5951– Hyde Rd, Gorton, Housing Development

CONCEPT DRAINAGE STRATEGY

DS/18/01 - Rev.P2

September 2018

www.hblassociates.co.uk

HBL ASSOCIATES LIMITED
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
Brook House, Weybrook Road, Heaton Chapel, Stockport M19 2QD
T: 0161 432 9977 E: stockport@hblassociates.co.uk
Shoemakers Court, Back Square Street, Ramsbottom, Bury, Lancashire BL0 9PZ
T: 01706 829 560 E: ramsbottom@hblassociates.co.uk
Bromfield Chambers, 38 Radford Street, Stone, Staffs ST15 8DA
T: 01785 816879 E: stone@hblassociates.co.uk

Contents

1. Introduction 3
2. Existing Conditions 3
3. Development Proposals 5
4. Consultation with United Utilities (UU) 5
5. Proposed Concept Drainage Schematic 6
Appendix A – Location Plan 8
Appendix B - Topographical Survey 9
Appendix C - Executive Summary of Phase II Interpretative Ground Assessment 10
Appendix D - Flood Zone Map 11
Appendix E - Local Utility Maps 12
Appendix F – Existing Drainage Surveys 13
Appendix G - Proposed Site Plan 14
Appendix H - Consultation with United Utilities (UU) 15
Appendix J - Proposed Impermeable Areas and Drainage Plans 16

1. Introduction

HBL Associates Ltd have been commissioned to prepare a Concept Drainage Strategy in relation to a proposed Residential Development and New Community Centre Building 'The Oasis' at Hyde Road, Gorton, M18 7FB.

From April 2015, Manchester City Council act as a Lead Local Flood Authority (LLFA), which is a statutory consultee for major planning applications in relation to surface water drainage, requiring that all planning applications are accompanied by a Sustainable Drainage Strategy.
The aim of the 'Sustainable Drainage Strategy' is to identify water management measures, including Sustainable Drainage Systems (SuDS), to provide surface water runoff reduction and treatment.

2. Existing Conditions

The 6655 sq m development site is located at National Grid Reference: 388 830, 396 045.
The site is surrounded by commercial and residential developments.
Existing access is via Hyde Road to the south of site.
There is an existing building positioned on the west corner of the site, it is proposed that this building will be demolished, and a new community center built in its place, this will be referred to as 'Oasis Centre' going forward.
The remaining of the site is undeveloped land, any buildings previously positioned on the land appear to have been demolished around the end of the 20th century.

A location plan is included in Appendix A.

2.1 Local Topography

A Topographical Survey was produced and is included in Appendix B. The Topographical Survey shows that the site slopes from 71.0m above Ordnance Datum (m OAD) in the north-east to 66.25m in the north-west, on Hyde Road.
Site levels generally fall from north to south and east to west.

2.2 Ground Conditions

Phase II Interpretative Ground Assessment has been carried out by Sutcliffe Investigations in August 2016 and the Executive Summary is included in Appendix C.

The report states that:

The made ground, comprises brown/grey sandy, gravelly clay with fine to medium brick fragments and whole bricks. Black ashy fine sand with bricks and dark brown fine to coarse sand with bricks. Demolition material was also seen throughout made ground.

Natural Ground: Natural ground comprised soft to very stiff brown sandy gravelly predominantly CLAY with weathered mudstone bands.

The site investigation recorded water levels in 4 monitoring wells. Over a period of 4 months during the summer, ground water was noted to hold at around 1.0m below ground level.

2.2 Flood Zone Classification

The Environment Agency (EA) 'Flood Map for Planning – Rivers and Sea', included in Appendix D, shows that the site is wholly located within Flood Zone 1 – an area outside of the extreme flood extent and considered to have a less than 1 in 1,000 or 0.1% annual probability of flooding from rivers or the sea.

2.3 Local Drainage

Public sewer records have been obtained from United Utilities and are included in Appendix E.

The sewer records show that there is a 900mm public combined sewer immediately South of the site running down the center of the Hyde Road.

In April 2017 sample survey was carried out by Clearway Drainage Systems Ltd and Lanes Group PLC of the Existing Inspection Chamber MH ECW1 in the pavement west of the main entrance gate from Hyde Road (CL 66.35 IL 63.45). See Appendix J - dwg. 5951.50 Proposed Drainage Plan.

These surveys confirmed that an existing capped connection from the site to the culvert exists,

constructed of vitrified clay pipe 375mm in diameter, see Appendix F.

The drainage survey shows that the Surface Water down pipes from the existing structure on the corner of Hyde Road and Wellington Street also connect into this Existing Manhole ECW1 (CL 66.35 IL 63.45) in the pavement to the west of the main entrance gate from Hyde Rd, see dwg. 5951 – 50 Proposed Drainage Plan.

Interpolating between available levels would indicate an invert level of approximately 63.540m AOD for the proposed demarcation manhole MH CW1 at the entrance to the site (CL 66.200, IL 63.540).

3. Development Proposals

The proposed development will introduce approx. 3913 m² of impermeable areas of which:

- The Residential Development for 26 new dwellings with private car parking will introduce approx. 3188m².
- The adjoining Oasis Centre Site will introduce further 725m² of impermeable areas (New Oasis Building, pavements, carpark areas).

See Appendix J - 5951 – 111 Proposed Impermeable Area Plan for details.

4. Consultation with United Utilities (UU)

An initial developer enquiry has been submitted to United Utilities on 1st of March 2016 with latest correspondence dating 8th of August 2017, see Appendix H.

4.1 Foul Drainage

Correspondence from United Utilities (Appendix H) states that: “Foul will be allowed to drain to the public combined sewer network, at a point convenient to you, at an unrestricted rate”.

The most practical point of connection is via the existing combined connection communicating with substantial combined sewer in Hyde Road (Extg Manhole MH ECW1, CL 66.35, IL 63.45)

4.2 Surface Water Drainage

The initial correspondence with UU (1.03.2016) recommending that “the surface water from this site must drain to soakaway or some other form of infiltration system but if ground conditions confirm that this is not a viable solution all surface water can drain to the nearby surface water sewer at a maximum pass forward flow of 5 l/s.”

Further investigation of ground conditions indicated that the soakaway or other form of infiltration is not a viable option for this project, see Phase II Interpretative Ground Assessment Executive Summary and record of ground water levels also included in Appendix C, UU accepted this, refer to email communication in Appendix H.

The closest Surface water sewer is in Garlic Street to the north of the site and due to the topography of the site would demand surface water to be lifted by the necessary inclusion of a surface water pumping station over a height in access of 5.0m. Also, to note it is extremely difficult to route the surface water from the site through 3rd Party land and into Garlic Street.

Since the initial consultation, the surveys of drainage on site has been undertaken identifying an existing combined connection from site to the existing substantial combined sewer (900mm) within Hyde Road, see Appendix F.

Further consideration has been given to explore possible connection into existing Surface Water pipe in Hengist Street, however, following site investigation including trace testing and due diligence, it has been established this option is not practical.

Since surface water cannot be drained to land via SUDS combined with the very difficult task of draining to Garlic Street or Hengist Street, it is proposed to connect to the combined 900mm dia. culvert in Hyde Road via the existing connection in proximity of main entrance to site (ECW1) with agreed maximum pass forward flow rate of 6.5l/s. The correspondence in Appendix H shows UU accepts this proposal.

5. Proposed Concept Drainage Schematic

The proposed Drainage Strategy and Storage Calculations are based on the Proposed Drainage Plan 5951 - 50 in Appendix J, proposing that both the surface water and foul from the new dwellings will be kept in separate systems until just prior to leaving the site (demarcation manhole CW1) and discharging into the existing 375mm pipe communicating with existing combined 900mm sewer in Hyde Road.

To ensure no increase in surface water run off as a result of the development, runoff rates will be

controlled and required underground storage provided.

Calculations are based on restricting the surface water outflow from the site and into the existing combined sewer at rate of 6.5l/s.

Storage will be provided within the large diameter pipes within the access road providing storage for events up to 30YR events taken against a surcharged outfall, with further private storage provided within the underground attenuation tank under the car park of the Oasis Centre for 100YR storm events + 40% climate change allowance.

Drainage system is intended for adoption under Section 104.

5.1 – Volumes Adopted

We have carried out initial storage calculations using the Micro Drainage for the following events.

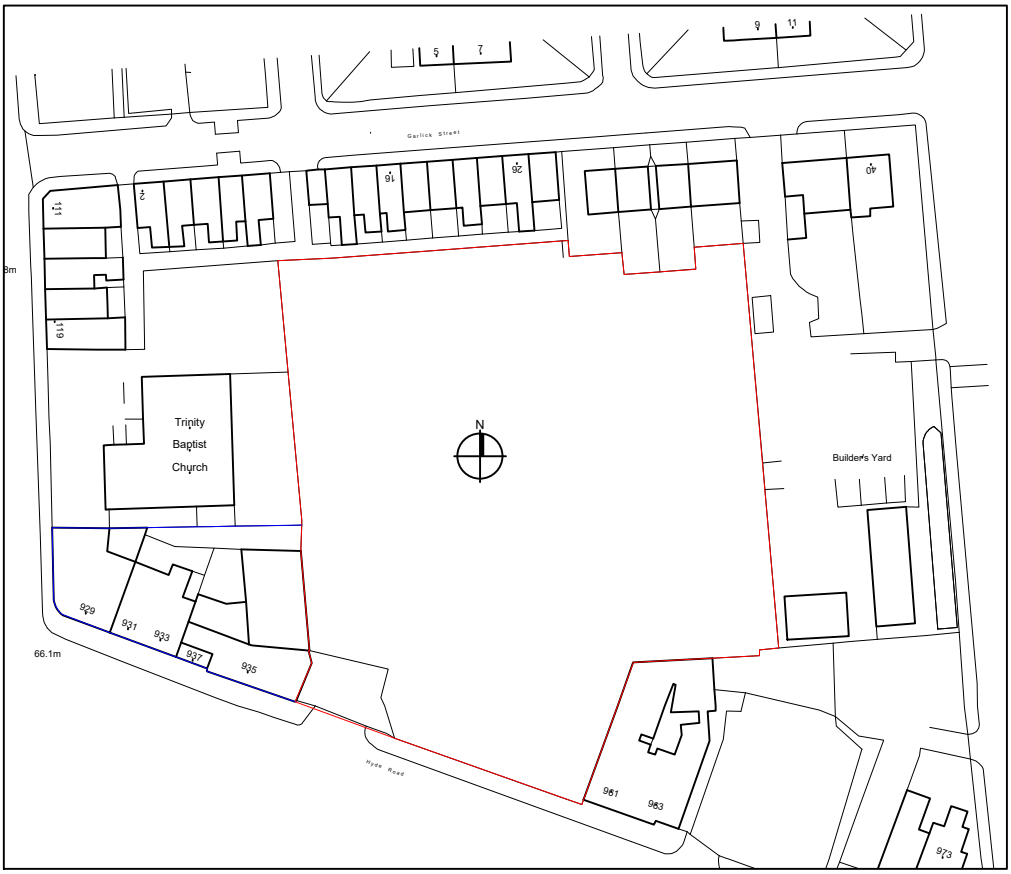
- 1 in 30 Year Critical Storm will be stored underground in large diameter pipes.
  Calculations include simulations for a 1:30 year storm taken against surcharged outfall level set 1 m above the soffit level of the receiving sewer pipe in MH CW1 (IL 63.540, 375mm dia outfall pipe).
- 1 in 100 Year Critical Storm Event plus 40% CC will be stored underground in private attenuation tank within car park of the Oasis Centre.

Both with a flow forward restriction of 6.5l/s.

The calculations indicate an underground storage tank of minimum volume of circa 82m³ will be proposed to store the 1 in 100-year storm event plus 40% CC. We have ensured this is a 'back-up' tank only and no surface water flow through is proposed.

Appendix A – Location Plan

5951.1001 (REV P0) – Location Plan



LOCATION PLAN

SCALE 1:1250

REV	DATE	DRAWN	CHKD	APPRD	DESCRIPTION

PROJECT	LOCATION
HYDE ROAD RESIDENTIAL DEVELOPMENT	HYDE ROAD, GORTON, M18 7FB

DRG No.	HBL REF.	DRAWN	DATE	SCALE(S)	REVISION
5951/1001	LOCATION PLAN	ES	JUN'17	1:1250	P0

DRAWING TITLE

LOCATION PLAN

HBL ASSOCIATES Ltd.
CONSULTING CIVIL
AND STRUCTURAL
ENGINEERS
Brook House, Weybrook Road, Stockport M19 2QD
Telephone 0161 432 9977
Facsimile 0161 432 7979
Email : consultants@hblassociates.co.uk

Appendix B - Topographical Survey

5951 - 01 (REV P0) – Existing Site Plan/ Topo.

DO NOT SCALE FROM THIS DRAWING

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH
ALL OTHER HBL DRAWINGS ISSUED FOR THIS PROJECT

LEGEND

SITE BOUNDARY

SITE BOUNDARY (OASIS CENTRE)

HYDE ROAD

1:200
0m 2m 4m 6m 8m 10m 20m

REV.	DATE	DRAWN	DESCRIPTION	CHKD	APPRD
P0	JULY'18	TAT	PRELIMINARY ISSUE	SBH	SBH

HBL ASSOCIATES Ltd.
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
Brook House, Weybrook Road Heaton Chapel, Stockport M19 2QD.
Telephone 0161 432 9977
Facsimile 0161 432 7979
Email : consultants@hblassociates.co.uk

© COPYRIGHT RESERVED HBL ASSOCIATES Ltd.

STATUS

PRELIMINARY

CLIENT: ONE MANCHESTER	DRAWN: T.A.TAYLOR
PROJECT: HYDE ROAD DEVELOPMENT	CHECKED: S.B.HOLMES
LOCATION: GORTON, MANCHESTER	APPROVED: S.B.HOLMES
DRAWING TITLE: EXISTING SITE PLAN	DATE: JULY 2018
	SCALE(S): 1:200 — A1
DRAWING No.: 01	HBL REF.: 5951
	REVISION: P0

FILE REF R:/JOBS CURRENT/

Appendix C - Executive Summary of Phase II Interpretative Ground Assessment.

Sutcliffe

Civil & Structural Engineers
Building Surveyors
Geo-Environmentalists

Oasis Centre, Manchester

Phase II Interpretative Ground Assessment

Liverpool
T: **0151 227 3155**

Manchester
T: **0161 817 5180**

Wrexham
T: **01978 664071**

London
T: **020 74 584136**

Head Office
18-20 Harrington Street
Liverpool L2 9QA
T: **0151 227 3155**
F : 0151 227 3156
E: **enquiries@sutcliffe.co.uk**
www.sutcliffe.co.uk

Client Name: Eastland Homes
Our ref: 28276LG
Date: August 2016

SUTCLIFFE INVESTIGATIONS

Phase II Interpretative Ground Assessment

Document Control Sheet

Report Reference: 28276LG Issue: 0 Date: August 2016

Prepared by:

Name:	K Davies		
Title:	Graduate Environmental Scientist		
Qualifications:	BSc (Hons) MMarBiol		

Checked/Approved by:

Name:	A Lewis		
Title:	Manager		
Qualifications:	BSc MSc AIEMA FGS		

Revision History:

Rev	Date	Description	Prepared	Checked	Approved
0	June 2016	Interim Report	KD	DB	AL
1	August 2016	Final Report	KD	DB	AL

This document has been prepared by Sutcliffe Investigations within the terms of the Contract with the Client to whom this document is addressed. Sutcliffe Investigations disclaims any responsibility to the Client and others in respect of matters outside the scope of the said contract. No person other than the Client or agreed assignees shall rely on it in any respect and Sutcliffe Investigations shall owe no duty of care to any such third party.

FOREWORD (Geotechnical and Environmental Assessment)

This report has been prepared for the sole internal use and reliance of the Client named on page 1. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Sutcliffe Investigation; such authorisation not to be unreasonably withheld. If any unauthorised third party comes into possession of this report, they rely on it at their risk and the authors owe them no duty of care and skill.

The report presents observations and factual data obtained during our site investigation, and provides an assessment of Geotechnical and environmental issues with respect to information provided by the Client regarding the proposed development. Further advice should be sought from Sutcliffe Investigation prior to significant revision of the development proposals. Primary aims of this exploratory phase of investigation were to identify salient geotechnical and environmental issues affecting the site to enable the client to obtain budget costs for the necessary site preparatory and remedial works.

The report should be read in its entirety, including all associated drawings and appendices. Sutcliffe Investigation cannot be held responsible for any misinterpretations arising from the use of extracts that are taken out of context.

The findings and opinions conveyed in this report (including review of any third party reports) are based on information obtained from a variety of sources as detailed within this report, and which Sutcliffe Investigation believes are reliable. All reasonable care and skill has been applied in examining the information obtained. Nevertheless, Sutcliffe Investigation cannot and does not guarantee the authenticity or reliability of the information it has relied upon.

The report represents the findings and opinions of experienced Geotechnical and environmental consultants. Sutcliffe Investigations does not provide legal advice and the advice of lawyers may also be required.

Intrusive investigation can only investigate shallow ground beneath a small proportion of the total site area. It is possible therefore that the intrusive investigation undertaken by Sutcliffe Investigation, whilst fully appropriate, may not have encountered all significant subsurface conditions. Any opinions expressed as to the possible configuration of strata between or below exploratory holes are for guidance only and no responsibility is accepted as to its accuracy.

It should be borne in mind that the timescale over which the investigation was undertaken might not allow the establishment of equilibrium groundwater levels. Particularly relevant in this context is that groundwater levels are susceptible to seasonal and other variations and may be higher during the wetter periods than those encountered during this commission.

Where the report refers to the potential presence of invasive weeds such as Japanese Knotweed, or the presence of asbestos containing materials, it should be noted that the observations are for information only and should be verified by a suitably qualified expert.

This report assumes that ground levels will not change significantly from those existing at present. If this is not to be the case, then some modification to this report may be required.

It should be noted that the banning of the co-disposal of hazardous and non-hazardous waste was introduced in 2011, as a result of the implementation within the UK of the Landfill Directive. This will considerably affect the current practices and procedures for the handling and disposal of wastes, in particular hazardous wastes. In addition, it will be a requirement for all wastes to be pre-treated and to comply with certain waste acceptance procedures prior to sending wastes to landfill. The full potential effects of these important changes are not known at this stage, but it is perceived that disposal costs will rise, particularly for hazardous wastes, and waste pre-treatment may, in some cases, become an ‘additional’ redevelopment cost with regard to the remediation of contaminated sites.

Should this report recommend that materials could be excavated and removed off site for landfill disposal, then it should be noted that the costs, timescales and implications of the pending changes to waste management legislation couldn’t be predicted at this stage. Sutcliffe Investigation will not be responsible for changing practices, etc that may affect the viability of necessary remedial actions or of the implications of potential alternative treatment techniques.

Sutcliffe Investigation reserves the right to amend their conclusions and recommendations in the light of further information that may become available. General notes and limitations relevant to all Sutcliffe Investigations are described in the Foreword and should be read in conjunction with this report.

Executive Summary

INTRODUCTION	Sutcliffe Investigations was instructed by Eastland Homes *(the "client")* to undertake a Phase II ground assessment for the site at Oasis Centre located in Gorton, Manchester, M18 8UB. The site is centred on National Grid Reference (NGR) 388830, 396045. This report assesses the ground based geotechnical and environmental risks, constraints and liabilities associated with the proposed development of the site. This is required in support of the discharge of contaminated land planning conditions assigned to the site and to allow the design of economic foundation solutions.
SITE DESCRIPTION	The site is approximately square in shape, and can be accessed via Hyde Road to the south of the site. The site is surrounded by commercial and residential developments, with Hyde Road directly to the south of site which provides the access to the site.
DEVELOPMENT PROPOSAL	The proposed development for the site is for 16 houses with private parking and gardens (residential with plant uptake use) and two apartment block with a managed garden and associated car parking facilities (residential without plant uptake use).
PRELIMINARY CONCEPTUAL MODEL	The earliest available historical map (1848) indicated that the site was under agricultural usage, with some possible development impinging briefly on site. From 1892 a Saw Mill was noted on site, occupying approximately 35% of the site area, also noted on site was a pond to the east and a travelling crane. In 1908 there was an expansion to the Saw Mill on site and the pond was no longer noted. This development, later in 1922-1933, was noted as Highfield Works (fur waste), also a Police Station was noted to the southern boundary of the site. In 1948-1962 Highfield Works was noted as a Printing Works. Later again in 1953-1990 the site's usage appeared to have changed, consisting of several works (unknown activities) and a warehouse, as well as some smaller buildings noted on site. From 1983 the site appeared to be undeveloped, with all previously noted buildings no longer present on site. The potential for significant contamination to have arisen at the site as a result of the current and former usage on site is considered to be low/moderate.
PREVIOUS WORKS	Sutcliffe's have completed a Phase I Desk Study, a synopsis of which is provided in *Section 2* of this report. No other previous studies are known to have been undertaken to Sutcliffe's knowledge.
SITE INVESTIGATION	Site work was undertaken on 18th May 2016 and consisted of: • 4No. Window Sample Holes. • 9No. Trial Holes. • Contamination samples from various depth in the made ground. • Leachate samples. • Gas monitoring wells. • Monitoring of ground gas / ground water within installed locations.
GROUND CONDITIONS	Made Ground: The made ground, comprises brown/grey sandy, gravelly clay with fine to medium brick fragments and whole bricks. Black ashy fine sand with bricks and dark brown fine to coarse sand with bricks. Demolition material was also seen throughout made ground. Natural Ground: Natural ground comprised soft to very stiff brown sandy gravelly clay with weathered mudstone bands. Sand is fine to medium and gravel is fine to medium subangular to angular mudstone.
GROUNDWATER	Groundwater was recorded in WS2 at 4.00m during site investigation works.
ENVIRONMENTAL RISK ASSESSMENT	Long Term Human Health - Elevated levels of Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenzo(ah)anthracene all indicate the presence of site wide contamination that will require remediation to be safe for Human Health. This will require the removal of material from site and the importing of clean tested material to create a capping break layer in garden areas on site, with hardcover providing a break layer in other areas of the site. It is also noted that five samples identified Asbestos fibres/cement and that further delineation is recommended to ascertain the extent of asbestos contamination in these areas and to provide more detailed information on the potential human health risk to construction workers from this material.

<table>
<tr><td></td><td>Controlled Waters Risk Assessment - For controlled waters there are two assessment criteria, the Environmental Quality Standard (EQS) and the UK Drinking Water Standard (UKDWS).

The UK DWS Leachate screening identified concentrations of Lead, Sulphate and Benzo(a)pyrene that could pose a risk to the Principal aquifer. However, due to the likely depth of groundwater and the effects of natural attenuation, the risk is unlikely to be significant.

The EQS Leachate screening identified concentrations of Copper, Lead, Fluoranthene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, benzo(a)pyrene, Benzo(ghi)perylene and Indeno(123cd)pyrene that could pose a risk to the local surface water features. However, the nearest surface water feature is noted 140m south/south east of the site, but is now culverted, as such the risk is unlikely to be significant.</td></tr>
<tr><td>ASBESTOS</td><td>Asbestos was identified within five samples (Mound 1, TP1, TP5, TP6 & TP9 @ 0.20-0.50m bgl). Quantification identified one sample (TP6) were the % asbestos was above the relevant threshold and would therefore, be considered a risk to human health.</td></tr>
<tr><td>GROUND GAS RISK ASSESSMENT</td><td>Using CIRIA C665 – Assessing risks posed by hazardous ground gases to buildings the NHBC Traffic Light classification for the site is currently Green, indicating that no protective measures are required as part of the ground floor design.</td></tr>
<tr><td>GEOTECHNICAL ASSESSMENT</td><td>General - It is understood that consideration is being given to the development of housing with associated garden areas and infrastructure.

The following is of note:

• Due to the ground conditions encountered it would be Sutcliffe's recommendation that mass concrete strip footings be adopted on site with a bearing pressure of 125kN/m^2.
• Limited groundwater ingress was recorded during site investigation works and subsequent monitoring.
• Sub-surface concrete that is only in contact with Made Ground can be Design Sulphate Class DS-2, with an ACEC Classification of AC-1s.

Ground Floor Construction - Based upon the amount of Made Ground noted on site it is not recommended that a ground-bearing slab is utilised on site. Sutcliffe Investigations therefore propose a suspended P.C Unit ground floor be adopted.

Designated Concrete Mixes - The following designated mix in accordance with BRE Special Digest SD1 and BS8500: Part1: 2015 will be suitable for use on this site.
<table>
<tr><th>Application</th><th>DS-1 Conditions (Made Ground and Natural) ACEC Class AC-1s</th></tr>
<tr><td>Unreinforced strip / trench fill footings</td><td>GEN1</td></tr>
<tr><td>Reinforced strip / trench fill footing (mesh reinforcement)</td><td>RC30</td></tr>
<tr><td>Reinforced strip / trench fill footings (rebar etc)</td><td>RC30</td></tr>
<tr><td>Unreinforced concrete floor slabs</td><td>GEN2</td></tr>
<tr><td>In situ reinforced concrete floor slabs</td><td>RC30</td></tr>
</table>
*Note: Although RC 30 is in line with BS8500, Sutcliffe Investigation recommend the use of RC35 for concrete used in structurally sensitive works, to provide greater certainty of compliance with strength verification tests. Tolerable mixes dispatched by a batching plant are +/- 10%, and delays on site can also result in deterioration of the concrete.</td></tr>
</table>

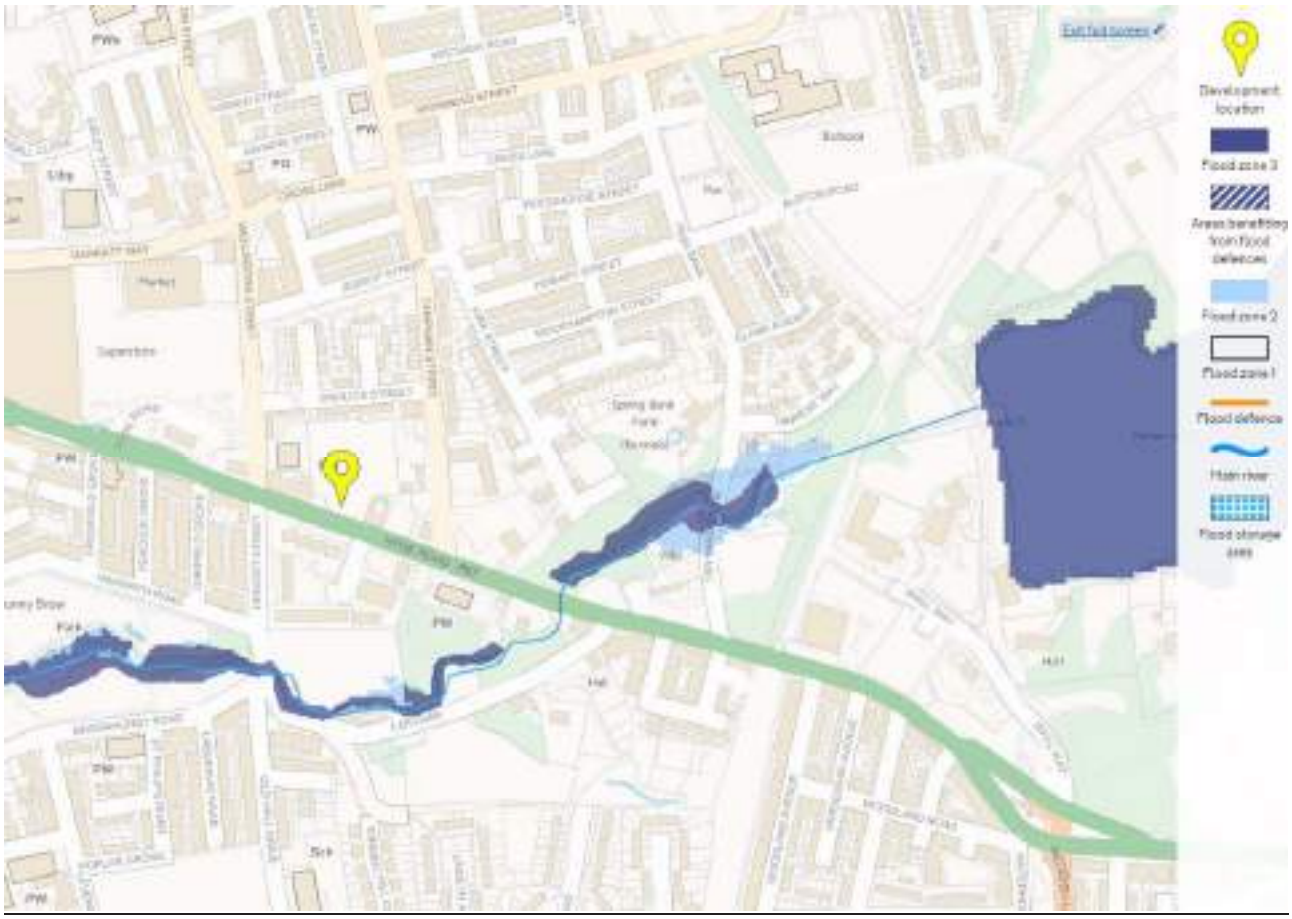
RECOMMENDATIONS	The following actions are recommended: • Good hygiene practices should be employed during construction work, in addition, the findings of this investigation should be included within the contractors H&S file and an assessment of risks associated with short term human health completed. No consumption of food or smoking should occur without prior hand washing. If dust is encountered, dust masks should be worn and dust suppression employed. • Design a Phase III Remediation & Validation Proposal for submission to planning department. • Delineation of the asbestos *"hotspot"* identified at TP6 (0.20-0.50m bgl). • Design SMMP – management of material on and off site.

NOTE: The executive summary is an overview of the key findings and conclusions of the report. There may be other information contained in the body of the main report which puts into context the information presented within the executive summary. No reliance should be placed on the executive summary.

Contents

1 INTRODUCTION 1
1.1 Terms of Reference 1
1.2 Development Proposal & Legislative Context 1
1.3 Site Location and Setting 2
1.4 Site Description and Layout 3
1.5 Previous Studies 4
1.6 Objectives & Scope of Assessment 4
2 PRELIMINARY CONCEPTUAL RISK ASSESSMENT 6
2.1 Ground Model 6
2.2 Potential Contaminant Linkages 6
2.3 Risk Evaluation 8
3 GROUND INVESTIGATION 10
3.1 Design Rationale 10
3.2 Fieldwork 10
3.3 Chemical Laboratory Testing 11
4 GROUND MODEL 13
4.1 General 13
4.2 Made Ground 13
4.3 Natural Ground 13
4.4 Field Evidence of Contaminated Soils 14
4.5 Groundwater 14
4.6 Stability 14
4.7 Drainage 14
4.8 Services 15
4.9 Geotechnical Testing and Assessment 15
4.10 Foundation Recommendations 16

Appendix D - Flood Zone Map



Appendix E - Local Utility Maps

United Utilites Water Limited
Property Searches
Ground Floor Grasmere House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP
DX 715568 Warrington
Telephone 0370 751 0101

Property.searches@uuplc.co.uk

Your Ref: PMA070216
Our Ref: 14/ 1174895
Date: 8/2/2016

Peter Mason Associates
Goodyear Business Park
New Street
Mawdesley, Near Ormskirk
Lancashire
L40 2QP

FAO: Steve Douglas

Dear Sirs

Location: LAND & YARD 951-953 HYDE ROAD MANCHESTER M12 5AA

I acknowledge with thanks your request dated 07/02/16 for information on the location of our services.

Please find enclosed plans showing the approximate position of our 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 - Wastewater & Water Distribution Plans which are shown overleaf.

I also attach United Utilities' General Condition and Information sheets regarding United Utilities wastewater network and water distribution apparatus, which details contact numbers for additional services (i.e. new supplies, connections, diversions) which we are unable to deal with at this office. You should ensure that the Condition and Information sheets are made available to anyone carrying out any works which may affect our apparatus.

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

If you have any queries regarding this matter please telephone us on 0370 7510101.

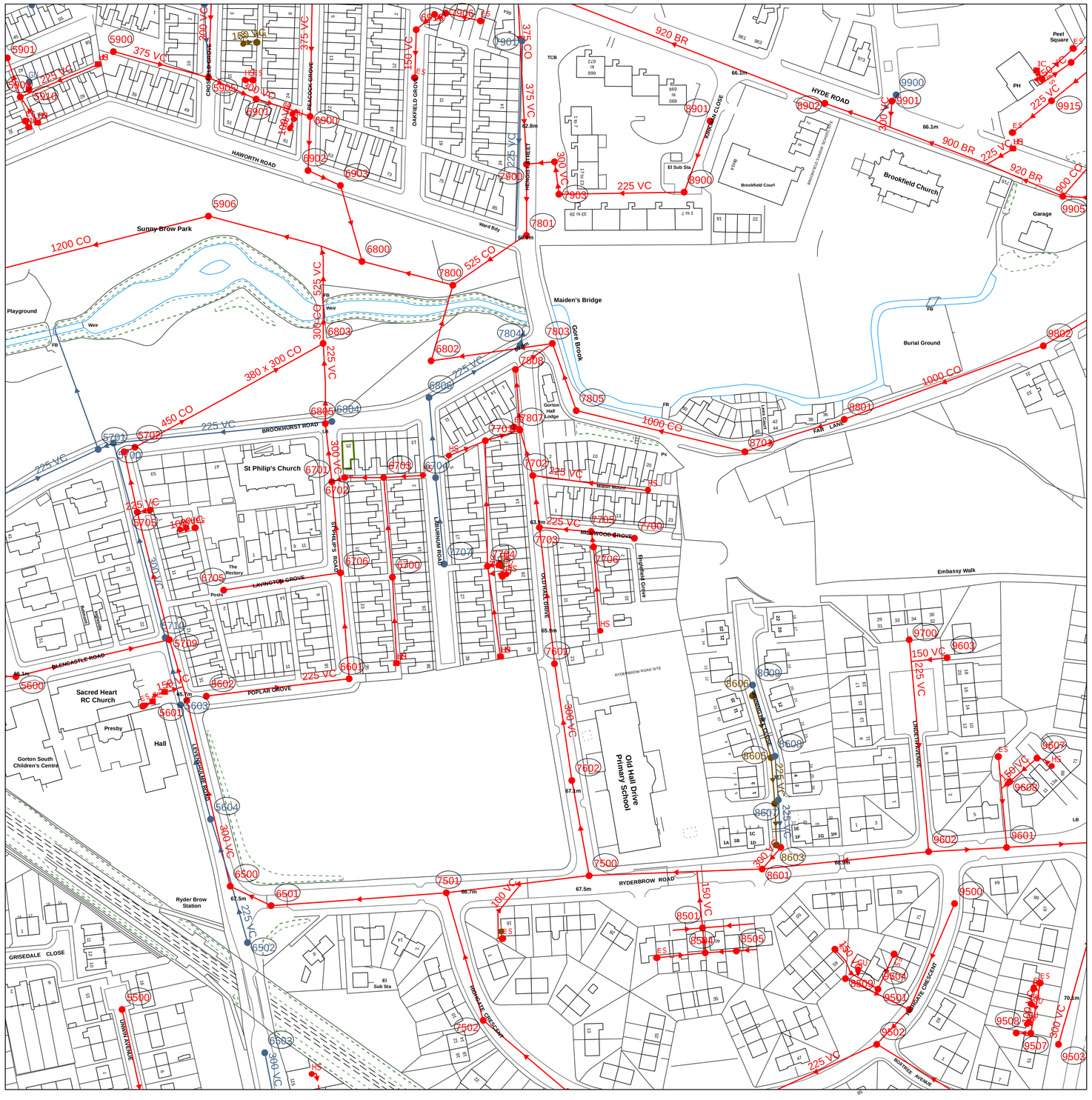
Yours Faithfully,

S McManus

Sue McManus
Operations Manager
Property Searches

UUWaterLimited 2014

United Utilities Water Limited
Registered in England & Wales No. 2366678
Registered Office: Haweswater House,
Lingley Mere Business Park, Lingley Green Avenue,
Great Sankey, Warrington, WA5 3LP



Reno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
5500	65.22	CO	63.79	225		CI	VC	73.76	107
5600	65.08	CO	62.71	225		CI	VC	37.11	186
5601	65.81	CO	62.23	300		CI	VC	29.12	265
5602	65.78	CO	64.36	225		CI	VC	66.48	201
5603	65.83	SW	63.74	300		CI	VC	31.78	54
5604	66.87	SW	64.82	300		CI	VC	54.82	51
5700	62.62	SW	60.77	300		CI	VC	7.62	5
5701	62.66	SW							
5702	62.67	CO	60.73	450		CI	CO	50.12	26
5703	62.73	CO	60.85	450		CI	VC	3.16	53
5704	63.65	CO	61.74	300		CI	VC	28.64	33
5705	63.67	CO	62.4	225		CI	VC	6.08	10
5709	65.22	CO							
5710	65.17	SW							
5900		CO	0	375		CI	VC	45.61	
5901	65.04	CO	63.59	300		CI	VC	11.7	
5903	64.82	CO							
5905	64.63	CO							
5906	58.84	CO	54.05	1200		CI	CO	108.15	204
5910		CO							
6500	67.55	CO							
6501	67.72	CO	62.8	300		CI	VC	21.02	191
6502	67.87	SW	65.96	225		CI	VC	30.08	54
6503	67.98	SW	66.17	300		CI	VC	51.97	33
6601	66.08	CO							
6700	65.52	CO							
6701	63.72	CO	61.38	300		CI	VC	27.17	46
6702	63.79	CO	62.03	225		CI	VC	6.32	11
6703	63.64	CO							
6704	63.36	SW	61.17	225		CI	VC	37.12	42
6705	65.31	CO	64.04	225		CI	VC	54.59	130
6706	65.71	CO							
6800	59.23	CO							
6802		CO	0	1000		CI	CO	36.4	
6803	58.44	CO	55.15	300		CI	CO	20	167
6804	62.37	SW	61.17	225		CI	VC	101.49	267
6805	62.47	CO							
6806	61.37	SW							
6900	64.64	CO	61.04	375		CI	VC	25.02	21
6901	64.7	CO	61.81	300		CI	VC	13.6	36
6902	63.38	CO							
6903	63.12	CO							
6912		CO							
6916		CO							
7500	67.45	CO	63.91	300		CI	VC	44.72	128
7501	66.63	CO							
7502	66.43	CO	63.45	300		CI	VC	61.4	150
7601	66.66	CO	63.09	300		CI	VC	63.39	88
7602	67.09	CO							
7700	63.17	CO	61.38	225		CI	VC	20.22	
7701	62.3	CO	61.2	225		CI	VC	16.76	
7702	63.07	CO	61.08	225		CI	VC	21.84	12
7703	64.38	CO							
7704	65.23	CO							
7705	64.38	CO							
7706	64.77	CO	63.17	225		CI	VC	7.07	31
7707	65.19	SW	62.37	225		CI	VC	40.2	112
7800	59.26	CO	54.62	1200		CI	CO	43.42	
7801	60.9	CO							
7803	60.05	CO	55.65	1000		CI	CO	28.28	
7804	59.88	SW							
7805	59.51	CO	55.66	1000		CI	CO	32.89	
7807	61.84	CO							
7808	60.56	CO	58.05	300		CI	VC	20.81	10
7900	62.64	CO	59.21	375		CI	VC	33	25
7901	65.32	SW	63.5	225		CI	VC	93.05	
7902	63.19	CO	59.79	375		CI	VC	13.04	38
7903	61.91	CO	60.2	300		CI	CO	8.06	58
7906		CO							
8501		CO							
8504		CO		150		CI	VC	11.56	
8505		CO		150		CI	VC	14.35	
8509		CO							
8601	68.59	CO	65.91	225		CI	VC	80.06	65
8602	68.44	CO							
8603	68.44	FO							
8604	68.25	FO							
8605	68.04	FO							
8606	67.7	FO	66.48	225		CI	VC	29.97	143
8607	68.25	SW							
8608	68.04	SW							
8609	67.7	SW	66.61	225		CI	VC	34.39	127
8701	60.03	CO	56.66	1000		CI	CO	80.28	92
8801	60.16	CO	57.69	1000		CI	CO	24.04	47
8900	63.37	CO	61.46	225		CI	VC	58.01	49
8901	64.93	CO	62.23	225		CI	VC	35.11	46
8902	66.03	CO	56.23	920		CI	BR	150.42	251
8903	69.78	CO	68.05	225		CI	VC	53.31	50
9501	69.32	CO							
9502	69.1	CO	66.55	225		CI	VC	62.65	51
9503	70.05	CO	67.26	300		CI	VC	97.8	181
9504		CO							
9507		CO							
9508		CO							
9601	70.11	CO	65.91	225		CI	VC	51.09	568
9602	69.91	CO	65.98	225		CI	VC	77.41	1548
9603		CO							
9607		CO							
9608		CO							
9700	68.97	CO	67.27	225		CI	VC	98.41	77
9802	64.71	CO	60.83	1000		CI	CO	98.08	31
9900	66.2	SW	0	900		CI	VC	15.62	
9901	66.03	CO	63.07	300		CI	VC	12.04	2
9904		CO							
9905	65.94	CO	56.57	920		CI	BR	38.08	952
9915		CO							
5605		CO							
5609		CO							
5706		CO							
5707		CO							
5708		CO							
5907		CO							
5909		SW							
6504		SW							
6505		CO							
6707		CO	0	225		CI	VC	18.03	
6808		CO							
6809		CO							
6810		CO							
6904		CO							
6905		CO							
6906		CO		100		CI	VC	4.03	
6909		CO							
6910		CO							
6915		FO							
7504		FO							
7708		CO	0	225		CI	VC	18.38	
7709		CO	0	225		CI	VC	39.12	
7710		CO	0	225		CI	VC	53.46	
7711		CO							
7713		CO							
7714		CO							
7716		CO							
7717		CO							
7720		CO							
7810		SW							
7811		CO							
7904		CO							
7905		CO							
8502		CO		150		CI	VC	9.58	
8506		CO		150		CI	VC	24.24	
8507		CO		150		CI	VC	13.91	
8508		CO							
8802		CO							
9509		CO							
9510		CO							
9511		CO							
9512		CO							
9513		CO							
9514		CO							

Reno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
9605		CO							
9606		CO							
9910		CO							
5610		CO							
5902		CO							
5904		CO							
5908		CO							
5911		CO							
6600		CO							
6801		CO							
6807		CO	0	525		CI	VC	5.1	
6911		CO							
7503		CO							
7505		CO							
7600		CO							
7718		CO							
7719		CO							
7806		CO							
7809		CO							
7813		CO							
8503		CO							
8511		CO							
9505		CO							
9515		CO							
9516		CO							
9517		CO							
9518		CO							
9519		CO							
9604		CO							
9610		CO							
9902		CO							
9903		CO							
9906		CO							
9907		CO							
9912		CO							
9914		CO							

WASTE WATER SYMBOLOGY

Foul | Surface | Combined | Overflow

Manhole
Manhole, Side Entry
MainSewer, Public
MainSewer, Private
MainSewer, S104
Rising Main, Public
Rising Main, Private
Rising Main, S104
Highway Drain, Private

Foul | Surface | Combined

WW Site Termination
Air Valve
Cascade
Non Return Valve
Extent of Survey
Flow Meter
Gulley
Hatch Box
Head of System
Hydrobrake / Vortex
Inlet
Inspection Chamber
Bifurcation
Catchpit
Contaminated Surface Water
WW Pumping Station
Sludge Pumping Station
Sewer Overflow
TJunction/Saddle
LampHole
OilInterceptor
PenStock
Pump
RoddingEye
Soakaway
Summit
Valve
Vehicle Chamber
Washout Chamber
DropShaft
WW Treatment Works
Septic Tank
Vent Column
Network Storage Tank
Orifice Plate
Vortex Chamber
Penstock Chamber
Blind Manhole

Foul | Surface | Combined | Overflow

Screen Chamber
Discharge Point
Outfall

Control Kiosk
Unspecified

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

MainSewer
Rising Main
Highway Drain
Sludge Main

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

The position of underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available.
The actual positions may be different from those shown on the plan and private pipes, sewers or drains may not be recorded.
United Utilities will not accept any liability for any damage caused by the actual positions being different from those shown.
United Utilities Water Limited 2014. The plan is based upon the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office. Crown and United Utilities copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

OS Sheet No: SJ8895NE
Scale: 1: 1250 Date: 08/02/2016
186 Nodes
Sheet 1 of 1

United Utilities
helping life flow smoothly

SEWER RECORDS

Printed By: Property Searches

OS Sheet No: SJ8895NE

Scale: 1: 1250 Date: 08/02/2016



Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
5000	65.9	CO							
5002	66.1	CO	62.98	300		CI	VC	55.04	56
5003	65.52	SW	64.28	225		CI	VC	34.06	15
5005		CO							
5006		CO	22.77	225		CI	VC	10.97	122
5007		CO							
5100	66.74	CO	64.08	375		CI	VC	38.9	65
5101	66.74	SW							
5200	66.93	SW							
5201	66.93	CO							
5300	67.38	SW							
5301	67.54	SW							
5302	68.12	SW	66.03	225		CI	VC	47.3	84
5303	67.41	FO	64.26	225		CI	VC	54.38	121
5304	67.51	FO							
5305	68.09	FO	65.31	225		CI	VC	49.48	82
5307	68.53	CO	66.31	300		CI	VC	103.85	196
5308	68.84	CO	67.22	225		CI	VC	22.14	16
5400	68.6	CO	65.22	300		CI	VC	27.07	45
5401	69.6	SW							
5402	69.2	SW							
5404	68.94	SW							
5405	68.62	SW							
5406	68.16	SW							
5407		FO							
6000	66.73	CO	63.73	225		CI	VC	4.09	15
6001	66.65	CO							
6002	67.04	CO	63.18	375		CI	VC	20	80
6003	67.49	CO	0	950		CI	VC	15.03	
6006	67.46	CO	64.76	225		CI	VC	27.02	32
6007	67.91	SW							
6100	67.93	SW	64.76	300		CI	VC	118	207
6101	68.87	CO	65.77	225		CI	VC	116.76	72
6104		CO							
6105		CO							
6200	68.09	SW							
6201	68.08	CO							
6202	68.2	CO	65.74	300		CI	VC	23.09	17
6203	68.48	SW							
6301	69.01	CO	66.25	300		CI	VC	54.82	137
6302	69.16	CO	65.85	300		CI	VC	28.46	77
6303	69.55	CO	65.48	300		CI	VC	29.83	166
6304	69.34	CO	67.14	300		CI	VC	57.57	35
6305	69.82	SW	0	225		CI	VC	126.06	
6306	69.49	CO	65.15	630		CI	CO	38.21	112
6400	69.63	CO	65.33	300		CI	VC	11.18	22
6401	69.72	CO							
6402	69.71	SW							
6408		SW	0	225		CI	VC	8.25	
6409	69.19	SW	67.76	300		CI	VC	48.26	73
6410	69.46	SW							
6411	69.55	CO	63.91	750		CI	BR	148.44	69
6412	69.77	CO							
7000	66.39	CO							
7001	66.83	CO							
7002	67.29	CO							
7003	66.99	CO							
7005	67.2	SW							
7006	67.4	CO	65.11	375		CI	CO	38.05	13
7007	68.68	CO							
7008	67.52	CO							
7101	68.08	CO	65.71	225		CI	VC	15.03	20
7102	69.5	CO	67.66	225		CI	VC	59.14	59
7103	69.34	CO							
7104	67.5	SW							
7105	67.38	CO							
7106	67.89	CO							
7107	68.7	SW	67.67	225		CI	VC	63.39	46
7108	69.82	CO							
7109		CO							
7200	68.92	CO							
7201	69.87	CO							
7202	70.03	CO							
7203	70.33	CO							
7204	70.5	CO	69.56	225		CI	VC	18.68	78
7205	70.14	CO							
7206	70.12	CO							
7207	70.04	SW							
7208	69.46	CO	65.48	600		CI	CO	51.26	302
7209	69.74	CO							
7211	69.07	SW	67.07	300		CI	VC	50.29	62
7213	69.21	CO							
7214	69.4	SW							
7215	69.26	CO							
7300	69.31	CO	65.31	600		CI	CO	18.94	947
7303	70.2	SW	68.71	225		CI	VC	34.37	123
7305	70.88	CO	0	225		CI	VC	71.59	
7306		SW							
7307	70.3	CO							
7308	70.13	SW							
7309	70.2	SW							
7311	70.1	CO							
7312	69.7	CO							
7313	69.62	CO	67.45	225		CI	VC	7.28	4
7400	69.92	CO	0	225		CI	VC	19.42	
7401	70.52	CO	0	225		CI	VC	37	
7403	71.03	CO	69.2	225		CI	VC	5.39	2
7404	71.32	SW	69.87	225		CI	VC	44.01	72
7405	70.97	CO							
7406	70.58	SW							
8002	69.29	CO							
8100	70.02	CO	68.11	225		CI	VC	41.14	70
8101	70.59	CO							
8102	70.54	SW							
8103	70.22	CO							
8104	70.14	SW	68.58	225		CI	VC	45.1	38
8105	70.12	SW							
8106	70.12	CO	68.37	225		CI	VC	45.09	59
8107	71.33	CO	67.5	300		CI	VC	61.07	56
8108	71.33	SW	70.14	225		CI	VC	63.13	63
8110	71.45	CO	70.28	225		CI	VC	115.44	61
8111	70.51	CO	67.69	300		CI	VC	35.74	38
8113		CO							
8114		CO							
8115		CO							
8116		CO							
8117		CO							
8119		CO							
8120		CO							
8121		CO	0	150		CI	VC	5.9	
8200	71.52	SW							
8204	71.43	SW	70.29	225		CI	VC	63.6	64
8207	72.28	CO							
8208		CO	0	225		CI	VC	53.85	
8209	71.14	SW							
8210	71.99	SW							
8211	72.04	CO							
8300	72.41	CO							
8302	72.31	CO	68.48	475		CI	VC	13.34	30
8303	72.38	CO	69.25	600		CI	CO	10.2	
8304	72.46	CO							
8305		CO	0	225		CI	VC	20.4	
8306	72.46	CO							
8307	71.74	CO	70.92	225		CI	VC	84.17	21
8308	71.71	SW							
8309		SW							
8311		SW	0	225		CI	VC	40.79	
8312	72.71	CO	69.53	300		CI	VC	11.7	47
8313	72.44	SW	0	1300		CI	VC	66.76	
8400	72.84	CO							
8401	72.46	CO							
8402	72.57	SW							
8403	71.84	CO	66.9	300		CI	VC	46.24	185
8404	72.57	CO	71.31	225		CI	VC	6.71	56
8405	72.38	CO							
8406	72.58	FO	70.42	225		CI	VC	14.14	
8407	72.55	CO							
8408	72.69	CO	71.4	225		CI	VC	16.28	203
8409	73.11	CO	71.79	225		CI	VC	42.95	70
9000	68.91	SW							

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
9001	67.75	CO							
9002	67.68	SW							
9003	71.09	CO							
9004	71.45	CO							
9005	71.52	CO							
9007		CO		100		CI	VC	11.68	
9008	71.65	CO	69.15	300		CI	VC	16.16	46
9009		CO		0		CI		0.7	
9010		CO		100		CI	VC	8.41	
9016		CO		0		CI		2.28	
9020		CO							
9021		CO		100		CI	VC	30.1	
9022		CO							
9023		CO							
9024		CO		100		CI	VC	2.37	
9025		CO		100		CI	VC	7.76	
9033		CO							
9034		CO		100		CI	VC	4.15	
9035		CO							
9036		CO		100		CI	VC	16.18	
9101	71.96	SW							
9102		CO	0	225		CI	VC	21.95	
9103	71.87	SW							
9104	71.81	CO	69.34	225		CI	VC	40.25	503
9105	71.79	SW	70.57	225		CI	VC	21.63	
9106	71.98	CO							
9112		CO							
9117	0	CO							
9118		CO							
9200	71.79	CO	70.59	225		CI	VC	17.55	18
9202	72.68	CO	0	225		CI	VC	23.09	
9203	73.83	CO	71.54	225		CI	VC	28.66	12
9204	73.11	CO	0	225		CI	VC	25	
9207	72.21	CO	69.97	300		CI	CO	26.93	93
9208	73.28	CO							
9209	73.65	CO	70.97	300		CI	VC	22.09	76
9210	73.15	CO	71.82	225		CI	VC	50.04	
9211	73.57	CO							
9215	73.43	CO	0	300		CI	VC	33.24	
9300	73.47	CO							
9301	73.9	SW	72.22	225		CI	VC	64.78	65
9302	73.66	CO							
9303	73.25	CO							
9304	72.4	SW							
9305	72.75	CO							
9306	72.9	SW	71.66	225		CI	VC	34.13	98
9308	74.12	CO	72.89	225		CI	VC	20.4	12
9315		CO							
9316		CO							
9400	74.06	CO	71.12	375		CI	VC	45.89	94
9401	73.7	CO	73.36	225		CI	VC	60.42	41
9402	74.78	CO							
9403		CO	0	375		CI	VC	66.71	
9404	73.78	SW							
9405	73.85	CO							
9406	73.35	FO							
9407		SW	0	375		CI	VC	22.2	
5001		SW							
5004		CO	0	300		CI	VC	50.6	
5102		SW							
5408		SW	65.58	300		CI	VC	12.04	27
5409		SW	66.22	300		CI	CO	10.2	54
6008		CO							
6009		CO							
6103		CO							
6205		SW	67.17	375		CI	VC	17.26	
6417		CO							
6418		CO	64.55	630		CI	CO	12	133
7004		CO	63.91	300		CI	VC	27.02	32
7009		CO							
7011		CO							
7110		CO	68.21	300		CI	VC	10.44	95
7111		CO	65.53	225		CI	VC	29.41	25
7216		CO	66.12	600		CI	BR	19.7	82
7302		CO							
7304		CO							
7317		SW							
7408		SW	0	225		CI	VC	71.39	
8112		CO	0	150		CI	VC	6.02	
8118		CO	0	100		CI	VC	15.63	
8123		CO	0	150		CI	VC	15.24	
8214		CO	68.85	600		CI	VC	50.22	
8215		CO	70.8	150		CI	VC	36.4	49
8216		CO	69.96	600		CI	VC	3.16	1
8217		SW	68.19	1200		CI	CO	66.48	16
8221		CO							
8301		CO							
8314		SW	0	225		CI	VC	55.11	
8315		CO	69.32	225		CI	VC	10.2	
8316		CO	68.04	375		CI	VC	14.14	32
8411		CO	68.85	675		CI	CO	24.52	189
8412		SW	0	1070		CI	BR	31.58	
8413		FO							
8416		FO							
9006		CO		100		CI	VC	12.88	
9011		CO							
9013		SW		0		CI	UN	4.75	
9014		SW		0		CI	UN	4.22	
9017		CO							
9019		SW		100		CI	VC	1.47	
9026		SW							
9027		SW		100		CI	VC	2.11	
9029		SW		100		CI	VC	0.92	
9030		SW		100		CI	VC	0.98	
9037		SW		100		CI	VC	3.63	
9038		SW		100		CI	VC	3.23	
9039		SW							
9111		CO							
9113		CO							
9116		CO							
9120		CO							
9122		CO							
9124		CO							
9125		CO							
9127		FO							
9214		CO	69.68	300		CI	VC	26	90
9216		CO	71.53	150		CI	VC	23.09	20
9311		CO	0	225		CI	VC	36.35	
9314		CO	69.4	600		CI	CO	15.3	64
9408		SW	72.82	300		CI	VC	44.38	30
9411		CO							
9413		CO							
5306		SW							
5403		CO							
6004		CO	55.34	950		CI	BR	154.33	276
6005		CO							
6308		CO							
6403		SW							
6404		SW							
6405		SW							
6406		SW							
6407		SW							
6413		CO							
6414		SW							
7100		CO							
7301		CO							
7310		CO							
7314		CO							
7315		CO	65.62	225		CI	VC	21.59	53
7316		CO							
7402		SW							
7407		CO	64.82	300		CI	VC	22.47	132
8001		CO							
8109		CO							
8124		CO							
8126		CO							
8201		CO							
8202		CO							
8203		CO							
8205		CO							

WASTE WATER SYMBOLOGY

Foul Surface Combined Overflow

Manhole
Manhole, Side Entry
MainSewer, Public
MainSewer, Private
MainSewer, S104
Rising Main, Public
Rising Main, Private
Rising Main, S104
Highway Drain, Private

Foul Surface Combined

WW Site Termination
Air Valve
Cascade
Non Return Valve
Extent of Survey
Flow Meter
Gulley
Hatch Box
Head of System
Hydrobrake / Vortex
Inlet
Inspection Chamber
Bifurcation
Catchpit
Contaminated Surface Water
WW Pumping Station
Sludge Pumping Station
Sewer Overflow
T Junction/Saddle
LampHole
OilInterceptor
PenStock
Pump
RoddingEye
Soakaway
Summit
Valve
Valve Chamber
Washout Chamber
DropShaft
WW Treatment Works
Septic Tank
Vent Column
Network Storage Tank
Orifice Plate
Vortex Chamber
Penstock Chamber
Blind Manhole

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

MainSewer
Rising Main
Highway Drain
Sludge Main

Foul Surface Combined Overflow

Screen Chamber
Discharge Point
Outfall

Control Kiosk
Unspecified

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

The position of underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available.
The actual positions may be different from those shown on the plan and private pipes, sewers or drains may not be recorded.
United Utilities will not accept any liability for any damage caused by the actual positions being different from those shown.

United Utilities Water Limited 2014. The plan is based upon the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office. Crown and United Utilities copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

OS Sheet No: SJ8896SE

Scale: 1: 1250 Date: 08/02/2016

330 Nodes

Sheet 1 of 2

United Utilities helping life flow smoothly

SEWER RECORDS

OS Sheet No: SJ8896SE

Printed By: Property Searches

Scale: 1: 1250 Date: 08/02/2016

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
8206		CO							
8212		CO							
8213		CO							
8219		CO							
8222		CO							
8310		CO							
8410		FO							
9012		CO		100		CI	VC	6.86	
9015		CO		100		CI	VC	4.81	
9018		CO							
9028		SW		100		CI	VC	3	
9031		CO		100		CI	VC	11.06	
9032		CO		100		CI	VC	9.67	
9040		SW		100		CI	VC	5.13	
9107		CO							
9108		SW							
9109		CO							
9110		CO							
9121		CO							
9201		CO							
9205		CO							
9206		CO							
9212		SW							
9307		CO							
9309		CO		70.63	375	CI	VC	14.32	49
9310		CO							
9312		CO							
9313		CO							
9317		CO							
5001	65.86	CO							

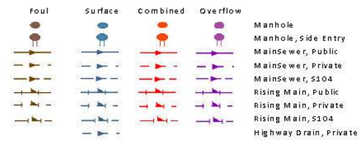
Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad

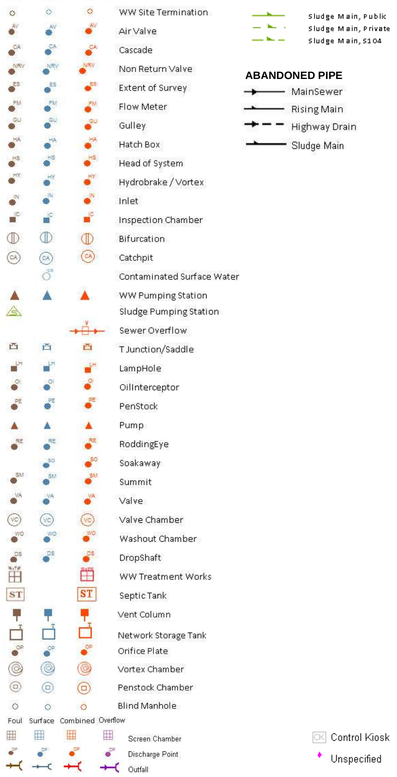
OS Sheet No: SJ8896SE

Scale: 1: 1250 Date: 08/02/2016

Printed By: Property Searches

WASTE WATER SYMBOLOGY





LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

The position of underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available.
The actual positions may be different from those shown on the plan and private pipes, sewers or drains may not be recorded.
United Utilities will not accept any liability for any damage caused by the actual positions being different from those shown.
United Utilities Water Limited 2014. The plan is based upon the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office. Crown and United Utilities copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

OS Sheet No: SJ8896SE

Scale: 1: 1250 Date: 08/02/2016

330 Nodes

Sheet 2 of 2

United Utilities
helping life flow smoothly

SEWER RECORDS

Conditions and Information regarding wastewater network

These general conditions and precautions apply to the wastewater network of United Utilities

Please ensure that a copy of these conditions is passed to your representative and contractor on site.

1 United Utilities provides the approximate locations of its sewers according to its records. These records are not necessarily accurate or complete nor do they normally show the positions of every sewer culvert or drain, private connections from properties to the public sewers or the particulars of any private system. No person or company shall be relieved from liability for any damage caused by reason of the actual positions and/or depths being different from those indicated. The records do indicate the position of the nearest known public sewer from which the likely length of private connections can be estimated together with the need for any off site drainage rights or easements.

2 Special requirements relative to our sewers may be indicated. United Utilities employees or its contractors will visit any site at reasonable notice to assist in the location of its underground sewers and advise any precautions that may be required to obviate any damage. To arrange a visit or for further information regarding new supplies, connections, diversions, costing, or any notification required under these General Conditions, please call us on **0345 602 0406**.

3 Where public sewers are within a site which is to be developed and do not take any drainage from outside the area, they are from an operational viewpoint redundant. The developer must identify all redundant sewers affected by the development and apply to United Utilities in writing for these sewers to be formally closed. The developer shall bear all related costs of the physical abandonment work.

4 Public sewers within the site that are still live outside the area will be subject to a “Restricted Building zone”. This would normally be a surface area equivalent to the depth of the sewer measured from the centre line of the sewer on either side. No construction will be permitted within that zone. The developer should also note that deep and wide rooted trees must not be planted in close proximity to live sewers. Access to public sewers must be maintained at all times and no interference to manholes will be permitted during construction work.

5. Where there is a public sewer along the line of a proposed development/building, arrangements shall be made by the developer at his cost to divert the sewer around the development. Where this is not possible and as a last resort, a “Building Over Agreement” will need to be completed under section 18 of the Building Act 1984. The developer shall design building foundations to ensure that no additional loading is transferred to the sewer and submit such details both to the Local Authority’s Building Control Officer and to United Utilities for approval/acceptance. United Utilities on a rechargeable basis would normally undertake all aspects of design work associated with the diversion of any part of the operational wastewater network. For further advice please email wastewaterdeveloperservices@uuplc.co.uk

6. Where there is a non-main river watercourse/culvert passing through the site, the landowner has the responsibility of a riparian owner for the watercourse/culvert and is responsible for the maintenance of the fabric of the culvert and for all works involved in maintaining the unrestricted flow through it. Building over the watercourse/culvert is not recommended. The developer must contact the local authority before any works are carried out on the watercourse/culvert. Where it is necessary to discharge surface water from the site into the watercourse/culvert the developer shall make an assessment of the available capacity of the watercourse/culvert (based on a 1 in 50 year event) and ensure that the additional flow to be discharged into the watercourse/culvert will not cause any flooding. In appropriate cases, flooding may be prevented by on-site storage. The developer shall submit the relevant details required to substantiate his development proposals. Details of any outfall proposed shall also be submitted to the Environment Agency, PO Box 12, Richard Fairclough House, Knutsford Road, Warrington, Cheshire, WA4 1HT for their approval.

7. Where there is a main river watercourse/culvert passing through the site, the developer shall submit all proposals affecting the river to the Environment Agency at the address stated in paragraph 6 for approval/acceptance.

United Utilities Water Limited 2015
Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP
www.unitedutilities.com

Registered in England and Wales Registered Number 2366678

Do you really need to print me?
Really? Think of the trees!
unitedutilities.com

United Utilities
helping life flow smoothly

8. Your attention is drawn also to the following:

Private drains or sewers which may be within the site.

On 1 October 2011 all privately owned sewers and lateral drains which communicate with (that is drain to) an existing public sewer as at 1 July 2011 will become the responsibility of the sewerage undertaker. This includes private sewers upstream of pumping stations that have yet to transfer, but excludes lengths of sewer or drain that are the subject of an on-going appeal or which have been excluded from transfer as a result of an appeal or which are on or under land opted-out by a Crown body. The transfer specifically excludes sewers and lateral drains owned by a railway undertaker. Sewers upstream of such assets, however, are transferred. Such assets may not be recorded on the public sewer record currently as it was not a requirement to keep records of previously private sewers and drains.

Applications to make connections to the public sewer.

The developer must write to United Utilities requesting an application form that must be duly completed and returned. No works on the public sewer shall be carried out until a letter of consent is received from United Utilities.

Sewers for adoption If an agreement for the adoption of sewers under Section 104 of the Water Industry Act 1991 is being contemplated, a submission in accordance with "Sewers for Adoption", Seventh Edition, published by the Water Research Centre (2001) Plc, Henley Road, Medmenham, PO Box 16, Marlow, Buckinghamshire, SL7 2HD will be required, taking into consideration any departures from the general guide stipulated by United Utilities.

Further consultation with United Utilities.

Developers wishing to seek advice or clarification regarding sewer record information provided should contact United Utilities to arrange an appointment. A consultation fee may be charged, details of which will be made available at the time of making an appointment.

9. Combined sewers, foul sewers, surface water sewers, and pumped mains. These are shown separately in a range of colours or markings to distinguish them on our drawings, which are extracts from the statutory regional sewer map. A legend and key is provided on each extract for general use, although not all types of sewer will be shown on every extract.

Combined sewers shown coloured red carries both surface water and foul sewage, especially in areas where there is no separate surface water sewerage system.

Foul sewers coloured brown may also carry surface water and there may be no separate surface water system indicated in the immediate area. Both combined and foul sewers carry wastewater to our treatment works before it can safely be returned to the environment.

Surface water sewers coloured blue on our drawings are intended only to carry uncontaminated surface water (e.g. rainfall from roofs, etc) and they usually discharge into local watercourses. It is important for the protection of the environment and water quality that only uncontaminated surface water is connected to the surface water sewers. Improper connections to surface water sewers from sink wastes, washing machines and other domestic use of water can cause significant pollution of watercourses.

Pumped mains, rising mains and sludge mains will all be subject to pumping pressures and are neither suitable nor available for making new connections.

Highway drains, when included, show as blue and black dashed lines. Highway drains are not assets belonging to United Utilities and are the responsibility of local authorities.

1. For information regarding future proposals for construction of company apparatus please write to United Utilities, PO Box 453, Warrington, WA5 3QN.
2. For information regarding easements, deeds, grants or wayleaves please write to United Utilities Property Solutions, Coniston Buildings, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington, WA5 3UU **Tel: 01925 731 365**

United Utilities Water Limited 2015
Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP
www.unitedutilities.com

Registered in England and Wales Registered Number 2366678

Do you really need to print me?
Really? Think of the trees!
unitedutilities.com

United Utilities
helping life flow smoothly

Conditions and Information regarding water distribution apparatus

These general conditions and precautions apply to the water distribution system of United Utilities

Please ensure that a copy of these conditions is passed to your representative and contractor on site.

1. United Utilities provides approximate locations of its water mains or apparatus according to its records. These records are not necessarily accurate or complete nor do they normally show the positions of private service pipes from the mains to properties. Where service pipes are shown, a blue broken line indicates their approximate position. No person or company shall be relieved from liability for any damage caused by reason of the actual positions and/or depths being different from those indicated.
2. Special requirements relative to our apparatus may be indicated. United Utilities employees will visit any site at reasonable notice to assist in the location of its underground water apparatus and advise any precautions that may be required to obviate any damage. To arrange a visit or for further information regarding new supplies, connections, diversions, costing, future proposals for construction of company apparatus or any notification required under these General Conditions, please telephone us on **0345 746 2200** or write to United Utilities, PO Box 453, Warrington, WA5 3QN.
3. In order to achieve safe working conditions adjacent to any water apparatus the following should be observed;
   (a) All water apparatus should be located by hand digging prior to the use of mechanical excavation.

   (b) During construction work where heavy plant may have to cross the line of a water main, and the main is not under a carriageway of adequate standard of construction, crossing points should be suitably reinforced with sleepers, steel plates or a specially constructed reinforced concrete raft as necessary. These crossing points should be clearly indicated and crossing the line of the water main at other places should be prevented. United Utilities employees will advise on the type of reinforcement necessary. This is particularly important on agricultural or open land, where tilling or erosion may have significantly reduced the original cover.

   (c) No explosive should be used within 32 metres of any United Utilities apparatus without prior consultation with United Utilities.

   (d) Where it is proposed to carry out piling within 15 metres of any water main United Utilities should be consulted so that the affected main may be surveyed.

4. During any excavation, it is important that measures should be taken to ensure continued support for any water main:

   (a) Where excavation of trenches adjacent to any water main is likely to affect its support, the main must be supported to the satisfaction of United Utilities.

   (b) Where a trench is excavated crossing or parallel to the line of a water main, the backfill should be adequately compacted to prevent any settlement which could subsequently cause damage to the main. In special cases it may be necessary to provide permanent support to a main which has been exposed over the length of the excavation before back-filling and reinstatement is carried out. No back-filled concrete should contact the main.

5. No other apparatus should be laid over and along the line of a water main irrespective of clearance. A minimum clearance of 450 millimetres should be allowed between any plant being installed and an existing main, to facilitate maintenance and repair, whether the adjacent plant is parallel to or crossing the main. No manhole, chamber, or other obstruction should be built over or around a water main.

6. Where a water main is coated with special wrapping and the wrapping is damaged, even to a minor extent, United Utilities must be notified, and the excavation must be left open for ready access so that repairs can be made. In case of any material damage to the main itself causing leakage, or weakening of the mechanical strength of the pipe, the person or body responsible should immediately notify United Utilities in order that the necessary remedial work can be carried out. The full cost of the necessary remedial work will be charged to the person or body responsible for the damage.

United Utilities Water Limited 2015
Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP
www.unitedutilities.com

Registered in England and Wales Registered Number 2366678

Do you really need to print me?
Really? Think of the trees!
unitedutilities.com

United Utilities
helping life flow smoothly

1. If you propose to change existing levels over water mains you will need to inform us. We will need specific locations to be identified together with precise details as to the scale of the proposed changes to existing ground levels. Changes to existing levels may require the diversion of our apparatus at your cost. However, in certain circumstances we may wish to leave our apparatus where it is. On these occasions you will usually be required to protect our apparatus by means of a concrete raft and either raise or lower any surface boxes affected.
2. Under no circumstances should our surface boxes be either buried or left in a situation where they are raised above finished ground levels. You should reuse and re-set any surface boxes affected by your works into the new surface so that they align over the water apparatus below. You will be responsible for the cost of repairing any damage to our apparatus as a result of your works.
3. Where proposals involve resurfacing, you must notify United Utilities if your excavation will be greater than 750mm in the highway and 300mm in a footpath, verge or other location.
4. For information regarding easements, deeds, grants, licences or wayleaves, please write to United Utilities Property Solutions, Coniston Buildings, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington WA5 3UU (**Tel 01925 731 365**).

Tree planting restrictions over water mains

a) Poplar and willow trees have extensive root systems and should not be planted within 10 metres of any water main.

b) The following trees and those of a similar size, whether they are deciduous or evergreen, should not be be planted within six metres of any water main:

- Ash, beech, birch, elm, horse chestnut, lime, oak, sycamore;
- Apple trees and pear trees;
- Most conifers.

c) United Utilities requires access to the route of its mains at all times to inspect for leaks and carry out surveys. We recommend that no shrubs or bushes which might obstruct or interfere with our access should be planted within one metre of the centre line of any water main.

d) There may be instances when both United Utilities and the landowner will wish to plant shrubs or bushes close to the water main for screening or other purposes. The following shallow rooting shrubs would be suitable for this purpose:

- Blackthorn, broom, cotoneaster, elder;
- Hazel, laurel, privet, quickthorn, snowberry;
- Most ornamental flowering shrubs.

e) In areas where soft fruit is grown, blackcurrant, raspberries and gooseberries may be planted close to the main, provided that a path is left clear for inspection access and surveys. United Utilities can give additional advice where required in particular circumstances.

United Utilities Water Limited 2015
Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP
www.unitedutilities.com

Registered in England and Wales Registered Number 2366678

Do you really need to print me?
Really? Think of the trees!
unitedutilities.com

United Utilities
helping life flow smoothly

WASTE WATER SYMBOLOGY



CLEAN WATER SYMBOLOGY

PIPE WORK



ABANDONED PIPE



NODES/FURNITURES



PROPERTY TYPES







TERMS AND CONDITIONS - WASTERWATER & 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:

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

Copyright © United Utilities Water Limited 2014

Appendix F – Existing Drainage Surveys

Place :

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

/ Main sections

Project name :	Project number :	Contact :	Date :
CD73095 ONE MANCHESTER HYDE	**CD 73095**		**19/04/2017**

Nr.	US MH	DS MH	Date	Road	Tape No.	Material	m	(m)
3	U/S C	MH01	19/04/2017	HYDE ROAD		Vitrified clay	23.43	23.43

Pipe size: CIRCULAR 225 = 23.43 m (23.43 m)

Nr.	US MH	DS MH	Date	Road	Tape No.	Material	m	(m)
1	U/S A	MH01	19/04/2017	HYDE ROAD		Vitrified clay	7.72	7.72
2	MH01	D/S	19/04/2017	HYDE ROAD		Vitrified clay	34.45	34.45
4	U/S B	MH01	19/04/2017	HYDE ROAD		Vitrified clay	23.26	23.26

Pipe size: CIRCULAR 375 = 65.43 m (65.43 m)

All sections = 88.86 m (88.86 m)

Place :

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Project-information

Project name :	Project Number :	Contact :	Date :
CD73095 ONE MANCHESTER HYDE	**CD 73095**		**19/04/2017**

Client:	**One Manchester**
Contact Name:	**Steven B. Holmes**
Department:	
Road:	**Brook House, Weybrook Road.**
Town:	
County:	
Telephone:	**+44 (0)161 432 9977**
Fax:	
Mobile:	
E-mail:	

Site:	**One Manchester**
Contact Name:	
Department:	
Road:	**Hyde Road**
Town:	**Gorton, Manchester**
County:	**Lancashire**
Telephone:	
Fax:	
Mobile:	
E-mail:	

Contractor	**CLEARWAY DRAINAGE SYSTEMS LTD**
Contact Name:	**AIDAN KEEGAN**
Department:	**CCTV DEPARTMENT**
Road:	**UNIT A2 LEIGH TRADING ESTATE**
Town:	**LEIGH WN7 3AE**
County:	**LANCASHIRE**
Telephone:	**01942 606761**
Fax:	
Mobile:	
E-mail:	**aidan@clearwayds.co.uk**

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Project-information

Project name :	Project Number :	Contact :	Date :
CD73095 ONE MANCHESTER HYDE	**CD 73095**		**19/04/2017**

Site address - Hyde Road, Gorton, Manchester M18 7FB

Clearway drainage systems attended the above site on 19th April.

Section 1

Start of survey: MH01
Depth of pipe Surveyed from: N/A
Finish of survey: U/S A
Depth of pipe surveyed to: N/A
Direction of survey: Upstream
Pipe Diameter: 375mm
Pipe material: Vitrified Clay
Water pressure result: Run not tested
CCTV Survey result: The CCTV survey has shown a crack & fracture at 0.19 metres. However, the line is capped off so we do not recommend any remedial works on this line.

Section 2

Start of survey: MH01
Depth of pipe Surveyed from: N/A
Finish of survey: D/S
Depth of pipe surveyed to: N/A
Direction of survey: Downstream
Pipe Diameter: 375mm
Pipe material: Vitrified Clay
Water pressure result: Run not tested
CCTV Survey result: There are structural defects throughout the line. There are multiple cracks and fractures which are causing detriment to the drainage system.

Although the line runs clear to the culvert, we recommend a series of localised patch liners to be installed to repair the numerous structural defects.

Section 3

Start of survey: MH01
Depth of pipe Surveyed from: N/A
Finish of survey: U/S C
Depth of pipe surveyed to: N/A
Direction of survey: Upstream
Pipe Diameter: 225mm
Pipe material: Vitrified Clay
Water pressure result: Run not tested
CCTV Survey result: The CCTV survey has shown structural defects, in the form of longitudinal cracks and infiltration. The line is capped off at 23.43 metres; however there still appears to be infiltration as the capped end is not installed fully.

We recommend a stunt end to be installed fully so that water is not entering the drain still.

Section 4

Start of survey: MH01
Depth of pipe Surveyed from: N/A
Finish of survey: U/S
Depth of pipe surveyed to: N/A
Direction of survey: Upstream

Place :

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Project-information

Project name :	Project Number :	Contact :	Date :
CD73095 ONE MANCHESTER HYDE	**CD 73095**		**19/04/2017**

Pipe Diameter:375mm
Pipe material: Vitrified Clay
Water pressure result: Run not tested
CCTV Survey result: The survey has shown deposits throughout the drain in the form of encrustation, silt & coarse deposits. There are a couple of displaced joints, but they are not affecting the drains flow.

We recommend another jet of the line to shift the deposits and a re-survey to ensure line runs clear throughout.

Place :

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
aidan@clearwayds.co.uk

Defect Grade Description

Project Name :	Project number :	Contact :	Date :
CD73095 ONE MANCHESTER HYDE	**CD 73095**		**19/04/2017**

1:

Brick: No Structural Defects
Pipe: No Structural Defects

Acceptable Structural Condition

2:

Brick: Minor cracking, Surface mortar loss, Spalling slight, wear slight
Pipe: Circumfrential crack, Moderate joint defects, Spalling slight, Wear slight

Minor collapse risk in short term but potential for further deterioration

3:

Brick: Total mortorloss without other defects, single brick displaced, Deformation up to 5%, Spalling medium, Wear medium
Pipe: Fractures with deformation up tp 5%, Longitudinal cracking or mulitlpe cracking, Minor loss of level, More severe joint

! Collapse unlikely in near future but future deterioration likely !

4:

Brick: Total mortorloss with deformation greater than 10%, Deformation up to 10% and fractured, Displaced/hanging brickwork, Small number of missing bricks
Pipe: Broken, Deformation up to 10% and broken,, Fractured with deformation 5 - 10%, Multipl

!! Collapse likely in foreseeable future !!

5:

Brick: Already Collapsed, Missing invert, Deformation over 10% and fractured, Displaced/hanging brickwork and deformation over 10%, Extensive missing bricks
Pipe: Already collapsed, Deformation over 10% and broken, Extensive areas of fabric missin

!!! Collapsed or collapse imminent !!!

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
Street : LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
19/04/2017		**no rain or snow**	**R OXBURY**	**1**	**X**
Weather	Vehicle :	Camera :	Preset :	Cleaned :	Operator :
no rain or snow	**NA12 JUF**	**ROVVER 225**		**no**	**R OXBURY**

Place :	**GORTON**	Location details:		U/S MH :	**U/S A**
Road :	**HYDE ROAD**	Catchment:		U/S Depth :	
Location	**A footway beside a road**	Tape number :		D/S MH :	**MH01**
Inspection Direction	**MH01 (U/S) U/S A**	Pipe Length		D/S Depth :	

Use:	**Surface water**	Pipe shape :	**Circular**
Year laid :	**Z**	Pipe size :	**375 mm**
Purpose :	**Sample survey to determin asset condition**	Pipe material :	**Vitrified clay**
Total length :	**7.72 m**	Lining :	

Comment :

1:75	Position	Code	Observation	MPEG	Photo	Grade
MH01	0.00	MH	Start node type, manhole, reference number : MH01	00:00:00		0
	0.00	WL	Water level, 5% of the vertical dimension			0
	0.19	CLJ	Crack, longitudinal at joint, at 12 o'clock	00:00:20	1_3A	2
	0.19	FLJ	Fracture, longitudinal at joint, at 6 o'clock	00:00:20		3
	7.72	REM	General remark Remarks: CONCRETE CAP	00:01:15	1_5A	0
	7.72	SA	Survey abandoned Remarks: CAPPED	00:01:27		0

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**1**	**X**



Photo: 1_1_4_A.JPG, 00:00:20
0.19m, Crack, longitudinal at joint, at 12 o'clock



Photo: 1_1_5_03052017_094438.jpg, 00:01:15
7.72m, General remark Remarks: CONCRETE CAP

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
Street : LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

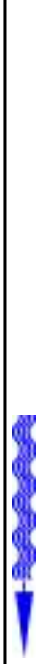
Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
19/04/2017		**no rain or snow**	**R OXBURY**	**2**	**X**
Weather	Vehicle :	Camera :	Preset :	Cleaned :	Operator :
no rain or snow	**NA12 JUF**	**ROVVER 225**		**yes**	**R OXBURY**

Place :	**GORTON**	Location details:		U/S MH :	**MH01**
Road :	**HYDE ROAD**	Catchment:		U/S Depth :	
Location	**A footway beside a road**	Tape number :		D/S MH :	**D/S**
Inspection Direction	**MH01 (D/S) D/S**	Pipe Length		D/S Depth :	

Use:	**Surface water**	Pipe shape :	**Circular**
Year laid :	**Z**	Pipe size :	**375 mm**
Purpose :	**Sample survey to determin asset condition**	Pipe material :	**Vitrified clay**
Total length :	**34.45 m**	Lining :	

Comment :



1:198	Position		Code	Observation	MPEG	Photo	Grade
MH01	0.00		MH	Start node type, manhole, reference number : MH01	00:00:00		0
	0.00		WL	Water level, 5% of the vertical dimension	00:00:00		0
	0.00		JN	Junction, at 3 o'clock, diameter 225mm	00:00:16		0
	0.03		JN	Junction, at 9 o'clock, diameter 150mm	00:00:30		0
	0.97		CMJ	Cracks, multiple at joint, from 12 to 8 o'clock	00:01:01	2_5A	3
	2.46		CLJ	Crack, longitudinal at joint, at 12 o'clock	00:01:01		2
	3.37		OJM	Open joint, medium	00:01:01	2_7A	1
	10.78		DES	Settled deposits, fine, 10% cross-sectional area loss	00:01:36		3
	10.78		JDM	Joint displaced, medium	00:01:40		1
	17.38		CL	Crack, longitudinal, at 11 o'clock	00:01:40		2
	18.35		LL	Line deviates left Remarks: SLIGHT	00:02:21		0
	22.34		FMJ	Fracture, multiple at joint, from 3 to 1 o'clock	00:02:48	2_12A	4
	22.34		D	Deformed sewer/drain, 10%	00:03:00	2_12A	4
	23.94	**S01**	FLJ	Fracture, longitudinal at joint, at 12 o'clock, Start	00:02:48	2_14A	3
	24.56		FLJ	Fracture, longitudinal at joint, at 6 o'clock	00:02:48	2_15A	3

Place :

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection Report

Date :	Job number :	Weather :	Operator :	Section number :	PLR :
19/04/2017		**no rain or snow**	**R OXBURY**	**2**	**X**
Weather	Vehicle :	Camera :	Preset :	Cleaned :	Grade:
no rain or snow	**NA12 JUF**	**ROVVER 225**		**yes**	



1:198 Position		Code	Observation	MPEG	Photo	Grade
25.19		CLJ	Crack, longitudinal at joint, at 9 o'clock	00:01:01		2
25.19		CLJ	Crack, longitudinal at joint, at 5 o'clock	00:02:48		2
25.61		FCJ	Fracture, circumferential at joint, from 8 to 2 o'clock	00:02:48		3
26.30	**F01**	FLJ	Fracture, longitudinal at joint, at 12 o'clock, End	00:03:00		3
26.30		JDM	Joint displaced, medium	00:03:46		1
29.33		FCJ	Fracture, circumferential at joint, from 2 to 6 o'clock	00:03:00		3
30.56		CLJ	Crack, longitudinal at joint, at 12 o'clock	00:03:00		2
30.70		DEEJ	Attached deposits, encrustation at joint, from 2 to 10 o'clock, 5% cross-sectional area loss	00:03:00		3
31.28		DEEJ	Attached deposits, encrustation at joint, from 2 to 5 o'clock, 10% cross-sectional area loss	00:04:27	2_14A	3
34.45		BRF	Finish node type, major connection without manhole reference number: D/S Remarks: CULVERT	00:01:01		0

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
3	**80**	**2.64**	**91**	**4**	**1**	**2**	**0.06**	**2**	**3**

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**2**	**X**



Photo: 2_1_5_03052017_094819.jpg, 00:01:01
0.97m, Cracks, multiple at joint, from 12 to 8 o'clock



Photo: 4_5_33_A.JPG, 00:01:01
3.37m, Open joint, medium

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**2**	**X**



Photo: 2_1_12_03052017_095510.jpg, 00:02:48
22.34m, Fracture, multiple at joint, from 3 to 1 o'clock



Photo: 4_5_39_A.JPG, 00:03:00
22.34m, Deformed sewer/drain, 10%

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**2**	**X**



Photo: 2_1_14_03052017_101055.jpg, 00:02:48
23.94m, Fracture, longitudinal at joint, at 12 o'clock, Start



Photo: 2_1_15_03052017_101110.jpg, 00:02:48
24.56m, Fracture, longitudinal at joint, at 6 o'clock

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**2**	**X**



Photo: 4_5_42_A.JPG, 00:04:27
31.28m, Attached deposits, encrustation at joint, from 2 to 5 o'clock, 10% cross-sectional area loss

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
Street : LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

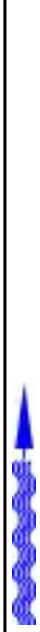
Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
19/04/2017		**no rain or snow**	**R OXBURY**	**3**	**X**
Weather	Vehicle :	Camera :	Preset :	Cleaned :	Operator :
no rain or snow	**NA12 JUF**	**ROVVER 225**		**no**	**R OXBURY**

Place :	**GORTON**	Location details:		U/S MH :	**U/S C**
Road :	**HYDE ROAD**	Catchment:		U/S Depth :	
Location	**A footway beside a road**	Tape number :		D/S MH :	**MH01**
Inspection Direction	**MH01 (U/S) U/S C**	Pipe Length		D/S Depth :	

Use:	**Surface water**	Pipe shape :	**Circular**
Year laid :	**Z**	Pipe size :	**225 mm**
Purpose :	**Sample survey to determin asset condition**	Pipe material :	**Vitrified clay**
Total length :	**23.43 m**	Lining :	

Comment :



1:195 Position	Code	Observation	MPEG	Photo	Grade
MH01					
0.00	MH	Start node type, manhole, reference number : MH01	00:00:00		0
0.00	WL	Water level, 10% of the vertical dimension	00:00:00		0
0.00	DES	Settled deposits, fine, 10% cross-sectional area loss	00:00:21	5_3A	3
14.28	JN	Junction, at 3 o'clock, diameter 150mm	00:01:51		0
15.23	CLJ	Crack, longitudinal at joint, at 10 o'clock	00:01:51		2
15.23	CLJ	Crack, longitudinal at joint, at 4 o'clock	00:03:21		2
15.49	DEEJ	Attached deposits, encrustation at joint, from 3 to 6 o'clock, 5% cross-sectional area loss	00:01:51		3
22.31	JN	Junction, at 3 o'clock, diameter 150mm	00:02:30		0
23.41	IR	Infiltration, running, from 6 to 8 o'clock	00:02:50	5_6A	0
23.43	REM	General remark Remarks: STUNT END	00:03:16		0
23.43	SA	Survey abandoned Remarks: CAPPED	00:03:21	5_8A	0

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	**0**	**0**	**0**	**1**	**1**	**2**	**0.09**	**2**	**3**

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**3**	**X**



Photo: 5_6_50_A.JPG, 00:00:21
0m, Settled deposits, fine, 10% cross-sectional area loss



Photo: 5_6_53_A.JPG, 00:02:50
23.41m, Infiltration, running, from 6 to 8 o'clock

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	**HYDE ROAD**	**19/04/2017**	**3**	**X**



Photo: 5_6_55_A.JPG, 00:03:21
23.43m, Survey abandoned Remarks: CAPPED

Place :

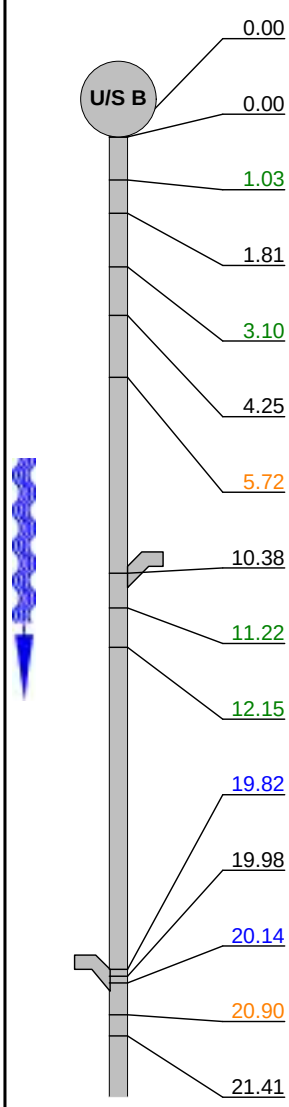
CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
Street : LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
19/04/2017		**no rain or snow**	**R OXBURY**	**4**	**X**
Weather	Vehicle :	Camera :	Preset :	Cleaned :	Operator :
no rain or snow	**NA12 JUF**	**ROVVER 225**		**no**	**R OXBURY**

Place :	**DER**	Location details:		U/S MH :	**U/S B**
Road :	**HYDE ROAD**	Catchment:		U/S Depth :	
Location	**A footway beside a road**	Tape number :		D/S MH :	**MH01**
Inspection Direction	**U/S B (D/S) MH01**	Pipe Length		D/S Depth :	
Use:	**Surface water**		Pipe shape :	**Circular**	
Year laid :	**Z**		Pipe size :	**375 mm**	
Purpose :	**Sample survey to determin asset condition**		Pipe material :	**Vitrified clay**	
Total length :	**23.26 m**		Lining :		

Comment :



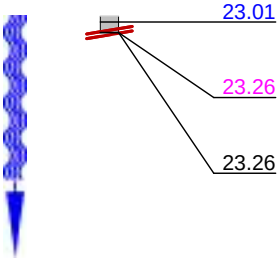
1:180	Position	Code	Observation	MPEG	Photo	Grade
	0.00	MH	Start node type, manhole, reference number : MH01	00:00:00		0
	0.00	WL	Water level, 5% of the vertical dimension	00:00:00		0
	1.03	JDM	Joint displaced, medium	00:00:15	6_3A	1
	1.81	LR	Line deviates right Remarks: SLIGHT	00:00:23		0
	3.10	OJM	Open joint, medium	00:00:34	6_5A	1
	4.25	LL	Line deviates left Remarks: SLIGHT	00:00:46		0
	5.72	DEE	Attached deposits, encrustation, from 2 to 5 o'clock, 10% cross-sectional area loss	00:00:57	6_7A	3
	10.38	JN	Junction, at 10 o'clock, diameter 150mm	00:01:29		0
	11.22	JDL	Joint displaced, large	00:01:40	6_9A	1
	12.15	JDM	Joint displaced, medium	00:01:50	6_10A	1
	19.82	RFJ	Roots, fine at joint	00:02:27	6_11A	2
	19.98	JN	Junction, at 1 o'clock, diameter 150mm	00:02:46		0
	20.14	RFJ	Roots, fine at joint	00:02:46		2
	20.90	DES	Settled deposits, fine, 20% cross-sectional area loss	00:02:56	6_13A	3
	21.41	WL	Water level, 10% of the vertical dimension	00:02:46		0

Place :

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection Report

Date :	Job number :	Weather :	Operator :	Section number :	PLR :
19/04/2017		**no rain or snow**	**R OXBURY**	**4**	**X**
Weather	Vehicle :	Camera :	Preset :	Cleaned :	Grade:
no rain or snow	**NA12 JUF**	**ROVVER 225**		**no**	

1:180	Position	Code	Observation	MPEG	Photo	Grade
	23.01	RFJ	Roots, fine at joint	00:03:15		2
	23.26	DER	Settled deposits, coarse, 60% cross-sectional area loss	00:03:38	4_17A	4
	23.26	SA	Survey abandoned Remarks: DER	00:03:46		0

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
1	**1**	**0.04**	**1**	**1**	**3**	**8**	**0.52**	**12**	**4**

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
DER	**HYDE ROAD**	**19/04/2017**	**4**	**X**



Photo: 6_7_58_A.JPG, 00:00:15
1.03m, Joint displaced, medium



Photo: 6_7_60_A.JPG, 00:00:34
3.1m, Open joint, medium

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
DER	**HYDE ROAD**	**19/04/2017**	**4**	**X**



Photo: 6_7_62_A.JPG, 00:00:57
5.72m, Attached deposits, encrustation, from 2 to 5 o'clock, 10% cross-sectional area loss



Photo: 6_7_64_A.JPG, 00:01:40
11.22m, Joint displaced, large

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
DER	**HYDE ROAD**	**19/04/2017**	**4**	**X**



Photo: 6_7_65_A.JPG, 00:01:50
12.15m, Joint displaced, medium

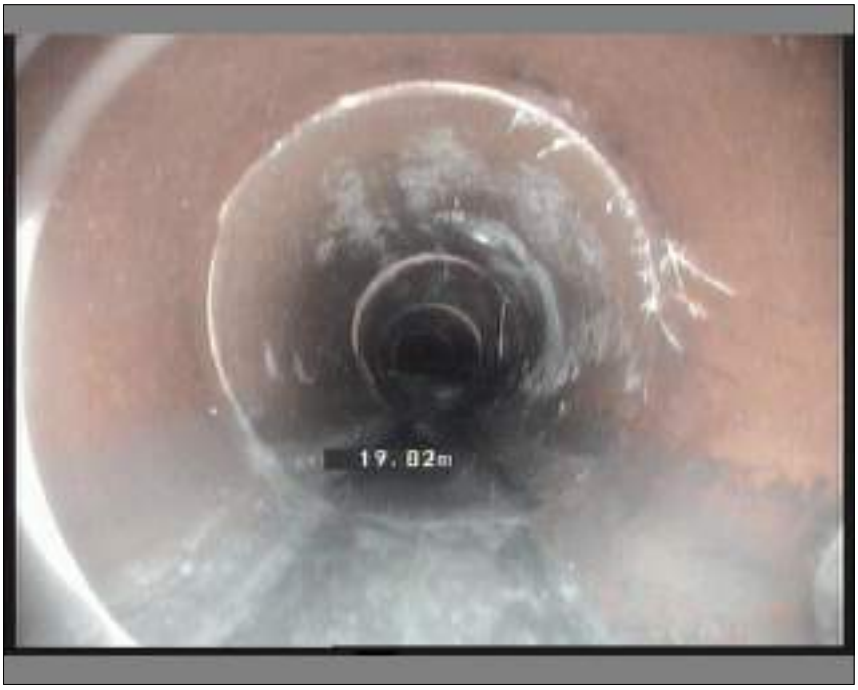


Photo: 6_7_66_A.JPG, 00:02:27
19.82m, Roots, fine at joint

CLEARWAY DRAINAGE SYSTEMS LTD
UNIT A2 LEIGH TRADING ESTATE
LEIGH WN7 3AE
Tel: 01942 606761
Fax:
Email: aidan@clearwayds.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
DER	**HYDE ROAD**	**19/04/2017**	**4**	**X**



Photo: 6_7_69_A.JPG, 00:02:56
20.9m, Settled deposits, fine, 20% cross-sectional area loss



Photo: 4_1_17_03052017_105325.jpg, 00:03:38
23.26m, Settled deposits, coarse, 60% cross-sectional area loss

Lanes Group PLC
300 Lansdowne Road
Monton, Eccles
Tel: 0161 788 2267
Fax: 0161 788 2232
Email: simon.roberts@lanesgroup.co.uk

Project-information

Project name :	Project Number :	Contact :	Date :
PJ00238967 HBL ASSOCIATED LTD	PJ238967	NW - 18360	20/10/2016

Client:	**HBL Associated Limited**
Contact Name:	
Department:	
Road:	**Brook House, Weybrook Road**
Town:	**Heaton Chapel**
County:	**Stockport, M19 2QD**
Telephone:	
Fax:	
Mobile:	
E-mail:	

Site:	**Oasis Centre**
Contact Name:	**Steve Holmes**
Department:	
Road:	**Hyde Road**
Town:	**Gorton**
County:	**Manchester, M18 8UB**
Telephone:	**0161 432 9977**
Fax:	
Mobile:	**07771557748**
E-mail:	

Contractor	**Lanes Group PLC**
Contact Name:	**Simon Roberts**
Department:	**North West Office Building 1**
Road:	**300 Lansdowne Road**
Town:	**Monton, Eccles**
County:	**Manchester, M30 9PJ**
Telephone:	**0161 788 2267**
Fax:	**0161 788 2232**
Mobile:	**07860 757163**
E-mail:	**simon.roberts@lanesgroup.co.uk**

Tetra Group PLC, 300 Carsdonwe Road, Manton, Eccles. Tel: 0161 788 2267 Fax. 0161 708 2232

Defect Summary Sheet

	No.	m +	Material	Observation	Upstream MH	Downstream MH	Grade
1	1	0.21	Vitrified clay	Attached deposits, encrustati	A	MH:	4
2	2	21.45	Vitrified clay	Settled deposits, fine, 25% cr	B	MH:	4
3	3	0.00	Vitrified clay	Settled deposits, fine, 10% cr	C	MH"	3
4	3	5.98	Vitrified clay	Settled deposits, fine, 10% cr	C	MH"	3
5	4	0.75	Vitrified clay	Fracture, longitudinal, at 1 o'	MH1	D'STREAM	3
6	4	2.80	Vitrified clay	Fracture, longitudinal, at 11 o	MH"	D'STREAM	3
7	4	15.14	Vitrified clay	Settled deposits, fine, 25% cr	MH:	D'STREAM	4

Lanes Group PLC
300 Lansdowne Road
Street : Manton, Eccles
Tel: 0161 788 2267
Fax: 0161 789 2232
Email: simon.roberts@lanesgroup.co.uk

Inspection report

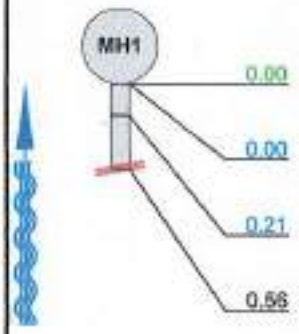
Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
20/10/2016	PJ238967	no rain or snow	J.RIDER	1	X
Weather	**Vehicle :**	**Camera :**	**Preset :**	**Cleaned :**	**Operator :**
no rain or snow	PJ62 MYH	IPEK125		no	J.RIDER

Place :	GORTON	Location details:		U/S MH :	A
Road :	HYDE ROAD	Catchment:		U/S Depth :	
Location	A footway beside a road	Tape number :		D/S MH :	MH1
Inspection	MH1 (U/S) A	Pipe Length	0.70 m	D/S Depth :	2.9

Use:	Combined	Pipe shape :	Circular
Year laid :	Z	Pipe size :	300 mm
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay
Total length :	0.56 m	Lining :	

Comment :

1:50 Position	Code	Observation	Photo	Grade
Depth: 2.9				
0.00	MH	Start node type, manhole, reference number : MH1		(Constr) 0
0.00	WL	Water level, 05% of the vertical dimension		(Serv) 0
0.21	DEE	Attached deposits, encrustation, from 3 to 10 o'clock, 70% cross-sectional area loss	1_1_4_A.JPG	(Serv) 4
0.56	SA	Survey abandoned Remarks: DUE TO ENCRUSTATION		(Misc) 0



Structural Defects					Constructional Features				
Service Defects					Miscellaneous Features				
STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	1	8	38.1	8	8

Lanes Group PLC
350 Lansdowne Road
Monton, Eccles
Tel: 0161 788 2267
Fax: 0161 789 2232
Email: simon.roberts@lanesgroup.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	HYDE ROAD	20/10/2016	1	X



Photo: 1_1_4_A.JPG, 00:00:21
0.21m, Attached deposits, encrustation, from 3 to 10 o'clock, 70% cross-sectional area loss

Lanes Group PLC
300 Lansdowne Road
Street : Manton, Eccles
Tel: 0161 789 2207
Fax: 0161 789 2232
Email: simon.roberts@lanesgroup.co.uk

Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
20/10/2016	PJ238967	no rain or snow	J.RIDER	2	X
Weather	**Vehicle :**	**Camera :**	**Preset :**	**Cleaned :**	**Operator :**
no rain or snow	PJ62 MYH	IPEK125		no	J.RIDER

Place :	GORTON	Location details:		U/S MH :	B
Road :	HYDE ROAD	Catchment:		U/S Depth :	
Location	A footway beside a road	Tape number :		D/S MH :	MH1
Inspection	MH1 (U/S) B	Pipe Length	0.70 m	D/S Depth :	2.9

Use:	Combined	Pipe shape :	Circular
Year laid :	Z	Pipe size :	300 mm
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay
Total length :	21.46 m	Lining :	

Comment :

1:180 Depth: 2.9

Position	Code	Observation	Photo	Grade
0.00	MH	Start node type, manhole, reference number : MH1		(Constr) 0
0.00	WL	Water level, 05% of the vertical dimension		(Serv) 0
4.10	LL	Line deviates left		(Serv) 0
10.71	JN	Junction, at 10 o'clock, diameter 150mm		(Constr) 0
20.11	JN	Junction, at 1 o'clock, diameter 100mm		(Constr) 0
21.45	DES	Settled deposits, fine, 25% cross-sectional area loss	3_3_11_A.JPG	(Serv) 4
21.46	REM	General remark Remarks: OFF BOUNDARY		(Misc) 0
21.46	SA	Survey abandoned Remarks: OFF BOUNDARY		(Misc) 0

Structural Defects | Constructional Features
Service Defects | Miscellaneous Features

STR no def	STR peak	STR mean	STR total	STR grade	MER no def	MER peak	MER mean	MER total	MER grade
0	0	0	0	1	1	5	0.23	5	4

Lawes Group PLC
300 Lansdowne Road
Moston, Eccles
Tel: 0161 788 2267
Fax: 0161 709 2232
Email: simon.roberts@lawesgroup.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	HYDE ROAD	20/10/2016	2	X



Photo: 3_3_11_A.JPG, 00:02:27
21.45m, Settled deposits, fine, 25% cross-sectional area loss

Lanes Group PLC
300 Lansdowne Road
Street : Manton, Eccles
Tel: 0161 788 2267
Fax: 0161 788 2232
Email: simon.roberts@lanesgroup.co.uk

Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
20/10/2016	PJ238867	no rain or snow	J.RIDER	3	X
Weather	**Vehicle :**	**Camera :**	**Preset :**	**Cleaned :**	**Operator :**
no rain or snow	PJ62 MYH	IPEK128		no	J.RIDER

Place :	GORTON	Location details:		U/S MH :	C
Road :	HYDE ROAD	Catchment:		U/S Depth :	
Location	A footway beside a road	Tape number :		D/S MH :	MH1
Inspection	MH1 (U/S) C	Pipe Length	0.70 m	D/S Depth :	

Use:	Combined	Pipe shape :	Circular
Year laid :	Z	Pipe size :	225 mm
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay
Total length :	23.40 m	Lining :	

Comment :

1:195 Position		Code	Observation	Photo	Grade
MH1					
0.00		MH	Start node type, manhole, reference number : MH1		(Constr) 0
0.00		WL	Water level, 15% of the vertical dimension		(Serv) 0
0.00	S01	DES	Settled deposits, fine, 10% cross-sectional area loss, Start	4_4_16_A.JPG	(Serv) 3
2.76		WL	Water level, 10% of the vertical dimension		(Serv) 0
5.96	F01	DES	Settled deposits, fine, 10% cross-sectional area loss, End		(Serv) 3
6.46		WL	Water level, 05% of the vertical dimension		(Serv) 0
14.21		JN	Junction, at 3 o'clock, diameter 150mm		(Constr) 0
22.25		JN	Junction, at 3 o'clock, diameter 150mm		(Constr) 0
23.40		REM	General remark Remarks: CAPPED OFF,HEAD OF RUN		(Misc) 0
C					
23.40		OCF	Finish node type, other special chamber reference number: C Remarks: CAPPED OFF		(Constr) 0

Structural Defects | Constructional Features
Service Defects | Miscellaneous Features

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
0	0	0	0	1	1	2	0.5	11.5	3

Lanes Group PLC
300 Lansdowne Road
Monton, Eccles
Tel: 0161 788 2267
Fax: 0161 788 2232
Email: simon.roberts@lanesgroup.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	HYDE ROAD	20/10/2016	3	X



Photo: 4_4_16_A.JPG, 00:00:07
0m, Settled deposits, fine, 10% cross-sectional area loss, Start

Lanes Group PLC
300 Lansdowne Road
Stoke : Morton, Ecclies
Tel: 0161 788 2267
Fax: 0161 788 2232
Email: simon.roberts@lanesgroup.co.uk

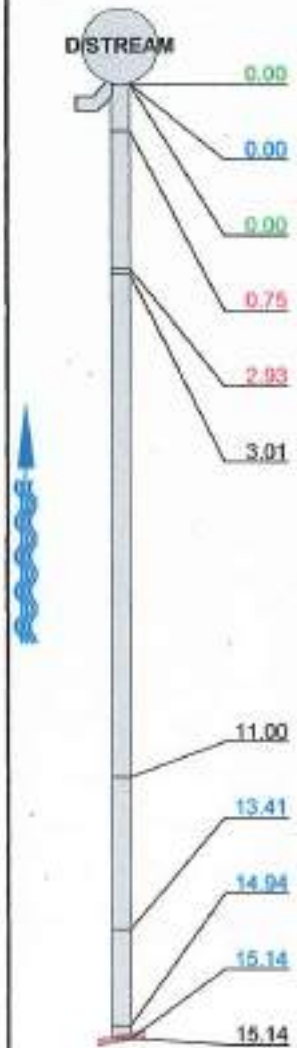
Inspection report

Date :	Job number :	Weather :	Operator :	Section number :	PLR SUFFIX:
20/10/2016	PJ238967	no rain or snow	J.RIDER	4	X
Weather	**Vehicle :**	**Camera :**	**Preset :**	**Cleaned :**	**Operator :**
no rain or snow	PJ62 MYH	IPEK125		no	J.RIDER

Place :	GORTON	Location details:		U/S MH :	MH1
Road :	HYDE ROAD	Catchment:		U/S Depth :	
Location	A footway beside a road	Tape number :		D/S MH :	D/STREAM
Inspection	D/STREAM (U/S) MH1	Pipe Length	0.70 m	D/S Depth :	

Use:	Combined	Pipe shape :	Circular
Year laid :	Z	Pipe size :	300 mm
Purpose :	Routine inspection of condition	Pipe material :	Vitrified clay
Total length :	15.14 m	Lining :	

Comment :



1:120 Position	Code	Observation	Photo	Grade
0.00	MH	Start node type, manhole, reference number : MH1		(Constr) 0
0.00	WL	Water level, 05% of the vertical dimension		(Serv) 0
0.00	JNC	Junction closed, at 3 o'clock, diameter 225mm		(Constr) 0
0.75	FL	Fracture, longitudinal, at 1 o'clock	5_5_27_A.JPG	(Struct) 3
2.93	FL	Fracture, longitudinal, at 11 o'clock	5_5_28_A.JPG	(Struct) 3
3.01	MC	Material changes, cast iron		(Misc) 0
11.00	MC	Material changes, vitrified clay		(Misc) 0
13.41	WL	Water level, 15% of the vertical dimension		(Serv) 0
14.94	WL	Water level, 25% of the vertical dimension		(Serv) 0
15.14	DES	Settled deposits, fine, 25% cross-sectional area loss	5_5_32_A.JPG	(Serv) 4
15.14	SA	Survey abandoned Remarks: DUE TO SILT		(Misc) 0

Structural Defects | Constructional Features
Service Defects | Miscellaneous Features

STR no def	STR peak	STR mean	STR total	STR grade	SER no def	SER peak	SER mean	SER total	SER grade
2	40	6.38	89	3	1	5	0.33	5	4

Lanes Group PLC
300 Lansdowne Road
Monton, Eccles
Tel: 0161 788 2267
Fax: 0161 788 2232
Email: simon.roberts@lanesgroup.co.uk

Inspection pictures

Place :	Road :	Date :	Section number :	PLR Suffix :
GORTON	HYDE ROAD	20/10/2016	4	X



Photo: 5_5_27_A.JPG, 00:00:33
0.75m, Fracture, longitudinal, at 1 o'clock



Photo: 5_5_28_A.JPG, 00:00:45
2.93m, Fracture, longitudinal, at 11 o'clock



Photo: 5_5_32_A.JPG, 00:02:05
15.14m, Settled deposits, fine, 25% cross-sectional area loss

Appendix G - Proposed Site Plan

4105/101 Rev.E – Proposed Site Plan.

All dimensions are to be checked on site, any discrepancies are to be reported to the Architect before work commences. Do not scale from this drawing.

This drawing is to be read in conjunction with all relevant consultants and specialists drawings / documents, any discrepancies are to be reported to the Architect before the affected work commences.

All structural components shown are Indicative only. Details / calculations of structural members are to be provided by the Structural Engineer.

This drawing is copyright.

A	Levels to plots H9/H10 adjusted - Oasis centre drainage added	19/09/2018

111
2
16
26
119
Wellington St
Hyde Road
OASIS CENTRE
+67.75 FFL
Main Entrance
Prayer room entrance
External storage / Bins
informal cycle parking
8no Car Parking Spaces
cycle parking
H9 3B 4P
H10 3B 4P
+67.90 FFL
H11 3B 4P
H12 3B 4P
+68.25 FFL
+68.50 FFL
H13 3B 4P
H14 3B 4P
+69.05 FFL
H15 3B 4P
H16 3B 4P
+69.30 FFL
H17 3B 4P
H18 3B 4P
+69.55 FFL
H19 3B 4P
H20 3B 4P
+69.80 FFL
H21 3B 4P
H22 3B 4P
H23 3B 4P
+69.05 FFL
H24 3B 4P
H25 3B 4P
H26 3B 4P
+68.80 FFL
H1 H2 H3 H4 H5 H6 H7 H8
+67.10 FFL
CL 66.35
EL 75.05
N

Grays Architecture Limited

Northwood House (N1)
Greenwood Business Centre,
Manchester, M5 4QH

Tel : 0161 848 7263
e-mail: mail@graysarchitecture.co.uk

Client:
The Oasis Centre

Project:
The Oasis Centre -
Hyde Road, Gorton, M18 7FB

Drawing Title:
Proposed Site Plan - Combined

Scale:
1:200 @ A1

Date:
November 2017

Drawing No:
4105/103

Revision:
A

Appendix H - Consultation with United Utilities (UU)

Edyta Savage

Subject: FW: 5951 - PDE UU Ref: DE1961 Hyde Road, Gorton - 595 - Connection to Hyde Road Approval and Rate

---

From: Harrison, William [mailto:William.Harrison1@uuplc.co.uk]
Sent: 08 August 2017 12:16
To: Steve Holmes
Cc: steve.douglas@btinternet.com; Edyta Savage ; Wastewater Developer Services
Subject: 5951 - PDE UU Ref: DE1961 Hyde Road, Gorton - 595 - Connection to Hyde Road Approval and Rate

Good Afternoon Steve,

Based on your site investigation and due diligence, I can confirm that in principal I have no objections to you discharging the surface water into the combined sewerage network located within Hyde Road with a maximum pass forward flow rate of 6.5l/s.

Kind Regards,

Will Harrison BSc (Hons)
Assistant Developer Engineer
Developer Services & Planning
Operational Services
United Utilities

T : 01925 679319
E : Wastewaterdeveloperservices@uuplc.co.uk

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

United Utilities Water Ltd. - Developer Services and Planning
Warrington North Wastewater Treatment Works
Barnard Street Off Old Liverpool Road
Gatewarth Industrial Estate
Warrington
WA5 1DS

From: Steve Holmes [mailto:Steve.Holmes@hblassociates.co.uk]
Sent: 03 August 2017 13:26
To: Harrison, William <William.Harrison1@uuplc.co.uk>
Cc: steve.douglas@btinternet.com; Edyta Savage <Edyta.Savage@hblassociates.co.uk>
Subject: 5951 - PDE UU Ref: DE1961 Hyde Road, Gorton - 595 - Connection to Hyde Road Approval and Rate

Good Afternoon Will,

Thanks for taking my call earlier and to confirm our conversation as follows;

We would confirm that we did carryout the trace testing of the SW pipe in Hengist Street and confirm the pipe does discharge into Gore Brook, just under the bridge.

However, after further consideration, it is not practical to link our site with Hengist Street as we would have to cross Hyde Road, which is almost impossible as such, and to confirm our discussion, we would confirm your acceptance of discharging into the current 375mm connection from our site, as per the attached schematic, which essentially discharges into the 900mm combined sewer in Hyde Road.

Our current scheme is based on a flow forward rate of 5l/s for the SW, please could you drop me a quick e-mail confirming your acceptance of the above and at what flow forward rate would be permitted. We will then update our calculations and drainage strategy and re-submit for approval.

We really do appreciate your time on this and look forward to receiving your response.

Thanks and Regards

Steven B. Holmes
Director
For and on behalf of **HBL Associates Ltd**

Brook House, Weybrook Road, Heaton Chapel M19 2QD

t : +44 (0)161 432 9977
f : +44 (0)161 432 7979
m : +44 (0)7771 55 77 48
w: www.hblassociates.co.uk

Offices: Stockport – Bury – Stafford

From: Harrison, William [mailto:William.Harrison1@uuplc.co.uk]
Sent: 11 July 2017 15:39
To: Steve Holmes <Steve.Holmes@hblassociates.co.uk>
Cc: steve.douglas@btinternet.com; Edyta Savage <Edyta.Savage@hblassociates.co.uk>
Subject: PDE UU Ref: DE1961 Hyde Road, Gorton - 595

Afternoon Steve,

Further to our phone call, I note a surface water sewer in Hengist Street to the south west of the site. This is marked up as discharging into the combined system, however I find this very odd given the scenario and the water course located in close proximity – so much so that I think the surface water sewer discharges direct to the water course. If you were to investigate this and found the surface water sewer did discharge to the water course then then I would be willing to accept a pass forward flow rate of 30l/s.

Kind Regards,

Will Harrison BSc (Hons)
Assistant Developer Engineer
Developer Services & Planning
Operational Services
United Utilities

T : 01925 679319
E : Wastewaterdeveloperservices@uuplc.co.uk

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

United Utilities Water Ltd. - Developer Services and Planning
Warrington North Wastewater Treatment Works
Barnard Street Off Old Liverpool Road
Gatewarth Industrial Estate
Warrington
WA5 1DS

From: Harrison, William
Sent: 11 July 2017 11:29
To: 'Edyta Savage' <Edyta.Savage@hblassociates.co.uk>
Cc: Steve Holmes <Steve.Holmes@hblassociates.co.uk>; 'steve.douglas@btinternet.com' <steve.douglas@btinternet.com>; Dodd, Matthew <Matthew.Dodd@uuplc.co.uk>; Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>
Subject: PDE UU Ref: DE1961 Hyde Road, Gorton - 595

Good Morning Edyta,

Many thanks for your email as per below.

I note from the concept drainage strategy that SUDs aren't a viable option in this instance due to water levels being within 1m below ground level.

As per previous comments, United Utilities would accept the surface water discharge into the 1350mm diameter public surface water sewer located within Garlick Street via a pumped solution and to be included within the S104.

Conversely, the domestic foul and surface water can be drained to existing 920mm diameter combined sewer located within Hyde Road, but surface water emanating from any highways will not be permitted to enter the public combined sewerage network, and alternative methods of disposal with have to be used .

I'm also concerned about the stub that you wish to connect to. For the upstream network to be adopted, this stub would have to be put forward under a S102 and be made up to standard, as it is now an abandoned, 'private' pipe after the original building was demolished – obviously we can't have a public system going into a private pipe into a public network.

Kind Regards,

Will Harrison BSc (Hons)
Assistant Developer Engineer
Developer Services & Planning
Operational Services
United Utilities

T : 01925 679319
E : Wastewaterdeveloperservices@uuplc.co.uk

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

United Utilities Water Ltd. - Developer Services and Planning
Warrington North Wastewater Treatment Works
Barnard Street Off Old Liverpool Road

Gatewarth Industrial Estate
Warrington
WA5 1DS

From: Edyta Savage [mailto:Edyta.Savage@hblassociates.co.uk]
Sent: 07 July 2017 11:29
To: Harrison, William <William.Harrison1@uuplc.co.uk>
Cc: Steve Holmes <Steve.Holmes@hblassociates.co.uk>
Subject: FW: 5951 - Hyde Road - Residential Development.

William,

I was wondering if you would be able to assist us with regards to the above project in Matthew Dodd absence. The concept drainage strategy is attached with Appendix H showing the communication with Matthew to date. Please advise, your earliest response will be greatly appreciated

Kind regards,

Regards,

Edyta Savage
For and on behalf of **HBL Associates Ltd**

Brook House, Weybrook Road, Heaton Chapel, Stockport M19 2QD

t : +44 (0)161 432 9977
f : +44 (0)161 432 7979
m : +44 (0)7970049646
w: www.hblassociates.co.uk

Offices: Stockport – Bury – Stafford

From: Edyta Savage
Sent: Wednesday, July 5, 2017 9:42 AM
To: Dodd, Matthew <Matthew.Dodd@uuplc.co.uk>
Cc: Matthew Gray (matthew@graysarchitecture.co.uk) <matthew@graysarchitecture.co.uk>; Catherine Halstead <Catherine.Halstead@onemanchester.co.uk>; Ben Dawson <ben.dawson@wilcowan.com>; Steve Holmes (Steve.Holmes@hblassociates.co.uk) <Steve.Holmes@hblassociates.co.uk>
Subject: FW: 5951 - Hyde Road - Residential Development.

Dear Matthew,

Please find attached our Proposed Concept Drainage Strategy for the above including the executive summary of the Phase II SI report (full report available on request) indicating that the soakaway or other form of infiltration is not a viable option for this project - please see Appendix C of the attached document.

The connection to the water sewer is in Garlic Street to the north of the site, due to the topography of the site, would demand surface water to be lifted by the necessary inclusion of a surface water pumping station over a height in access of 5.0m though 3rd party land.

Please review the attached document in support and justification of our request for your approval to connect into the large culvert in Hyde Road. Please advise of any restrictions in flow forward rates from the site.

We trust the attached provides sufficient information, however please do not hesitate to contact us if you need any further information or to discuss the attached.

Kind regards,

Edyta Savage
For and on behalf of **HBL Associates Ltd**

Brook House, Weybrook Road, Heaton Chapel, Stockport M19 2QD

t : +44 (0)161 432 9977
f : +44 (0)161 432 7979
m : +44 (0)7970049646
w: www.hblassociates.co.uk

Offices: Stockport – Bury – Stafford

The information contained in this message and in any attachment(s) is solely for the use of the intended recipient(s). It may be privileged and confidential and protected from disclosure. If you are not the intended recipient, please immediately notify the sender by replying to the message and then destroy this message. You must not directly or indirectly use, disclose, distribute, print or copy any part of this message if you are not the intended recipient(s). Any views or opinions expressed in this message are those of the individual sender and do not necessarily represent those of HBL Associates Ltd.

HBL Associates Ltd does not accept responsibility for any viruses being passed or for any data or damage caused by any mail or data contained therein. E-mails maybe monitored by HBL Associates Ltd for operational or business reasons in accordance with company policy.

HBL Associates Ltd : Registered England Number 8646046 - Registered Office : 7 Christie Way, Christie Fields, Manchester M21 7QY

EMGateway3.uuplc.co.uk made the following annotations

The information contained in this e-mail is intended only
for the individual to whom it is addressed. It may contain
legally privileged or confidential information or otherwise
be exempt from disclosure. If you have received this Message
in error or there are any problems, please notify the sender
immediately and delete the message from your computer. You
must not use, disclose, copy or alter this message for any
unauthorised purpose. Neither United Utilities Group PLC nor
any of its subsidiaries will be liable for any direct, special,
indirect or consequential damages as a result of any virus being
passed on, or arising from the alteration of the contents of
this message by a third party.

United Utilities Group PLC, Haweswater House, Lingley Mere
Business Park, Lingley Green Avenue, Great Sankey,
Warrington, WA5 3LP
Registered in England and Wales. Registered No 6559020

www.unitedutilities.com
www.unitedutilities.com/subsidiaries

The information contained in this message and in any attachment(s) is solely for the use of the intended recipient(s). It may be privileged and confidential and protected from disclosure. If you are not the intended recipient, please immediately notify the sender by replying to the message and then destroy this message. You must not directly or indirectly use, disclose, distribute, print or copy any part of this message if you are not the intended recipient(s). Any views or opinions expressed in this message are those of the individual sender and do not necessarily represent those of HBL Associates Ltd.

HBL Associates Ltd does not accept responsibility for any viruses being passed or for any data or damage caused by any mail or data contained therein. E-mails maybe monitored by HBL Associates Ltd for operational or business reasons in accordance with company policy.

HBL Associates Ltd : Registered England Number 8646046 - Registered Office : 7 Christie Way, Christie Fields, Manchester M21 7QY

Edyta Savage

From: Steve Douglas (PMA) <steve.douglas@btinternet.com>
Sent: Friday, June 2, 2017 8:58 AM
To: 'Dodd, Matthew'
Cc: 'Wastewater Developer Services'; Steve Holmes; Edyta Savage
Subject: RE: HBL Job# 5951 - (DE1916 951-953) Hyde Road, Manchester - Drainage Proposal for Comment / Approval

Follow Up Flag: Follow up
Flag Status: Flagged

Matthew,

Thanks for your further advices.

I have copied Steve Holmes and Edyta at HBL Associates and will rely upon them providing the evidence of ground conditions and practicalities or otherwise of communicating with the SW sewer in Garlick Street.

From the point of view of confirming permissible discharge rates from the site, I note that you have not addressed my query. Would you please:-

- Consider increasing the pff for the whole site above the given 5 litres/sec taking account of the substantial existing building to be demolished.
- Consider permitting the part of the site with the former existing building to discharge as it is understood it currently does to the combined sewer in Hyde Road, with the remainder of the site discharging as your initial advice.
- Confirm that if a SW pumping station communicating with the SW sewer is the only option (other than connection to combined sewer) that you consider available to us, that your company would adopt the station and upstream system, provided always it met SFA6 for sewers and SFA6/7 for the pumping station.

Regards,
Steve Douglas

peter mason associates
Tel:- 01704 823245
Fax:- 01704 823246
Mob:- 07803 210383
email: steve@petermasonassociates.co.uk
email: steve.douglas@btinternet.com

Web: www.petermasonassociates.co.uk

It is recommended that emails sent with large attachments be cc'd to BOTH email accounts above.

This email and its attachments may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of Peter Mason Associates. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone.
Please contact the sender if you believe you have received this email in error.

Peter Mason Associates Limited.
Registered in England and Wales No. 3794324.

Registered Office
Goodyear Business Park
New Street
Mawdesley

Lancs.
L40 2QP

From: Dodd, Matthew [mailto:Matthew.Dodd@uuplc.co.uk]
Sent: 01 June 2017 17:13
To: 'steve@petermasonassociates.co.uk' <steve@petermasonassociates.co.uk>
Cc: Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>
Subject: RE: HBL Job# 5951 - (DE1916 951-953) Hyde Road, Manchester - Drainage Proposal for Comment / Approval

Good afternoon Steve

Thank you for the additional information.

Can you please provide evidence to support the points below i.e. infiltration test results

There have been some cases recently where our network teams have preferred the installation of a surface water pumping station as opposed to taking the extra volume of surface water into the combined system, albeit at a reduced rate.

Is there no route through to the surface water sewer in Garlick Street?

I'm on leave tomorrow, returning on Monday. If you wish to discuss then we can.

Kind regards

Matthew Dodd
Assistant Developer Engineer
Developer Services and Planning
Operational Services
United Utilities
T: 01925 679369 (internal 79369)
unitedutilities.com

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

From: Steve Douglas (PMA) [mailto:steve.douglas@btinternet.com]
Sent: 30 May 2017 11:45
To: Dodd, Matthew <Matthew.Dodd@uuplc.co.uk>; Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>
Cc: 'Edyta Savage' <Edyta.Savage@hblassociates.co.uk>; 'Matthew Gray' <matthew@graysarchitecture.co.uk>; 'Andrew Gent' <andrew@graysarchitecture.co.uk>; 'Steve Holmes' <Steve.Holmes@hblassociates.co.uk>
Subject: RE: HBL Job# 5951 - (DE1916 951-953) Hyde Road, Manchester - Drainage Proposal for Comment / Approval

Matthew,

I refer to our brief conversation earlier and my attempt to clarify our enquiry regarding DE1916 and, in particular, Steve Holmes' additional further enquiry from Friday.

The initial enquiry came from myself and your response DE1916 was directed to me on 01 March.

Since that time the detailed design of drainage on site has been passed to HBL Associates and I am maintaining a peripheral and advisory role.

Whilst you directed surface water be disposed either to soakaway or to local surface water sewer, I understand that further investigation has indicated

(a) Ground conditions will not support disposal via infiltration
(b) Local surface water sewers are at a level that will demand surface water be lifted by the necessary inclusion of a surface water pumping station

There are expectations that drainage on site will be offered to United Utilities under S104 and my experience is that you would be reluctant to adopt a surface water pumping station if there were other disposal options available. There is a substantial combined sewer within Hyde Road and an existing combined connection to it from the site. Steve Holmes of HBL has enquired further if there is the prospect of communicating with that for disposal of both surface water and foul wastewater.

Moreover, it is clear from viewing the area that there is a substantial existing (former bank building) on the development site at the corner of Hyde Road and Wellington Street and that it is understood the surface water drainage from this will communicate with the combined sewer in Hyde Road. The proposals are for this building to be demolished.

The existing building has a roof area of approximately 300 square metres and at 50mm/hr rainfall that would generate a run-off of 4 litres/sec.

Would it not be that this building currently draining to sewer would increase the total permissible run-off from the site to sewer above the quoted 5 litres/sec and, if so, to what would you consider increasing the permissible run-off, either to combined or surface water sewer?

Regards,
Steve Douglas

peter mason associates
Tel:- 01704 823245
Fax:- 01704 823246
Mob:- 07803 210383
email: steve@petermasonassociates.co.uk
email: steve.douglas@btinternet.com

Web: www.petermasonassociates.co.uk

It is recommended that emails sent with large attachments be cc'd to BOTH email accounts above.

This email and its attachments may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of Peter Mason Associates. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone.
Please contact the sender if you believe you have received this email in error.

Peter Mason Associates Limited.
Registered in England and Wales No. 3794324.

Registered Office
Goodyear Business Park
New Street
Mawdesley
Lancs.
L40 2QP

From: Steve Holmes [mailto:Steve.Holmes@hblassociates.co.uk]
Sent: 26 May 2017 18:50
To: Dodd, Matthew <Matthew.Dodd@uuplc.co.uk>
Cc: Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>; steve.douglas@btinternet.com; Ben Dawson <ben.dawson@wilcowan.com>; Judy Noah <Judy.Noah@onemanchester.co.uk>; Catherine.Halstead@onemanchester.co.uk; Edyta Savage <Edyta.Savage@hblassociates.co.uk>; 'Matthew Gray (matthew@graysarchitecture.co.uk)' <matthew@graysarchitecture.co.uk>; Andrew Gent

<andrew@graysarchitecture.co.uk>
Subject: HBL Job# 5951 - (DE1916 951-953) Hyde Road, Manchester - Drainage Proposal for Comment / Approval

Good Afternoon Mathew,

Further to the e-mail below to Steven Douglas at Peter Mason Associates and the attached drainage network and pre-liminary drainage scheme we would request approval / comment from you in respect of making the drainage both for foul and surface water into the existing combined culvert running down the centre of Hyde Road.

We would further comment as follows;

Within your initial response you have requested the surface water is discharged into either a soakaway on site or into the surface water system, the nearest being on either in Chapman Street to the east or Garlic St to the north. However, the site itself runs away from both these surface water connections and any connection would also require a pipe run through a number of third party properties between our site and the surface water connections. The ground conditions are such that a Soakaway solution is not practical.

Therefore if we were to connect into these then a pumping set would need to be installed and as it is the intention the system will be adopted the maintenance of the pump chamber would be with UU.

To mitigate this we have identified a 375mm pipe that runs from the boundary of our site on Hyde Road an into the combined brick culvert within Hyde Road. We have a camera survey of this pipe demonstrating its connection into the culvert.

Attached is a pre-liminary drainage schematic demonstrating how we would attenuate the storm surface surge and limit the run off rate to 5l/s as you have directed.

We would welcome your comments / approval on the proposal to connect to the Culvert in Hyde Road based on the reasons mentioned above.

Please feel free to contact me if you require any further information or to discuss the above.

Thanks and we look forward to hearing from you at your earliest convenience.

Regards

Steven B. Holmes
Director
For and on behalf of **HBL Associates Ltd**

Brook House, Weybrook Road, Heaton Chapel M19 2QD

t : +44 (0)161 432 9977
f : +44 (0)161 432 7979
m : +44 (0)7771 55 77 48
w: www.hblassociates.co.uk

Offices: Stockport – Bury – Stafford

From: Dodd, Matthew [mailto:Matthew.Dodd@uuplc.co.uk]
Sent: 01 March 2016 09:54
To: steve.douglas@btinternet.com
Cc: Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>
Subject: RE: DE1916 951-953 Hyde Road, Manchester, M12 5AA due 01.032016

Dear Steve

We have carried out an assessment of your application which is based on the information provided; this pre development advice will be valid for 12 months

Foul

Foul will be allowed to drain to the public combined sewer network, at a point convenient to you, at an unrestricted rate.

Surface Water

Surface water from this site must drain to soak away or some other form of infiltration system but if ground conditions confirm that this is not a viable solution all surface water can drain to the nearby surface water sewer at a maximum pass forward flow of 5 l/s.

Connection Application

Although we may discuss and agree discharge points & rates in principle, please be aware that you will have to apply for a formal sewer connection. This is so that we can assess the method of construction, Health & Safety requirements and to ultimately inspect the connection when it is made. Details of the application process and the form itself can be obtained from our website by following the link below

http://www.unitedutilities.com/connecting-public-sewer.aspx

Sewer Adoption Agreement

You may wish to offer the proposed new sewers for adoption. United Utilities assess adoption appliation based on Sewers adoption 6th Edition and for any pumping stations our company addenda document. Please refer to link below to obtain further guidance and application pack:

http://www.unitedutilities.com/sewer-adoption.aspx

Please be aware that on site drainage must be designed in accordance with Building Regulations, National Planning Policy, Planning Conditions and local flood authority guidelines, we would recommend that you liaise and make suitable agreements with the relevant statutory bodies.

I can advise that there are no records of public sewer flooding of properties in this vicinity as a result of overloaded sewers i.e. no properties on the 'at risk' register as compiled for our Regulator. Please note that United Utilities Water plc (UUW) can only record and check flooding events which are reported to us and we have to comply with our Regulators instructions on the qualification of flooding events to place on the 'at risk' register Also, this does not include any sewer flooding events caused by blockages or collapses which are the result of third party actions, natural events or other actions over which UUW has no control and not a facet of sewer capacity.

Regards

Matthew Dodd
Assistant Developer Engineer
Developer Services and Planning
Operational Services
United Utilities
T: 01925 679369 (internal 79369)
unitedutilities.com

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

From: Steve Douglas (PMA) [mailto:steve.douglas@btinternet.com]
Sent: 09 February 2016 08:38
To: Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>
Subject: Land at 951-953 Hyde Road Manchester. M12 5AA

To whom it may concern

Find attached predevelopment enquiry form in addition to proposed site layout for

Land at
951-953 Hyde Road
Manchester.
M12 5AA

Regards,
Steve Douglas
peter mason associates
Tel:- 01704 823245
Fax:- 01704 823246
Mob:- 07803 210383
email: steve@petermasonassociates.co.uk
Web: www.petermasonassociates.co.uk

This email and its attachments may be confidential and are intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of Peter Mason Associates. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone.
Please contact the sender if you believe you have received this email in error.

Peter Mason Associates Limited.
Registered in England and Wales No. 3794324.

Registered Office
Goodyear Business Park
New Street
Mawdesley
Lancs.
L40 2QP

EMGateway3.uuplc.co.uk made the following annotations

The information contained in this e-mail is intended only for the individual to whom it is addressed. It may contain legally privileged or confidential information or otherwise be exempt from disclosure. If you have received this Message in error or there are any problems, please notify the sender immediately and delete the message from your computer. You must not use, disclose, copy or alter this message for any unauthorised purpose. Neither United Utilities Group PLC nor any of its subsidiaries will be liable for any direct, special, indirect or consequential damages as a result of any virus being passed on, or arising from the alteration of the contents of this message by a third party.

United Utilities Group PLC, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey,

Warrington, WA5 3LP
Registered in England and Wales. Registered No 6559020

www.unitedutilities.com
www.unitedutilitiescom/subsidiaries

The information contained in this message and in any attachment(s) is solely for the use of the intended recipient(s). It may be privileged and confidential and protected from disclosure. If you are not the intended recipient, please immediately notify the sender by replying to the message and then destroy this message. You must not directly or indirectly use, disclose, distribute, print or copy any part of this message if you are not the intended recipient(s). Any views or opinions expressed in this message are those of the individual sender and do not necessarily represent those of HBL Associates Ltd.

HBL Associates Ltd does not accept responsibility for any viruses being passed or for any data or damage caused by any mail or data contained therein. E-mails maybe monitored by HBL Associates Ltd for operational or business reasons in accordance with company policy.

HBL Associates Ltd : Registered England Number 8646046 - Registered Office : 7 Christie Way, Christie Fields, Manchester M21 7QY

Appendix J - Proposed Impermeable Areas and Drainage Plans

5951 - 50 (REV P0) – Proposed Drainage Plan

5951 - 111 (REV P0) - Proposed Impermeable Areas



LEGEND

PROPOSED IMPERMEABLE AREAS

PROPOSED IMPERMEABLE AREAS

SCALE 1:200

DO NOT SCALE FROM THIS DRAWING

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER HBL DRAWINGS ISSUED FOR THIS PROJECT

AREAS	SQ M	TOTAL CONTRIBUTING PER PIPE (SQ M)	PIPE NUMBER
OASIS BUILDING	410		
OASIS HARDSTANDING	315	795	S 2.001
ROAD GULLIES 11-12	70		
PLOT H13	50		
H13 -HARD STANDING	12		
PLOT H14	50		
H14 -HARD STANDING	12		
PLOT H15	50		
H15 -HARD STANDING	24		
PLOT H16	50		
H16 -HARD STANDING	53		
PLOT H17	50		
H17 -HARD STANDING	24		
PLOT H18	50		
H18 -HARD STANDING	12	1297	S 1.000
PLOT H19	50		
H19 -HARD STANDING	12		
PLOT H20	50		
H20 -HARD STANDING	12		
PLOT H21	50		
H21 -HARD STANDING	12		
PLOT H22	50		
H22 -HARD STANDING	12		
PLOT H23	50		
H23 -HARD STANDING	12		
ROAD GULLIES 1-5	550		
PLOT H24	50		
H24 -HARD STANDING	13		
PLOT H25	50		
H25 -HARD STANDING	12		
PLOT H26	50		
H26 -HARD STANDING	16		
PLOT H9	50		
H9 -HARD STANDING	42	869	S 1.001
PLOT H10	50		
H10 -HARD STANDING	43		
PLOT H11	50		
H11 -HARD STANDING	36		
PLOT H12	50		
H12 -HARD STANDING	17		
ROAD GULLIES 6-7	340		
ROAD GULLIES 8-10	320		
PLOT H1	42		
H1 -HARD STANDING	47		
PLOT H2	42		
H2 -HARD STANDING	36		
PLOT H3	42		
H3 -HARD STANDING	36		
PLOT H4	42		
H4 -HARD STANDING	36		
PLOT H5	42		
H5 -HARD STANDING	36		
PLOT H6	42		
H6 -HARD STANDING	36		
PLOT H7	42		
H7 -HARD STANDING	35		
PLOT H8	42		
H8 -HARD STANDING	34	952	S 1.002
TOTAL IMPERMEABLE	3913		
TOTAL IMPERMEABLE OASIS CENTRE	725		
TOTAL IMPERMEABLE RESIDENTIAL DEVELOPMENT	3188		

REV.	DATE	DRAWN	DESCRIPTION	CHKD	APPRD
P0	OCT'18	ES	PRELIMINARY ISSUE	SH	SH

HBL ASSOCIATES Ltd.
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
Brook House, Weybrook Road Heaton Chapel, Stockport M19 2QD.
Telephone 0161 432 9977
Facsimile 0161 432 7979
Email : consultants@hblassociates.co.uk

© COPYRIGHT RESERVED HBL ASSOCIATES Ltd.

STATUS

PRELIMINARY

CLIENT: ONE MANCHESTER	DRAWN: ES
PROJECT: HYDE ROAD RESIDENTIAL DEVELOPMENT	CHECKED: SH
LOCATION: HYDE ROAD, GORTON, M18 7FB	APPROVED: SH
DRAWING TITLE: SECTION 104 PROPOSED IMPERMEABLE AREAS	DATE: MAY'17
	SCALE(S): A1
DRAWING No.: 111	HBL REF.: 5951
	REVISION: P0

FILE REF R:/JOBS CURRENT/

LEGEND

100Ø — PIPE SIZE AND DIRECTION OF FLOW

EXISTING SURFACE WATER

EXISTING FOUL WATER

EXISTING COMBINED WATER

PROPOSED SURFACE WATER

PROPOSED FOUL WATER

PROPOSED COMBINED WATER

ESW1 — EXISTING SURFACE WATER MANHOLE

EFW1 — EXISTING FOUL WATER MANHOLE

EFW1 — EXISTING FOUL WATER MANHOLE

ECW1 — EXISTING COMBINED WATER MANHOLE

SW1 — PROPOSED SURFACE WATER MANHOLE

FW1 — PROPOSED FOUL WATER MANHOLE

CW1 — PROPOSED COMBINED WATER MANHOLE

SIC3 — PROPOSED SURFACE WATER INSPECTION CHAMBER - TYPE 3 AS PER SFA7TH.

SIC4 — PROPOSED SURFACE WATER INSPECTION CHAMBER - TYPE 4 AS PER SFA7TH

FIC3 — PROPOSED FOUL WATER INSPECTION CHAMBER - TYPE 3 AS PER SfA7th.

FIC4 — PROPOSED FOUL WATER INSPECTION CHAMBER TYPE 4 AS PER SFA7TH

CIC1 — PROPOSED COMBINED INSPECTION CHAMBER

RWP — EXISTING RAIN WATER PIPE

G — EXISTING GULLY

SVP — EXISTING SOIL VENT PIPE

RWP — PROPOSED RAIN WATER PIPE

SVP — PROPOSED SOIL VENT PIPE

RE — PROPOSED RODDING EYE

G — PROPOSED SURFACE WATER GULLY

G — PROPOSED FOUL WATER GULLY

G — PROPOSED COMBINED WATER GULLY

CHANNEL — CHANNEL DRAIN 'ACO' OR SIMILAR APPROVED

GEOCELL — PROPOSED SURFACE WATER ATTENUATION STORAGE - GEOCELL STRUCTURE

CELLULAR STORAGE
12m x 9m x 0.8m - TBC
CL 67.300 - TBC
TOP OF TANK 66.200
BASE 65.400

MH S1 (2400Ø) CL 68.732 IL 64.200

MH S2 300Ø CL 67.970 IL 64.124

MH S3 (3000Ø) CL 67.400 IL 64.071

MH S4 (1500Ø) CL 66.400 IL 65.360 SILT SUMP

MH S5 (3000Ø) HydroBreak 6.5l/s CL 66.420 IL 64.020

MH S6 1500DIA - TBC SILT SUMP

MH F1 1350Ø CL 68.500 IL 67.150

MH F2 (1200Ø) CL 68.025 IL 66.675

MH F3 (1200Ø) CL 67.700 IL 66.350

MH F4 1200Ø CL 67.560 IL 66.200

MH F5 1200Ø CL 67.435 IL 66.050

MH F6 1500Ø CL 66.500 IL 65.115

MH F7 1200Ø CL 66.500 IL 65.450

MH CW1 (1800 Ø - TBC) CL 66.200 IL 63.540

EXTG MH ECW1 CL 66.35 IL 63.45

S1.000 1200 Ø 1/401

S1.001 1200 Ø 1/500

S1.002 1200 Ø 1/475

S1.003 150Ø

S2.000 225 Ø

F 10.000 1500 @1/56

F 1.003 150Ø @1/80 MIN

F 1.002 150Ø @1/80 MIN

F 1.001 150Ø @1/80 MIN

F 2.000 150Ø@1/80 MIN

INDICATIVE LINE OF EXISTING SURFACE WATER DRAIN SERVING THE EXISTING BUILDING ON THE CORNER OF HYDE ROAD AND WELLINGTON STREET

EXISTING 375MM Ø CONNECTION TO EXTG 900mm CULVERT IN HYDE ROAD TO BE LINED, REFER TO DRAINAGE SURVEYS BY CLEARWAY AND LANES GROUP PLC IN 'APPENDIX F' OF DRAINAGE STRATEGY.

OASIS CENTRE +67.75 FFL

Main Entrance

Cabin

Hyde Road

PROPOSED DRAINAGE PLAN

SCALE 1:200

DO NOT SCALE FROM THIS DRAWING

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER HBL DRAWINGS ISSUED FOR THIS PROJECT

DRAINAGE NOTES

1. SETTING OUT SHOULD BE UNDERTAKEN FROM ARCHITECT'S DRAWINGS AND DETAILS. DO NOT SCALE FROM THIS DRAWING.
2. ALL DRAINAGE WORKS TO BE IN ACCORDANCE WITH BS EN752: BRITISH STANDARD FOR DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS AND THE BUILDING REGULATIONS, ALL WHERE RELEVANT.
3. THE ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES TO THE DETAILS SHOWN ON THE DRAINAGE AND ANY UNRECORDED CONNECTIONS NOT SHOWN ON THE DRAWINGS. A CCTV SURVEY OF ALL THE DRAINAGE SHOULD BE CARRIED OUT ON COMPLETION OF THE BUILDING WORKS AND PASSED ON TO THE CLIENT.
4. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS AND LEVELS AND FOR CONFIRMING THE GIVEN LEVEL OF OUTFALL INTO PUBLIC SEWER, WATERCOURSE OR OTHER OOUTFALL
5. NEW PRIVATE PLOT DRAINAGE AND LATERAL DRAINS FOR SURFACE AND FOUL WATER TO BE 'OSMADRAIN' PVC-U 110mm GRAVITY DRAIN.
6. ALL PIPE BEDDING AND ENCASING TO BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND DETAILS, APPROPRIATE TO THE SITE CONDITIONS AND LOCATIONS USED. THERMOPLASTIC PIPES UNDER ROADS AND ACCESSWAYS WITH DEPTH OF COVERL LESS THAN 900MM, TO BE CONCRETE ENCASED.
7. ALL MANHOLES AND INSPECTOR CHAMBERS TO COMPLY WITH BSEN 752-3:1996 AND BUILDING REGULATION APPROVED DOCUMENT PART 'H' :2015.
8. MANHOLE COVERS TO COMPLY WITH BSEN 124.
   TYPE N - SUITABLE FOR LOAD CLASS B125 (PEDESTRIAN, CYCLIST AND GARDENS)
   TYPE HD - SUITABLE FOR LOAD CLASS D400 (CAR PARKS AND ROADS).
9. DRAINAGE CHANNELS TO BE ACO S-RANGE DRAIN CHANNEL SUPPLIED BY 'ACO TECHNOLOGIES LTD'. INSTALLED TO MANUFACTURERS DESIGN, RECOMENDATIONS AND GUIDELINES.
10. CONTRACTOR TO SEEK APPROVAL / APPLY FOR ALL NEW SEWER CONNECTIONS WHERE REQUIRED.
11. ALL 100mm NOMINAL INTERNAL DIAMETER SURFACE WATER DRAINS TO BE INSTALLED AT GRADIENT NOT FLATTER THAN 1:100.
11. ALL 150MM NOMINAL INTERNAL DIAMETER SURFACE WATER DRAINS TO BE INSTALLED AT GRADIENT NOT FLATTER THAN 1:150.
12. ALL LARGE DIAMETER STORAGE PIPES TO BE INSTALLED AT GRADIENT 1:500 UNLESS NOTED OTHERWISE.
13. ALL FOUL PIPES BENEATH BUILDINGS AND FROM SVPS, GULLIES AND WC CONNECTIONS TO ACCESS CHAMBERS TO BE 100mm AT A MINIMUM GRADIENT OF 1:40 UNLESS NOTED OTHERWISE.
14. MINIMUM GRADIENT OF 100mm FOUL PIPE BETWEEN ACCESS CHAMBERS OUTSIDE BUILDING TO BE MINIMUM 1 IN 80 UNO.
11. ALL FOUL CONNECTIONS TO BE FULLY TRAPPED AND EACH FOUL CONNECTION TO A BRANCH DRAIN TO BE FULLY RODDABLE (E.G. LOW LEVEL RODDING ACCESS).
14. ALL ROAD GULLY PIPEWORK SPURS TO BE 150mm DIA U.N.O.

REV.	DATE	DRAWN	DESCRIPTION	CHKD	APPRD
P0	OCT'18	ES	PRELIMINARY ISSUE	SH	SH

HBL ASSOCIATES Ltd.
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
Brook House, Weybrook Road Heaton Chapel, Stockport M19 2QD.
Telephone 0161 432 9977
Facsimile 0161 432 7979
Email : consultants@hblassociates.co.uk

© COPYRIGHT RESERVED HBL ASSOCIATES Ltd.

STATUS: PRELIMINARY

CLIENT: ONE MANCHESTER	DRAWN: ES
PROJECT: HYDE ROAD RESIDENTIAL DEVELOPMENT	CHECKED: SH
LOCATION: HYDE ROAD, GORTON, M18 7FB	APPROVED: SH
DRAWING TITLE: PROPOSED DRAINAGE PLAN	DATE: MAY'17
	SCALE(S): 1:200 — A1
DRAWING No.: 50	HBL REF.: 5951
	REVISION: P0

FILE REF: R:\JOBS CURRENT\