



Land at Victoria Avenue East, New Moston

Proposed Retail Development

Flood Risk Assessment & Outline Drainage Strategy

For: Aldi Stores Ltd.

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1.0 INTRODUCTION

- 1.1 Integra Consulting has been commissioned by Aldi Stores Ltd. to undertake a Flood Risk Assessment & Outline Drainage Strategy (FRA) for the land at Victoria Avenue East, New Moston. This document has been prepared to accompany the detailed planning application for the proposed development of a new food retail store and associated car parking / servicing areas at the site (refer to Appendix 5).
- 1.2 The objective of the FRA is to identify potential flooding issues and any consequent implications on the proposed site development. The proposed surface and foul water drainage strategies for the development site are also considered.
- 1.3 The FRA has been undertaken in accordance with the pro-forma guidance contained in:
- Department for Communities and Local Government document 'National Planning Practice Guidance: Flood Risk and Coastal Change'
 - Manchester City, Salford City and Trafford Councils Level 2 Hybrid Strategic Flood Risk Assessment - Level 1 SFRA prepared by JBA Consulting and dated March 2010
 - Manchester City, Salford City and Trafford Councils Level 2 Hybrid Strategic Flood Risk Assessment - Level 2 SFRA prepared by JBA Consulting and dated March 2011
 - DEFRA / Environment Agency publication SC030219 'Rainfall Runoff Management for Developments' dated October 2013.
- 1.4 To date, consultations have been undertaken with the Environment Agency (EA).

2.0 STANDARDS AND LIMITATIONS

This report has been prepared solely for use by Aldi Stores Ltd.

It shall not be relied upon or transferred to any other party without the prior written authorisation of Integra Consulting.

The findings and opinions in the report are based on information derived from a variety of different sources. Integra Consulting do not accept any liability for the accuracy or otherwise of any information provided by third parties.

It should be noted that some of the aspects considered in this study may be subject to change with time. Therefore, if the development is delayed or postponed, consideration may need to be given to reviewing such issues to confirm that no changes have taken place, either at the site or within relevant legislation.

Further consultations with statutory bodies are likely as the scheme progresses. It should be noted that even where responses have been received from Regulators, these could be subject to change at a later date.

3.0 CURRENT SITUATION

3.1 Site Location and Description

The circa 0.69 hectare site is located approximately 700m north west of the centre of Moston at National Grid reference 388213, 403392 as shown on the site location plan in Appendix 1.

The site is bounded by Victoria Avenue East to the south, playing fields directly to the east, open fields, a vegetated area and the M60 to the north and a surface car park / residential apartment block to the west (refer to existing site plan in Appendix 2). Boggart Hole Brook (designated by the Environment Agency as 'main river') lies circa 1200m south of the site with Wince Brook ('main river') located circa 1250m to the north.

Site levels fall from a maximum level around 106.0m AOD in the north of the site to circa 104.7m AOD in the south of the site. The existing topographical survey can be found in Appendix 2.

The central section of the site is hard landscaped comprising a building and a bitmacadam surfaced car park with existing soft landscaped areas in the north western and eastern areas of the site.

3.2 Flooding

Current Environment Agency flood data indicates the proposed development site to lie wholly in Flood Zone 1 (refer to Appendix 3 for details).

EA / DEFRA flood mapping indicates an isolated area in the central area of the site at a low risk of surface water flooding together with a further isolated area in the eastern area of the site at low to high risk of surface water flooding.

EA / DEFRA flood mapping does not indicate any areas of the proposed development platform at elevated risk of reservoir flooding.

3.3 Existing Sewers

The United Utilities sewer plan in Appendix 4 indicate the following adopted sewer infrastructure at the site:

- 300mm / 450mm diameter combined sewer extending from north west to south east beneath the northern side of Victoria Avenue East
- 300mm diameter combined sewer extending from north west to south east beneath the southern side of Victoria Avenue East

It is noted that the Thirlmere Aqueduct water main extends north west-south east beneath the proposed development site. Accordingly, an associated overall 10m easement width has been accommodated within the development proposals.

4.0 PROPOSED DEVELOPMENT

4.1 Development Proposals

It is proposed to submit a detailed planning application for the construction of a food retail unit with associated vehicle and pedestrian access, parking, and landscaping (refer to Appendix 5 for details of the proposed site plan).

4.2 Surface Water Drainage

The issue of surface water drainage to the proposed development has been considered with reference to the hierarchy of surface water disposal as noted in the Building Regulations H3:

- i) Sustainable Urban Drainage Systems (SUDS)
- ii) Discharge of surface water off site direct to watercourse
- iii) Discharge to adopted sewer

SUDS are made up of one or more structures built to manage surface water runoff. They are used in conjunction with good management of the site to prevent flooding and pollution. There are four general methods of control:

- Filter strips and swales
- Filter drains and permeable surfaces
- Infiltration devices
- Basins and Ponds

A Phase 1 geo-environmental desk study has been undertaken by EEG followed by the construction of 10 No window sample boreholes to 6m depth and 2 No shell sand auger boreholes to circa 15m depth (refer to Appendix 7 for Phase 1 desk study details). The desk study indicates the site to be underlain by superficial deposits of Devensian Diamicton Till and Peat which are in turn underlain by Pennine Middle Coal Measures Formation solid deposits.

Intrusive geo-environmental ground investigations have been undertaken although the final report has not yet been published. Initial findings are reported as set out below:

- 10 No window samples were completed to 6m depth along with 2 No cable percussion holes to 15m although the second cable hole refused at around 13.5m.
- The boreholes generally encountered made ground up to approximately 1.20m thick overlying firm to stiff clay with frequent interbedded sand lenses.
- Peat was found in several of the boreholes and one of the cable holes, up to 2m thick on the existing rugby pitch to the east.
- The cable holes encountered softer, silty sand after 10m.

Although no specific infiltration testing in line with BRE 365 has been undertaken, it is evident from the above noted borehole data / desk study data that the underlying soils at shallow depth beneath the site are not suitable for the use of post-development soakaway surface water drainage techniques.

On the basis that the nearest natural watercourse to the site lies circa 1200m south of the site through multiple third party land ownerships, it is therefore proposed to discharge suitably attenuated site surface water to the 300mm diameter (becoming 450mm diameter) combined sewer that extends from north west to south east beneath the northern side of Victoria Avenue East potentially using the existing site connection. A survey of the existing private on-site sewer network has been undertaken and the results are provided in Appendix 6 of this report.

The site lies in a Critical Drainage Area and hence it is proposed that the post-development flows are limited to 50% of the existing brownfield runoff rate within the brownfield areas of the site with post-development surface water flows limited to greenfield run off rates over the existing greenfield areas of the site.

The existing drainage survey recently undertaken at the site encountered a below ground attenuation tank in the south eastern area of the site adjacent to Victoria Avenue East. As noted above, it is the intention to provide a 50% reduction on the existing brownfield flows although it is recognised that an existing attenuation system is already in use. The final proposed surface water flow rate for the overall site will be determined on completion of further investigation of the existing site surface water drainage system and in particular the existing flow restrictions and existing attenuation volume provided on site.

Based on the nature of this proposed retail development, a lifespan up to 2069 is anticipated and hence a climate change factor of 20% on peak rainfall intensity has been adopted.

Estimated preliminary surface water storage volumes to cater for a 1 in 30 year event and for a 1 in 100 year plus 20% climate change event will be provided once the above noted drainage investigations have been completed and reported on. It is noted that these estimated figures will be subject to finalisation of soil type following detailed ground investigation.

The post-development surface water drainage strategy will naturally need to be agreed in principle with the LLFA officer and United Utilities. Discharge of post-development surface water into the adjacent adopted combined sewer system will also naturally require a formal S104 application to be made to United Utilities.

Ultimately the final design of the drainage system will be subject to the finalised site arrangement, further targeted site investigation and subsequent development of a detailed drainage scheme.

4.3 National Planning Policy Framework and Technical Guidance

The retail site development proposals are classed as 'less vulnerable' in Table 2 of the Flood Risk and Coastal Change guidance.

'Less vulnerable' developments in Flood Zone 1 are classed as appropriate according to Table 3 of the Flood Risk and Coastal Change guidance. Proposed post development levels will be engineered in order to protect the development and not provide any increased flood risk elsewhere.

Types of flooding that could affect the site are:

River- the site wholly lies in Flood Zone 1

Sea – there is no risk of flooding from the sea

Groundwater – there are no springs or weep areas on the site

Sewers – there have been no local reports of sewer surcharge

4.4 Strategic Flood Risk Assessment & EA Mapping Review

From our review of the Manchester City, Salford City and Trafford Councils Level 2 Hybrid Strategic Flood Risk Assessment - Level 2 SFRA prepared by JBA Consulting and dated March 2011, the site lies in the Conurbation Core Critical Drainage Area.

There are no groundwater protection zones in the vicinity of the site and there is negligible residual fluvial risk. The site is not noted to lie within a flood warning area.

4.5 Safe Access and Egress

Safe access / egress from the site in extreme conditions will be via the entrance on Victoria Avenue East.

4.6 Foul Water Drainage

We would propose to discharge post-development foul drainage from the new food retail unit to the existing adjacent adopted combined sewerage system beneath the northern side of Victoria Avenue East potentially utilising the existing site connection.

The foul drainage network will naturally comply with Building Regulations 2010 – Approved Document H1 and the calculations for post-development foul water discharge will be based on Sewers for Adoption 8th Edition.

5.0 SuDS DESIGN STATEMENT

5.1 SuDS Requirements

SuDS measures are required on the proposed development to comply with the National Planning Policy Framework (NPPF), DEFRA Non-Statutory Technical Standards for Sustainable Drainage Systems and the SuDS guidance in the Manchester City, Salford City and Trafford Councils Level 2 Hybrid Strategic Flood Risk Assessment - Level 2 SFRA prepared by JBA Consulting and dated March 2011

The key conceptual SUDS design criteria for the development are covered in Non-Statutory Technical Standards for Sustainable Drainage under sections S1 to S9 based on the part brownfield / part greenfield nature of the development site.

Peak Flow Control

S2 of the DEFRA Technical Standards stipulates that for greenfield developments, the peak runoff from the development for the 1 in 1 year and 1 in 100 year rainfall events should never exceed the greenfield runoff rate for the same event.

S3 of the DEFRA Technical Standards stipulates that for brownfield developments, the peak runoff from the development for the 1 in 1 year and 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate for the same rainfall event but should never exceed the rate of discharge from the development prior to re-development for that event.

Volume Control

Requirement S4 stipulates that the runoff volume in the 1 in 100 year, 6 hour rainfall event should never exceed the greenfield runoff volume for the same event.

Requirement S5 stipulates that the runoff volume in the 1 in 100 year, 6 hour rainfall event must be constrained to a value as close as is reasonably practicable to the greenfield runoff volume for the same event but should never exceed the runoff volume from the development site prior to development.

Flood Risk within the Development

S7 stipulates that the drainage system shall be designed such that no flooding shall occur on any part of the site during a 1 in 30 year storm event whilst the S8 requirement stipulates that, during a 1 in 100 year enhanced rainfall event, no flooding of any building shall occur.

S9 stipulates that site levels shall be designed such that flows which are as a result of rainfall events exceeding the 1 in 100 year enhanced rainfall event, are managed in exceedance routes that minimise the risks to people and property.

Water Quality

Water quality measures are generally considered with reference to CIRIA Report 'C753 – The SUDS Manual', specifically Chapters 4 and 26. In this instance, the hierarchy of surface discharge has demonstrated that it is not feasible to discharge surface water flows to ground or to watercourse and hence the local existing adopted combined sewer system is the only viable discharge option. Accordingly, no further water quality treatment is considered appropriate.

5.2 Proposed SUDS Methodology & Drainage Design Principles

As detailed in section 4.2, discharge of surface water direct to the ground in the form of infiltration measures is deemed infeasible due to the underlying permeability of the natural strata. Accordingly, controlled discharge to the adjacent existing adopted combined sewerage network beneath the northern side of Victoria Avenue East is the proposed method of post-development surface water discharge.

Peak Flow Control

Post-development surface water flow from the proposed development site shall be limited to 50% of the existing brownfield runoff rate within the brownfield areas of the site with post-development surface water flows limited to greenfield run off rates over the existing greenfield areas of the site thereby providing a significant betterment in relation to the existing situation.

Volume Control

The proposed discharge flow rate (to be determined following completion of drainage investigations - refer to section 4.2 for details) will apply for all flood events from the 1 in 1 year to the 1 in 100 year (enhanced) event. This is deemed to equate to a significant betterment over the development site.

Flood Risk within the Development

To cater for excess surface water runoff, the proposed method of attenuation on the site is to utilise underground crate storage beneath the external areas of the development platform with a downstream piped drainage system discharging attenuated site surface water into the existing adjacent adopted combined sewerage system beneath the northern side of Victoria Avenue East.

It is proposed to accommodate the 1 in 100 year (enhanced) event storage volume within the underground crate storage. Accordingly, this will ensure that criteria S7 and S8 are met.

The site is to discharge post-development surface water into underground crate storage within the 'red line' site boundary which in turn will discharge through a flow control chamber to limit the discharge to a runoff rate that provides a 50% betterment on the pre-development brownfield surface water flow rate for the existing brownfield site extent site with post-development surface water flows limited to greenfield run off rates over the existing greenfield areas of the site. Downstream of the crate storage / flow control chamber, the attenuated surface water flow will discharge to the adjacent adopted combined water sewerage system beneath the northern side of Victoria Avenue East.

It is intended that post-development surface water discharge to the adopted combined sewerage system will utilise existing site private drainage connections to the adjacent adopted United Utilities combined sewer beneath Victoria Avenue East where possible (refer to Appendix 6 for details).

5.3 Management and Maintenance of SuDS Drainage System

The management and maintenance of the above noted SuDS measures to serve the proposed development will be undertaken by a maintenance management company to be appointed for the project. The appointment of the maintenance and management company is to be confirmed at the completion of the build phase. All parts of the drainage network are to be accessible and are to be constructed from materials that are suitable and robust for the lifetime of the development.

The maintenance activities required for the drainage network are as follows:

5.3.1 Cellular Storage Structure

The maintenance for the cellular storage structure is as follows:

Operation	Frequency
Inspect and identify any areas that are not operating correctly and if required take remedial actions	Monthly for three months then six monthly intervals
Debris caused from catchment surface (where it may cause risk to performance)	Monthly
Where rainfall infiltration into cellular storage from above, check surface or filter for blockage or silt, algae or other matter by jetting	As required but at least twice a year
Remove sediment from upstream surface water network by jetting	Annually or as required
Repair / check all inlets, outlets, overflows and vents	As required
Inspect / check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually and after severe storms

5.3.2 Flow Control

The maintenance for the flow control is as follows:

Operation	Frequency
Inspect and identify any areas that are not operating correctly, if required take remedial actions	Monthly for three months then at six monthly intervals
Debris removal from catchment surface (where it may cause risk to performance)	Monthly
Check control chamber for blockage or silt, algae or other matter by jetting	As required, but at least four times a year
Remove sediment from upstream drainage network and sediment from within manhole by jetting	As required, but at least twice a year
Repair / check all inlets and control mechanics	As required
Inspect / check all inlets and control mechanics to ensure that they are operating as designed	Twice a year as a minimum and after severe storm events

5.3.3 Flow Control Chamber Design Criteria

In addition to the above maintenance methods, the flow control chamber will be designed so it works effectively throughout the lifespan of the development and will have precautionary features to ensure maintenance work can be carried out promptly and efficiently to ensure no control failure which may otherwise subsequently lead to flooding.

Details of the flow control chamber are as follows:

- High Water Level Alarm: Alarm installed and directed to site maintenance team
- Spares: Control spares to be kept on site for efficient maintenance

5.3.6 Flood Routes

A visual monthly inspection of flood routes should be made in order to check that routes are not blocked by new fences, walls, soil or other rubbish with removal undertaken as necessary.

5.3.7 Spillage – Emergency Action

Most spillages on development sites are of compounds that do not pose a serious risk to the environment as they enter the drainage system in a slow and controlled manner with time available for natural breakdown in a treatment system. Therefore, small spillages of oil, milk or other known organic substances should be removed where possible using soak mats as recommend by the Environment Agency with residual spillage allowed to bio-remediate in the drainage system.

In the event of a serious spillage, either by volume or of unknown or toxic compounds, then the spillage should be isolated using soil, turf or fabric and outlet pipes from chambers downstream of the spillage blocked with bungs. Bungs for blocking pipes may be made by wrapping soil or turf in a plastic sheet or close woven fabric. The Environment Agency should be contacted immediately.

5.3.8 Linked and Further Maintenance

The maintenance of the drainage network and SuDS features is to be linked with the landscape maintenance plan for the proposed development.

5.3.9 Maintenance Activities

A log of all maintenance activities is to be kept and made available to the Local Planning Authority (LPA) and / or the Lead Local Flood Authority (LLFA) on request.

6. CONCLUSIONS

6.1 Flooding

Following review of the Environment Agency flood maps and data, it has been confirmed that the site lies wholly in Flood Zone 1.

There are to be no off site surface water flood routes generated by the development during an enhanced 1 in 100 year storm. All surface water run-off will remain on site in the 1 in 100 year + 20% climate change event.

6.2 Site Surface Water Drainage

It is proposed to discharge suitably attenuated post-development surface water into underground crate storage within the 'red line' site boundary which in turn will discharge through a flow control chamber to limit the discharge to a runoff rate that provides a 50% betterment on the pre-development brownfield surface water flow rate for the existing brownfield site extent site with post-development surface water flows limited to greenfield run off rates over the existing greenfield areas of the site, all subject to detailed drainage design.

Downstream of the crate storage / flow control chamber, the attenuated surface water flow will discharge to the adjacent adopted combined water sewerage system beneath the northern side of Victoria Avenue East.

6.3 Site Foul Water Drainage

We would propose that post-development foul drainage discharges from the new food retail unit to the existing adjacent adopted combined sewerage system beneath the northern section of Victoria Avenue East to the south of the site.

6.4 Flood Risk Management Measures

There will be a site management Health and Safety document prepared in respect of the site.

6.5 Off Site Impacts

All roofed and paved areas are to be drained into the site surface water drainage system. The design of the site surface water system will ensure that no off site flood flows are generated by the proposed development in the 1% plus climate change event.

6.6 Residual Risk

With careful design of the drainage elements as described above, there will be no residual flood related risks remaining after the development has been completed.

The proposed building envelope will naturally fully lie in Flood Zone 1.

A post-development safe emergency access can be maintained at all times during a flood event with emergency access from Victoria Avenue East.

APPENDIX

APPENDIX 1

SITE LOCATION PLAN

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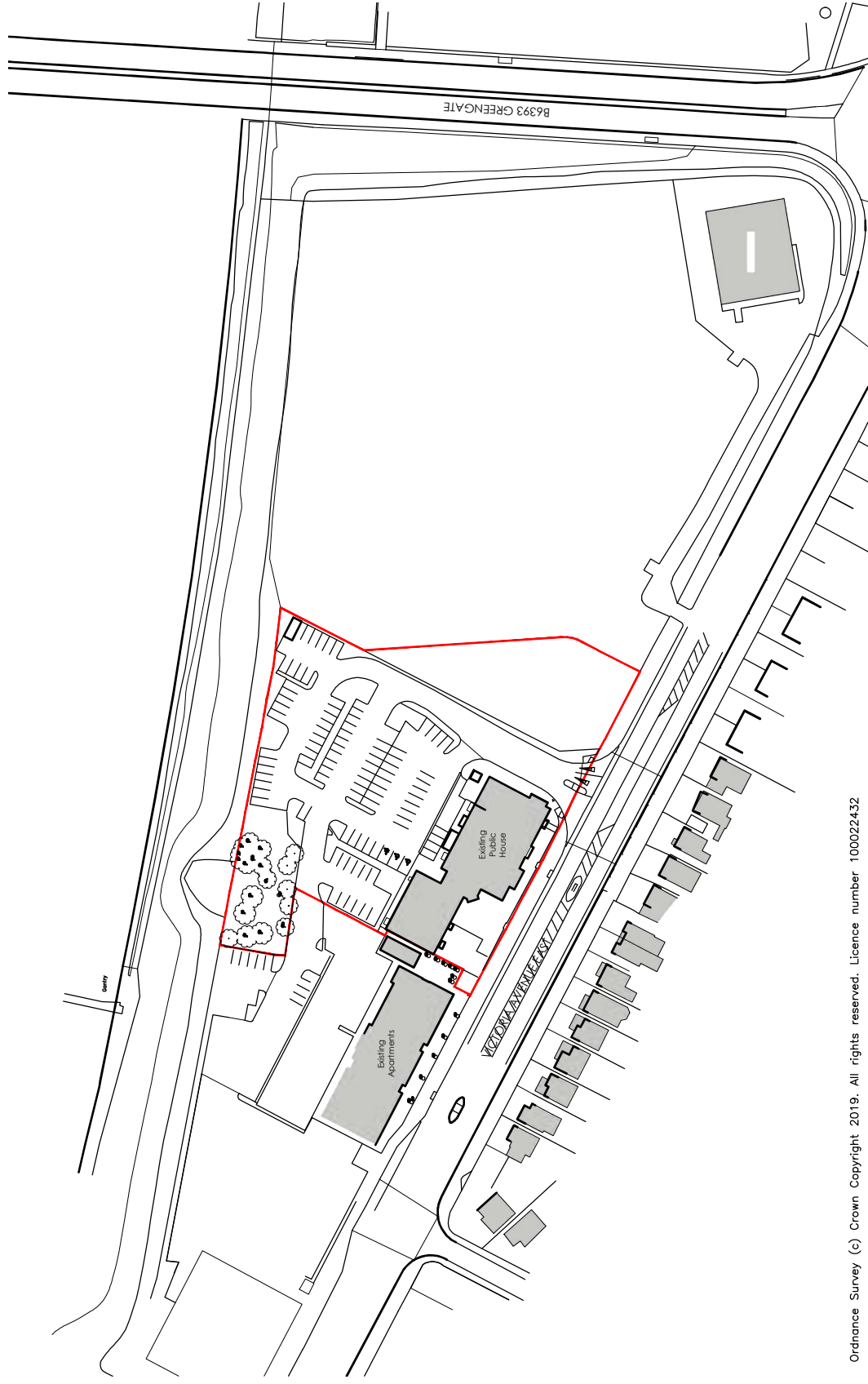
Note: Information is based on received information and is subject to full topographical building survey and site visit

Assumed site boundary and site constraints based on desktop study and subject to confirmation.

All Legal easements and extent of existing underground services locations are subject to confirmation.

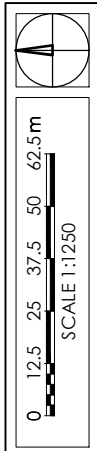
			dd/mm/yyyy			Rev By	Check By		
			Date	Description					
					PROPOSED FOODSTORE VICTORIA AVENUE EAST MANCHESTER M9 7HW				
					ALDI STORES LTD				
					PLANNING				
					Drawing Size A3				
					Scale 1:1250				
					MARCH 21	Drawn By CM	Checked LEB		
					Drawing title SITE LOCATION PLAN				
					Jobs Draw No 16223BOL-098				
					Jobs Draw No				Rev -

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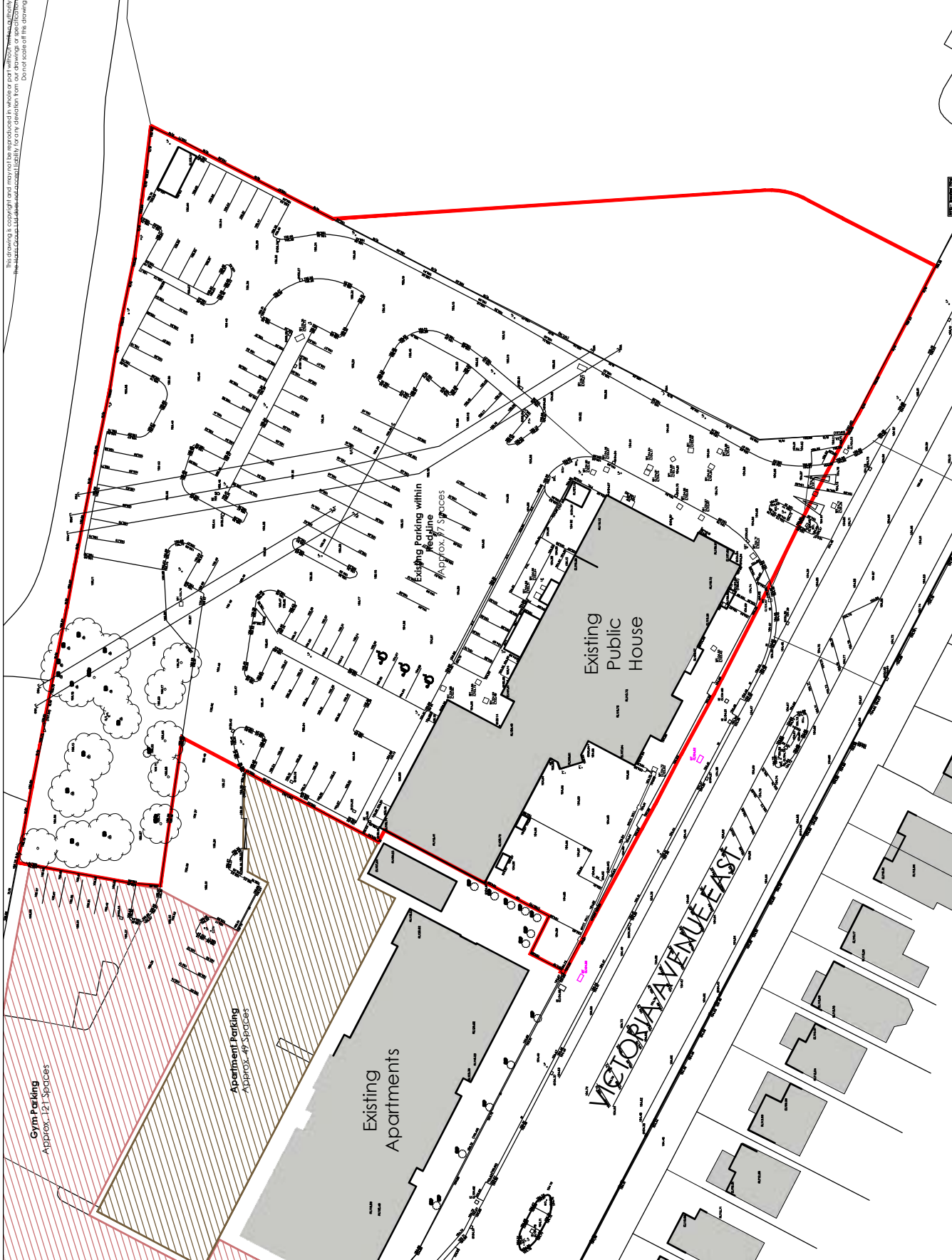
SITE LOCATION PLAN
SCALE 1:1250 @ A3



ASSUMED BOUNDARY (Red Line)
2.06 ACRES (0.83 HA)

APPENDIX 2

EXISTING SITE PLAN / TOPOGRAPHICAL SURVEY



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Note:
Information is based on received information and is subject to full topographical, building survey and site visit.
Assumed site boundary and site constraints based on desktop study and subject to confirmation.
All legal easements and extent of existing underground services locations are subject to confirmation.

Rev	Date	Description	Drawn By	Checked By
1	01/24/2024	PROPOSED FOODSTORE		
2	01/24/2024	VICTORIA AVENUE EAST MANCHESTER M19 7HW		
3	01/24/2024	ALDI STORES LTD		
4	01/24/2024	PLANNING		
5	01/24/2024	Scale 1:500	Drawn Size A3	
6	01/24/2024	Date MARCH 21	Drawn By CM	Checked EEB
7	01/24/2024	EXISTING SITE PLAN		
8	01/24/2024	Job-Draw No	16223BOL-099	Rev

PROPOSED FOODSTORE
VICTORIA AVENUE EAST
MANCHESTER
M19 7HW

Client: ALDI STORES LTD

Scale: 1:500

Date: MARCH 21

Drawn By: CM

Checked: EEB

Job-Draw No: 16223BOL-099

Rev: 1

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EXISTING SITE PLAN
SCALE 1:500 @ A3

NORTH

SCALE 1:500

ASSUMED BOUNDARY (Red Line)
2.06 ACRES (0.83 HA)

APPENDIX 3

ENVIRONMENT AGENCY FLOOD MAPPING

Flood map for planning

Your reference
New Moston

Location (easting/northing)
388201/403332

Created
29 Jan 2022 16:13

Your selected location is in flood zone 1, an area with a low probability of flooding.

This means:

- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

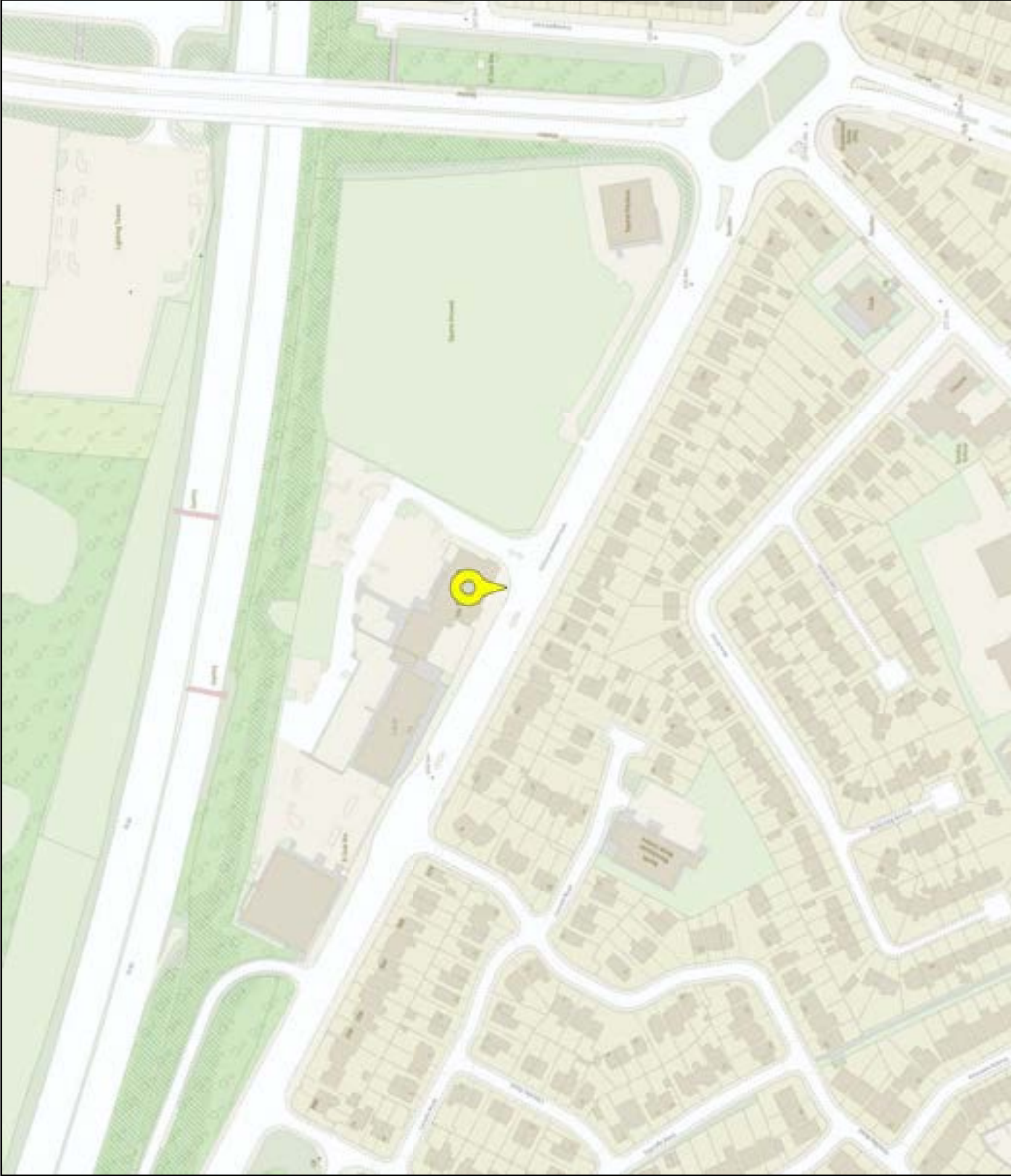
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2021 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference

New Moston

Location (easting/northing)

388201/403332

Scale

1:2500

Created

29 Jan 2022 16:13



Selected point



Flood zone 3



Flood zone 3: areas
benefitting from flood
defences



Flood zone 2



Flood zone 1



Flood defence



Main river



Flood storage area



APPENDIX 4

UNITED UTILITIES SEWER PLAN

Integra Consulting

**14-32
Hewitt Street,
Manchester,
M15 4GB**

FAO:

How to contact us:

**United Utilities Water Limited
Property Searches
Haweswater House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP**

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

**Your Ref: New Moston
Our Ref: UUPS-ORD-344474
Date: 16/11/2021**

Dear Sirs

Location: New Moston

I acknowledge with thanks your request dated 15/11/2021 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. <http://www.unitedutilities.com/work-near-asset.aspx>.

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please [contact us](#).

Yours Faithfully,



Karen McCormack
Property Searches Manager

TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

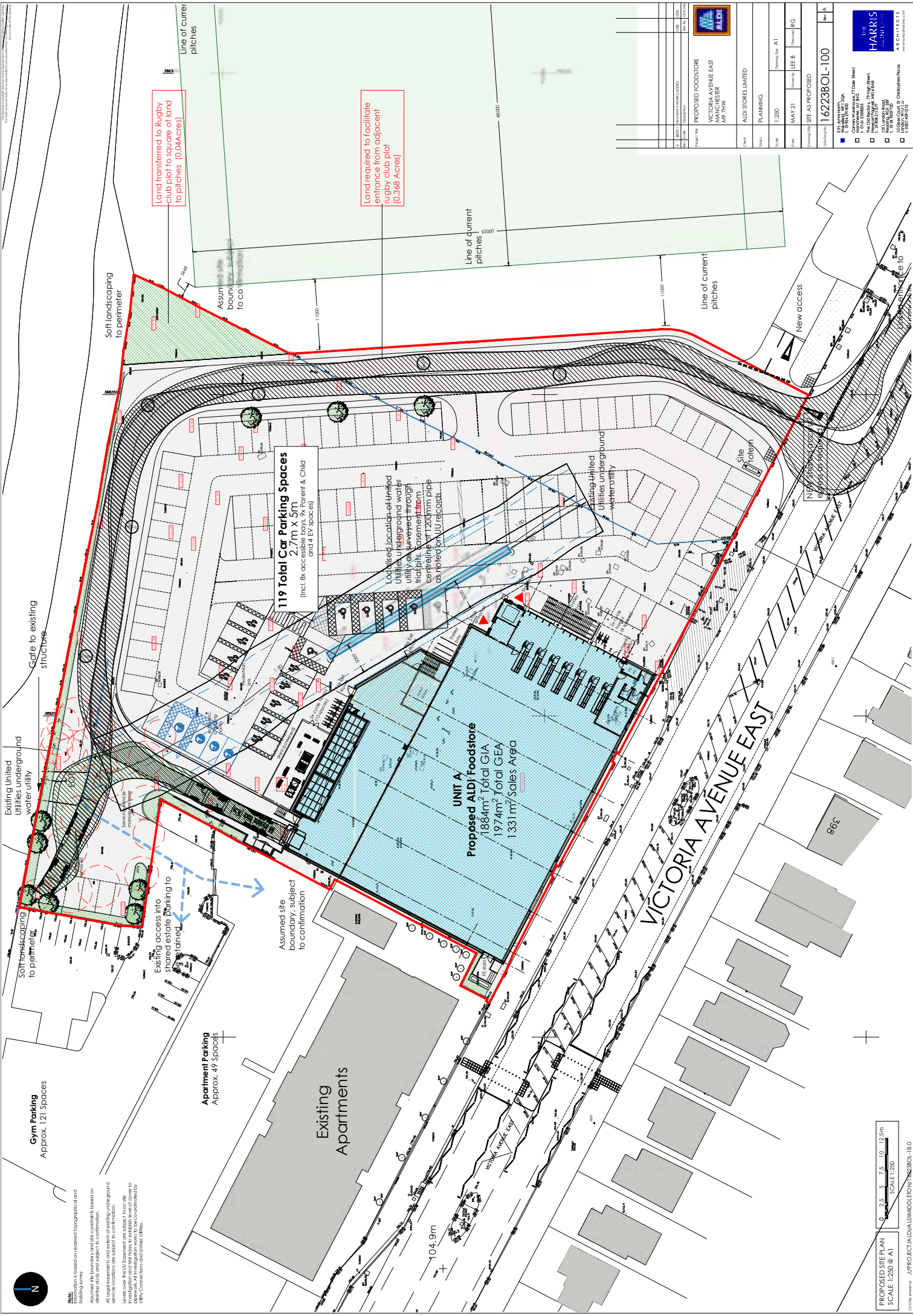
These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

APPENDIX 5

PROPOSED SITE PLAN

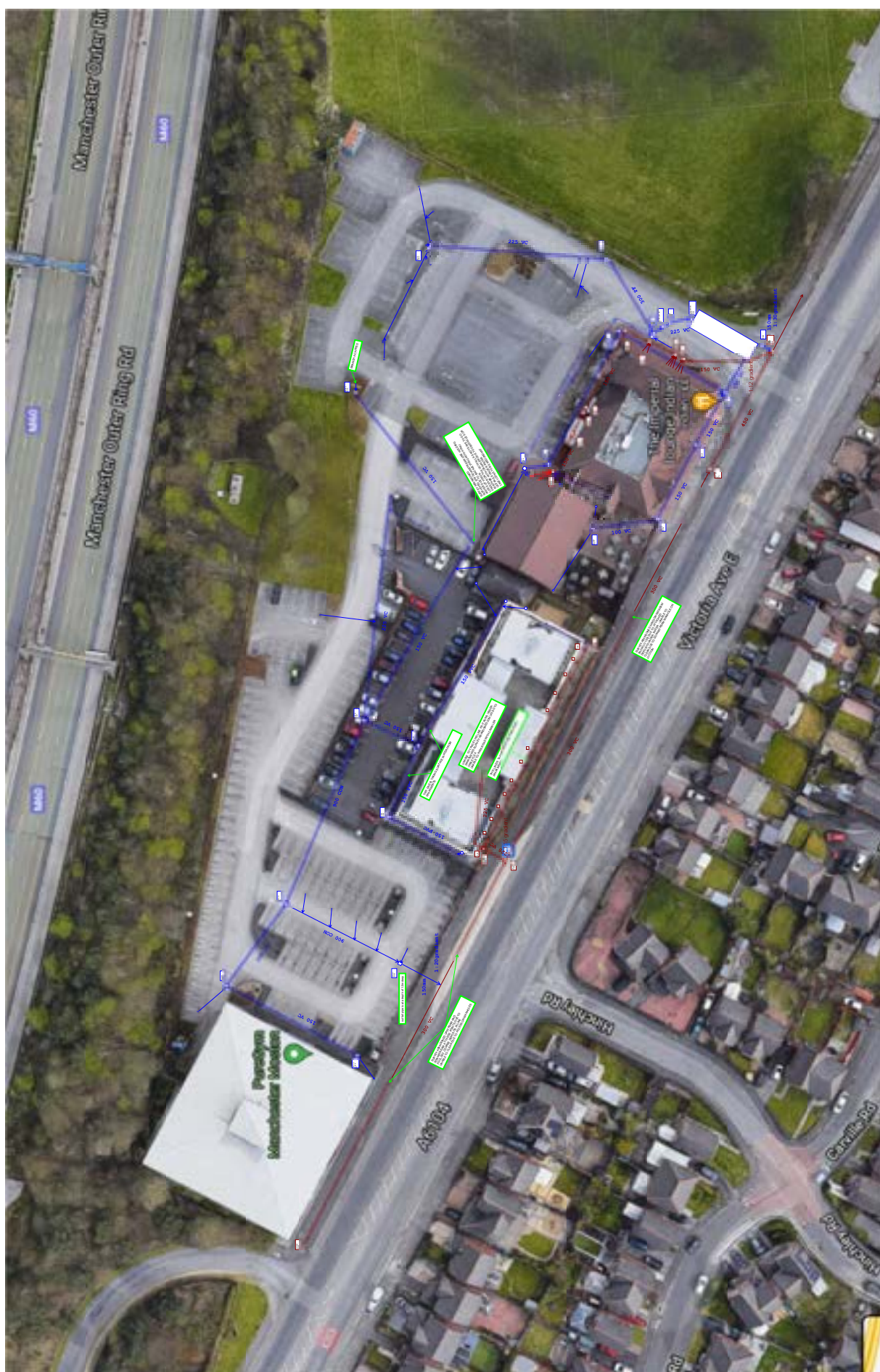


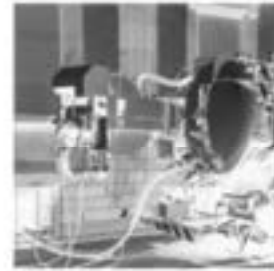
NOTES:
1. This plan is based on the latest topographical and planning information.
2. Assumed the boundary and site coverage based on desktop study and subject to confirmation.
3. All legal easements and extent of existing underground service locations are subject to confirmation.
4. Levels over the site (elevation) are subject to confirmation.
5. All investigation works to be carried out by a qualified geotechnical engineer.

PROPOSED SITE PLAN
SCALE 1:250 @ A1
0 2.5 5 7.5 10 12.5m
SCALE 1:250
J:\PROJECTS\ALD\UNDEVELOPED\162238OL-160

APPENDIX 6

EXISTING DRAINAGE SURVEY





LAYER SURVEYS LTD
SEE THE COMPLETE PICTURE

DRAINAGE SURVEY

Job Number
LAYERSERV0001064Surveyed by (Operator)
CHRIS LUCOCKBase Unit
ELFEIYII63Date
24/11/2021

Client Details:

Integra Consulting
Suite 4,
14-32 Hewitt Street,
Manchester,
M15 4GBClient Contact Name: Neville Shaw
Client Contact Tel: 07740 723 258

Site Details:

Aldi Moston Development,
Victoria Ave E,
Manchester
M9 7GHSite Contact Name: Adam Westwell
Site Contact Tel: 07779 035443

Contractor Details:

Layer Surveys Ltd
Francis House
Meadowcroft Business Park
Pope Lane
Preston
Lancashire
PR4 4BA

Office Contact Number: 01772 611634

Purpose of Survey:

Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
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Report Contents

Page 1	Cover Page
Page 2	Job Overview
Page 3	Contents Page
Page 6	Survey Run Sheet(Survey 1 - MH S2 to MH S1)
Page 9	Survey Run Sheet(Survey 2 - MH S2 to MH S3)
Page 12	Survey Run Sheet(Survey 3 - MH F1 to SOURCE)
Page 14	Survey Run Sheet(Survey 4 - MH F1 to BRANCH B)
Page 16	Survey Run Sheet(Survey 5 - MH F1 to BRANCH C)
Page 18	Survey Run Sheet(Survey 6 - MH F1 to BRANCH D)
Page 20	Survey Run Sheet(Survey 7 - MH F1 to MH F2)
Page 22	Survey Run Sheet(Survey 8 - MH S3 to MH S2)
Page 25	Survey Run Sheet(Survey 9 - MH F5 to MH F4)
Page 28	Survey Run Sheet(Survey 10 - MH F4 to MH F3)
Page 30	Survey Run Sheet(Survey 11 - MH F3 to MH F2)
Page 32	Survey Run Sheet(Survey 12 - MH F5 to MH F6)
Page 34	Survey Run Sheet(Survey 13 - MH F6 to MH F7)
Page 36	Survey Run Sheet(Survey 14 - MH F7 to MH F8)

Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
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Report Contents

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Page 44	Survey Run Sheet(Survey 17 - MH S8 to MH S9)
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Page 48	Survey Run Sheet(Survey 19 - MH S10 to INTERCEPTOR)
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Page 52	Survey Run Sheet(Survey 21 - UU 2301 to UU 1304)
Page 55	Survey Run Sheet(Survey 22 - UU 2301 to MH F8)
Page 57	Survey Run Sheet(Survey 23 - UU 2301 to MH S11)
Page 59	Survey Run Sheet(Survey 24 - MH S11 to ATTENUATION TANK)
Page 61	Survey Run Sheet(Survey 25 - IC 01 to MH 1303 A)
Page 65	Survey Run Sheet(Survey 26 - IC 01 to SOURCE)
Page 68	Survey Run Sheet(Survey 27 - IC S01 to SOURCE)
Page 71	Survey Run Sheet(Survey 28 - IC S01 to MH S12)
Page 73	Survey Run Sheet(Survey 29 - IC S01 to IC S02)
Page 75	Survey Run Sheet(Survey 30 - IC S02 to SOURCE)
Page 78	Survey Run Sheet(Survey 31 - MH S12 to SOURCE)
Page 81	Survey Run Sheet(Survey 32 - MH S12 to BRANCH B)
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Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
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Report Contents

Page 86	Survey Run Sheet(Survey 34 - MH S13 to MH S14)
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Page 94	Survey Run Sheet(Survey 37 - UU 1303 to UU 1304)
Page 97	Survey Run Sheet(Survey 38 - UU 1303 to MH 1303 A)
Page 99	Survey Run Sheet(Survey 39 - UU 0402 to UU 1303)
Page 102	Survey Run Sheet(Survey 40 - MH 1303 A to SOURCE)
Page 104	Survey Run Sheet(Survey 41 - MH S3 to MH S4)
Page 107	Survey Run Sheet(Survey 42 - MH S6 to MH S5)
Page 110	Survey Run Sheet(Survey 43 - MH S5 to MH S4)
Page 113	Survey Run Sheet(Survey 44 - MH S6 to MH S6 A)
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Page 122	Survey Run Sheet(Survey 47 - MH S15 to MH S16)
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Page 127	Survey Run Sheet(Survey 49 - MH S16 to MH S13)
Page 129	Final Page

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) MH S1 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/1	Base Unit ELFEIYII63	Section Number 1

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 100mm Material Vitrified clay Category	Start Node MH S2 End Node MH S1 Total length 4.24 metres
--	---	--

Scale 1:0.21 Direction Upstream

Start Node Ref: MH S2 I/L :mm Depth: 1.17mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S2	5773420	Comment / 0	
0.00	WL	Water level 5% height/diameter	5773421	Comment / 0	
0.64	JDM	Joint displaced medium	5773422	Structural / 1	
0.64	DES	Settled deposits fine 5% cross-sectional area loss	5773430	Service / 2	
2.50	JDL	Joint displaced large	5773431	Structural / 1	
2.50	DES	Settled deposits fine 5% cross-sectional area loss	5773432	Service / 2	
4.24	MHF	Finish node type, manhole, reference MH S1	5773437	Comment / 0	
End Node Ref: MH S1 I/L :mm Depth: 1.08mm					

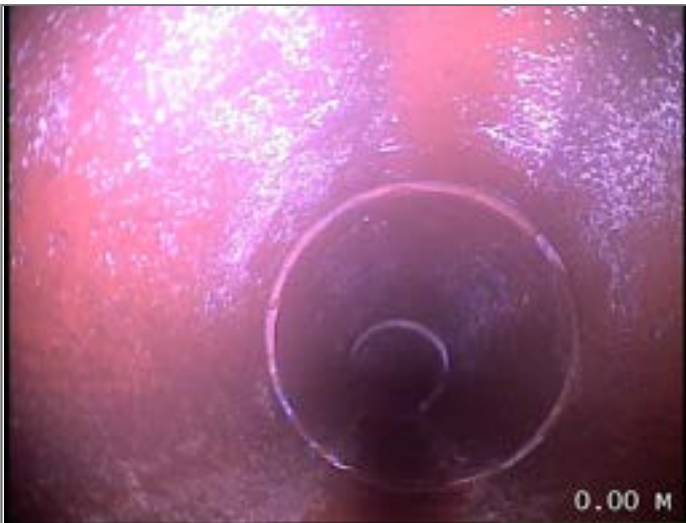


Job Number
LAYERSERV0001064

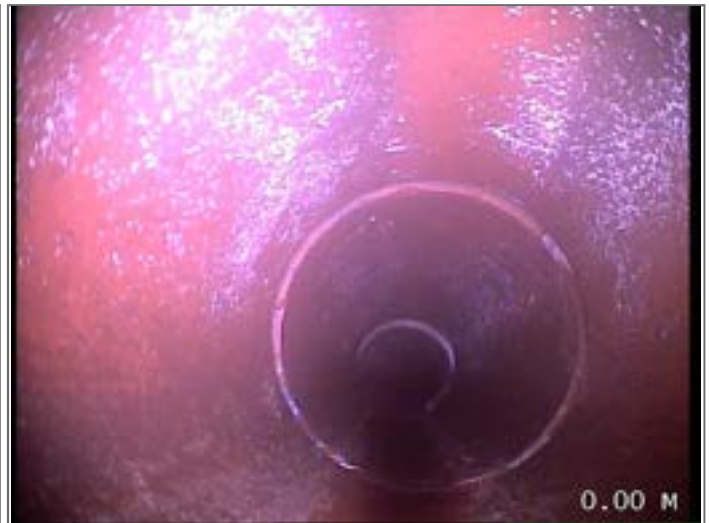
Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

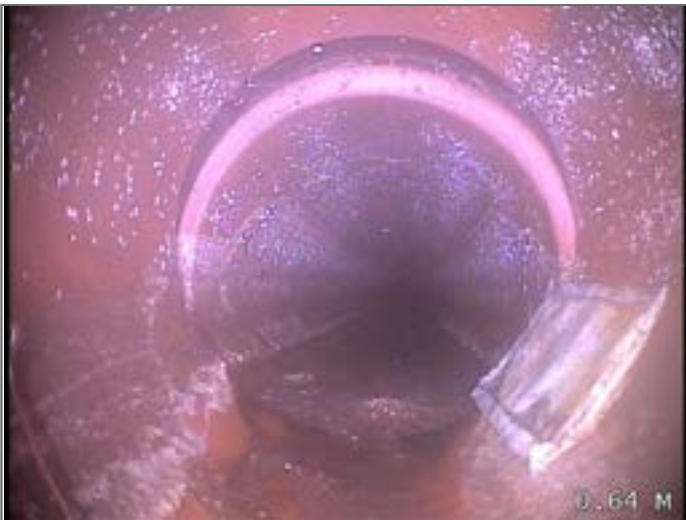
Date
24/11/2021



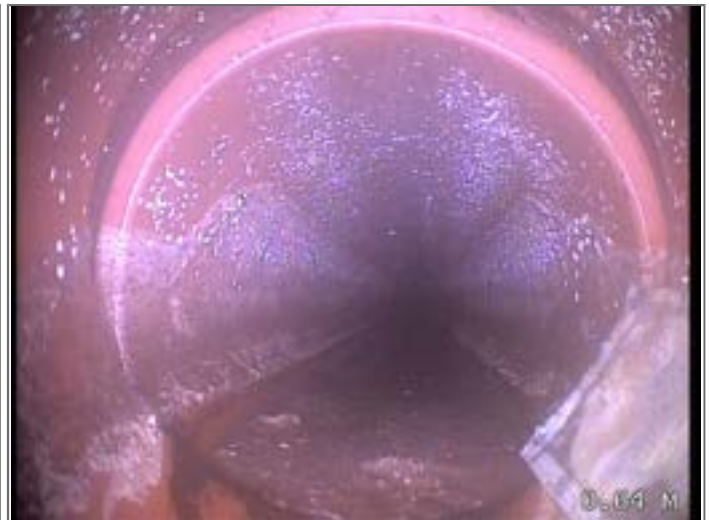
Start node type, manhole, reference MH S2



Water level 5% height/diameter



Joint displaced medium



Settled deposits fine 5% cross-sectional area loss



Joint displaced large



Settled deposits fine 5% cross-sectional area loss



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Finish node type, manhole, reference MH S1

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S2 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 4/0	Base Unit ELFEIYII63	Section Number 2
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category		Start Node MH S2 End Node MH S3 Total length 30 metres	

 Scale 1:1.57
 Direction Downstream

Start Node Ref:MH S2 | I/L :mm | Depth: 1.17mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S2	5773483	Comment / 0
0.00	WL	Water level 5% height/diameter	5773484	Comment / 0
2.81	JN	Junction at 1 o'clock, diameter 100mm	5773486	Comment / 0
3.02	DES	Settled deposits fine 5% cross-sectional area loss	5773487	Service / 2
6.31	JN	Junction at 3 o'clock, diameter 100mm	5773488	Comment / 0
8.19	DER	Settled deposits coarse 5% cross-sectional area loss - Remark: PIECE OF PIPE	5773490	Service / 2
12.55	DEX	Other settled deposits 25% cross-sectional area loss - Remark: DEBRIS	5773491	Service / 4
13.38	DES	Settled deposits fine 25% cross-sectional area loss	5773492	Service / 4
15.57	SA	Survey abandoned - Remark: UNABLE TO PASS DUE TO HIGH SILT DEPOSITS	5773503	Comment / 0

End Node Ref:MH S3 | I/L :mm | Depth: 1.52mm

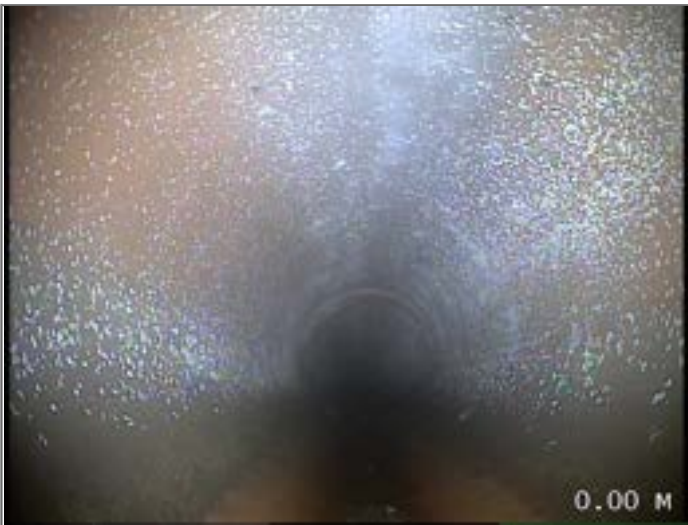


Job Number
LAYERSERV0001064

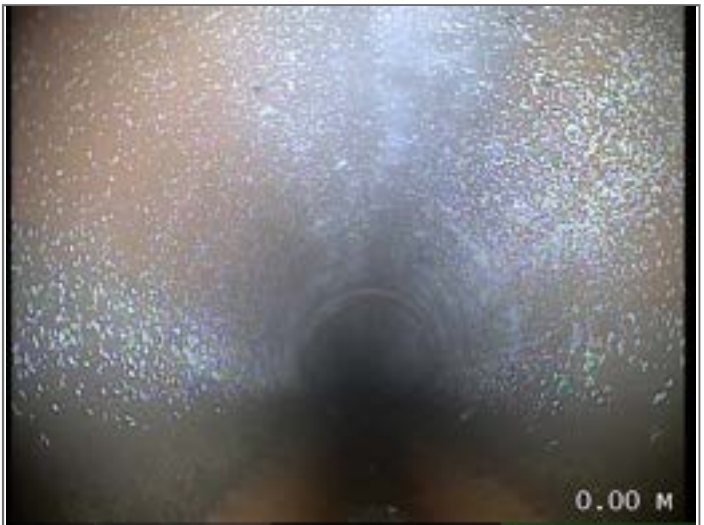
Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH S2



Water level 5% height/diameter



Junction at 1 o'clock, diameter 100mm



Settled deposits fine 5% cross-sectional area loss



Junction at 3 o'clock, diameter 100mm



Settled deposits coarse 5% cross-sectional area loss - Remark: PIECE OF PIPE



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Other settled deposits 25% cross-sectional area loss - Remark: DEBRIS



Settled deposits fine 25% cross-sectional area loss



Survey abandoned - Remark: UNABLE TO PASS DUE TO HIGH SILT DEPOSITS

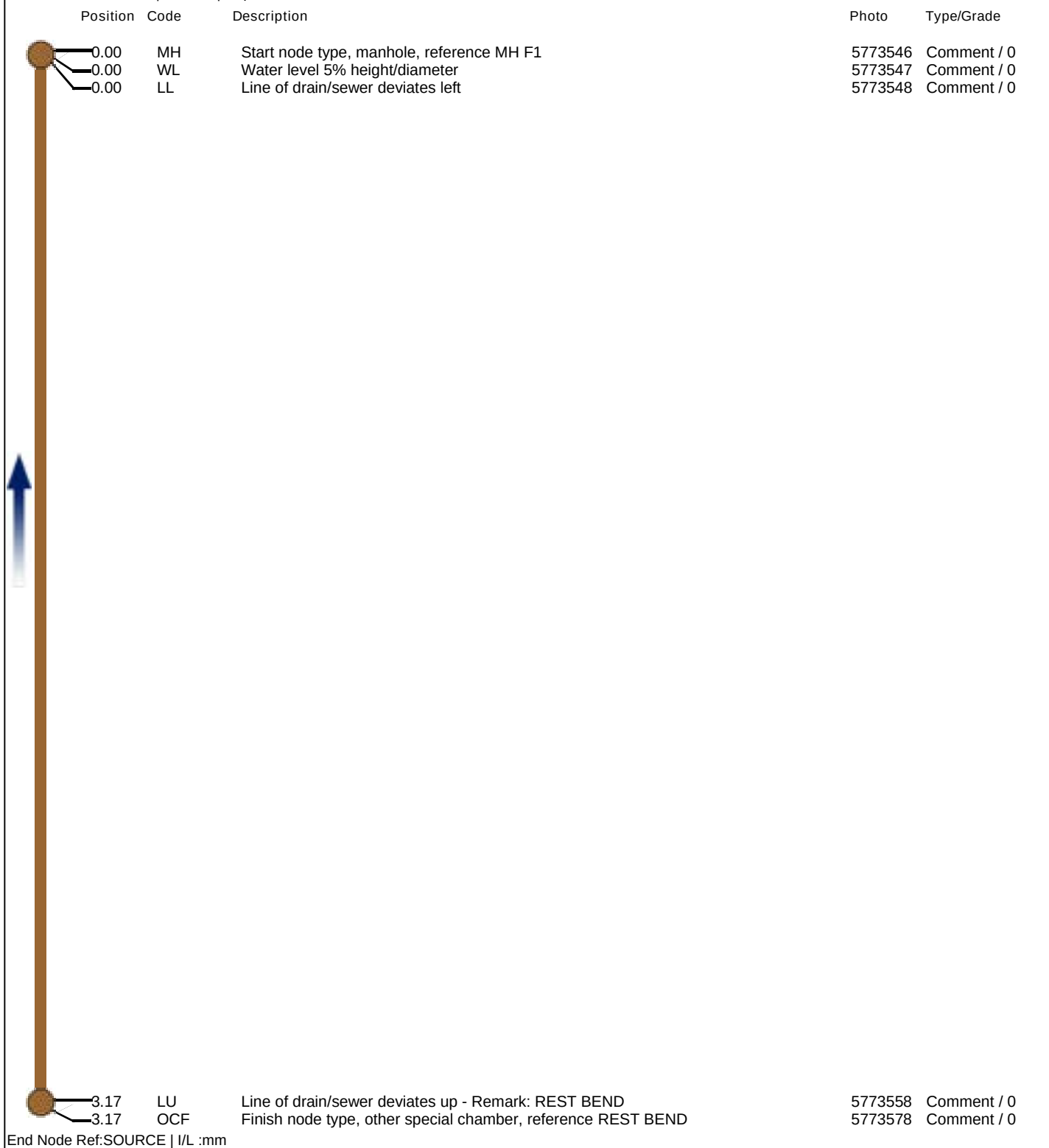
Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) SOURCE X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 3

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 100mm Material Vitrified clay Category	Start Node MH F1 End Node SOURCE Total length 3.17 metres
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Scale 1:0.16 Direction Upstream

Start Node Ref:MH F1 | I/L :mm | Depth: 1.52mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F1	5773546	Comment / 0
0.00	WL	Water level 5% height/diameter	5773547	Comment / 0
0.00	LL	Line of drain/sewer deviates left	5773548	Comment / 0
				
3.17	LU	Line of drain/sewer deviates up - Remark: REST BEND	5773558	Comment / 0
3.17	OCF	Finish node type, other special chamber, reference REST BEND	5773578	Comment / 0

End Node Ref:SOURCE | I/L :mm

Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYI63	Date 24/11/2021
 Start node type, manhole, reference MH F1			
 Water level 5% height/diameter			
 Line of drain/ sewer deviates left			
 Line of drain/ sewer deviates up - Remark: REST BEND			
 Finish node type, other special chamber, reference REST BEND			



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) BRANCH B X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 4

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F1 End Node BRANCH B Total length 12.52 metres
---------------------------------------	---	--

Scale 1:0.63 Direction Upstream

Start Node Ref:MH F1 I/L :mm Depth: 1.52mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH F1	5773580	Comment / 0	
0.00	WL	Water level 5% height/diameter	5773581	Comment / 0	
0.55	LL	Line of drain/sewer deviates left	5773597	Comment / 0	
					
11.52	DEE	Attached deposits, encrustation from 4 to 8 o'clock 20% cross-sectional area loss	5773599	Service / 3	
12.52	GYF	Finish node type, gully, reference BRANCH B	5773607	Comment / 0	
End Node Ref:BRANCH B I/L :mm					

Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

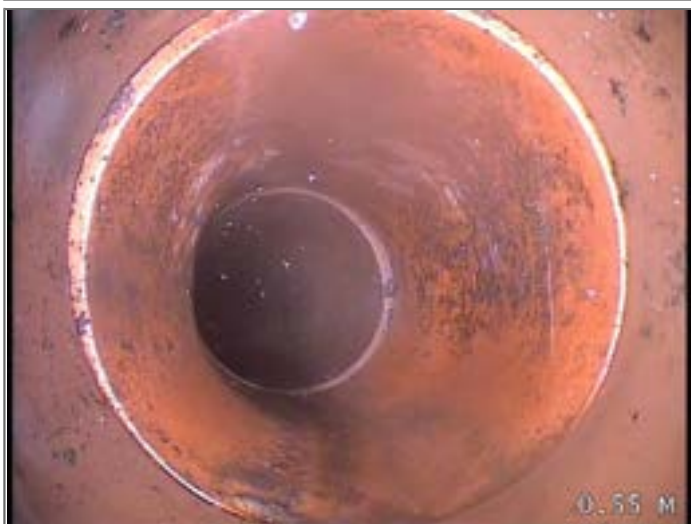
Date
24/11/2021



Start node type, manhole, reference MH F1



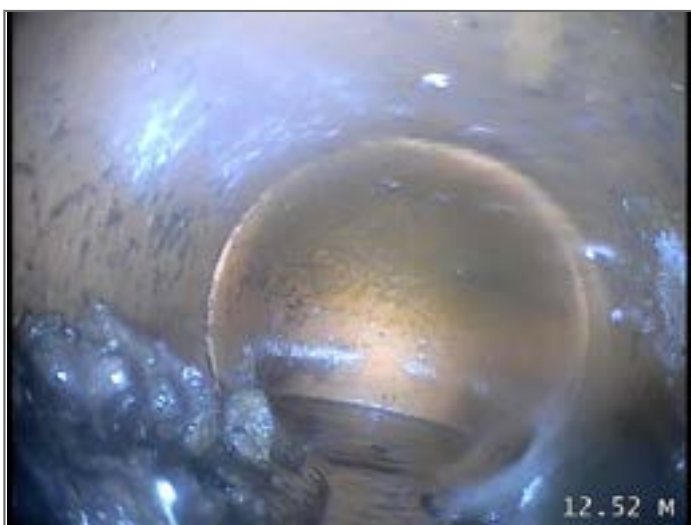
Water level 5% height/diameter



Line of drain/sewer deviates left



Attached deposits, encrustation from 4 to 8 o'clock 20% cross-sectional area loss



Finish node type, gully, reference BRANCH B

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) BRANCH C X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 5

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 100mm Material Vitrified clay Category	Start Node MH F1 End Node BRANCH C Total length 2.74 metres
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Scale 1:0.10 Direction Upstream

Start Node Ref:MH F1 I/L :mm Depth: 1.52mm						
Position	Code	Description		Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH F1		5773833	Comment / 0	
0.00	WL	Water level 5% height/diameter		5773834	Comment / 0	
						
1.21	LL	Line of drain/sewer deviates left		5773835	Comment / 0	
2.19	LU	Line of drain/sewer deviates up		5773836	Comment / 0	
2.74	OCF	Finish node type, other special chamber, reference REST BEND		5773844	Comment / 0	
End Node Ref:BRANCH C I/L :mm						

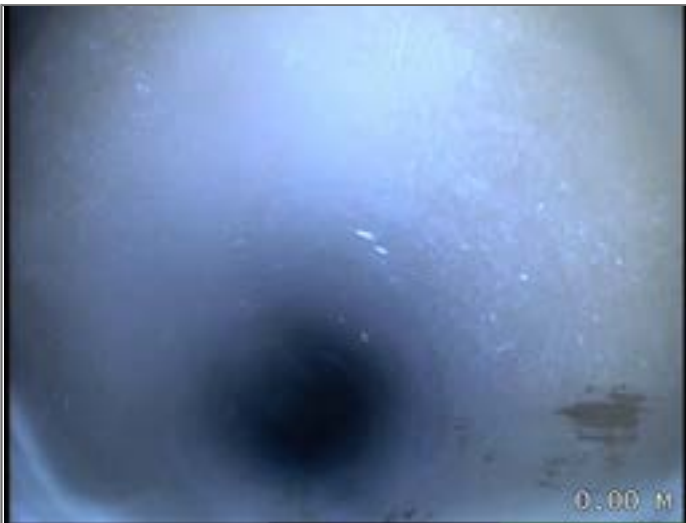


Job Number
LAYERSERV0001064

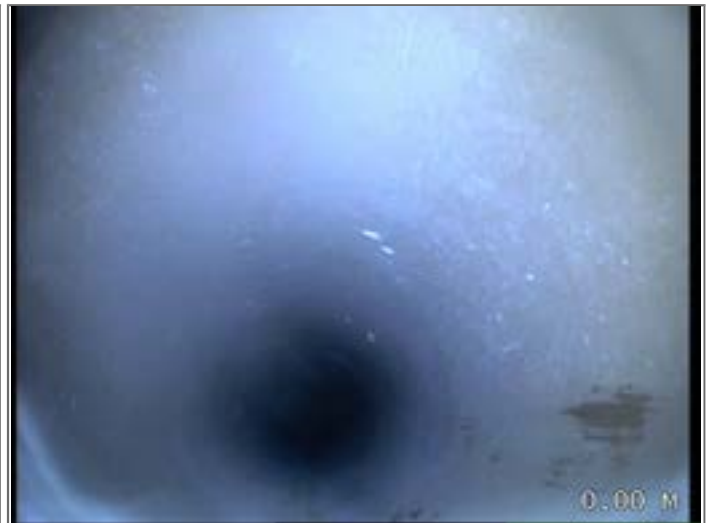
Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH F1



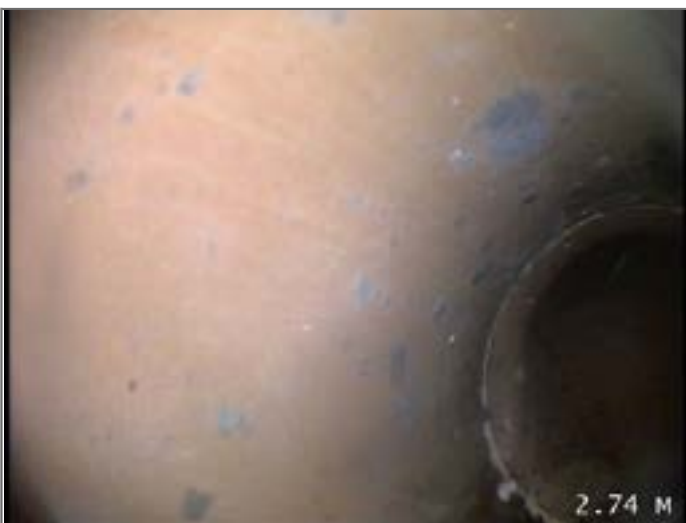
Water level 5% height/diameter



Line of drain/sewer deviates left



Line of drain/sewer deviates up



Finish node type, other special chamber, reference REST BEND

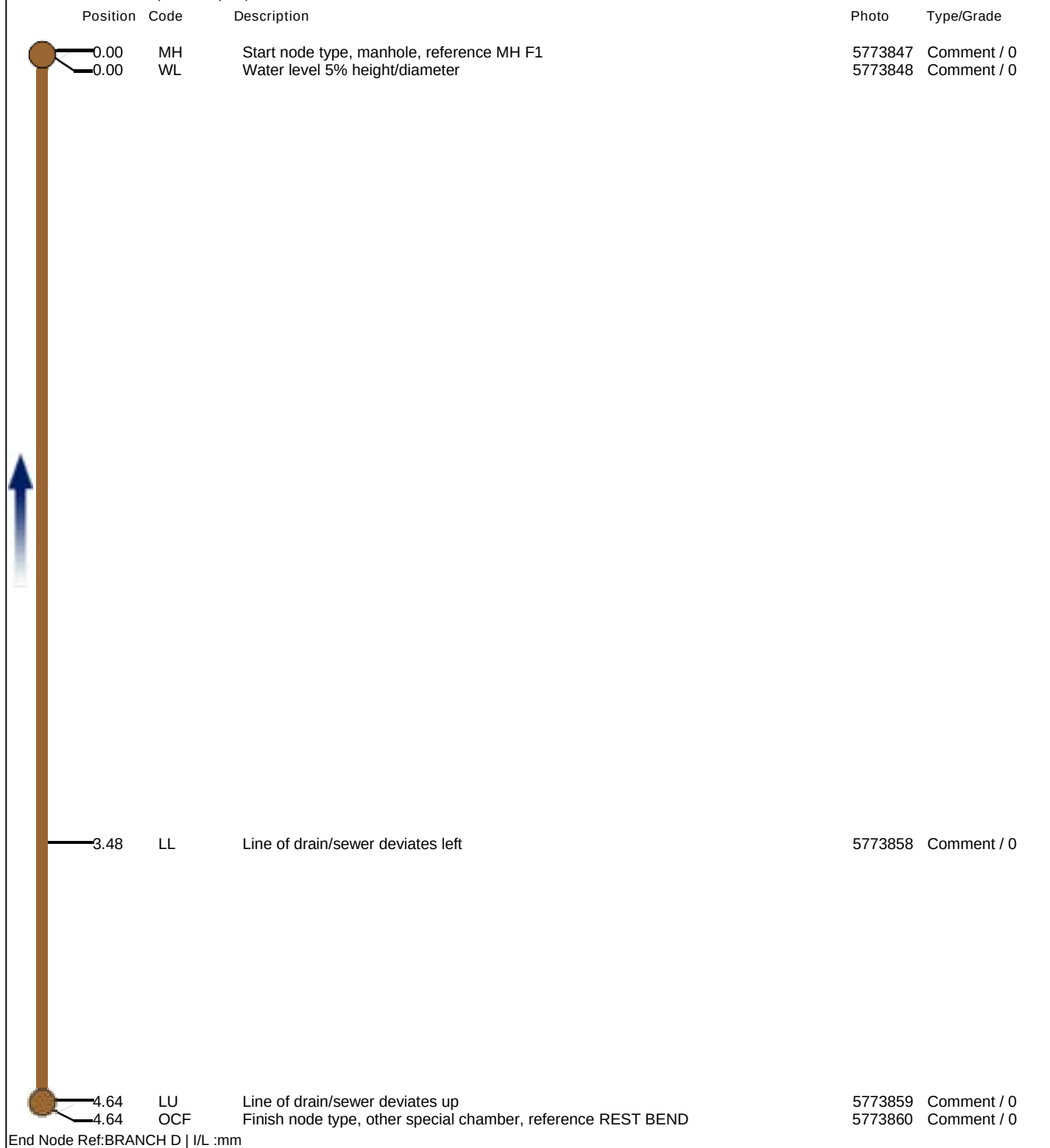
Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) BRANCH D X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 6

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F1 End Node BRANCH D Total length 4.64 metres
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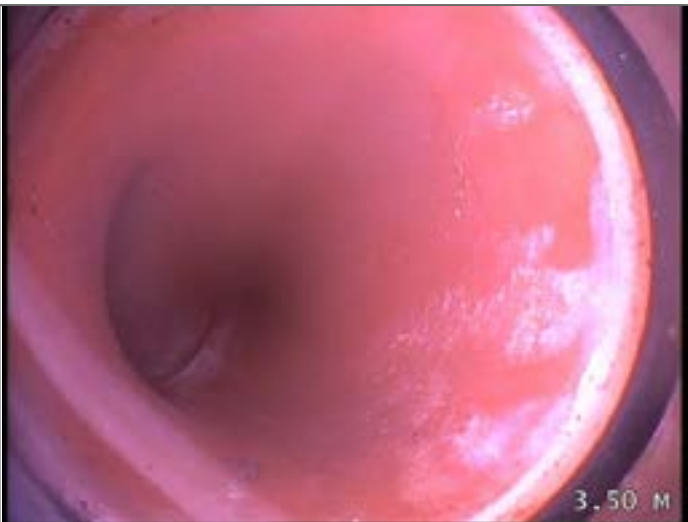
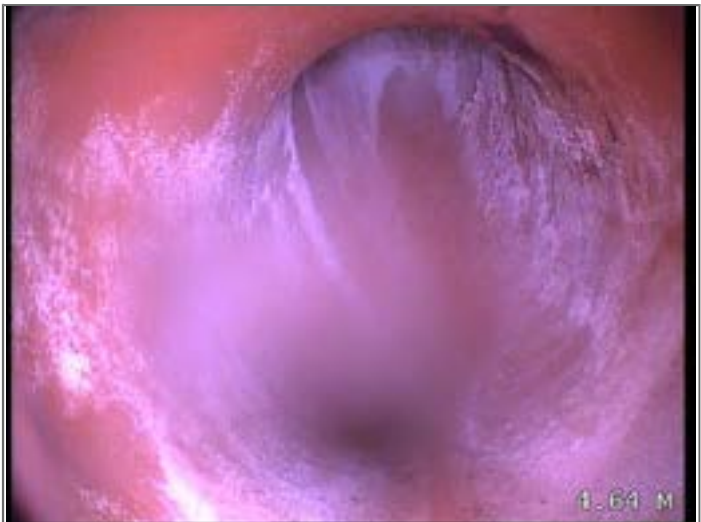
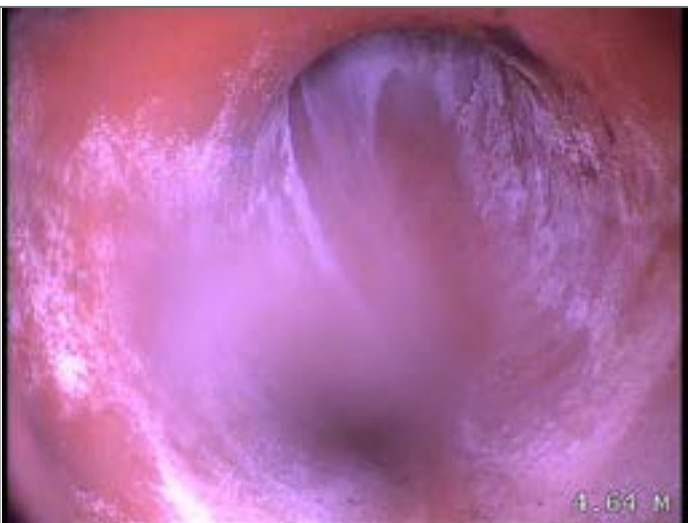
Scale 1:0.21 Direction Upstream

Start Node Ref:MH F1 | I/L :mm | Depth: 1.52mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F1	5773847	Comment / 0
0.00	WL	Water level 5% height/diameter	5773848	Comment / 0
				
3.48	LL	Line of drain/sewer deviates left	5773858	Comment / 0
4.64	LU	Line of drain/sewer deviates up	5773859	Comment / 0
4.64	OCF	Finish node type, other special chamber, reference REST BEND	5773860	Comment / 0

End Node Ref:BRANCH D | I/L :mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
			
Start node type, manhole, reference MH F1		Water level 5% height/diameter	
			
Line of drain/sewer deviates left		Line of drain/sewer deviates up	
			
Finish node type, other special chamber, reference REST BEND			

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F1 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 7

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F1 End Node MH F2 Total length 10.24 metres
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Scale 1:0.52 Direction Downstream

Start Node Ref:MH F1 | I/L :mm | Depth: 1.52mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F1	5773870	Comment / 0
0.00	WL	Water level 5% height/diameter	5773871	Comment / 0
				
10.24	MHF	Finish node type, manhole, reference MH F2	5773872	Comment / 0

End Node Ref:MH F2 | I/L :mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
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Start node type, manhole, reference MH F1



Water level 5% height/diameter



Finish node type, manhole, reference MH F2

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S2 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 8

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S3 End Node MH S2 Total length 35 metres
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Scale 1:1.84 Direction Upstream

Start Node Ref:MH S3 | I/L :mm | Depth: 1.52mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S3	5775241	Comment / 0
0.00	WL	Water level 5% height/diameter	5775242	Comment / 0
0.00	DES	Settled deposits fine 10% cross-sectional area loss	5775245	Service / 3
0.00	DEZ	Other attached deposits from 8 to 4 o'clock 5% cross-sectional area loss - Remark SILT	5775261	Service / 2
4.19	JN	Junction at 1 o'clock, diameter 100mm	5775262	Comment / 0
14.00	WL	Water level 25% height/diameter	5775280	Comment / 0
15.29	CUD	Loss of vision, silt	5775282	Comment / 0
16.00	SA	Survey abandoned - Remark: OBSTRUCTION UNABLE TO PASS DUE TO HIGH SILT DEPOSITS	5775301	Comment / 0

End Node Ref:MH S2 | I/L :mm | Depth: 1.17mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH S3



Water level 5% height/diameter



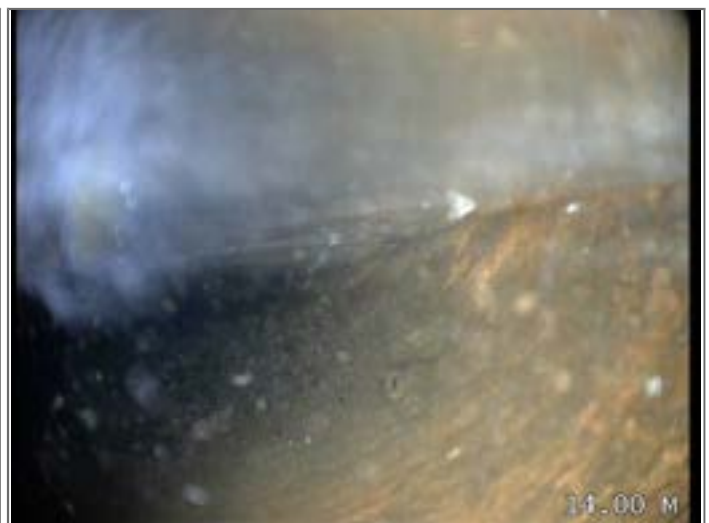
Settled deposits fine 10% cross-sectional area loss



Other attached deposits from 8 to 4 o'clock 5% cross-sectional area loss - Remark SILT



Junction at 1 o'clock, diameter 100mm



Water level 25% height/diameter



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
 Loss of vision, silt		 Survey abandoned - Remark: OBSTRUCTION UNABLE TO PASS DUE TO HIGH SILT DEPOSITS	

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F4 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 9

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F5 End Node MH F4 Total length 17.7 metres
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Scale 1:0.89 Direction Upstream

Start Node Ref:MH F5 I/L :mm Depth: 1.90mm					
Position	Code	Description	Photo	Type/Grade	
	0.00	MH	Start node type, manhole, reference MH F5	5775498	Comment / 0
	0.00	WL	Water level 5% height/diameter	5775499	Comment / 0
	0.00	DEF	Attached deposits, fouling from 5 to 7 o'clock 10% cross-sectional area loss	5775519	Service / 3
					
	11.01	WL	Water level 25% height/diameter	5775528	Comment / 0
	11.01	DEX	Other settled deposits 10% cross-sectional area loss - Remark: FOUL WASTE	5775529	Service / 3
					
	15.09	DEF	Attached deposits, fouling from 5 to 7 o'clock 10% cross-sectional area loss	5775537	Service / 3
					
	17.70	MHF	Finish node type, manhole, reference MH F4	5775541	Comment / 0
End Node Ref:MH F4 I/L :mm Depth: 1.62mm					



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
24/11/2021



Start node type, manhole, reference MH F5



Water level 5% height/diameter



Attached deposits, fouling from 5 to 7 o'clock 10% cross-sectional area loss



Water level 25% height/diameter



Other settled deposits 10% cross-sectional area loss - Remark: FOUL WASTE



Attached deposits, fouling from 5 to 7 o'clock 10% cross-sectional area loss



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
 Finish node type, manhole, reference MH F4			



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F3 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 10

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F4 End Node MH F3 Total length 0.69 metres
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Scale 1:0.00 Direction Upstream

Start Node Ref:MH F4 I/L :mm Depth: 1.62mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH F4	5775550	Comment / 0	
0.00	WL	Water level 5% height/diameter	5775551	Comment / 0	
0.69	MHF	Finish node type, manhole, reference MH F3	5775552	Comment / 0	
End Node Ref:MH F3 I/L :mm Depth: 1.58mm					

Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH F4



Water level 5% height/diameter



Finish node type, manhole, reference MH F3



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F2 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 11

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F3 End Node MH F2 Total length 4.57 metres
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Scale 1:0.21 Direction Upstream

Start Node Ref:MH F3 | I/L :mm | Depth: 1.58mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F3	5775557	Comment / 0
0.00	WL	Water level 5% height/diameter	5775558	Comment / 0
0.25	DEF	Attached deposits, fouling at 7 o'clock 5% cross-sectional area loss	5775559	Service / 2
4.57	MHF	Finish node type, manhole, reference MH F2	5775562	Comment / 0

End Node Ref:MH F2 | I/L :mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH F3



Water level 5% height/diameter



Attached deposits, fouling at 7 o'clock 5% cross-sectional area loss



Finish node type, manhole, reference MH F2

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F5 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/4	Base Unit ELFEIYII63	Section Number 12

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F5 End Node MH F6 Total length 4.84 metres
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Scale 1:0.21 Direction Downstream

Start Node Ref:MH F5 | I/L :mm | Depth: 1.90mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F5	5775631	Comment / 0
0.00	WL	Water level 5% height/diameter	5775632	Comment / 0
0.00	DEF	Attached deposits, fouling at 4 o'clock 10% cross-sectional area loss	5775633	Service / 3
0.34	DEE	Attached deposits, encrustation from 7 to 5 o'clock 5% cross-sectional area loss	5775652	Service / 2
3.78	FM	Fracture multiple from 10 to 2 o'clock	5775654	Structural / 4
4.84	MHF	Finish node type, manhole, reference MH F6	5775674	Comment / 0

End Node Ref:MH F6 | I/L :mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
24/11/2021



Start node type, manhole, reference MH F5



Water level 5% height/diameter



Attached deposits, fouling at 4 o'clock 10% cross-sectional area loss



Attached deposits, encrustation from 7 to 5 o'clock 5% cross-sectional area loss



Fracture multiple from 10 to 2 o'clock



Finish node type, manhole, reference MH F6



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F6 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 13

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F6 End Node MH F7 Total length 4.19 metres
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Scale 1:0.21 Direction Downstream

Start Node Ref:MH F6 | I/L :mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F6	5775683	Comment / 0
0.00	WL	Water level 5% height/diameter	5775685	Comment / 0
4.19	MHF	Finish node type, manhole, reference MH F7	5775691	Comment / 0

End Node Ref:MH F7 | I/L :mm | Depth: 1.99mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
			
Start node type, manhole, reference MH F6		Water level 5% height/diameter	
		Finish node type, manhole, reference MH F7	



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F7 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 14

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F7 End Node MH F8 Total length 2.38 metres
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Scale 1:0.10 Direction Downstream

Start Node Ref:MH F7 | I/L :mm | Depth: 1.99mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F7	5775694	Comment / 0
0.00	WL	Water level 5% height/diameter	5775696	Comment / 0
0.00	DEF	Attached deposits, fouling at 5 o'clock 5% cross-sectional area loss	5775698	Service / 2
2.38	MHF	Finish node type, manhole, reference MH F8	5775699	Comment / 0

End Node Ref:MH F8 | I/L :mm | Depth: 2.01mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH F7



Water level 5% height/diameter



Attached deposits, fouling at 5 o'clock 5% cross-sectional area loss



Finish node type, manhole, reference MH F8



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F8 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/4	Base Unit ELFEIYII63	Section Number 15

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH F8 End Node UU 2301 Total length 10 metres
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Scale 1:0.52 Direction Downstream

Start Node Ref:MH F8 | I/L :mm | Depth: 2.01mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH F8	5776990	Comment / 0
0.00	WL	Water level 5% height/diameter	5776991	Comment / 0
0.31	LL	Line of drain/sewer deviates left	5776992	Comment / 0
6.58	LD	Line of drain/sewer deviates down	5776993	Comment / 0
6.58	FM	Fracture multiple from 12 to 12 o'clock	5776994	Structural / 4
6.80	LL	Line of drain/sewer deviates left	5776995	Comment / 0
6.80	SA	Survey abandoned - Remark: UNABLE TO PASS THIS POINT DUE TO SHARP TURN AND DROP IN PIPE - NOT SAFE TO DO SO	5776996	Comment / 0

End Node Ref:UU 2301 | I/L :mm | Depth: 3.40mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH F8



Water level 5% height/diameter



Line of drain/sewer deviates left



Line of drain/sewer deviates down



Fracture multiple from 12 to 12 o'clock



Line of drain/sewer deviates left



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
 Survey abandoned - Remark: UNABLE TO PASS THIS POINT DUE TO SHARP TURN AND DROP IN PIPE - NOT SAFE TO DO SO			

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S8 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/1	Base Unit ELFEIYII63	Section Number 16

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 300mm Material Pitch fibre Category	Start Node MH S7 End Node MH S8 Total length 14.41 metres
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Scale 1:0.73 Direction Upstream

Start Node Ref:MH S7 I/L :mm Depth: 0.70mm					Photo	Type/Grade
Position	Code	Description				
0.00	MH	Start node type, manhole, reference MH S7			5778416	Comment / 0
0.00	WL	Water level 5% height/diameter			5778417	Comment / 0
						
6.53	DES	Settled deposits fine 5% cross-sectional area loss			5778418	Service / 2
9.82	WL	Water level 20% height/diameter			5778426	Comment / 0
12.99	SC	Dimensions of drain/sewer changes to 225mm			5778440	Comment / 0
12.99	LL	Line of drain/sewer deviates left			5778441	Comment / 0
13.65	OJL	Open joint large			5778444	Structural / 1
13.65	MCVC	Material of drain/sewer changes to vitrified clay at this point			5778448	Comment / 0
14.41	MHF	Finish node type, manhole, reference MH S8			5778449	Comment / 0
End Node Ref:MH S8 I/L :mm Depth: 0.88mm						

Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
 Start node type, manhole, reference MH S7			
 Water level 5% height/diameter			
 Settled deposits fine 5% cross-sectional area loss			
 Water level 20% height/diameter			
 Dimensions of drain/sewer changes to 225mm			
 Line of drain/sewer deviates left			

Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Open joint large



Material of drain/sewer changes to vitrified clay at this point



Finish node type, manhole, reference MH S8



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S9 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 4/0	Base Unit ELFEIYII63	Section Number 17

Road Aldi Moston Development,
Place Victoria Ave E,
Location Manchester

Division
District
Location Details

Purpose
Duty Surface water
Catchment

Shape/Size 225mm
Material Vitrified clay
Category

Start Node MH S8
End Node MH S9
Total length 36.49 metres

Scale 1:1.89
Direction Upstream

Start Node Ref:MH S8 | I/L :mm | Depth: 0.88mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S8	5778471	Comment / 0
0.00	WL	Water level 5% height/diameter	5778472	Comment / 0
1.88	JN	Junction at 9 o'clock, diameter 150mm	5778477	Comment / 0
2.03	DES	Settled deposits fine 20% cross-sectional area loss	5778478	Service / 4
4.75	JN	Junction at 9 o'clock, diameter 150mm	5778484	Comment / 0
36.49	MHF	Finish node type, manhole, reference MH S9	5778507	Comment / 0

End Node Ref:MH S9 | I/L :mm | Depth: 0.68mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
24/11/2021



Start node type, manhole, reference MH S8



Water level 5% height/diameter



Junction at 9 o'clock, diameter 150mm



Settled deposits fine 20% cross-sectional area loss



Junction at 9 o'clock, diameter 150mm



Finish node type, manhole, reference MH S9



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S7 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 18

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 225mm Material Vitrified clay Category	Start Node MH S7 End Node INTERCEPTOR Total length 2.11 metres
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Scale 1:0.10 Direction Downstream

Start Node Ref:MH S7 | I/L :mm | Depth: 0.70mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S7	5778734	Comment / 0
0.00	WL	Water level 5% height/diameter	5778735	Comment / 0
2.11	OSF	Finish node type, oil separator, reference INTERCEPTOR	5778737	Comment / 0

End Node Ref:INTERCEPTOR | I/L :mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference MH S7



Water level 5% height/diameter



Finish node type, oil separator, reference INTERCEPTOR



Layer Surveys Ltd
Francis House
Meadowcroft Business Park
Pope Lane
Preston
Lancashire
PR4 4BA

Start Node Ref:MH S10 | I/L :mm | Depth: 1.42mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
			
Start node type, manhole, reference MH S10		Water level 5% height/diameter	
			
Finish node type, oil separator, reference INTERCEPTOR			



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S10 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 20

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 225mm Material Vitrified clay Category	Start Node MH S10 End Node ATTENUATION TANK Total length 1.87 metres
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Scale 1:0.05 Direction Downstream

Start Node Ref:MH S10 I/L :mm Depth: 1.42mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S10	5779321	Comment / 0	
0.00	WL	Water level 10% height/diameter	5779322	Comment / 0	
0.94	WL	Water level 50% height/diameter	5779332	Comment / 0	
1.87	CPF	Finish node type, catchpit, reference ATTENUATION TANK	5779358	Comment / 0	
End Node Ref:ATTENUATION TANK I/L :mm Depth: 3.10mm					



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
			
Start node type, manhole, reference MH S10		Water level 10% height/diameter	
			
Water level 50% height/diameter		Finish node type, catchpit, reference ATTENUATION TANK	

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) UU 1304 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/2	Base Unit ELFEIYII63	Section Number 21

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 450mm Material Vitrified clay Category	Start Node UU 2301 End Node UU 1304 Total length 27.39 metres
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Scale 1:1.42 Direction Upstream

Start Node Ref: UU 2301 | I/L :mm | Depth: 3.40mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference UU 2301	5779720	Comment / 0
0.00	WL	Water level 10% height/diameter	5779721	Comment / 0
0.18	CL	Crack longitudinal at 12 o'clock	5779724	Structural / 2
0.66	DEE (S01)	Attached deposits, encrustation from 7 to 10 o'clock 5% cross-sectional area loss - Remark: THIS IS A CONTINUOUS DEFECT UPSTREAM TO UU 1304 , Start	5791839	Service / 2
13.00	JN	Junction at 10 o'clock, diameter 150mm	5779753	Comment / 0
27.39	DEE	Attached deposits, encrustation from 1 to 6 o'clock 20% cross-sectional area loss	5779765	Service / 3
27.39	MHF	Finish node type, manhole, reference UU 1304	5779769	Comment / 0

End Node Ref: UU 1304 | I/L :mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
24/11/2021



Start node type, manhole, reference UU 2301



Water level 10% height/diameter



Crack longitudinal at 12 o'clock



Attached deposits, encrustation from 7 to 10 o'clock 5% cross-sectional area loss - Remark: THIS IS A CONTINUOUS DEFECT UPSTREAM TO UU 1304 , Start



Junction at 10 o'clock, diameter 150mm



Attached deposits, encrustation from 1 to 6 o'clock 20% cross-sectional area loss



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
 Finish node type, manhole, reference UU 1304			



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH F8 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 22

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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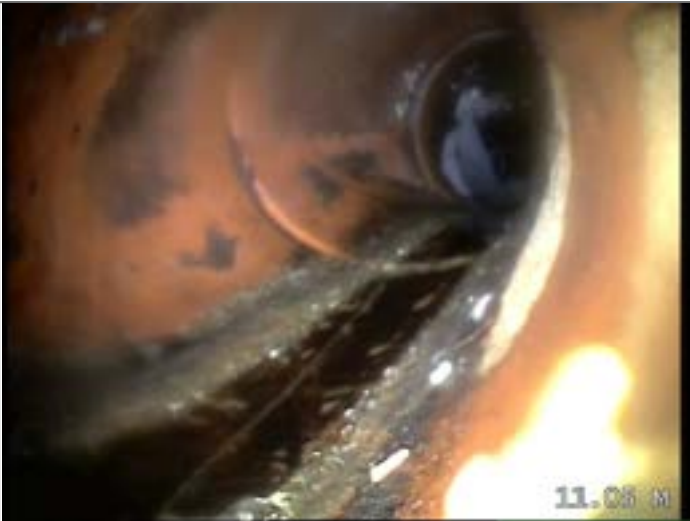
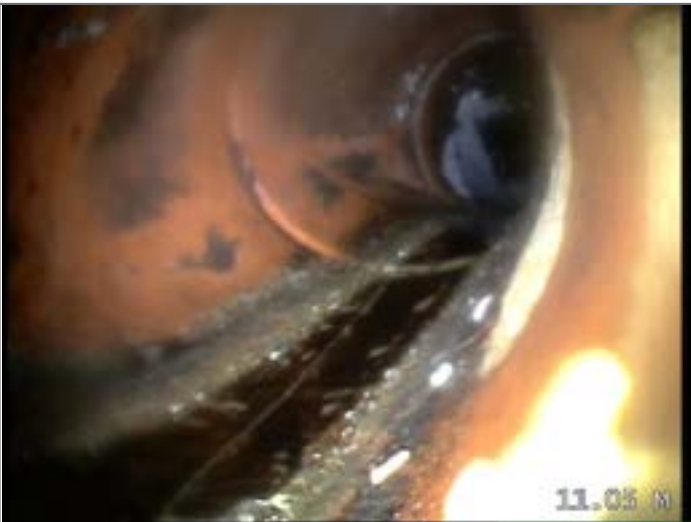
Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node UU 2301 End Node MH F8 Total length 17.95 metres
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Scale 1:0.89 Direction Upstream

Start Node Ref:UU 2301 I/L :mm Depth: 3.40mm				Photo	Type/Grade
Position	Code	Description			
	0.00	MH	Start node type, manhole, reference UU 2301	5779826	Comment / 0
	0.00	WL	Water level 5% height/diameter	5779827	Comment / 0
					
	6.83	DEF	Attached deposits, fouling from 5 to 7 o'clock 10% cross-sectional area loss	5779835	Service / 3
					
	11.05	LU	Line of drain/sewer deviates up	5779839	Comment / 0
	11.05	LR	Line of drain/sewer deviates right	5779842	Comment / 0
					
	17.95	MHF	Finish node type, manhole, reference MH F8	5779845	Comment / 0
End Node Ref:MH F8 I/L :mm Depth: 2.01mm					

End Node Ref:MH F8 | I/L :mm | Depth: 2.01mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 24/11/2021
 0.00 M		 0.00 M	
Start node type, manhole, reference UU 2301		Water level 5% height/diameter	
 6.83 M		 11.05 M	
Attached deposits, fouling from 5 to 7 o'clock 10% cross-sectional area loss		Line of drain/sewer deviates up	
 11.05 M		 17.90 M	
Line of drain/sewer deviates right		Finish node type, manhole, reference MH F8	



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S11 X	Date 24/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 23

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node UU 2301 End Node MH S11 Total length 1.74 metres
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Scale 1:0.05 Direction Upstream

Start Node Ref:UU 2301 | I/L :mm | Depth: 3.40mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference UU 2301	5779853	Comment / 0
0.00	WL	Water level 5% height/diameter	5779855	Comment / 0
1.74	MHF	Finish node type, manhole, reference MH S11	5779856	Comment / 0

End Node Ref:MH S11 | I/L :mm | Depth: 1.90mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, manhole, reference UU 2301



Water level 5% height/diameter



Finish node type, manhole, reference MH S11

Start Node Ref:MH S11 | I/L :mm | Depth: 1.90mm

End Node Ref:ATTENUATION TANK | I/L :mm | Depth: 3.10mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
24/11/2021



Start node type, catchpit, reference MH S11



Water level 10% height/diameter



Finish node type, catchpit, reference ATTENUATION TANK

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) IC 01 X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 25
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester		Division District Location Details		
Purpose Duty Combined Catchment		Shape/Size 150mm Material Polyvinyl chloride Category	Start Node IC 01 End Node MH 1303 A Total length 44.17 metres	

 Scale 1:2.31
 Direction Downstream

Start Node Ref:IC 01 | I/L :mm | Depth: 0.80mm

Position	Code	Description	Photo	Type/Grade
0.00	IC	Start node type, inspection chamber, reference IC S1	5782279	Comment / 0
0.00	WL	Water level 5% height/diameter	5782280	Comment / 0
2.62	JN	Junction at 3 o'clock, diameter 100mm	5782282	Comment / 0
5.48	JN	Junction at 3 o'clock, diameter 100mm	5782295	Comment / 0
6.00	JN	Junction at 2 o'clock, diameter 100mm	5782296	Comment / 0
9.86	JN	Junction at 2 o'clock, diameter 100mm	5782305	Comment / 0
14.12	JN	Junction at 1 o'clock, diameter 100mm	5782306	Comment / 0
17.55	JN	Junction at 2 o'clock, diameter 100mm	5782313	Comment / 0
21.17	JN	Junction at 1 o'clock, diameter 100mm	5782396	Comment / 0
22.40	JN	Junction at 1 o'clock, diameter 100mm	5782397	Comment / 0
27.12	JN	Junction at 2 o'clock, diameter 100mm	5782398	Comment / 0
30.00	CUS	Loss of vision, steam	5782406	Comment / 0
30.69	JN	Junction at 1 o'clock, diameter 100mm	5782407	Comment / 0
33.88	JN	Junction at 2 o'clock, diameter 100mm	5782421	Comment / 0
38.62	JN	Junction at 1 o'clock, diameter 100mm	5782429	Comment / 0
41.93	JN	Junction at 1 o'clock, diameter 100mm	5782430	Comment / 0
43.57	LD	Line of drain/sewer deviates down - Remark: BACK DROP	5782446	Comment / 0
44.17	MHF	Finish node type, manhole, reference IC S2	5782461	Comment / 0

End Node Ref:MH 1303 A | I/L :mm | Depth: 2.65mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Start node type, inspection chamber, reference IC S1



Water level 5% height/diameter



Junction at 3 o'clock, diameter 100mm



Junction at 3 o'clock, diameter 100mm



Junction at 2 o'clock, diameter 100mm



Junction at 2 o'clock, diameter 100mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 25/11/2021
			
Junction at 1 o'clock, diameter 100mm			
			
Junction at 2 o'clock, diameter 100mm			
			
Junction at 1 o'clock, diameter 100mm			
			
Junction at 1 o'clock, diameter 100mm			
			
Junction at 2 o'clock, diameter 100mm			
			
Loss of vision, steam			



Job Number
LAYERSERV0001064

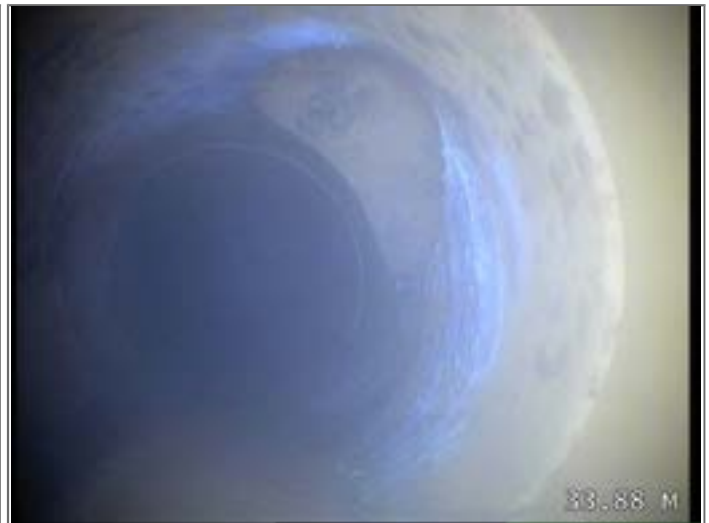
Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



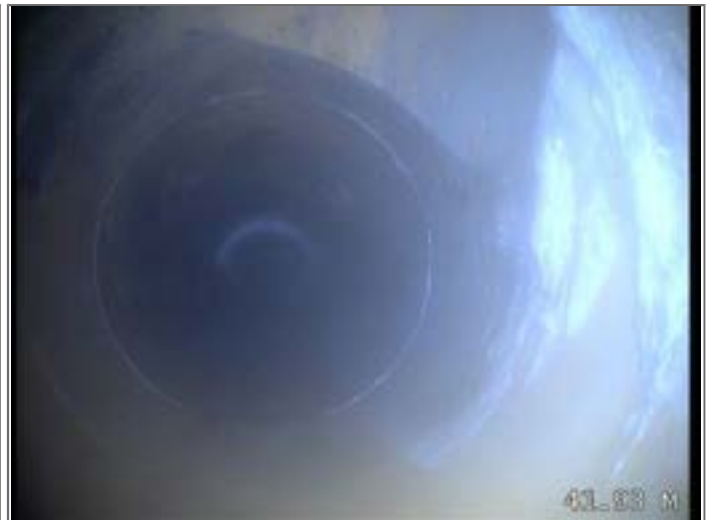
Junction at 1 o'clock, diameter 100mm



Junction at 2 o'clock, diameter 100mm



Junction at 1 o'clock, diameter 100mm



Junction at 1 o'clock, diameter 100mm



Line of drain/sewer deviates down - Remark: BACK DROP



Finish node type, manhole, reference IC S2

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) SOURCE X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 26

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 100mm Material Polyvinyl chloride Category	Start Node IC 01 End Node SOURCE Total length 10.38 metres
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Scale 1:0.52 Direction Upstream

Start Node Ref:IC 01 I/L :mm Depth: 0.80mm						
Position	Code	Description		Photo	Type/Grade	
0.00	IC	Start node type, inspection chamber, reference IC S1		5782553	Comment / 0	
	WL	Water level 5% height/diameter		5782555	Comment / 0	
1.48	LL	Line of drain/sewer deviates left		5782559	Comment / 0	
1.60	JN	Junction at 9 o'clock, diameter 100mm		5782566	Comment / 0	
1.93	DES	Settled deposits fine 5% cross-sectional area loss		5782567	Service / 2	
1.93	WL	Water level 10% height/diameter		5782568	Comment / 0	
9.81	LL	Line of drain/sewer deviates left		5782571	Comment / 0	
10.38	OCF	Finish node type, other special chamber, reference REST BEND		5782585	Comment / 0	

End Node Ref:SOURCE | I/L :mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Start node type, inspection chamber, reference IC S1



Water level 5% height/diameter



Line of drain/sewer deviates left



Junction at 9 o'clock, diameter 100mm



Settled deposits fine 5% cross-sectional area loss



Water level 10% height/diameter



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 25/11/2021
			
Line of drain/sewer deviates left		Finish node type, other special chamber, reference REST BEND	

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) SOURCE X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 27

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Polyvinyl chloride Category	Start Node IC S01 End Node SOURCE Total length 30.24 metres
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Scale 1:1.57 Direction Upstream

Start Node Ref: IC S01 I/L :mm Depth: 1.12mm					
Position	Code	Description	Photo	Type/Grade	
0.00	IC	Start node type, inspection chamber, reference IC S01	5782699	Comment / 0	
0.00	WL	Water level 5% height/diameter	5782700	Comment / 0	
5.69	JN	Junction at 1 o'clock, diameter 100mm	5782701	Comment / 0	
10.24	JN	Junction at 1 o'clock, diameter 100mm	5782702	Comment / 0	
14.14	JN	Junction at 1 o'clock, diameter 100mm	5782704	Comment / 0	
17.05	JN	Junction at 2 o'clock, diameter 100mm	5782715	Comment / 0	
18.00	DEX	Other settled deposits 10% cross-sectional area loss - Remark: DEBRIS	5782727	Service / 3	
25.62	DES	Settled deposits fine 10% cross-sectional area loss	5782728	Service / 3	
28.69	JN	Junction at 2 o'clock, diameter 100mm	5782776	Comment / 0	
29.81	JN	Junction at 10 o'clock, diameter 100mm	5783633	Comment / 0	
30.24	JN	Junction at 3 o'clock, diameter 100mm	5783644	Comment / 0	
30.24	OCF	Finish node type, other special chamber, reference REST BEND	5783645	Comment / 0	
End Node Ref: SOURCE I/L :mm					



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



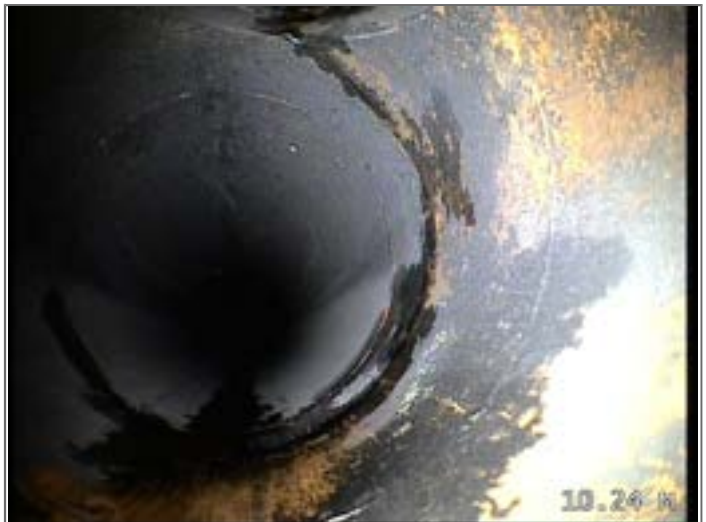
Start node type, inspection chamber, reference IC S01



Water level 5% height/diameter



Junction at 1 o'clock, diameter 100mm



Junction at 1 o'clock, diameter 100mm



Junction at 1 o'clock, diameter 100mm



Junction at 2 o'clock, diameter 100mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Other settled deposits 10% cross-sectional area loss - Remark: DEBRIS



Settled deposits fine 10% cross-sectional area loss



Junction at 2 o'clock, diameter 100mm



Junction at 10 o'clock, diameter 100mm



Junction at 3 o'clock, diameter 100mm



Finish node type, other special chamber, reference REST BEND



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) IC S01 X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 28

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Polyvinyl chloride Category	Start Node IC S01 End Node MH S12 Total length 11.55 metres
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Scale 1:0.58 Direction Downstream

Start Node Ref: IC S01 | I/L :mm | Depth: 1.12mm

Position	Code	Description	Photo	Type/Grade
0.00	IC	Start node type, inspection chamber, reference IC S01	5783682	Comment / 0
0.00	WL	Water level 5% height/diameter	5783683	Comment / 0
11.55	MHF	Finish node type, manhole, reference MH S12	5783685	Comment / 0

End Node Ref: MH S12 | I/L :mm | Depth: 1.97mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Start node type, inspection chamber, reference IC S01



Water level 5% height/diameter



Finish node type, manhole, reference MH S12

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) IC S02 X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 29

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Polyvinyl chloride Category	Start Node IC S01 End Node IC S02 Total length 16.48 metres
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Scale 1:0.84 Direction Upstream

Start Node Ref:IC S01 I/L :mm Depth: 1.12mm				Photo	Type/Grade
Position	Code	Description			
	0.00	IC	Start node type, inspection chamber, reference IC S01	5783727	Comment / 0
	0.00	WL	Water level 5% height/diameter	5783728	Comment / 0
					
3.69	JN	Junction at 3 o'clock, diameter 150mm		5783729	Comment / 0
10.57	JN	Junction at 11 o'clock, diameter 100mm		5783730	Comment / 0
16.48	ICF	Finish node type, inspection chamber, reference IC S02		5783731	Comment / 0
End Node Ref:IC S02 I/L :mm Depth: 0.96mm					



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Start node type, inspection chamber, reference IC S01



Water level 5% height/diameter



Junction at 3 o'clock, diameter 150mm



Junction at 11 o'clock, diameter 100mm



Finish node type, inspection chamber, reference IC S02



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) SOURCE X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 30
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 150mm Material Polyvinyl chloride Category		Start Node IC S02 End Node SOURCE Total length 18.19 metres	
Scale 1:0.94 Direction Upstream				

Start Node Ref:IC S02 I/L :mm					Photo	Type/Grade	
Position	Code	Description					
	0.00	IC	Start node type, inspection chamber, reference IC S02			5783757	Comment / 0
	0.00	WL	Water level 5% height/diameter			5783758	Comment / 0
1.40	JN	Junction at 9 o'clock, diameter 100mm			5783765	Comment / 0	
9.74	JN	Junction at 9 o'clock, diameter 100mm			5783772	Comment / 0	
16.10	DES	Settled deposits fine 5% cross-sectional area loss			5783781	Service / 2	
17.69	JN	Junction at 9 o'clock, diameter 100mm			5783784	Comment / 0	
18.19	OCF	Finish node type, other special chamber, reference HEAD OF LINE			5783801	Comment / 0	
End Node Ref:SOURCE I/L :mm							



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Start node type, inspection chamber, reference IC S02



Water level 5% height/diameter



Junction at 9 o'clock, diameter 100mm



Junction at 9 o'clock, diameter 100mm



Settled deposits fine 5% cross-sectional area loss



Junction at 9 o'clock, diameter 100mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 25/11/2021
 Finish node type, other special chamber, reference HEAD OF LINE			

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) SOURCE X	Date 25/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 31

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 225mm Material Vitrified clay Category	Start Node MH S12 End Node SOURCE Total length 20.16 metres
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Scale 1:1.05 Direction Upstream

Start Node Ref:MH S12 I/L :mm Depth: 1.97mm						
Position	Code	Description		Photo	Type/Grade	
	0.00	MH	Start node type, manhole, reference MH S12	5784021	Comment / 0	
	0.00	WL	Water level 10% height/diameter	5784024	Comment / 0	
						
5.74	JN	Junction at 10 o'clock, diameter 100mm		5784037	Comment / 0	
10.58	RF	Roots fine		5784043	Service / 2	
19.16	JN	Junction at 10 o'clock, diameter 100mm		5784061	Comment / 0	
20.16	SC	Dimensions of drain/sewer changes to 100mm		5784073	Comment / 0	
20.16	GYF	Finish node type, gully, reference UNABLE TO PASS DUE TO CHANGE OF PIPE SIZE - REST BEND IN VIEW A FEW METERS U/S		5784090	Comment / 0	
End Node Ref:SOURCE I/L :mm						

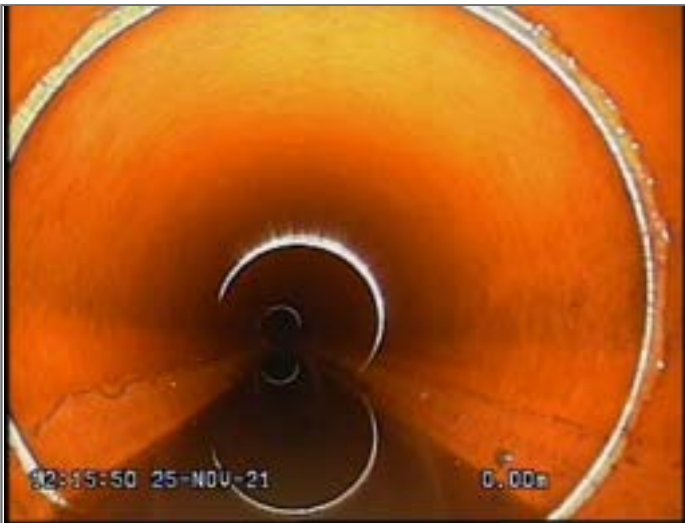


Job Number
LAYERSERV0001064

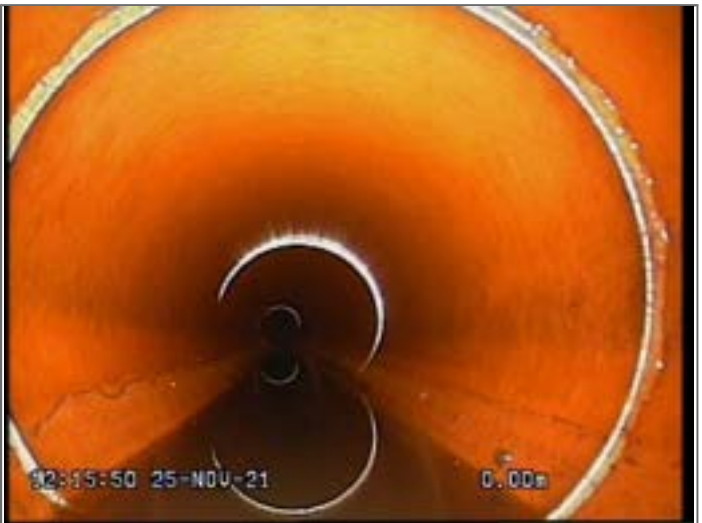
Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

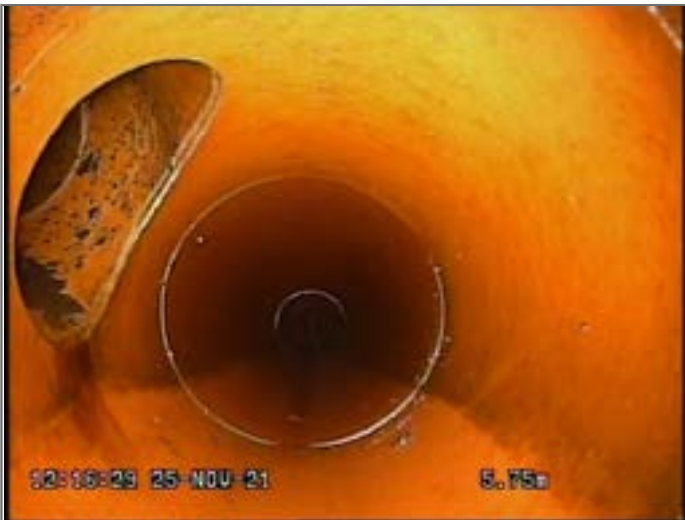
Date
25/11/2021



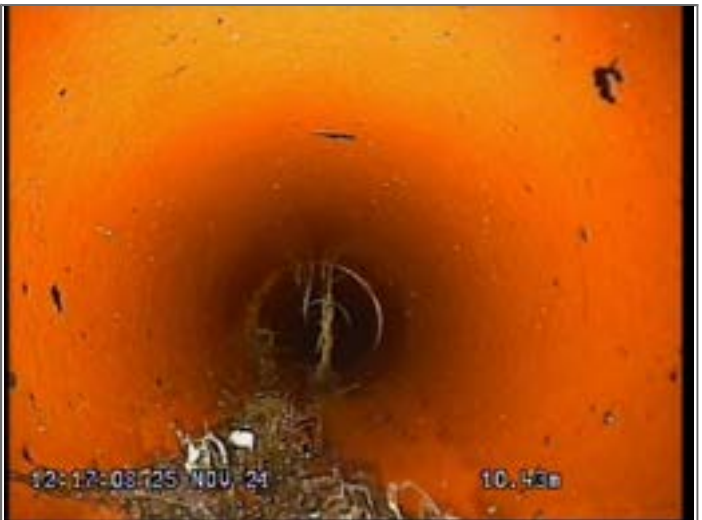
Start node type, manhole, reference MH S12



Water level 10% height/diameter



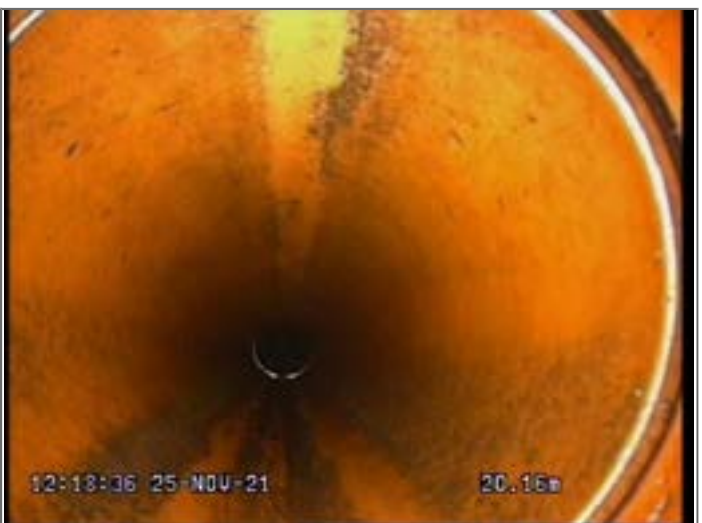
Junction at 10 o'clock, diameter 100mm



Roots fine



Junction at 10 o'clock, diameter 100mm



Dimensions of drain/sewer changes to 100mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 25/11/2021
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Finish node type, gully, reference UNABLE TO PASS DUE TO CHANGE OF PIPE SIZE - REST BEND IN VIEW A FEW METERS U/S

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) BRANCH B X	Date 25/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/1	Base Unit ELFEIYII63	Section Number 32
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester			Division District Location Details	
Purpose Duty Surface water Catchment		Shape/Size 150mm Material Vitrified clay Category		Start Node MH S12 End Node BRANCH B Total length 40.25 metres
Scale 1:2.10 Direction Upstream				

Start Node Ref:MH S12 I/L :mm Depth: 1.97mm						
Position	Code	Description		Photo	Type/Grade	
	0.00	MH	Start node type, manhole, reference MH S12	5784243	Comment / 0	
	0.00	WL	Water level 5% height/diameter	5784244	Comment / 0	
						
5.61	JDM	Joint displaced medium		5784265	Structural / 1	
9.36	JN	Junction at 1 o'clock, diameter 150mm		5784271	Comment / 0	
16.24	JN	Junction at 9 o'clock, diameter 150mm		5784284	Comment / 0	
36.23	JN	Junction at 1 o'clock, diameter 150mm		5784292	Comment / 0	
40.25	LU	Line of drain/sewer deviates up		5784305	Comment / 0	
40.25	GYF	Finish node type, gully, reference GULLY		5784315	Comment / 0	
End Node Ref:BRANCH B I/L :mm						

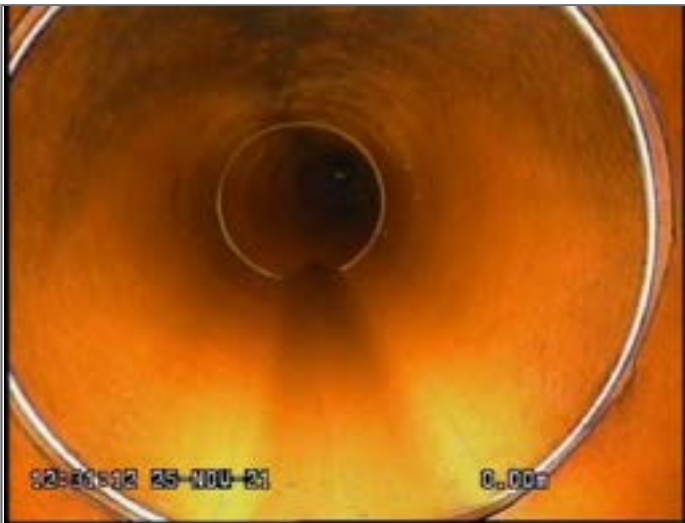


Job Number
LAYERSERV0001064

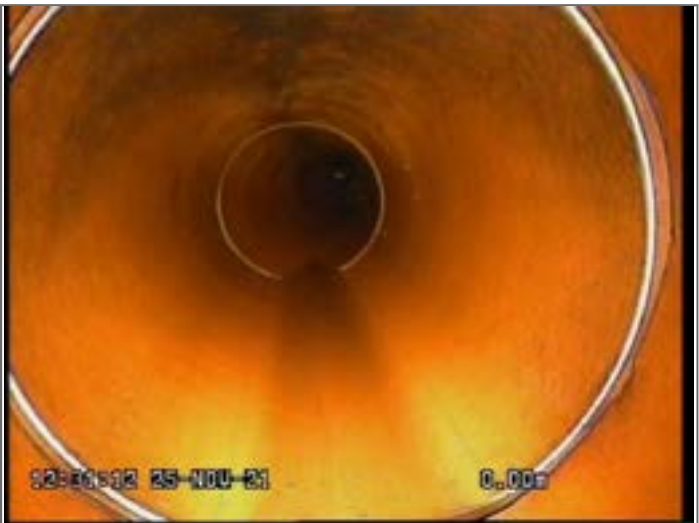
Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

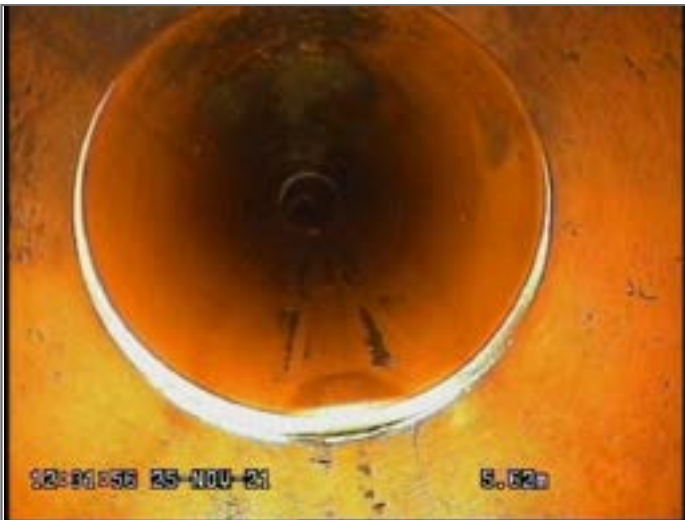
Date
25/11/2021



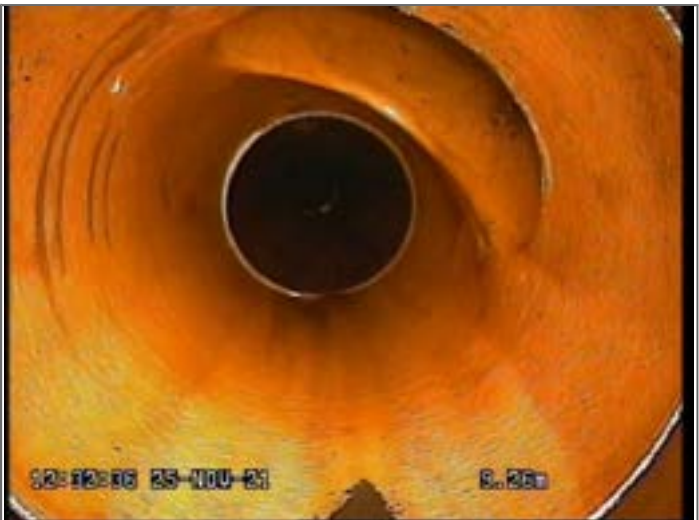
Start node type, manhole, reference MH S12



Water level 5% height/diameter



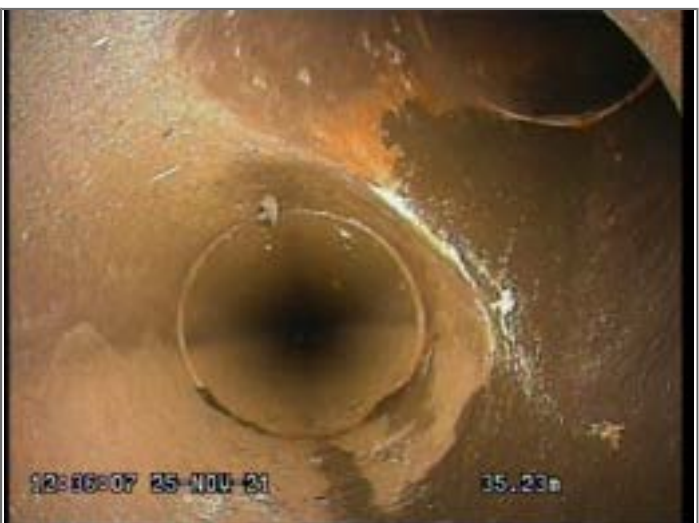
Joint displaced medium



Junction at 1 o'clock, diameter 150mm



Junction at 9 o'clock, diameter 150mm



Junction at 1 o'clock, diameter 150mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Line of drain/sewer deviates up



Finish node type, gully, reference GULLY



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) MH S12 X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 33

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 900mm Material Concrete Category	Start Node MH S12 End Node MH S13 Total length 38.84 metres
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Scale 1:1.99 Direction Downstream

Start Node Ref:MH S12 I/L :mm Depth: 1.97mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S12	5784550	Comment / 0	
0.00	WL	Water level 5% height/diameter	5784551	Comment / 0	
0.00	DES	Settled deposits fine 5% cross-sectional area loss	5784553	Service / 2	
8.00	CN	Connection other than junction at 9 o'clock, diameter 100mm	5784567	Comment / 0	
10.62	DES	Settled deposits fine 5% cross-sectional area loss	5784572	Service / 2	
38.84	MHF	Finish node type, manhole, reference MH S13	5784602	Comment / 0	
End Node Ref:MH S13 I/L :mm Depth: 2.05mm					



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
25/11/2021



Start node type, manhole, reference MH S12



Water level 5% height/diameter



Settled deposits fine 5% cross-sectional area loss



Connection other than junction at 9 o'clock, diameter 100mm



Settled deposits fine 5% cross-sectional area loss



Finish node type, manhole, reference MH S13

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S13 X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 34

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 900mm Material Concrete Category	Start Node MH S13 End Node MH S14 Total length 30 metres
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Scale 1:1.57 Direction Downstream

Start Node Ref:MH S13 | I/L :mm | Depth: 2.05mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S13	5784605	Comment / 0
0.00	WL	Water level 10% height/diameter	5784606	Comment / 0
0.00	DES	Settled deposits fine 10% cross-sectional area loss	5784617	Service / 3
0.90	CN	Connection other than junction at 10 o'clock, diameter 100mm	5784626	Comment / 0
9.14	CN	Connection other than junction at 10 o'clock, diameter 100mm	5784635	Comment / 0
11.40	DES (S01)	Settled deposits fine 10% cross-sectional area loss, Start	5784656	Service / 3
13.31	DES (F01)	Settled deposits fine 10% cross-sectional area loss, Finished	5784673	Service / 3
13.31	SA	Survey abandoned - Remark: UNABLE TO PASS DUE TO HIGH SILT DEPOSITS - CLEANING REQUIRED	5784689	Comment / 0

End Node Ref:MH S14 | I/L :mm | Depth: 2.10mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 25/11/2021
			
Start node type, manhole, reference MH S13			
			
Water level 10% height/diameter			
			
Settled deposits fine 10% cross-sectional area loss			
			
Connection other than junction at 10 o'clock, diameter 100mm			
			
Connection other than junction at 10 o'clock, diameter 100mm			
			
Settled deposits fine 10% cross-sectional area loss, Start			



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
25/11/2021



Settled deposits fine 10% cross-sectional area loss, Finished



Survey abandoned - Remark: UNABLE TO PASS DUE TO HIGH SILT DEPOSITS - CLEANING REQUIRED



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S9 X	Date 25/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 35

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S9A End Node MH S9 Total length 30 metres
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Scale 1:1.57 Direction Upstream

Start Node Ref:MH S9A | I/L :mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S9A	5785878	Comment / 0
0.00	WL	Water level 5% height/diameter	5785880	Comment / 0
0.02	DES	Settled deposits fine 10% cross-sectional area loss	5785883	Service / 3
25.14	DES	Settled deposits fine 10% cross-sectional area loss	5785884	Service / 3
25.14	SA	Survey abandoned - Remark: UNABLE TO PASS DUE TO HIGH SILT DEPOSITS	5785904	Comment / 0

End Node Ref:MH S9 | I/L :mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 25/11/2021
			
Start node type, manhole, reference MH S9A			
			
Water level 5% height/diameter			
			
Settled deposits fine 10% cross-sectional area loss			
			
Settled deposits fine 10% cross-sectional area loss			
			
Survey abandoned - Remark: UNABLE TO PASS DUE TO HIGH SILT DEPOSITS			

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) UU 0402 X	Date 26/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 36

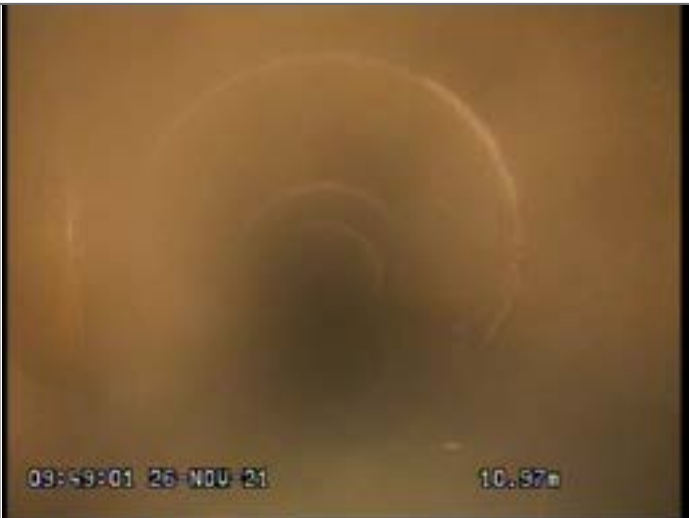
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 300mm Material Vitrified clay Category	Start Node UU 1303 End Node UU 0402 Total length 60 metres
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Scale 1:3.15 Direction Upstream

Start Node Ref:UU 1303 I/L :mm Depth: 3.00mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference UU 1303	5791821	Comment / 0	
0.00	WL	Water level 5% height/diameter	5791822	Comment / 0	
0.00	CUS	Loss of vision, steam	5791823	Comment / 0	
5.00	WL	Water level 10% height/diameter	5791824	Comment / 0	
10.97	JN	Junction at 9 o'clock, diameter 150mm	5791825	Comment / 0	
20.22	DEF	Attached deposits, fouling from 4 to 8 o'clock 15% cross-sectional area loss	5791826	Service / 3	
20.22	DER	Settled deposits coarse 15% cross-sectional area loss	5791827	Service / 3	
20.22	SA	Survey abandoned - Remark: OBSTRUCTION - UNABLE TO PASS DUE TO FOUL AND COARSE DEPOSITS	5791828	Comment / 0	
End Node Ref:UU 0402 I/L :mm					



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
	Start node type, manhole, reference UU 1303		Water level 5% height/diameter
	Loss of vision, steam		Water level 10% height/diameter
	Junction at 9 o'clock, diameter 150mm		Attached deposits, fouling from 4 to 8 o'clock 15% cross-sectional area loss



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Settled deposits coarse 15% cross-sectional area loss



Survey abandoned - Remark: OBSTRUCTION - UNABLE TO PASS DUE TO FOUL AND COARSE DEPOSITS

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) UU 1303 X	Date 26/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 4/2	Base Unit ELFEIYII63	Section Number 37
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester		Division District Location Details		
Purpose Duty Combined Catchment	Shape/Size 300mm Material Vitrified clay Category		Start Node UU 1303 End Node UU 1304 Total length 70 metres	

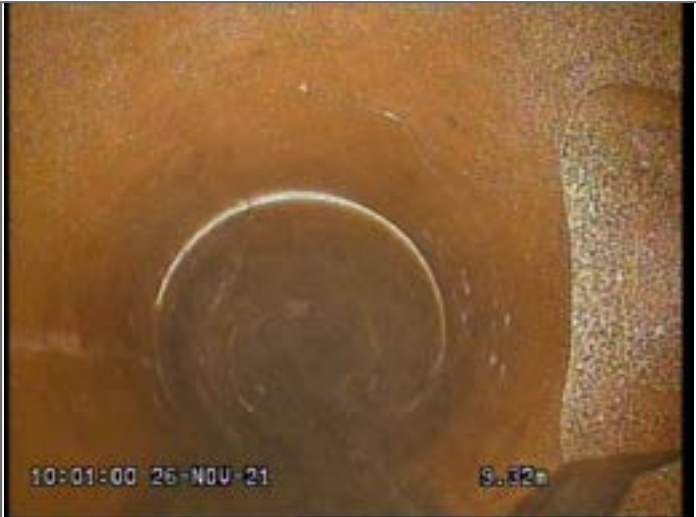
 Scale 1:3.67
 Direction Downstream

Start Node Ref:UU 1303 | I/L :mm | Depth: 3.00mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference UU 1303	5791829	Comment / 0
0.00	WL	Water level 5% height/diameter	5791830	Comment / 0
4.66	DEE	Attached deposits, encrustation from 9 to 7 o'clock 5% cross-sectional area loss - Remark: CONTINUOUS DEFECT DOWNSTREAM TO UU 1304 , Start	5791831	Service / 2
9.32	JN	Junction at 3 o'clock, diameter 150mm	5791832	Comment / 0
10.42	CL	Crack longitudinal at 11 o'clock	5791833	Structural / 2
19.47	DES	Settled deposits fine 10% cross-sectional area loss	5791834	Service / 3
31.70	JN	Junction at 3 o'clock, diameter 150mm	5791835	Comment / 0
51.17	WL	Water level 25% height/diameter	5791836	Comment / 0
54.20	DEF	Attached deposits, fouling from 5 to 7 o'clock 20% cross-sectional area loss	5791837	Service / 4
54.20	SA	Survey abandoned - Remark: OBSTRUCTION UNABLE TO PASS DUE TO ATTACHED DEPOSITS UNDER WATER	5791838	Comment / 0

End Node Ref:UU 1304 | I/L :mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
			
Start node type, manhole, reference UU 1303			
			
Water level 5% height/diameter			
			
Attached deposits, encrustation from 9 to 7 o'clock 5% cross-sectional area loss - Remark: CONTINUOUS DEFECT DOWNSTREAM TO UU 1304 , Start			
			
Junction at 3 o'clock, diameter 150mm			
			
Crack longitudinal at 11 o'clock			
			
Settled deposits fine 10% cross-sectional area loss			



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

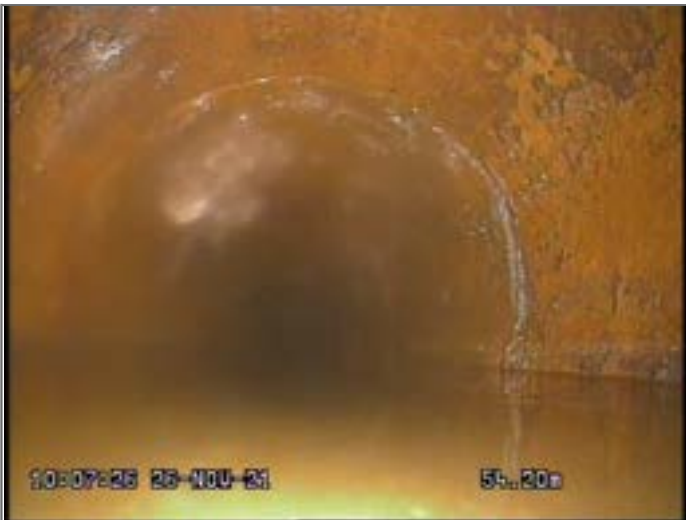
Date
26/11/2021



Junction at 3 o'clock, diameter 150mm



Water level 25% height/diameter



Attached deposits, fouling from 5 to 7 o'clock 20% cross-sectional area loss



Survey abandoned - Remark: OBSTRUCTION UNABLE TO PASS DUE TO ATTACHED DEPOSITS UNDER WATER



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH 1303 A X	Date 26/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 38

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Combined Catchment	Shape/Size 225mm Material Vitrified clay Category	Start Node UU 1303 End Node MH 1303 A Total length 5.09 metres
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Scale 1:0.26 Direction Upstream

Start Node Ref:UU 1303 | I/L :mm | Depth: 3.00mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference UU 1303	5791840	Comment / 0
0.00	WL	Water level 5% height/diameter	5791841	Comment / 0
5.09	MHF	Finish node type, manhole, reference IC 02	5791842	Comment / 0

End Node Ref:MH 1303 A | I/L :mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
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Start node type, manhole, reference UU 1303



Water level 5% height/diameter



Finish node type, manhole, reference IC 02



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) UU 0402 X	Date 26/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 39

Road Aldi Moston Development,
Place Victoria Ave E,
Location Manchester

Division
District
Location Details

Purpose
Duty Combined
Catchment

Shape/Size 300mm
Material Vitrified clay
Category

Start Node UU 0402
End Node UU 1303
Total length 80 metres

Scale 1:4.20
Direction Downstream

Start Node Ref:UU 0402 | I/L :mm | Depth: 2.75mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference UU 0402	5791847	Comment / 0
0.00	WL	Water level 5% height/diameter	5791848	Comment / 0
0.30	DEE	Attached deposits, encrustation from 8 to 4 o'clock 5% cross-sectional area loss	5791849	Service / 2
5.78	DEE (S01)	Attached deposits, encrustation from 12 to 12 o'clock 5% cross-sectional area loss, Start	5791850	Service / 2
5.78	DES	Settled deposits fine 5% cross-sectional area loss	5791851	Service / 2
11.09	JN	Junction at 3 o'clock, diameter 150mm	5791852	Comment / 0
33.77	DER	Settled deposits coarse 5% cross-sectional area loss	5791853	Service / 2
33.77	DEE (F01)	Attached deposits, encrustation from 12 to 12 o'clock 5% cross-sectional area loss, Finished	5791854	Service / 2
33.77	DES	Settled deposits fine 10% cross-sectional area loss	5791855	Service / 3
33.77	SA	Survey abandoned - Remark: UNABLE TO PASS DUE TO FOUL AND SILT DEPOSITS	5791856	Comment / 0

End Node Ref:UU 1303 | I/L :mm | Depth: 3.00mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
26/11/2021



Start node type, manhole, reference UU 0402



Water level 5% height/diameter



Attached deposits, encrustation from 8 to 4 o'clock 5% cross-sectional area loss



Attached deposits, encrustation from 12 to 12 o'clock 5% cross-sectional area loss, Start



Settled deposits fine 5% cross-sectional area loss



Junction at 3 o'clock, diameter 150mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
26/11/2021



Settled deposits coarse 5% cross-sectional area loss



Attached deposits, encrustation from 12 to 12 o'clock 5% cross-sectional area loss, Finished



Settled deposits fine 10% cross-sectional area loss



Survey abandoned - Remark: UNABLE TO PASS DUE TO FOUL AND SILT DEPOSITS



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH 1303 A X	Date 26/11/2021	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 40
Road Aldi Moston Development, Place Victoria Ave E, Location Manchester		Division District Location Details		
Purpose Duty Combined Catchment	Shape/Size 225mm Material Vitrified clay Category		Start Node MH 1303 A End Node SOURCE Total length 50 metres	
Scale 1:2.62 Direction Downstream				

Start Node Ref:MH 1303 A | I/L :mm | Depth: 2.65mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH 1303 A	5791857	Comment / 0
0.00	WL	Water level 5% height/diameter	5791858	Comment / 0
0.52	DEX	Other settled deposits 10% cross-sectional area loss - Remark: FOUL	5791859	Service / 3
1.29	LR	Line of drain/sewer deviates right	5791860	Comment / 0
32.95	SA	Survey abandoned - Remark: UNABLE TOP PASS DUE TO CABLE FLEX	5791861	Comment / 0

End Node Ref:SOURCE | I/L :mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

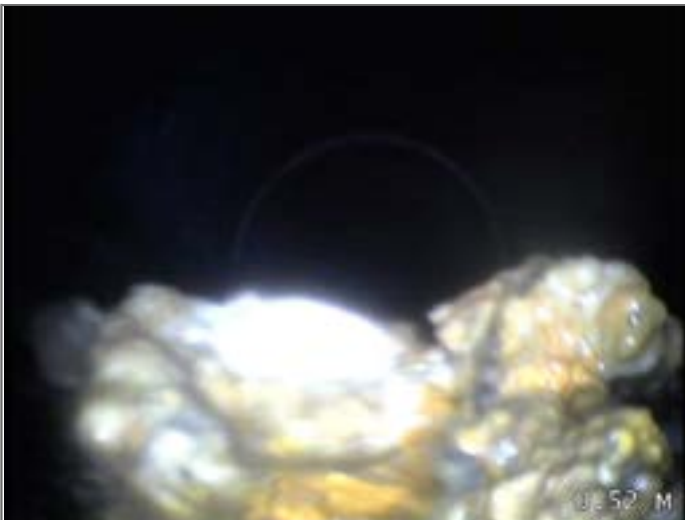
Date
26/11/2021



Start node type, manhole, reference MH 1303 A



Water level 5% height/diameter



Other settled deposits 10% cross-sectional area loss - Remark: FOUL



Line of drain/sewer deviates right



Survey abandoned - Remark: UNABLE TOP PASS DUE TO CABLE FLEX



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S3 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 41

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S3 End Node MH S4 Total length 23.29 metres
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Scale 1:1.21 Direction Downstream

Start Node Ref:MH S3 I/L :mm Depth: 1.52mm						
Position	Code	Description		Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S3		5791865	Comment / 0	
0.00	WL	Water level 5% height/diameter		5791866	Comment / 0	
2.40	JN	Junction at 2 o'clock, diameter 100mm		5791867	Comment / 0	
6.59	DEX	Other settled deposits 5% cross-sectional area loss - Remark: METAL OBJECT		5791868	Service / 2	
8.48	WL	Water level 10% height/diameter		5791869	Comment / 0	
21.78	JN	Junction at 1 o'clock, diameter 100mm		5791870	Comment / 0	
23.29	MHF	Finish node type, manhole, reference MH S4		5791871	Comment / 0	
End Node Ref:MH S4 I/L :mm Depth: 1.50mm						



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Start node type, manhole, reference MH S3



Water level 5% height/diameter



Junction at 2 o'clock, diameter 100mm



Other settled deposits 5% cross-sectional area loss - Remark: METAL OBJECT



Water level 10% height/diameter



Junction at 1 o'clock, diameter 100mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
 Finish node type, manhole, reference MH S4			



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S6 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/1	Base Unit ELFEIYII63	Section Number 42

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S6 End Node MH S5 Total length 17.19 metres
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Scale 1:0.89 Direction Downstream

Start Node Ref:MH S6 I/L :mm Depth: 1.10mm					Photo	Type/Grade
Position	Code	Description				
0.00	MH	Start node type, manhole, reference MH S6			5791874	Comment / 0
0.00	WL	Water level 5% height/diameter			5791875	Comment / 0
						
7.62	JN	Junction at 9 o'clock, diameter 100mm			5791876	Comment / 0
9.71	WL	Water level 10% height/diameter - Remark: DIP IN PIPE			5791877	Comment / 0
9.71	JN	Junction at 11 o'clock, diameter 100mm			5791878	Comment / 0
						
16.10	JDM	Joint displaced medium			5791879	Structural / 1
17.19	MHF	Finish node type, manhole, reference MH S5			5791880	Comment / 0
End Node Ref:MH S5 I/L :mm Depth: 1.47mm						

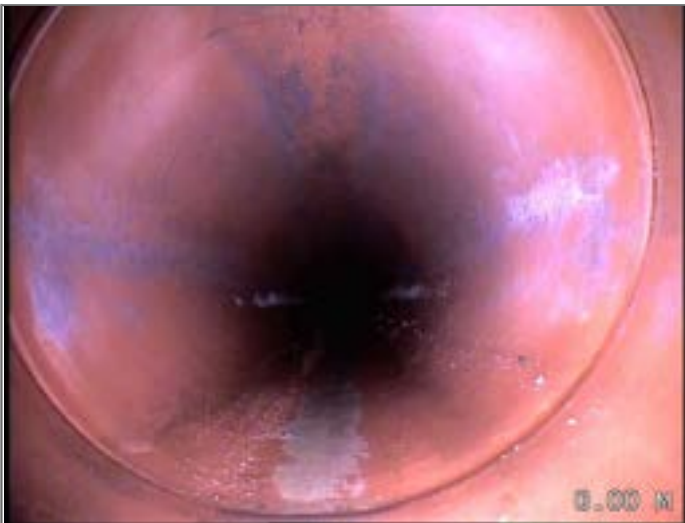


Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Start node type, manhole, reference MH S6



Water level 5% height/diameter



Junction at 9 o'clock, diameter 100mm



Water level 10% height/diameter - Remark: DIP IN PIPE



Junction at 11 o'clock, diameter 100mm



Joint displaced medium



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
 Finish node type, manhole, reference MH S5			

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference (PLR) MH S5 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 43

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S5 End Node MH S4 Total length 13.43 metres
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Scale 1:0.68 Direction Downstream

Start Node Ref: MH S5 I/L :mm Depth: 1.47mm						
Position	Code	Description		Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S5		5791881	Comment / 0	
0.00	WL	Water level 5% height/diameter		5791882	Comment / 0	
						
5.90	WL	Water level 10% height/diameter - Remark: DIP IN PIPE		5791883	Comment / 0	
5.90	JN	Junction at 2 o'clock, diameter 100mm		5791884	Comment / 0	
8.07	LL	Line of drain/sewer deviates left		5791885	Comment / 0	
11.40	LL	Line of drain/sewer deviates left		5791886	Comment / 0	
11.95	LR	Line of drain/sewer deviates right		5791887	Comment / 0	
13.43	MHF	Finish node type, manhole, reference MH S4		5791888	Comment / 0	
End Node Ref: MH S4 I/L :mm Depth: 1.50mm						



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Start node type, manhole, reference MH S5



Water level 5% height/diameter



Water level 10% height/diameter - Remark: DIP IN PIPE



Junction at 2 o'clock, diameter 100mm



Line of drain/sewer deviates left



Line of drain/sewer deviates left

Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Line of drain/sewer deviates right



Finish node type, manhole, reference MH S4

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S6 A X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 44

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 100mm Material Vitrified clay Category	Start Node MH S6 End Node MH S6 A Total length 13.76 metres
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Scale 1:0.68 Direction Upstream

Start Node Ref:MH S6 I/L :mm Depth: 1.10mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S6	5791889	Comment / 0	
0.00	WL	Water level 5% height/diameter	5791890	Comment / 0	
1.45	JN	Junction at 10 o'clock, diameter 100mm	5791891	Comment / 0	
7.81	JN	Junction at 3 o'clock, diameter 100mm	5791892	Comment / 0	
9.48	JN	Junction at 9 o'clock, diameter 100mm	5791893	Comment / 0	
10.10	DES	Settled deposits fine 5% cross-sectional area loss	5791894	Service / 2	
13.62	MHF	Finish node type, manhole, reference MH S6 A	5791896	Comment / 0	
End Node Ref:MH S6 A I/L :mm Depth: 0.77mm					

Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Start node type, manhole, reference MH S6



Water level 5% height/diameter



Junction at 10 o'clock, diameter 100mm



Junction at 3 o'clock, diameter 100mm



Junction at 9 o'clock, diameter 100mm



Settled deposits fine 5% cross-sectional area loss



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
 Finish node type, manhole, reference MH S6 A			

Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S2 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/0	Base Unit ELFEIYII63	Section Number 45

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 100mm Material Vitrified clay Category	Start Node MH S3 End Node MH S2 Total length 32.45 metres
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Scale 1:1.68 Direction Upstream

Start Node Ref:MH S3 I/L :mm Depth: 1.52mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S3	5791897	Comment / 0	
0.00	WL	Water level 5% height/diameter	5791898	Comment / 0	
0.79	DEZ	Other attached deposits from 8 to 4 o'clock 5% cross-sectional area loss - Remark SILT	5791899	Service / 2	
3.14	DES	Settled deposits fine 10% cross-sectional area loss	5791900	Service / 3	
4.48	JN	Junction at 2 o'clock, diameter 100mm	5791901	Comment / 0	
14.57	JN	Junction at 10 o'clock, diameter 100mm	5791902	Comment / 0	
15.07	JN	Junction at 10 o'clock, diameter 100mm	5791903	Comment / 0	
15.29	WL	Water level 10% height/diameter - Remark: DIP ON PIPE	5791904	Comment / 0	
25.57	JN	Junction at 9 o'clock, diameter 100mm	5791906	Comment / 0	
29.21	JN	Junction at 10 o'clock, diameter 100mm	5791907	Comment / 0	
32.45	MHF	Finish node type, manhole, reference MH S2	5791909	Comment / 0	
End Node Ref:MH S2 I/L :mm Depth: 1.17mm					



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



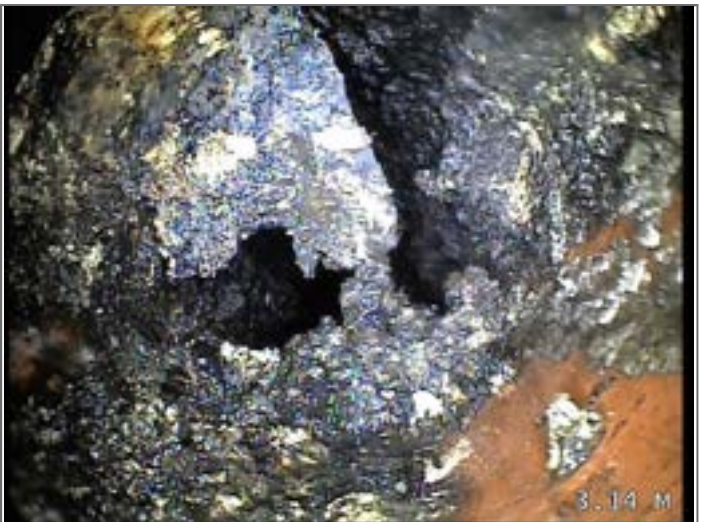
Start node type, manhole, reference MH S3



Water level 5% height/diameter



Other attached deposits from 8 to 4 o'clock 5% cross-sectional area loss -
Remark SILT



Settled deposits fine 10% cross-sectional area loss



Junction at 2 o'clock, diameter 100mm



Junction at 10 o'clock, diameter 100mm

Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Junction at 10 o'clock, diameter 100mm



Water level 10% height/diameter - Remark: DIP ON PIPE



Junction at 9 o'clock, diameter 100mm



Junction at 10 o'clock, diameter 100mm



Finish node type, manhole, reference MH S2



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S9A X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 2/0	Base Unit ELFEIYII63	Section Number 46

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S9A End Node MAIN CARRIER Total length 70 metres
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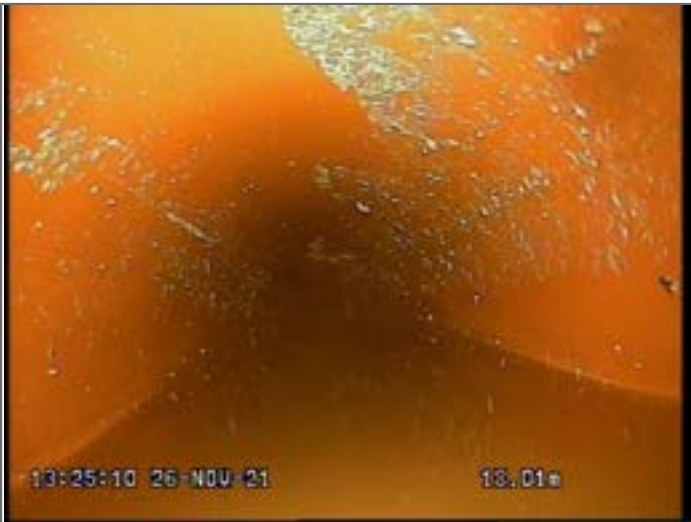
Scale 1:3.67 Direction Downstream

Start Node Ref:MH S9A | I/L :mm | Depth: 1.12mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S9A	5791911	Comment / 0
0.00	WL	Water level 5% height/diameter	5791912	Comment / 0
0.73	DES	Settled deposits fine 5% cross-sectional area loss	5791914	Service / 2
4.14	DES	Settled deposits fine 5% cross-sectional area loss	5791916	Service / 2
11.68	DER	Settled deposits coarse 5% cross-sectional area loss	5791917	Service / 2
18.01	WL	Water level 25% height/diameter - Remark: LINE HOLDING WATER	5791918	Comment / 0
20.43	CUW	Loss of vision, camera under water	5791919	Comment / 0
37.96	SA	Survey abandoned - Remark: LOSS OF VISION - NOT SAFE TO SURVEY DUE TO UNKNOWN OBSTACLES AND OUTFALLS	5791921	Comment / 0

End Node Ref:MAIN CARRIER | I/L :mm



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
			
Start node type, manhole, reference MH S9A	Water level 5% height/diameter		
			
Settled deposits fine 5% cross-sectional area loss	Settled deposits fine 5% cross-sectional area loss		
			
Settled deposits coarse 5% cross-sectional area loss	Water level 25% height/diameter - Remark: LINE HOLDING WATER		



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
			
Loss of vision, camera under water		Survey abandoned - Remark: LOSS OF VISION - NOT SAFE TO SURVEY DUE TO UNKNOWN OBSTACLES AND OUTFALLS	



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S15 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 3/3	Base Unit ELFEIYII63	Section Number 47

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
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Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category	Start Node MH S15 End Node MH S16 Total length 30.07 metres
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Scale 1:1.57 Direction Downstream

Start Node Ref:MH S15 I/L :mm Depth: 0.78mm					
Position	Code	Description	Photo	Type/Grade	
0.00	MH	Start node type, manhole, reference MH S15	5791922	Comment / 0	
0.00	WL	Water level 5% height/diameter	5791923	Comment / 0	
1.69	CS	Crack spiral from 1 to 9 o'clock	5791924	Structural / 3	
4.14	CC	Crack circumferential from 12 to 12 o'clock	5791925	Structural / 2	
23.90	FC	Fracture circumferential from 12 to 12 o'clock	5791926	Structural / 3	
28.36	DEX	Other settled deposits 10% cross-sectional area loss - Remark: DEBRIS	5791927	Service / 3	
28.69	JN	Junction at 11 o'clock, diameter 150mm	5791928	Comment / 0	
28.93	LR	Line of drain/sewer deviates right	5791929	Comment / 0	
30.07	MHF	Finish node type, manhole, reference MH S16	5791930	Comment / 0	
End Node Ref:MH S16 I/L :mm Depth: 1.40mm					



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Start node type, manhole, reference MH S15



Water level 5% height/diameter



Crack spiral from 1 to 9 o'clock



Crack circumferential from 12 to 12 o'clock



Fracture circumferential from 12 to 12 o'clock



Other settled deposits 10% cross-sectional area loss - Remark: DEBRIS



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYII63

Date
26/11/2021



Junction at 11 o'clock, diameter 150mm



Line of drain/sewer deviates right



Finish node type, manhole, reference MH S16



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S4 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/1	Base Unit ELFEIYII63	Section Number 48

Road Aldi Moston Development,
Place Victoria Ave E,
Location Manchester

Division
District
Location Details

Purpose
Duty Surface water
Catchment

Shape/Size 150mm
Material Vitrified clay
Category

Start Node MH S4
End Node ATTENUATION TANK
Total length 6.81 metres

Scale 1:0.31
Direction Downstream

Start Node Ref:MH S4 | I/L :mm | Depth: 1.50mm

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference MH S4	5791931	Comment / 0
0.00	WL	Water level 50% height/diameter	5791932	Comment / 0
0.00	CUW	Loss of vision, camera under water - Remark: HOLDING WATER DIP IN PIPE	5791933	Comment / 0
6.62	JDM	Joint displaced medium	5791934	Structural / 1
6.81	CPF	Finish node type, catchpit, reference ATTENUATION TANK	5791935	Comment / 0

End Node Ref:ATTENUATION TANK | I/L :mm | Depth: 3.10mm



Job Number
LAYERSERV0001064

Surveyed by (Operator)
CHRIS LUCOCK

Base Unit
ELFEIYI63

Date
26/11/2021



Start node type, manhole, reference MH S4



Water level 50% height/diameter



Loss of vision, camera under water - Remark: HOLDING WATER DIP IN PIPE



Joint displaced medium



Finish node type, catchpit, reference ATTENUATION TANK



Surveyed by (Operator) CHRIS LUCOCK	Job Number LAYERSERV0001064	Pipe Length Reference(PLR) MH S16 X	Date 26/11/2021	Pre Cleaned HPWJ to clean prior to survey
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit ELFEIYII63	Section Number 49

Road Aldi Moston Development, Place Victoria Ave E, Location Manchester	Division District Location Details
---	--

Purpose Duty Surface water Catchment	Shape/Size 225mm Material Vitrified clay Category	Start Node MH S16 End Node MH S13 Total length 0 metres
--	---	---

Scale 1:0.00 Direction Downstream

Start Node Ref:MH S16 I/L :mm Depth: 1.40mm					
	Position	Code	Description	Photo	Type/Grade
	0.00	MH	Start node type, manhole, reference MH S16	5791936	Comment / 0
	0.00	WL	Water level 5% height/diameter	5791937	Comment / 0
	0.00	MHF	Finish node type, manhole, reference MH S13	5791938	Comment / 0
End Node Ref:MH S13 I/L :mm Depth: 2.05mm					



Job Number LAYERSERV0001064	Surveyed by (Operator) CHRIS LUCOCK	Base Unit ELFEIYII63	Date 26/11/2021
--------------------------------	--	-------------------------	--------------------



Start node type, manhole, reference MH S16



Water level 5% height/diameter



Finish node type, manhole, reference MH S13



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Aldridge WS9 8PT

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Layer Surveys Ltd Manhole Survey Card

Card No	01	Map No	
Catchment		MH No	MH S1
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
---	-----------------------------	---	--	--

COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.06		C	100	X	VC			
	B	1.07		C	100	X	VC			
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.08		C	100	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	900 mm	Evidence of Surcharge	
Shaft at narrowest	mm	Shaft Depth (from CL)	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☐	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐

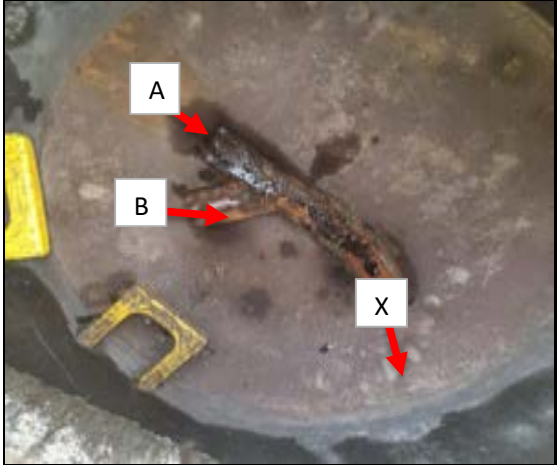
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	02	Map No	
Catchment		MH No	MH S2
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.15		C	100	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.17		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670	mm	Chamber Dimension	1050	mm	Evidence of Surcharge	
Shaft at narrowest		mm	Shaft Depth (from CL)		mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ 2 No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

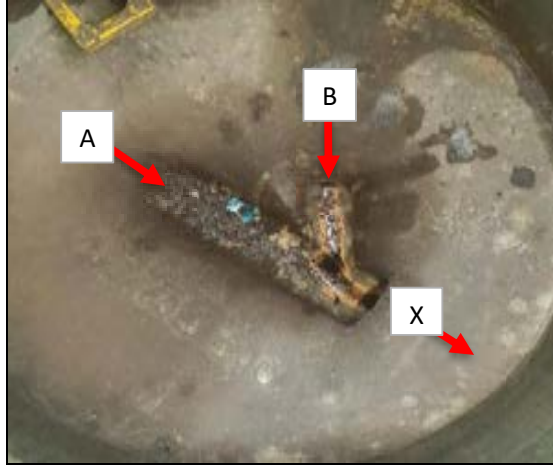
	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☐	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐
Depth of Flow	mm	Depth of Silt	mm	Height of Surcharge from CL	mm	

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	03	Map No	
Catchment		MH No	MH F1
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ F	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square	☐ Rectangle	☐ Triangle	☐ Dbl Triangle	☐ Circular	☐ Oval	☐ Other	☐ Multiple	☐ Hinged	☐ Lockable
Cover Level		m	H / M / L Cover Duty	★ H	Initials	JP			

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.50		C	Height	Width	VC			
	B	1.45		C	150	X	VC			
	C	1.45		C	100	X	VC			
	D	1.45		C	150	X	VC			
	E					X				
	F					X				

Outgoing Pipes

X	1.52		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670	mm	Chamber Dimension	1050	mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650	mm	Shaft Depth (from CL)	480	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete	☐ In Situ Concrete	☐ Brick	☐ GRP	☐ Arch	☐ Corbel	☐ Taper	☐ Side Entry
☒ Reducing Slab	☐ Segments	☐ No. of Landings	☐ No. of Steps	☐ No. of Ladders			
☐ 3 No. of Regulating Brick Courses							

CONDITION INFORMATION (specific in remark)

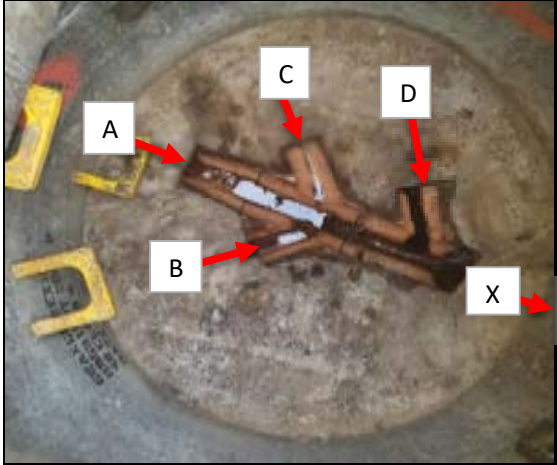
OK	☒ Cover	☒ Shaft	☒ Irons / Ladders	☒ Chamber	☒ Benching	☒ Channel	
Needs attention	☐	☐	☐	☐	☐	☐	
Urgent attention	☐	☐	☐	☐	☐	☐	
Depth of Flow		mm	Depth of Silt		mm	Height of Surcharge from CL	

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	04	Map No	
Catchment		MH No	MH F3
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ C Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level		m	H / M / L Cover Duty	★ H	Initials	JP
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PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.57		C	150	X	VC			
	B	1.53		C	100	X	VC			
	C	1.53		C	100	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.58		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670	mm	Chamber Dimension	1050	mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650	mm	Shaft Depth (from CL)	480	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete	☐ In Situ Concrete	☐ Brick	☐ GRP	☐ Arch	☐ Corbel	☐ Taper	☐ Side Entry
☒ Reducing Slab	☐ Segments	☐ No. of Landings	3 No. Steps	☐ No. of Ladders			
3 No. of Regulating Brick Courses							

CONDITION INFORMATION (specific in remark)

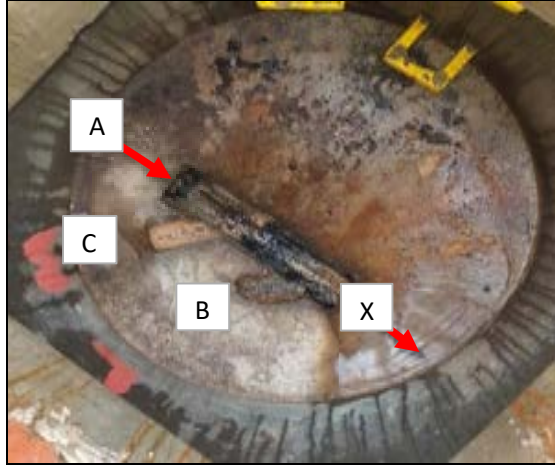
OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		
Urgent attention	☐		☐		☐		☐		☐		☐		
Depth of Flow		mm	Depth of Silt		mm	Height of Surcharge from CL		mm					

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	05	Map No	
Catchment		MH No	MH F4
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ C Function	★ MH MH Type	24/11/2021 Date of Survey
---	-----------------------------	--	--	--

COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.61		C	150	X	VC			
	B	1.54		C	100	X	VC			
	C	1.54		C	100	X	VC			
	D	1.54		C	100	X	VC			
	E					X				
	F					X				

Outgoing Pipes

X	1.62		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	1050 mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650 mm	Shaft Depth (from CL)	520 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☐
Needs attention	☐		☐		☐		☐		☐		☐	☒	
Urgent attention	☐		☐		☐		☐		☐		☐	☐	

Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

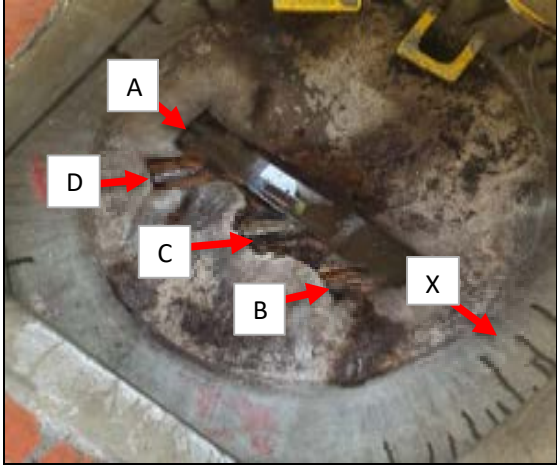
REMARKS

CHANNEL HOLDING FOUL DEPOSITS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	06	Map No	
Catchment		MH No	MH S3
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.51		C	150	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.52		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	1050 mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650 mm	Shaft Depth (from CL)	700 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐

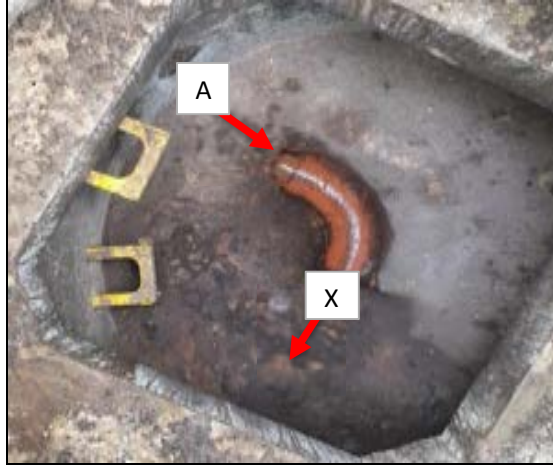
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	07	Map No	
Catchment		MH No	MH F5
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ F	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.89		C	150	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.90		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	1050 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	560 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ 4 No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐
Depth of Flow	mm	Depth of Silt	mm	Height of Surcharge from CL	mm	

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	08	Map No	
Catchment		MH No	MH F7
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ C	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.98		C	150	X	VC			
	B	1.96		C	100	X	VC		100	1.19
	C	1.96		C	100	X	VC		100.00	1.19
	D	1.96		C	100	X	VC		100.00	1.19
	E	1.96		C	100	X	VC		100.00	1.19
	F					X				

Outgoing Pipes

X	1.99		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	1200 mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650 mm	Shaft Depth (from CL)	390 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 5 No. Steps
 ☐ No. of Ladders

1 No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

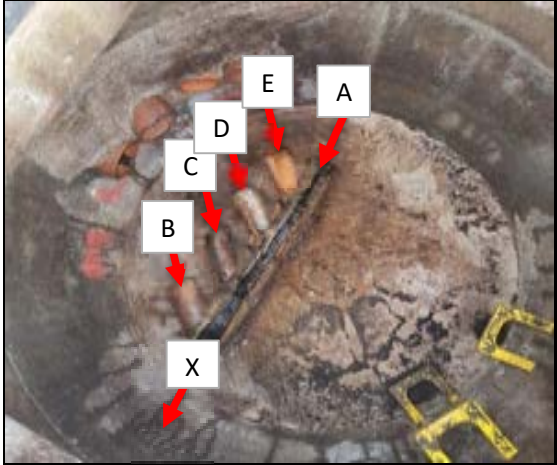
	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐
Depth of Flow	mm	Depth of Silt	mm	Height of Surcharge from CL	mm	

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	09	Map No	
Catchment		MH No	MH F8
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ C Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.00		C	150	X	VC			
	B	1.99		C	100	X	VC		100	1.14
	C	1.99		C	100	X	VC		100.00	1.14
	D	1.99		C	100	X	VC		100.00	1.14
	E					X				
	F					X				

Outgoing Pipes

X	2.01		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	1200 mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650 mm	Shaft Depth (from CL)	450 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

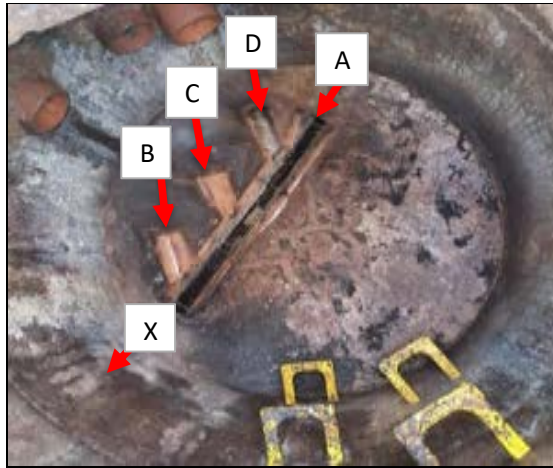
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	10	Map No	
Catchment		MH No	MH S4
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.49		C	150	X	VC			
	B	1.48		C	100	X	VC			
	C	1.49		C	150	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.50		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670	mm	Chamber Dimension	1200	mm	Evidence of Surcharge	
Shaft at narrowest	650 X 650	mm	Shaft Depth (from CL)	500	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☒ 3 No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☐	☐	☐	☐
Needs attention	☐	☐	☐	☐	☒	☐
Urgent attention	☐	☐	☐	☒	☐	☒
Depth of Flow		Depth of Silt	120	mm	Height of Surcharge from CL	

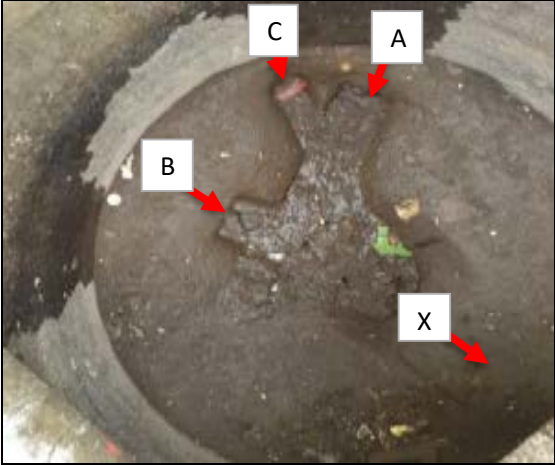
REMARKS

HIGH SILT DEPOSITS IN CHAMBER - JET VAC REQUIRED

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	11	Map No	
Catchment		MH No	MH S7
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☒ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	0.64		C	300	X	PF			
	B	0.62		C	150	X	VC			
	C	0.64		C	150	X	VC			
	D	0.64		C	150	X	VC			
	E					X				
	F					X				

Outgoing Pipes

X	0.70		C	225	X		VC			
Y					X					

Cover Opening at narrowest	610 X 610 mm	Chamber Dimension	1100 X 650 mm	Evidence of Surcharge	
Shaft at narrowest	mm	Shaft Depth (from CL)	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☐	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

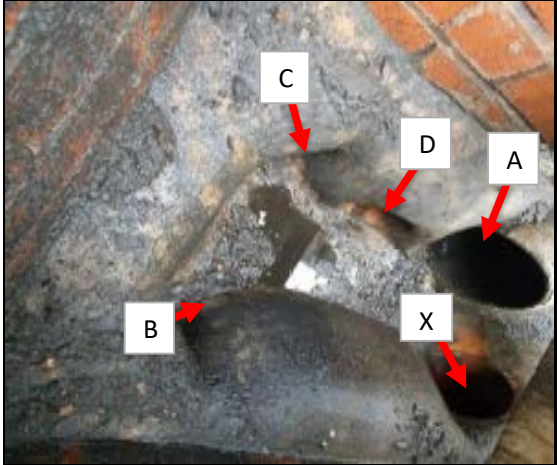
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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SEE THE COMPLETE PICTURE

Layer Surveys Ltd Manhole Survey Card

Card No	12	Map No	
Catchment		MH No	MH S10
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.41		C	225	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.42		C	225	X		VC			
Y					X					

Cover Opening at narrowest	610 X 610 mm	Chamber Dimension	1200 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	480 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

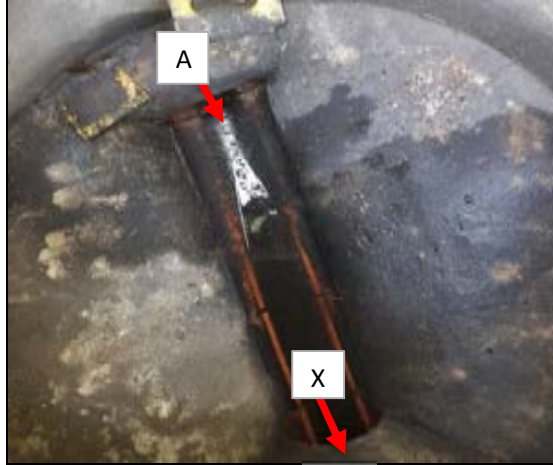
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	13	Map No	
Catchment		MH No	UU 2301
Location	Aldi Moston		
Town			

★ PU Status	Syphon	★ C Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	3.39		C	450	X	VC			
	B	3.00		C	150	X	VC			
	C	3.00		C	150	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	3.40		C	450	X		VC			
Y					X					

Cover Opening at narrowest	610 X 610 mm	Chamber Dimension	1200 mm	Evidence of Surcharge	
Shaft at narrowest	mm	Shaft Depth (from CL)	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☐	Shaft	☐	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

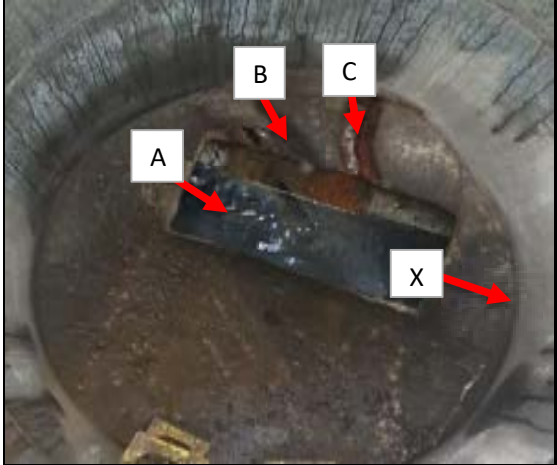
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	14	Map No	
Catchment		MH No	MH S11
Location	Aldi Moston		
Town			

★ PU Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.89		C	225	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	2.90		C	150	X		VC			
Y					X					

Cover Opening at narrowest	610 X 610 mm	Chamber Dimension	1200 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	450 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

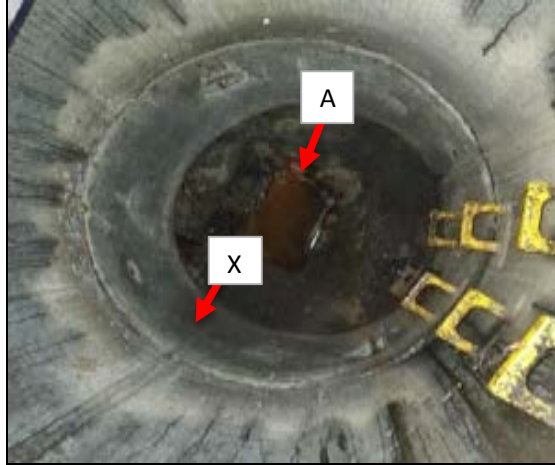
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	15	Map No	
Catchment		MH No	MH S9
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☒ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	0.65		C	150	X	VC			
	B	0.66		C	150	X	VC			
	C	0.66		C	150	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	0.68		C	225	X		VC			
Y					X					

Cover Opening at narrowest	700 x 1200 mm	Chamber Dimension	700 x 1200 mm	Evidence of Surcharge	
Shaft at narrowest	mm	Shaft Depth (from CL)	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☐ Pre Cast Concrete
 ☐ In Situ Concrete
 ☒ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Shaft	☐	Irons / Ladders	☐	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐

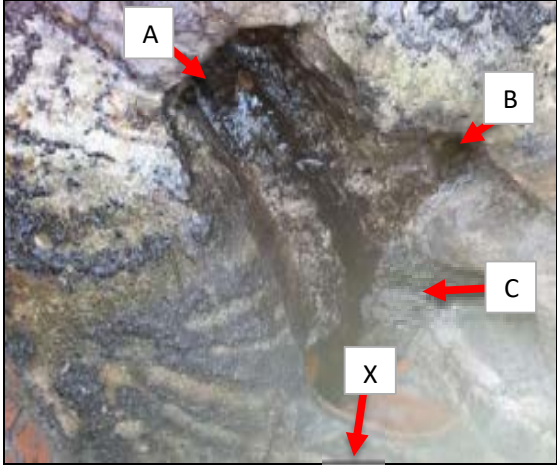
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	16	Map No	
Catchment		MH No	MH S8
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☒ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	0.87		C	225	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	0.88		C	225	X	VC				
Y					X					

Cover Opening at narrowest	700 x 1200	mm	Chamber Dimension	700 x 1200	mm	Evidence of Surcharge	
Shaft at narrowest		mm	Shaft Depth (from CL)		mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☐ Pre Cast Concrete
 ☐ In Situ Concrete
 ☒ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☐	☐	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐

Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	17	Map No	
Catchment		MH No	MH S12
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.96		C	225	X	VC			
	B	1.96		C	150	X	VC			
	C	1.45		C	150	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.97		C	900	X		CON			
Y					X					

Cover Opening at narrowest	610 X 610 mm	Chamber Dimension	1800 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	420 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ 2 No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐

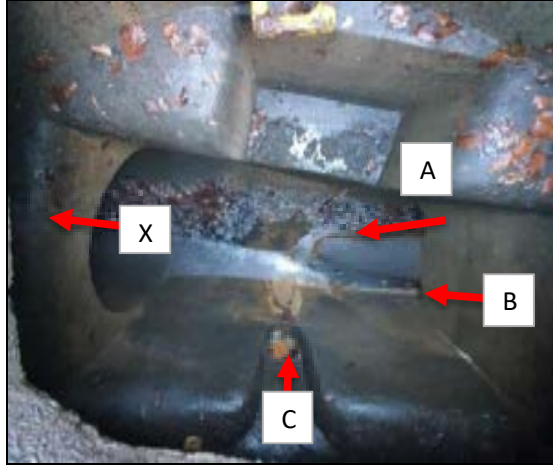
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	18	Map No	
Catchment		MH No	MH S5
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.44		C	150	X	VC			
	B	1.40		C	100	X	VC			
	C	1.40		C	100	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.47		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670 mm	Chamber Dimension	1050 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	380 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

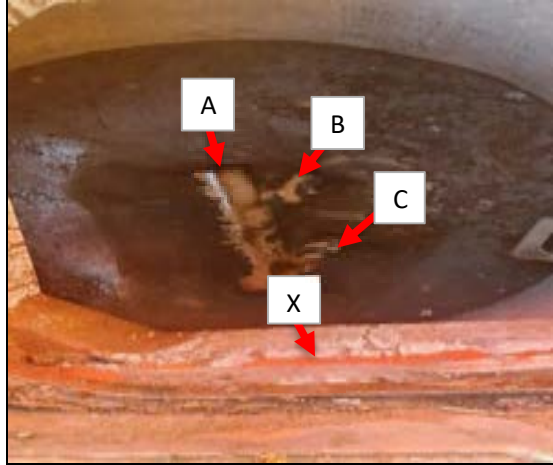
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	19	Map No	
Catchment		MH No	MH S6
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.08		C	150	X	VC			
	B	1.08		C	100	X	VC			
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.10		C	150	X		VC			
Y					X					

Cover Opening at narrowest	670 X 670	mm	Chamber Dimension	1050	mm	Evidence of Surcharge	
Shaft at narrowest	620 X 400	mm	Shaft Depth (from CL)	350	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☒	☒	☒	☐
Needs attention	☐	☐	☐	☐	☐	☒
Urgent attention	☐	☐	☐	☐	☐	☐

Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

RUBBLE IN CHAMBER

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	20	Map No	
Catchment		MH No	MH S6A
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☐ Square	☒ Rectangle	☐ Triangle	☐ Dbl Triangle	☐ Circular	☐ Oval	☐ Other	☐ Multiple	☐ Hinged	☐ Lockable
Cover Level		m	H / M / L Cover Duty	★ H	Initials	JP			

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	0.75		C	100	X	VC			
	B	0.73		C	100	X	VC			
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	0.77		C	100	X	VC			
Y					X				

Cover Opening at narrowest	820 X 670	mm	Chamber Dimension	1050	mm	Evidence of Surcharge	
Shaft at narrowest	470 X 580	mm	Shaft Depth (from CL)	130	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete	☐ In Situ Concrete	☐ Brick	☐ GRP	☐ Arch	☐ Corbel	☐ Taper	☐ Side Entry
☒ Reducing Slab	☐ Segments	☐ No. of Landings	☐ No. Steps	☐ No. of Ladders			
☐ 5 No. of Regulating Brick Courses							

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel	
OK	☒	☒	☐	☒	☒	☐	
Needs attention	☐	☐	☐	☐	☐	☒	
Urgent attention	☐	☐	☐	☐	☐	☐	
Depth of Flow		mm	Depth of Silt		mm	Height of Surcharge from CL	

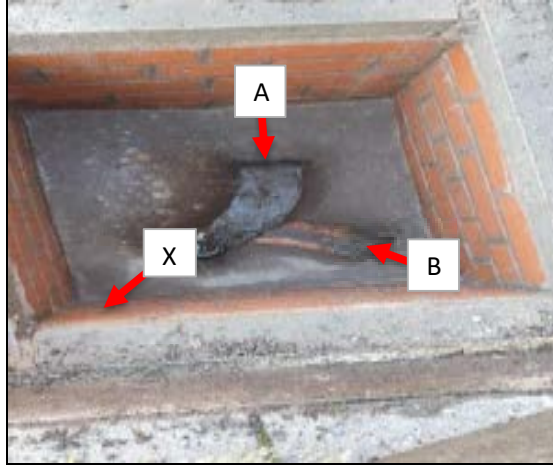
REMARKS

HIGH SILT DEPOSITS IN CHANNEL

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	21	Map No	
Catchment		MH No	UU 1303
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ C Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☐ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☒ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.99		C	300	X	VC			
	B	2.65		C	225	X	VC			
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	3.00		C	300	X		VC			
Y					X					

Cover Opening at narrowest	610 x 610 mm	Chamber Dimension	1400 x 800 mm	Evidence of Surcharge	
Shaft at narrowest	600 x 600 mm	Shaft Depth (from CL)	1100 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☐ Pre Cast Concrete
 ☐ In Situ Concrete
 ☒ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	22	Map No	
Catchment		MH No	UU 0402
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ C Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level		m	H / M / L Cover Duty	★ H	Initials	JP
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PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.74		C	300	X	VC			
	B	2.64		C	300	X	VC		300	1.71
	C	2.64		C	150	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	2.75		C	300	X		VC			
Y					X					

Cover Opening at narrowest	610 x 610	mm	Chamber Dimension	900 X 1300	mm	Evidence of Surcharge	
Shaft at narrowest	500.00	mm	Shaft Depth (from CL)	300	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☐ Pre Cast Concrete	☐ In Situ Concrete	☒ Brick	☐ GRP	☐ Arch	☐ Corbel	☐ Taper	☐ Side Entry
☒ Reducing Slab	☐ Segments	☐ No. of Landings	5 No. Steps	☐ No. of Ladders			
☐ No. of Regulating Brick Courses							

CONDITION INFORMATION (specific in remark)

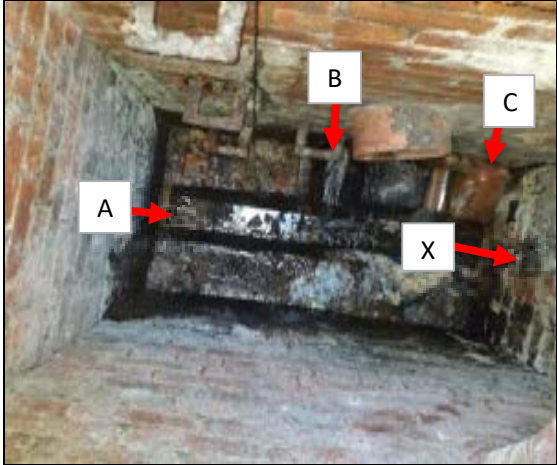
OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		
Urgent attention	☐		☐		☐		☐		☐		☐		
Depth of Flow		mm	Depth of Silt		mm	Height of Surcharge from CL		mm					

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	23	Map No	
Catchment		MH No	MH 1303 A
Location	Aldi Moston		
Town			

★	PR Status	Syphon	★	C Function	★	MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.64		C	225	X	VC			
	B	2.61		C	100	X	PVC		100	1.54
	C	2.61		C	150	X	PVC		150.00	1.84
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	2.65		C	225	X		VC			
Y					X					

Cover Opening at narrowest	610 x 610 mm	Chamber Dimension	1200 mm	Evidence of Surcharge	
Shaft at narrowest	mm	Shaft Depth (from CL)	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☐	Shaft	☐	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

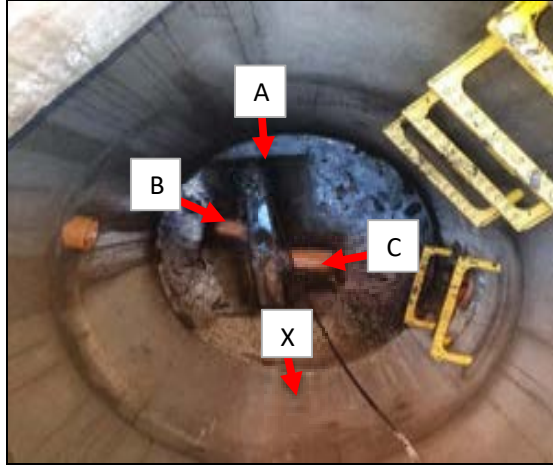
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	24	Map No	
Catchment		MH No	MH S9A
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level		m	H / M / L Cover Duty	★ H	Initials	JP
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PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.11		C	150	X	VC			
	B					X				
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.12		C	150	X	VC			
Y					X				

Cover Opening at narrowest	610 x 610	mm	Chamber Dimension	1050	mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610	mm	Shaft Depth (from CL)	380	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. of Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel	
OK	☒	☒	☒	☒	☒	☒	
Needs attention	☐	☐	☐	☐	☐	☐	
Urgent attention	☐	☐	☐	☐	☐	☐	
Depth of Flow		mm	Depth of Silt		mm	Height of Surcharge from CL	

REMARKS

POSSIBLE REDUNDANT LINE

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	25	Map No	
Catchment		MH No	MH S16
Location	Aldi Moston		
Town			

★ PR Status	Syphon	★ SW Function	★ MH MH Type	24/11/2021 Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty
 Initials

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	1.37		C	150	X	VC			
	B	1.37		C	150	X	VC			
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	1.40		C	225	X		VC			
Y					X					

Cover Opening at narrowest	610 x 610 mm	Chamber Dimension	900 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	500 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 No. Steps
 ☐ No. of Ladders

No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

OK	☒	Cover	☒	Shaft	☒	Irons / Ladders	☒	Chamber	☒	Benching	☒	Channel	☒
Needs attention	☐		☐		☐		☐		☐		☐		☐
Urgent attention	☐		☐		☐		☐		☐		☐		☐

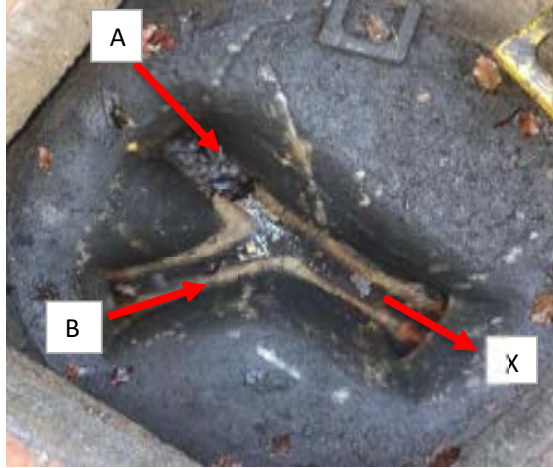
Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL mm

REMARKS

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	26	Map No	
Catchment		MH No	MH S13
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level m
 H / M / L Cover Duty ☒ H
 Initials JP

PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.04		C	900	X	CON			
	B	1.49		C	225	X	VC			
	C	1.47		C	150	X	VC			
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	2.05		C	900	X	CON			
Y					X				

Cover Opening at narrowest	610 x 610 mm	Chamber Dimension	1500 mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610 mm	Shaft Depth (from CL)	550 mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. Steps
 ☐ No. of Ladders

☐ 3 No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel
OK	☒	☒	☒	☒	☒	☒
Needs attention	☐	☐	☐	☐	☐	☐
Urgent attention	☐	☐	☐	☐	☐	☐

Depth of Flow mm
 Depth of Silt mm
 Height of Surcharge from CL 1300 mm

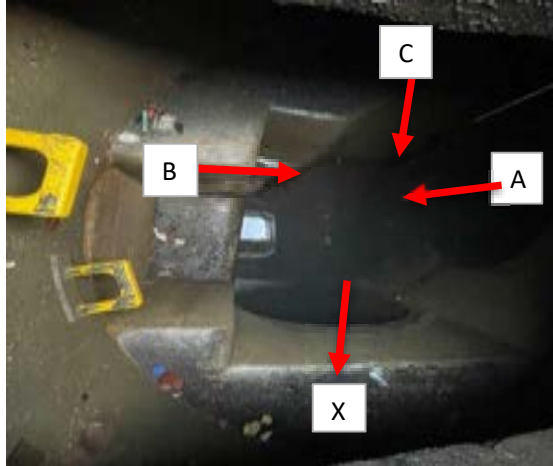
REMARKS

MANHOLE SURCHARGED

LOCATION SKETCH



PLAN OF MANHOLE



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

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Layer Surveys Ltd Manhole Survey Card

Card No	27	Map No	
Catchment		MH No	MH S14
Location	Aldi Moston		
Town			

★ PR	Status		Syphon	★ SW	Function	★ MH	MH Type	24/11/2021	Date of Survey
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COVER DETAILS

☒ Square
 ☐ Rectangle
 ☐ Triangle
 ☒ Dbl Triangle
 ☐ Circular
 ☐ Oval
 ☐ Other
 ☐ Multiple
 ☐ Hinged
 ☐ Lockable

Cover Level		m	H / M / L Cover Duty	★ H	Initials	JP
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PIPE DETAILS

Incoming Pipes

Clockwise from pipe X	Pipe	Depth from Invert (m)	Upstream / Downstream MH Ref	Shape	Size (mm)		Pipe Mat	Lining Mat	Back Drop Dia (mm)	Back Drop Depth (m)
	A	2.09		C	900	X	CON			
	B	1.25		C	150	X	VC			
	C					X				
	D					X				
	E					X				
	F					X				

Outgoing Pipes

X	2.10		C	225	X	VC			
Y					X				

Cover Opening at narrowest	610 x 610	mm	Chamber Dimension	1300	mm	Evidence of Surcharge	
Shaft at narrowest	610 X 610	mm	Shaft Depth (from CL)	390	mm	OX / H2S / METH Toxic atmosphere	

MANHOLE CONSTRUCTION DETAILS

☒ Pre Cast Concrete
 ☐ In Situ Concrete
 ☐ Brick
 ☐ GRP
 ☐ Arch
 ☐ Corbel
 ☐ Taper
 ☐ Side Entry

☒ Reducing Slab
 ☐ Segments
 ☐ No. of Landings
 ☐ No. of Steps
 ☐ No. of Ladders

☐ No. of Regulating Brick Courses

CONDITION INFORMATION (specific in remark)

	Cover	Shaft	Irons / Ladders	Chamber	Benching	Channel	
OK	☒	☒	☒	☒	☒	☐	
Needs attention	☐	☐	☐	☐	☐	☐	
Urgent attention	☐	☐	☐	☐	☐	☒	
Depth of Flow		mm	Depth of Silt		mm	Height of Surcharge from CL	1300

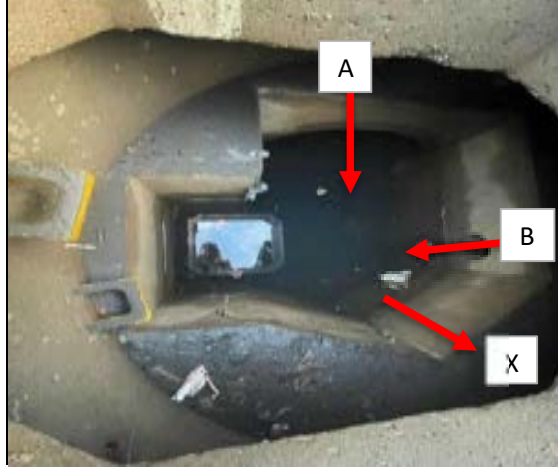
REMARKS

MANHOLE SURCHARGED

LOCATION SKETCH



PLAN OF MANHOLE



STATUS	PU : Public	PR : Private	WC : Culverted Watercourse	} Applies to main outlet
	24 : Section 24	HD : Highway Drain		
FUNCTION	F : Foul	C : Combined	S : Surface Water	} Applies to main outlet
MANHOLE TYPE	IF : Infall	MH : Manhole	CP : Catchpit	CSO : Consented Sewer Overflow
	LH : Lamphole	RE : Rodding Eye	SO : Storm Overflow	DS : Dual system Manhole
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PIPE (OR LINING) MATERIAL	AK : Alkathene	AC : Asbestos Cement	BR : Brick	
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	CSB : Concrete Segments (Bolted)	CSU : Concrete Segments (Unbolted)	CC : Concrete Box Culvert	
	DI : Ductile Iron	GRC : Glass Reinforced Concrete	GRP : Glass Reinforced Plastic	
	PSC : Plastic/Steel Composite	PVC : Polyvinyl Chloride	PE : Polyethylene	
	RPN : Reinforced Plastic Matrix	ST : Steel	VC : Vitrified Clay	
	PP : Polypropylene	PF : Pitch Fibre	MAC : Masonry, Coursed	
	MAR : Masonry, Random Courses	XXX : Other (State in remarks)		
LINING	BL : Bitumen	RL : Resin	IS : Insituform	
	CL : Cement	PI : Plastic		

APPENDIX 7

EEG PHASE 1 GEO-ENVIRONMENTAL DESK STUDY REPORT MARCH 2020