

**Welcome Break Ltd
Proposed Retail Unit
Northway Service Station
A1 Southbound
Hinxworth
Baldock**

Drainage Strategy Report
PI5706-DSR-02
rev -

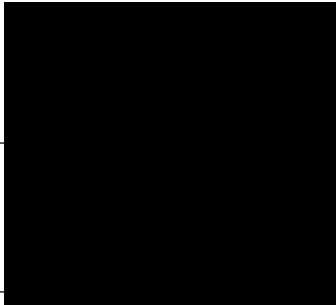
Client: Welcome Break Ltd

Date: 07 September 2025

Project No: PI5706

**Goodson Associates
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Leeds
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Revision: –		Signature		Date
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Revision Notes:	Issued for planning			

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I.0 Introduction

Goodson Associates (Leeds) Ltd have been appointed by Welcome Break Ltd to prepare a Drainage Strategy for the proposed Retails Units at the existing Northway Service Station facility, A1 Southbound, Hinxworth.

The proposed development will comprise a new restaurant pod and associated vehicle parking/hardstanding and landscaped areas. The proposed site will be accessed directly from the existing PFS and will be located on part of the existing site currently used for HGV parking.

The purpose of this report is to describe, in principle, the design approach of the foul and surface water drainage systems for the redevelopment.

2.0 Existing Site

2.1 General Description

The proposed site is located off the A1 Southbound, north of the AIM Junction 10 Baldock Services, and between Stotfold and Hinxworth, Hertfordshire (Grid Ref: 522677 238163, Post Code: SG7 5EX). Figure 1.0 shows an aerial photograph of the area with the approximate site boundary highlighted in red.

The site is approximately 0.289ha in area, irregular in shape and predominantly contains hardstanding used for HGV parking. The site is bounded along its western side by the existing PFS, and to the north/east by green open space with a residential property to the south.

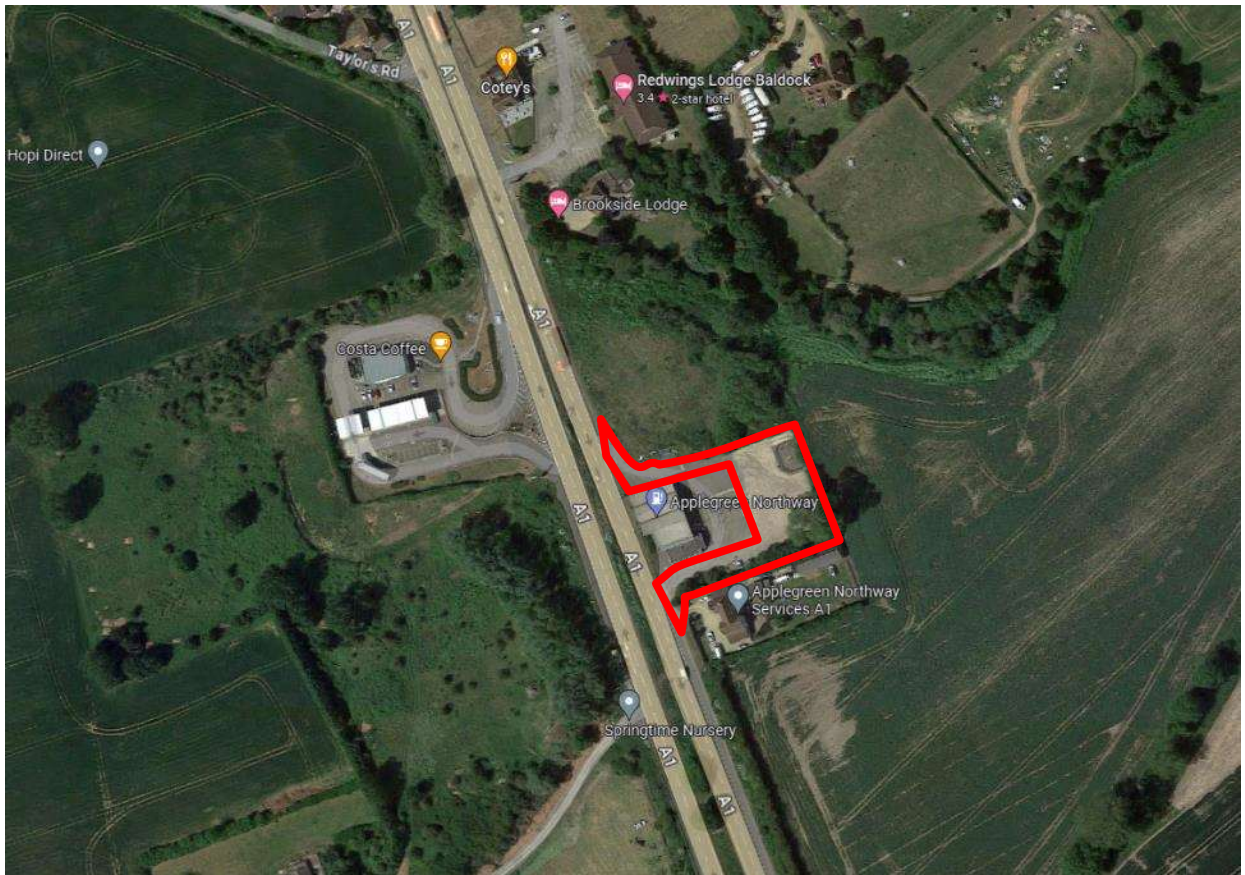


Figure 1.0 - Aerial photograph showing approximate site boundary

2.2 Site Topography

Based on the topographical survey completed by RJP Surveying Consultants Ltd, the site is generally flat, with only very gentle falls. The site low point is indicated around 44.13m AOD in the northern area of the site, and the site high point is indicated around 44.51m AOD in the southeast corner. A copy of the topographical survey by RJP Surveying Consultants Ltd is provided in the Section 6.0 appendices.

2.3 Ground Conditions

A Phase I Preliminary Risk Assessment report (ref: 23/1431.1.1) was completed for the site by Geo² Remediation Ltd. Based on information from publicly available ground investigation borehole records and reports, this indicates the site ground conditions are likely to comprise topsoil/made ground overlying sands and gravels, which transition to firm clayey silts; bedrock is likely to consist of the West Melbury Marly Chalk Formation.

The report indicates the bedrock is classified as a Principle Aquifer and the superficial deposits are classified as a Secondary Aquifer A. The report indicates the groundwater beneath the site is classified as High Vulnerability, though the site is not located within a Source Protection Zone.

2.4 Existing Natural Drainage Features

There is an existing ditch running north that connects to an IDB ditch (Cat's Ditch) running east to west 90m north of the site boundary. These discharge to the nearest known surface water feature, the River Ivel, which is located approximately 450m west of the site. This is considered to be a cause of fluvial flooding risk to the site, and should be considered and accounted for in the design of the proposed development. A detailed flood risk assessment for the site, along with conclusions and recommendations for the proposed development design, will be completed by NSugg Ltd.

The Geo² Remediation Ltd Phase I Preliminary Risk Assessment report indicates that the River Ivel is classified with a river quality C CQA grade rating.

2.5 Existing Drainage Infrastructure

Anglian Water records indicate there are no surface or foul sewerage systems on or adjacent to site. A full copy of the Pre-Planning Assessment Report from Anglian Water for the site is included in the Section 6.0 appendices.

3.0 Consultation

Consultation has taken place with various sources to obtain relevant information on the proposed development. These are:

- The design team to obtain relevant details on the proposed development
- Anglian Water for record drawings indicating their sewerage infrastructure in the area local to the development site (refer to Section 2.5)
- The Hertfordshire County Council (LLFA) surface water planning guidance documents for requirements on surface water volume estimates and discharge approaches

4.0 Proposed Development

The proposed development involves a new restaurant pod and associated vehicle parking/hardstanding and landscaped areas. The proposed site will be accessed directly from the existing PFS, and will be located predominantly on the site currently used for HGV parking.

The developable area of the site is approximately 0.112ha with roofs/hardstanding comprising of 0.079ha. A copy of the architect's proposed layout plan is included in the Section 6.0 appendices.

5.0 Site Drainage

An initial CCTV scoping survey of the existing site drainage network has been completed to confirm current drainage arrangements; relevant extracts are included in the Section 6.0 appendices. This indicated that surface water from hardstanding areas is currently being collected and discharged via a petrol interceptor to Cat's Ditch to the north of site.

It is proposed that the site re-development will be designed with separate foul and surface water drainage systems, with each discharging as detailed below.

5.1 Foul Drainage

Anglian Water have been consulted regarding the discharge of foul water from the proposed site to their sewer system. A Pre-Planning Sewerage Enquiry was made to Anglian Water and their response confirmed that the closest connection point into their network for a foul discharge is over 1.4km away to the southwest of site. A copy of the PPSE response is provided in the Section 6.0 appendices.

Given the distances involved in making a foul water connection to the public sewer it is proposed to direct foul flows to a 10,000L capacity cesspool with high level alarm to the eastern side of site. The cesspool will be serviced by regular tanker visits to take wastewater off-site.

5.2 Surface Water System

5.2.1 Site Assessment

Based on the aerial photograph provided in Section 2.1, the development site currently comprises an existing area of HGV parking largely made up of hardstanding, with some localised areas of landscaping.

5.2.2 Run-off Destination

The SuDS hierarchy set out in Requirement H3 of the Building Regulations has been used for the surface water drainage design. This establishes the consideration of surface water disposal in the following order:

- Infiltration to the ground
- Discharge to watercourse
- Discharge to surface water sewer
- Discharge to highway drainage
- Discharge to combined sewer

Based on the site ground conditions detailed in Section 2.3, soakaway or infiltration drainage solutions are not considered feasible or appropriate options for this site.

Surface water from roofs and hardstanding areas will be collected and directed towards the northwestern boundary before connecting into the existing private site drainage storm water sewer running along the northern boundary of the site. Flows from the proposed development will ultimately discharge to Cat's Ditch in a similar manner to the existing arrangement.

5.2.3 Pollution Control

The risk of pollution entering the wider drainage network will be minimised in three ways:

- Sealed drainage: Rainfall run-off from roofs should discharge directly to the sealed below ground drainage network (i.e. no gullies)
- Permeable paving: Permeable surfacing is located at the parking area at the eastern side of the site and will provide pre-treatment of surface water run-off from the trafficked/hardstanding area
- Silt trap: The inspection chamber immediately prior to the underground storage crates to collect silt, pollutants, and debris.

5.2.4 Designing for Exceedance

From the site topography, should extreme storms occur or there be a malfunction of the drainage system, exceedance routing would direct storm water away from the proposed development, towards the existing drainage ditch and ultimately to Cat's Ditch. The indicative flood exceedance route is shown on the drainage layout plan in the Section 6.0 appendices.

5.3 Maintenance

The drainage pipework is designed with self-cleansing gradients to minimise the requirement for maintenance. However, regular inspection and maintenance of the drainage network is important to identify areas which may be blocked or reduced in capacity and not function correctly, and therefore increase the level of flood risk to the development and wider area.

Appropriate procedures should be outlined to establish responsibility for operation and maintenance of the drainage network on the site; this can typically be the owner of the site. A suitable maintenance strategy should be adopted by those responsible for operation/maintenance to ensure the drainage network is inspected regularly and cleaned when required, with the routine maintenance and cleansing regime formally documented. An operation and maintenance schedule should be included in an O&M manual for ease of reference.

The drainage system should be inspected at least twice a year, with the system also being inspected after any major storm event. Sediment deposition is likely in catch pits, silt traps etc. When required a clean-up operation should be carried out to remove all silt, litter, vegetation, sewerage debris and larger objects, and to repair any damaged part of the network.

The maintenance regime should incorporate all components within the drainage network, including gullies, drainage channels, manholes, pipes, package pump stations, cesspools and petrol interceptors.

Appropriate health and safety procedures and equipment should be used when accessing manholes, and work carried out by trained and competent operators. Confined space certificates must be held by any personnel entering a manhole and the appropriate permits should be obtained from the Maintenance Manager prior to any access.

5.4 Flood Mitigation Measures

The proposed development is shown to lie within a Flood Risk Zone 3 area of 'high probability of flooding' as indicated in the Environment Agency maps presented in Section 5.0, consequently flood risk specialist N Sugg Ltd have been appointed to investigate and advise on the necessary flood risk mitigation measures required for this development.

Existing ground levels are to be reprofiled to raise the floor levels of the new building to minimise flooding risk. The new building is to be built with a ground floor FFL set above surrounding ground levels, and with external ground levels typically falling away from all sides.

For full details of the flood risk mitigation measures recommended for the development please refer to the separate N Sugg Ltd FRA Report.

6.0 Drawings and Calculations

Site Layout Proposals (ADS Design)

Topographic Survey (RJP Surveying Consultants Ltd)

Anglian Water PPSE Correspondence

Anglian Water Sewer Records

Terrain Surveys CCTV Survey

PI5706-510 Drainage Layout Plan (Goodson Associates)

PI5706-511 Impermeable Area Plan (Goodson Associates)

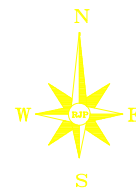


Key

- Site boundary
- Site Area 2885 Sqm / 0.71 acres
- Black Bitmac finish
- Stoned with loose chippings
- Concrete
- Kerb
- Pin Kerb
- Drop Kerb
- Soft Landscaping
- Removed



A	05.09.25
REVISIONS	HARDSTANDING REVISED
CLIENT	WELCOME BREAK
PROJECT	NORTHWAY S/S GREAT NORTH ROAD (A1 SOUTHBOUND) BALDOCK, SG7 9EX
TITLE	PROPOSED SITE LAYOUT
DATE	02.09.25
SCALE	1:200 @ A1
JOB ID	2050
DWG	23a



COORDINATED STATIONS			
STATION	EASTING	NORTHING	LEVEL (m)
A	522633.775	238169.249	44.793
B	522652.708	238125.133	45.162
C	522664.694	238103.386	45.370
D	522659.879	238130.773	45.129
E	522694.118	238143.908	44.536
F	522687.063	238162.187	44.554
G	522664.158	238173.914	44.586
H	522597.492	238262.580	44.730

ABBREVIATIONS	
AV	AIR VALVE/VENT
BC	BOLLARD
BB	BELSHIA BEACON
BM	BENCH MARK
BL	RED LEVEL
BS	BUS STOP
BT	BRITISH TELECOM
CL	COVER LEVEL
DI	DILAPIDATED
DN	DISUSED
EL	EVES LEVEL
ELJ	ELEC JUNCT. BOX
EP	ELECTRICITY POLE
PH	FIRE HYDRANT
FL	FLOOR LEVEL
FOS	FULL OF SEDIMENT
FP	FLAG POLE
G	GULLY
GM	GAS METER
GV	GAS VALVE
IC	INSPECT CHAMBER
IL	INVERT LEVEL
JKW	JAPANESE KNOTT WEED
LH	LAMP POLE
LP	LAMP POST
NF	NAME PLATE
MH	MANHOLE
PS	POST/SON POST
PB	POST BOX
PS	UNKNOWN SERVICE
RE	ROOFTOP DYE
RL	RIDGE LEVEL
RS	ROAD SIGN
ST	STOP TAP
TH	TRIAL HOLE
TL	TRAFFIC LIGHT
TP	TELEGRAPH POLE
TV	CABLE TV BOX
UNL	UNABLE TO LIFT
WM	WATER METER

SYMBOLS	
	SURVEY STATION
	O/H ELEC CABLE
	O/H PHONE LINE
	CANDYTUFT/HEDGE
	TREE
	BENCH MARK
	TRIAL PIT
	BOREHOLE

- NOTES**
- A) ONLY MANHOLES AND SERVICES VISIBLE AT TIME OF SURVEY SHOWN
- B) LOCAL GRID USED AND ORIENTATED TO MAGNETIC NORTH
- C) LEVELS IN METRES RELATED TO G.P.S.
- D) DRAINAGE INFORMATION TAKEN FROM LOCAL AUTHORITY RECORDS. INFORMATION MUST BE CHECKED PRIOR TO WORK COMMENCING

Rev	Description	Date
PROPOSED DEVELOPMENT AT A1 NORTHWAY , BALDOCK		
ADS ARCHITECTS LTD		
TOPOGRAPHICAL SURVEY		
ADS070/T00		Drawn S. FAIRHURST
		Date SEPTEMBER 2023
		Scale 1:500 @ A1
 RJP Surveying Consultants Ltd LAND SURVEYORS & SITE ENGINEERS AYREFIELD COTTAGE AYREFIELD ROAD ROBY MILL UPHOLLAND LANCASHIRE WN8 0GP TEL: 01257 251554 MOBILE 0710 335709 WEBSITE : www.rjsurveyors.co.uk E-MAIL: mail@rjsurveyors.co.uk		

3.0 Desk Study

3.1 Desk Study Data

Information regarding the environmental setting of the site was obtained from the Envirocheck report, which collated information from a variety of sources. A copy of the Envirocheck report is presented in Appendix B.

Where indicated in Table 2 and Table 3 below, the data from the Envirocheck report has been supplemented with additional information obtained from freely available online data.

Site Geology	BGS data indicates bedrock consists of West Melbury Marly Chalk Formation formed between 100.5 and 93.9 million years ago during the Cretaceous period. Numerous superficial deposits are listed, comprising of Alluvium deposits such as clay, silt and gravel as well as glaciofluvial deposits comprising of sand and gravel. However, part of the site has no superficial data. Nearby BGS borehole logs and historical reports suggest that sand and gravels are located below topsoil to approximately 1m bgl, where it transitions to firm clayey silt at approximately 2.5m bgl. There is one BGS Recorded Mineral Site, located 879m south, which is a ceased common clay and shale quarry. The site has a moderate risk of compressible ground, with no to low hazard regarding the potential for all others.
Coal	The site is not within an area which may be affected by coal mining activity, therefore the risk to the proposed development from shallow coal mining is considered to be Low.
Radon	The site is in a lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). As such, no radon protective measures are necessary in the construction of new dwellings or extensions.
Site Hydrogeology	The bedrock is classified as a Principal Aquifer – defined as layers of rock or drift deposits that have high intergranular and/or fracture permeability meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, Principal Aquifers are aquifers previously designated as Major Aquifers. The superficial deposits are classified as a Secondary aquifer A – Defined as Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as Minor Aquifers The groundwater beneath the site in the combined aquifers has been classed as High Vulnerability. However, the site is not located within a Source Protection Zone (SPZ) and there are no groundwater abstraction points within 1km.

Table 2. Environmental Assessment of the Site.



Pre-Planning Assessment Report

Northway Service Station

InFlow Reference: PPE-0192297

Assessment Type: Used Water

Report published: 09/10/2023



Thank you for submitting a pre-planning enquiry.

This has been produced for Goodson Associates.

Your reference number is **PPE-0192297**.

This report can be submitted as a drainage strategy for the development should it seek planning permission.

If you have any questions upon receipt of this report, you can submit a further question via InFlow. Alternatively, please contact the Planning & Capacity team on **07929 786 955** or email planningliaison@anglianwater.co.uk

Section 1 - Proposed development

The response within this report has been based on the following information which was submitted as part of your application:

List of planned developments	
Type of development	No. Of units
Shops	1
Restaurants and cafes	1

The anticipated residential build rate is:

Year	Y1
Build rate	2

Development type: Brownfield

Planning application status: Unknown

Site grid reference number: TL2266338185

The comments contained within this report relate to the public water mains and sewers indicated on our records.

Your attention is drawn to the disclaimer in the useful information section of this report.

Section 2 - Assets affected

Our records indicate that there are no public water mains/public sewers or other assets owned by Anglian Water within the boundary of your development site. However, it is highly recommended that you carry out a thorough investigation of your proposed working area to establish whether any unmapped public or private sewers and lateral drains are in existence.

Due to the private sewer transfer in October 2011 many newly adopted public used water assets and their history are not indicated on our records. You also need to be aware that your development site may contain private water mains, drains or other assets not shown on our records. These are private assets and not the responsibility of Anglian Water but that of the landowner.

Section 3 - Water recycling services

In examining the used water system we assess the ability for your site to connect to the public sewerage network without causing a detriment to the operation of the system. We also assess the receiving water recycling centre and determine whether the water recycling centre can cope with the increased flow and effluent quality arising from your development.

Water recycling centre

The foul drainage from the proposed development is in the catchment of Poppyhill Water Recycling Centre, which currently has capacity to treat the flows from your development site. Anglian Water cannot reserve capacity and the available capacity at the water recycling centre can be reduced at any time due to growth, environmental and regulation driven changes.

Used water network

Our assessment has been based on development flows connecting to the nearest accessible foul water sewer of the same size or greater pipe diameter to that required to drain the site. The infrastructure to convey foul water flows to the receiving sewerage network is assumed to be the responsibility of the developer. Conveyance to the connection point is considered as Onsite Work and includes all work carried out upstream from of the point of connection, including making the connection to our existing network. This connection point has been determined in reference to the calculated discharge flow and on this basis, a 150mm internal diameter pipe is required to drain the development site. The nearest network connection point that meets this criteria is 1.4km from the proposed development site at manhole MH9202, located in Malthouse Lane at National Grid Reference NGR TL 21955 37217. Anglian Water has assessed the impact of connecting the foul flows from the planned development to this point and unfortunately, if the developer wishes to convey the foul flow generated by the proposed development to the recommended point of connection, then it must be noted that the distance of conveyance and the low flow produced by the development would raise concerns due to the risk of septicity occurring within the rising main. This would be unacceptable, and connecting to the public foul network would not be viable if this were to occur. Consequently, we must consider an alternative foul water drainage strategy. In order to define a feasible alternative foul water drainage strategy we will need to understand your onsite drainage design in greater detail. Therefore, we would like to arrange a meeting to examine the available options and establish an effective strategy. Mark Rhodes, our Pre-Development Senior Engineer for this area and will be responsible for evaluating the foul water drainage strategy. We'd grateful if you could advise Mark of your availability for a meeting and a convenient venue or alternatively a conference call can be arranged if this is more convenient. For your reference, Mark can be contacted at 07980 756440 or mrhodes@anglianwater.co.uk. Please note that Anglian Water will request a suitably worded condition at planning application stage to ensure this strategy is implemented to mitigate the risk of flooding.

It is assumed that the developer will provide the necessary infrastructure to convey flows from the site to the network. Consequently, this report does not include any costs for the conveyance of flows.

Surface water disposal

There are no public surface water sewers within the vicinity of the proposed development. Therefore Anglian Water will be unable to provide the site with a feasible solution of surface water disposal within the current assets. Alternative methods of surface water disposal will need to be investigated such as infiltration techniques or a discharge to a watercourse in accordance with the surface water management hierarchy as outlined in Building Regulations Part H. The alternative is that a new surface water sewer is constructed which is used to convey your surface water to a watercourse or as part of a SuDs scheme, where appropriate. Subject to the sewer being designed in accordance with the current version of Sewers For Adoption, the sewer can be put forward for adoption by Anglian Water under Section 104 of the Water Industry Act 1991. If the outfall is to a watercourse, the applicant will be required to obtain consent to discharge via the appropriate body. If your site has no means of drainage due to third party land then you may be able to requisition Anglian Water, under Section 98, to provide a connection to the public sewer for domestic drainage purposes. As part of this option, you may wish to enter into a works agreement in accordance with Section 30 of the Anglian Water Authority Act 1977. This will allow you to design and construct the public sewer using Anglian Waters' statutory powers in accordance with Section 159/168 of the Water Industry Act 1991.

As you may be aware, Anglian Water will consider the adoption of SuDs provided that they meet the criteria outline in our SuDs adoption manual. This can be found on our [website](#). We will adopt features located in public open space that are designed and constructed, in conjunction with the Local Authority and Lead Local Flood Authority (LLFA), to the criteria within our SuDs adoption manual. Specifically, developers must be able to demonstrate:

1. Effective upstream source control,
2. Effective exceedance design, and
3. Effective maintenance schedule demonstrating that the assets can be maintained both now and in the future with adequate access.

If you wish to look at the adoption of any SuDs then an expression of interest form can be found on our [website](#)

As the proposed method of surface water disposal is not relevant to Anglian Water; we suggest that you contact the relevant Local Authority, Lead Local Flood Authority, the Environment Agency or the Internal Drainage Board, as appropriate.

Trade Effluent

We note that you do not have any trade effluent requirements. Should this be required in the future you will need our written formal consent. This is in accordance with Section 118 of the Water Industry Act (1991).

Used Water Budget Costs

Your development site will be required to pay an Infrastructure charge for each new property connecting to the public water and sewerage network that benefits from Full planning permission. The infrastructure charge replaces the zonal charge as previously identified.

You will be required to pay an infrastructure charge upon connection for each new plot on your development site. The infrastructure charge are types of charges set out in Section 146(2) of the Water Industry Act 1991.

The charge should be paid by anyone who wishes to build or develop a property and is payable upon request of connection.

- The Infrastructure Charge is based on the cost of any reinforcement and upgrades to our existing network ("Network Reinforcements"), whether designed to address strategic or local capacity issues. For more information on our Infrastructure Charge, please see the 'Useful Information' section of this report.

Infrastructure charges are raised on a standard basis of one charge per new connection (one for water and one for sewerage).

The Water Recycling Infrastructure charge for your dwellings is:

Infrastructure charge	Number of units	Total
£ 400	0	£0.00

Please note that you should also budget for infrastructure charges on non-household premises where applicable and these will be calculated according to the number and type of water fittings in the premises. This is called the "relevant multiplier" method of calculating the charge and the relevant multiplier will be applied to the figures set out in our 2023-24 Developer Charging Arrangements to arrive at the amount payable. Details of the relevant multiplier for each fitting can be found on our [website](#).

Section 4 - Map of Proposed Point of Connection(s)

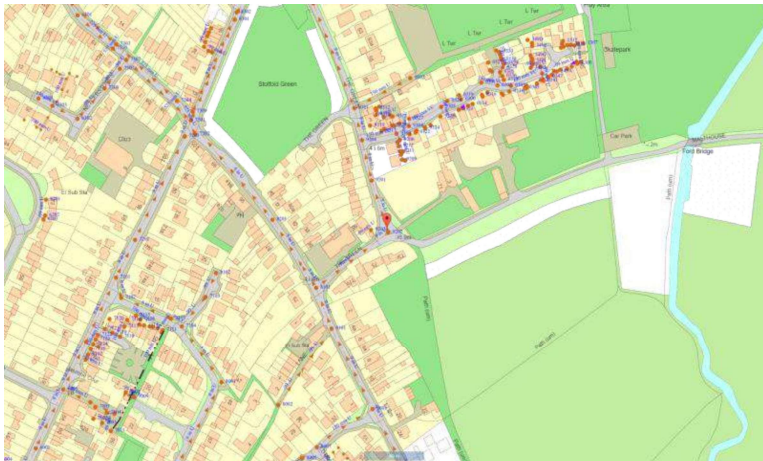


Figure 1: Showing your water recycling foul point of connection

Section 5 - Useful information

Water Industry Act – Key used water sections

Section 98:

This provides you with the right to requisition a new public sewer. The new public sewer can be constructed by Anglian Water on your behalf. Alternatively, you can construct the sewer yourself under section 30 of the Anglian Water Authority Act 1977.

Section 102:

This provides you with the right to have an existing sewerage asset vested by us. It is your responsibility to bring the infrastructure to an adoptable condition ahead of the asset being vested.

Section 104:

This provides you with the right to have a design technically vetted and an agreement reached that will see us adopt your assets following their satisfactory construction and connection to the public sewer.

Section 106:

This provides you with the right to have your constructed sewer connected to the public sewer.

Section 185

This provides you with the right to have a public sewerage asset diverted.

Details on how to make a formal application for a new sewer, new connection or diversion are available on our [website](#) or via our Development Services team on **0345 60 66 087**.

Sustainable drainage systems

Many existing urban drainage systems can cause problems of flooding, pollution or damage to the environment and are not resilient to climate change in the long term. .

Our preferred method of surface water disposal is through the use of Sustainable Drainage Systems or SuDS.

SuDS are a range of techniques that aim to mimic the way surface water drains in natural systems within urban areas. For more information on SuDS, please visit our [website](#)

We recommend that you contact the Local Authority and Lead Local Flood Authority (LLFA) for your site to discuss your application.

Private sewer transfers

Sewers and lateral drains connected to the public sewer on the 1 July 2011 transferred into Water Company ownership on the 1 October 2011. This follows the implementation of the Floods and Water Management Act (FWMA). This included sewers and lateral drains that were subject to an existing Section 104 Adoption Agreement and those that were not. There were exemptions and the main non-transferable assets were as follows:

Surface water sewers and lateral drains that do not discharge to the public sewer, e.g. those that discharged to a watercourse.

Foul sewers and lateral drains that discharged to a privately owned sewage treatment/collection facility.

Pumping stations and rising mains will transfer between 1 October 2011 and 1 October 2016.

The implementation of Section 42 of the FWMA will ensure that future private sewers will not be created. It is anticipated that all new sewer applications will need to have an approved section 104 application ahead of a section 106 connection.

It is anticipated that all new sewer applications will need to have an approved Section104 application ahead of a Section 106 connection

Encroachment

Anglian Water operates a risk based approach to development encroaching close to our used water infrastructure. We assess the issue of encroachment if you are planning to build within 400 metres of a water recycling centre or, within 15 metres to 100 metres of a pumping station. We have more information available on our [website](#)

Locating our assets

Maps detailing the location of our water and used water infrastructure including both underground assets and above ground assets such as pumping stations and recycling centres are available from [digdat](#)

All requests from members of the public or non-statutory bodies for maps showing the location of our assets will be subject to an appropriate administrative charge.

We have more information on our [website](#)

Charging arrangements

Our charging arrangements and summary for this year's water and used water connection and infrastructure charges can be found on our [website](#)

Section 6 - Disclaimer

The information provided in this report is based on data currently held by Anglian Water Services Limited ('Anglian Water') or provided by a third party. Accordingly, the information in this report is provided with no guarantee of accuracy, timeliness, completeness and is without indemnity or warranty of any kind (express or implied).

This report should not be considered in isolation and does not nullify the need for the enquirer to make additional appropriate searches, inspections and enquiries. Anglian Water supports the plan led approach to sustainable development that is set out in the National Planning Policy Framework ('NPPF') and any infrastructure needs identified in this report must be considered in the context of current, adopted and/or emerging local plans. Where local plans are absent, silent or have expired these needs should be considered against the definition of sustainability holistically as set out in the NPPF.

Whilst the information in this report is based on the presumption that proposed development obtains planning permission, nothing in this report confirms that planning permission will be granted or that Anglian Water will be bound to carry out the works/proposals contained within this report.

No liability whatsoever, including liability for negligence is accepted by Anglian Water or its partners, employees or agents, for any error or omission, or for the results obtained from the use of this report and/or its content.

Furthermore, in no event will any of those parties be liable to the applicant or any third party for any decision made or action taken as a result of reliance on this report.

This report is valid from the date issued and the enquirer is advised to resubmit their request for an up to date report should there be a delay in submitting any subsequent application for water supply/sewer connection(s). Our pre-planning reports are valid for 12 months, however please note Anglian Water cannot reserve capacity and available capacity in our network can be reduced at any time due to increased requirements from existing businesses and houses as well as from new housing and new commercial developments.

Terrain Surveys Site Scoping Report

Client: Goodson Associates
Contact: Nigel Batty
Date: 23rd November 2023
Site: Welcome Break A1 Northway
Job Ref: TS23-701



Services we provide

- Topographical surveys
- Measured building surveys
- 3D Revit survey models
- Laser scanning
- Pointcloud data & viewer files
- Arboriculturist reports
- PAS 128 underground utility surveys
- CCTV drainage surveys
- Drainage Repairs (trenches and excavated)
- Aerial/Drone surveys
- Hydrographic surveys
- Monitoring

Accreditations

- The Survey Association (TSA)
- CICES
- CHAS
- CSCS
- Construction Line (Gold/Level 3)
- Acclaim
- ISO9001:2015

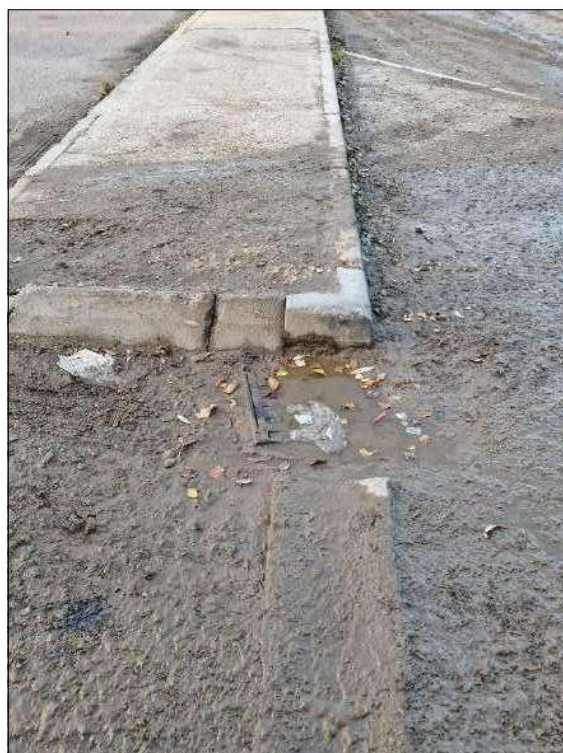
Works Overview

Attended site to undertake an investigation of the accessible below ground foul & surface water drainage located on site with a combination lorry jetting unit to clear & empty various sections facilitating access to trace the lines where possible. As part of the scoping survey, we were supplied with another contractor's survey report from 2020 for cross-reference purposes. Manholes ST1 (septic tank) PS1 (pumping station) & the downstream rising main chamber were all confirmed to be part of an old redundant foul water system. The current foul system from manhole F1 now outfalls to a septic tank (ST2) which does not have any outfall pipe, site personnel confirmed manhole ST2 is emptied by a tanker every 10 days. Manholes MH1, MH2 & MH3 were noted to be part of a highways drainage system for the A1, due to the location of manhole MH3 (busy entrance to services) we were unable to lift this cover safely to survey. The outfall of the highway's drainage could not be confirmed into the watercourse located to the north of the site (visual walkover now outfalls noted). The site surface water system located to the east was noted to be in a poorly maintained condition with standing water present in the parking area east of the truck filling area that eventually overflows into a ditch located in the wooded/vegetated area. Undertook HPWJ with the combination lorry jetting unit and confirmed an outfall point (OF1) into the watercourse to the north of the site with dye tracing. The forecourt drainage system was confirmed to pass through two petrol interceptors before connecting into manhole S8 before any noted outfall. **Note:** Further connectivity downstream of manhole S8 will require additional HPWJ including CCTV survey if confirmation is required. We were unable to lift manholes S3 & S6 due to their location in the busy exit of the service station. Manhole S6 appears to be part of the surface water system possibly taking the canopy drainage, slip lane road gully confirmed to connect to manhole S7 and a further two gully's would need to be confirmed with CCTV surveying if connectivity required. All covers lifted were surveyed then put back safely following the survey.

Recommendations

CCTV condition/connectivity survey downstream of manhole S8, and road gully connections in the slip road including HPWJ (Combination Lorry Jetting Unit) if the client requires this additional information to be picked up.

Traffic Management (configuration TBC) entrance & exit to further investigate MH3 & S3/S6 and confirm connectivity etc.



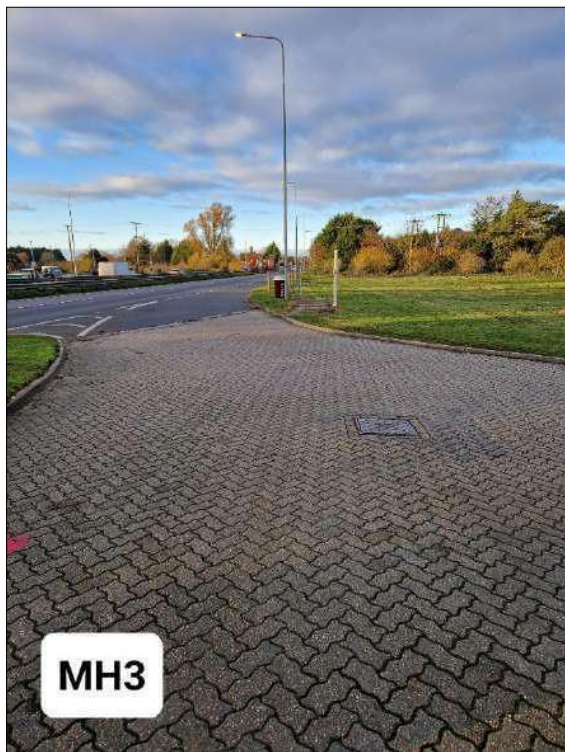




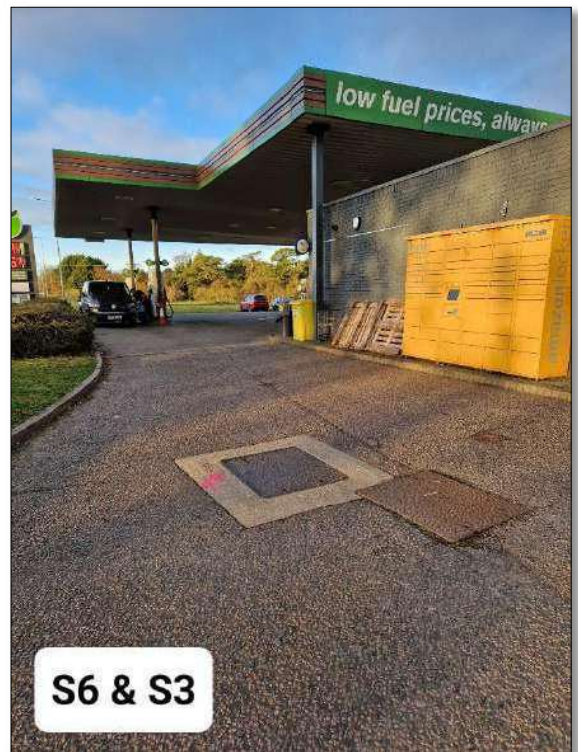
ST2



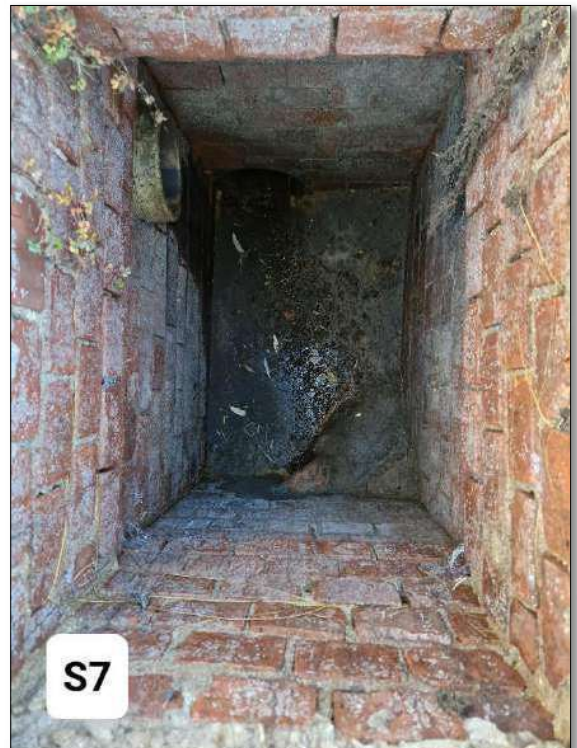
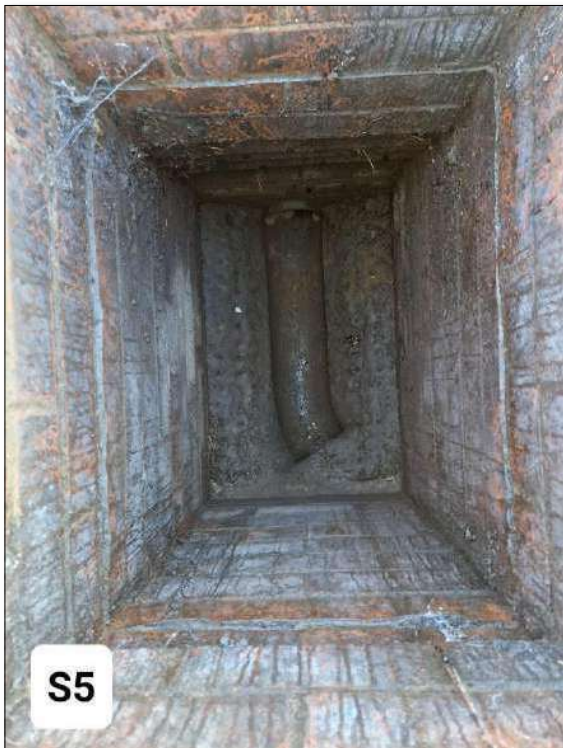
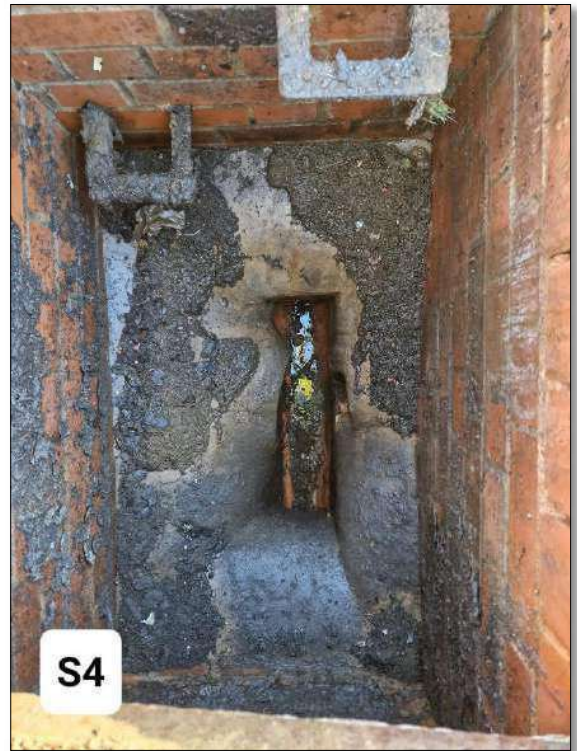
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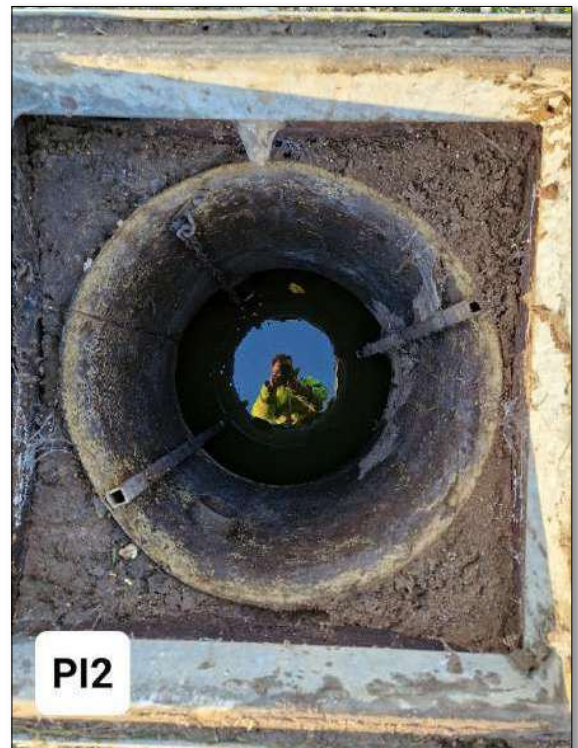
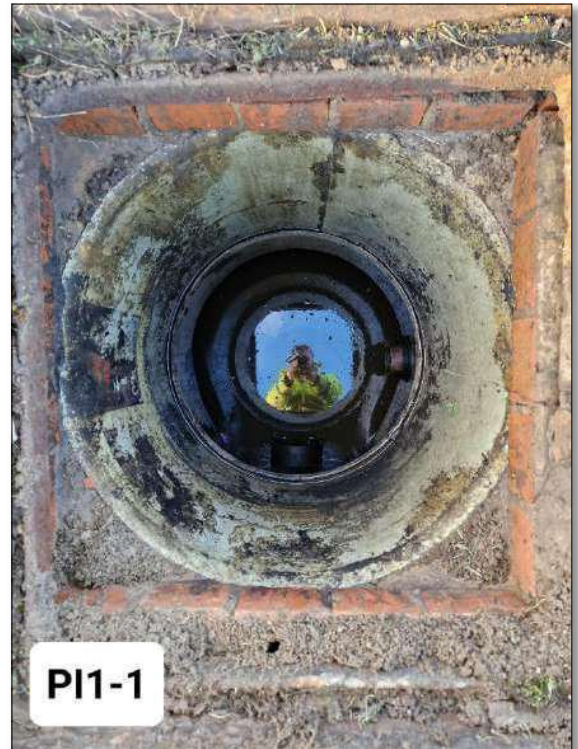


MH3



S6 & S3







ABBREVIATION

DISCLAIMER

11

GOODSON ASSOCIATES
LINE 2
LINE 3

**WELCIME BREAK A1 NORTHWAY
SOUTHBOUND
SG7 5EX**

T.44 DRAINAGE CONNECTIVITY PLAN

Drawing Number

Drawing Number
TS23-701-1-RevA

Revision	Description
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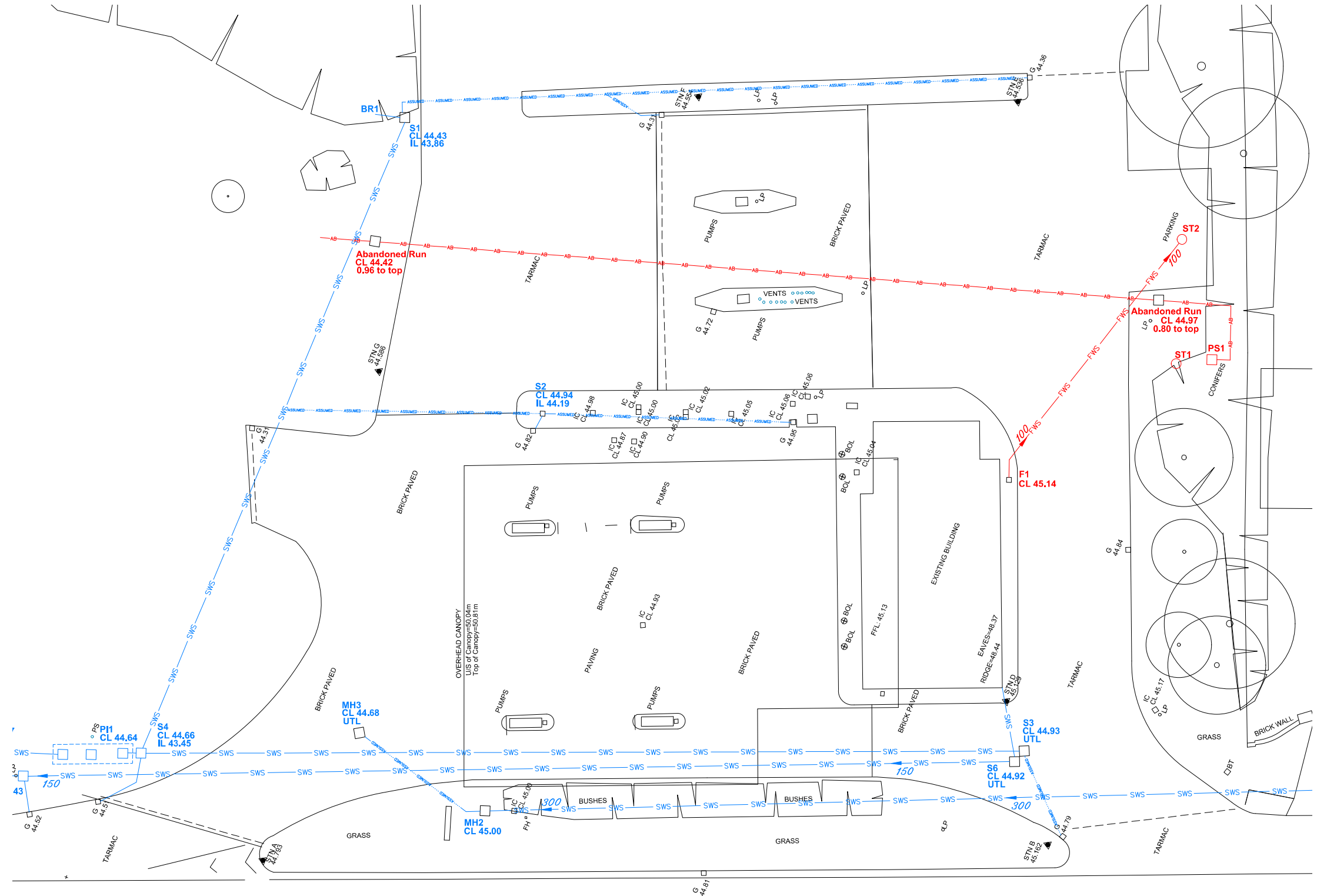
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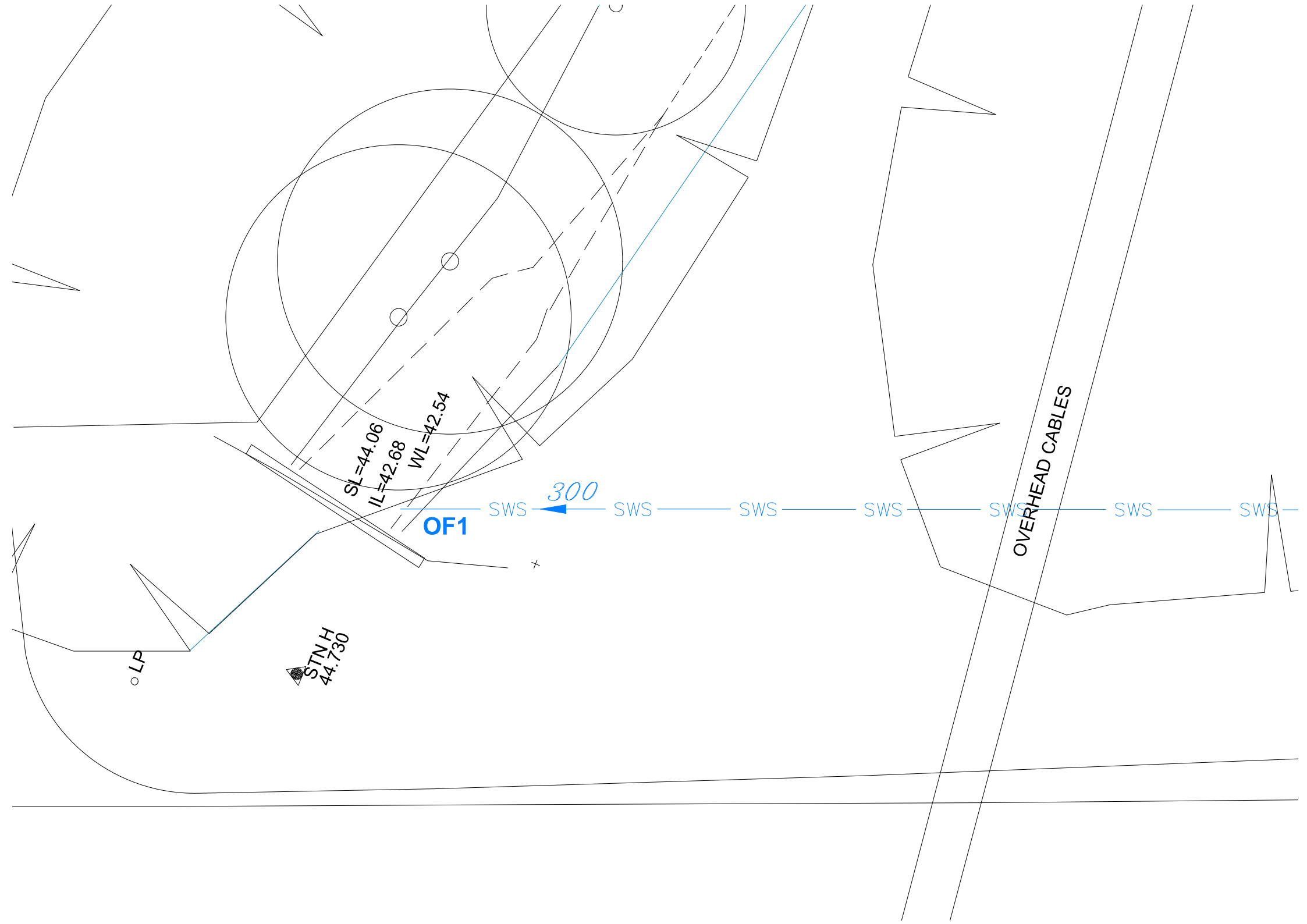
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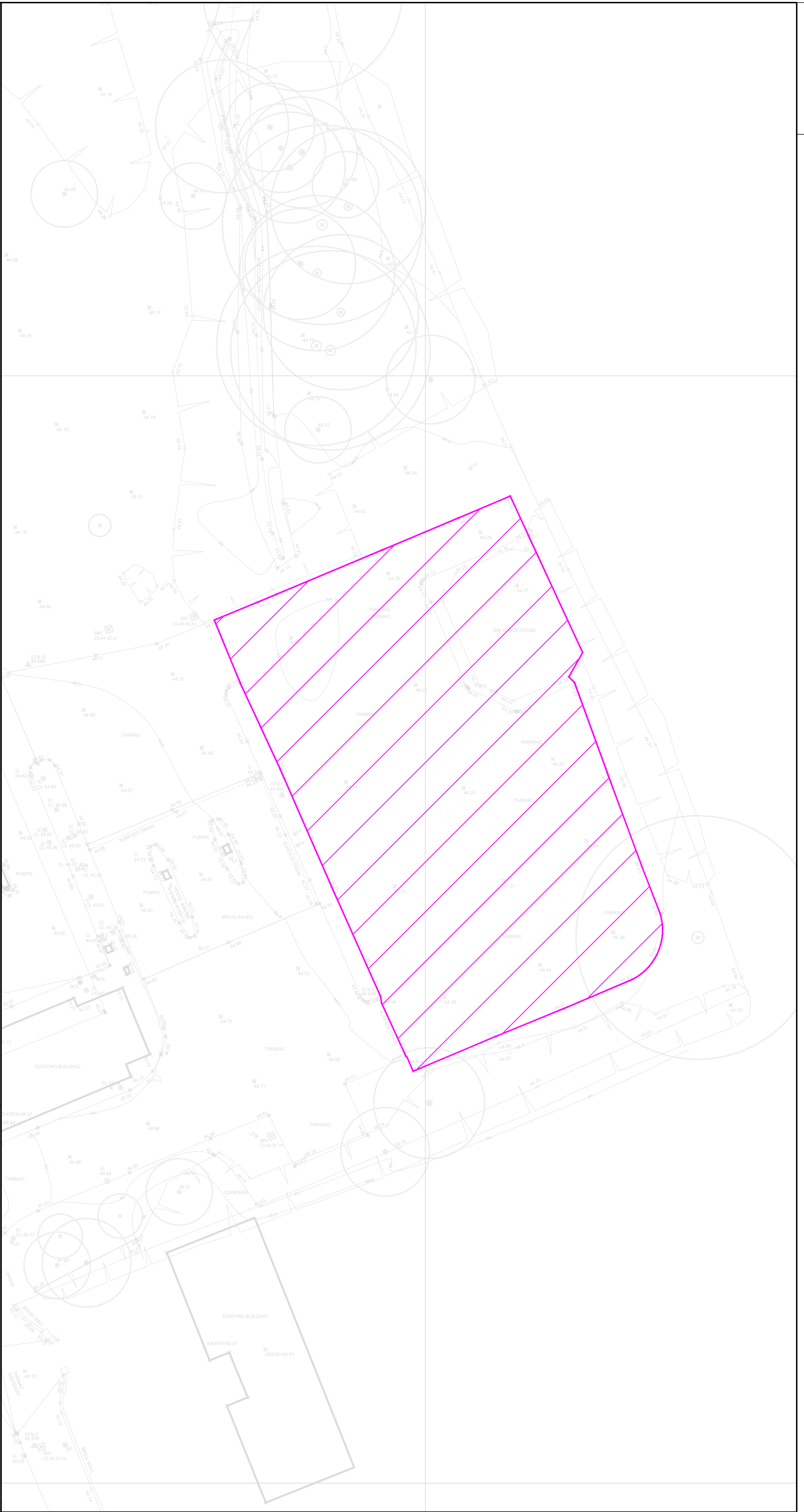
Drawn by	Checked by	Date of Survey
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NEM	MH	NOV 2023
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 SITE AREA: 2890m² (0.289Ha)

REV.	DATE.	REVISION.	BY.	CHK.
-		FIRST ISSUE.	PH	NB
-	-		-	-

CONTRACT No: P15706	DRAWING No: 511	REV: -
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