTERNATIVE MEANS OF ACCESS IS AGREED. ACCESS POINT TO BE ABOVE ANY GROUND FLOOR CONNECTED APPLIANCE SPILL LEVEL.
12. LARGE ACCESS FITTING REQUIRED ABOVE GROUND WHERE GREATER THAN 12M UP TO 22M TO A JUNCTION. SMALL ACCESS FITTING REQUIRED UP TO 12M TO A JUNCTION.
13. ALL GULLY AND CHANNEL DRAIN OUTLETS AND TERMINATION POINTS TO BE TRAPPED AND RODDABLE. INTERNAL GULLIES AND CHANNEL DRAINS TO BE SPECIFIED BY OTHERS.
14. WHERE NO WC'S ARE CONNECTED UPSTREAM, UNDERSLAB FW DRAINAGE TO BE LAID AT 1:80 MIN. AFTER THE CONNECTION OF AT LEAST 1NO WC, A MIN. FALL OF 1:80 APPLIES.
15. ALL CONNECTIONS FROM POP-UPS TO BE LAID AT A CONSTANT GRADIENT TO JUNCTION/ INSPECTION CHAMBER/ MANHOLE UNLESS NOTED OTHERWISE. ANY ISSUES RELATING TO CLASHES WITH FOUNDATIONS ARE TO BE FORWARDED TO THE ENGINEER, ALLOWING SUFFICIENT TIME FOR AN ALTERNATIVE SOLUTION TO BE PROPOSED.
16. INVERT LEVELS AT MANHOLES/ INSPECTION CHAMBERS TO BE USED TO SET OUT PIPEWORK. PIPE GRADIENTS ARE SHOWN INDICATIVELY ONLY.
17. ALL PIPE DIAMETERS GIVEN ARE NOMINAL INTERNAL PIPE DIAMETERS.
18. ALL SEWERS, UNLESS AGREED OTHERWISE STATED, SHALL BE:
- 150mm to 300mm DIA TO BE VITRIFIED CLAY.
19. AS AN ALTERNATIVE THE CONTRACTOR MAY USE AN APPROVED UNPLASTICISED POLYVINYL CHLORIDE (PVCU) WITH APPROVAL FROM THE ENGINEER.
20. SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS.
21. THE FIRST PIPE OUT OF MANHOLES TO BE AS SHORT AS PRACTICABLE SO AS TO PROVIDE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE OUTSIDE FACE OF THE CONCRETE SURROUND AND CONNECTED TO A LENGTH OF ROCKER PIPE.
22. ALL NEW CONNECTIONS INTO EXISTING MANHOLES (OR INTO EXISTING SEWERS) TO BE 'SOFFITS LEVEL' UNLESS OTHERWISE NOTED.
23. ALL ADOPTABLE DRAINAGE PIPES WILL REQUIRE A MINIMUM OF 1200mm COVER, IN ACCORDANCE WITH SEWERAGE UNDERTAKERS REQUIREMENTS. WHERE THIS IS NOT ACHIEVED, IT WILL BE NECESSARY TO AGREE THE BED AND SURROUND DETAIL.
24. ALL PRIVATE DRAINAGE PIPES WITH A COVER OF LESS THAN 600mm IN NON-TRAFFICKED AREAS AND LESS THAN 1200mm IN TRAFFICKED AREAS TO BE BEDDED AND SURROUNDED IN CONCRETE (CLASS Z). COMPRESSIBLE MATERIAL SHALL BE PROVIDED AT EVERY PIPE JOINT. WHERE COVER EXCEEDS THIS DEPTH, PIPES ARE TYPICALLY BEDDED AND SURROUNDED IN CLASS S. REFER TO PIPE EMBEDMENT DETAILS DRAWING FOR SPECIFIC TYPES.
25. WHERE DRAINAGE PIPES ARE LESS THAN 300mm BELOW THE UNDERSIDE OF THE GROUND FLOOR SLAB, CONCRETE ENCASEMENT IS REQUIRED (CLASS Z). COMPRESSIBLE JOINTS ARE TO BE PROVIDED AT EVERY PIPE JOINT WITHIN THE CONCRETE.
26. WHERE PIPES ARE MORE THAN 300mm BELOW THE UNDERSIDE OF THE SLAB, CLASS S BEDDING IS ACCEPTABLE.
27. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED TO PROVE THAT SUCH PRECAUTIONS ARE NOT REQUIRED.
28. WHERE FOUL SEWERS RUN ABOVE SURFACE SEWERS, CONCRETE PROTECTION MAY BE REQUIRED AT CROSSOVERS TO PREVENT ANY POTENTIAL CONTAMINATION.
29. ALL CONNECTIONS PASSING THROUGH BASES OR EDGE BEAMS TO BE IN SEALED SLEEVES. ALTERNATIVELY CONNECTIONS MAY BE CAST-IN WITH FLEXIBLE JOINTS NOT GREATER THAN 150MM FROM FACE OF CONCRETE.
30. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED TO ACCOMMODATE THE CONNECTIONS AND BENDS.
31. ALL MANHOLE COVERS IN BLOCK/SLAB AND EXTERNAL PAVING AREAS TO HAVE RECESSED COVERS OF THE APPROPRIATE GRADE TO ACCEPT ARCHITECT'S PAVING PROPOSAL.
32. ALL INTERNAL COVERS TO HAVE MECHANICALLY JOINTED CORNERS AND DOUBLE SEALED WITH RECESSED TRAY TO ALLOW FOR FINISHES.
33. UNLESS NOTED OTHERWISE IN THE MANHOLE SCHEDULE, ALL MANHOLE, GULLY AND CHANNEL COVERS (IRONWORK) SHOULD BE THE FOLLOWING SPECIFICATION:
- B125 LOAD CLASS IN PEDESTRIAN AREAS
- D400 LOAD CLASS IN VEHICULAR AREAS.
35. ALL PROPRIETARY PRODUCTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS, INSTRUCTIONS AND RECOMMENDATIONS.
36. THE DESIGN IS BASED ON A GRAVITY RAINWATER SYSTEM. WHERE A SIPHONIC SYSTEM IS PROPOSED ADDITIONAL NOTES REQUIRED AND DESIGN ADJUSTED TO SUIT.

KEY:

- SITE BOUNDARY - AS SHOWN ON SIMPSON HAUGH DRAWING 10133-Z1-00-PL-A-B5D8-G200-0001 REV 00 (PDF PLANNING ISSUE)
- EXISTING PUBLIC COMBINED SEWER (APPROXIMATE)
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- AB OB GATIC 150 TREADESAFE
- PROPOSED PERMEABLE PAVING
- THB THROUGH BEAM
- ABB ABOVE BEAM
- BB BELOW BEAM

DRAWING BASED ON:
TOPOGRAPHICAL SURVEY 18560-TOPO-REV1 BY SURVEY SYSTEM
UTILITY SURVEY 18560A-UTIL REV 1 BY SURVEY SYSTEM
CCTV SURVEY 15148 BY SUB SCAN MAY 2018
ADDITIONAL CCTV SURVEY TEAM DRAINAGE 04.05.2021
GF 32073-SHP-Z1-A-G200-PL-00-001 P09
FOUNDATION 32073-CUR-Z1-S-G210-PL-FN-095 C04
POPUP, DU& ROOF AREA 32073-BGL-Z1-P-G581-PL-00-0710 AGD
RWP Pop Up Locations revJ
SETTING OUT 32073-SHP-Z1-A-G220-PL-00-001
SERVICES AU-1183-013 P4
4714.02D Landscape layout work in progress 28.01.22

Rev:	Description:	Date:	By:	Chkd:
CR01	FINAL CONSTRUCTION	01.12.23	KS	MW
C05	MANHOLES F13A AND SW6A MOVED TO CAR PARK	30.03.22	MW	MW
C04	POPUP ADDED, COVER LEVELS AMENDED	15.02.22	MW	MW
C03	POPUPS AND SERVICES UPDATED	10.02.22	MW	MW
C02	POPUPS UPDATED	02.02.22	MW	MW
C01	ISSUED FOR CONSTRUCTION	02/12/21	MW	MW
P12	BUILDING & DRAINAGE LOCATION UPDATE	11/10/21	MW	MW
P11	ISSUED STAGE 4	08/07/21	RH	MW
P10	COORDINATION OPTION 2	17/05/21	MW	MW

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Status: CONSTRUCTION RECORD

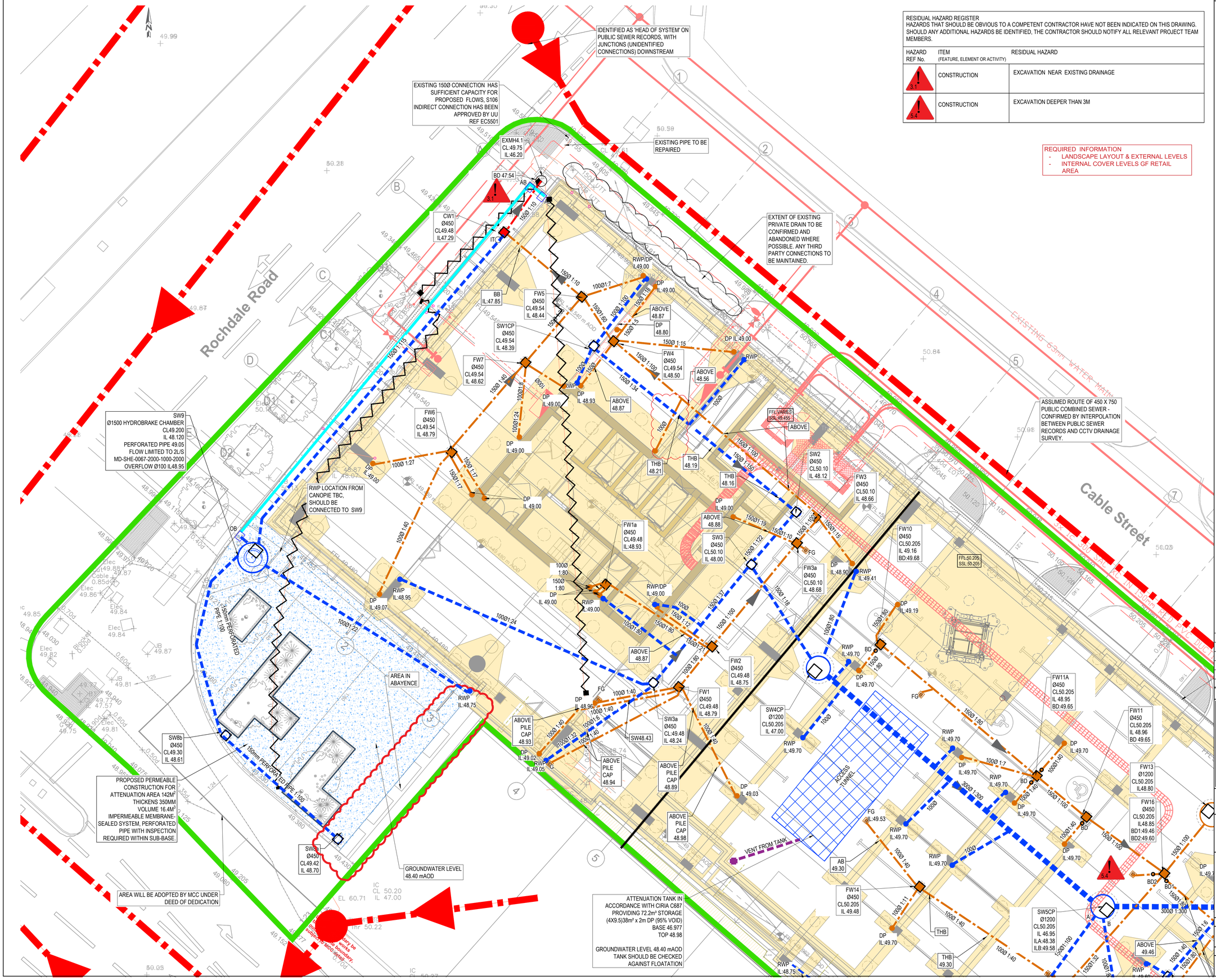
Project: SWAN HOUSE, ROCHDALE ROAD

Drg Title: DETAILED DRAINAGE STRATEGY

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:	RG Series
067266	A1 Scale: 1:200	22/12/18	MW	MW	CG	26

Project Code:	Originator:	Volume:	Role	Uniclass:	Type:	Level	Number:	Rev:
32073	CUR	Z0	C	G581	PL	00	001	CR01

\\mabs20\Projects\067001 - 068000\067266 - Swan House\2MS 4 Production\4B Models & Drawings\003-Civils\002-Drawings\



RESIDUAL HAZARD REGISTER

HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS.

HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
3.1	CONSTRUCTION	EXCAVATION NEAR EXISTING DRAINAGE
5.4	CONSTRUCTION	EXCAVATION DEEPER THAN 3M

GENERAL NOTES:

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3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING32073-CUR-Z0-C-G581-PL-00-001-C01

KEY:

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DRAWING BASED ON:
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SETTING OUT 32073-SHP-Z1-A-G220-PL-00-001
SERVICES AU-1183-013 P4
4714.02D Landscape layout work in progress 28.01.22

CONSTRUCTION RECORD - FINAL CONSTRUCTION

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Rev:	Description:	Date:	By:	Chkd:
CR01	FINAL CONSTRUCTION	01.12.23	KS	MW
C05	RWP ADDED FOR CANOPY	30.03.22	MW	MW
C04	POPUP ADDED, MANHOLE COVERS LEVEL UPDATED	15.02.22	MW	MW
C03	POPUPS AND SERVICES UPDATED	10/02/22	MW	MW
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C01	ISSUED FOR CONSTRUCTION	02/12/21	MW	MW

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Status: CONSTRUCTION RECORD

Project: SWAN HOUSE, ROCHDALE ROAD

Drg Title: DETAILED DRAINAGE STRATEGY SHEET 1

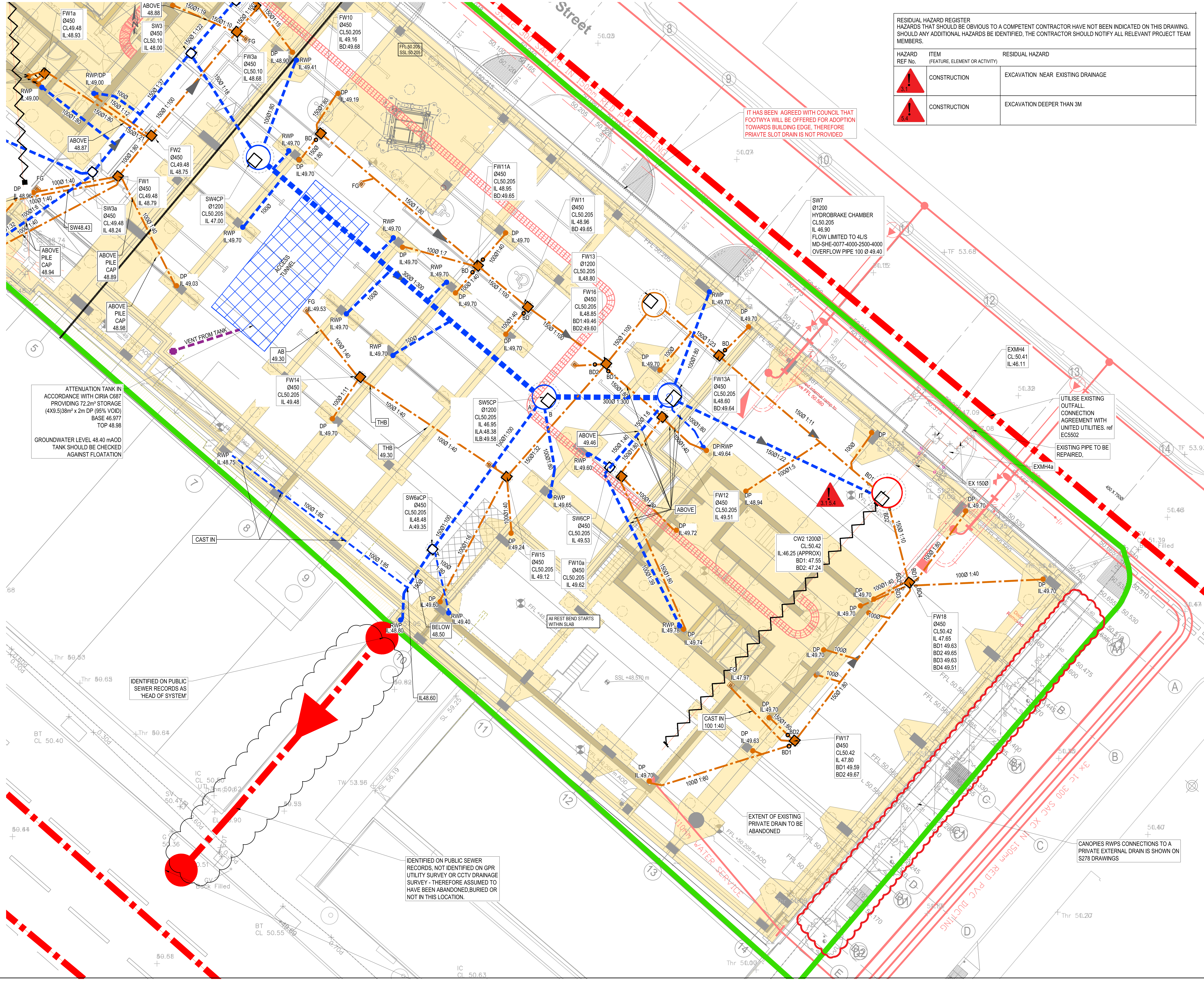
Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:	RG Series
067266	A1	30.11.21	MW	MW	CG	26
	Scale: 1:100					

Project Code:	Originator:	Volume:	Role	Uniclass:	Type:	Level	Number:	Rev:
32073 -	CUR -	Z0 -	C -	G581-	PL -	00-	008-	CR01

\\mats\02\Projects\067001 - 068000\67266 - Swan House\04\5 Production\AB Models & Drawings\002-Civils\002\Drawings\

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RWP Pop Up Locations revJ &700 P08
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CR01	FINAL CONSTRUCTION	01.12.23	KS	MW
C05	MANHOLES F13A AND SW6A MOVED TO CAR PARK	30.03.22	MW	MW
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C02	POPUPS UPDATED	02/02/22	MW	MW
C01	ISSUED FOR CONSTRUCTION	30.11.21	MW	MW

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Status: CONSTRUCTION RECORD

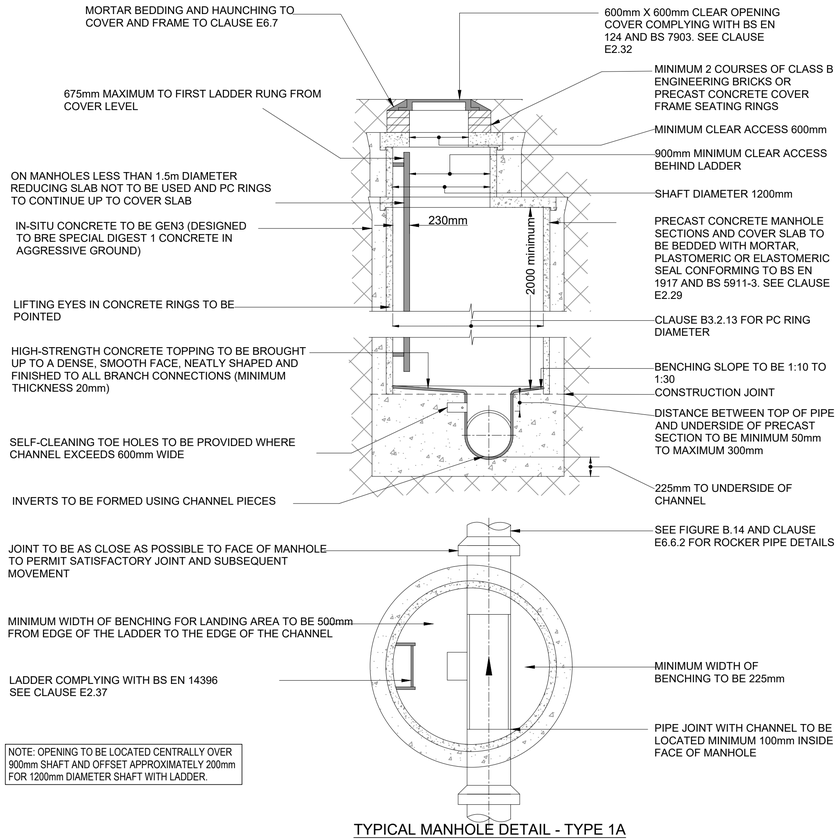
Project: SWAN HOUSE, ROCHDALE ROAD

Drg Title: DETAILED DRAINAGE STRATEGY SHEET 2

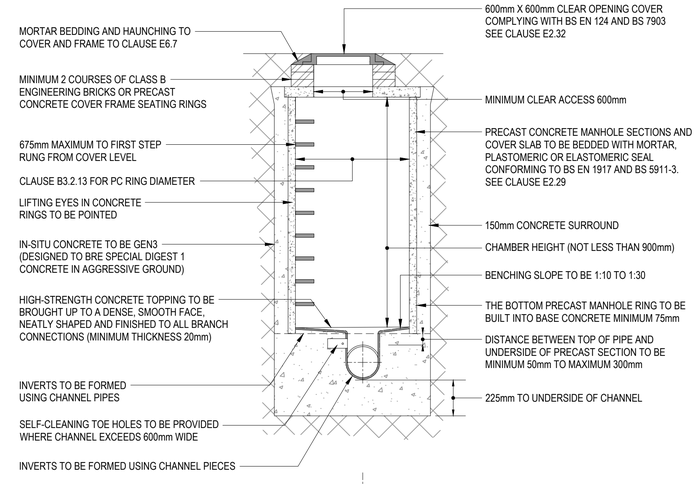
Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:	RG Series
067266	A1, Scale: 1:100	30.11.21	MW	MW	CG	26

Project Code:	Originator:	Volume:	Role	Uniclass:	Type:	Level	Number:	Rev:
32073	CUR	Z0	C	G581	PL	00	009	CR01

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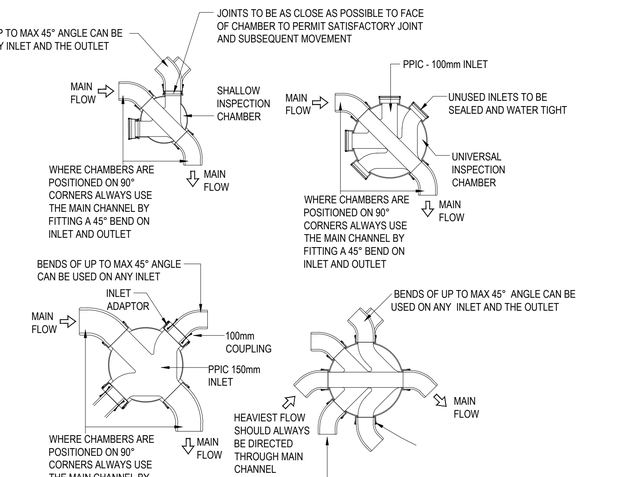
TYPICAL MANHOLE DETAIL - TYPE 1A
(DEPTH FROM COVER TO SOFFIT OF PIPE 3m TO 6m)



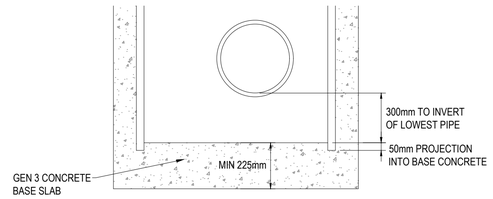
MANHOLE COVERS WITHIN TRAFFICKED PAVED AREAS TO BE D400 RECESSED COVERS.

TYPICAL MANHOLE DETAIL - TYPE 2
(MAXIMUM DEPTH FROM COVER TO SOFFIT OF PIPE 3.0 m)

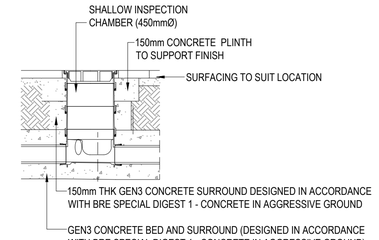
TYPICAL MANHOLE DETAIL - TYPE 1B
(DEPTH FROM COVER TO SOFFIT OF PIPE 3m TO 6m)



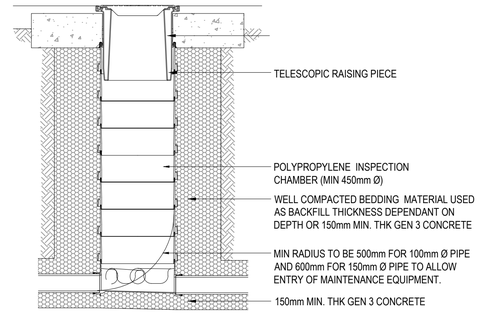
INSPECTION CHAMBER BASE DETAILS



CATCH PIT DETAIL

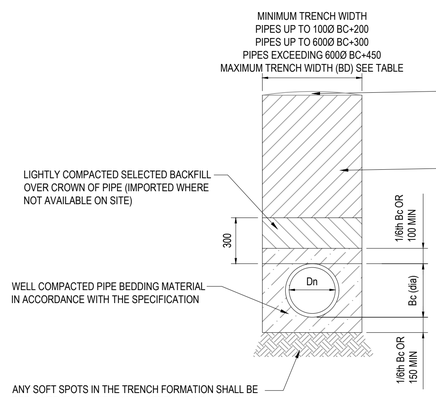


SHALLOW INSPECTION CHAMBER
MAX DEPTH 0.6m



DEEP INSPECTION CHAMBER
DEPTHS BETWEEN 1.2m AND 3.0m

TYPICAL INSPECTION CHAMBER DETAILS - PPIC



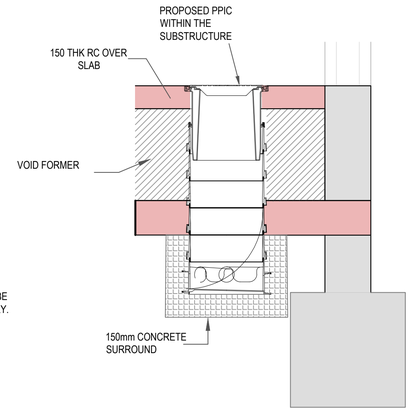
CLASS S - 360° GRANULAR SURROUND PIPE BEDDING DETAIL

Dn	Bd
150	0.6
225	0.7
300	0.85
375	1.05
450	1.15
525	1.25
600	1.35
675	1.45
750	1.50

MAXIMUM TRENCH WIDTH

CLASS Z - CONCRETE BED AND SURROUND PIPE BEDDING DETAIL

COVER < 900mm IN VEHICULAR LOADING AND OPEN FIELD.
COVER <600mm ELSEWHERE EXCEPT UNDER BUILDINGS.



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CR01	FINAL CONSTRUCTION	01.12.23	KS	MW
C02	UPDATED FOR CONSTRUCTION	02.02.22	MW	MW
C01	FOR CONSTRUCTION	02/12/21	MW	MW
P03	STAGE 4 ISSUE	08/07/21	CS	MW
P02	STAGE 3- DRAWING NUMBER UPDATED	01/02/21	MW	CG
P01	STAGE 3	18/01/21	MW	CG

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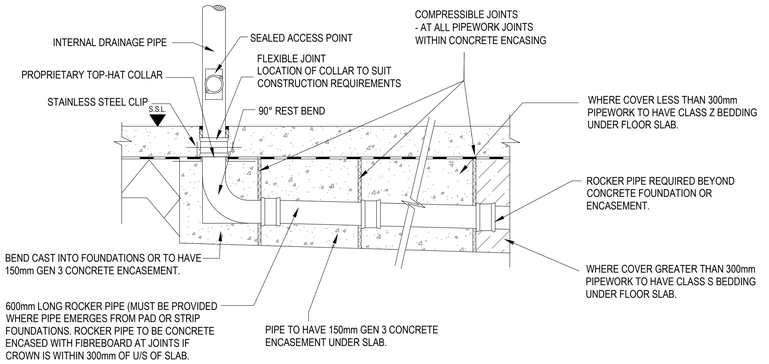
Status: CONSTRUCTION RECORD

Project: SWAN HOUSE, ROCHDALE ROAD

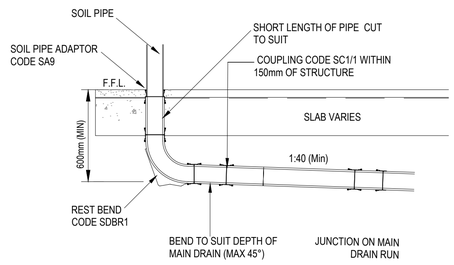
Drg Title: DRAINAGE DETAILS SHEET 1

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:	RG Series
067266	A1	18/01/21	MW	MW	CG	26
	Scale: 1:20					

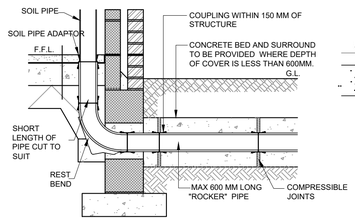
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32073 -	CUR -	Z0 -	C -	G581-	DE -	XX -	003 -	CR01



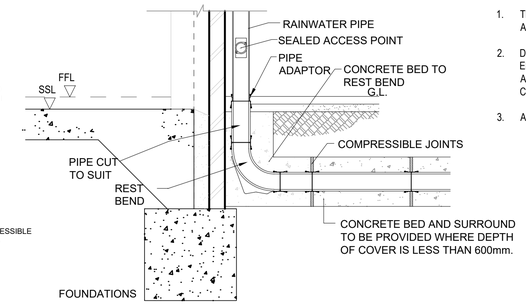
DRAINAGE UNDER BUILDINGS



TYPICAL SVP CONNECTION TO
MAIN RUN



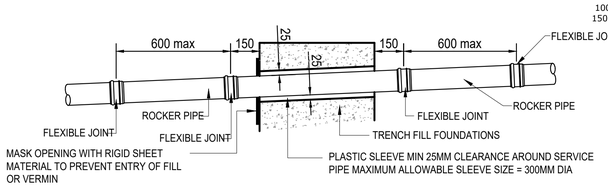
SOIL & VENT PIPE / STUB STACK /
W.C. CONNECTION DETAIL



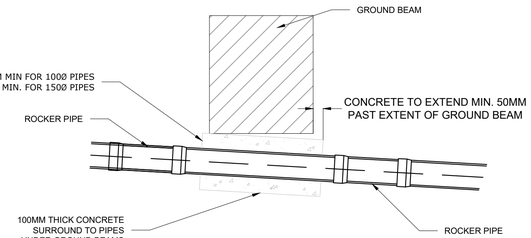
RWP CONNECTION DETAIL

GENERAL NOTES:

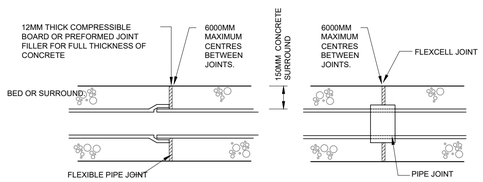
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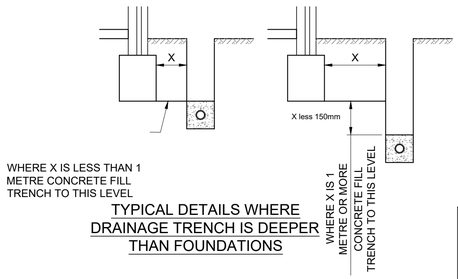
PIPES PASSING THROUGH
GROUND BEAM



TYPICAL PIPE DETAIL UNDER
GROUND BEAMS
(SCALE 1:20)



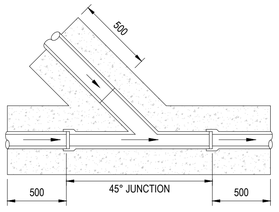
EXPANSION JOINT
FOR CONCRETE BED AND
SURROUND



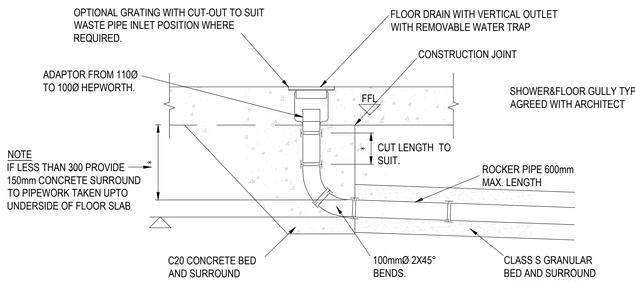
TYPICAL DETAILS WHERE
DRAINAGE TRENCH IS DEEPER
THAN FOUNDATIONS

CONSTRUCTION RECORD - FINAL CONSTRUCTION

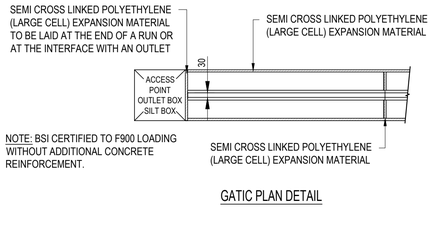
THE INFORMATION IS BASED ON CONFIRMATION FROM THE CONTRACTOR OF THE INSTALLED WORKS. THERE MAY BE VARIATIONS ON SITE WHICH ARE NOT REFLECTED ON THIS DRAWING AND HAS NOT BEEN VERIFIED BY CURTINS.



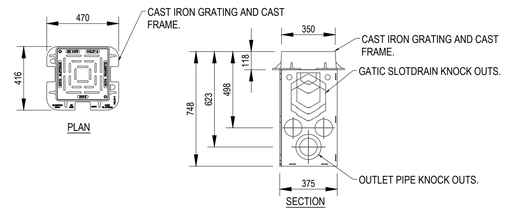
TYPICAL SADDLE CONNECTION



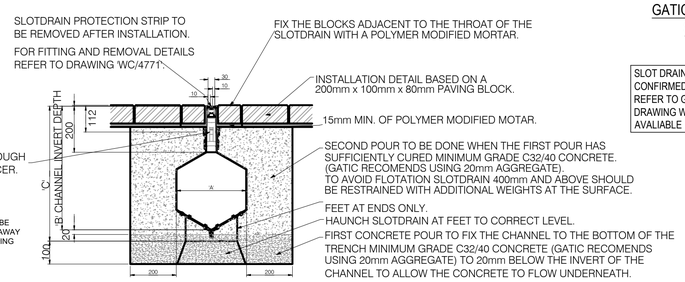
INTERNAL FLOOR DRAIN



GATIC PLAN DETAIL

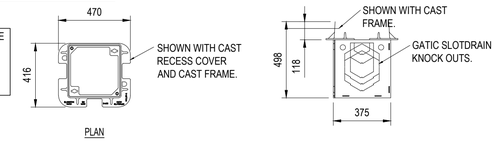


GATIC SLOTDRAIN 350mm OUTLET UNIT
SECTION AND PLAN DETAILS

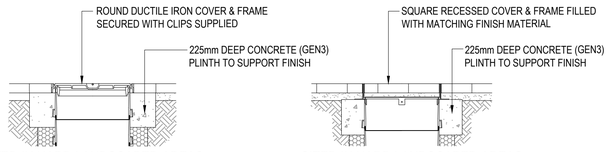


GATIC SLOTDRAIN CASTSLOT TREADSAFE

SLOT DRAIN SIZE WILL BE CONFIRMED BY GATIC, REFER TO GATIC DRAWING WHEN AVALIABLE



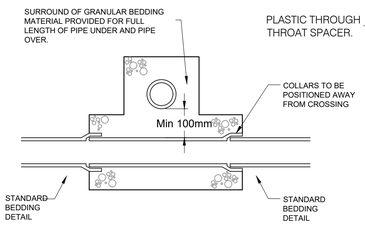
350 ACCESS BOX
SECTION AND PLAN DETAILS



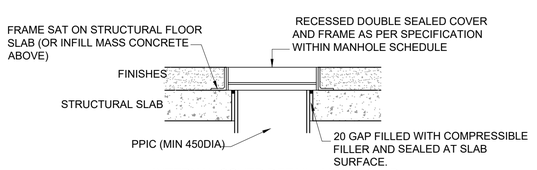
SITED IN HARD LANDSCAPED AREAS
WITH STANDARD ROUND COVER

SITED IN HARD LANDSCAPED AREAS
WITH RECESSED COVER

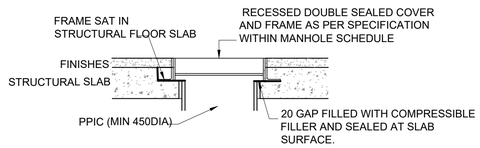
TYPICAL INSPECTION CHAMBER COVER DETAILS



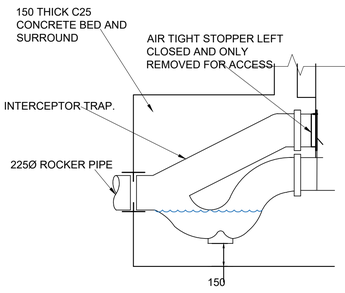
PIPE CROSSINGS DETAIL



INTERNAL COVER DETAIL ABOVE SLAB

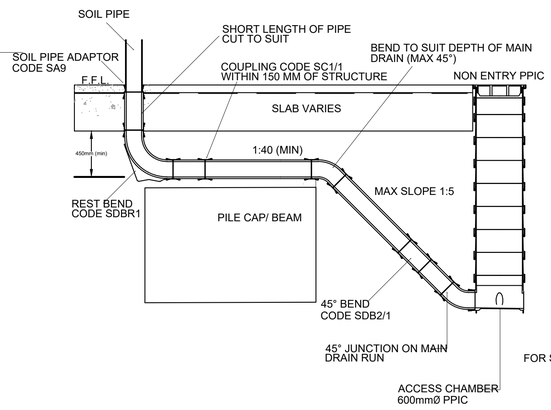


INTERNAL COVER DETAIL SAT IN SLAB

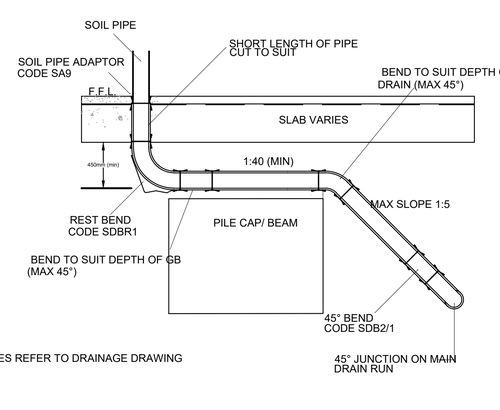


INTERCEPTOR TRAP

TYPICAL SVP CONNECTION - PASSING OVER GROUND
BEAM / PILE CAP TO PPIC CHAMBER



TYPICAL SVP CONNECTION - PASSING OVER GROUND
BEAM / PILE CAP TO PIPE



FOR SLOPES REFER TO DRAINAGE DRAWING

Rev:	Description:	Date:	By:	Chkd:
CR01	FINAL CONSTRUCTION	01.12.23	KS	MW
C03	GATIC CHANNEL DETAIL ADDED	10.02.22	MW	MW
C02	CONSTRUCTION UPDATES	02.02.22	MW	MW
C01	FOR CONSTRUCTION	02/12/21	MW	MW
P03	STAGE 4 ISSUE	08/07/21	CS	MW
P02	STAGE 3- DRAWING NUMBER UPDATED	01/02/21	MW	CG
P01	STAGE 3	18/01/21	MW	CG

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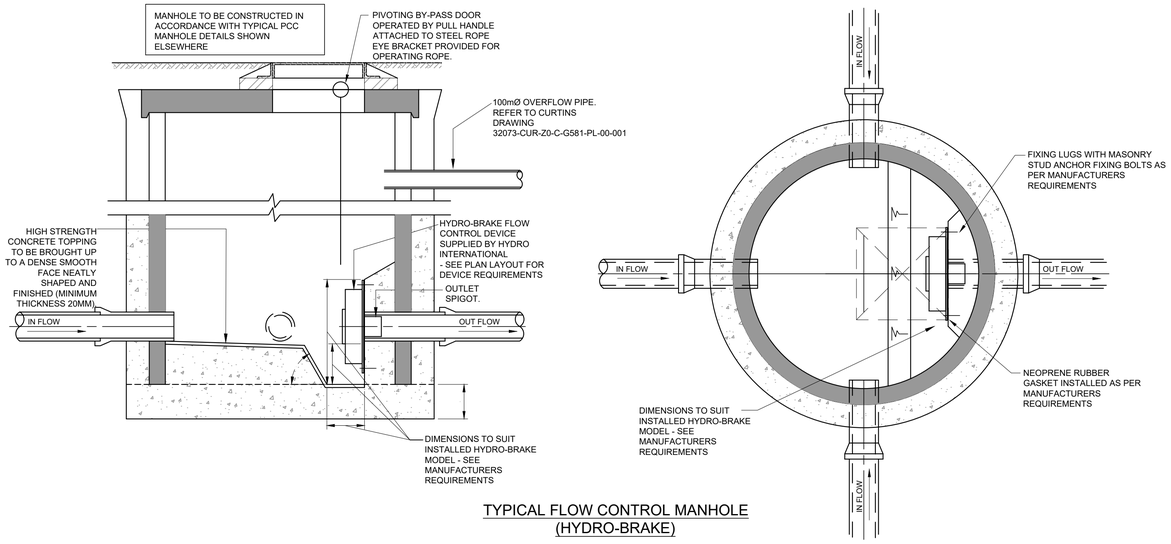
Status: CONSTRUCTION RECORD

Project: SWAN HOUSE, ROCHDALE ROAD

Drg Title: DRAINAGE DETAILS
SHEET 2

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:	RG Series
067266	A1 Scale: 1:20	18/01/21	MW	MW	CG	26

Project Code:	Originator:	Volume:	Role	Uniclass:	Type:	Level	Number:	Rev:
32073 -	CUR -	Z0 -	C -	G581-	DE -	XX-	004-	CR01



TYPICAL FLOW CONTROL MANHOLE
(HYDRO-BRAKE)

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
4. REFER TO THE DRAINAGE LAYOUT FOR THE LOCATION OF THE FLOW CONTROL.
5. FLOW CONTROL TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
6. WHERE ALTERNATIVE FLOW CONTROL DEVICE IS PREFERRED, IT WILL BE SUBJECT TO REDESIGN TO CONFIRM WHETHER THE SYSTEM HAS CAPACITY.
7. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.

SWMH 7 HYDROBRAKE DETAIL

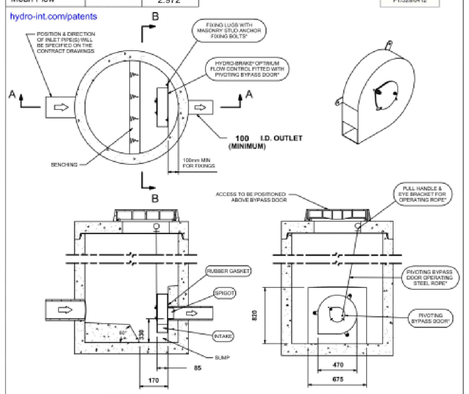
Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	2.500	4.000
Flush-Flo™	0.334	2.755
Kick-Flo®	0.689	2.208
Mean Flow		2.972

Hydro-Brake® Optimum Flow Control including:
- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Bleed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE No: 08/4598
WRc Approved PT329/0412

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SECTION A-A SECTION B-B

IMPORTANT: LIMIT OF HYDRO INTERNATIONAL SUPPLY
THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
ALL CIVIL AND INSTALLATION WORK BY OTHERS
* WHERE SUPPLIED
HYDRO-BRAKE® FLOW CONTROL & HYDRO-BRAKE® OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE !	The head/flow characteristics of this SHE-0077-4000-2500-4000 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve. **The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.**
DATE	2/2/2022 9:50 AM
SITE	
DESIGNER	Tiago Henriques
REF	md-she-0077-4000-2500-4000

Hydro International
SHE-0077-4000-2500-4000
Hydro-Brake® Optimum

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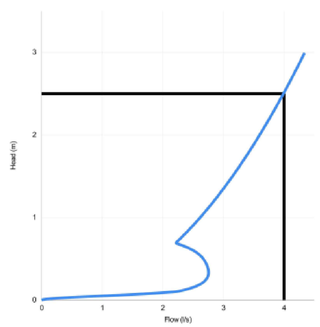
tiago.henriques@curtins.com

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	2.500	4.000
Flush-Flo	0.334	2.755
Kick-Flo®	0.689	2.208
Mean Flow		2.972

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE No: 08/4598
WRc APPROVED PT329/0412

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Head (m)	Flow (l/s)
0.000	0.000
0.086	1.914
0.172	2.560
0.259	2.723
0.345	2.754
0.431	2.723
0.517	2.648
0.603	2.499
0.690	2.217
0.776	2.330
0.862	2.444
0.948	2.553
1.034	2.656
1.121	2.755
1.207	2.850
1.293	2.942
1.379	3.031
1.466	3.116
1.552	3.200
1.638	3.280
1.724	3.359
1.810	3.435
1.897	3.510
1.983	3.583
2.069	3.654
2.155	3.724
2.241	3.793
2.328	3.860
2.414	3.925
2.500	3.990

DESIGN ADVICE !	The head/flow characteristics of this SHE-0077-4000-2500-4000 Hydro-Brake Optimum® Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve. **The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.**
DATE	02/02/2022 09:50
Site	
DESIGNER	Tiago Henriques
Ref	md-she-0077-4000-2500-4000

Hydro International
SHE-0077-4000-2500-4000
Hydro-Brake Optimum®

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SWMH 9 HYDROBRAKE DETAIL

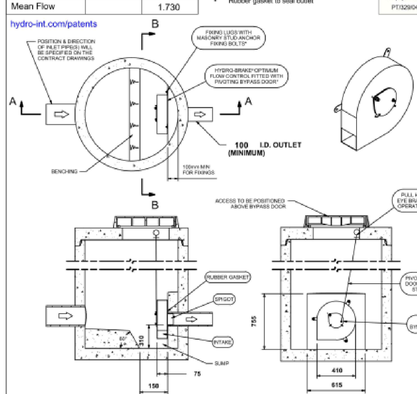
Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.000	2.000
Flush-Flo™	0.296	1.950
Kick-Flo®	0.599	1.584
Mean Flow		1.730

Hydro-Brake® Optimum Flow Control including:
- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Bleed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE No: 08/4598
WRc Approved PT329/0412

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SECTION A-A SECTION B-B

IMPORTANT: LIMIT OF HYDRO INTERNATIONAL SUPPLY
THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
ALL CIVIL AND INSTALLATION WORK BY OTHERS
* WHERE SUPPLIED
HYDRO-BRAKE® FLOW CONTROL & HYDRO-BRAKE® OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE !	The head/flow characteristics of this SHE-0067-2000-1000-2000 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve. **The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.**
DATE	7/8/2021 8:15 AM
SITE	Swan house
DESIGNER	Marta Jarzembowska
REF	067266

Hydro International
SHE-0067-2000-1000-2000
Hydro-Brake® Optimum

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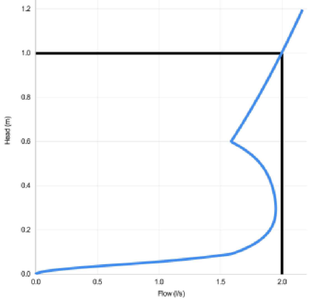
marta.jarzembowska@curtins.com

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.000	2.000
Flush-Flo	0.296	1.950
Kick-Flo®	0.599	1.584
Mean Flow		1.730

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE No: 08/4598
WRc APPROVED PT329/0412

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Head (m)	Flow (l/s)
0.000	0.000
0.034	0.462
0.069	1.240
0.103	1.646
0.138	1.775
0.172	1.858
0.207	1.909
0.241	1.936
0.276	1.948
0.310	1.949
0.345	1.942
0.379	1.929
0.414	1.911
0.448	1.884
0.483	1.848
0.517	1.797
0.552	1.726
0.586	1.631
0.621	1.609
0.655	1.649
0.690	1.687
0.724	1.725
0.759	1.761
0.793	1.797
0.828	1.832
0.862	1.866
0.897	1.899
0.931	1.932
0.966	1.964
1.000	1.995

DESIGN ADVICE !	The head/flow characteristics of this SHE-0067-2000-1000-2000 Hydro-Brake Optimum® Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve. **The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.**
DATE	08/07/2021 08:15
Site	Swan house
DESIGNER	Marta Jarzembowska
Ref	067266

Hydro International
SHE-0067-2000-1000-2000
Hydro-Brake Optimum®

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CONSTRUCTION RECORD - FINAL CONSTRUCTION

THE INFORMATION IS BASED ON CONFIRMATION FROM THE CONTRACTOR OF THE INSTALLED WORKS. THERE MAY BE VARIATIONS ON SITE WHICH ARE NOT REFLECTED ON THIS DRAWING AND HAS NOT BEEN VERIFIED BY CURTINS.

Rev:	Description:	Date:	By:	Chkd:
CR02	DETAILS UPDATED	23/04/24	HS	HS
CR01	FINAL CONSTRUCTION	01/12/23	KS	MW
C02	HYDROBRAKE TYPE SW7 AMENDED	02/02/22	MW	MW
C01	FOR CONSTRUCTION	02/12/21	MW	MW
P01	STAGE 4 ISSUE	08/07/21	CS	MW

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Status: CONSTRUCTION RECORD

Project: SWAN HOUSE, ROCHDALE ROAD

Drg Title: DRAINAGE DETAILS SHEET 4

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:	RG Series
067266	A1 Scale: 1:20	18/01/21	MW	MW	CG	26

Project Code:	Originator:	Volume:	Role	Uniclass:	Type:	Level	Number:	Rev:
32073 -	CUR -	Z0 -	C -	G581-	DE -	XX-	007-	CR02

Appendix B

CCTV survey report

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Lanes Group plc
300 Lansdowne Road, Manchester, M30 9PJ
Tel. 0161 788 2222
cctvsurveys@lanesgroup.co.uk

Project

Project Name:	SSC Construction - Cable Street - PJ00453723
Project Status:	Complete
Project Date:	24/08/2022
Lanes Division:	Manchester

Lanes Group plc
300 Lansdowne Road, Manchester, M30 9PJ
Tel. 0161 788 2222
cctvsurveys@lanesgroup.co.uk

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Lanes Group plc
300 Lansdowne Road, Manchester, M30 9PJ
Tel. 0161 788 2222
cctvsurveys@lanesgroup.co.uk

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Project Information

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022

Client

Company: SSC Construction Services Ltd
Department: Provender Mill
Street: Mill Bay Lane
Town or City: Horsham
Post Code: RH12 1SS

Site

Company: SSC Construction Services Ltd
Description: RG Group
Department: Swan House
Street: 55 Cable Street
Town or City: Manchester
Post Code: M4 5DF

Contractor

Company: Lanes Group plc
Description: Manchester Division
Contact: Paul Lynch
Department: Regional Manager
Street: 300 Lansdowne Road
Town or City: Manchester, M30 9PJ
County: Greater Manchester
Phone: 0161 788 2222
Email: manchesterops@lanesgroup.co.uk

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Project Information

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022

Project Summary

Dear Customer,

As requested, we have recently carried out a drainage CCTV survey at the site location and our full and detailed findings are contained in the attached CCTV report which you can review at your leisure.

We have identified the need for further works and will provide a quotation which will highlight the areas of concern, the most appropriate remedial technique and all associated costings.

We would like to take this opportunity to thank you for using Lanes Group plc and we hope we can be of service to you again soon. Please visit our website for full details of all services we can provide, follow us on social media or even share details of your customer experience with us:

www.lanesgroup.co.uk

If you require any technical assistance understanding the findings of the CCTV report then please contact us at:

cctvsurveys@lanesgroup.co.uk

Kind regards,
Lanes Group plc

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Project Information

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022

Project Notes

Clear site plan located within 'Docs' folder.

CCTV reveals issues in pipework:

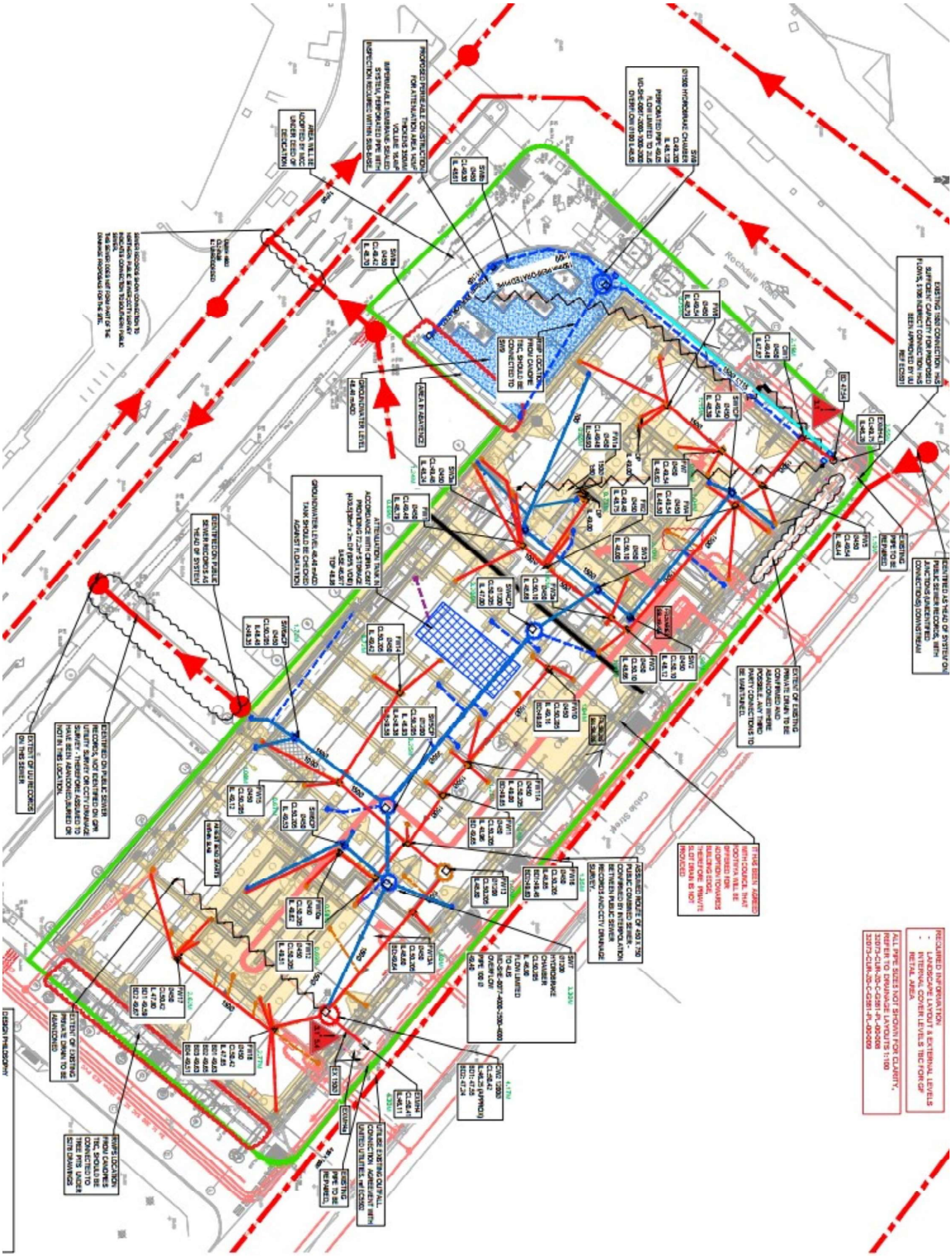
Section 7: Settled deposits, hard or compacted, 10%
Section 10: Settled deposits, hard or compacted, 10%
Section 11: Settled deposits, hard or compacted, 10%
Section 12: Settled deposits, hard or compacted, 30%
Section 23: Possible dip
Section 29: Possible dip
Section 34: Possible dip
Section 49: Silt in MHFW12
Section 70: Settled deposits, fine, 10%
Section 73: Deposits in MHFW17
Section 79: Hard deposits in EXMH4

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Project Information

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022

Project Drawing, Page 'SSC Construction - Cable Street - PJ00453723'



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Project Pictures

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022



please-take-a-picture-during-works-1661433745514



please-take-a-picture-during-works-1661352450153

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Section Profile

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022

Circular, 100 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Asset Material	Total Length	Inspected Length
8	PIPE A	FW7	24/08/2022	Cable street	Plastic (smooth)	2.73 m	2.73 m
9	PIPE B	FW7	24/08/2022	Cable street	Plastic (smooth)	4.19 m	4.19 m
10	PIPE A	FW6	24/08/2022	Cable street	Plastic (smooth)	3.07 m	3.07 m
11	PIPE B	FW6	24/08/2022	Cable street	Plastic (smooth)	2.68 m	2.68 m
12	PIPE C	FW6	24/08/2022	Cable street	Plastic (smooth)	9.16 m	9.16 m
13	PIPE D	FW6	24/08/2022	Cable street	Plastic (smooth)	3.66 m	3.66 m
14	PIPE A	FW4	24/08/2022	Cable street	Plastic (smooth)	3.60 m	3.60 m
15	PIPE B	FW4	24/08/2022	Cable street	Plastic (smooth)	7.24 m	7.24 m
16	PIPE D	FW4	24/08/2022	Cable street	Plastic (smooth)	2.97 m	2.97 m
17	PIPE A	FW3	24/08/2022	Cable street	Plastic (smooth)	3.36 m	3.36 m
21	PIPE A	FW1	24/08/2022	Cable street	Plastic (smooth)	7.32 m	7.32 m
22	PIPE C	FW1	24/08/2022	Cable street	Vitrified clay	9.25 m	9.25 m
24	PIPE C	FW2	24/08/2022	Cable street	Plastic (smooth)	3.56 m	3.56 m
25	PIPE A	FW3A	24/08/2022	Cable street	Plastic (smooth)	0.10 m	0.10 m
26	PIPE C	FW3A	24/08/2022	Cable street	Plastic (smooth)	3.63 m	3.63 m
34	PIPE B	FW1	24/08/2022	Cable street	Plastic (smooth)	8.29 m	8.29 m
35	PIPE D	FW1	24/08/2022	Cable street	Plastic (smooth)	4.52 m	4.52 m
41	PIPE A	FW11A	24/08/2022	Cable street	Plastic (smooth)	2.73 m	2.73 m
42	PIPE B	FW11A	24/08/2022	Cable street	Plastic (smooth)	4.28 m	4.28 m
43	PIPE D	FW11A	24/08/2022	Cable street	Plastic (smooth)	1.29 m	1.29 m
44	PIPE A	FW11	24/08/2022	Cable street	Plastic (smooth)	1.19 m	1.19 m
47	PIPE B	FW15	24/08/2022	Cable street	Plastic (smooth)	8.15 m	8.15 m
50	PIPE A	FW12	24/08/2022	Cable street	Plastic (smooth)	3.45 m	3.45 m
51	FW14	FW15	25/08/2022	Cable street	Plastic (smooth)	10.81 m	10.81 m
52	PIPE A	FW14	25/08/2022	Cable street	Plastic (smooth)	2.77 m	2.77 m
53	PIPE B	FW14	25/08/2022	Cable street	Plastic (smooth)	4.45 m	4.45 m
54	PIPE A	FW10A	25/08/2022	Cable street	Plastic (smooth)	4.34 m	4.34 m
55	PIPE B	FW10A	25/08/2022	Cable street	Plastic (smooth)	9.45 m	9.45 m
56	FW10A	FW12	25/08/2022	Cable street	Plastic (smooth)	3.06 m	3.06 m
57	PIPE A	SW6CP	25/08/2022	Cable street	Plastic (smooth)	10.33 m	10.33 m
58	PIPE B	SW6CP	25/08/2022	Cable street	Plastic (smooth)	1.16 m	1.16 m
60	PIPE A	FW15	25/08/2022	Cable street	Plastic (smooth)	3.74 m	3.74 m
61	PIPE A	SW6ACP	25/08/2022	Cable street	Plastic (smooth)	3.26 m	3.26 m
62	PIPE B	SW6ACP	25/08/2022	Cable street	Plastic (smooth)	3.89 m	3.89 m
71	PIPE A	FW17	25/08/2022	Cable street	Plastic (smooth)	9.45 m	9.45 m
72	PIPE B	FW17	25/08/2022	Cable street	Plastic (smooth)	2.57 m	2.57 m
74	PIPE A	FW18	25/08/2022	Cable street	Plastic (smooth)	5.12 m	5.12 m
75	PIPE B	FW18	25/08/2022	Cable street	Plastic (smooth)	7.82 m	7.82 m
76	PIPE D	FW18	25/08/2022	Cable street	Plastic (smooth)	2.94 m	2.94 m
78	PIPE E	FW18	25/08/2022	Cable street	Plastic (smooth)	2.34 m	2.34 m

Total: 40 Inspections x Circular 100 mm = 180.12 m Total Length and 180.12 m Inspected Length

Circular, 150 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Asset Material	Total Length	Inspected Length
1	CW1	EXMH4.1	14/08/2022	Cable street	Plastic (smooth)	3.30 m	3.30 m
2	FW5	CW1	14/08/2022	Cable street	Plastic (smooth)	5.20 m	5.20 m
3	PIPE A	FW5	24/08/2022	Cable street	Plastic (smooth)	3.72 m	3.72 m
4	FW4	FW5	24/08/2022	Cable street	Plastic (smooth)	2.46 m	2.46 m
5	FW3	FW4	24/08/2022	Cable street	Plastic (smooth)	15.38 m	15.38 m
6	FW7	FW5	24/08/2022	Cable street	Plastic (smooth)	4.26 m	4.26 m

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Section Profile

Project Name	Project Date
SSC Construction - Cable Street - PJ00453723	24/08/2022

7	FW6	FW7	24/08/2022	Cable street	Plastic (smooth)	6.60 m	6.60 m
18	FW3A	FW3	24/08/2022	Cable street	Plastic (smooth)	1.52 m	1.52 m
19	FW2	FW3A	24/08/2022	Cable street	Plastic (smooth)	7.80 m	7.80 m
20	FW1	FW2	24/08/2022	Cable street	Plastic (smooth)	2.61 m	2.61 m
23	FW1A	FW2	24/08/2022	Cable street	Plastic (smooth)	6.74 m	6.74 m
27	PIPE A	SW1CP	24/08/2022	Cable street	Plastic (smooth)	5.24 m	5.24 m
28	PIPE B	SW1CP	24/08/2022	Cable street	Plastic (smooth)	2.02 m	2.02 m
29	SW1CP	SW2	24/08/2022	Cable street	Plastic (smooth)	15.43 m	15.43 m
30	SW2	SW3	24/08/2022	Cable street	Plastic (smooth)	3.80 m	3.80 m
31	SW3	SW4CP	24/08/2022	Cable street	Plastic (smooth)	6.27 m	6.27 m
32	PIPE A	SW3A	24/08/2022	Cable street	Plastic (smooth)	7.40 m	7.40 m
33	SW3A	SW3	24/08/2022	Cable street	Plastic (smooth)	8.48 m	8.48 m
36	PIPE A	FW10	24/08/2022	Cable street	Plastic (smooth)	1.53 m	1.53 m
37	PIPE B	FW10	24/08/2022	Cable street	Plastic (smooth)	4.24 m	**2.70 m**
38	FW10	FW11A	24/08/2022	Cable street	Plastic (smooth)	12.13 m	12.13 m
39	FW11A	FW11	24/08/2022	Cable street	Plastic (smooth)	2.80 m	2.80 m
40	FW11	FW16	24/08/2022	Cable street	Plastic (smooth)	5.30 m	5.30 m
45	FW16	FW13	25/08/2022	Cable street	Plastic (smooth)	3.57 m	3.57 m
46	FW15	FW16	24/08/2022	Cable street	Plastic (smooth)	7.53 m	7.53 m
48	PIPE C	FW16	24/08/2022	Cable street	Plastic (smooth)	2.50 m	2.50 m
49	FW12	FW16	24/08/2022	Cable street	Plastic (smooth)	3.81 m	**3.81 m**
59	SW6CP	SW7	25/08/2022	Cable street	Plastic (smooth)	6.99 m	6.99 m
63	SW6ACP	SW5CP	25/08/2022	Cable street	Plastic (smooth)	10.80 m	10.80 m
66	FW13	FW13A	25/08/2022	Cable street	Plastic (smooth)	3.36 m	3.36 m
67	FW13A	CW2	25/08/2022	Cable street	Plastic (smooth)	13.72 m	13.72 m
68	PIPE A	FW13A	25/08/2022	Cable street	Plastic (smooth)	3.52 m	3.52 m
69	PIPE A	SW7	25/08/2022	Cable street	Plastic (smooth)	0.00 m	0.00 m
70	SW7	CW2	25/08/2022	Cable street	Plastic (smooth)	9.79 m	**9.76 m**
73	FW17	FW18	25/08/2022	Cable street	Plastic (smooth)	11.14 m	11.14 m
77	FW18	CW2	25/08/2022	Cable street	Plastic (smooth)	4.37 m	4.37 m
79	CW2	EXMH4	25/08/2022	Cable street	Cast iron	2.29 m	**2.05 m**

Total: 37 Inspections x Circular 150 mm = 217.62 m Total Length and 215.81 m Inspected Length

Circular, 300 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Asset Material	Total Length	Inspected Length
64	SW4CP	SW5CP	25/08/2022	Cable street	Plastic (smooth)	18.90 m	18.90 m

Total: 1 Inspection x Circular 300 mm = 18.90 m Total Length and 18.90 m Inspected Length

Circular, 450 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Asset Material	Total Length	Inspected Length
65	SW5CP	SW7	25/08/2022	Cable street	Plastic (smooth)	5.46 m	5.46 m

Total: 1 Inspection x Circular 450 mm = 5.46 m Total Length and 5.46 m Inspected Length

Total: 79 Inspections = 422.10 m Total Length and 420.29 m Inspected Length

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Section Inspection - 14/08/2022 - CW1X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
1	1	14/08/22	13:44	PJ00453723	Dry	Yes	CW1X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	CW1
Road:	Cable Street	**Inspected Length:**	3.30 m	**Upstream Pipe Depth:**	2.19
Post Code:	M4 5DF	**Total Length:**	3.30 m	**Downstream Node:**	EXMH4.1
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.55

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: CW1	00:00:00		
0.00	WL	Water level, 10% of the vertical dimension	00:00:04	1	
1.64	JN	Junction at 6 o'clock, diameter: 150mm	00:00:06	2	
1.73	WL	Water level, 5% of the vertical dimension	00:00:07		
3.30	MHF	Finish node, manhole, reference: EXMH4.1	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 Pictures - 14/08/2022 - CW1X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
1	Downstream	CW1X	1	PJ00453723



1, 00:00:04, 0.00 m
Water level, 10% of the vertical dimension



2, 00:00:06, 1.64 m
Junction at 6 o'clock, diameter: 150mm

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Section Inspection - 14/08/2022 - FW5X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
2	1	14/08/22	13:44	PJ00453723	Dry	Yes	FW5X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW5
Road:	Cable Street	**Inspected Length:**	5.20 m	**Upstream Pipe Depth:**	1.10
Post Code:	M4 5DF	**Total Length:**	5.20 m	**Downstream Node:**	CW1
Surface Type:	Concrete Footway	**Joint Length:**	2.50 m	**Downstream Pipe Depth:**	2.19

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



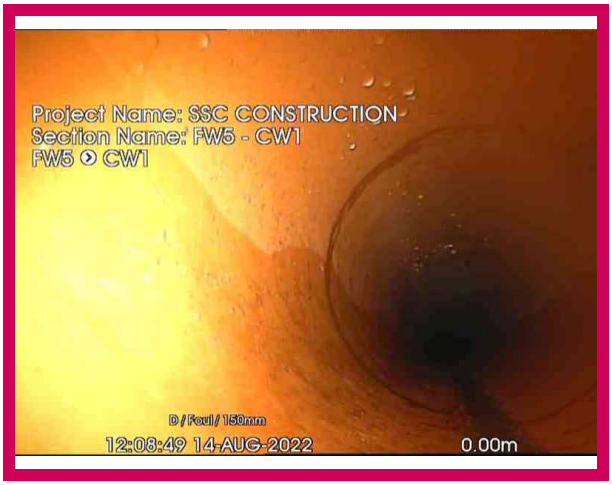
Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.10 m **FW5**					
0.00	MH	Start node, manhole, reference: FW5	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
4.84	LR	Line deviates right: Sharp	00:00:18		
5.20	MHF	Finish node, manhole, reference: CW1	00:00:20	2	
CW1 **Depth: 2.19 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 Pictures - 14/08/2022 - FW5X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
2	Downstream	FW5X	2	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW5



2, 00:00:20, 5.20 m
Finish node, manhole, reference: CW1

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
3	1	24/08/22	11:24	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.72 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.72 m	**Downstream Node:**	FW5
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.10

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW5	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:05		
3.72	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:18	2	
3.72	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:20		

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

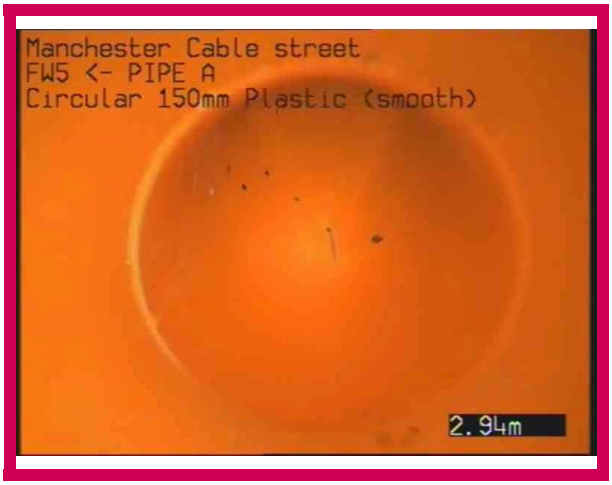
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Section Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
3	Upstream	PIPE AX	3	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW5



2, 00:00:18, 3.72 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - FW4X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
4	1	24/08/22	11:26	PJ00453723	Dry	Yes	FW4X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW4
Road:	Cable Street	**Inspected Length:**	2.46 m	**Upstream Pipe Depth:**	1.04
Post Code:	M4 5DF	**Total Length:**	2.46 m	**Downstream Node:**	FW5
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.10

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW5	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
2.46	MHF	Finish node, manhole, reference: FW4	00:00:15	2	

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 Pictures - 24/08/2022 - FW4X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
4	Upstream	FW4X	4	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW5



2, 00:00:15, 2.46 m
Finish node, manhole, reference: FW4

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Section Inspection - 24/08/2022 - FW3X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
5	1	24/08/22	11:27	PJ00453723	Dry	Yes	FW3X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW3
Road:	Cable Street	**Inspected Length:**	15.38 m	**Upstream Pipe Depth:**	1.44
Post Code:	M4 5DF	**Total Length:**	15.38 m	**Downstream Node:**	FW4
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.04

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:134



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW4	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
1.82	JN	Junction at 02 o'clock, diameter: 150mm	00:00:16		
15.14	LR	Line deviates right: Slight	00:01:04		
15.38	MHF	Finish node, manhole, reference: FW3	00:01:25	2	

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 Pictures - 24/08/2022 - FW3X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
5	Upstream	FW3X	5	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW4



2, 00:01:25, 15.38 m
Finish node, manhole, reference: FW3

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Section Inspection - 24/08/2022 - FW7X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
6	1	24/08/22	11:30	PJ00453723	Dry	Yes	FW7X

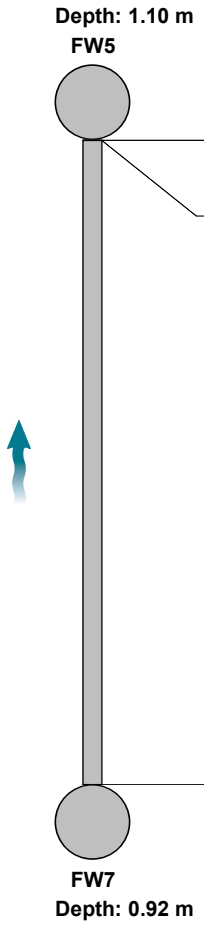
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW7
Road:	Cable Street	**Inspected Length:**	4.26 m	**Upstream Pipe Depth:**	0.92
Post Code:	M4 5DF	**Total Length:**	4.26 m	**Downstream Node:**	FW5
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.10

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW5	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00	1	
4.26	MHF	Finish node, manhole, reference: FW7	00:00:21	2	

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

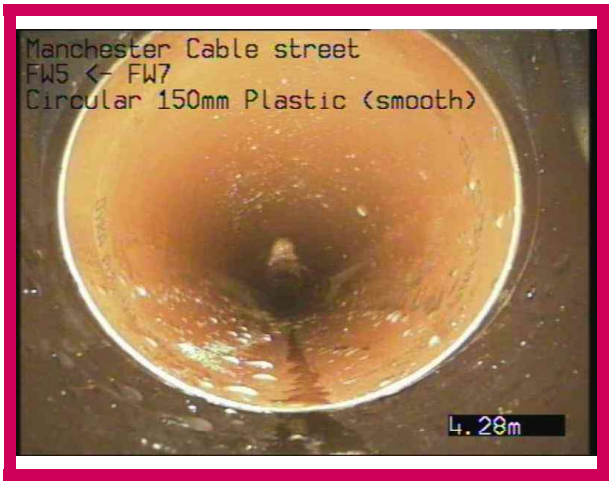
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Section Pictures - 24/08/2022 - FW7X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
6	Upstream	FW7X	6	PJ00453723



1, 00:00:00, 0.00 m
Water level, 5% of the vertical dimension



2, 00:00:21, 4.26 m
Finish node, manhole, reference: FW7

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Section Inspection - 24/08/2022 - FW6X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
7	1	24/08/22	11:30	PJ00453723	Dry	Yes	FW6X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW6
Road:	Cable Street	**Inspected Length:**	6.60 m	**Upstream Pipe Depth:**	0.75
Post Code:	M4 5DF	**Total Length:**	6.60 m	**Downstream Node:**	FW7
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.92

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:58



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: FW7	00:00:00	1	
0.00		WL	Water level, 5% of the vertical dimension	00:00:00		
6.06	F01	DEC	Settled deposits, hard or compacted, 30% cross-sectional area loss, finish: Concrete	00:00:35	3	4
6.60		MHF	Finish node, manhole, reference: FW6	00:00:45		

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	1	5.0	0.8	5.0	4.0

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Section Pictures - 24/08/2022 - FW6X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
7	Upstream	FW6X	7	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW7



3, 00:00:35, 6.06 m
Settled deposits, hard or compacted 10% cross-sectional area loss, finish, Concrete

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
8	1	24/08/22	11:36	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	2.73 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.73 m	**Downstream Node:**	FW7
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.92

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW7	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:04	1	
2.73	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:12	2	
2.73	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:15		

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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
8	Upstream	PIPE AX	8	PJ00453723



1, 00:00:04, 0.00 m
Water level, 5% of the vertical dimension



2, 00:00:12, 2.73 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
9	1	24/08/22	11:37	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	4.19 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	4.19 m	**Downstream Node:**	FW7
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.92

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW7	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
4.19	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:25	2	
4.19	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:27		

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

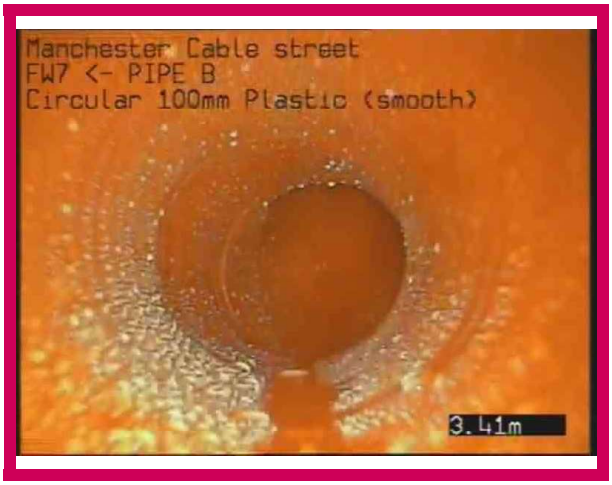
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Section Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
9	Upstream	PIPE BX	9	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW7



2, 00:00:25, 4.19 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
10	1	24/08/22	11:43	PJ00453723	Dry	Yes	PIPE AX

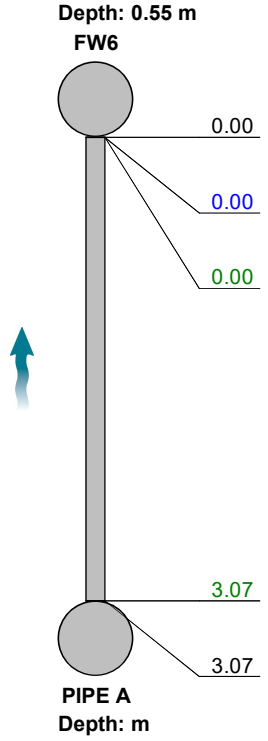
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.07 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.07 m	**Downstream Node:**	FW6
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.55

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



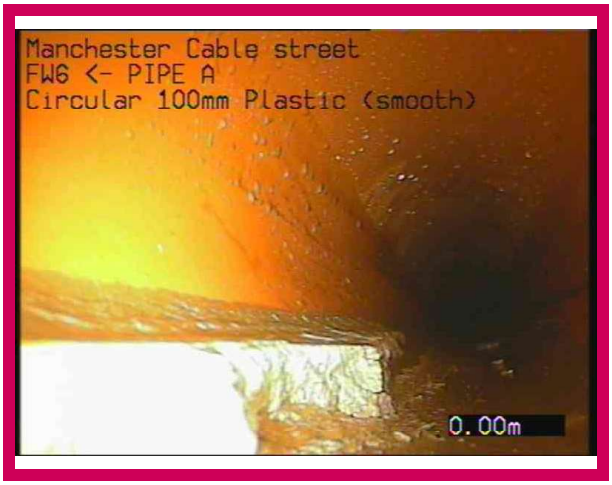
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW6	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
0.00	DEC	Settled deposits, hard or compacted, 10% cross-sectional area loss	00:00:03	1	3
3.07	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:17	2	
3.07	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:25		

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	1	2.0	0.7	2.0	3.0

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Section Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
10	Upstream	PIPE AX	10	PJ00453723



1, 00:00:03, 0.00 m
Settled deposits, hard or compacted, 10% cross-sectional area loss



2, 00:00:17, 3.07 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
11	1	24/08/22	11:45	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	2.68 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.68 m	**Downstream Node:**	FW6
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.55

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW6	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
0.09	DER	Settled deposits, coarse, 5% cross-sectional area loss	00:00:06	1	2
1.97	DEC	Settled deposits, hard or compacted, 10% cross-sectional area loss	00:00:13	2	3
2.68	LU	Line deviates up: 90 Degree bend /Rest bend	00:00:15		
2.68	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	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	2	2.0	1.1	3.0	3.0

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Section Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
11	Upstream	PIPE BX	11	PJ00453723



1, 00:00:06, 0.09 m
Settled deposits, coarse, 5% cross-sectional area loss



2, 00:00:13, 1.97 m
Settled deposits, hard or compacted, 10% cross-sectional area loss

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Section Inspection - 24/08/2022 - PIPE CX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
12	1	24/08/22	11:48	PJ00453723	Dry	Yes	PIPE CX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE C
Road:	Cable Street	**Inspected Length:**	9.16 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	9.16 m	**Downstream Node:**	FW6
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.55

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW6	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
0.21	LL	Line deviates left	00:00:08		
1.22	DEC	Settled deposits, hard or compacted, 30% cross-sectional area loss: Concrete	00:00:12	1	4
			00:00:30		
8.86	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:46		
9.16	OCF	Finish node, other special chamber, reference: PIPE C: Rest bend	00:00:50		

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	1	2.0	1.1	3.0	3.0

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Section Pictures - 24/08/2022 - PIPE CX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
12	Upstream	PIPE CX	12	PJ00453723



1, 00:00:12, 1.22 m
Settled deposits, hard or compacted, 30% cross-sectional area loss, Concrete

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Section Inspection - 24/08/2022 - PIPE DX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
13	1	24/08/22	11:50	PJ00453723	Dry	Yes	PIPE DX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE D
Road:	Cable Street	**Inspected Length:**	3.66 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.66 m	**Downstream Node:**	FW6
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.55

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW6	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:04		
3.66	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:16	2	
3.66	OCF	Finish node, other special chamber, reference: PIPE D: Rest bend	00:00:20		

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

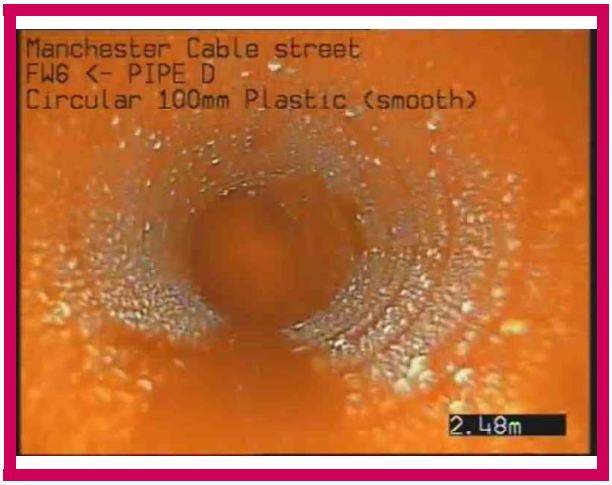
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Section Pictures - 24/08/2022 - PIPE DX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
13	Upstream	PIPE DX	13	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW6



2, 00:00:16, 3.66 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
14	1	24/08/22	12:07	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.60 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.60 m	**Downstream Node:**	FW4
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.04

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW4	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
0.00	JN	Junction at 11 o'clock, diameter: 100mm	00:00:03		
1.01	LD	Line deviates down	00:00:08	2	
3.47	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:15		
3.60	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
14	Upstream	PIPE AX	14	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW4



2, 00:00:08, 1.01 m
Line deviates down

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
15	1	24/08/22	12:08	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	7.24 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	7.24 m	**Downstream Node:**	FW4
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.04

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:63



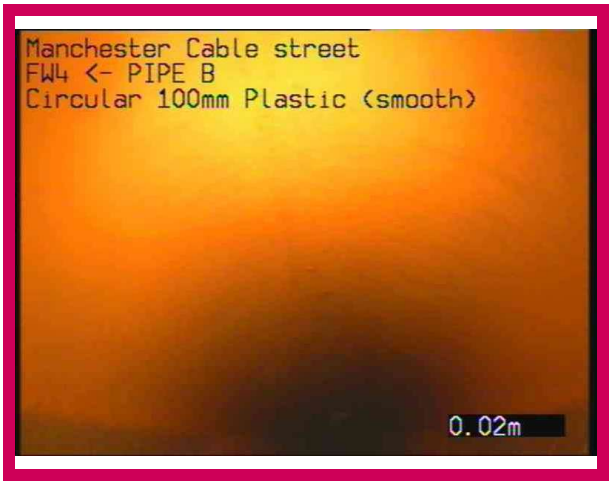
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW4	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:04		
7.24	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:26	2	
7.24	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:29		

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

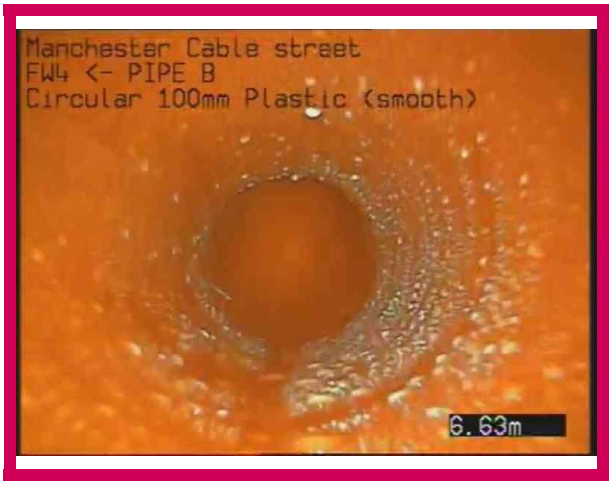
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Section Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
15	Upstream	PIPE BX	15	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW4



2, 00:00:26, 7.24 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE DX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
16	1	24/08/22	12:09	PJ00453723	Dry	Yes	PIPE DX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE D
Road:	Cable Street	**Inspected Length:**	2.97 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.97 m	**Downstream Node:**	FW4
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.04

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW4	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00	1	
2.97	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:12	2	
2.97	OCF	Finish node, other special chamber, reference: PIPE D: Rest bend	00:00:15		

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

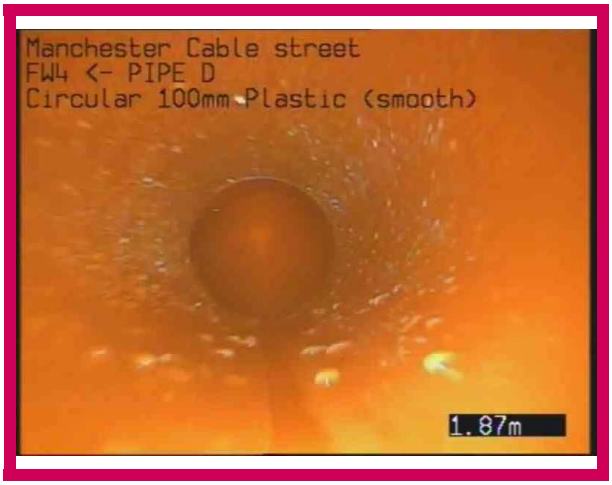
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Section Pictures - 24/08/2022 - PIPE DX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
16	Upstream	PIPE DX	16	PJ00453723



1, 00:00:00, 0.00 m
Water level, 5% of the vertical dimension



2, 00:00:12, 2.97 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
17	1	24/08/22	14:06	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.36 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.36 m	**Downstream Node:**	FW3
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.44

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
0.04	LL	Line deviates left: Slight	00:00:03		
3.36	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:14	2	
3.36	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:17		

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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
17	Upstream	PIPE AX	17	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3



2, 00:00:14, 3.36 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - FW3AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
18	1	24/08/22	13:48	PJ00453723	Dry	Yes	FW3AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW3A
Road:	Cable Street	**Inspected Length:**	1.52 m	**Upstream Pipe Depth:**	1.42
Post Code:	M4 5DF	**Total Length:**	1.52 m	**Downstream Node:**	FW3
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.44

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.42 m FW3A					
0.00	MH	Start node, manhole, reference: FW3A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
1.25	LL	Line deviates left: Sharp	00:00:11		
1.52	MHF	Finish node, manhole, reference: FW3	00:00:18	2	
FW3 Depth: 1.44 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 Pictures - 24/08/2022 - FW3AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
18	Downstream	FW3AX	18	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3A



2, 00:00:18, 1.52 m
Finish node, manhole, reference: FW3

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Section Inspection - 24/08/2022 - FW2X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
19	1	24/08/22	13:46	PJ00453723	Dry	Yes	FW2X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW2
Road:	Cable Street	**Inspected Length:**	7.80 m	**Upstream Pipe Depth:**	0.73
Post Code:	M4 5DF	**Total Length:**	7.80 m	**Downstream Node:**	FW3A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.44

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:68



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00	1	
0.00	WL	Water level, 10% of the vertical dimension	00:00:03		
1.35	WL	Water level, 5% of the vertical dimension	00:00:22		
7.80	MHF	Finish node, manhole, reference: FW2	00:00:48	2	

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 Pictures - 24/08/2022 - FW2X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
19	Upstream	FW2X	19	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3A



2, 00:00:48, 7.80 m
Finish node, manhole, reference: FW2

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Section Inspection - 24/08/2022 - FW1X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
20	1	24/08/22	13:45	PJ00453723	Dry	Yes	FW1X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW1
Road:	Cable Street	**Inspected Length:**	2.61 m	**Upstream Pipe Depth:**	0.69
Post Code:	M4 5DF	**Total Length:**	2.61 m	**Downstream Node:**	FW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.73

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



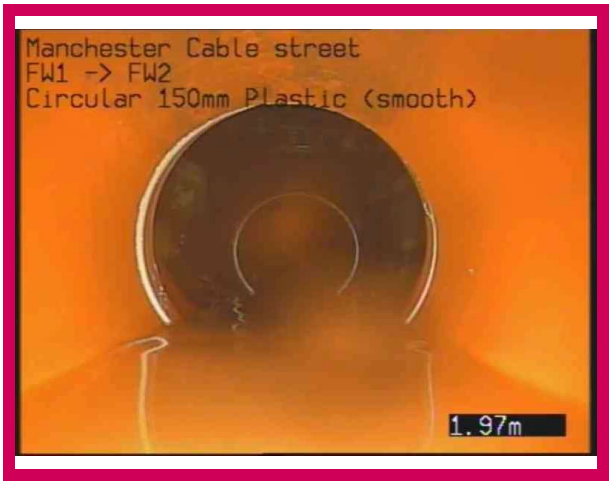
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW1	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:07		
1.97	WL	Water level, 10% of the vertical dimension	00:00:22	1	
2.61	MHF	Finish node, manhole, reference: FW2	00:00:27	2	

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 Pictures - 24/08/2022 - FW1X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
20	Downstream	FW1X	20	PJ00453723



1, 00:00:22, 1.97 m
Water level, 10% of the vertical dimension



2, 00:00:27, 2.61 m
Finish node, manhole, reference: FW2

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
21	1	24/08/22	13:34	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	7.32 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	7.32 m	**Downstream Node:**	FW1
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.69

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:64



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
6.72	LL	Line deviates left: Sharp	00:00:28	2	
7.32	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:33		
7.32	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
21	Upstream	PIPE AX	21	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3A



2, 00:00:28, 6.72 m
Line deviates left, Sharp

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Section Inspection - 24/08/2022 - PIPE CX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
22	1	24/08/22	13:39	PJ00453723	Dry	Yes	PIPE CX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE C
Road:	Cable Street	**Inspected Length:**	9.25 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	9.25 m	**Downstream Node:**	FW1
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.69

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Vitrified clay
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:81



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
4.98	WL	Water level, 10% of the vertical dimension	00:00:18		
5.82	WL	Water level, 20% of the vertical dimension	00:00:21		
6.24	LL	Line deviates left: Slight	00:00:31		
6.24	WL	Water level, 10% of the vertical dimension	00:00:32		
7.04	WL	Water level, 5% of the vertical dimension	00:00:37	2	
9.25	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:49		
9.25	OCF	Finish node, other special chamber, reference: PIPE C: Rest bend	00:00:51		

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 Pictures - 24/08/2022 - PIPE CX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
22	Upstream	PIPE CX	22	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3A



2, 00:00:37, 7.04 m
Water level, 5% of the vertical dimension

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Section Inspection - 24/08/2022 - FW1AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
23	1	24/08/22	13:54	PJ00453723	Dry	Yes	FW1AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW1A
Road:	Cable Street	**Inspected Length:**	6.74 m	**Upstream Pipe Depth:**	0.55
Post Code:	M4 5DF	**Total Length:**	6.74 m	**Downstream Node:**	FW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.73

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:59



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW2	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
3.69	WL	Water level, 10% of the vertical dimension: Possible dip in pipe	00:00:13	1	
3.69	WL	Water level, 5% of the vertical dimension	00:00:22		
6.74	MHF	Finish node, manhole, reference: FW1A	00:00:36	2	

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 Pictures - 24/08/2022 - FW1AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
23	Upstream	FW1AX	23	PJ00453723



1, 00:00:13, 3.69 m
Water level, 10% of the vertical dimension, Possible dip in pipe



2, 00:00:36, 6.74 m
Finish node, manhole, reference: FW1A

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Section Inspection - 24/08/2022 - PIPE CX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
24	1	24/08/22	13:51	PJ00453723	Dry	Yes	PIPE CX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE C
Road:	Cable Street	**Inspected Length:**	3.56 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.56 m	**Downstream Node:**	FW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.73

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW2	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
3.54	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:33		
3.56	OCF	Finish node, other special chamber, reference: PIPE C: Rest bend	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**
1	80.0	22.5	80.0	4.0	0	0.0	0.0	0.0	1.0

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Section Pictures - 24/08/2022 - PIPE CX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
24	Upstream	PIPE CX	24	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW2

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
25	1	24/08/22	14:02	PJ00453723	Dry	Yes	PIPE AX

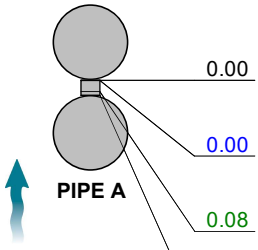
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	0.10 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	0.10 m	**Downstream Node:**	FW3A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.42

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
0.08	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:04		
0.10	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:05		

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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
25	Upstream	PIPE AX	25	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3A

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Section Inspection - 24/08/2022 - PIPE CX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
26	1	24/08/22	14:03	PJ00453723	Dry	Yes	PIPE CX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE C
Road:	Cable Street	**Inspected Length:**	3.63 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.63 m	**Downstream Node:**	FW3A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.42

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00	1	
3.63	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:17		
3.63	OCF	Finish node, other special chamber, reference: PIPE C: Rest bend	00:00:17		

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 Pictures - 24/08/2022 - PIPE CX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
26	Upstream	PIPE CX	26	PJ00453723



1, 00:00:00, 0.00 m
Water level, 5% of the vertical dimension

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
27	1	24/08/22	12:14	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	5.24 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	5.24 m	**Downstream Node:**	SW1CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.15

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments:	None
Recommendations:	None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW1CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
5.24	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:17	2	
5.24	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:18		

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

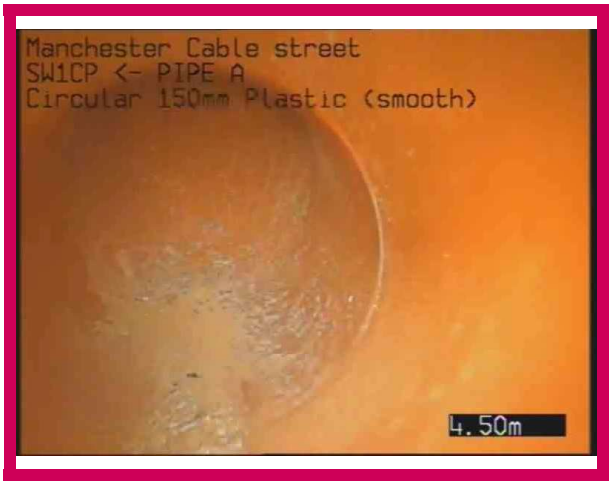
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Section Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
27	Upstream	PIPE AX	27	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW1CP



2, 00:00:17, 5.24 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
28	1	24/08/22	12:16	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	2.02 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.02 m	**Downstream Node:**	SW1CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.15

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50

Depth: 1.15 m
SW1CP



PIPE B
Depth: m

Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW1CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
0.00	LR	Line deviates right: Slight	00:00:03		
1.37	DER	Settled deposits, coarse, 5% cross-sectional area loss	00:00:09	2	2
2.02	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:11		
2.02	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:11		

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	1	1.0	0.5	1.0	2.0

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Section Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
28	Upstream	PIPE BX	28	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW1CP



2, 00:00:09, 1.37 m
Settled deposits, coarse, 5% cross-sectional area loss

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Section Inspection - 24/08/2022 - SW1CPX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
29	1	24/08/22	12:17	PJ00453723	Dry	Yes	SW1CPX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW1CP
Road:	Cable Street	**Inspected Length:**	15.43 m	**Upstream Pipe Depth:**	1.15
Post Code:	M4 5DF	**Total Length:**	15.43 m	**Downstream Node:**	SW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.98

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:134

Depth: 1.15 m
SW1CP



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW1CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
4.96	WL	Water level, 10% of the vertical dimension	00:00:15	2	
5.28	WL	Water level, 20% of the vertical dimension	00:00:15		
5.81	WL	Water level, 30% of the vertical dimension	00:00:16		
5.81	CUW	Loss of vision, camera under water: Possible dip in pipe	00:00:17		
6.78	WL	Water level, 20% of the vertical dimension	00:00:21		
7.21	WL	Water level, 10% of the vertical dimension	00:00:22		
8.03	WL	Water level, 5% of the vertical dimension	00:00:24	3	
14.77	LR	Line deviates right	00:00:44		
15.43	MHF	Finish node, manhole, reference: SW2	00:00:47		

SW2
Depth: 1.98 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 Pictures - 24/08/2022 - SW1CPX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
29	Downstream	SW1CPX	29	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW1CP



2, 00:00:15, 4.96 m
Water level, 10% of the vertical dimension



3, 00:00:24, 8.03 m
Water level, 5% of the vertical dimension

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Section Inspection - 24/08/2022 - SW2X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
30	1	24/08/22	13:57	PJ00453723	Dry	Yes	SW2X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	SW2
Road:	Cable Street	**Inspected Length:**	3.80 m	**Upstream Pipe Depth:**	1.98
Post Code:	M4 5DF	**Total Length:**	3.80 m	**Downstream Node:**	SW3
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.10

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW3	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
3.31	LL	Line deviates left: Slight	00:00:17	2	
3.80	MHF	Finish node, manhole, reference: SW2	00:00:30		

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

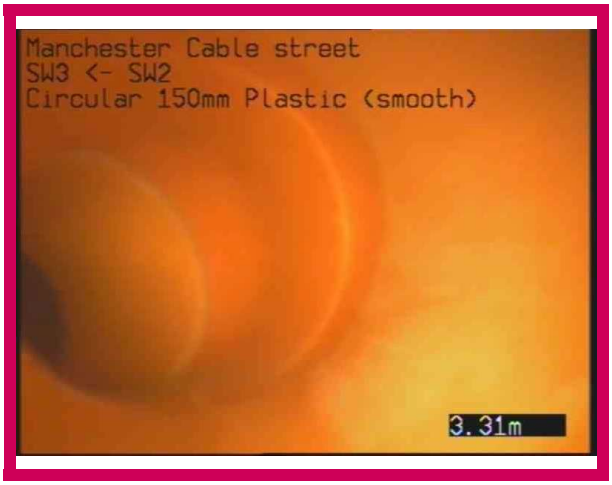
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Section Pictures - 24/08/2022 - SW2X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
30	Upstream	SW2X	30	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW3



2, 00:00:17, 3.31 m
Line deviates left, Slight

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Section Inspection - 24/08/2022 - SW3X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
31	1	24/08/22	13:59	PJ00453723	Dry	Yes	SW3X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW3
Road:	Cable Street	**Inspected Length:**	6.27 m	**Upstream Pipe Depth:**	2.10
Post Code:	M4 5DF	**Total Length:**	6.27 m	**Downstream Node:**	SW4CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.20

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:55



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 2.10 m **SW3**					
0.00	MH	Start node, manhole, reference: SW3	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
6.27	CPF	Finish node, catchpit, reference: SW4CP	00:00:27	2	
SW4CP **Depth: 3.20 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 Pictures - 24/08/2022 - SW3X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
31	Downstream	SW3X	31	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW3



2, 00:00:27, 6.27 m
Finish node, catchpit, reference: SW4CP

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
32	1	24/08/22	13:29	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	7.40 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	7.40 m	**Downstream Node:**	SW3A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.24

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments:	None
Recommendations:	None

Scale: 1:65



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW3A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:04		
7.40	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:24	2	
7.40	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:28		

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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
32	Upstream	PIPE AX	32	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW3A



2, 00:00:24, 7.40 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - SW3AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
33	1	24/08/22	13:32	PJ00453723	Dry	Yes	SW3AX

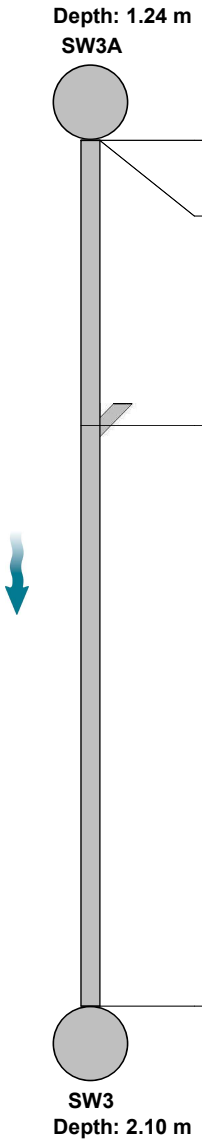
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW3A
Road:	Cable Street	**Inspected Length:**	8.48 m	**Upstream Pipe Depth:**	1.24
Post Code:	M4 5DF	**Total Length:**	8.48 m	**Downstream Node:**	SW3
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.10

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:74



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW3A	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.79	JN	Junction at 11 o'clock, diameter: 100mm	00:00:12	1	
8.48	MHF	Finish node, manhole, reference: SW3	00:00:34	2	

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 Pictures - 24/08/2022 - SW3AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
33	Downstream	SW3AX	33	PJ00453723



1, 00:00:12, 2.79 m
Junction at 11 o'clock, diameter: 100mm



2, 00:00:34, 8.48 m
Finish node, manhole, reference: SW3

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
34	1	24/08/22	13:37	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	8.29 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	8.29 m	**Downstream Node:**	FW1
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.69

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:72



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
4.84	WL	Water level, 10% of the vertical dimension: Possible dip in pipe	00:00:19	2	
6.78	WL	Water level, 5% of the vertical dimension	00:00:25		
8.29	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:30		
8.29	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:30		

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 Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
34	Upstream	PIPE BX	34	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW3A



2, 00:00:19, 4.84 m
Water level, 10% of the vertical dimension, Possible dip in pipe

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Section Inspection - 24/08/2022 - PIPE DX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
35	1	24/08/22	13:41	PJ00453723	Dry	Yes	PIPE DX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE D
Road:	Cable Street	**Inspected Length:**	4.52 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	4.52 m	**Downstream Node:**	FW1
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.69

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW3A	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
4.15	JN	Junction at 02 o'clock, diameter: 100mm	00:00:18	1	
4.15	LR	Line deviates right: Slight	00:00:20		
4.52	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:26		
4.52	OCF	Finish node, other special chamber, reference: PIPE D: Rest bend	00:00:27		

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 Pictures - 24/08/2022 - PIPE DX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
35	Upstream	PIPE DX	35	PJ00453723



1, 00:00:18, 4.15 m
Junction at 02 o'clock, diameter: 100mm

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
36	1	24/08/22	14:49	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	1.53 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	1.53 m	**Downstream Node:**	FW10
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.04

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Depth: 1.04 m
FW10

PIPE A

Depth: m

Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW10	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
0.49	LL	Line deviates left: Slight	00:00:12	1	
1.03	LR	Line deviates right: Slight	00:00:19		
1.53	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:25		
1.53	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:26		

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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
36	Upstream	PIPE AX	36	PJ00453723



1, 00:00:12, 0.49 m
Line deviates left, Slight

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
37	1	24/08/22	14:52	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	2.70 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	4.24 m	**Downstream Node:**	FW10
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.04

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW10	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
2.66	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:26	2	
2.70	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:30		

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 Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
37	Upstream	PIPE BX	37	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW10



2, 00:00:26, 2.66 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - FW10X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
38	1	24/08/22	14:54	PJ00453723	Dry	Yes	FW10X

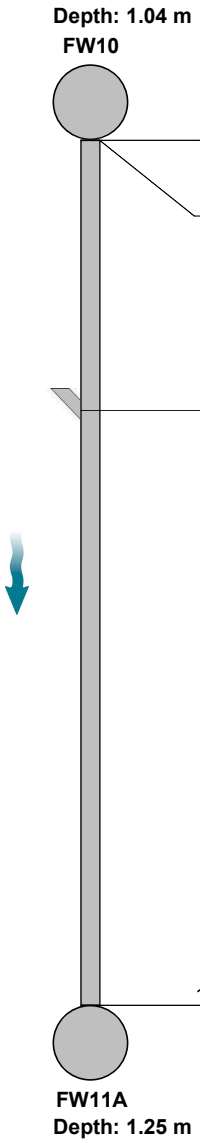
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW10
Road:	Cable Street	**Inspected Length:**	12.13 m	**Upstream Pipe Depth:**	1.04
Post Code:	M4 5DF	**Total Length:**	12.13 m	**Downstream Node:**	FW11A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.25

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:106



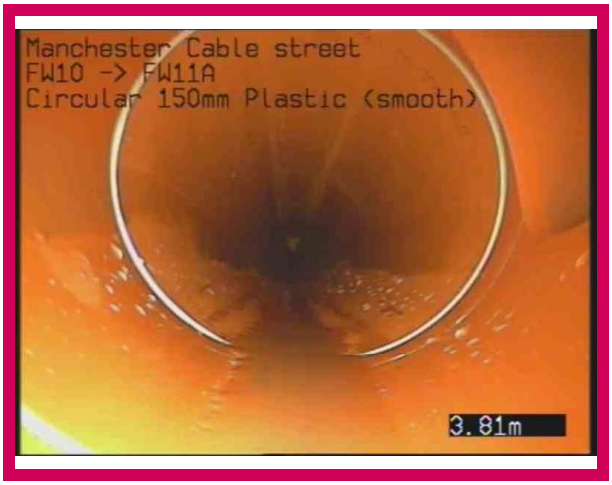
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW10	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
3.79	JN	Junction at 02 o'clock, diameter: 100mm	00:00:14	1	
12.13	MHF	Finish node, manhole, reference: FW11A	00:00:39	2	

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 Pictures - 24/08/2022 - FW10X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
38	Downstream	FW10X	38	PJ00453723



1, 00:00:14, 3.79 m
Junction at 02 o'clock, diameter: 100mm



2, 00:00:39, 12.13 m
Finish node, manhole, reference: FW11A

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Section Inspection - 24/08/2022 - FW11AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
39	1	24/08/22	14:55	PJ00453723	Dry	Yes	FW11AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW11A
Road:	Cable Street	**Inspected Length:**	2.80 m	**Upstream Pipe Depth:**	1.25
Post Code:	M4 5DF	**Total Length:**	2.80 m	**Downstream Node:**	FW11
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.24

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
		Depth: 1.25 m			
		FW11A			
0.00	MH	Start node, manhole, reference: FW11A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
2.80	MHF	Finish node, manhole, reference: FW11	00:00:18	2	
		FW11			
		Depth: 1.24 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 Pictures - 24/08/2022 - FW11AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
39	Downstream	FW11AX	39	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW11A



2, 00:00:18, 2.80 m
Finish node, manhole, reference: FW11

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Section Inspection - 24/08/2022 - FW11X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
40	1	24/08/22	14:56	PJ00453723	Dry	Yes	FW11X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW11
Road:	Cable Street	**Inspected Length:**	5.30 m	**Upstream Pipe Depth:**	1.24
Post Code:	M4 5DF	**Total Length:**	5.30 m	**Downstream Node:**	FW16
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.35

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW11	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:04		
5.30	MHF	Finish node, manhole, reference: FW16	00:00:21	2	

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 Pictures - 24/08/2022 - FW11X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
40	Downstream	FW11X	40	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW11



2, 00:00:21, 5.30 m
Finish node, manhole, reference: FW16

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
41	1	24/08/22	14:59	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	2.73 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.73 m	**Downstream Node:**	FW11A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.25

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



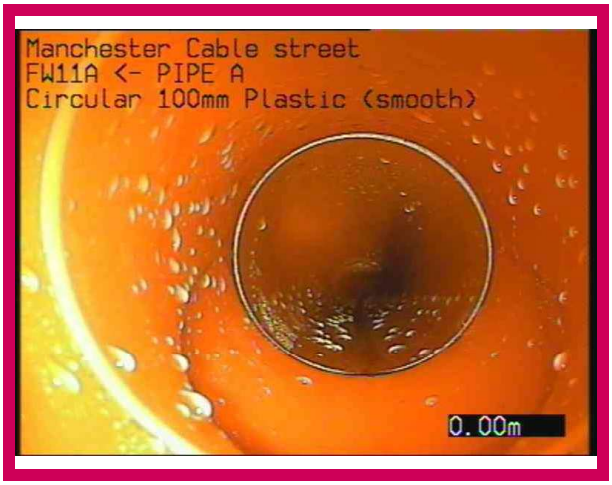
Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.25 m FW11A					
0.00	MH	Start node, manhole, reference: FW11A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:03		
0.00	LD	Line deviates down: Dropshaft	00:00:05		
1.87	LL	Line deviates left	00:00:14	2	
2.73	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:16		
2.73	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:17		
PIPE A 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

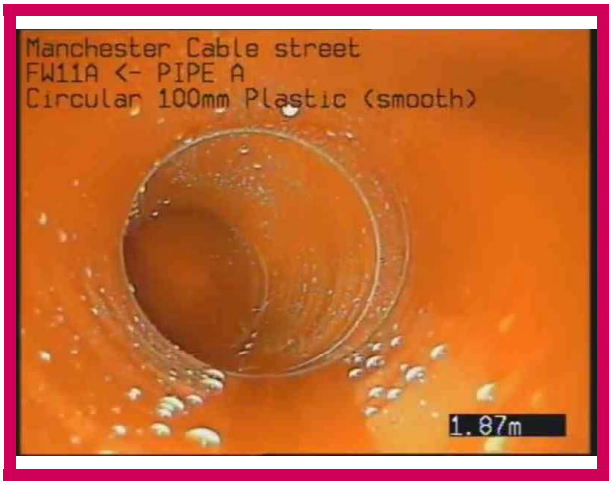
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Section Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
41	Upstream	PIPE AX	41	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW11A



2, 00:00:14, 1.87 m
Line deviates left

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
42	1	24/08/22	15:05	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	4.28 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	4.28 m	**Downstream Node:**	FW11A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.25

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW11A	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.62	LD	Line deviates down	00:00:10	1	
3.70	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:16	2	2
4.28	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:18		
4.28	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:21		

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	1	1.0	0.2	1.0	2.0

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Section Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
42	Upstream	PIPE BX	42	PJ00453723



1, 00:00:10, 2.62 m
Line deviates down



2, 00:00:16, 3.70 m
Settled deposits, fine, 5% cross-sectional area loss

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Section Inspection - 24/08/2022 - PIPE DX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
43	1	24/08/22	15:02	PJ00453723	Dry	Yes	PIPE DX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE D
Road:	Cable Street	**Inspected Length:**	1.29 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	1.29 m	**Downstream Node:**	FW11A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.25

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.25 m FW11A					
0.00	MH	Start node, manhole, reference: FW11A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:04		
1.29	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:14		
1.29	OCF	Finish node, other special chamber, reference: PIPE D: Rest bend	00:00:14	2	
PIPE D 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 Pictures - 24/08/2022 - PIPE DX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
43	Upstream	PIPE DX	43	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW11A



2, 00:00:14, 1.29 m
Finish node, other special chamber, reference: PIPE D, Rest bend

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
44	1	24/08/22	15:08	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	1.19 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	1.19 m	**Downstream Node:**	FW11
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.24

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW11	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	LD	Line deviates down: Dropshaft	00:00:01		
0.44	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:19	2	
1.19	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:22		

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

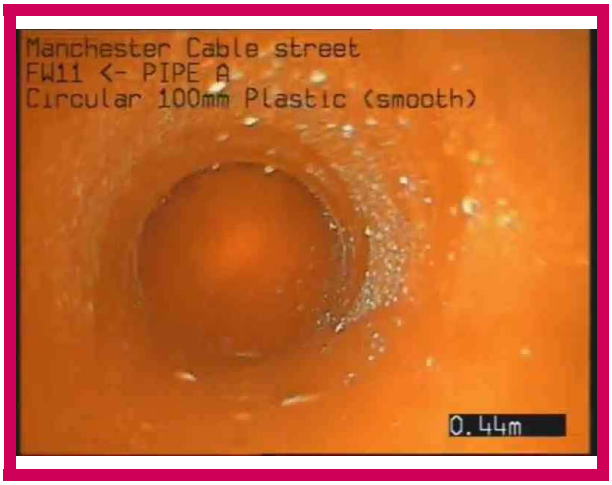
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Section Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
44	Upstream	PIPE AX	44	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW11



2, 00:00:19, 0.44 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 25/08/2022 - FW16X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
45	1	25/08/22	10:05	PJ00453723	Dry	Yes	FW16X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW16
Road:	Cable Street	**Inspected Length:**	3.57 m	**Upstream Pipe Depth:**	1.35
Post Code:	M4 5DF	**Total Length:**	3.57 m	**Downstream Node:**	FW13
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.40

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



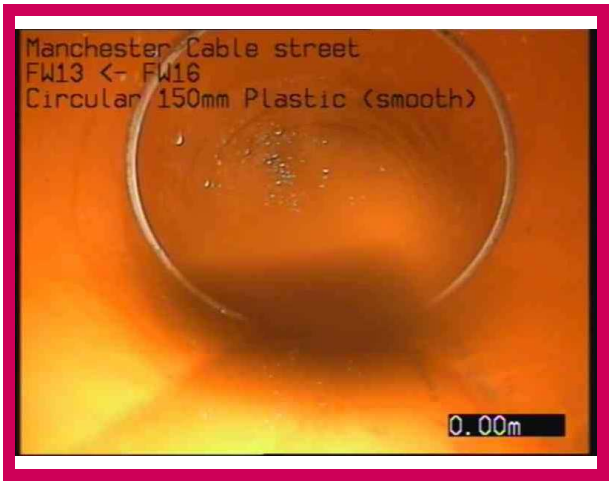
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW13	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.40	REM	General remark: Line levels out	00:00:08		
1.15	WL	Water level, 10% of the vertical dimension	00:00:11		
3.57	MHF	Finish node, manhole, reference: FW16	00:00:21	2	

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 Pictures - 25/08/2022 - FW16X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
45	Upstream	FW16X	45	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW13



2, 00:00:21, 3.57 m
Finish node, manhole, reference: FW16

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Section Inspection - 24/08/2022 - FW15X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
46	1	24/08/22	15:20	PJ00453723	Dry	Yes	FW15X

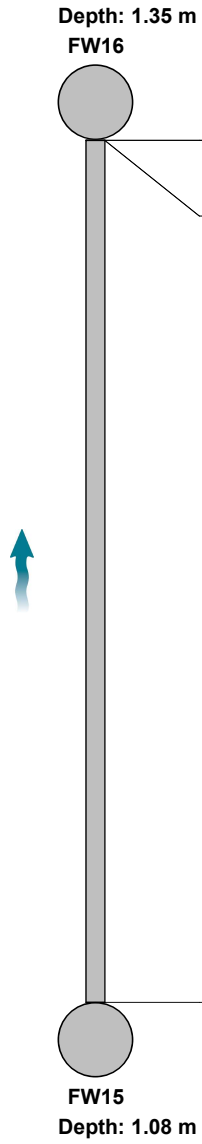
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW15
Road:	Cable Street	**Inspected Length:**	7.53 m	**Upstream Pipe Depth:**	1.08
Post Code:	M4 5DF	**Total Length:**	7.53 m	**Downstream Node:**	FW16
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.35

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:66



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW16	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
7.53	MHF	Finish node, manhole, reference: FW15	00:00:31	2	

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 Pictures - 24/08/2022 - FW15X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
46	Upstream	FW15X	46	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW16



2, 00:00:31, 7.53 m
Finish node, manhole, reference: FW15

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Section Inspection - 24/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
47	1	24/08/22	15:21	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	8.15 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	8.15 m	**Downstream Node:**	FW15
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.08

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:71



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW15	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
8.15	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:33	2	
8.15	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:35		

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

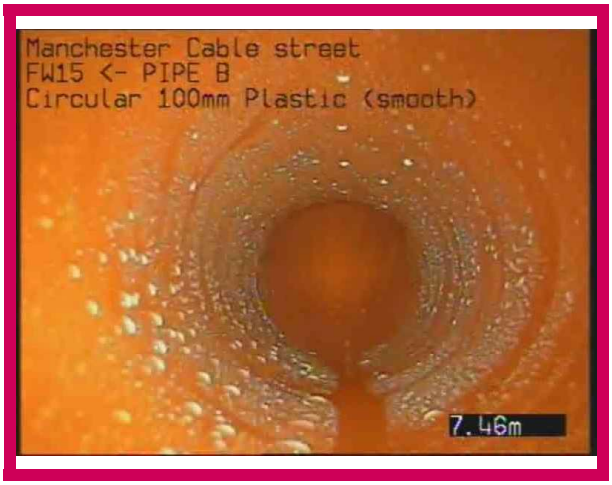
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Section Pictures - 24/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
47	Upstream	PIPE BX	47	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW15



2, 00:00:33, 8.15 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 24/08/2022 - PIPE CX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
48	1	24/08/22	15:29	PJ00453723	Dry	Yes	PIPE CX

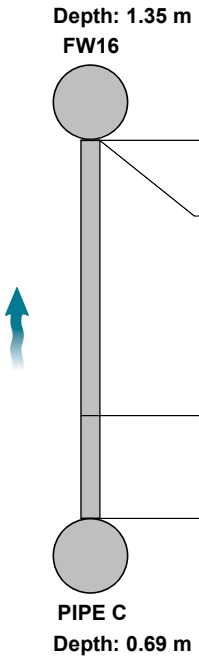
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE C
Road:	Cable Street	**Inspected Length:**	2.50 m	**Upstream Pipe Depth:**	0.69
Post Code:	M4 5DF	**Total Length:**	2.50 m	**Downstream Node:**	FW16
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.35

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW16	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
1.82	LR	Line deviates right	00:00:18	2	
2.50	GYF	Finish node, gully, reference: PIPE C	00:00:21		

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 Pictures - 24/08/2022 - PIPE CX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
48	Upstream	PIPE CX	48	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW16



2, 00:00:18, 1.82 m
Line deviates right

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Section Inspection - 24/08/2022 - FW12X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
49	1	24/08/22	15:34	PJ00453723	Dry	Yes	FW12X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW12
Road:	Cable Street	**Inspected Length:**	3.81 m	**Upstream Pipe Depth:**	0.69
Post Code:	M4 5DF	**Total Length:**	3.81 m	**Downstream Node:**	FW16
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.35

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW16	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
3.27	LR	Line deviates right: Sharp	00:00:14		
3.80	REM	General remark: Silt in manhole	00:00:29		
3.81	MHF	Finish node, manhole, reference: FW12	00:00:30	2	

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 Pictures - 24/08/2022 - FW12X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
49	Upstream	FW12X	49	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW16



2, 00:00:30, 3.81 m
Finish node, manhole, reference: FW12

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Section Inspection - 24/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
50	1	24/08/22	15:36	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.45 m	**Upstream Pipe Depth:**	0.58
Post Code:	M4 5DF	**Total Length:**	3.45 m	**Downstream Node:**	FW12
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.69

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW12	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.18	LR	Line deviates right	00:00:10	1	
0.85	LU	Line deviates up	00:00:14		
2.36	LU	Line deviates up	00:00:20		
3.45	LU	Line deviates up: 90 Degree bend/Rest bend	00:01:10		
3.45	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:01:11	2	

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 Pictures - 24/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
50	Upstream	PIPE AX	50	PJ00453723



1, 00:00:10, 0.18 m
Line deviates right



2, 00:01:11, 3.45 m
Finish node, other special chamber, reference: PIPE A, Rest bend

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Section Inspection - 25/08/2022 - FW14X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
51	1	25/08/22	8:01	PJ00453723	Dry	Yes	FW14X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW14
Road:	Cable Street	**Inspected Length:**	10.81 m	**Upstream Pipe Depth:**	0.72
Post Code:	M4 5DF	**Total Length:**	10.81 m	**Downstream Node:**	FW15
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.08

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:94

Depth: 0.72 m
FW14



FW15
Depth: 1.08 m

Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW14	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
9.25	JN	Junction at 12 o'clock, diameter: 100mm	00:00:31		
10.02	REM	General remark: Line levels out	00:00:46		
10.81	MHF	Finish node, manhole, reference: FW15	00:00:49	2	

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 Pictures - 25/08/2022 - FW14X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
51	Downstream	FW14X	51	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW14



2, 00:00:49, 10.81 m
Finish node, manhole, reference: FW15

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
52	1	25/08/22	8:04	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	2.77 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.77 m	**Downstream Node:**	FW14
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.72

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW14	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00	1	
1.75	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:15	2	2
2.63	LL	Line deviates left: Sharp	00:00:18		
2.77	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:24		
2.77	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:24		

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	1	1.0	0.4	1.0	2.0

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Section Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
52	Upstream	PIPE AX	52	PJ00453723



1, 00:00:00, 0.00 m
Water level, 5% of the vertical dimension



2, 00:00:15, 1.75 m
Settled deposits, fine, 5% cross-sectional area loss

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Section Inspection - 25/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
53	1	25/08/22	8:06	PJ00453723	Dry	Yes	PIPE BX

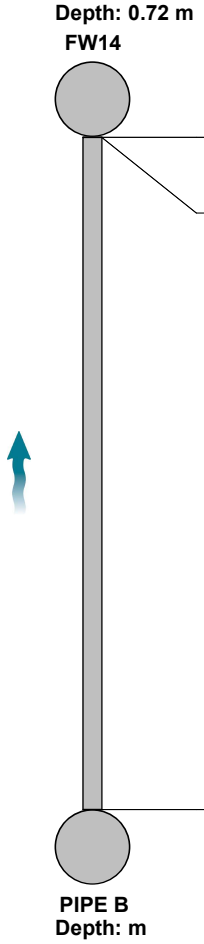
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	4.45 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	4.45 m	**Downstream Node:**	FW14
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.72

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW14	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
4.45	GYF	Finish node, gully, reference: PIPE B	00:00:27	2	

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 Pictures - 25/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
53	Upstream	PIPE BX	53	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW14



2, 00:00:27, 4.45 m
Finish node, gully, reference: PIPE B

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
54	1	25/08/22	8:10	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	4.34 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	4.34 m	**Downstream Node:**	FW10A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.58

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW10A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
4.32	LU	Line deviates up	00:00:18	2	
4.34	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:22		

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 Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
54	Upstream	PIPE AX	54	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW10A



2, 00:00:18, 4.32 m
Line deviates up

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Section Inspection - 25/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
55	1	25/08/22	8:11	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	9.45 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	9.45 m	**Downstream Node:**	FW10A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.58

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:82

Depth: 0.58 m
FW10A



PIPE B
Depth: m

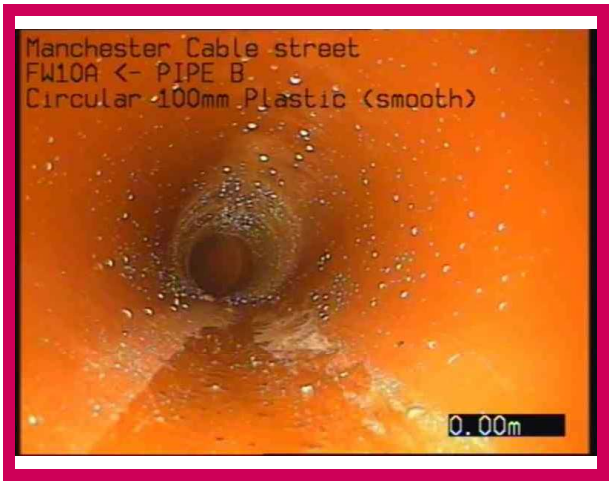
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW10A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
1.51	LL	Line deviates left: Slight	00:00:08		
2.09	LR	Line deviates right: Slight	00:00:15		
7.78	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:42	2	2
9.45	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:49		
9.45	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:50		

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	1	1.0	0.1	1.0	2.0

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Section Pictures - 25/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
55	Upstream	PIPE BX	55	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW10A



2, 00:00:42, 7.78 m
Settled deposits, fine, 5% cross-sectional area loss

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Section Inspection - 25/08/2022 - FW10AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
56	1	25/08/22	8:14	PJ00453723	Dry	Yes	FW10AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW10A
Road:	Cable Street	**Inspected Length:**	3.06 m	**Upstream Pipe Depth:**	0.58
Post Code:	M4 5DF	**Total Length:**	3.06 m	**Downstream Node:**	FW12
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.69

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



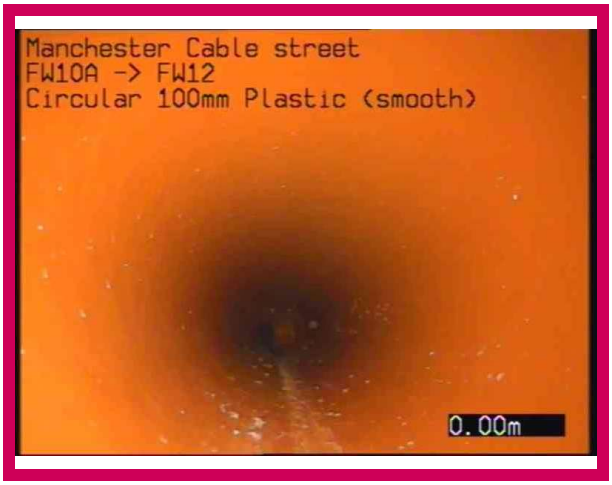
Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 0.58 m **FW10A**					
0.00	MH	Start node, manhole, reference: FW10A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
1.53	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:16	2	2
2.73	LL	Line deviates left: Slight	00:00:22		
3.06	MHF	Finish node, manhole, reference: FW12	00:00:28		
FW12 **Depth: 0.69 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	1	1.0	0.3	1.0	2.0

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Section Pictures - 25/08/2022 - FW10AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
56	Downstream	FW10AX	56	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW10A



2, 00:00:16, 1.53 m
Settled deposits, fine, 5% cross-sectional area loss

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
57	1	25/08/22	8:18	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	10.33 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	10.33 m	**Downstream Node:**	SW6CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.67

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	CP	Start node, catchpit, reference: SW6CP	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	LL	Line deviates left: Slight	00:00:01		
2.75	LL	Line deviates left: Slight	00:00:27		
2.93	LD	Line deviates down	00:00:28		
2.93	REM	General remark: Water level increase due to line down	00:00:28		
3.07	WL	Water level, 10% of the vertical dimension	00:00:33		
3.20	WL	Water level, 15% of the vertical dimension	00:00:33	1	
3.41	WL	Water level, 20% of the vertical dimension	00:00:36		
3.66	WL	Water level, 30% of the vertical dimension	00:00:44		
3.66	LR	Line deviates right: Slight	00:00:45		
3.91	WL	Water level, 20% of the vertical dimension	00:00:51		
4.03	WL	Water level, 15% of the vertical dimension	00:00:51		
4.40	WL	Water level, 10% of the vertical dimension	00:00:54		
5.23	WL	Water level, 10% of the vertical dimension	00:01:03	2	

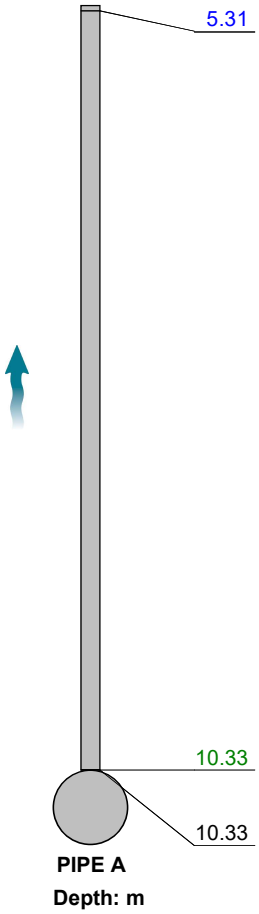
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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
57	1	25/08/22	8:18	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
5.31	WL	Water level, 5% of the vertical dimension	00:01:04		
10.33	LU	Line deviates up: 90 Degree bend/Rest bend	00:01:35		
10.33	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:01:38		

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 Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
57	Upstream	PIPE AX	57	PJ00453723



1, 00:00:33, 3.20 m
Water level, 30% of the vertical dimension



2, 00:01:03, 5.23 m
Water level, 10% of the vertical dimension

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Section Inspection - 25/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
58	1	25/08/22	8:22	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	1.16 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	1.16 m	**Downstream Node:**	SW6CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	0.67

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Depth: 0.67 m
SW6CP

Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: SW6CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
1.16	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:08	2	
1.16	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:11		

PIPE B
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

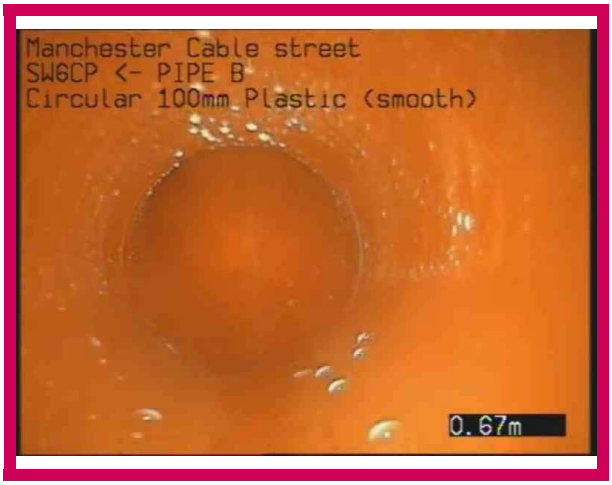
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Section Pictures - 25/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
58	Upstream	PIPE BX	58	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW6CP



2, 00:00:08, 1.16 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 25/08/2022 - SW6CPX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
59	1	25/08/22	8:30	PJ00453723	Dry	Yes	SW6CPX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW6CP
Road:	Cable Street	**Inspected Length:**	6.99 m	**Upstream Pipe Depth:**	0.67
Post Code:	M4 5DF	**Total Length:**	6.99 m	**Downstream Node:**	SW7
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.30

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:61

Depth: 0.67 m
SW6CP



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	CP	Start node, catchpit, reference: SW6CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
2.82	LD	Line deviates down: Slight	00:00:23	2	
4.99	LD	Line deviates down: Sharp	00:00:34		
6.37	REM	General remark: Rest bend	00:00:47		
6.99	MHF	Finish node, manhole, reference: SW7	00:01:00		

SW7
Depth: 3.30 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

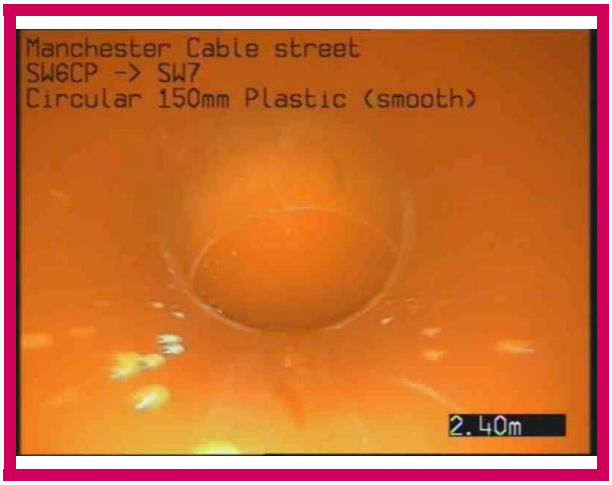
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Section Pictures - 25/08/2022 - SW6CPX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
59	Downstream	SW6CPX	59	PJ00453723



1, 00:00:00, 0.00 m
Start node, catchpit, reference: SW6CP



2, 00:00:23, 2.82 m
Line deviates down, Slight

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
60	1	25/08/22	8:39	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.74 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.74 m	**Downstream Node:**	FW15
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.08

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW15	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.50	LL	Line deviates left: Slight	00:00:26	2	
3.74	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:46		
3.74	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:46		

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

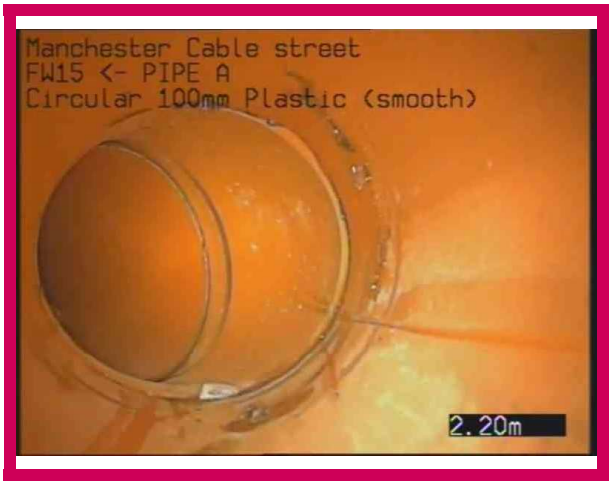
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Section Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
60	Upstream	PIPE AX	60	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW15



2, 00:00:26, 2.50 m
Line deviates left, Slight

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
61	1	25/08/22	8:44	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.26 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.26 m	**Downstream Node:**	SW6ACP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.72

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	CP	Start node, catchpit, reference: SW6ACP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
2.50	LL	Line deviates left: Slight	00:00:18	2	
3.24	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:33		
3.26	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	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 Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
61	Upstream	PIPE AX	61	PJ00453723



1, 00:00:00, 0.00 m
Start node, catchpit, reference: SW6ACP



2, 00:00:18, 2.50 m
Line deviates left, Slight

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Section Inspection - 25/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
62	1	25/08/22	8:47	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	3.89 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.89 m	**Downstream Node:**	SW6ACP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.72

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



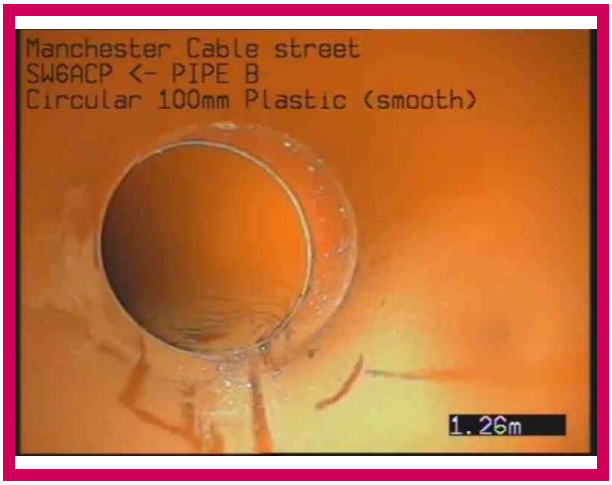
Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 1.72 m					
SW6ACP					
0.00	CP	Start node, catchpit, reference: SW6ACP	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
1.82	LL	Line deviates left: Slight	00:00:12	1	
3.10	LL	Line deviates left: Slight	00:00:25	2	
3.48	LL	Line deviates left: Sharp	00:00:31		
3.89	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:45		
PIPE B 3.89	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:00:48		
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

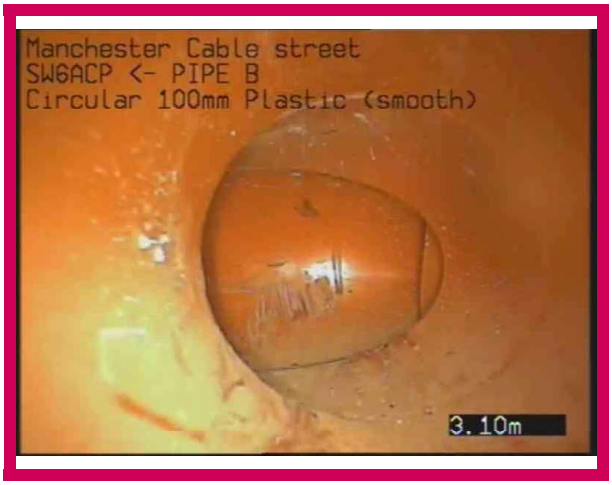
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Section Pictures - 25/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
62	Upstream	PIPE BX	62	PJ00453723



1, 00:00:12, 1.82 m
Line deviates left, Slight



2, 00:00:25, 3.10 m
Line deviates left, Slight

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Section Inspection - 25/08/2022 - SW6ACPX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
63	1	25/08/22	8:54	PJ00453723	Dry	Yes	SW6ACPX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW6ACP
Road:	Cable Street	**Inspected Length:**	10.80 m	**Upstream Pipe Depth:**	1.72
Post Code:	M4 5DF	**Total Length:**	10.80 m	**Downstream Node:**	SW5CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.25

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:94



Position [m]	Code	Observation	MPEG	Photo	Grade
		Depth: 1.72 m **SW6ACP**			
0.00	MH	Start node, manhole, reference: SW6ACP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
7.45	LL	Line deviates left: Slight	00:00:39	2	
10.80	CPF	Finish node, catchpit, reference: SW5CP	00:01:00		
		SW5CP **Depth: 3.25 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 Pictures - 25/08/2022 - SW6ACPX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
63	Downstream	SW6ACPX	63	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW6ACP



2, 00:00:39, 7.45 m
Line deviates left, Slight

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Section Inspection - 25/08/2022 - SW4CPX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
64	1	25/08/22	9:35	PJ00453723	Dry	Yes	SW4CPX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Small Crawler	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	SW4CP
Road:	Cable Street	**Inspected Length:**	18.90 m	**Upstream Pipe Depth:**	3.20
Post Code:	M4 5DF	**Total Length:**	18.90 m	**Downstream Node:**	SW5CP
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.25

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	300 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:164



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 3.25 m **SW5CP**					
0.00	CP	Start node, catchpit, reference: SW5CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
5.01	LR	Line deviates right: Slight	00:00:30		
5.42	JN	Junction at 11 o'clock, diameter: 150mm	00:00:34		
6.37	JN	Junction at 01 o'clock, diameter: 150mm	00:00:42		
9.13	JN	Junction at 11 o'clock, diameter: 150mm	00:00:56	2	
10.06	JN	Junction at 01 o'clock, diameter: 150mm	00:01:03		
16.01	LR	Line deviates right: Slight	00:01:31		
16.36	JN	Junction at 10 o'clock, diameter: 150mm	00:01:35		
16.78	LU	Line deviates up	00:01:40		
18.54	JN	Junction at 02 o'clock, diameter: 150mm	00:02:14		
SW4CP 18.90 **Depth: 3.20 m**	CPF	Finish node, catchpit, reference: SW4CP	00:02:29	3	

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 Pictures - 25/08/2022 - SW4CPX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
64	Upstream	SW4CPX	64	PJ00453723



1, 00:00:00, 0.00 m
Start node, catchpit, reference: SW5CP



2, 00:00:56, 9.13 m
Junction at 11 o'clock, diameter: 150mm



3, 00:02:29, 18.90 m
Finish node, catchpit, reference: SW4CP

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Section Inspection - 25/08/2022 - SW5CPX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
65	1	25/08/22	9:45	PJ00453723	Dry	Yes	SW5CPX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Small Crawler	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW5CP
Road:	Cable Street	**Inspected Length:**	5.46 m	**Upstream Pipe Depth:**	3.25
Post Code:	M4 5DF	**Total Length:**	5.46 m	**Downstream Node:**	SW7
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.30

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	450 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 3.25 m **SW5CP**					
0.00	MH	Start node, manhole, reference: SW5CP	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:02		
5.46	MHF	Finish node, manhole, reference: SW7	00:00:33	2	
SW7 **Depth: 3.30 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 Pictures - 25/08/2022 - SW5CPX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
65	Downstream	SW5CPX	65	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW5CP



2, 00:00:33, 5.46 m
Finish node, manhole, reference: SW7

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Section Inspection - 25/08/2022 - FW13X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
66	1	25/08/22	10:17	PJ00453723	Dry	Yes	FW13X

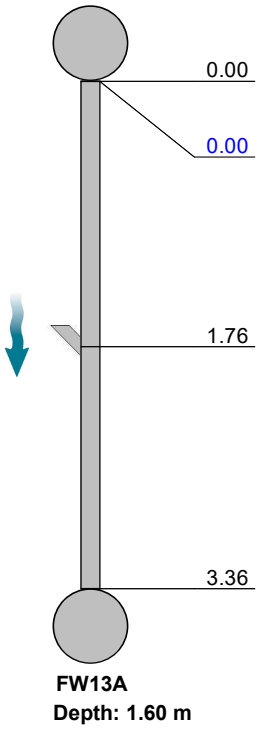
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW13
Road:	Cable Street	**Inspected Length:**	3.36 m	**Upstream Pipe Depth:**	1.40
Post Code:	M4 5DF	**Total Length:**	3.36 m	**Downstream Node:**	FW13A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.60

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW13	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
1.76	JN	Junction at 01 o'clock, diameter: 150mm	00:00:18		
3.36	MHF	Finish node, manhole, reference: FW13A	00:00:30	2	

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 Pictures - 25/08/2022 - FW13X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
66	Downstream	FW13X	66	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW13



2, 00:00:30, 3.36 m
Finish node, manhole, reference: FW13A

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Section Inspection - 25/08/2022 - FW13AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
67	1	25/08/22	10:18	PJ00453723	Dry	Yes	FW13AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW13A
Road:	Cable Street	**Inspected Length:**	13.72 m	**Upstream Pipe Depth:**	1.60
Post Code:	M4 5DF	**Total Length:**	13.72 m	**Downstream Node:**	CW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	4.17

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:119



Position [m]	Code	Observation	MPEG	Photo	Grade
Depth: 4.17 m **CW2**					
0.00	MH	Start node, manhole, reference: CW2	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:01		
9.42	JN	Junction at 01 o'clock, diameter: 150mm	00:00:46		
9.71	JN	Junction at 11 o'clock, diameter: 150mm	00:00:54		
12.11	LL	Line deviates left	00:01:11	2	
12.19	JN	Junction at 6 o'clock, diameter: 150mm: Drop shaft	00:01:20		
13.72	MHF	Finish node, manhole, reference: FW13A	00:03:16		
FW13A **Depth: 1.60 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 Pictures - 25/08/2022 - FW13AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
67	Upstream	FW13AX	67	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: CW2



2, 00:01:11, 12.11 m
Line deviates left

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
68	1	25/08/22	11:05	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	3.52 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	3.52 m	**Downstream Node:**	FW13A
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	1.60

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW13A	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.83	LR	Line deviates right: Slight	00:00:15		
2.88	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:32	2	
3.52	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:37		

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

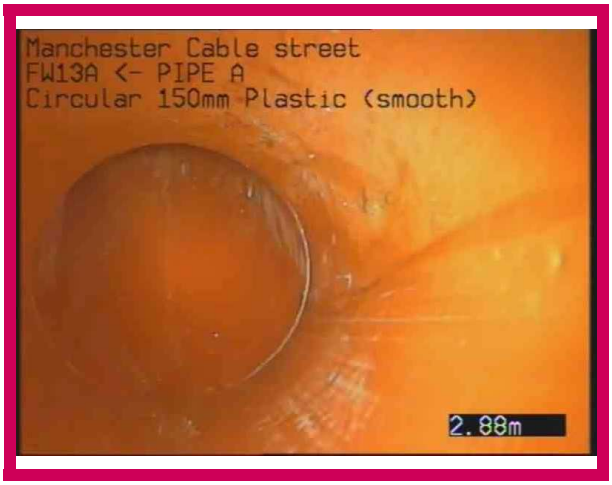
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Section Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
68	Upstream	PIPE AX	68	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW13A



2, 00:00:32, 2.88 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
69	1	25/08/22	11:25	PJ00453723	Dry	Yes	PIPE AX

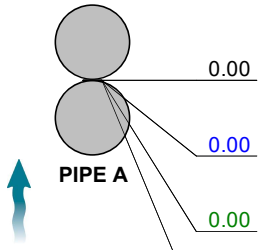
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	0.00 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	0.00 m	**Downstream Node:**	SW7
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	3.30

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



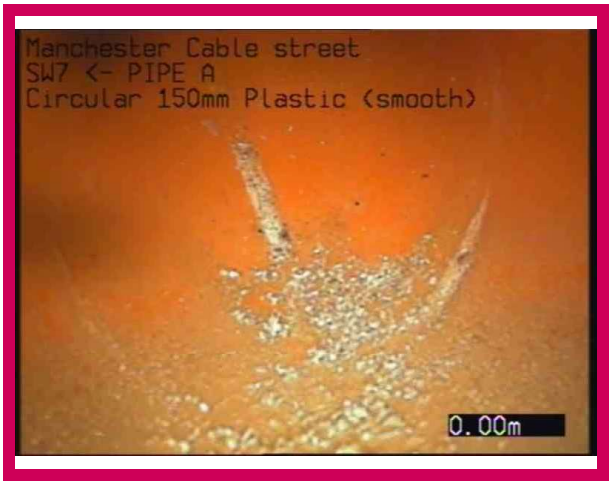
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	CP	Start node, catchpit, reference: SW7	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:01		
0.00	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:01		

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 Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
69	Upstream	PIPE AX	69	PJ00453723



1, 00:00:00, 0.00 m
Start node, catchpit, reference: SW7

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Section Inspection - 25/08/2022 - SW7X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
70	1	25/08/22	11:39	PJ00453723	Dry	Yes	SW7X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	SW7
Road:	Cable Street	**Inspected Length:**	9.76 m	**Upstream Pipe Depth:**	3.30
Post Code:	M4 5DF	**Total Length:**	9.79 m	**Downstream Node:**	CW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	4.17

Asset Use:	Surface waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:85



Position [m]		Code	Observation	MPEG	Photo	Grade
Depth: 3.30 m SW7						
0.00		MH	Start node, manhole, reference: SW7	00:00:00	1	
0.00		WL	Water level, 5% of the vertical dimension	00:00:00		
0.00		JN	Junction at 12 o'clock, diameter: 150mm	00:00:01		
0.00		LU	Line deviates up: Slight	00:00:07		
2.05		WL	Water level, 10% of the vertical dimension	00:00:54		
2.11		WL	Water level, 10% of the vertical dimension	00:00:55		
2.53	S01	DES	Settled deposits, fine, 10% cross-sectional area loss, start: Below water level	00:00:55	2	
2.96		WL	Water level, 20% of the vertical dimension	00:00:57		
5.18		WL	Water level, 25% of the vertical dimension	00:01:03		
6.74		WL	Water level, 20% of the vertical dimension	00:01:12		
8.79		LL	Line deviates left: Slight	00:01:37		
9.70	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, finish: Below water level	00:01:42		3
9.76		MHF	Finish node, manhole, reference: CW2	00:01:57	3	
CW2 Depth: 4.17 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	1	2.0	1.6	16.0	3.0

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Section Pictures - 25/08/2022 - SW7X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
70	Downstream	SW7X	70	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: SW7



2, 00:00:55, 2.53 m
Settled deposits, fine, 10% cross-sectional area loss, start,
Below water level



3, 00:01:57, 9.76 m
Finish node, manhole, reference: CW2

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
71	1	25/08/22	13:37	PJ00453723	Dry	Yes	PIPE AX

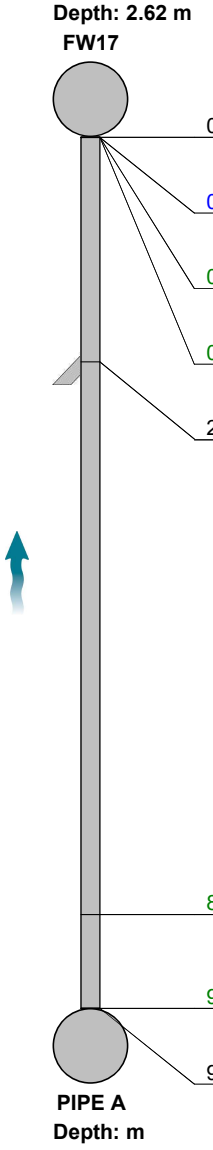
Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	9.45 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	9.45 m	**Downstream Node:**	FW17
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.62

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:82



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW17	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	LD	Line deviates down: Dropshaft	00:00:00		
0.00	LR	Line deviates right: Slight	00:00:01		
2.44	JN	Junction at 03 o'clock, diameter: 100mm	00:00:21		
8.43	LR	Line deviates right	00:00:53	2	
9.45	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:57		
9.45	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	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 Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
71	Upstream	PIPE AX	71	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW17



2, 00:00:53, 8.43 m
Line deviates right

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Section Inspection - 25/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
72	1	25/08/22	13:40	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	2.57 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.57 m	**Downstream Node:**	FW17
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.62

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	MH	Start node, manhole, reference: FW17	00:00:00	1	
0.00	LR	Line deviates right	00:00:01		
0.02	LD	Line deviates down: Dropshaft	00:00:14	2	
1.06	LR	Line deviates right: Sharp	00:00:25		
2.57	LU	Line deviates up: 90 degree bend/Rest bend	00:01:13		
2.57	OCF	Finish node, other special chamber, reference: PIPE B: Rest bend	00:01:13		

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 Pictures - 25/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
72	Upstream	PIPE BX	72	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW17



2, 00:00:14, 0.02 m
Line deviates down, Dropshaft

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Section Inspection - 25/08/2022 - FW17X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
73	1	25/08/22	13:27	PJ00453723	Dry	Yes	FW17X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	FW17
Road:	Cable Street	**Inspected Length:**	11.14 m	**Upstream Pipe Depth:**	2.62
Post Code:	M4 5DF	**Total Length:**	11.14 m	**Downstream Node:**	FW18
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.77

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:97



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: FW18	00:00:00		
0.00		WL	Water level, 5% of the vertical dimension	00:00:01		
0.00		LR	Line deviates right: Slight	00:00:01		
2.52		JN	Junction at 01 o'clock, diameter: 100mm	00:00:14		
4.11	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:23	1	
5.67		JN	Junction at 01 o'clock, diameter: 100mm	00:00:30		
7.44		JN	Junction at 01 o'clock, diameter: 100mm	00:00:47		
7.44	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:51	2	2
8.40	S02	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:54	3	
10.40	F02	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:01:02	4	2
10.74		REM	General remark: Deposits in manhole	00:01:02		
11.14		MHF	Finish node, manhole, reference: FW17	00:01:05		

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	2	2.0	0.5	6.0	3.0

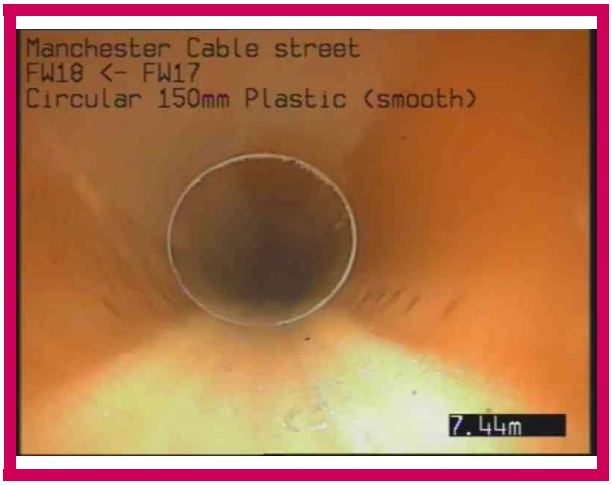
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Section Pictures - 25/08/2022 - FW17X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
73	Upstream	FW17X	73	PJ00453723



1, 00:00:23, 4.11 m
Settled deposits, fine, 5% cross-sectional area loss, start



2, 00:00:51, 7.44 m
Settled deposits, fine, 5% cross-sectional area loss, finish



3, 00:00:54, 8.40 m
Settled deposits, fine, 5% cross-sectional area loss, start



4, 00:01:02, 10.40 m
Settled deposits, fine, 5% cross-sectional area loss, finish

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Section Inspection - 25/08/2022 - PIPE AX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
74	1	25/08/22	13:11	PJ00453723	Dry	Yes	PIPE AX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE A
Road:	Cable Street	**Inspected Length:**	5.12 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	5.12 m	**Downstream Node:**	FW18
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.77

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW18	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	JN	Junction at 6 o'clock, diameter: 100mm: Dropshaft	00:00:05		
0.55	LL	Line deviates left: Sharp	00:00:15		
5.12	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:42	2	
5.12	OCF	Finish node, other special chamber, reference: PIPE A: Rest bend	00:00:48		

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 Pictures - 25/08/2022 - PIPE AX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
74	Upstream	PIPE AX	74	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW18



2, 00:00:42, 5.12 m
Line deviates up, 90 Degree bend/Rest bend

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Section Inspection - 25/08/2022 - PIPE BX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
75	1	25/08/22	13:14	PJ00453723	Dry	Yes	PIPE BX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE B
Road:	Cable Street	**Inspected Length:**	7.82 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	7.82 m	**Downstream Node:**	FW18
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.77

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:68



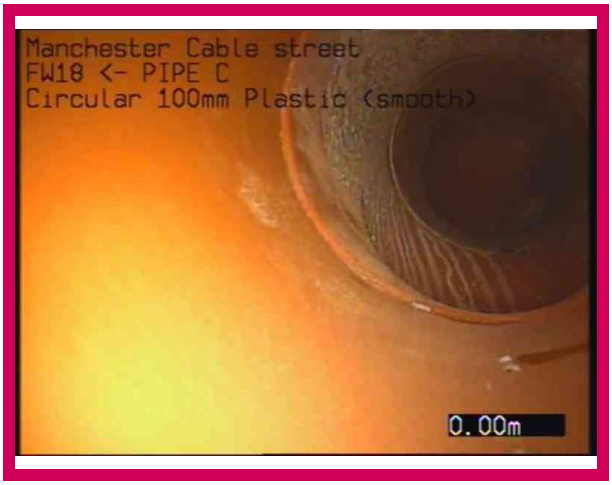
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW18	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	LD	Line deviates down: Dropshaft	00:00:00		
0.54	LL	Line deviates left: Sharp	00:00:07		
7.18	LU	Line deviates up	00:00:42	2	
7.82	GYF	Finish node, gully, reference: PIPE B	00:00:53		

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 Pictures - 25/08/2022 - PIPE BX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
75	Upstream	PIPE BX	75	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW18



2, 00:00:42, 7.18 m
Line deviates up

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Section Inspection - 25/08/2022 - PIPE DX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
76	1	25/08/22	13:20	PJ00453723	Dry	Yes	PIPE DX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE D
Road:	Cable Street	**Inspected Length:**	2.94 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.94 m	**Downstream Node:**	FW18
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.77

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW18	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.00	LD	Line deviates down: Dropshaft	00:00:02		
0.03	LR	Line deviates right: Sharp	00:00:06		
2.46	LR	Line deviates right	00:00:25	2	
2.94	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:28		
2.94	OCF	Finish node, other special chamber, reference: PIPE D: Rest bend	00:00:29		

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 Pictures - 25/08/2022 - PIPE DX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
76	Upstream	PIPE DX	76	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW18



2, 00:00:25, 2.46 m
Line deviates right

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Section Inspection - 25/08/2022 - FW18X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
77	1	25/08/22	13:30	PJ00453723	Dry	Yes	FW18X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	FW18
Road:	Cable Street	**Inspected Length:**	4.37 m	**Upstream Pipe Depth:**	2.77
Post Code:	M4 5DF	**Total Length:**	4.37 m	**Downstream Node:**	CW2
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	4.17

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



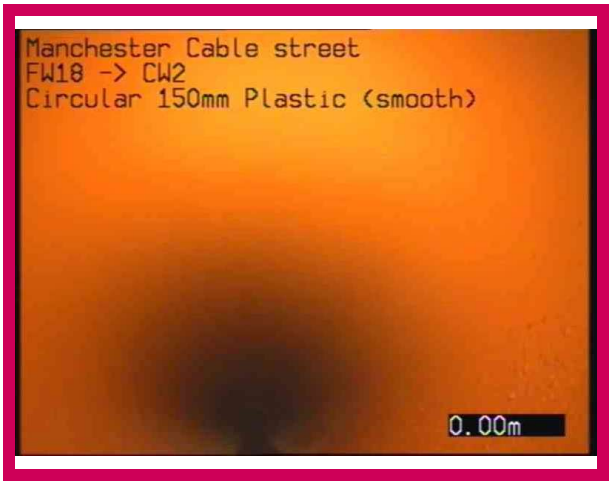
Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW18	00:00:00	1	
0.00	WL	Water level, 5% of the vertical dimension	00:00:06		
2.23	JN	Junction at 6 o'clock, diameter: 150mm: Dropshaft	00:00:17	2	
4.37	MHF	Finish node, manhole, reference: CW2	00:00:40		

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 Pictures - 25/08/2022 - FW18X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
77	Downstream	FW18X	77	PJ00453723



1, 00:00:00, 0.00 m
Start node, manhole, reference: FW18



2, 00:00:17, 2.23 m
Junction at 6 o'clock, diameter: 150mm, Dropshaft

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Section Inspection - 25/08/2022 - PIPE EX

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
78	1	25/08/22	13:24	PJ00453723	Dry	Yes	PIPE EX

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Upstream	**Upstream Node:**	PIPE E
Road:	Cable Street	**Inspected Length:**	2.34 m	**Upstream Pipe Depth:**	0
Post Code:	M4 5DF	**Total Length:**	2.34 m	**Downstream Node:**	FW18
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	2.77

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	100 mm
Asset Owner:	Private	**Asset Material:**	Plastic (smooth)
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]	Code	Observation	MPEG	Photo	Grade
0.00	MH	Start node, manhole, reference: FW18	00:00:00		
0.00	WL	Water level, 5% of the vertical dimension	00:00:00		
0.01	JN	Junction at 6 o'clock, diameter: 100mm: Drop shaft	00:00:03	1	
0.02	LL	Line deviates left: Slight	00:00:09		
1.71	DES	Settled deposits, fine, 5% cross-sectional area loss	00:00:35	2	2
2.34	LU	Line deviates up: 90 Degree bend/Rest bend	00:00:35		
2.34	OCF	Finish node, other special chamber, reference: PIPE E: Rest bend	00:00:47		

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	1	1.0	0.4	1.0	2.0

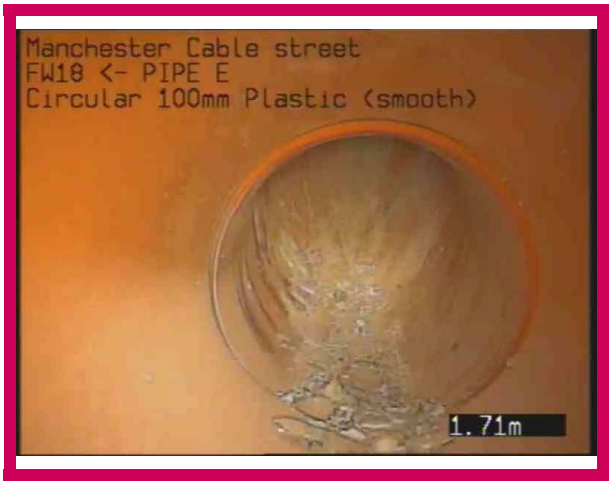
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Section Pictures - 25/08/2022 - PIPE EX

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
78	Upstream	PIPE EX	78	PJ00453723



1, 00:00:03, 0.01 m
Junction at 6 o'clock, diameter: 100mm, Drop shaft



2, 00:00:35, 1.71 m
Settled deposits, fine, 5% cross-sectional area loss

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Section Inspection - 25/08/2022 - CW2X

Item No.	Insp. No.	Date	Time	Lanes Job Number	Weather	Pre Cleaned	PLR
79	1	25/08/22	14:07	PJ00453723	Dry	Yes	CW2X

Operator	Asset Location:	Camera	Preset Length	Legal Status	Alternative ID
P.Corfield	Building site	Push Rod	Not Specified	Private Drain	Not Specified

Town or Village:	Manchester	**Inspection Direction:**	Downstream	**Upstream Node:**	CW2
Road:	Cable Street	**Inspected Length:**	2.05 m	**Upstream Pipe Depth:**	4.17
Post Code:	M4 5DF	**Total Length:**	2.29 m	**Downstream Node:**	EXMH4
Surface Type:	Concrete Footway	**Joint Length:**	3.00 m	**Downstream Pipe Depth:**	4.30

Asset Use:	Foul waste	**Asset Shape:**	Circular
Asset Type:	Gravity drain/sewer	**Dia/Height:**	150 mm
Asset Owner:	Private	**Asset Material:**	Cast iron
Year Constructed:	Not Specified	**Asset Lining Type:**	No Lining
Inspection Purpose:	Condition survey	**Asset Lining Material:**	No Lining

Comments: None
Recommendations: None

Scale: 1:50



Position [m]		Code	Observation	MPEG	Photo	Grade
0.00		MH	Start node, manhole, reference: CW2	00:00:00		
0.00		WL	Water level, 5% of the vertical dimension	00:00:01		
0.00	S01	DES	Settled deposits, fine, 5% cross-sectional area loss, start	00:00:04	1	
1.22		WL	Water level, 10% of the vertical dimension	00:00:13		
2.04		REM	General remark: Hard deposits in Manhole	00:00:28		
2.04	F01	DES	Settled deposits, fine, 5% cross-sectional area loss, finish	00:00:28	2	2
2.05		MHF	Finish node, manhole, reference: EXMH4	00:00:29		

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	1	1.0	1.3	3.0	3.0

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Section Pictures - 25/08/2022 - CW2X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
79	Downstream	CW2X	79	PJ00453723



1, 00:00:04, 0.00 m
Settled deposits, fine, 5% cross-sectional area loss, start



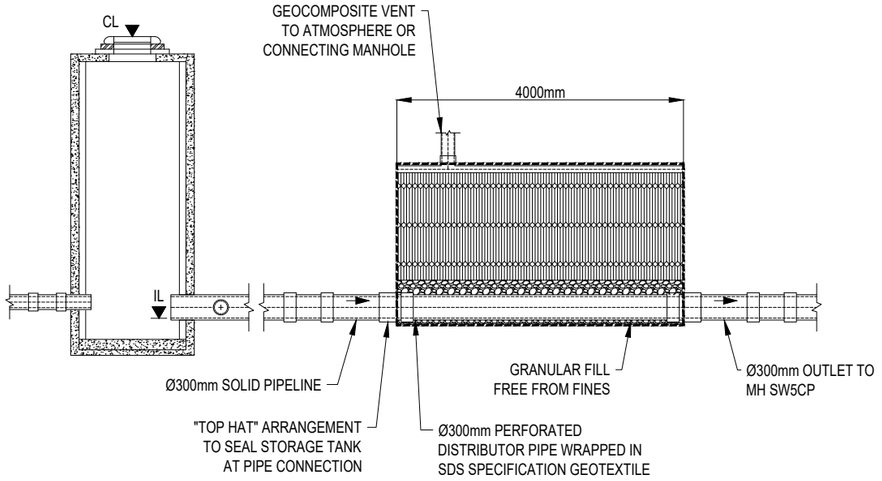
2, 00:00:28, 2.04 m
Settled deposits, fine, 5% cross-sectional area loss, finish

Appendix C

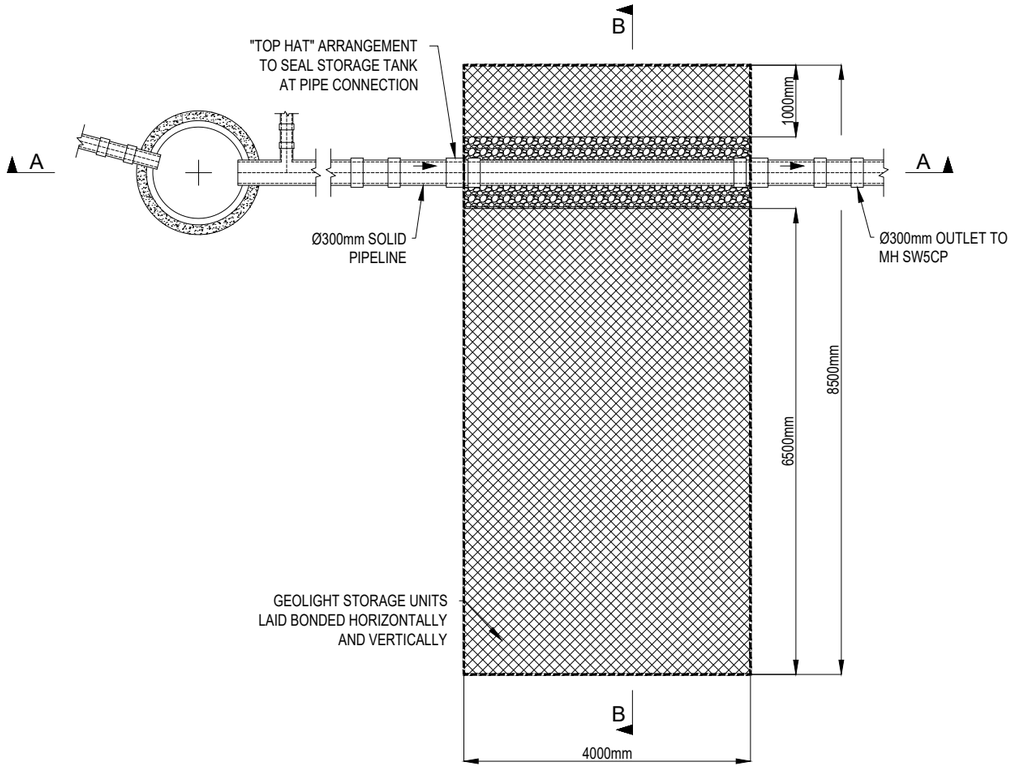
Attenuation Tank Detail

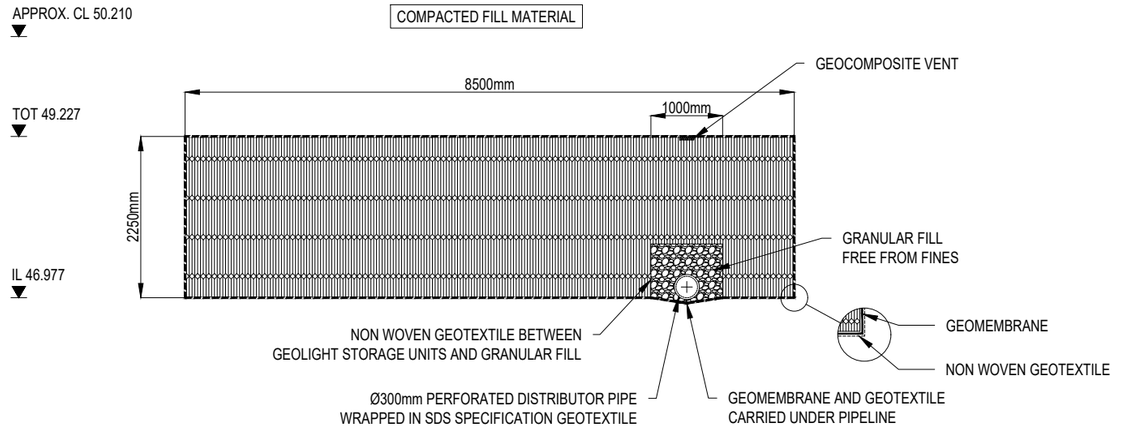
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CATCHPIT MANHOLE WITH SUMP
REF: SW4CP
MANHOLE CL: 50.210
IL: 47.000



SECTION A-A





SECTION B-B

Notes:

This Drawing is to be read in conjunction with all relevant Architect's Engineer's and specialists' drawings and specifications.

Do not scale from this drawing in either paper or digital form. Use written dimensions only.

SDS to leave solid stub only, exiting tank for connection by others.

All external Manholes, Access Points, Junctions & Pipe are shown for guidance only and not part of the SDS program unless otherwise agreed.

Rev	Comments	Date	DRW	CHK
A	INLET OMITTED PER REQUEST ISSUED FOR CON-APP	21.102.1	GM	SP
-	ISSUED FOR CONSTRUCTION	20.10.21	GM	GM
-	ISSUED FOR APPROVAL	14.10.21	GM	SP

REFERENCE DRAWINGS:

Drawing Number	Revision	Drawing Title	Date
001	P11	DETAILED DRAINAGE STRATEGY	08.07.21

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Biddisham
Somerset
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sdslimited.com

Project: SWAN HOUSE, ROCHDALE

Client: STEPHENSON CONSTRUCTION

Title: ATTENUATION TANK 1 DETAIL

Scale: NTS | Date: 14.10.21

Drawing No: E156821_01_A | Rev: A

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