

United Utilities Water Limited
Grasmere House
Lingley Mere Business Park
Lingley Green Avenue
Great Sankey
Warrington
WA5 3LP



Via email.

Our ref: GON.0217.0126
Your ref: DC/21/1403v8
Planning ref: 2/2021/0275
Date: 08/11/2023

Dear Sir / Madam,

**RE: PROPOSED ERECTION OF 9 NEW DWELLINGS AND ASSOCIATED
WORKS AT LAND BEHIND THE DOG INN MARKET PLACE, LONGRIDGE
PR3 3RR**

We are writing to you in respect of the objection submitted by United Utilities (UU) with regards to the above planning application which requests further information in regards to drainage. The full objection is appended to this response and the pertinent points are summarised below:

Comment 1

"We request that the applicant provides further information on the proposed measures to mitigate against potential property level flooding. These measures should include raising property finished floor levels and providing physical mitigation features. "

Comment 2

"It is requested that an overland flow exceedance plan is submitted which should consider and show that potential overland flow from sewer surcharge is directed away from the properties. It is important that the final topography of the site guides the flows from any surcharged manhole away from the proposed dwellings and their associated curtilages. "

Comment 3

"We request that soakaway testing in accordance with BRE 365 is undertaken to validate the use of infiltration. "

Comment 4

"The existing sewer running within the site is a foul sewer and we would not accept surface water to drain to a foul water sewer. "

Comment 5

"We wish to also note that the Council should give careful consideration to the proposed soakaway and the potential impact on any adjoining land. At the current time, we are not aware of any intention to offer the surface water drainage systems for adoption therefore this system would be a private asset for which United Utilities would have no responsibility. "

Comment 6

"We request that the applicant provides further information to confirm whether the existing public foul water sewer running through the site has been surveyed in its entirety to establish its accurate location especially as the proposed dwellings are located close by. It is requested the sewer is accurately located. "

Comment 7

"We request that the applicant confirms whether there are proposed changes to ground levels over or near to the existing public sewer. "

Comment 8

"We request that further information is provided regarding the location and details of any proposed retaining walls which are proposed over or near to the public sewer located within the site."

This letter provides a response to each of the points raised by UU in the following sections. This letter references, where appropriate, the Flood Risk and Drainage Assessment Report¹ prepared by Reford Consulting Engineers Ltd submitted as part of the planning application. This letter should be read in conjunction with above document.

Comment 1 – Flood Risk Mitigation

With reference to the following sections and the submitted Flood Risk and Drainage Assessment (FRDA) report it has been adequately demonstrated that the proposed drainage design has been undertaken in accordance with relevant guidance and is designed to protect against flooding to the proposed properties. As such, no additional mitigation measures are considered necessary.

It is noted from UU's response that they "have serious concerns regarding the potential flood risk to proposed properties which are at lower level than the surrounding manhole cover levels". It is noted from the submitted drainage layout drawing as part of the planning application that this is only the case at Plot 3 and with regards to manhole 7 which is indicated to be elevated 54mm above the property. Given this manhole is at the top of a run and the gradients of the pipe run around Plot 3 (between 1 in 10 and 1 in 60), the risk of sewer surcharge at this location is improbable and in such an event, any surcharged flows would be routed along the external surfacing areas.

¹ Reford Consulting Engineers Limited (2022) Drainage Strategy Incorporating an Assessment of Flood Risk, October 2022 – Revision B

Comment 2 – Flow Exceedance Routing

With reference to the submitted FRDA report, the drainage strategy for the site has been designed and sized using Causeway modelling software and the results indicate that no flooding of manholes occurs for any design event up to and including the 1 in 100 year plus 50% climate change event.

As such, the possibility of sewer surcharging at the site is very low based on the provided designs. Nevertheless, an exceedance flow route plan has been appended to this letter. The drawing shows that overland flow exceedance routes do not pose a risk to the properties.

Comment 3 – Soakaway Testing

With reference to paragraphs 3.5 and 3.6 of the submitted FRDA report, infiltration testing was undertaken at the proposed soakaway location. Two trial pits were carried out and the lowest calculated infiltration rate has been used within the drainage design. Additional information regarding the testing undertaken has been provided and appended to this letter.

With reference to paragraph 3.13 of the submitted FRDA report, further infiltration testing shall be carried out to inform the detailed design of the drainage strategy.

Comment 4 – Surface Water Discharge To Foul Sewer

No surface water discharge is proposed to the public foul sewer.

Comment 5 – Soakaway Impact on Adjoining Land

It is considered that there are two potential pathways for surface water to impact and adjoining land:

- Soakaway surcharging and flood waters continuing overland downgradient
- Subsurface pathways of infiltrated surface runoff emerging at ground level downgradient

It is considered that the risk of either of the potential impacts is low.

With respect to the soakaway surcharging, design calculations presented within the submitted FRDA report demonstrate that the soakaway has sufficient storage capacity to contain all design events up to and including the 1 in 100 year plus 50% climate change event. It is noted that the design uses the lowest infiltration rate calculated by site investigations (as required by BRE 365 guidance), halved to account for only one round of testing being undertaken and a factor of safety of 2 has been applied to the design. As such, the infiltration rates adopted is equivalent to a quarter of the lowest measured rate during site investigations and thus the design is considered very conservative. Additionally, the proposed soakaway area is to be designed with a 1 in 30 gradient in south western direction. Any exceedance flows would therefore follow the gradient and runoff from site to the southwest, following the local topography (refer to exceedance flow route plan).

Several existing properties are located downgradient of the proposed soakaway system on Darwen Close. The site topographic survey indicates the finished floor level of these existing

properties which were estimated to be between approximately 123.0 - 124.5mAOD. The soakaway invert level is proposed at 123.75mAOD and thus is approximately equal to FFLs downgradient. The predominant flow direction of infiltrating runoff is considered to be vertical given the sloping nature of the site with no indication of groundwater emergence (springs, rushes etc.)

The developer shall remain responsible, or appoint a suitably qualified contractor to maintain the drainage system throughout the lifetime of the development.

Comment 6 – Existing Foul Sewer Location

The client commissioned Lanes Group plc to undertake a CCTV survey of the public sewer within the site extents. The survey confirmed the route between manhole nodes 7202 and 6102. The route between manhole nodes 7202 and 7201 was partially surveyed from 7202 but was unable to be completed due to the presence of a backdrop. The survey extents confirmed the pipe runs to be straight and connected to the identified manholes as expected. This survey, in conjunction with the topographic survey undertaken (which recorded manhole locations) confirms the sewer route as shown in the submitted planning drawings to be in accordance with UU asset plans.

The CCTV survey documentation is appended to this document.

Comment 7 – Changes to Ground Levels

A 6 metre wide easement buffer has been provided along the route of the existing public sewer in which no changes in ground levels are proposed with the exception of minor reprofiling where surfacing is proposed.

Comment 8 – Retaining Walls

No retaining walls are proposed over or near to the public sewer located within the site. Existing embankments within the site are being incorporated into the site design.

Closure

We trust the additional information presented herein satisfies UU comments regarding the proposed drainage for the development and proximity to the existing public sewer.

Should you have any queries whatsoever please do not hesitate to contact me directly on the details below.

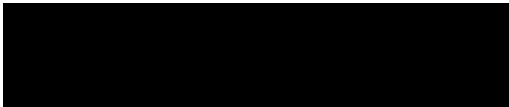
Yours sincerely,



Stephen Donnan

MEng(hons), MSc, MCIWEM

Technical Director



Documents Enclosed:

United Utilities Planning Objection
Exceedance Flow Route Plan
Soakaway Testing Details
CCTV Survey Report

Ribble Valley Borough Council
By email

Your ref: 3/2021/0275
Our ref: DC/21/1403v8
Date: 02-FEB-23

Dear Planning Team

Location: Land behind the Dog Inn Market Place Longridge PR3 3RR
Proposal: Proposed erection of 9 new dwellings and associated works

United Utilities wish to make the following comments regarding the proposal detailed above.

OBJECTION AND REQUEST FOR FURTHER INFORMATION

It is noted that our previous response raised concerns regarding the proposed sewer diversion, which is now no longer proposed, and regarding hydraulic low spots being created by proposed properties at lower finished floor levels connecting to the public foul water sewer, which is now instead to be made at a downstream point.

Whilst the above matters have been addressed we still have serious concerns regarding the potential overland flow from sewer surcharge and the potential flood risk to the proposed properties which are at lower level than the surrounding sewer manhole cover levels.

We request that the applicant provides further information on the proposed measures to mitigate against potential property level flooding. These measures should include raising property finished floor levels and providing physical mitigation features. It is requested the applicant discusses these matters directly with United Utilities at wastewaterdeveloperservices@uuplc.co.uk

It is requested that these matters, as well as the additional comments below, are resolved prior to determination of this planning application as these matters are material to the proposed site layout.

It is requested that an overland flow exceedance plan is submitted which should consider and show that potential overland flow from sewer surcharge is directed away from the properties. It is important that the final topography of the site guides the flows from any surcharged manhole away from the proposed dwellings and their associated curtilages.

We request that soakaway testing in accordance with BRE 365 is undertaken to validate the use of infiltration. The existing sewer running within the site is a foul sewer and we would not accept surface water to drain to a foul water sewer.

We wish to also note that the Council should give careful consideration to the proposed soakaway and the potential impact on any adjoining land. At the current time, we are not aware of any intention to offer the surface water drainage systems for adoption therefore this system would be a private asset for which United Utilities would have no responsibility. In discharging any future planning condition, you should therefore consider the detailed design of the surface water drainage arrangements with your colleagues who act as the Lead Local Flood Authority or your Building Control colleagues.

We request that the applicant provides further information to confirm whether the existing public foul water sewer running through the site has been surveyed in its entirety to establish its accurate location especially as the proposed dwellings are located close by. It is requested the sewer is accurately located.

We request that the applicant confirms whether there are proposed changes to ground levels over or near to the existing public sewer.

We request that further information is provided regarding the location and details of any proposed retaining walls which are proposed over or near to the public sewer located within the site.

At the current time, we have not been able to adequately assess this risk due to the absence of information outlined above. It is for these reasons that we continue to request the submission of additional information prior to determination. In the absence of the above information we must continue to OBJECT to the application proposals and request that the information requested above is submitted prior to determination.

Once the additional information requested above is provided to our satisfaction, we will be able to provide further comment and recommend final detailed conditions. **Given the absence of the above information, the concerns we have outlined and the nature of the application, which is submitted in full; we recommend that the application is not determined until the requested additional information is received and assessed.** If, however, you are minded to favourably determine this application in advance of receipt of this information, which is not our recommended approach, we would request that you attach the following condition:

Foul and Surface Water Drainage Condition

Prior to the commencement of development, details of a sustainable surface water drainage scheme and a foul water drainage scheme shall be submitted to, and approved in writing by, the Local Planning Authority. The drainage schemes must include:

(i) An investigation of the hierarchy of drainage options in the National Planning Practice Guidance (or any subsequent amendment thereof). This investigation shall include evidence of

an assessment of ground conditions and the potential for infiltration of surface water in accordance with BRE365;

(ii) A restricted rate of discharge of surface water agreed with the local planning authority (if it is agreed that infiltration is discounted by the investigations);

(iii) Levels of the proposed drainage systems including proposed ground and finished floor levels in AOD;

(iv) Details of overland flows and how these will be managed including exceedance routes from the existing and proposed drainage systems;

(v) Mitigation measures to manage the risk of sewer surcharge;

(vi) Foul and surface water shall drain on separate systems;

(vii) A management and maintenance plan. The management and maintenance plan shall include as a minimum:

a. Arrangements for adoption by an appropriate public body or statutory undertaker, or, management and maintenance by a management company; and

b. Arrangements for inspection and ongoing maintenance of all elements of the sustainable drainage system to secure the operation of the surface water drainage scheme throughout its lifetime including during construction; and

(ix) A timetable for implementation.

The approved drainage schemes shall also demonstrate accordance with the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015) or any subsequent replacement national standards.

The drainage schemes shall be completed, maintained and managed in accordance with the approved details and retained thereafter for the lifetime of the development.

Reason: To promote sustainable development, secure proper drainage and to manage the risk of flooding and pollution.

The applicant can discuss any of the above with Developer Engineer, **Shoaib Tauqeer**, by email at wastewaterdeveloperservices@uuplc.co.uk.

Please note, United Utilities is not responsible for advising on rates of discharge to the local watercourse system. This is a matter for discussion with the Lead Local Flood Authority and / or the Environment Agency (if the watercourse is classified as main river).

If the applicant intends to offer wastewater assets forward for adoption by United Utilities, their proposed detailed design will be subject to a technical appraisal by our Developer Services team and must meet the requirements outlined in 'Sewers for Adoption and United Utilities' Asset Standards'. This is important as drainage design can be a key determining factor of site levels and layout.

Acceptance of a drainage strategy does not infer that a detailed drainage design will meet the requirements for a successful adoption application. We strongly recommend that no construction commences until the detailed drainage design, has been assessed and accepted in writing by United Utilities. Any work carried out prior to the technical assessment being approved is done entirely at the developer's own risk and could be subject to change.

Management and Maintenance of Sustainable Drainage Systems

Without effective management and maintenance, sustainable drainage systems can fail or become ineffective. As a provider of wastewater services, we believe we have a duty to advise the Local Planning Authority of this potential risk to ensure the longevity of the surface water drainage system and the service it provides to people. We also wish to minimise the risk of a sustainable drainage system having a detrimental impact on the public sewer network should the two systems interact. We therefore recommend the Local Planning Authority include a condition in their Decision Notice regarding a management and maintenance regime for any sustainable drainage system that is included as part of the proposed development. You may find the condition below a useful example.

Prior to occupation of the development a sustainable drainage management and maintenance plan for the lifetime of the development shall be submitted to the local planning authority and agreed in writing. The sustainable drainage management and maintenance plan shall include as a minimum:

- a. Arrangements for adoption by an appropriate public body or statutory undertaker, or, management and maintenance by a resident's management company; and*
- b. Arrangements for inspection and ongoing maintenance of all elements of the sustainable drainage system to secure the operation of the surface water drainage scheme throughout its lifetime.*

The development shall subsequently be completed, maintained and managed in accordance with the approved plan.

Reason: To ensure that management arrangements are in place for the sustainable drainage system in order to manage the risk of flooding and pollution during the lifetime of the development.

Please note United Utilities cannot provide comment on the management and maintenance of an asset that is owned by a third party management and maintenance company. We would not be involved in the discharge of the management and maintenance condition in these circumstances.

WATER AND WASTEWATER SERVICES

If the applicant intends to receive water and/or wastewater services from United Utilities, they should visit our website or contact the Developer Services team for advice. This includes seeking confirmation of the required metering arrangements for the proposed development.

If the proposed development site benefits from existing water and wastewater connections, the applicant should not assume that the arrangements will be suitable for the new proposal.

In some circumstances we may require a compulsory meter is fitted. For detailed guidance on whether the development will require a compulsory meter please visit

<https://www.unitedutilities.com/my-account/your-bill/our-household-charges-20212022/> and go to section 7.7 for compulsory metering.

If reinforcement of the water network is required to meet potential demand, this could be a significant project and the design and construction period should be accounted for.

To avoid any unnecessary costs and delays being incurred by the applicant or any subsequent developer, we strongly recommend the applicant seeks advice regarding water and wastewater services, and metering arrangements, at the earliest opportunity. Please see 'Contacts' section below.

UNITED UTILITIES PROPERTY, ASSETS AND INFRASTRUCTURE

United Utilities will not allow building over or in close proximity to a water main.

United Utilities may not allow building over or in close proximity to a public sewer.

A public sewer crosses the site and we may not permit building over it. We require an access strip for maintenance or replacement. The minimum distances that might be acceptable to United Utilities are detailed within Part H of the Building Regulations however, we recommend the applicant determines the precise location, size, depth and condition of the pipeline as this is likely to influence the required stand-off distance from any structure.

It is the applicant's responsibility to demonstrate the exact relationship between any United Utilities' assets and the proposed development. Developer's should investigate the existence and the precise location of water and wastewater pipelines as soon as possible as this could significantly impact the preferred site layout and/or diversion of the asset(s) may be required. Where United Utilities' assets cross the proposed red line boundary, developers must contact our Developer Services team prior to commencing any works on site, including trial holes, groundworks or demolition.

Unless there is specific provision within the title of the property or an associated easement, any necessary disconnection or diversion of assets to accommodate development, will be at the applicant/developer's expense. In some circumstances, usually related to the size and nature of the assets impacted by proposals, developers may discover the cost of diversion is prohibitive in the context of their development scheme.

Where United Utilities' assets exist, the level of cover to United Utilities pipelines and apparatus must not be compromised either during or after construction and there should be no additional load bearing capacity on pipelines without prior agreement from United Utilities. This would include earth movement and the transport and position of construction equipment and vehicles.

Consideration should also be applied to United Utilities assets which may be located outside the applicant's red line boundary. Any construction activities in the vicinity of our assets must comply with our 'Standard Conditions for Works Adjacent to Pipelines' or national building standards.

The applicant or developer should contact our Developer Services team for advice if their proposal is in the vicinity of water or wastewater pipelines and apparatus. It is their responsibility to ensure that United Utilities' required access is provided within their layout and that our infrastructure is appropriately protected. The developer would be liable for the cost of any damage to United Utilities' assets resulting from their activity. See 'Contacts' section below.

CONTACTS

Website

For detailed guidance on water and wastewater services, including application forms and the opportunity to talk to the Developer Services team using the '**Live Chat**' function, please visit:

<http://www.unitedutilities.com/builders-developers.aspx>

Email

For advice on water and wastewater services or to discuss proposals near to pipelines, email the Developer Services team as follows:

Water mains and water supply, including metering - DeveloperServicesWater@uuplc.co.uk

Public sewers and drainage - WastewaterDeveloperServices@uuplc.co.uk



Property Searches (for asset maps):

A number of providers offer a paid for mapping service including United Utilities. For more information, or to purchase a sewer and water plan from United Utilities, please visit <https://www.unitedutilities.com/property-searches/>

Water and sewer records can be viewed for free at our Warrington Head Office by calling 0370 751 0101. Appointments must be made in advance. Public sewer records can be viewed at local authority offices. Arrangements should be made directly with the local authority.

The position of the underground apparatus shown on asset maps is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown on the map.

We request that a copy of this letter is made available to the applicant.

Yours faithfully

The Planning, Landscape and Ecology Team

From: [REDACTED]
Sent: 08 January 2021 16:34
To: [REDACTED]
Subject: Dog Inn trial tests

Pit 1

1.5 deep x .5 wide x 1.7 long 4 minutes to fill half way 3.5 hours to drain









Pit 2

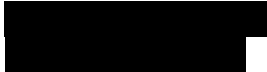
1.5 deep x .7 wide x 1.8 long 5 mins to fill half way 2.7 hours to empty







Benjamin Lee
Managing Director
Steel Work Construction Ltd (SWC)





Project

Project Name: SWC Steel - Market Place - PJ00487935
Project Status: Complete
Project Date: 02/08/2023
Lanes Division: Preston



**Lanes
Group plc**



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SWC Steel - Market Place - PJ00487935

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02/08/2023

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Project Information

Project Name

SWC Steel - Market Place - PJ00487935

Project Date

02/08/2023

Project Summary

Dear Customer,

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

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

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

www.lanesgroup.co.uk

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



Kind regards,
Lanes Group plc



Project Information

Project Name

SWC Steel - Market Place - PJ00487935

Project Date

02/08/2023

Project Notes

Summary of issues highlighted by survey:

Section 1: Broken pipe
Defective junction, damaged
Deformed drain or sewer, 10%
Fracture, longitudinal
Holes in drain or sewer
Infiltration, running at joint
Other obstacles at joint, 10%
Roots, fine

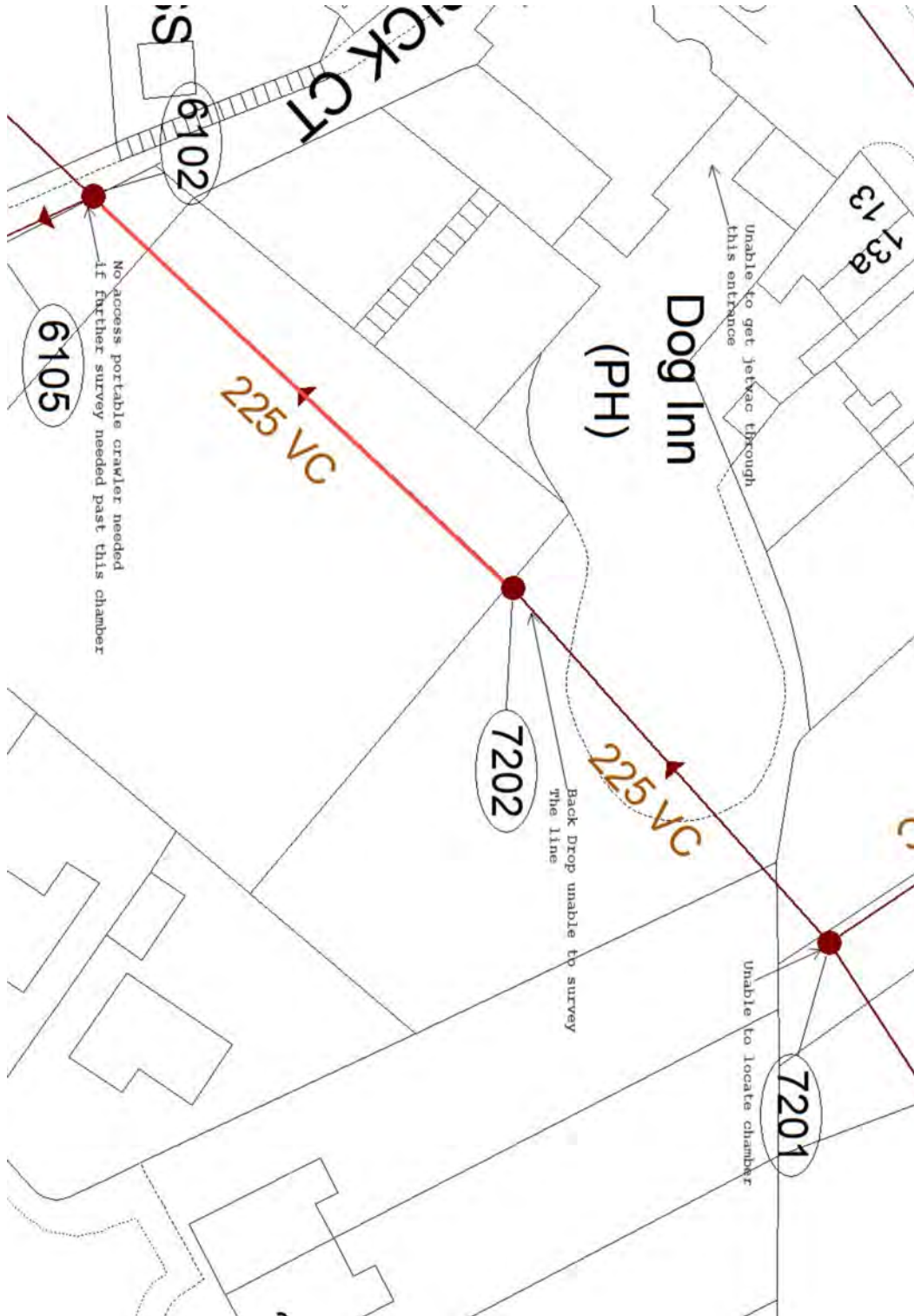


Project Information

Project Name
SWC Steel - Market Place - PJ00487935

Project Date
02/08/2023

Project Drawing, Page 'SWC Steel - Market Place - PJ00487935'





Project Pictures

Project Name

SWC Steel - Market Place - PJ00487935

Project Date

02/08/2023



Site picture (1)



Site picture (2)



Section Profile

Project Name
SWC Steel - Market Place - PJ00487935

Project Date
02/08/2023

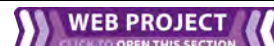
Circular, 225 mm

Item No.	Upstream Node	Downstream Node	Date	Road	Asset Material	Total Length	Inspected Length
1	7202	6102	02/08/2023	Market Place	Vitrified clay	44.23 m	44.23 m
2	7201	7202	02/08/2023	Market Place	Vitrified clay	4.87 m	1.00 m

Total: 2 Inspections x Circular 225 mm = 49.10 m Total Length and 45.23 m Inspected Length

Total: 2 Inspections = 49.10 m Total Length and 45.23 m Inspected Length

Section Inspection - 02/08/2023 - 7202X

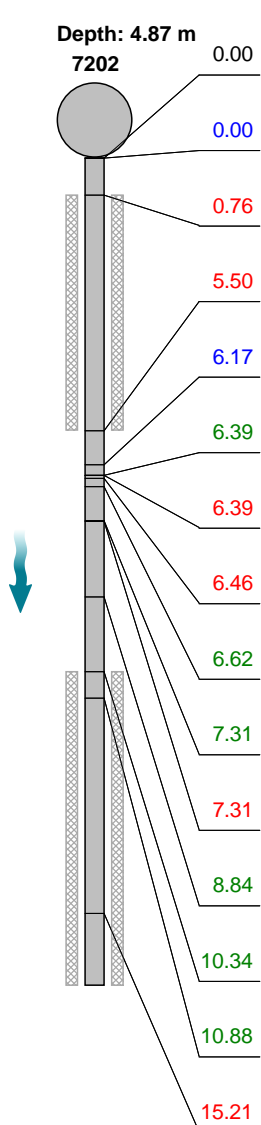



Item No. 1	Insp. No. 1	Date: 02/08/23	Time: 9:42	Lanes Job Number PJ00487935	Weather Light Rain	Pre Cleaned No	PLR 7202X
Operator D. Ashton		Asset Location: Fields		Camera Small Crawler	Preset Length Not Specified	Legal Status Public Sewer	Alternative ID Not Specified

Town or Village:	Longridge	Inspection Direction:	Downstream	Upstream Node:	7202
Road:	Market Place	Inspected Length:	44.23 m	Upstream Pipe Depth:	4.87
Post Code:	PR3 3RR	Total Length:	44.23 m	Downstream Node:	6102
Surface Type:	Overgrown	Joint Length:	1.00 m	Downstream Pipe Depth:	0

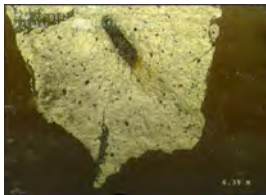
Asset Use:	Foul waste	Asset Shape:	Circular
Asset Type:	Gravity drain/sewer	Dia/Height:	225 mm
Asset Owner:	Public	Asset Material:	Vitrified clay
Year Constructed:	Not Specified	Asset Lining Type:	No Lining
Inspection Purpose:	Condition survey	Asset Lining Material:	No Lining

Comments:	
Recommendations:	


Scale:	1:152	Position [m]	Code	Observation	Grade	
	Depth: 4.87 m 7202	0.00	MH	Start node, manhole, reference: 7202		
		0.00	WL	Water level, 10% of the vertical dimension		
		0.76	S01	CL	Crack, longitudinal at 12 o'clock, start	
		5.50	F01	CL	Crack, longitudinal at 12 o'clock, finish	2
		6.17	WL	Water level, 20% of the vertical dimension		
		6.39	DEE	Attached deposits, encrustation at 3 o'clock, 5% cross-sectional area loss	2	
		6.39	H	Hole in drain or sewer at 3 o'clock	4	
		6.46	CLJ	Crack, longitudinal at joint at 2 o'clock	2	
		6.62	DEZJ	Attached deposits, other at joint at 11 o'clock, 5% cross-sectional area loss: Unknown	2	
		7.31	DEE	Attached deposits, encrustation at 3 o'clock, 5% cross-sectional area loss	2	
		7.31	H	Hole in drain or sewer at 2 o'clock	4	
		8.84	RFJ	Roots, fine at joint	2	
		10.34	S02	RFJ	Roots, fine at joint, start	
		10.88	DES	Settled deposits, fine, 5% cross-sectional area loss	2	
		15.21	H	Hole in drain or sewer from 11 o'clock to 1 o'clock	4	




CL - 0.76




H - 6.39



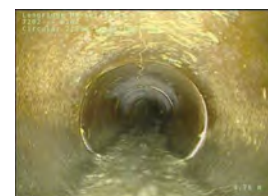
CLJ - 6.46



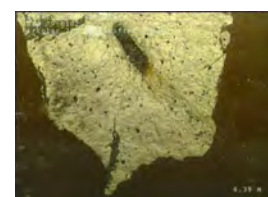
H - 7.31



RFJ - 8.84



CL - 0.76



H - 6.39



CLJ - 6.46



H - 7.31




RFJ - 8.84

Section Inspection - 02/08/2023 - 7202X

WEB PROJECT
CLICK TO OPEN THIS SECTION

Item No. 1	Insp. No. 1	Date: 02/08/23	Time: 9:42	Lanes Job Number PJ00487935	Weather Light Rain	Pre Cleaned No	PLR 7202X
Operator D. Ashton		Asset Location: Fields		Camera Small Crawler	Preset Length Not Specified	Legal Status Public Sewer	Alternative ID Not Specified

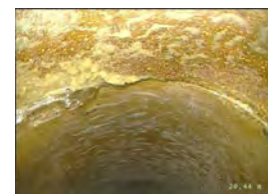
Scale:	1:152	Position [m]	Code	Observation	Grade	
		18.09	F02	RFJ	Roots, fine at joint, finish	2
		20.01		JN	Junction at 3 o'clock, diameter: 100mm	
		20.44		IRJ	Infiltration, running at joint at 11 o'clock	
		20.44		RFJ	Roots, fine at joint	2
		20.83		OBZJ	Other obstacles at joint from 11 o'clock to 1 o'clock, 10% cross-sectional area loss: Rag	5
		20.86		RFJ	Roots, fine at joint	2
		27.82		OBZJ	Other obstacles at joint at 12 o'clock, 10% cross-sectional area loss: Rag	5
		28.49		OBZJ	Other obstacles at joint at 10 o'clock, 10% cross-sectional area loss: Rag	5
		29.00		DEEJ	Attached deposits, encrustation at joint from 1 o'clock to 4 o'clock, 5% cross-sectional area loss	2
		33.29	S03	RFJ	Roots, fine at joint, start	
		38.38		JXD	Defective junction, damaged at 3 o'clock, diameter: 150mm	
		43.78		B	Broken pipe from 3 o'clock to 9 o'clock	4
		43.82		D	Deformed drain or sewer, 10%	4
		44.23		FLJ	Fracture, longitudinal at joint at 12 o'clock	3
		44.23	F03	RFJ	Roots, fine at joint, finish	2
6102		44.23		MHF	Finish node, manhole, reference: 6102	
Depth: m						



RFJ - 10.34



H - 15.21



IRJ - 20.44



OBZJ - 20.83



RFJ - 20.86



OBZJ - 27.82



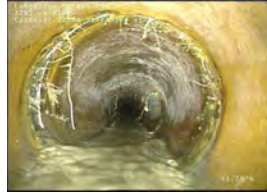
Section Inspection - 02/08/2023 - 7202X



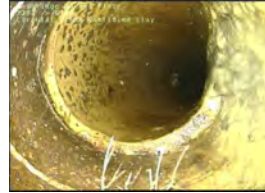
Item No. 1	Insp. No. 1	Date: 02/08/23	Time: 9:42	Lanes Job Number PJ00487935	Weather Light Rain	Pre Cleaned No	PLR 7202X
Operator D. Ashton		Asset Location: Fields		Camera Small Crawler	Preset Length Not Specified	Legal Status Public Sewer	Alternative ID Not Specified



OBZJ - 28.49



RFJ - 33.29



JXD - 38.38



B - 43.78



D - 43.82



FLJ - 44.23

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
8	200.0	11.3	500.0	4.0	13	10.0	1.3	57.0	5.0



Section Pictures - 02/08/2023 - 7202X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
1	Downstream	7202X	1	PJ00487935



1, 00:00:10, 0.76 m
Crack, longitudinal at 12 o'clock, start



2, 00:01:05, 6.39 m
Hole in drain or sewer at 3 o'clock



3, 00:01:16, 6.46 m
Crack, longitudinal at joint at 2 o'clock



4, 00:01:33, 7.31 m
Hole in drain or sewer at 2 o'clock



5, 00:01:59, 8.84 m
Roots, fine at joint



6, 00:02:16, 10.34 m
Roots, fine at joint, start



Section Pictures - 02/08/2023 - 7202X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
1	Downstream	7202X	1	PJ00487935



7, 00:02:56, 15.21 m
Hole in drain or sewer from 11 o'clock to 1 o'clock



8, 00:04:03, 20.44 m
Infiltration, running at joint at 11 o'clock



9, 00:04:33, 20.83 m
Other obstacles at joint from 11 o'clock to 1 o'clock, 10%
cross-sectional area loss, Rag



10, 00:04:28, 20.86 m
Roots, fine at joint



11, 00:05:42, 27.82 m
Other obstacles at joint at 12 o'clock, 10% cross-sectional area
loss, Rag



12, 00:06:03, 28.49 m
Other obstacles at joint at 10 o'clock, 10% cross-sectional area
loss, Rag



Section Pictures - 02/08/2023 - 7202X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
1	Downstream	7202X	1	PJ00487935



13, 00:06:42, 33.29 m
Roots, fine at joint, start



14, 00:07:22, 38.38 m
Defective junction, damaged at 3 o'clock, diameter: 150mm



15, 00:08:19, 43.78 m
Broken pipe from 3 o'clock to 9 o'clock



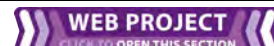
16, 00:08:26, 43.82 m
Deformed drain or sewer, 10%



17, 00:08:36, 44.23 m
Fracture, longitudinal at joint at 12 o'clock

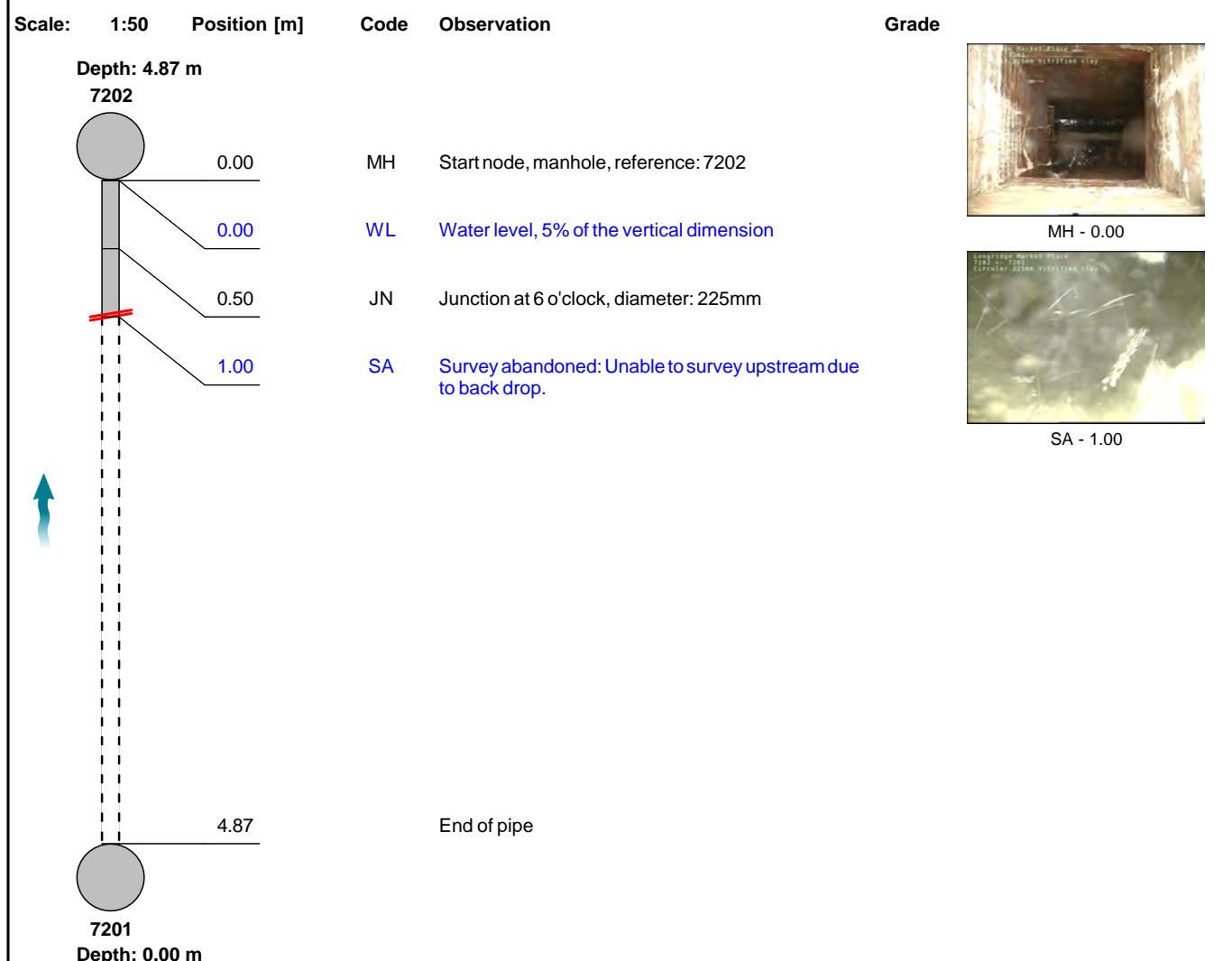


Section Inspection - 02/08/2023 - 7201X



Item No. 2	Insp. No. 1	Date: 02/08/23	Time: 10:02	Lanes Job Number PJ00487935	Weather Light Rain	Pre Cleaned No	PLR 7201X
Operator D. Ashton		Asset Location: Fields		Camera Small Crawler	Preset Length Not Specified	Legal Status Public Sewer	Alternative ID Not Specified

Town or Village:	Longridge	Inspection Direction:	Upstream	Upstream Node:	7201
Road:	Market Place	Inspected Length:	1.00 m	Upstream Pipe Depth:	0.00
Post Code:	PR3 3RR	Total Length:	4.87 m	Downstream Node:	7202
Surface Type:	Overgrown	Joint Length:	1.00 m	Downstream Pipe Depth:	4.87
Asset Use:	Foul waste	Asset Shape:	Circular		
Asset Type:	Gravity drain/sewer	Dia/Height:	225 mm		
Asset Owner:	Public	Asset Material:	Vitrified clay		
Year Constructed:	Not Specified	Asset Lining Type:	No Lining		
Inspection Purpose:	Condition survey	Asset Lining Material:	No Lining		
Comments:	Survey to prove U/S on a back drop				
Recommendations:					



Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
0	0.0	0.0	0.0	1.0	0	0.0	0.0	0.0	1.0



Section Pictures - 02/08/2023 - 7201X

Item No.	Inspection Direction	PLR	Insp. No.	Lanes Job Number
2	Upstream	7201X	2	PJ00487935



1, 00:00:01, 0.00 m
Start node, manhole, reference: 7202



2, 00:01:02, 1.00 m
Survey abandoned, Unable to survey upstream due to back drop.