GROUND INVESTIGATION REPORT
FOR NEW AMC CONTROL ROOM BUILDING
AT READING SEWAGE TREATMENT WORKS
ISLAND ROAD
READING
BERKSHIRE
RG2 0RP

CARRIED OUT FOR:

CLIENT: THAMES WATER LIMITED

ENGINEER: CS2 LIMITED

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1.0 INTRODUCTION

In October 2025 Ground Investigation Specialists Limited (GIS) received written instructions from Chartered Surveyors CS2 Limited to carry out a ground investigation for a new AMC Control Room building which is to be constructed at Thames Water Limited's Sewage Treatment Works in Reading, Berkshire.

The proposal is to construct a new two storey Alarm Monitoring Centre (AMC) building, incorporating a new substation and adjacent car park.

Following a desk study, fieldwork was carried out between 4th and 13th November 2025 and consisted of sinking two boreholes by cable percussive means. Standpipes were installed in both boreholes to facilitate the monitoring of ground gas and groundwater levels over an extended period.

This report presents a factual account of the work undertaken and gives a risk-based assessment of the soil and ground gas contamination on the site with respect to a specific suite of contaminants. A geotechnical appraisal of the soil conditions in respect of foundations for the new building is also included.

This report has been produced for the sole use of Thames Water Limited and their advisors in support of the AMC Control Room development. No liability can be accepted for its use by other parties or for any other development proposals.

2.0 SITE LOCATION AND DESCRIPTION

The site is situated in the northwestern part of the substantial Thames Water's Reading Sewage Treatment Works, located off Island Road on the outskirts of Reading in Berkshire. The National Grid Reference for the approximate centre of the site is 470730, 170770. The approximate site outline is shown in yellow in Figure 1 below:

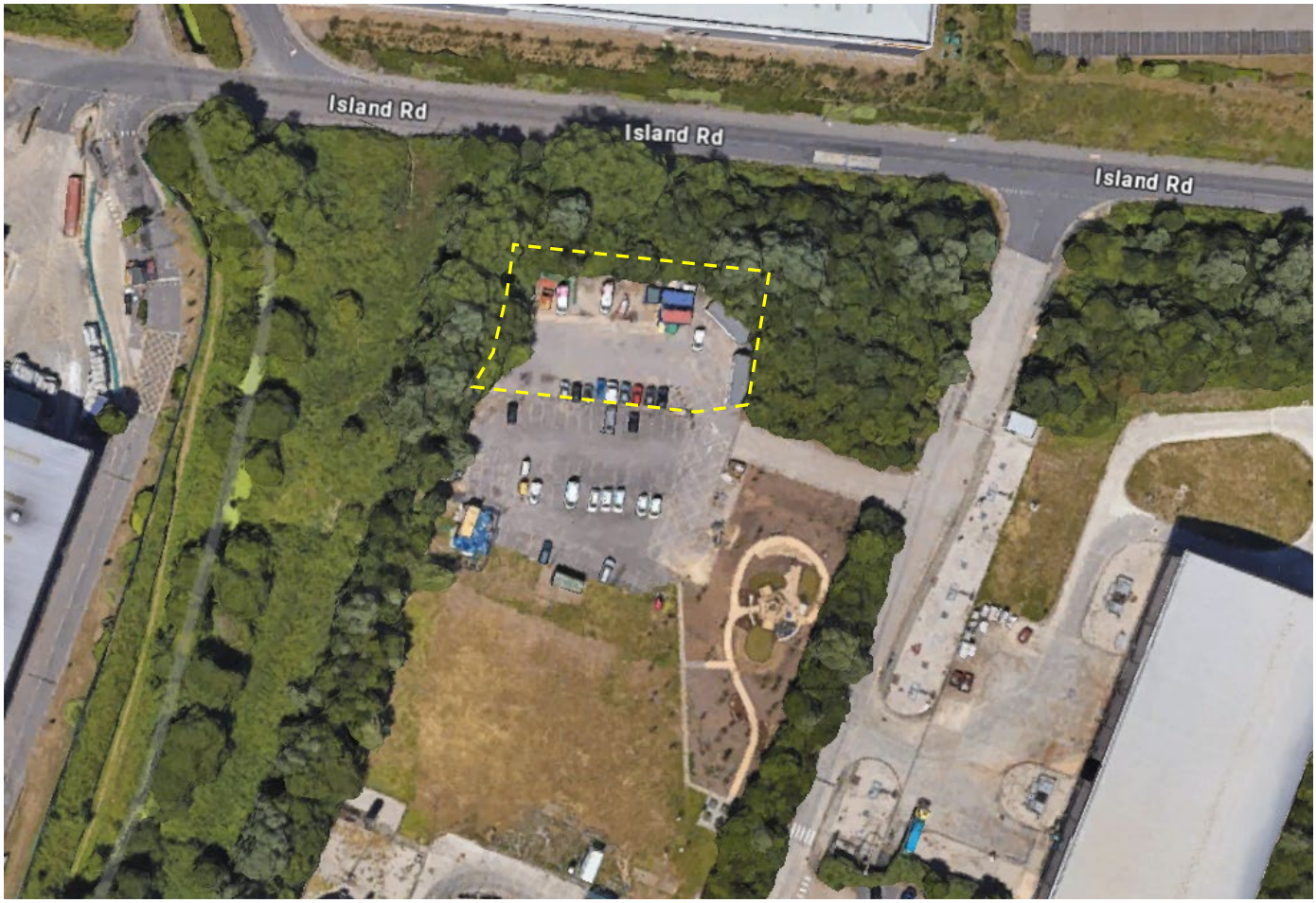


Fig 1: Approximate Site Outline in Yellow

The site is dominated by a blacktop surfaced car park used as a yard area by Lanes Limited (working for Thames Water). Temporary office and welfare buildings are situated in the eastern part of the site, while storage containers (including bunded fuel and COSHH storage), a diesel powered electricity generator, and a skip are located around the periphery. Figures 2, 3 and 4 (below and overleaf) show the site during the drilling operations in early November 2025.



Fig 2: Western Part of Site



Fig 3: Northern Part of Site



Fig 4: Eastern Part of Site

At the time of the site walkover, an area of young to semi-mature trees were situated to the immediate east, west and north. To the south was a construction area, beyond which was the main Reading Sewage Treatment Works.

The sewage works is an extensive, modern facility, set in a generally commercial area at the southwestern edge of Reading. To the west is a recycling centre, to the north a warehouse, while to the east is derelict land formerly occupied by a greyhound racing stadium. To the south is Green Park, a substantial modern residential development.

3.0 DESK STUDY FINDINGS

This section of the report presents the observations made during the desk study and factual data obtained. The conclusions and recommendations included in this report are limited to those that can be made based upon the findings of the desk study and information provided by third parties. G.I.S. believes all third party data to be true and correct. However, no responsibility can be accepted by G.I.S. for inaccuracies in the information supplied by any other party.

Various sources were consulted including a Groundsure Insight Report (Report No: GS-UVQ-OQF-YOI-KP6) presented in section 16.0, and verified/ supplemented where possible and appropriate using online sources and public register information.

3.1 Geology

Reference to the recent geological survey sheet SU 77 SW for Whitley (1: 10,000 scale) together with online data provided by the British Geological Survey (BGS) indicated the site is underlain by made ground, overlying recent Alluvium deposited by the River Kennet. Alluvium usually comprises soft to firm unconsolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stiffer, desiccated zone at the surface may also be present. The Alluvium may be of a significant thickness as it has clearly influenced development in the southwestern part of Reading. Very few buildings have been constructed where it is shown on the geological maps.

It is anticipated the Alluvium is underlain by the Beenham Grange Gravel Member; namely terrace deposits of variably clayey sand and gravel associated with the post glacial River Kennet.

The underlying solid geology is represented by the Paleogene period Lambeth Group, comprising vertically and laterally variable sequences of clay, some silty or sandy, with some sands and gravels, minor limestones, lignites, and occasional sandstones and conglomerates. The Lambeth Group was deposited in fluvial, estuarine, lagoonal or proximal marine environments.

Uncomformably underlying the Lambeth Group at an anticipated relatively shallow depth, lies the Seaford Chalk Formation formed during the Cretaceous Period. It is expected to comprise firm white chalk with conspicuous semi-continuous nodular and tabular seams of flint. Some of the flint nodules can be large to very large.

It is well documented that chalk is prone to dissolution and features such as sinkholes and dissolution pipes are not uncommon.

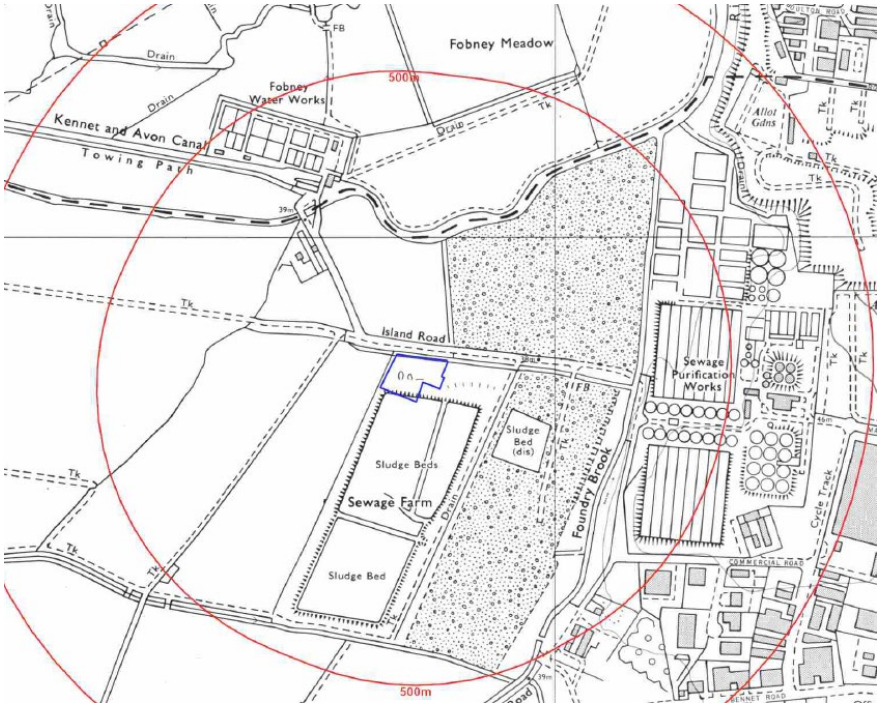
The nature and occurrence of features formed by dissolution have been studied as a part of the Review of Instability due to Natural Cavities in Great Britain for the Department of the Environment (Applied Geology 1993). Included in this document was a database recording the location and nature of each known dissolution feature. An up-to-date version of the database is maintained by Stantec UK Ltd (formerly Peter Brett Associates). They have confirmed via the Groundsure Report that there are no records of any natural cavities (solution features) on their data base within 500m of the site.

3.2 Site History

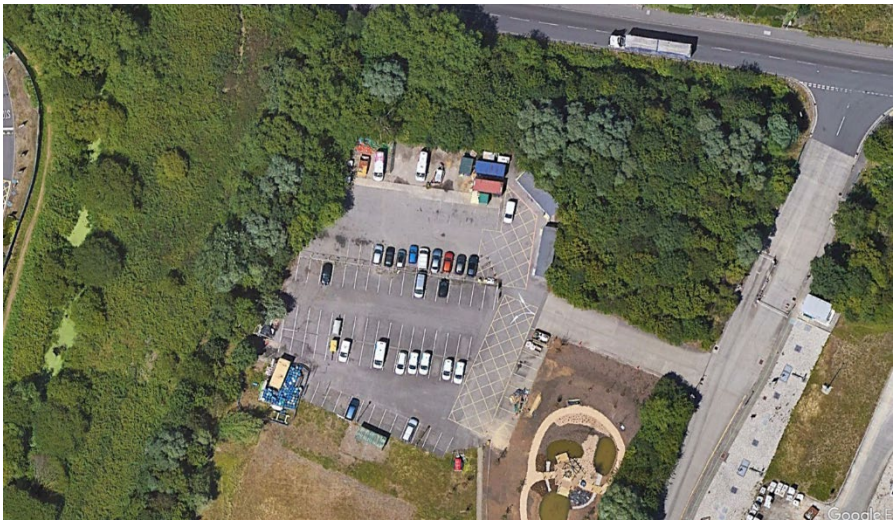
Ordnance survey maps dating back to 1877 have been consulted to establish the previous land uses and historical development of the site and the surrounding area. Extracts of the maps are appended to this report in section 15.0. A summary of the information is presented in Table 1 overleaf:

Table 1 : Historical Activity

Date	The Site and Local Land Use of Significance	Map Extracts
1877 – 1962	On the earliest OS maps the site was shown as forming part of a field surrounded by a network of ditches, all linked to the River Kennet, which itself lay c.200m to the north in approximately its current position. The nearest buildings to the site were four semi-detached houses c.240m to the northwest. The land to south, east and southeast of the site was labelled as Reading Corporation Sewage Farm. Better known as Manor Farm Sewage Treatment Works, they occupied c.25 hectares and were initially constructed in 1873, with further modifications in 1925 and 1963.	 ***c.1899***
1966 – 1994	By 1966, the site appeared as rough pasture studded with trees. To the north, Island Road had been constructed in approximately its current position, while the area to the immediate south appears to have been raised to incorporate new sludge beds. A disused sludge bed was shown to the southeast in an area labelled as a refuse tip.	 ***c.1966***

1966 – 1994 cont.../	The area to the northeast of Island Road appears to have been significantly raised, and was also shown as a refuse tip on the 1 : 10,000 scale map from the early 1970's, which in addition confirms the size of the Manor Farm sewage works to the east. By 1975 Reading stadium (also known as Smallmead Stadium) had been constructed on disused sludge beds c.240m to the southeast of the site. The stadium was a greyhound racing track which was closed by the Council in 2008 and subsequently demolished.	 ***c.1970***
1999 – 2003	By the early 2000's, environmental regulations had tightened significantly such that the old Manor Farm Sewage Works would have required extensive redevelopment to conform. As such, Thames Water, in collaboration with developers and Reading Council, constructed a new sewage treatment facility to the immediate south of the site at a cost of £80 million. The old sewage works were redeveloped for commercial and residential use. According to information included on a Thames Water document on the new works, the land was used for sludge disposal in two large lagoons until the 1970's, and subsequently for domestic waste disposal, which is not shown on the OS maps. It is noted that a demolition company also occupied part of the area for recycling materials. Thames Water state that the sludge lagoons rested on a thin layer of river gravels, overlying the relatively impervious clays of the Lambeth Group. However sand lenses the Lambeth Group allowed downward migration of ammonia that was known to be causing contamination of the underlying chalk aquifer. Land remediation was required and starting in May 2001; 170,000 tonnes of sludge impacted with mercury and cadmium, and 45,000 tonnes of domestic waste was excavated and removed from the new development. It is unclear if the site itself was directly impacted by these works. Thames Water state that a 7 – 11m deep bentonite cement slurry cut-off wall was installed around the perimeter of the larger sewage treatment site to control groundwater movement.	

1999 – 2003 cont.../	The aerial photograph (right) appears to show the site during the remediation works in 1999. Google Earth aerial photographs show the site in 2003 in use as a builders' compound for the construction of the new sewage works. The trees currently surrounding the site had yet to be planted by that stage. A rectangular building occupied the northern part of the site.	 ***c.1999***  ***c.2003***

2005 – Present day	By 2005 the works were completed and the site layout shown more in keeping with today. The rectangular building had been replaced by the temporary office and adjacent welfare facility still present today. By 2018 the site appeared to be in use by Lanes, with the existing storage and COSH containers visible.	 ***c.2005***  ***c.2022***  ***Reading Sewage Treatment Plant – Looking North - c.2025***

3.3 Environmental Setting

The nearest significant surface water body is the drain situated c.15m to the northeast of the site at its closest point. The drain network is linked to the River Kennet, situated c.200m to the north. The river flows in a northeasterly direction towards its confluence with the River Thames in Reading.

According to the Groundsure report, and verified using information provided on the Gov.uk website, the western side of the site lies within a Flood Zone 2, and as such it is likely the site will require a **Flood Risk Assessment** as part of the planning process. The adjacent drains and their immediate surrounds are at high risk of flooding and have been affected by historical flood events. There is also a high risk of surface water flooding from a 1 in 100 year rainfall event (0.3 – 1.0m flood depth), and a high risk of groundwater flooding.

There are no active discharge consents on the site itself. The Groundsure report does indicate a consent on the western site boundary dating from 1997 (associated with Smallmead Recycling Centre). However, this predates the construction of the modern sewage works and is not thought to still be in use. The final treated effluent from the sewage works appears to be discharged to Foundry Brook c.330m to the east of the site.

As previously discussed, the site is likely to be underlain by recent Alluvium and Beenham Grange Gravel Member deposits, which form part of a Secondary A aquifer as designated by the Environment Agency (EA). The underlying Lambeth Group Formation also forms part of a Secondary A Aquifer. Below the Lambeth Group, the Seaford Chalk Formation forms part of a Principal Aquifer.

There are no current or recent petrol stations within 500m of the site.

Thames Water's Fobney Pumping Station is situated c.340m to the north of the site. There are currently 8 no. active groundwater abstraction licenses in operation at the facility, drawing potable water from boreholes to supply Reading with drinking water,

although it is unclear which strata the boreholes are abstracting from. Each of the eight boreholes (BHA – BHH) have an abstraction allowance of 1.5 billion litres of water, with a combined theoretical maximum annual abstraction of 12 billion litres.

Despite the proximity of the site to Fobney Pumping Station, the site is not situated over a Groundwater Source Protection Zone.

The nearest active surface water abstraction licence is operated by Thames Water at Fobney. Under Licence No. 28/39/22043 they can abstract a maximum of 2.6 billion litres of water annually from the River Kennet for public drinking water.

According to the Groundsure Report, the nearest pollution incident recorded in the vicinity of the site involved a Category 2 (Significant) impact to air in October 2024, c.50m to the northwest of the site. No other details are known, but it is considered unlikely it directly impacted the site.

There are no current or historic fuel stations within 500m of the site.

The Groundsure Report identified a recent landfill to the immediate west of the site. Now occupied by Reading Recycling Centre, the site accepted household, commercial & industrial wastes, and was operated by Cemex Uk Materials Limited. The landfill site is currently in closure, which presumably means the permit has not yet been surrendered to the EA.

There are four historic landfill sites situated within 250m of the site according to EA records. The site is underlain by Island Road Tip, a historic landfill site which accepted inert, industrial, commercial, and liquid sludge wastes between 1970 and 1975.

Reading Sludge Treatment Centre to the south of the site is current licensed waste site, permitted to treat 25,000 tonnes of sludge under permit no. 66443. It is also classed by the EA as a historic landfill site, presumably referring to the former household and commercial wastes tipped on the site following the closure of the former sewage works.

The known details and extent of the local historical landfills are summarised below in Figure 5:

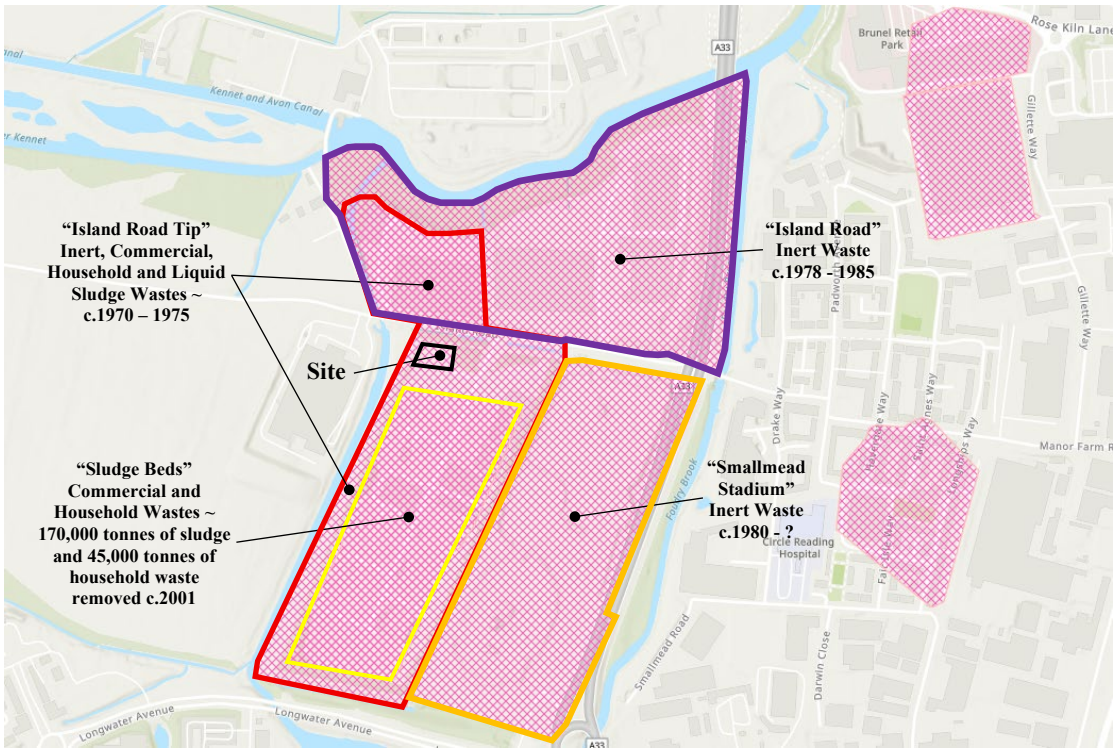


Fig 5: Local Historical Landfill Sites (taken from EA Website)

There are no designated sites within 1km of the site: Sites of Special Scientific Interest (SSSI), Ramsar Sites, Special Areas of Conservation, Special Protection Areas, Local or National Nature Reserves, Designated Ancient Woodland, Biosphere Reserves, Forest Parks, RSPB Reserves, or RAMSAR sites on or close to the site.

The Groundsure Report confirms the site is in an area where less than 1 % of homes are estimated to be at or above the action level for radon. As such, "No radon protective measures are considered necessary in the construction of new dwellings or extensions".

4.0 PRELIMINARY CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) for the site has been constructed based on the findings of the desk study and is reported in Table 2 (overleaf). The CSM seeks to describe the pollutant linkages between potential contamination sources and receptors both on and off-site and to give a preliminary assessment of potential risk to the receptors.

Table 2: Preliminary Conceptual Site Model

Potential Source	Potential Contaminants of Concern	Plausible Pathways	Potential Receptor	Probability	Consequence	Risk Classification	Justification
Legacy of made ground or contaminated soils from former landfilling activities on site, or from current use as contractors compound	**Heavy metals** (some naturally occurring, others associated with any made ground or sewage), **hydrocarbons (e.g. Polycyclic Aromatic Hydrocarbons (PAH)** – possibly associated with any ashy material or blacktop scalpings), **Total Petroleum Hydrocarbons (TPH)** – predominantly associated with areas of fuel storage), and/or **asbestos** (particularly associated with demolition rubble).	• Direct soil and dust ingestion (both indoor, through tracking of dust into the buildings, and outdoor) • Dermal contact (indoor and outdoor) • Inhalation (indoor and outdoor dust and vapour)	• "Commercial" scenario end-users	Unlikely	Medium	**Low**	The historical information indicates the site is situated over the former Island Road Tip, an inert, commercial, household and liquid sludge landfill site dating from the 1970's. It was also situated close to former sludge beds; however they did not actually encroach on the site area. There are not anticipated to be any significant risks to end-users from soil contamination associated with the continued commercial use of the site, with any risks largely mitigated by the presence of hardstanding and the new building. However, groundworkers in direct contact with the soil may be at high risk from short term exposure to the landfill materials and this should be thoroughly assessed
			• Groundworkers	High Likelihood	Medium	**High**	
			• Proposed building and service pipes	Low Likelihood	Medium	**Moderate/ Low**	Elevated levels of sulphate and acids may be present which can attack buried concrete. Water supply pipes may need to be upgraded in the unlikely event that hydrocarbon contamination is identified in the near surface soils
		• Transmission of contaminants into shallow groundwater and off-site migration (excludes asbestos)	• Controlled waters (River Kennet; Secondary A and Principal Aquifer)	High Likelihood	Medium	**High**	The site is situated in a particularly sensitive area with respect to contamination of controlled waters, given its proximity to open drains directly linked to the River Kennet (drains are located c.15m away), and overlying as it does Secondary A Aquifers associated with the Beenham Grange Gravel Member and the Lambeth Group, and the a Principal Aquifer associated with the Seaford Chalk Formation. The risks of generating pathways for contaminant migration during drilling and foundation works should be carefully considered. If any evidence of significant soil or groundwater contamination is identified during the investigation, the risks posed to controlled waters should be carefully considered
Landfilled inert, commercial, household and liquid sludge wastes/ organic material in underlying Alluvium (if present)	**Landfill and ground gases** (methane, carbon dioxide, hydrogen sulphide, carbon monoxide, de-oxygenated air)	• Generation of ground gas either on, or near to the site, resulting in potential asphyxiation or explosion	• End users/ proposed building	High Likelihood	Medium	**High**	The site is known to be situated over a former landfill site ("Island Road Tip") which received inert, commercial, household and liquid sludge wastes between 1970 and 1975. Although the wastes are now at least 50 years old, there remains a high likelihood of landfill gas generation which could impact buildings and end-users of the site. This should be carefully assessed.
Underlying natural geology	**Radon Gas**	• Generation of carcinogenic radon gas on-site	• End users	Unlikely	Medium	**Low**	According to the UK Radon, no radon protection measures will be necessary in the building

Pathway: Classification of human exposure pathways (routes) from The CLEA model, Research and Development Publication CLR10. **Probability and severity**: Classification of Probability and Consequence from CIRIA C552 Contaminated land risk assessment, a guide to good practice 2001.
Risk Classification from DETR Guidelines for Environmental Risk Assessment and Management, 2000

5.0 POTENTIAL CONTAMINANTS AND RECOMMENDATIONS FOR SAMPLING

The historical records indicate that the site was undeveloped until the 1960's, when sludge beds were constructed to the immediate south of the site, followed by landfilling of the area in the early to mid-1970's, with inert, commercial, household and liquid sludge wastes. In the early 2000's the site was impacted by the construction of the substantial sewage works to the south, during which it is understood remediation of the landfill and former sludge beds to the south was carried out. It is unclear if any remedial works occurred on the site itself, although it was used as a contractor's compound for those works, and finally from the late 2010's as a compound for Lanes Limited. There is mention of a 7 – 11m deep bentonite slurry wall installed to control groundwater movement, although the location of the wall is unclear.

From the available information there is a high potential risk to the health of groundworkers from contamination contained within the near surface soils found below the site, which would require a representative number of samples to be tested in order to make an accurate evaluation.

It is therefore recommended that a sampling scheme is designed which includes an assessment of selected near surface soils for general suite of contaminants, including arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, zinc, speciated Polycyclic Aromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons (TPH CWG) and asbestos. pH and sulphate testing should also be undertaken to assess the risk to buried concrete.

Groundwater quality monitoring should be carried out in the event that significant soil or groundwater contamination is suspected due to the proximity of the site to open ditches linked to the River Kennet. The site is also underlain by Secondary A Aquifers

linked to the superficial soils and the Lambeth Group Formation, and a Principal Aquifer associated with the Seaford Chalk Formation.

"Clean drilling" techniques must be carried out to control and minimise the risk of potentially contaminated near surface groundwater entering the protected aquifers below. On completion of the site investigation, the protected aquifers should be adequately sealed off.

Ground gas monitoring should be carried out to eliminate any risks associated with the degradation of organic deposits in the made ground, Alluvium or Head Deposits.

Conditions encountered on the site during the site investigation may vary from those predicted in the desk study and scope must be allowed for variations in the sampling procedure to account for this.

The results of the site investigation should be used to refine the site conceptual model and assess the risk to human health and the wider environment. A resultant strategy for the remediation of any contamination found should be submitted.

6.0 SITE INVESTIGATION

6.1 Fieldwork

Between 4th and 13th November 2025, a Dando 2000 boring rig was utilised to sink boreholes BH01 and BH02 by cable percussive means to the respective depths of 22.0 and 16.5mbgl.

The levels provided on each borehole log are approximate as they have been extrapolated from topographical information included on Interlocks Surveys drawing no. 250688UGS.

Below a service inspection pit dug to 1.2 m at each position, Standard Penetration Tests (SPT) were carried out at regular intervals to determine the relative density and strength of the underlying strata.

Sampling was carried out in accordance with the British Standards Code of Practice for Ground Investigations B.S. 5930:2015. Representative disturbed samples were taken at regular intervals and major soil changes throughout the full depth of each borehole to provide a continuous soil profile. These were logged by a geotechnical engineer to produce the appended engineering borehole logs included in section 10.0.

“Clean drilling” techniques were exercised to minimise the risks to controlled waters below the landfill strata encountered. This involved the installation of segmented steel casing, reducing in diameter from 250mm, to 200mm (and in the case of BH01, dropping again to 150mm). At the interface of the landfill and underlying natural soils, the bottom 1.0m of the 250mm casing was sealed off with bentonite swelling clay. The narrower diameter casing was then advanced through the seal once it had cured sufficiently.

Upon completion of drilling, the natural strata in the boreholes were sealed off by tremie pumping a bentonite/ cement grout from the base up to a depth of 4.0mbgl. Above 4.0m, 50mm diameter ground gas and groundwater monitoring standpipes were installed, comprising slotted pipe with a geosock screen and 10mm gravel surround to 1.0mbgl, overlain by plain pipe sealed with bentonite clay and topped with a removal bung, tap, and lockable metal security cover.

The surplus soils not sampled and sent to the laboratory were placed in a designated skip and removed from site by a licensed waste carrier.

6.2 Laboratory Analysis

GIS specified the laboratory testing. The results are presented in full in section 11.0 and 12.0.

With regard to conditions considered aggressive to buried concrete, the pH and soluble sulphate content (using a 2:1 water/soil extract) was determined for ten samples of soil. The pH and sulphate content of one sample of groundwater was also determined.

Five samples of made ground were selected for contamination analysis and tested for a general suite of contaminants, including metals and metalloids (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc), speciated Polycyclic Aromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons (either total TPH or Criteria Working Group TPH CWG), and asbestos. Two samples of made ground also underwent an extended suite of tests to satisfy regulations for disposal of soils to landfill.

A sample of purged groundwater recovered from BH02 has undergone testing for a similar suite of metallic and organic contaminants.

7.0 GROUND CONDITIONS

7.1 Strata Encountered

Full details of the strata encountered by this investigation are presented on the borehole logs included in section 10.0. However, as a brief guide, the main engineering geology horizons and geotechnical data are summarised below:-

Below any surface coverings of blacktop or associated fill, **made ground**/ **refuse** was encountered to a depth (*approximate level*) of 4.0 (*37.1mAOD)* in BH01 and 4.7m (*35.9mAOD*) in BH02, it consisted of medium dense becoming loose slightly odorous clayey sand; or very soft grey-brown and dark grey sandy silt and clay, all containing varying amounts of semi-decomposed newspaper, ash, fabric, cardboard, plastic, metal, flint, chert, grass, glass, rope, rubber printing press blanks, bleach bottles and wood. Below c.3.0m in BH02, the refuse gave way to very dense dark grey silty sandy gravel of chert and flint with many angular metal, brick, wood, plastic and glass fragments. Uncorrected SPT N values recorded in the made ground/ refuse ranged from a minimum of 2 blows for 450mm penetration at 1.2 m in BH02, to a maximum extrapolated value of 158 at 4.0m in the same borehole (as based on 50 blows for 95mm penetration).

Below the refuse in BH01, **Alluvium** was encountered to 4.6m (*c.36.5mAOD*), comprising soft grey clayey sandy slightly organic silt. An uncorrected SPT N value of 6 was recorded at 4.0m depth in BH01.

Underlying the alluvium in BH01, and directly underlying the made ground/ refuse in BH02, strata of the **Beenham Grange Gravel Member** (BGGM) were encountered to the respective depths of 6.0 (*c.35.1mAOD*) and 6.4m (*34.2mAOD*), comprising loose to medium dense grey and cream sandy fine to coarse angular to rounded chert and flint gravel, overlying very stiff mottled pale brown and light grey very clayey very sandy slightly gravelly silt. Uncorrected SPT N values recorded in the BGGM ranged from a minimum of 9 at 5.0 in BH01, to a maximum of 49 at 6.0m in BH02.

Below the BGGM, both boreholes encountered strata of the **Lambeth Group** to the respective depths of 15.0 (*c.26.1mAOD*) and 14.8m (*c.25.8mAOD*), comprising predominantly very dense light grey slightly clayey silty fine sand, with bands of stiff grey very sandy clay noted at the top and bottom of the sequence. Disseminated fine fragments of lignite were noted to increase in frequency with depth, becoming larger

below 12.0m in BH01. Below a depth of 13.9m in BH01, many cobbles of weak sandstone, lignite, glauconitic flint and conglomerate were encountered in the sand. Uncorrected SPT N values recorded in the Lambeth Group ranged from a minimum of 17 at 6.0 in BH01, to a maximum extrapolated value of 111 at 13.5m in BH01 (as based on 50 blows for 135mm penetration).

The Lambeth Group was found to be underlain by completely weathered strata of the **Seaford Chalk Formation**. It comprised extremely weak friable white and cream chalk, weathered in many places to a stiff to very stiff clay/ putty, and containing occasional irregular gravel sized flint nodules. Uncorrected SPT N values recorded in the chalk ranged from a minimum of 19 at 16.5m in BH01, to a maximum extrapolated value of 65 at 15.0m in the same borehole (as based on 50 blows for 230mm penetration). In terms of classifying the chalk, it is possible to assign a weathering grade of **Dm** (structureless fine soil), as proposed by Spink (CIRIA C574 2002).

7.2 Groundwater

During the four week monitoring period, groundwater levels below the site were observed at a depth of c.2.7 to 2.9m (*approx. level 38.5 – 37.8m AOD*).

8.0 GEOTECHNICAL COMMENTS

8.1 Introduction

Reference to CS2 drawing no. 4052309 Revision B (included in section 17.0) shows that following the partial removal of some of the trees in the northern part of the site, a new AMC Compound and two-storey control room will be constructed. A new 16 No. bay car park will be provided in the eastern part of the site.

8.2 Foundations

The site investigation has found the site area to be complicated by the presence of a significant thickness of inferior soils of variable bearing capacity and settlement characteristics. A summary of the pertinent geotechnical information for each stratum (as described in detail in section 7.1) is included in Table 3 below:

Table 3: Summary of Pertinent Geotechnical Data

Strata	Depths Encountered (mbgl)		Thickness (m)	SPT N Value Range (extrapolated where appropriate)	Mean SPT N Value
	From	To			
Fill (hardcore)	GL	0.6	-	-	-
Made Ground/ Refuse	0.6	4.0 – 4.7	3.5 – 4.2	<1[A] – 158[B]	-
Alluvium (BH01 only)	4.0	4.6	0.6	6	6
Beenham Grange Gravel Member	4.6 – 4.7	6.4 – 6.7	1.8 – 2.0	9 – 27	17
Lambeth Group	6.4 – 6.7	14.8 – 15.0	8.3 – 8.4	17 – 111[C]	c.70
Seaford Chalk Formation	14.8 – 15.0	>22.0	>7.0	19 – 65[D]	35

[A] = N value based on 2 blows for 450mm penetration.
[B] = N value based on 50 blows for 95mm penetration.
[C] = N value based on 50 blows for 135mm penetration.
[D] = N value based on 50 blows for 230mm penetration.

The made ground/ refuse is not considered to be a suitable bearing stratum for either the foundations or floor slab for the new building. There is a higher than average risk that even when employing a light loading on a rigid raft foundation with reinforced perimeter downstand beams, total differential settlements could prove excessive due to the extreme variation in the consistency and bearing capacity identified in the made ground/ refuse and the presence of degradable materials (paper, cardboard, rope, fabric, grass, wood etc).

There are two options that could be considered for the proposed development:-

i) installing a grid of vibro-concrete or mixed-modulus columns taken down to the competent natural soils in order to improve the bearing capacity and settlement characteristics of the made ground/ refuse and alluvium soils, such that a lightly loaded raft foundation could be utilised, or…

ii) transferring all structural loads through the inferior soils and into the competent Lambeth Group strata by means of small diameter piles, surmounted by a ground beam and incorporating a fully suspended floor slab.

The economics of the two foundation solutions should be considered following advice from the relevant specialist contractors, who would be best able to advise on their detailed construction and application to the site based on their own individual design and the information contained in this report.

Great care should be taken selecting the appropriate foundation solution with respect to the protection of the controlled water bodies below the landfill materials, which includes Secondary A and Principal Aquifers. For example, a driven pile may deviate during driving, creating a potential pathway for contaminant migration. The most appropriate solution is likely to involve a non-displacement method, such as Continuous Flight Auger (CFA) piling, although this will need to be confirmed with the specialists and regulators before works commence on site. Before finalising on the foundation scheme, it may well be that the regulators will require a detailed Foundations Works Risk Assessment (FWRA) to be undertaken to ensure that all possible foundation solutions have been adequately considered in the context of the site's complex hydrogeological setting.

8.3 Buried Concrete

Reference to BRE Special Digest 1:2005 and the chemical testing carried out on the ten samples of soil would indicate that in terms of buried concrete and classifying the site as to its Design Sulphate Class (DS) and Aggressive Chemical Environment for Concrete Class (ACEC) the site could be considered to have a DS class of DS-2 and ACEC class of AC-2.

9.0 CONTAMINATION ASSESSMENT

9.1 Introduction

The ground floor layout of the proposed development is shown on the site plan included in section 17.0. Soft landscaping is likely to remain around the western, northern and eastern boundaries of the site.

9.2 Soil Analysis

Five samples of made ground were selected for contamination analysis and tested for a general suite of contaminants, including metals and metalloids (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc), speciated PAH, TPH or TPH CWG, and asbestos.

The results (included in full in section 11.0) have been compared with Generic Assessment Criteria (GAC) for both residential without homegrown produce and commercial land uses, known as "Suitable 4 Use Levels – S4UL", derived using the Contaminated Land Environmental Assessment 'CLEA' v1.06 software methodology by the Land Quality Management (LQM)/ Chartered Institute of Environmental Health (CIEH). The only exception is lead, for which the DEFRA Category 4 Screening Level for the same land use scenario has been used.

The use of a residential screening value is considered to be protective of groundworkers who, in this scenario, are deemed at greatest short term risk from any soil contamination. Commercial screening values (appropriate to the long term continued use of the site as part of a sewage works) are far less stringent and are provided for context.

Table 4 (overleaf) provides a summary of the analysis data in comparison with the screening values. All the S4UL's for the organic contaminants are appropriate to a Soil Organic Matter (SOM) content of 2.5 % (based on a conservative assessment of the laboratory results).

Table 4: Summary of Made Ground Analysis Data for Metals, Metalloids, Cyanide, pH, PAH, TPH & Asbestos

Determinand	Units	BH01 0.60m	BH01 1.80m	BH02 0.60m	BH02 1.10m	BH02 1.80m	Resi$_{with}$ Screening Values	Commercial Screening Values	Source
Arsenic	mg/kg	9.0	9.8	5.9	6.6	35	40	640	S4UL
Cadmium	mg/kg	0.96	2.4	0.33	0.38	0.55	85	190	S4UL
Chromium	mg/kg	41	47	19	24	17	910	8600	S4UL
Copper	mg/kg	97	46	19	100	49	7100	68000	S4UL
Lead	mg/kg	430	120	30	81	120	310	2330	C4SL
Mercury	mg/kg	0.20	0.10	0.12	0.50	0.10	56	1100	S4UL
Nickel	mg/kg	49	44	12	24	14	180	980	S4UL
Selenium	mg/kg	0.39	1.3	0.66	< 0.25	< 0.25	430	12000	S4UL
Zinc	mg/kg	380	260	50	150	360	40000	730000	S4UL
pH	pH units	8.5	8.1	8.2	8.3	8.2	<5	<5	Arb
Asbestos	-	NAD	NAD	NAD	NAD	NAD	Nil	Nil	-
Naphthalene	mg/kg	0.74	0.21	< 0.10	< 0.10	0.14	5.6	460	S4UL
Acenaphthylene	mg/kg	0.51	0.11	< 0.10	< 0.10	< 0.10	4600	97000	S4UL
Acenaphthene	mg/kg	2.3	0.28	< 0.10	< 0.10	< 0.10	4700	97000	S4UL
Fluorene	mg/kg	2.3	0.31	< 0.10	< 0.10	< 0.10	1600	68000	S4UL
Phenanthrene	mg/kg	15	2.3	0.18	< 0.10	0.66	1500	22000	S4UL
Anthracene	mg/kg	5.1	0.91	< 0.10	< 0.10	0.16	35000	54000	S4UL
Fluoranthene	mg/kg	29	4.7	0.45	< 0.10	0.94	1600	23000	S4UL
Pyrene	mg/kg	25	3.8	0.39	< 0.10	0.85	3800	54000	S4UL
Benzo[a]anthracene	mg/kg	12	2.1	0.24	< 0.10	0.46	14	170	S4UL
Chrysene	mg/kg	14	2.0	0.25	< 0.10	0.57	31	350	S4UL
Benzo[b]fluoranthene	mg/kg	31	3.3	0.36	< 0.10	0.73	4.0	44	S4UL
Benzo[k]fluoranthene	mg/kg	8.4	1.1	0.15	< 0.10	0.28	110	1200	S4UL
Benzo[a]pyrene (only)	mg/kg	25	2.7	0.29	< 0.10	0.53	3.2	35	S4UL
Indeno[1,2,3-cd]pyrene	mg/kg	21	1.9	0.20	< 0.10	0.39	46	510	S4UL
Dibenzo[a,h]anthracene	mg/kg	3.4	0.37	< 0.10	< 0.10	< 0.10	0.32	3.6	S4UL
Benzo[g,h,i]perylene	mg/kg	20	1.7	0.20	< 0.10	0.39	360	4000	S4UL
Aliphatic VPH >C5-C6	mg/kg	-	< 0.05	< 0.05	-	< 0.05	78	5900	S4UL
Aliphatic VPH >C6-C8 (Sum)	mg/kg	-	< 0.10	< 0.10	-	< 0.10	230	17000	S4UL
Aliphatic VPH >C8-C10	mg/kg	-	< 0.05	< 0.05	-	< 0.05	65	4800	S4UL
Aliphatic EPH >C10-C12	mg/kg	-	11	2.2	-	33	330	23000	S4UL
Aliphatic EPH >C12-C16	mg/kg	-	17	2.0	-	70	2400	82000	S4UL
Aliphatic EPH >C16-C21	mg/kg	-	58	30	-	290	92000	1700000	S4UL
Aliphatic EPH >C21-C35	mg/kg	-	210	65	-	1700			
Aliphatic EPH >C35-C40	mg/kg	-	33	14	-	400	92000	1700000	S4UL
Aliphatic EPH >C40-C44	mg/kg	-	< 10	< 10	-	53			
Aromatic VPH >C5-C7	mg/kg	-	< 0.05	< 0.05	-	< 0.05	690	46000	S4UL
Aromatic VPH >C7-C8	mg/kg	-	< 0.05	< 0.05	-	< 0.05	1800	110000	S4UL
Aromatic VPH >C8-C10	mg/kg	-	< 0.05	< 0.05	-	< 0.05	110	8100	S4UL
Aromatic EPH >C10-C12	mg/kg	-	24	< 1.0	-	6.9	590	28000	S4UL
Aromatic EPH >C12-C16	mg/kg	-	19	4.0	-	45	2300	37000	S4UL
Aromatic EPH >C16-C21	mg/kg	-	260	22	-	280	1900	28000	S4UL
Aromatic EPH >C21-C35	mg/kg	-	54	14	-	89	1900	28000	S4UL
Aromatic EPH >C35-C40	mg/kg	-	5.9	3.5	-	33	1900	28000	S4UL
Aromatic EPH >C40-C44	mg/kg	-	< 10	< 10	-	< 10			
Total TPH >C10-C40	mg/kg	4500	700	160	<10	2900	-	-	-

S4UL = Suitable 4 Use Levels developed by LQM/CIEH for Residential Without Homegrown Produce and Commercial land uses (2.5% SOM).
C4SL = DEFRA Category 4 Screening Levels for lead.
Arb = Arbitrary Acidity Screen.
NAD = No Asbestos Detected.
Breeches are highlighted in yellow.

Reference to Table 4 would show that elevated concentrations of lead and PAH (namely benzo[b]fluoranthene, benzo[a]pyrene and dibenzo[a,h]anthracene) were detected in the made ground/ refuse sample recovered from 0.60m in borehole BH01. There was also some elevated TPH in the same sample. There were no other contaminants of concern detected.

The levels of lead, PAH and TPH contamination identified in the soil should not be a significant risk to human health during, or post construction in a commercial setting, nor are they considered a significant risk to controlled waters, given the sites setting in a large former landfill. No further assessment or remedial action is deemed necessary.

Groundworkers involved in any construction works should wear appropriate PPE for a development of this nature at an active sewage works.

Attention is drawn to a suspected fragment of asbestos tile noted at a depth of 2.8m in BH01. This sample was too deep to impact human health directly, and as such was not tested. Five samples of shallower made ground/ refuse were screened for asbestos, with no fibres or fragments detected in the laboratory. However, given the heterogenous nature of the near surface material, it's age and history, a careful watch for any signs of asbestos containing materials (ACM's) should kept during groundworks by suitably trained and experienced personnel. Further advice should be sought if any suspected ACM's are uncovered with respect to their safe removal.

9.3 Soil Disposal

In respect of determining the suitability of the near surface soils for disposal to landfill, waste classification software has been used to identify whether the material can be classified as hazardous or non-hazardous, as defined in the EWC (European Waste Catalogue 2002).

The solid suite determinands have been compared with the appropriate/ most likely chemical compounds as detailed in EWC Chapter 17 - Construction and demolition wastes. Full details of the classification are provided on the data sheets in section 11.0.

Based on a mean of the solid test results for each determinand (simulating a mixed load of made ground from the site), the material would all be classified at this stage as "Hazardous Waste" due to the levels of TPH identified in the samples, and their potential carcinogenic and mutagenic properties. As previously discussed, no asbestos was detected in the samples tested.

Following the initial assessment, Waste Acceptance Criteria (WAC) testing is subsequently required in order to establish the suitability of the made ground for disposal to a hazardous waste landfill. Summaries of the solid and leachate results for the samples recovered from 0.6 and 1.1m depth in BH01 and BH02 respectively are included in section 13.0.

The WAC analysis has revealed the soils do not exceed the Hazardous Waste Limit Values and as such, the waste is suitable for disposal to a Hazardous Waste Landfill in its current state. It may be possible to reduce the classification through some form of pre-treatment (i.e. mixing with soils of lower TPH and PAH contents). However, this must be agreed with the landfill operator and may involve additional testing of the soils

following excavation and/ or treatment. Final tipping costs will need to be agreed with the landfill operators.

9.4 Groundwater Risk Assessment

A purged groundwater sample was recovered on 5th December 2025 from borehole BH02 and sent to a UKAS accredited laboratory to be analysed for dissolved arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, selenium, zinc, pH, ammonia, sulphate, total cyanide, speciated speciated PAH, TPH CWG, Volatile and Semi-Volatile Organic Compounds (VOC's and SVOC's).

All of the results are presented in full in section 12.0 and are summarised in Table 5 overleaf. They are compared with generic screening criteria derived from UK Environmental Quality Standards applicable to the local water hardness regime (where available). UK drinking water standards are provided where possible due to the known abstraction to the north of the site at Fobney Pumping Station.

Non-detected substances are omitted from the table for the purposes of clarity (i.e. cadmium, mercury, all TPH carbon bands, all PAH determinands, BTEX, and all VOC's/ SVOC's (except 1,2,4-Trimethylbenzene).

Table 5: Groundwater Quality Data

Determinand	Units	BH02	EQS		DWG
			AA	MAC	
Arsenic	**µg/l**	2.9	**50**	**N/A**	**10**
Boron	**µg/l**	720	**2000**	**N/A**	**2400**
Chromium	**µg/l**	1.8	**4.7**	**32**	**50**
Copper*	**µg/l**	**3.0**	**1**	**N/A**	**2000**
Lead*	**µg/l**	0.88	**1.2**	**14**	**10**
Nickel*	**µg/l**	**11**	**4**	**34**	**70**
Selenium	**µg/l**	3.5	**-**	**-**	**40**
Zinc*	**µg/l**	**12**	**10.9**	**-**	**-**
pH	**pH units**	7.5	**-**	**6 – 9**	**-**
Ammonia	**mg/l**	0.96	**-**	**-**	**-**
Sulphate	**mg/l**	100	**400**	**-**	**-**
Hardness	**mg/l**	410	**-**	**-**	**-**
1,2,4-Trimethylbenzene	**µg/l**	4.8	**-**	**-**	**-**

EQS = Environmental Quality Standards for Freshwaters
AA = Annual Average; MAC = Maximum Allowable Concentration
* Bioavailable
DWG = Drinking Water Guidelines published by Drinking Water Inspectorate
Exceedances of the EQS are highlighted in **green**
Exceedances of the EQS and DWG's are highlighted in **blue**

The results indicate that groundwater at the site is generally of good quality, particularly when considering the site's history. Minor exceedances of the EQS suitable for direct discharge to the local river network were recorded with respect to copper, nickel and zinc. There were no recorded exceedances of the UK Drinking Water Guidelines.

Based on the available information, the levels of groundwater contamination identified are not considered significant in the context of the site's history or environmental setting. Such levels are unlikely to give significant cause for concern to the regulators.

No further assessment or remedial action is considered necessary to protect controlled waters.

9.6 Ground Gas Analysis

9.6.1 Gas Monitoring Data

Standpipes were installed in boreholes BH01 and BH02. The standpipes were monitored for a suite of permanent ground gasses on four occasions: 14th, 21st and 28th November, and 5th December 2025. The boreholes were screened for methane (CH_4), carbon dioxide (CO_2), oxygen (O_2), carbon monoxide (CO), hydrogen sulphide (H_2S), and advective gas flow using a Gas Data GFM series landfill gas monitor.

The readings are appended in full in section 14.0. Table 6 (below) provides a summary of the data:-

Table 6: Summary of Gas Monitoring Data

Monitoring Point ID	Slotted Screen Section Depth Range (mbgl)	No. of Monitoring Occasions	CH_4 (% v/v)	CO_2 (% v/v)	O_2 (% v/v)	CO (ppm)	H_2S (ppm)	Steady Positive Flow (l/hr)	Water Level Range (mbgl)	Atmospheric Pressure Range (mBar)
BH01	1.0 – 4.0	4	<0.1 – **1.5**	<0.1 – **6.6**	**<0.1** – 12.8	0	0	0	2.65 – 2.85	995 – 1026
BH02	1.0 – 4.0	4	0.9 – **9.1**	1.9 – **11.6**	**<0.1** – 17.0	0	0	0	2.75 – 2.85	

*Gas Concentrations of concern are highlighted in **yellow**.*

Reference to Table 6 would show that elevated concentrations of methane have been detected in both boreholes (maximum of 9.1 % v/v in BH02). Elevated concentrations of carbon dioxide were also detected (maximum of 11.6 % v/v in BH02). Corresponding oxygen levels were also severely depleted in both boreholes, with entirely anaerobic conditions noted on several occasions (<0.1 % v/v oxygen). No carbon monoxide or hydrogen sulphide was detected in either standpipe, nor any steady positive gas flow.

9.6.2 Atmospheric Pressure Data

Shuman *et al.* (1992) suggest that advective soil gas flow is most likely during, or immediately following periods of low or falling atmospheric pressure. In order to ensure the boreholes have been monitored during "worst case" atmospheric conditions, the site readings have been placed into context with respect to atmospheric pressure records available on-line for the weather station at Benson in Oxfordshire (see Figure 6 overleaf).

The readings shown are from the three days prior to the first visit and for the duration of the monitoring. Monitoring visits carried out during or immediately following periods of falling pressure are highlighted green, rising pressure readings in red, while roughly steady pressure is highlighted orange. Site readings are also shown for reference.

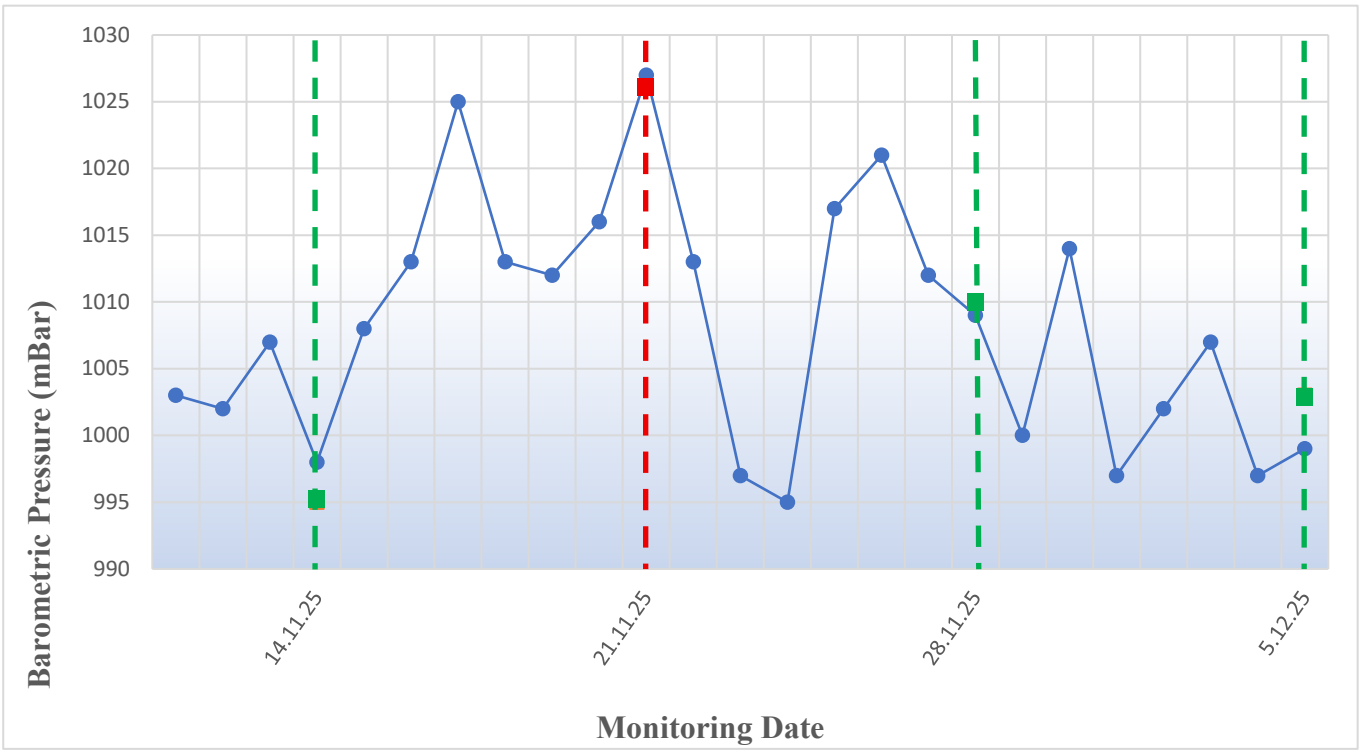


Figure 6: Graph Displaying Atmospheric Pressure Readings During Monitoring Period

Reference to Figure 6 would show that three of the four visits can be considered to have been carried out during, or immediately following a period of falling atmospheric pressure.

9.7 Ground Gas Risk Assessment

The methane and carbon dioxide detected are almost certainly being generated by the decomposition of organic material in the made ground/ refuse below the site, which was found to contain large quantities of putrescible material such as paper, cardboard and rope. Given the sites location within a larger complex of landfills, a contribution from off-site sources is also considered plausible.

Referring to the guidance set out in section 6.3.4 of BS 8485:2015+A1:2019 'Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings', the following is a calculation of the Gas Screening Value (*GSV*) using the borehole hazardous gas flow rate ($\boldsymbol{Q_{hg}}$) in order to provide a quantitative assessment of the gas risk to the proposed development.

It uses the maximum recorded concentration of 9.1 % v/v for methane and 11.6 % v/v for carbon dioxide. No advective gas flow has been recorded during the monitoring, so the lower detection limit of the instrument has been used in the calculation (0.1 l/hr).

$$Q_{hg} = q\left(\frac{C_{hg}}{100}\right)$$

q = the measured flow rate of combined gases from the standpipe in l/hr

C_{hg} = the measured hazardous gas concentration (% v/v)

$Q_{hg}CH_4 = 0.1\left(\frac{9.1}{100}\right)$ = **0.0091 l/hr**

$Q_{hg}CO_2 = 0.1\left(\frac{11.6}{100}\right)$ = **0.0116 l/hr**

The *GSVs* for methane and carbon dioxide are 0.0091 and 0.0116 l/hr respectively. According to Table 2 of 8485:2015+A1:2019, the hazard potential from such a *GSV* is considered very low (*GSV's* of <0.7) and equates to characteristic gas situation CS1.

However, as the site is located over a 1970's landfill, there remains potential for the generation of CH_4 and CO_2 over the coming years, albeit at a gradually reducing rate as the availability of putrescible materials diminishes.

There is also the construction of the building to consider, which may alter the status quo with respect to gas generation, and possibly advective gas flow.

Further to the above, and in terms of the need for gas protection measures, Table 2 of BS 8485:2015+A1:2019 states that for CH_4 concentrations in excess of 1% (and 5 % for CO_2), consideration should be given to increasing the characteristic gas situation to **CS2**, even when such low levels of advective gas flow have been identified.

As such, the new building will require hazardous gas mitigation measures to be correctly designed, installed and verified to protect the structure and occupants from the permanent hazardous gases identified below the site.

According to Table 4 of BS 8485:2015+A1:2019, the minimum level of gas protection (score) required for a Type C commercial building in a CS2 setting would be ***2.5 points***.

To achieve this score, the appropriate gas protective system will be dependant on the floor slab design opted for, which will ultimately be governed by the foundation solution chosen:

1. Utilising vibro-concrete or mixed-modulus columns with a cast in-situ raft foundation.

or,

2. The installation of piles surmounted by a ground beam and fully suspended floor slab.

Foundation Option 1

Subject to confirmation from the specialist contractor, utilising either vibro-concrete or mixed-modulus columns should minimise the creation of pathways for gas migration to the surface, certainly in comparison to the use of vibro-stone columns.

Constructing the building on a cast in-situ ground-bearing floor slab following ground improvement will provide ***1*** to ***1.5 points***, depending on the reinforcement provided to control cracking, and the number of penetrations. The additional points required can be made up via the incorporation of a "good performance" passive sub-floor dispersal layer consisting of a no-fines gravel layer (***1.5 points***), either with or without gas drains; or alternatively, ***2 points*** would be awarded for the incorporation of a suitable gas resistant membrane in the floor slab (as detailed overleaf).

Foundation Option 2

With respect to the provision of piled foundations surmounted by a fully suspended floor slab, the requisite ***2.5 points*** would be provided by the incorporation of a "**very good performance**" passive sub floor dispersal layer, comprising a **clear air void** beneath the fully suspended floor slab.

For a passive sub-floor ventilation system to be considered "very good", the building should incorporate vents equivalent to a minimum of 2,000 mm^2/m run of wall.

Providing air bricks on all sides of the building is advised. The minimum depth of clear void space should be 100mm, with any increase on that beneficial.

Any downstand beams and other internal obstructions to the clear void ventilation layer will clearly restrict airflow. As such there should be four or five times the area of the side vents provided in the internal obstructions.

If any doubts arise during the planning stage as to whether a "very good performance" void can be successfully constructed and maintained, the addition of an appropriate gas resistant membrane into the floor slab construction should be considered (as detailed below).

Gas Resistant Membrane Requirements

A virgin polymer integral **GRM** will contribute ***2 points*** to the gas protection score, but must be installed to the specifications listed in Table 7 of BS 8485:2015+A1:2019.

As an example, Visqueen Gas Barrier© should provide sufficient protection from methane and carbon dioxide if correctly installed across the entire footprint of the building. All membrane seams should be lapped, taped or welded and all service penetrations sealed, all strictly to the manufacture's guidelines.

Validation Reporting

The regulators will need to approve in writing the above remedial gas protection scheme before a Gas Remediation Statement is produced for the new development. The standpipes should be retained until then.

The Remediation Statement should detail the agreed gas protection system, the proposed method of construction, the validation measures required and the experience of the operatives and independent validators. In that regard, the design, installation and validation of the gas protection measures should be carried out by independent, experienced, and qualified professionals. Access will be required at all stages of the implementation to ensure the correct ventilation measures are incorporated and the appropriate gas membrane has been installed to the manufacturer's guidelines.

Upon completion of the works, a final Validation Statement will be required for the approval of the Council, thoroughly detailing and recording the gas mitigation works carried out.

T.J. M^{c}Laren, BSc., FGS.
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Director

Ground Investigation Specialists Limited

10.0 BOREHOLE LOGS

GROUND INVESTIGATION SPECIALISTS LIMITED

BOREHOLE RECORD						BOREHOLE: BH01
	BORING COMMENCED: 04.11.25	TYPE OF BORING:	Cable Percussive	CLIENT:	Thames Water	SHEET: 1 OF 3
	BORING COMPLETED: 07.11.25	DIAMETER OF HOLE:	250 – 200 mm	ENGINEER:	CS2 Limited	JOB NO: 2727
	GROUND LEVEL: Approx 41.1 m AOD	BOREHOLE CASING:	250 mm diameter casing to 5.0 m and 200 mm diameter casing to 15.0 m	CONTRACT:	Reading Sewage Treatment Works	

DRILLING | SAMPLES | RESULTS OF TESTS

DESCRIPTION OF STRATA	LEGEND	WATER LEVEL	THICKNESS	DEPTH	Approx REDUCED LEVEL	DEPTH (m)	TYPE	INDEX PROPERTIES 'N' VALUE	'CN' VALUE	M/C %	LL %	PL %	PI	DENSITIES WET (kg/m³)	DENSITIES DRY (kg/m³)	STRENGTH TESTS TYPE	STRENGTH TESTS COHESION (kN/m²)	PID (ppm)	IN-SITU CHEMICAL AND OTHER TESTS AND REMARKS (SPT Blows)
				GL	41.10														Service inspection pit dug to 1.10 m in 3.25 hours
BLACKTOP.			0.09	0.09	41.01														
Fill (brown and grey sandy limestone hardcore GRAVEL).			0.16	0.25	40.85														
Fill (brown SAND and fine to coarse angular GRAVEL and small BOULDER sized fragments of brick, occasional ash and metal).			0.30	0.55	40.55	0.60	E1												4.11.25
						1.10	S2	23											5.11.25 (4.4.8.7.4.4.)
Terram onto made ground/refuse (medium dense dark grey slightly odourous clayey SAND with some ash, fabric, cardcoard, plastic, metal bar, flint and chert). Includes much semi-decomposed grass and occasional glass from 1.10 – 1.55 m. Includes much fabric, occasional rope and plastic below 1.50 m. Becomes loose and includes many floor tile fragments and occasional roots below 2.00 m. Includes some 0.5 cm thick fragments of rubber printing press blanks at 2.80 m, plus occasional corrugated suspected asbestos cement sheet fragments. Includes pockets of soft grey clayey silt towards the base.			3.45			1.80	D3												
						2.00	S4	9											(9.6.2.1.3.3.)
						2.80	D5												
						3.00	S6	5											(1.1.1.1.1.2.)
						3.80	D7												
		▲		4.00	37.10	4.00	S8	6											(1.-.1.1.1.3.)
Soft grey clayey sandy slightly organic SILT. (ALLUVIUM)		▽	0.60	4.50	36.60														1.7 hr dayworks installing 250 mm casing; bentonite seal from 5.0 – 4.0 m; reducing casing to 200 mm diameter.
				4.60	36.50	4.60	D9												
Loose grey sandy fine to coarse angular to rounded chert and flint GRAVEL. (BEENHAM GRANGE GRAVEL MEMBER)			1.10			5.00	S(C)10	9											(4.3.2.2.2.3.)
Pale brown and grey very silty slightly sandy slightly gravelly CLAY. (BEENHAM GRANGE GRAVEL MEMBER)			0.30	5.70	35.40	5.70	D11												
				6.00	35.10	6.00	S12	17											(1.2.4.4.4.5.)
Stiff grey very sandy (fine) CLAY. (LAMBETH GROUP)			0.70																5.11.25 6.11.25
Very dense light grey slightly clayey silty fine SAND. (LAMBETH GROUP)		▽	0.30	6.70	34.40														
				7.00	34.10														
Borehole continued …./																			

GROUNDWATER OBSERVATIONS:

Water struck at 7.0 m with casing at 6.2 m. Rose to 4.5 m after 20 minutes.

▼ - Final groundwater level
▽ - Groundwater first struck
▲ - Standpipe
● - Piezometer

W - Water Sample
P - Plastic Tub Sample
J - Amber Jar Sample
U - Undisturbed Sample

M/C - Natural Moisture Content
LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

'N' - Standard or Cone Penetration Test Result
T - Undrained Triaxial
M - Multi-stage Undrained Triaxial

S - Standard Penetration Test
C - Cone Penetration Test
V - Vane Test
SO_3 - Soluble Sulphate Analysis

GROUND INVESTIGATION SPECIALISTS LIMITED

BOREHOLE RECORD					BOREHOLE: BH01
BORING COMMENCED: 04.11.25 BORING COMPLETED: 07.11.25 GROUND LEVEL: Approx 41.1 m AOD	TYPE OF BORING: Cable Percussive DIAMETER OF HOLE: 250 – 200 mm BOREHOLE CASING: 250 mm diameter casing to 5.0 m and 200 mm diameter casing to 15.0 m	CLIENT: Thames Water ENGINEER: CS2 Limited CONTRACT: Reading Sewage Treatment Works	SHEET: 2 OF 3 JOB NO: 2727

DRILLING | SAMPLES | RESULTS OF TESTS

DESCRIPTION OF STRATA	LEGEND	WATER LEVEL	THICK-NESS	DEPTH	Approx REDUCED LEVEL	DEPTH (m)	TYPE	INDEX PROPERTIES 'N' VALUE	$'C_N'$ VALUE	M/C %	LL %	PL %	PI	DENSITIES WET (kg/m³)	DENSITIES DRY (kg/m³)	STRENGTH TESTS TYPE	STRENGTH TESTS COHESION (kN/m²)	PID (ppm)	IN-SITU CHEMICAL AND OTHER TESTS AND REMARKS (SPT Blows)
Borehole continued ..../				7.00	34.10	7.00	D13												
Very dense light grey slightly clayey silty fine SAND. (LAMBETH GROUP) Becomes light grey and pale brown fine to medium SAND below 7.50 m – very little fines.						7.50 7.80	S14 D15	50 blows for 280 mm penetration											(2.2.7.10.18.15 for 55 mm)
						8.80 9.00	D16 S17	50 blows for 180 mm penetration											(4.9.16.21.13 for 30 mm) Hard boring 9.00 – 10.50 m for 1.5 hours
Includes some disseminated fine angular lignite fragments below 10.30 m.			7.40			9.80 10.30 10.50 10.80	D18 D19 S20 D21	50 blows for 160 mm penetration											(3.8.12.29.9 for 10 mm)
Includes larger lignite fragments below 12.00 m.						11.80 12.00 12.80	D22 S23 D24	50 blows for 175 mm penetration											(7.10.12.27.11 for 25 mm)
Includes many cobbles of weak very well cemented fine to coarse grey sandstone, large lignite fragments, glauconitic flint and conglomerate from 13.90 m.						13.50	S25	50 blows for 135 mm penetration											(4.8.14.36 for 60 mm)
Stiff grey very silty very sandy CLAY. (LAMBETH GROUP)			0.60	14.40	26.70														6.11.25 7.11.25
Borehole Continued.../				15.00	26.10														

GROUNDWATER OBSERVATIONS:

Water struck at 7.00 m with casing at 6.2 m. Rose to 4.5 m after 20 minutes.

▼ - Final groundwater level
▽ - Groundwater first struck
▲ - Standpipe
● - Piezometer

W - Water Sample
P - Plastic Tub Sample
J - Amber Jar Sample
U - Undisturbed Sample

M/C - Natural Moisture Content
LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

'N' - Standard or Cone Penetration Test Result
T - Undrained Triaxial
M - Multi-stage Undrained Triaxial

S - Standard Penetration Test
C - Cone Penetration Test
V - Vane Test
SO_3 - Soluble Sulphate Analysis

GROUND INVESTIGATION SPECIALISTS LIMITED

BOREHOLE RECORD						BOREHOLE: BH01
	BORING COMMENCED: 04.11.25	TYPE OF BORING:	Cable Percussive	CLIENT:	Thames Water	SHEET: 3 OF 3
	BORING COMPLETED: 07.11.25	DIAMETER OF HOLE:	250 – 200 mm	ENGINEER:	CS2 Limited	JOB NO: 2727
	GROUND LEVEL: Approx 41.1 m AOD	BOREHOLE CASING:	250 mm diameter casing to 5.0 m and 200 mm diameter casing to 15.0 m	CONTRACT:	Reading Sewage Treatment Works	

DRILLING | SAMPLES | RESULTS OF TESTS

DESCRIPTION OF STRATA	LEGEND	WATER LEVEL	THICK-NESS	DEPTH	Approx REDUCED LEVEL	DEPTH (m)	TYPE	INDEX PROPERTIES 'N' VALUE	INDEX PROPERTIES $'C_N'$ VALUE	INDEX PROPERTIES M/C %	INDEX PROPERTIES LL %	INDEX PROPERTIES PL %	INDEX PROPERTIES PI	DENSITIES WET (kg/m³)	DENSITIES DRY (kg/m³)	STRENGTH TESTS TYPE	STRENGTH TESTS COHESION (kN/m²)	PID (ppm)	IN-SITU CHEMICAL AND OTHER TESTS AND REMARKS (SPT Blows)
Borehole continued ..../				15.00	26.10	15.00	S26	50 blows for 230 mm penetration											(6.8.9.11.26.4 for 5 mm)
						15.00	D27												0.75 hr dayworks reducing casing to 150 mm diameter
Extremely weak friable white and cream CHALK – weathered to stiff to very stiff clay/putty in many places – also with some secondary green glauconite mineralisation above 15.80 m. (SEAFORD CHALK FORMATION)						15.80	D28												
Includes occasional orange-brown iron staining below 16.80 m.						16.50	S29	19											(2.2.2.3.5.9.)
						16.80	D30												
						17.80	D31												
			6.95			18.00	S32	30											(3.4.6.6.7.11.)
Includes occasional fine to medium irregular gravel sized flint nodules below 18.80 m.						18.80	D33												
						19.50	S34	28											(2.3.5.7.7.9.)
						19.80	D35												
						20.80	D36												
						21.50	S37	46											(3.5.8.10.14.14.)
Borehole Complete – backfilled with bentonite/cement grout pumped/tremied in from base to 4.0 m bgl.				21.95	19.15														8.2 hr dayworks grouting borehole and removing three strings of casing; cleaning up position
50 mm diameter ground gas monitoring standpipe installed to 4.0 m.																			

GROUNDWATER OBSERVATIONS:

Water struck at 7.0 m with casing at 6.2 m. Rose to 4.5 m after 20 minutes.

▼ - Final groundwater level
▽ - Groundwater first struck
▲ - Standpipe
• - Piezometer

W - Water Sample
P - Plastic Tub Sample
J - Amber Jar Sample
U - Undisturbed Sample

M/C - Natural Moisture Content
LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

'N' - Standard or Cone Penetration Test Result
T - Undrained Triaxial
M - Multi-stage Undrained Triaxial

S - Standard Penetration Test
C - Cone Penetration Test
V - Vane Test
SO_3 - Soluble Sulphate Analysis

GROUND INVESTIGATION SPECIALISTS LIMITED

BOREHOLE RECORD						BOREHOLE: BH02
	BORING COMMENCED: 11.11.25	TYPE OF BORING: Cable Percussive	CLIENT: Thames Water			SHEET: 1 OF 2
	BORING COMPLETED: 13.11.25	DIAMETER OF HOLE: 250 – 200 mm	ENGINEER: CS2 Limited			JOB NO: 2727
	GROUND LEVEL: Approx 40.6 m AOD	BOREHOLE CASING: 250 mm diameter casing to 4.70 m and 200 mm diameter casing to 16.00 m	CONTRACT: Reading Sewage Treatment Works			

DRILLING | SAMPLES | RESULTS OF TESTS

DESCRIPTION OF STRATA	LEGEND	WATER LEVEL	THICKNESS	DEPTH	Approx REDUCED LEVEL	DEPTH (m)	TYPE	INDEX PROPERTIES 'N' VALUE	INDEX PROPERTIES $'C_N'$ VALUE	M/C %	LL %	PL %	PI	DENSITIES WET (kg/m³)	DENSITIES DRY (kg/m³)	STRENGTH TESTS TYPE	STRENGTH TESTS COHESION (kN/m²)	PID (ppm)	IN-SITU CHEMICAL AND OTHER TESTS AND REMARKS (SPT Blows)
				GL	40.60														
Fill (dark grey and brown SAND/ CLAY with some angular flint, chert, brick and tile fragments).			0.50			0.40	D1												Service inspection pit dug to 1.20 m in 1 hour. 0.5 hr dayworks setting up bunded area for drilling.
Made ground/ refuse (very soft thinly laminated grey-brown and dark grey sandy SILT and CLAY with much semi-decomposed newspaper). Includes brick and plastic fragments below 1.10 m. Includes fragments of metal, glass, wood, a bleach bottle, cardboard and paper below 1.80 m.			2.50	0.50	40.10	0.60	E2												
						1.00	D3												
						1.10	E4												
						1.20	S5	2 blows for 450 mm penetration											(1.-.-.1.-.-.)
						1.80	D6												
						2.00	S7	4 blows for 450 mm penetration											(1.1.-.1.-.1.)
		▽		2.60	38.00	2.80	D8												
				3.00	37.60	3.00	S9	50 blows for 227 mm penetration											(1.2.5.18.24.3 for 2 mm) No recovery 3.0 – 4.0 m
Made ground (very dense dark grey silty sandy fine to coarse angular GRAVEL of chert and flint with many angular metal, brick, wood, plastic and glass fragments).		▲	1.70	4.00	36.60	4.00	S10	50 blows for 95 mm penetration											(6.18.38.12 for 20 mm)
						4.00	B11												0.75 hr dayworks installing bentonite seal from 4.7 – 3.7 m and reducing casing to 200 m diameter
		▽		4.70	35.90	4.70	D12												
Medium dense grey and cream sandy fine to coarse angular to rounded GRAVEL of chert and flint. (BEENHAM GRANGE GRAVEL MEMBER)			0.90			5.00	S(C)13	16											(4.6.7.3.3.3.)
				5.60	35.00	5.60	D14												
Stiff mottled pale brown and light grey very clayey very sandy slightly gravelly SILT. (BEENHAM GRANGE GRAVEL MEMBER)			0.80			6.00	S15	27											(3.3.5.7.7.8.)
				6.40	34.20	6.40	D16												
Dense grey very silty fine to medium SAND – becoming less silty with depth. (LAMBETH GROUP)			8.00			7.00	D17												
						7.50	S18	49											(3.5.8.10.14.17.)
				8.00	32.60														
Borehole continued …./																			

GROUNDWATER OBSERVATIONS:

Water struck at 4.7 m; rose to 2.6 m after 20 minutes.

▼ - Final groundwater level
▽ - Groundwater first struck
▲ - Standpipe
● - Piezometer

W - Water Sample
P - Plastic Tub Sample
J - Amber Jar Sample
U - Undisturbed Sample

M/C - Natural Moisture Content
LL - Liquid Limit
PL - Plastic Limit
PI - Plasticity Index

'N' - Standard or Cone Penetration Test Result
T - Undrained Triaxial
M - Multi-stage Undrained Triaxial

S - Standard Penetration Test
C - Cone Penetration Test
V - Vane Test
SO_3 - Soluble Sulphate Analysis

GROUND INVESTIGATION SPECIALISTS LIMITED

BOREHOLE RECORD						BOREHOLE: BH02
	BORING COMMENCED: 11.11.25	TYPE OF BORING: Cable Percussive	CLIENT: Thames Water			SHEET: 2 OF 2
	BORING COMPLETED: 13.11.25	DIAMETER OF HOLE: 200 mm	ENGINEER: CS2 Limited			JOB NO: 2727
	GROUND LEVEL: Approx 40.6 m AOD	BOREHOLE CASING: 200 mm diameter used to 16.00 m	CONTRACT: Reading Sewage Treatment Works			

DRILLING | SAMPLES | RESULTS OF TESTS

DESCRIPTION OF STRATA	LEGEND	WATER LEVEL	THICK-NESS	DEPTH	Approx REDUCED LEVEL	DEPTH (m)	TYPE	INDEX PROPERTIES 'N' VALUE	'CN' VALUE	M/C %	LL %	PL %	PI	DENSITIES WET (kg/m³)	DRY (kg/m³)	STRENGTH TESTS TYPE	COHESION (kN/m²)	PID (ppm)	IN-SITU CHEMICAL AND OTHER TESTS AND REMARKS (SPT Blows)
Borehole continued …./				8.00	32.60	8.00	D19												
Very dense grey slightly silty fine to medium SAND. (LAMBETH GROUP)						9.00	S20	50 blows or 180 mm penetration											(3.7.14.20.16 for 30 mm) 11.11.25
						9.00	D21												12.11.25
						10.00	D22												
Includes increasing amounts of disseminated fine black lignite fragments below 10.50 m.			8.00			10.50	S23	47											(2.3.4.8.13.22.)
						10.90	D24												
						12.00	D25												
						12.00	S26	50 blows for 235 mm penetration											(3.5.7.12.24.7 for 10 mm)
						13.00	D27												
Includes occasional clayey pockets below 13.50 m.						13.50	S28	50 blows for 175 mm penetration											(4.8.14.23.13 for 25 mm)
Very stiff ? grey and dark grey silty sandy slightly gravelly CLAY. (LAMBETH GROUP)			0.40	14.40	26.20	14.40	D29												
						14.60	D30												
Stiff to very stiff cream and occasional green (glauconitic) putty CHALK. (SEAFORD CHALK FORMATION) Becomes friable below 15.00 m. Includes many irregular flint nodules at 16.00 m.			1.65	14.80	25.80	15.00	D31												
						15.00	S32	25											(3.4.6.6.6.7.)
						16.00	D33												
						16.00	S34	34											(3.5.8.8.8.10.)
Borehole Complete – backfilled with bentonite/cement grout pumped/tremied in from base to 5.00 m. 50 mm diameter ground gas monitoring standpipe installed to 4.00 m.				16.45	24.15														12.11.25 13.11.25 6 hrs dayworks grouting borehole to 5.0 m; removing 2 strings of casing; cleaning borehole position

GROUNDWATER OBSERVATIONS:

Water struck at 4.7 m, rose to 2.6 m after 20 minutes.

▼ - Final groundwater level

▽ - Groundwater first struck

▲ - Standpipe

● - Piezometer

W - Water Sample

P - Plastic Tub Sample

J - Amber Jar Sample

U - Undisturbed Sample

M/C - Natural Moisture Content

LL - Liquid Limit

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'N' - Standard or Cone Penetration Test Result

T - Undrained Triaxial

M - Multi-stage Undrained Triaxial

S - Standard Penetration Test

C - Cone Penetration Test

V - Vane Test

SO_3 - Soluble Sulphate Analysis

11.0 SOIL CONTAMINATION TEST RESULTS

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: cs@etuki.eurofins.com

Final Report

Report No.:	25-37176-1
Initial Date of Issue:	05-Dec-2025
Re-Issue Details:	
Client	*Ground Investigation Specialists Ltd*
Client Address:	*Suite D Astor House* *282 Lichfield Road* *Sutton Coldfield* *WV2 4LY*
Contact(s):	*Charlie Noakes*
Project	*J 2727 (Reading)*
Quotation No.:	*Q25-37036*
Order No.:	
No. of Samples:	*12*
Turnaround (Wkdays):	10
Date Approved:	05-Dec-2025
Approved By:	



Details:	David Smith, Technical Director

Date Received:	19-Nov-2025		
Date Instructed:	19-Nov-2025		
Results Due:	02-Dec-2025		

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: J 2727 (Reading)

Client: Ground Investigation Specialists Ltd			**Chemtest Job No.:**			25-37176	25-37176	25-37176	25-37176	25-37176	25-37176
Quotation No.: Q25-37036			**Chemtest Sample ID.:**			2055128	2055129	2055130	2055131	2055132	2055133
			Client Reference:			*BH01*	*BH01*	*BH01*	*BH01*	*BH01*	*BH02*
			Sample Type:			*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
			Top Depth (m):			*0.60*	*1.80*	*4.00*	*7.80*	*20.80*	*0.60*
			Bottom Depth (m):					*4.45*			
			Date Sampled:			*04-Nov-2025*	*05-Nov-2025*	*05-Nov-2025*	*06-Nov-2025*	*07-Nov-2025*	*11-Nov-2025*
			Asbestos Lab:			DURHAM	DURHAM				DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
ACM Type		N	2192		N/A	-	-				-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected				No Asbestos Detected
Moisture		N	2030	%	0.020	13	16	41	16	26	29
Soil Colour		N	2030		N/A	Brown	Brown	Brown	Grey	White	Brown
Other Material		N	2030		N/A	Stones and Roots	Stones, Roots, Glass and plastic	Stones	None	None	Stones
Soil Texture		N	2030		N/A	Sand	Sand	Clay	Sand	Chalk	Clay
pH at 20C		M	2010		4.0		8.1	7.9	9.0	8.5	8.2
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		2.0				1.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	1.0	1.5	0.94	0.012	0.032	0.065
Arsenic		M	2455	mg/kg	0.5	9.0	9.8				5.9
Barium		M	2455	mg/kg	0.5	160					
Cadmium		M	2455	mg/kg	0.10	0.96	2.4				0.33
Chromium		M	2455	mg/kg	0.5	41	47				19
Molybdenum		M	2455	mg/kg	0.5	1.8					
Antimony		N	2455	mg/kg	2.0	2.5					
Copper		M	2455	mg/kg	0.50	97	46				19
Mercury		M	2455	mg/kg	0.05	0.20	0.10				0.12
Nickel		M	2455	mg/kg	0.50	49	44				12
Lead		M	2455	mg/kg	0.50	430	120				30
Selenium		M	2455	mg/kg	0.25	0.39	1.3				0.66
Zinc		M	2455	mg/kg	0.50	380	260				50
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10		< 0.10				< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25				< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		11				2.2
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		17				2.0
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		58				30
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		210				65
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		33				14
Aliphatic EPH >C40-C44 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		< 10				< 10
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		300				98

Results - Soil

Project: J 2727 (Reading)

Client: Ground Investigation Specialists Ltd			**Chemtest Job No.:**			25-37176	25-37176	25-37176	25-37176	25-37176	25-37176
Quotation No.: Q25-37036			**Chemtest Sample ID.:**			2055128	2055129	2055130	2055131	2055132	2055133
			Client Reference:			*BH01*	*BH01*	*BH01*	*BH01*	*BH01*	*BH02*
			Sample Type:			*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
			Top Depth (m):			*0.60*	*1.80*	*4.00*	*7.80*	*20.80*	*0.60*
			Bottom Depth (m):					*4.45*			
			Date Sampled:			*04-Nov-2025*	*05-Nov-2025*	*05-Nov-2025*	*06-Nov-2025*	*07-Nov-2025*	*11-Nov-2025*
			Asbestos Lab:			DURHAM	DURHAM				DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		330				110
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05				< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05				< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05				< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25				< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		24				< 1.0
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		19				4.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		260				22
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		54				14
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		5.9				3.5
Aromatic EPH >C40-C44 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		< 10				< 10
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		360				40
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		360				44
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50				< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		660				140
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00		700				160
Organic Matter		M	2625	%	0.40		4.2				1.6
Naphthalene		M	2800	mg/kg	0.10	0.74	0.21				< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	0.51	0.11				< 0.10
Acenaphthene		M	2800	mg/kg	0.10	2.3	0.28				< 0.10
Fluorene		M	2800	mg/kg	0.10	2.3	0.31				< 0.10
Phenanthrene		M	2800	mg/kg	0.10	15	2.3				0.18
Anthracene		M	2800	mg/kg	0.10	5.1	0.91				< 0.10
Fluoranthene		M	2800	mg/kg	0.10	29	4.7				0.45
Pyrene		M	2800	mg/kg	0.10	25	3.8				0.39
Benzo[a]anthracene		M	2800	mg/kg	0.10	12	2.1				0.24
Chrysene		M	2800	mg/kg	0.10	14	2.0				0.25
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	31	3.3				0.36
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	8.4	1.1				0.15
Benzo[a]pyrene		M	2800	mg/kg	0.10	25	2.7				0.29
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	21	1.9				0.20
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	3.4	0.37				< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	20	1.7				0.20
Coronene		N	2800	mg/kg	0.10	< 0.10					
Total Of 16 PAH's		N	2800	mg/kg	2.0		28				2.7
Total Of 17 PAH's		N	2800	mg/kg	2.0	210					

Results - Soil

Project: J 2727 (Reading)

Client: Ground Investigation Specialists Ltd			**Chemtest Job No.:**			25-37176	25-37176	25-37176	25-37176	25-37176	25-37176
Quotation No.: Q25-37036			**Chemtest Sample ID.:**			2055134	2055135	2055136	2055137	2055138	2055139
			Client Reference:			*BH02*	*BH02*	*BH02*	*BH02*	*BH02*	*BH02*
			Sample Type:			*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
			Top Depth (m):			*1.10*	*1.80*	*2.80*	*5.60*	*10.90*	*16.00*
			Bottom Depth (m):								*16.45*
			Date Sampled:			*11-Nov-2025*	*11-Nov-2025*	*11-Dec-2005*	*11-Nov-2025*	*12-Nov-2025*	*12-Nov-2025*
			Asbestos Lab:			DURHAM	DURHAM				
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
ACM Type		N	2192		N/A	-	-				
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected				
Moisture		N	2030	%	0.020	23	43	32	17	17	20
Soil Colour		N	2030		N/A	Brown	Brown	Brown	Brown	Grey	White
Other Material		N	2030		N/A	None	Stones, paper and Glass	Stones, Roots, Glass and plastic	Stones	None	None
Soil Texture		N	2030		N/A	Clay	Clay	Clay	Clay	Sand	Chalk
pH at 20C		M	2010		4.0		8.2	7.8	8.8	8.9	8.6
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		2.3				
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010			0.59	0.033	0.036	0.026
Arsenic		M	2455	mg/kg	0.5	6.6	35				
Barium		M	2455	mg/kg	0.5	83					
Cadmium		M	2455	mg/kg	0.10	0.38	0.55				
Chromium		M	2455	mg/kg	0.5	24	17				
Molybdenum		M	2455	mg/kg	0.5	1.7					
Antimony		N	2455	mg/kg	2.0	2.0					
Copper		M	2455	mg/kg	0.50	100	49				
Mercury		M	2455	mg/kg	0.05	0.50	0.10				
Nickel		M	2455	mg/kg	0.50	24	14				
Lead		M	2455	mg/kg	0.50	81	120				
Selenium		M	2455	mg/kg	0.25	< 0.25	< 0.25				
Zinc		M	2455	mg/kg	0.50	150	360				
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10		< 0.10				
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05		< 0.05				
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25		< 0.25				
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		33				
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00		70				
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00		290				
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00		1700				
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		400				
Aliphatic EPH >C40-C44 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		53				
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00		2100				

Results - Soil

Project: J 2727 (Reading)

Client: Ground Investigation Specialists Ltd				**Chemtest Job No.:**		25-37176	25-37176	25-37176	25-37176	25-37176	25-37176
Quotation No.: Q25-37036				**Chemtest Sample ID.:**		2055134	2055135	2055136	2055137	2055138	2055139
				Client Reference:		*BH02*	*BH02*	*BH02*	*BH02*	*BH02*	*BH02*
				Sample Type:		*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
				Top Depth (m):		*1.10*	*1.80*	*2.80*	*5.60*	*10.90*	*16.00*
				Bottom Depth (m):							*16.45*
				Date Sampled:		*11-Nov-2025*	*11-Nov-2025*	*11-Dec-2005*	*11-Nov-2025*	*12-Nov-2025*	*12-Nov-2025*
				Asbestos Lab:		DURHAM	DURHAM				
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00		2400				
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05				
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05				
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05		< 0.05				
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25		< 0.25				
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		6.9				
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00		45				
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		280				
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00		89				
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00		33				
Aromatic EPH >C40-C44 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		< 10				
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00		430				
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00		460				
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50		< 0.50				
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00		2500				
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00		2900				
Organic Matter		M	2625	%	0.40		5.1				
Naphthalene		M	2800	mg/kg	0.10	< 0.10	0.14				
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10				
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10				
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10				
Phenanthrene		M	2800	mg/kg	0.10	< 0.10	0.66				
Anthracene		M	2800	mg/kg	0.10	< 0.10	0.16				
Fluoranthene		M	2800	mg/kg	0.10	< 0.10	0.94				
Pyrene		M	2800	mg/kg	0.10	< 0.10	0.85				
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	0.46				
Chrysene		M	2800	mg/kg	0.10	< 0.10	0.57				
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	0.73				
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	0.28				
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	0.53				
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	0.39				
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10				
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	0.39				
Coronene		N	2800	mg/kg	0.10	< 0.10					
Total Of 16 PAH's		N	2800	mg/kg	2.0		6.1				
Total Of 17 PAH's		N	2800	mg/kg	2.0	< 2.0					

Results - Single Stage WAC

Project: J 2727 (Reading)

Chemtest Job No:	25-37176					**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	2055128							
Sample Ref:								
Sample ID:								
Client Reference:	*BH01*					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Top Depth(m):	*0.60*							
Bottom Depth(m):								
Sampling Date:	*04-Nov-2025*							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	3.2	3	5	6
Loss On Ignition	2610		M	%	5.3	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	0.12	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	4500	500	--	--
Total (Of 17) PAH's	2800		N	mg/kg	210	100	--	--
pH at 20C	2010		M		8.5	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.019	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0010	0.0095	0.5	2	25
Barium	1455		U	0.064	0.64	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0039	0.039	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0024	0.024	0.5	10	30
Nickel	1455		U	0.0027	0.027	0.4	10	40
Lead	1455		U	0.0009	0.0092	0.5	10	50
Antimony	1455		U	0.0013	0.013	0.06	0.7	5
Selenium	1455		U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455		U	0.006	0.062	4	50	200
Chloride	1220		U	2.1	21	800	15000	25000
Fluoride	1220		U	0.31	3.1	10	150	500
Sulphate	1220		U	660	6600	1000	20000	50000
Total Dissolved Solids	1020		N	1300	13000	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	5.3	53	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	11
WAC Sample Weight	3144

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - Single Stage WAC

Project: J 2727 (Reading)

Chemtest Job No:	25-37176					**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	2055134							
Sample Ref:								
Sample ID:								
Client Reference:	*BH02*					**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Top Depth(m):	*1.10*							
Bottom Depth(m):								
Sampling Date:	*11-Nov-2025*							
Determinand	**SOP**	**HWOL Code**	**Accred.**	**Units**				
Total Organic Carbon	2625		M	%	0.81	3	5	6
Loss On Ignition	2610		M	%	2.9	--	--	10
Total BTEX	2760		M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815		M	mg/kg	< 0.05	1	--	--
TPH Total WAC	2670	EH_CU_1D_Total	M	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2800		N	mg/kg	< 2.0	100	--	--
pH at 20C	2010		M		8.3	--	>6	--
Acid Neutralisation Capacity	2015		N	mol/kg	0.016	--	To evaluate	To evaluate
Eluate Analysis				**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455		U	0.0005	0.0048	0.5	2	25
Barium	1455		U	0.019	0.19	20	100	300
Cadmium	1455		U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455		U	< 0.0005	< 0.0050	0.5	10	70
Copper	1455		U	0.0037	0.037	2	50	100
Mercury	1455		U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455		U	0.0026	0.026	0.5	10	30
Nickel	1455		U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455		U	0.0008	0.0078	0.5	10	50
Antimony	1455		U	< 0.0005	< 0.0050	0.06	0.7	5
Selenium	1455		U	0.0005	0.0051	0.1	0.5	7
Zinc	1455		U	0.003	0.033	4	50	200
Chloride	1220		U	6.0	60	800	15000	25000
Fluoride	1220		U	0.63	6.3	10	150	500
Sulphate	1220		U	42	420	1000	20000	50000
Total Dissolved Solids	1020		N	150	1500	4000	60000	100000
Phenol Index	1920		U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610		U	3.1	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	4.8
WAC Sample Weight	1052

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Chemtest Sample ID	*Clients Sample Ref:*	*Clients Sample ID:*	*Clients Reference:*	*Sampled Date:*	Deviation Code(s):	Containers Received:
2055128			*BH01*	*04-Nov-2025*	B	Amber Glass 250ml
2055128			*BH01*	*04-Nov-2025*	B	Amber Glass 60ml
2055128			*BH01*	*04-Nov-2025*	B	Plastic Tub 1000g
2055134			*BH02*	*11-Nov-2025*	E	Amber Glass 250ml
2055134			*BH02*	*11-Nov-2025*	E	Amber Glass 60ml
2055134			*BH02*	*11-Nov-2025*	E	Plastic Tub 1000g
2055136			*BH02*	*11-Dec-2005*	B	Plastic Tub 1000g

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity at 25°C and Total Dissolved Solids (TDS) in Waters	Conductivity Meter	
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.	RE PW PL LE DW GW
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW
2010	pH Value of Soils	pH at 20°C	pH Meter	
2015	Acid Neutralisation Capacity	Acid Reserve	Titration	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2192	Asbestos Quantification in Soils Sediments Ballast & Aggregate Crushed Concrete & Demolition Rubble	Asbestos	Polarised light microscopy / Gravimetry	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8-C10 Aromatics: >C5–C7,>C7-C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS. Reported PCB 101 results may contain contributions from PCB 90 due to inseparable chromatography.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
650	Characterisation of Waste (Leaching C2,C8,C10,WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection
Text example	All items indicated in italic font represent customer-supplied information that may not be independently verified by the laboratory

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Where analysis is performed on a dried and crushed sample, it has been prepared by crushing all of the sample. If material has been removed prior to crushing, or by request of the client, this will be stated on the report.

NEW_ASB	Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL
DURHAM	Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW

Sample Deviation Codes

As a result of any of the below deviations applying, the test results may be unreliable

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - The required amount of sample for analysis was not received

H - Appropriate cooling measures were not taken for sample transportation

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Report Information

Water Sample Category Key for Accreditation

DW - Drinking Water (Non-Regulatory)
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

Asbestos Tests LOD = LOQ

Limit of Detection = Limit of Quantification for asbestos results only

If you require extended retention of samples, please email your requirements to:
cs@etuki.eurofins.com

12.0 GROUNDWATER CONTAMINATION TEST RESULTS

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: cs@etuki.eurofins.com

Final Report

Report No.:	25-39835-1
Initial Date of Issue:	29-Dec-2025
Re-Issue Details:	
Client	*Ground Investigation Specialists Ltd*
Client Address:	*Suite D Astor House* *282 Lichfield Road* *Sutton Coldfield* *WV2 4LY*
Contact(s):	*Mail*
Project	*J2727 Reading*
Quotation No.:	*Q25-40126*
Order No.:	
No. of Samples:	*1*
Turnaround (Wkdays):	10
Date Approved:	29-Dec-2025
Approved By:	
Details:	David Smith, Technical Director

Date Received:	09-Dec-2025
Date Instructed:	11-Dec-2025
Results Due:	24-Dec-2025

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Water

Project: J2727 Reading

Client: Ground Investigation Specialists Ltd				**Chemtest Job No.:**		25-39835
Quotation No.: Q25-40126				**Chemtest Sample ID.:**		2064262
Order No.:				*Client Sample Ref.:*		*BH2*
				Sample Type:		*WATER*
				Sample Sub Type:		*Ground Water*
				Top Depth (m):		*2.78*
				Date Sampled:		*05-Dec-2025*
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**	
pH at 20C		U	1010		4.0	7.5
Ammonia (Free)		N	1220	mg/l	0.050	0.96
Sulphate		U	1220	mg/l	1.0	100
Cyanide (Total)		U	1300	mg/l	0.050	< 0.050
Total Hardness as CaCO3		U	1270	mg/l	15	410
Arsenic (Dissolved)		U	1455	µg/l	0.20	2.9
Boron (Dissolved)		U	1455	µg/l	10.0	720
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	1.8
Copper (Dissolved)		U	1455	µg/l	0.50	3.0
Mercury (Dissolved)		U	1455	µg/l	0.05	< 0.05
Nickel (Dissolved)		U	1455	µg/l	0.50	11
Lead (Dissolved)		U	1455	µg/l	0.50	0.88
Selenium (Dissolved)		U	1455	µg/l	0.50	3.5
Zinc (Dissolved)		U	1455	µg/l	2.5	12
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1780	µg/l	0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1780	µg/l	0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1780	µg/l	0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1680	µg/l	0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1680	µg/l	0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1680	µg/l	0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1680	µg/l	0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1680	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1780	µg/l	0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1780	µg/l	0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1780	µg/l	0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1680	µg/l	0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1680	µg/l	0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1680	µg/l	0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1680	µg/l	0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1680	µg/l	0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10
Dichlorodifluoromethane		N	1760	µg/l	1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0

Results - Water

Project: J2727 Reading

Client: Ground Investigation Specialists Ltd				**Chemtest Job No.:**		25-39835
Quotation No.: Q25-40126				**Chemtest Sample ID.:**		2064262
Order No.:				*Client Sample Ref.:*		*BH2*
				Sample Type:		*WATER*
				Sample Sub Type:		*Ground Water*
				Top Depth (m):		*2.78*
				Date Sampled:		*05-Dec-2025*
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**	
Bromomethane		U	1760	µg/l	5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0
Trichlorofluoromethane		N	1760	µg/l	1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0

Results - Water

Project: J2727 Reading

Client: Ground Investigation Specialists Ltd				**Chemtest Job No.:**		25-39835
Quotation No.: Q25-40126				**Chemtest Sample ID.:**		2064262
Order No.:				*Client Sample Ref.:*		*BH2*
				Sample Type:		*WATER*
				Sample Sub Type:		*Ground Water*
				Top Depth (m):		*2.78*
				Date Sampled:		*05-Dec-2025*
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**	
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	4.8
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0
1,2-Dibromo-3-Chloropropane		N	1760	µg/l	50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50

Results - Water

Project: J2727 Reading

Client: Ground Investigation Specialists Ltd				**Chemtest Job No.:**		25-39835
Quotation No.: Q25-40126				**Chemtest Sample ID.:**		2064262
Order No.:				*Client Sample Ref.:*		*BH2*
				Sample Type:		*WATER*
				Sample Sub Type:		*Ground Water*
				Top Depth (m):		*2.78*
				Date Sampled:		*05-Dec-2025*
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**	
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50

Results - Water

Project: J2727 Reading

Client: Ground Investigation Specialists Ltd				**Chemtest Job No.:**		25-39835
Quotation No.: Q25-40126				**Chemtest Sample ID.:**		2064262
Order No.:				*Client Sample Ref.:*		*BH2*
				Sample Type:		*WATER*
				Sample Sub Type:		*Ground Water*
				Top Depth (m):		*2.78*
				Date Sampled:		*05-Dec-2025*
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**	
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50
Naphthalene		U	1800	µg/l	0.10	< 0.10
Acenaphthylene		U	1800	µg/l	0.10	< 0.10
Acenaphthene		U	1800	µg/l	0.10	< 0.10
Fluorene		U	1800	µg/l	0.10	< 0.10
Phenanthrene		U	1800	µg/l	0.10	< 0.10
Anthracene		U	1800	µg/l	0.10	< 0.10
Fluoranthene		U	1800	µg/l	0.10	< 0.10
Pyrene		U	1800	µg/l	0.10	< 0.10
Benzo[a]anthracene		U	1800	µg/l	0.10	< 0.10
Chrysene		U	1800	µg/l	0.10	< 0.10
Benzo[b]fluoranthene		U	1800	µg/l	0.10	< 0.10
Benzo[k]fluoranthene		U	1800	µg/l	0.10	< 0.10
Benzo[a]pyrene		U	1800	µg/l	0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		U	1800	µg/l	0.10	< 0.10
Dibenz(a,h)Anthracene		U	1800	µg/l	0.10	< 0.10
Benzo[g,h,i]perylene		U	1800	µg/l	0.10	< 0.10
Total Of 16 PAH's		U	1800	µg/l	2.0	< 2.0

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.	RE PW PL LE DW GW
1270	Total Hardness of Waters	Total hardness	Calculation applied to calcium and magnesium results, expressed as mg l-1 CaCO3 equivalent.	GW LE
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	GW
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1680	Extractable Petroleum Hydrocarbons	Aliphatics: >C5–C6, >C6–C8, >C8– C10*, >C10–C12*, >C12–C16*, >C16–C21*, >C21– C35*, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10*, >C10–C12*, >C12–C16*, >C16– C21*, >C21– C35*, >C35– C44	Dichloromethane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10 Aromatics: >C5–C6, >C6–C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	PL GW SW

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection
Text example	All items indicated in italic font represent customer-supplied information that may not be independently verified by the laboratory

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Where analysis is performed on a dried and crushed sample, it has been prepared by crushing all of the sample. If material has been removed prior to crushing, or by request of the client, this will be stated on the report.

NEW_ASB	Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL
DURHAM	Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW

Sample Deviation Codes

As a result of any of the below deviations applying, the test results may be unreliable

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - The required amount of sample for analysis was not received

H - Appropriate cooling measures were not taken for sample transportation

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Report Information

Water Sample Category Key for Accreditation

DW - Drinking Water (Non-Regulatory)
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

Asbestos Tests LOD = LOQ

Limit of Detection = Limit of Quantification for asbestos results only

If you require extended retention of samples, please email your requirements to:
cs@etuki.eurofins.com

13.0 WASTE ACCEPTANCE CRITERIA TEST DATA

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

J1WGE-O42A7-5ENZ4

Report is invalid if pages are removed.

Job name

Reading STW

Description/Comments

Project

J 2727

Site

Classified by

Name:
Tom McLaren
Date:
12 Dec 2025 11:40 GMT
Telephone:
01902 717653

Company:
Ground Investigation Specialists Limited
GIS

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

2 - Material Characterisation

Address of the waste

Reading STW **Post Code** RG2 0RP

SIC for the process giving rise to the waste

41201 Construction of commercial buildings

Description of industry/producer giving rise to the waste

Construction

Description of the specific process, sub-process and/or activity that created the waste

Excavation

Description of the waste

Made Ground/ Refuse

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	Mixed Made Ground		Hazardous	HP 7, HP 11	3

Related documents

#	Name	Description
1	General Soil Default Waste Stream	waste stream template used to create this Job

Report

Created by: Tom McLaren

Created date: 12 Dec 2025 11:40 GMT

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Classification of sample: Mixed Made Ground

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:
Mixed Made Ground

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.165%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.165%)

Determinands

Moisture content: None

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic compounds, with the exception of those specified elsewhere in this Annex }	033-002-00-5			1	13 mg/kg		13 mg/kg	0.0013 %		
2	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	1.157 mg/kg	0.00009 %		
3	chromium(III) oxide (worst case)		215-160-9	1308-38-9		30 mg/kg		30 mg/kg	0.003 %		
4	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		62 mg/kg	1.126	69.805 mg/kg	0.00698 %		
5	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	156 mg/kg		156 mg/kg	0.0156 %		
6	mercury { compounds of mercury (with the exception of mercuric sulfide and those listed separately in this Annex) }	080-002-00-6			1	0.2 mg/kg	1.39	0.278 mg/kg	0.00002 %		
7	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29 mg/kg	1.579	45.805 mg/kg	0.00458 %		

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
8	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				0.57 mg/kg	1.405	0.801 mg/kg	0.0000801 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		240 mg/kg	1.245	298.731 mg/kg	0.0299 %		
10	pH			PH		8.3 pH		8.3 pH	8.3 pH		
11	TPH (C6 to C40) petroleum group			TPH		1654 mg/kg		1654 mg/kg	0.165 %		
12	benzene	601-020-00-8	200-753-7	71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
13	toluene	601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
14	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	naphthalene	601-052-00-2	202-049-5	91-20-3		0.26 mg/kg		0.26 mg/kg	0.000026 %		
17	acenaphthylene		205-917-1	208-96-8		0.18 mg/kg		0.18 mg/kg	0.000018 %		
18	acenaphthene		201-469-6	83-32-9		0.58 mg/kg		0.58 mg/kg	0.000058 %		
19	fluorene		201-695-5	86-73-7		0.58 mg/kg		0.58 mg/kg	0.000058 %		
20	phenanthrene		201-581-5	85-01-8		3.7 mg/kg		3.7 mg/kg	0.00037 %		
21	anthracene		204-371-1	120-12-7		1.3 mg/kg		1.3 mg/kg	0.00013 %		
22	fluoranthene		205-912-4	206-44-0		7 mg/kg		7 mg/kg	0.0007 %		
23	pyrene		204-927-3	129-00-0		6 mg/kg		6 mg/kg	0.0006 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3 mg/kg		3 mg/kg	0.0003 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		3.4 mg/kg		3.4 mg/kg	0.00034 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		7.1 mg/kg		7.1 mg/kg	0.00071 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2 mg/kg		2 mg/kg	0.0002 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		5.7 mg/kg		5.7 mg/kg	0.00057 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		4.7 mg/kg		4.7 mg/kg	0.00047 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.81 mg/kg		0.81 mg/kg	0.000081 %		
31	benzo[ghi]perylene		205-883-8	191-24-2		4.48 mg/kg		4.48 mg/kg	0.000448 %		
32	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2.3 mg/kg		2.3 mg/kg	0.00023 %		
33	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.8 mg/kg	1.5	2.7 mg/kg	0.00027 %		

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
34		barium { barium oxide }				122 mg/kg	1.117	136.214 mg/kg	0.0136 %		
			215-127-9	1304-28-5							
								Total:	0.246 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	This determinand is defined in the EU CLP Table 3
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 2000 mg/kg (0.2%) because: Not Liquid

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.165%)

Appendix A: Classifier defined and non GB MCL determinands

arsenic compounds, with the exception of those specified elsewhere in this Annex

GB MCL index number: 033-002-00-5
Description/Comments: Worst Case: IARC considers arsenic compounds Group 1; Carcinogenic to humans
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from:: IARC Group 1 (23, Sup 7, 100C) 2012

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

lead compounds with the exception of those specified elsewhere in this Annex

GB MCL index number: 082-001-00-6
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from:: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

compounds of mercury (with the exception of mercuric sulfide and those listed separately in this Annex)

EU CLP index number: 080-002-00-6
Description/Comments: Combines the average of the conversion factors for Mercury difulminate and Mercury (II) sulphide.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
)
Hazard Statements: Acute Tox. 2; H330 , Acute Tox. 1; H310 , Acute Tox. 2; H300 , STOT RE 2; H373 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , STOT RE 2; H373 >= 0.1 %

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Unknown Oil

Hazard statements taken from WM3 1st Edition 2015
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from:: IARC Group 2B (77) 2000

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **barium oxide** (EC Number: 215-127-9, CAS Number: 1304-28-5)

Description/Comments: Data from ECHA's C&L Inventory Database, Sigma Aldrich SDS dated 6/2/20
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/88825
Data source date: 02 Apr 2020
Hazard Statements: Acute Tox. 3; H301 , Skin Corr. 1B; H314 , Eye Dam. 1; H318 , Acute Tox. 1; H332

Appendix B: Rationale for selection of metal species

arsenic {arsenic compounds, with the exception of those specified elsewhere in this Annex}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on risk phrases

mercury {compounds of mercury (with the exception of mercuric sulfide and those listed separately in this Annex)}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on risk phrases

zinc {zinc oxide}

Worst case species based on risk phrases

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

molybdenum {molybdenum(VI) oxide}

Worst case species based on risk phrases

barium {barium oxide}

most likely species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.345.6921.12504 (11 Dec 2025)
HazWasteOnline Database: 2025.345.6921.12504 (11 Dec 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024
GB MCL List v6.0 - version 6.0 of 15th February 2025
GB MCL List v7.0 - version 7.0 of 23rd September 2025

14.0 GROUND GAS MONITORING TEST RESULTS

GROUND INVESTIGATION SPECIALISTS LIMITED

CONTRACT: Reading Sewage Treatment Works	**SHEET 1 OF 1**
CLIENT: Thames Water	
ENGINEER: CS2 Limited	**JOB No. 2727**

DATE: 14.11.25	**AIR TEMP:** 11 °C	**ATMOSPHERIC PRESSURE:** 995 mbar	**TECHNICIAN:** TJM

METEOROLOGICAL AND OUTSIDE SITE CONDITIONS

STATE OF GROUND	Dry	Moist	Wet	**Saturated**
WIND	Calm	**Light**	Moderate	Strong
CLOUD COVER	None	Scattered	Broken	**Overcast**
PRECIPITATION	None	Slight	**Moderate** ——►	**Heavy**

BH ID	FLOW (l/hr)	START TIME	TIME ELAPSED (mins)	METHANE (% v/v)	CARBON DIOXIDE (% V/V)	OXYGEN (% v/v)	CARBON MONOXIDE (PPM)	HYDROGEN SULPHIDE (PPM)	WATER LEVEL (mbgl)
BH01	0	13:30	0.5	<0.1	<0.1	15.8	0	0	2.65
			1	<0.1	<0.1	12.8	0	0	
			2	<0.1	<0.1	12.8	0	0	
			3	<0.1	<0.1	12.8	0	0	
			4	<0.1	<0.1	12.8	0	0	
			5	<0.1	<0.1	12.8	0	0	
BH02	0	13:40	0.5	<0.1	1.7	17.3	0	0	2.78
			1	0.9	1.8	17.2	0	0	
			2	0.9	1.9	17.0	0	0	
			3	0.9	1.9	17.0	0	0	
			4	0.9	1.9	17.0	0	0	
			5	0.9	1.9	17.0	0	0	

REMARKS:	**FIG No.**

GROUND INVESTIGATION SPECIALISTS LIMITED

CONTRACT: Reading Sewage Treatment Works	**SHEET 1 OF 1**
CLIENT: Thames Water	
ENGINEER: CS2 Limited	**JOB No. 2727**

DATE: 21.11.25	**AIR TEMP:** 5 °C	**ATMOSPHERIC PRESSURE:** 1026 mbar	**TECHNICIAN: LBS**

METEOROLOGICAL AND OUTSIDE SITE CONDITIONS

STATE OF GROUND	**Dry**	Moist	Wet	Saturated
WIND	**Calm**	Light	Moderate	Strong
CLOUD COVER	**None**	Scattered	Broken	Overcast
PRECIPITATION	**None**	Slight	Moderate	Heavy

BH ID	FLOW (l/hr)	START TIME	TIME ELAPSED (mins)	METHANE (% v/v)	CARBON DIOXIDE (% V/V)	OXYGEN (% v/v)	CARBON MONOXIDE (PPM)	HYDROGEN SULPHIDE (PPM)	WATER LEVEL (mbgl)
BH01	0	12:25	0.5	<0.1	2.2	1.6	0	0	2.77
			1	<0.1	2.2	1.6	0	0	
			2	<0.1	2.2	1.5	0	0	
			3	<0.1	2.2	1.4	0	0	
			4	<0.1	2.3	1.4	0	0	
			5	<0.1	2.3	1.3	0	0	
BH02	-0.2	13:45	0.5	6.5	10.7	0.1	0	0	2.81
			1	6.9	10.9	<0.1	0	0	
			2	6.9	10.9	<0.1	0	0	
			3	6.9	11.0	<0.1	0	0	
			4	6.9	11.3	<0.1	0	0	
			5	6.9	11.6	<0.1	0	0	

REMARKS:	**FIG No.**

GROUND INVESTIGATION SPECIALISTS LIMITED

CONTRACT: Reading Sewage Treatment Works	**SHEET 1 OF 1**
CLIENT: Thames Water	
ENGINEER: C2S Limited	**JOB No. 2727**

DATE: 28.11.2025	**AIR TEMP:** 18 ºC	**ATMOSPHERIC PRESSURE:** 1010 mbar	**TECHNICIAN: LBS**

METEOROLOGICAL AND OUTSIDE SITE CONDITIONS

STATE OF GROUND	Dry	Moist	**Wet**	Saturated
WIND	Calm	**Light**	Moderate	Strong
CLOUD COVER	None	**Scattered**	Broken	Overcast
PRECIPITATION	**None**	Slight	Moderate	Heavy

BH ID	FLOW (l/hr)	START TIME	TIME ELAPSED (mins)	METHANE (% v/v)	CARBON DIOXIDE (% V/V)	OXYGEN (% v/v)	CARBON MONOXIDE (PPM)	HYDROGEN SULPHIDE (PPM)	WATER LEVEL (mbgl)
BH1	0	11:36	0.5	1.0	5.4	0.2	0	0	2.81
			1	1.0	5.5	<0.1	0	0	
			2	1.1	5.5	<0.1	0	0	
			3	1.0	5.5	<0.1	0	0	
			4	1.1	5.5	<0.1	0	0	
			5	1.1	5.5	<0.1	0	0	
BH2	0	11:49	0.5	7.8	8.8	1.3	0	0	2.77
			1	8.1	8.9	1.0	0	0	
			2	8.3	9.0	0.8	0	0	
			3	8.4	9.1	0.6	0	0	
			4	8.4	9.2	0.4	0	0	
			5	8.5	9.2	0.4	0	0	

REMARKS:	**FIG No.**

GROUND INVESTIGATION SPECIALISTS LIMITED

CONTRACT: Reading Sewage Treatment Works	**SHEET 1 OF 1**
CLIENT: Thames Water	
ENGINEER: CS2 Limited	**JOB No. 2727**

DATE: 05.12.2025	**AIR TEMP:** 6 ºC	**ATMOSPHERIC PRESSURE:** 1003 mbar	**TECHNICIAN: TJM**

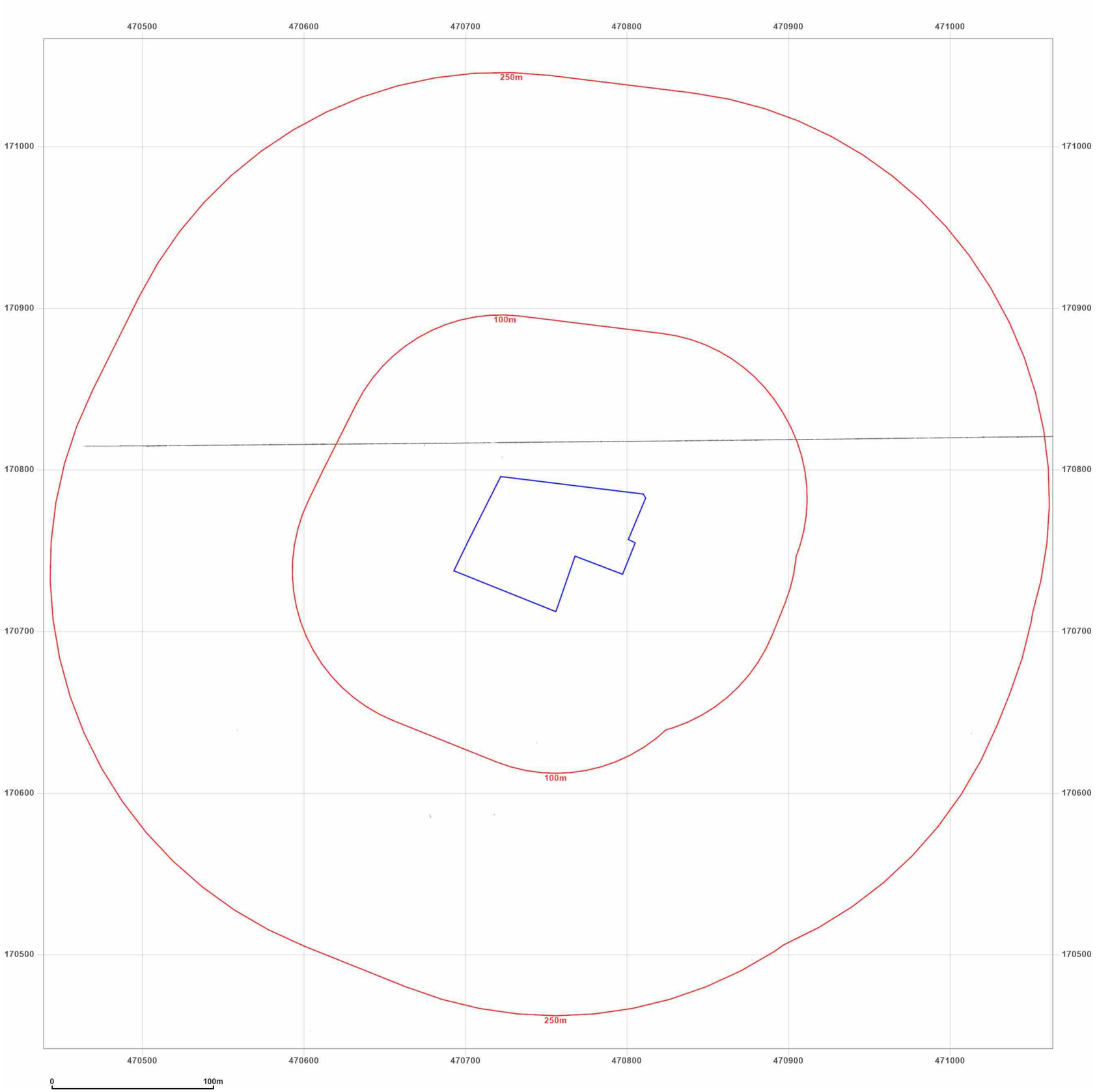
METEOROLOGICAL AND OUTSIDE SITE CONDITIONS

STATE OF GROUND	Dry	Moist	Wet	**Saturated**
WIND	Calm	**Light**	Moderate	Strong
CLOUD COVER	None	**Scattered**	Broken	Overcast
PRECIPITATION	**None**	Slight	Moderate	Heavy

BH ID	FLOW (l/hr)	START TIME	TIME ELAPSED (mins)	METHANE (% v/v)	CARBON DIOXIDE (% V/V)	OXYGEN (% v/v)	CARBON MONOXIDE (PPM)	HYDROGEN SULPHIDE (PPM)	WATER LEVEL (mbgl)
BH01	0	11:20	0.5	1.4	6.4	0.8	0	0	2.85
			1	1.4	6.5	0.5	0	0	
			2	1.4	6.5	0.4	0	0	
			3	1.5	6.6	0.3	0	0	
			4	1.5	6.6	0.3	0	0	
			5	1.5	6.6	0.3	0	0	
BH02	0	11:10	0.5	9.0	8.6	0.5	0	0	2.78
			1	9.1	8.7	0.4	0	0	
			2	9.1	8.7	0.3	0	0	
			3	9.1	8.7	0.3	0	0	
			4	9.1	8.7	0.3	0	0	
			5	9.1	8.7	0.3	0	0	

REMARKS:	**FIG No.**

15.0 HISTORICAL MAPS



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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

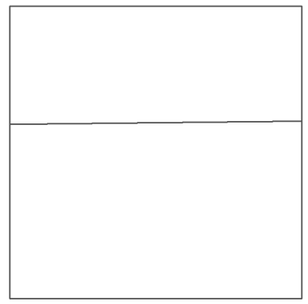
Map Name: County Series

Map date: **1872**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1872
Revised 1872
Edition N/A
Copyright N/A
Levelled N/A

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Groundsure INSIGHTS

Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

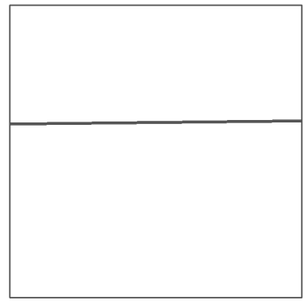
Map date: **1877-1879**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1879
Revised 1879
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1877
Revised 1877
Edition N/A
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

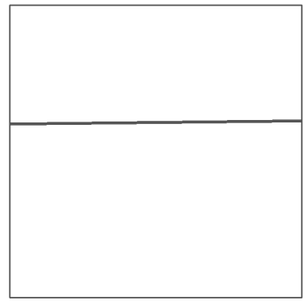
Map date: **1899**

Scale: 1:2,500

Printed at: 1:2,500

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Revised 1899
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1899
Revised 1899
Edition N/A
Copyright N/A
Levelled N/A

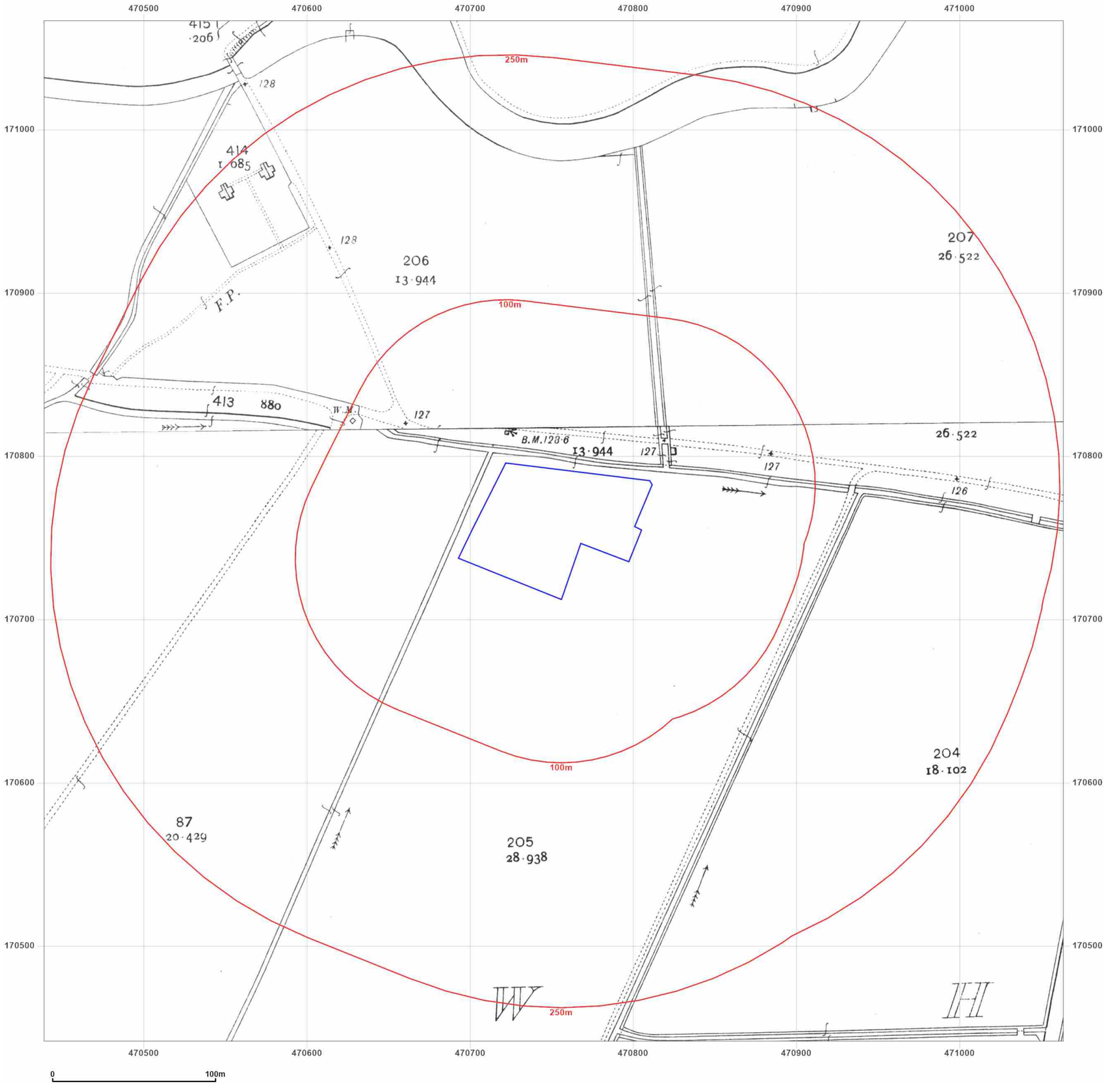
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

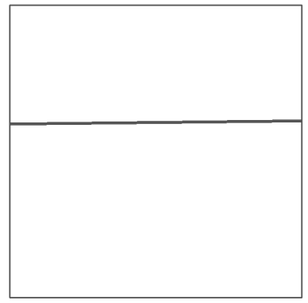
Map date: **1911**

Scale: 1:2,500

Printed at: 1:2,500

N
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Revised 1911
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1911
Revised 1911
Edition N/A
Copyright N/A
Levelled N/A

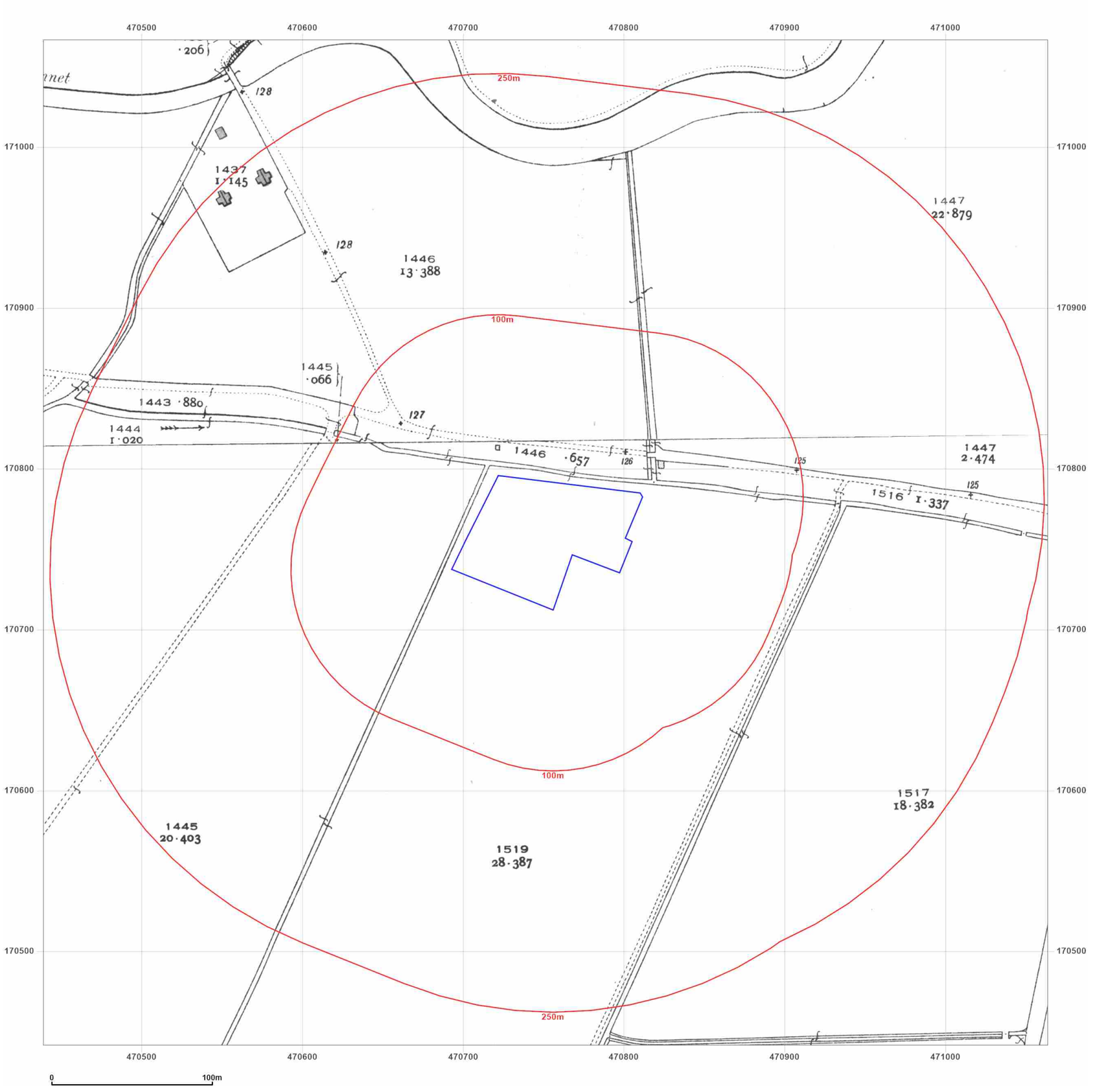
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Groundsure INSIGHTS

Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

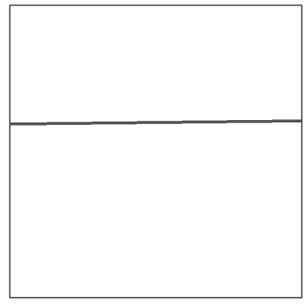
Map date: **1932-1936**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
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Surveyed 1932
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1936
Revised 1936
Edition N/A
Copyright N/A
Levelled N/A

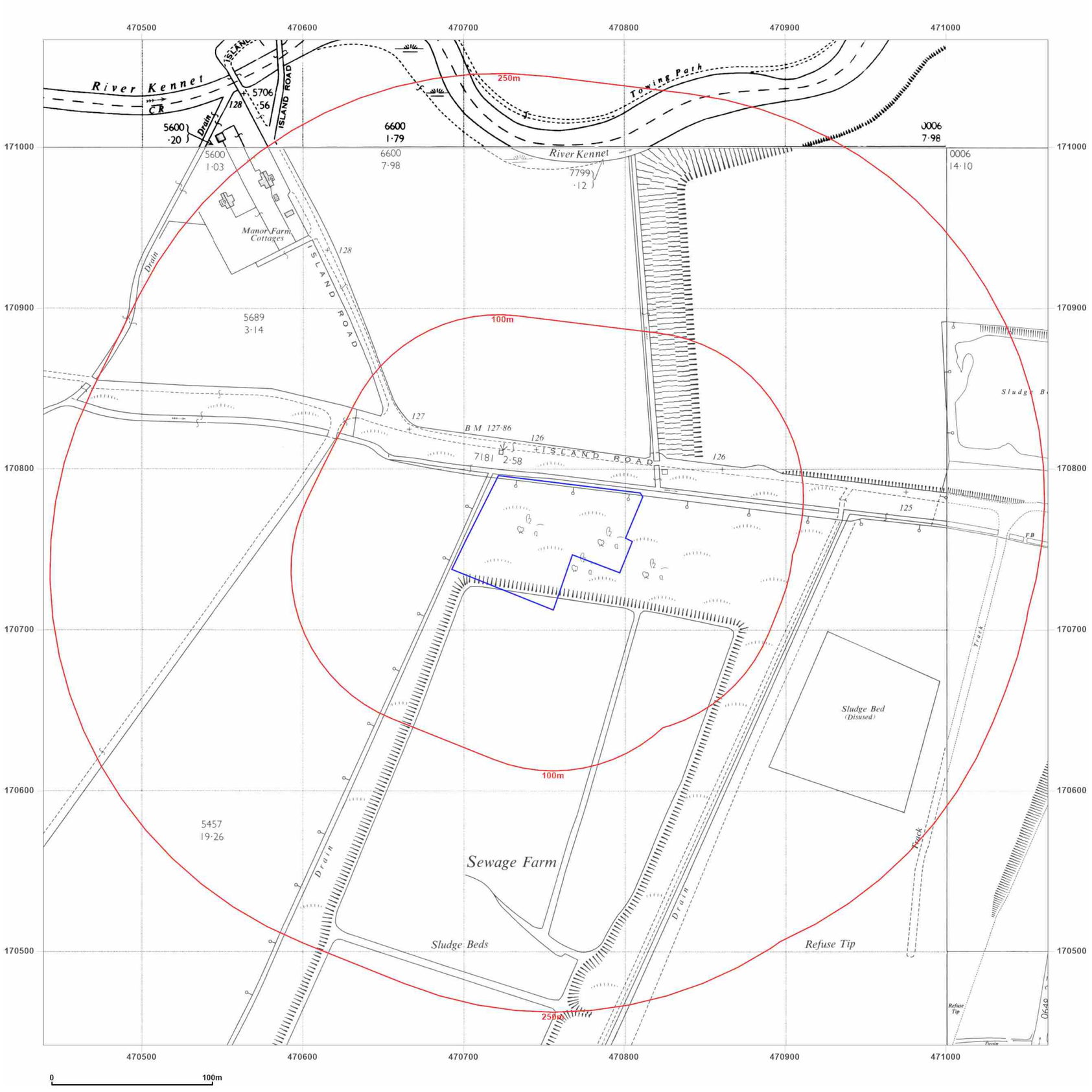
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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **1967-1969**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1966
Revised 1966
Edition N/A
Copyright 1969
Levelled 1951

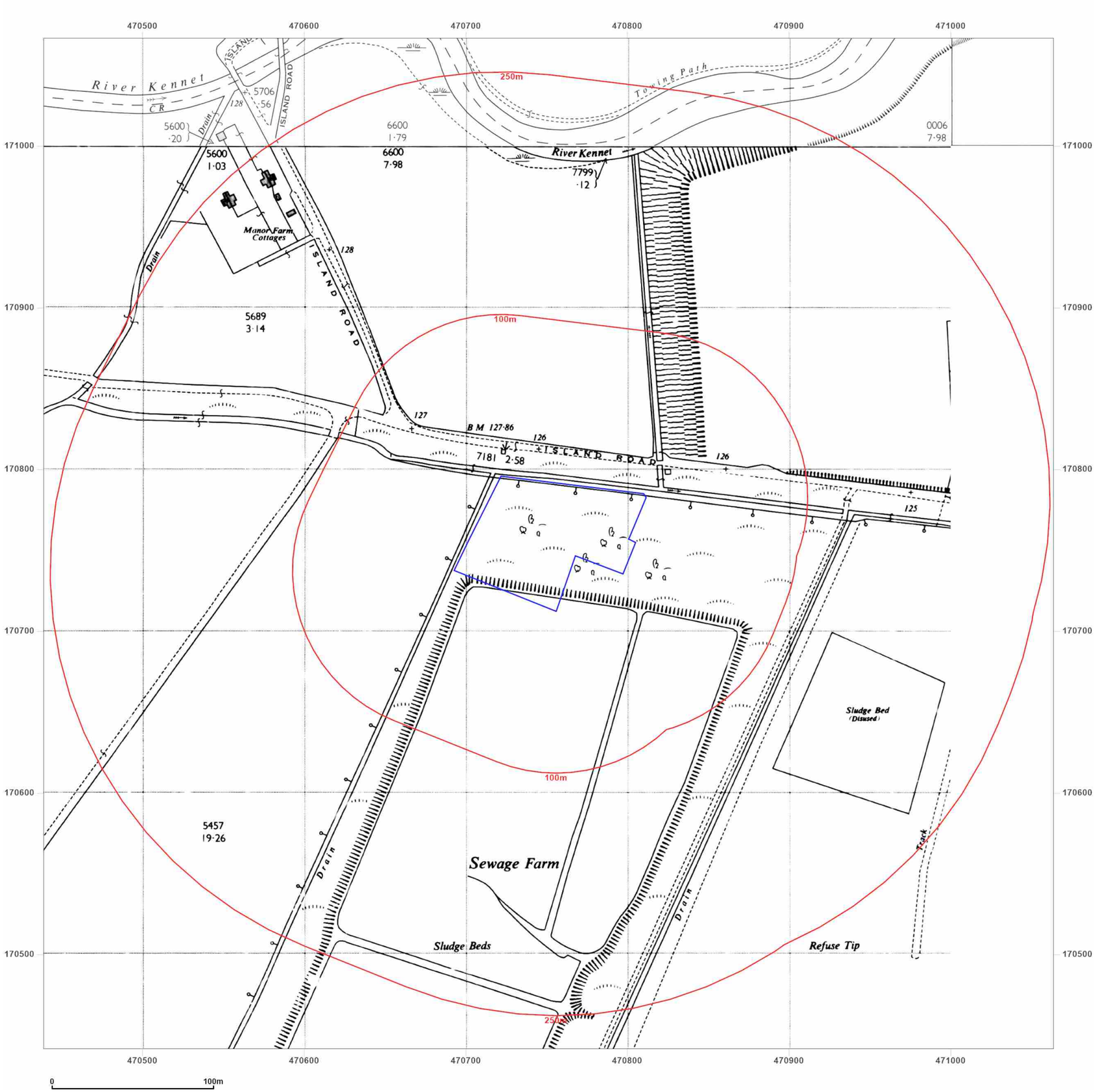
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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **1967-1969**

Scale: 1:2,500

Printed at: 1:2,500

N
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Surveyed 1965
Revised 1965
Edition N/A
Copyright 1967
Levelled 1951

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

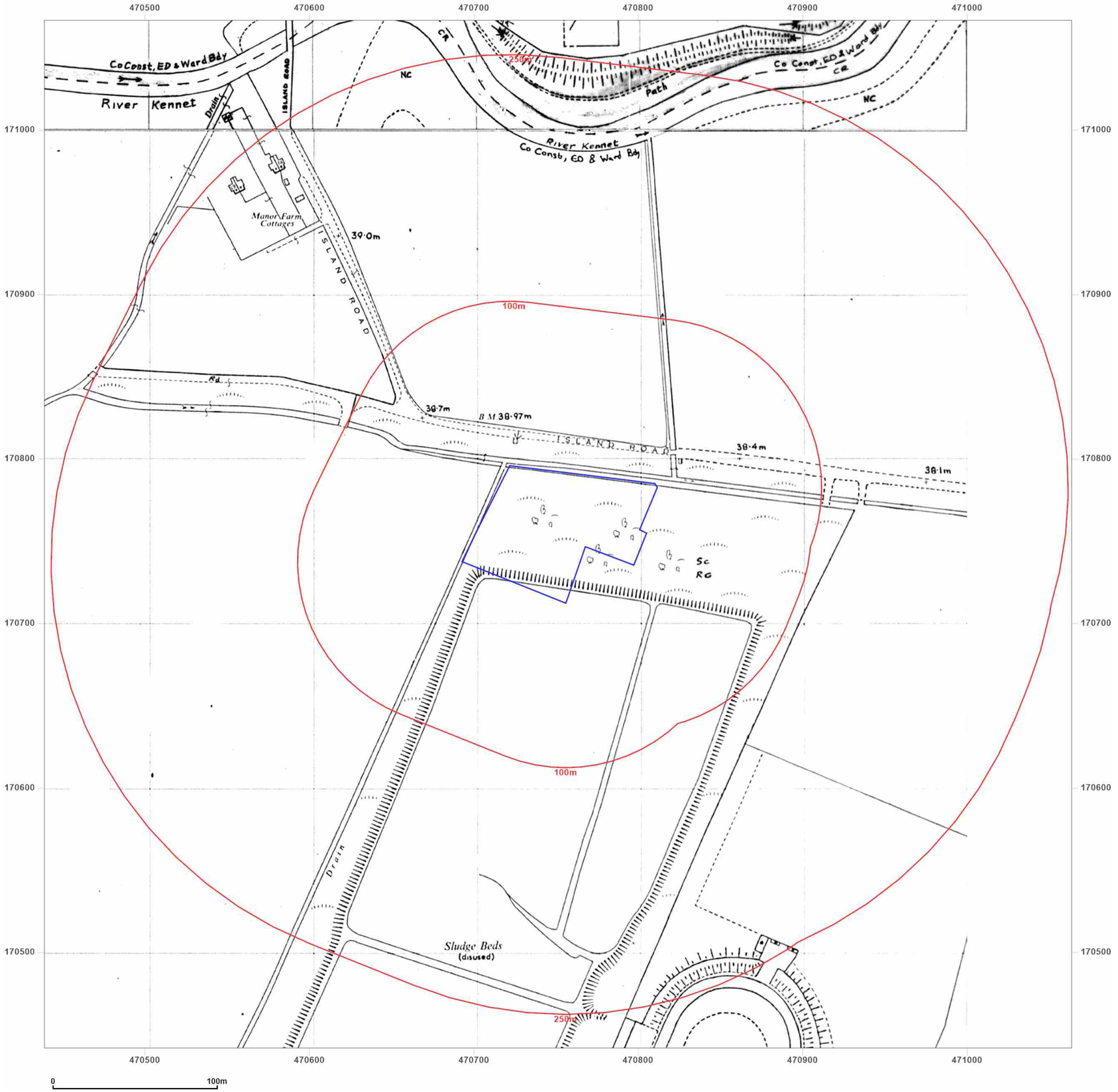
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Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **1985-1988**

Scale: 1:2,500

Printed at: 1:2,500

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Surveyed 1951
Revised 1988
Edition N/A
Copyright 1988
Levelled 1951

Surveyed 1973
Revised 1985
Edition N/A
Copyright 1985
Levelled 1973

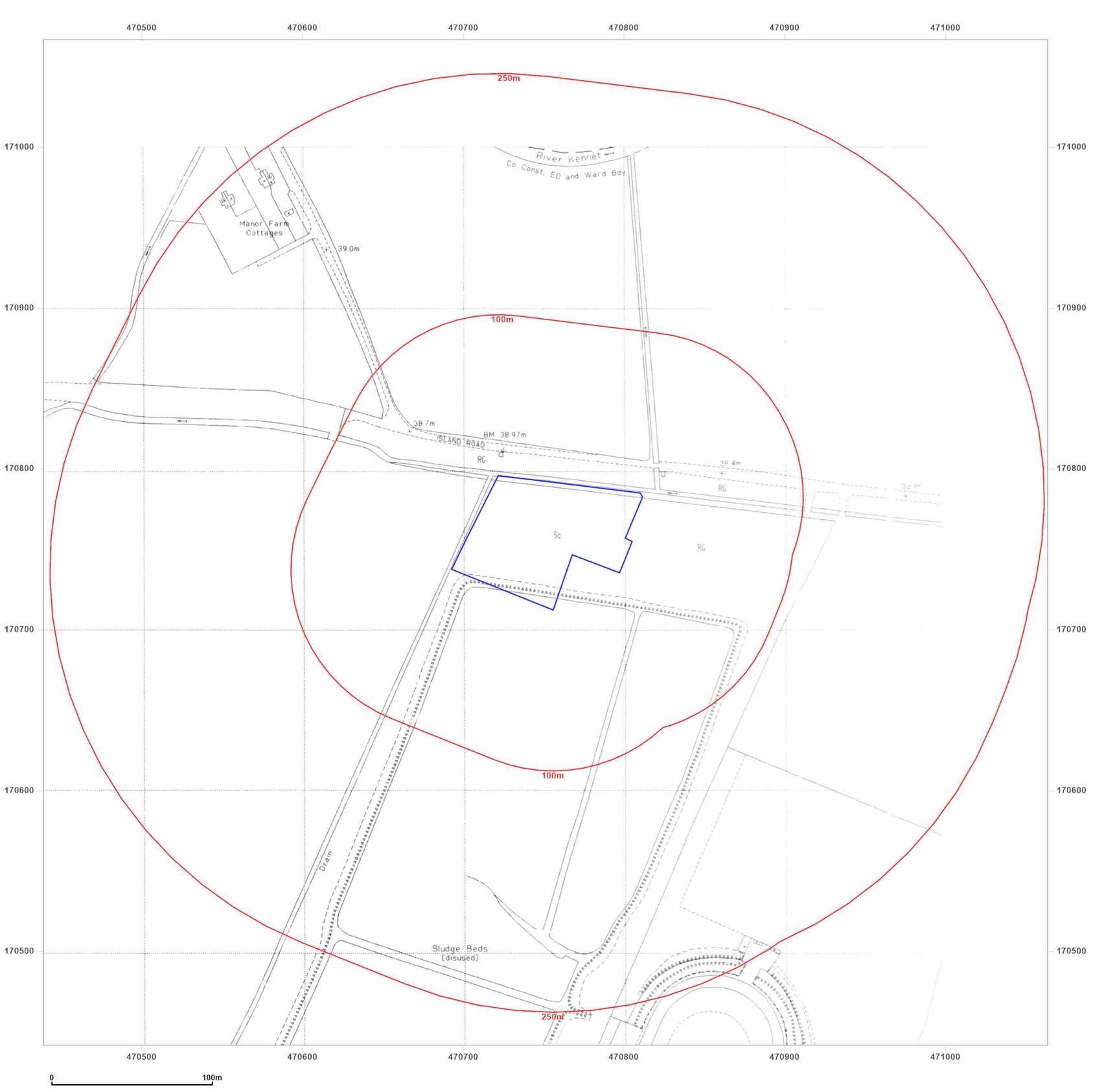
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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

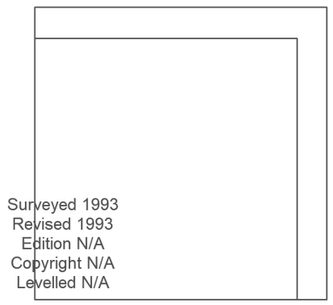
Map Name: National Grid

Map date: **1993**

Scale: 1:2,500

Printed at: 1:2,500

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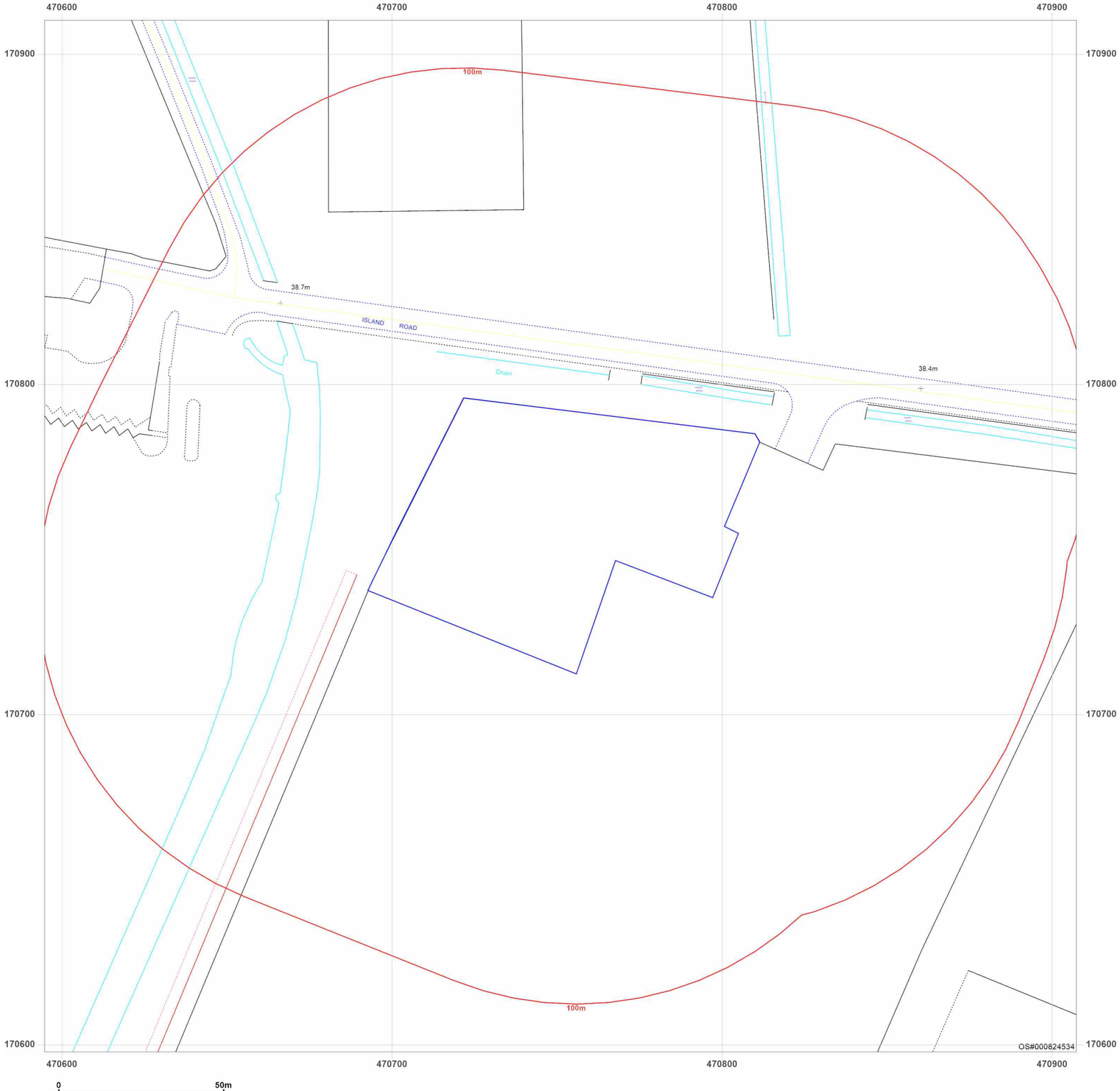
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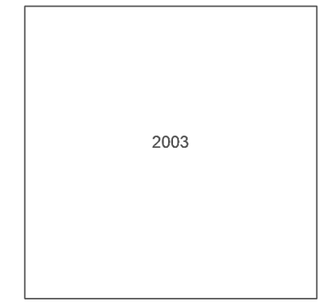
Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

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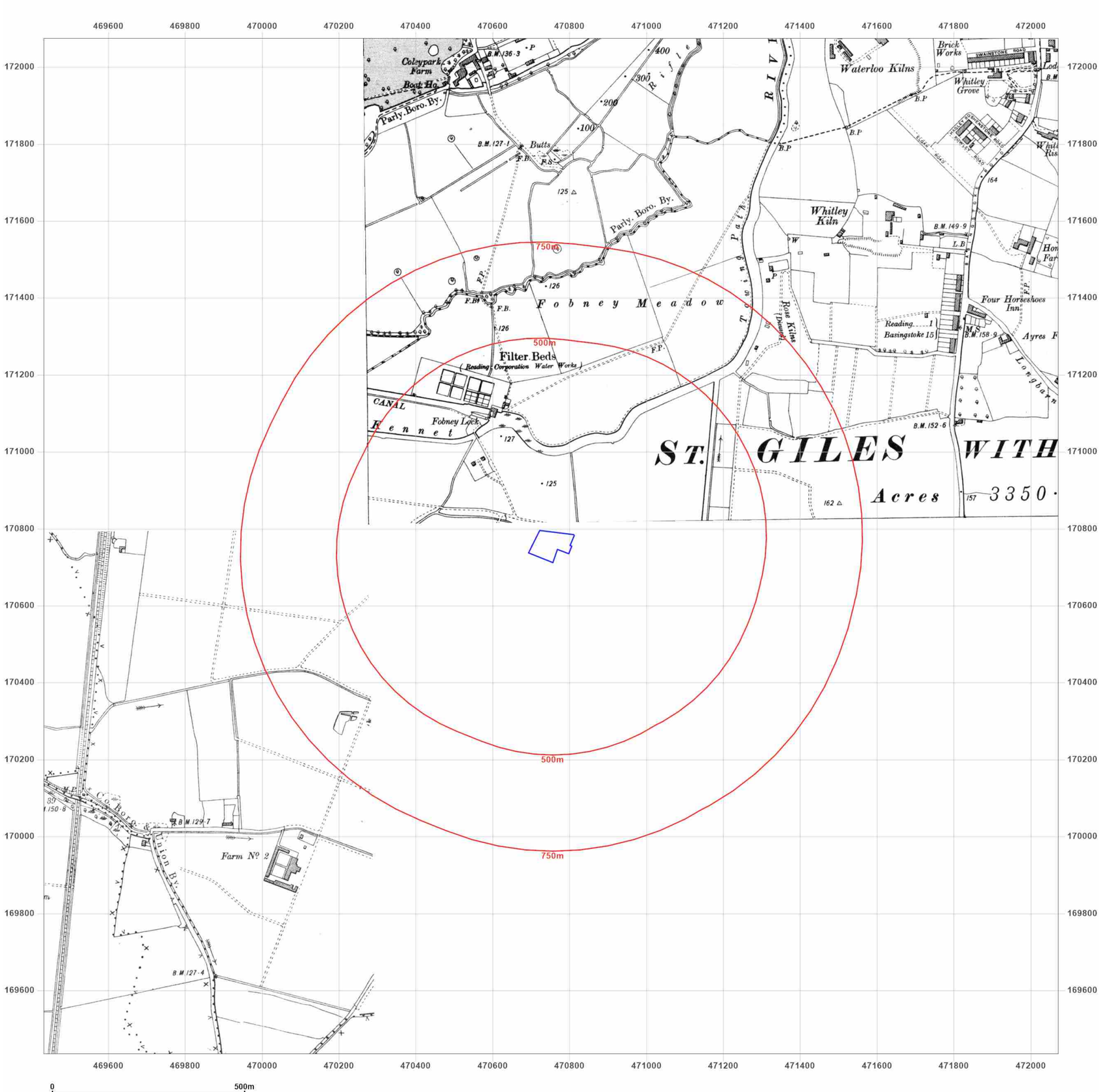
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

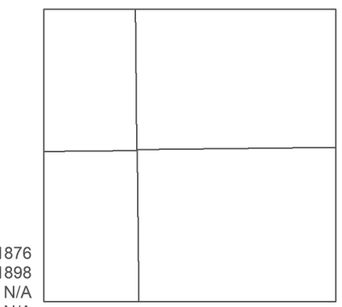
Map date: **1898**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1876
Revised 1898
Edition N/A
Copyright N/A
Levelled N/A

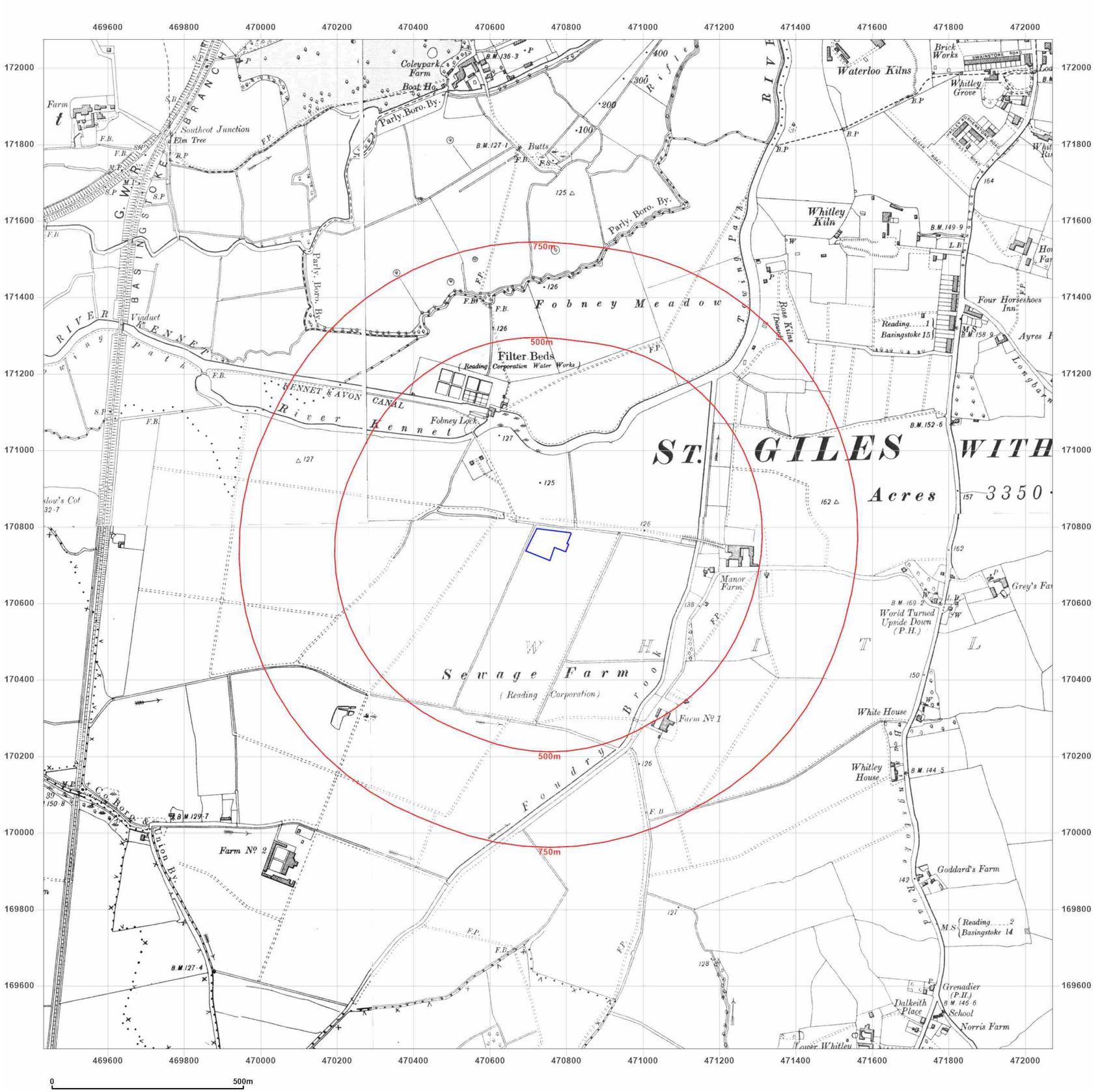
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

Map date: **1898-1900**

Scale: 1:10,560

Printed at: 1:10,560

N
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Revised 1898
Edition 1900
Copyright N/A
Levelled N/A

Surveyed 1877
Revised 1898
Edition N/A
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1898
Edition N/A
Copyright N/A
Levelled N/A

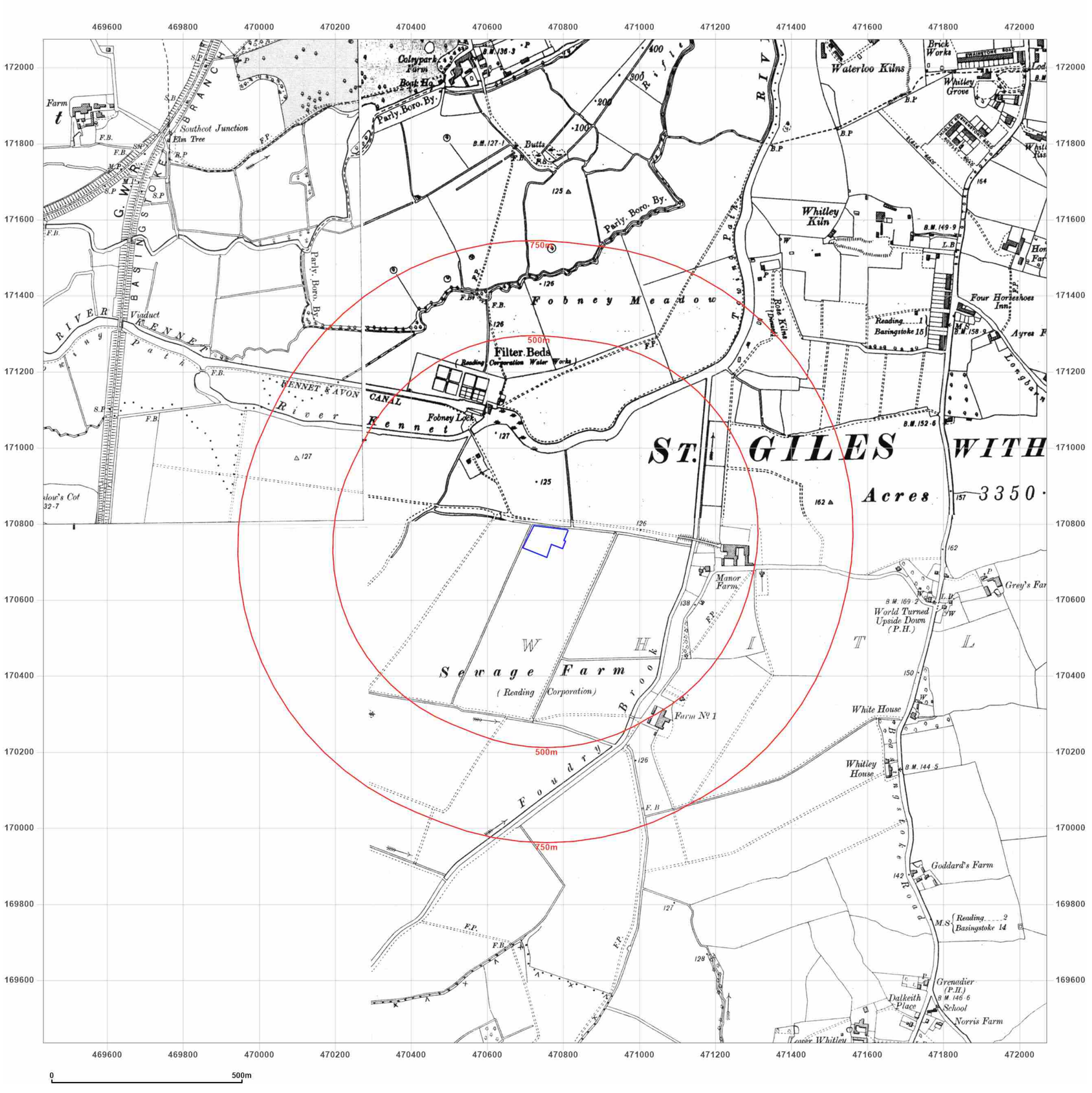
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

Map date: **1900**

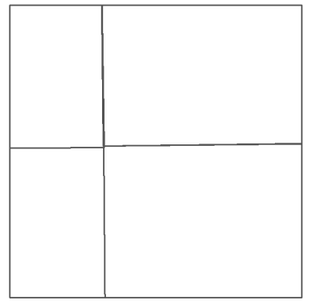
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Printed at: 1:10,560

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Revised 1898
Edition 1900
Copyright N/A
Levelled N/A

Surveyed N/A
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1876
Revised 1898
Edition 1900
Copyright N/A
Levelled N/A

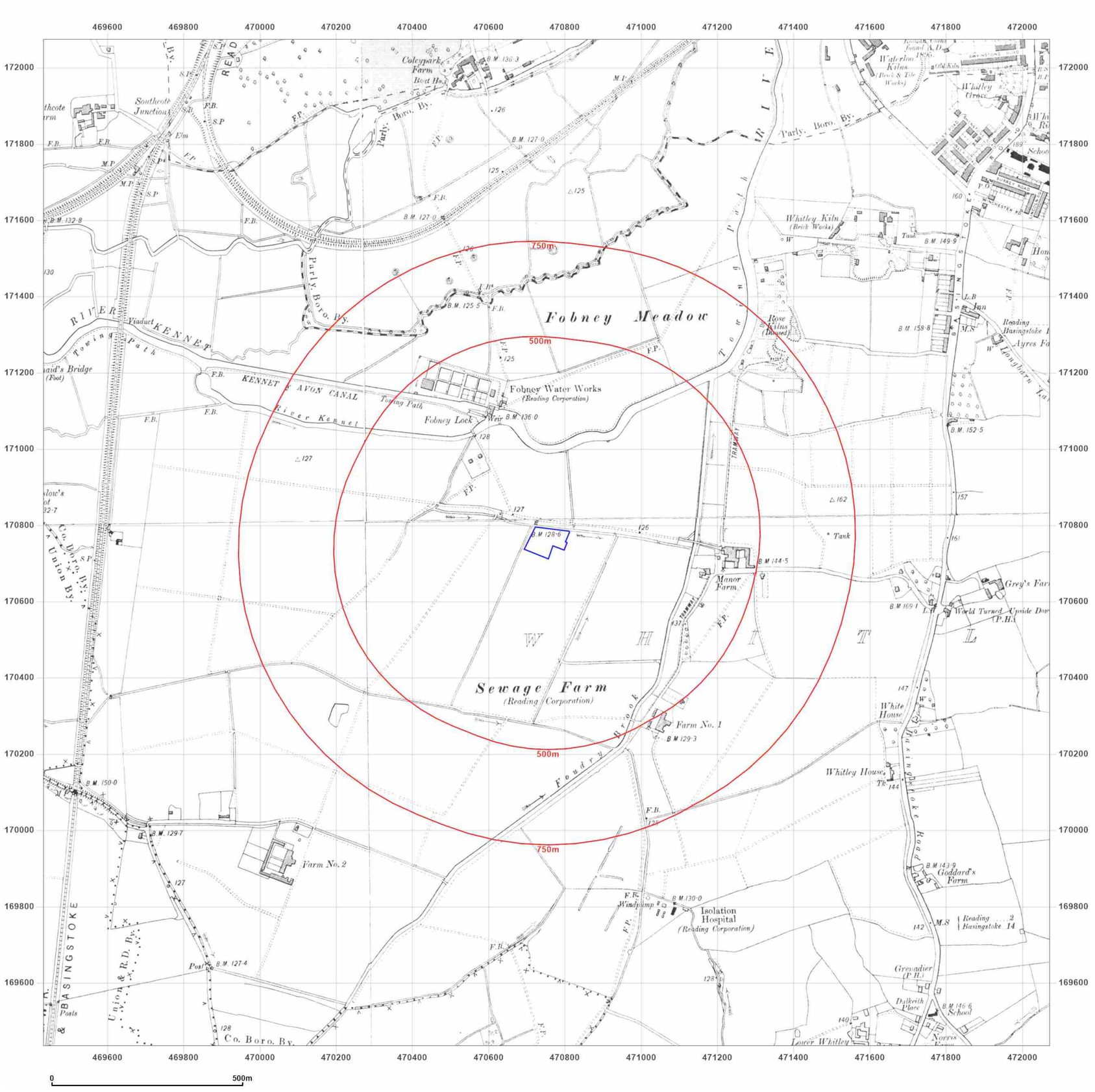
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

Map date: **1910-1913**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1877 Revised 1910 Edition N/A Copyright N/A Levelled N/A	Surveyed 1877 Revised 1910 Edition 1913 Copyright N/A Levelled N/A
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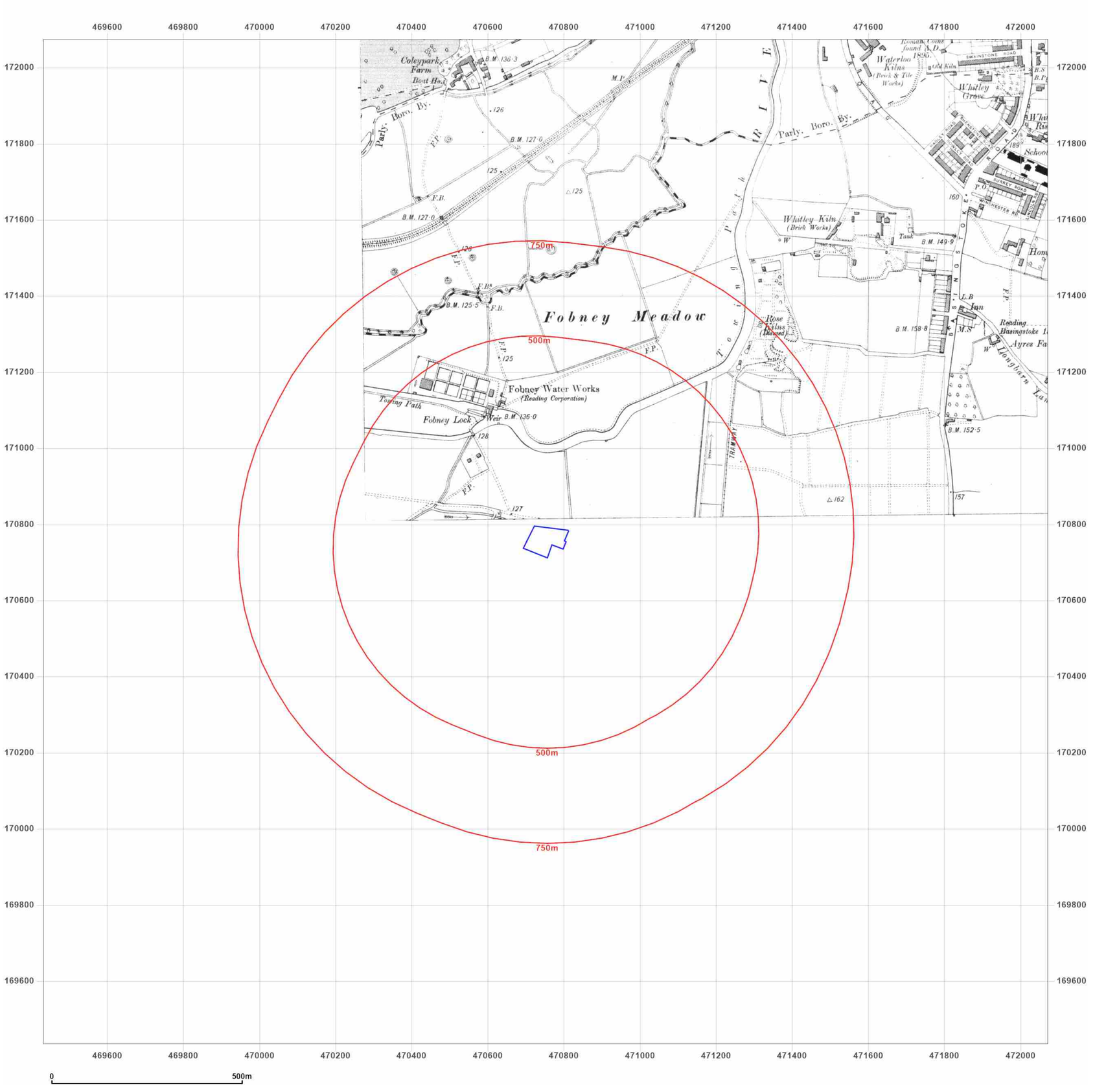
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

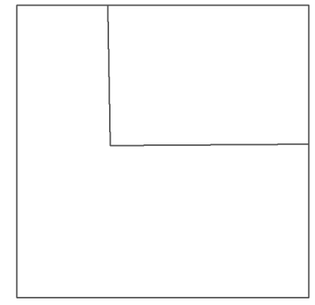
Map date: **1914**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1914
Edition 1913
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Groundsure INSIGHTS

Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

Map date: **1932-1933**

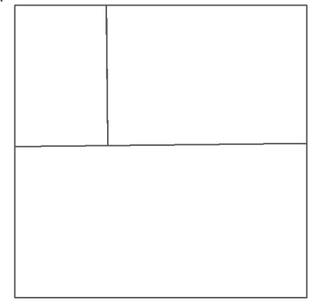
Scale: 1:10,560

Printed at: 1:10,560

N
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Surveyed 1877
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1877
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A



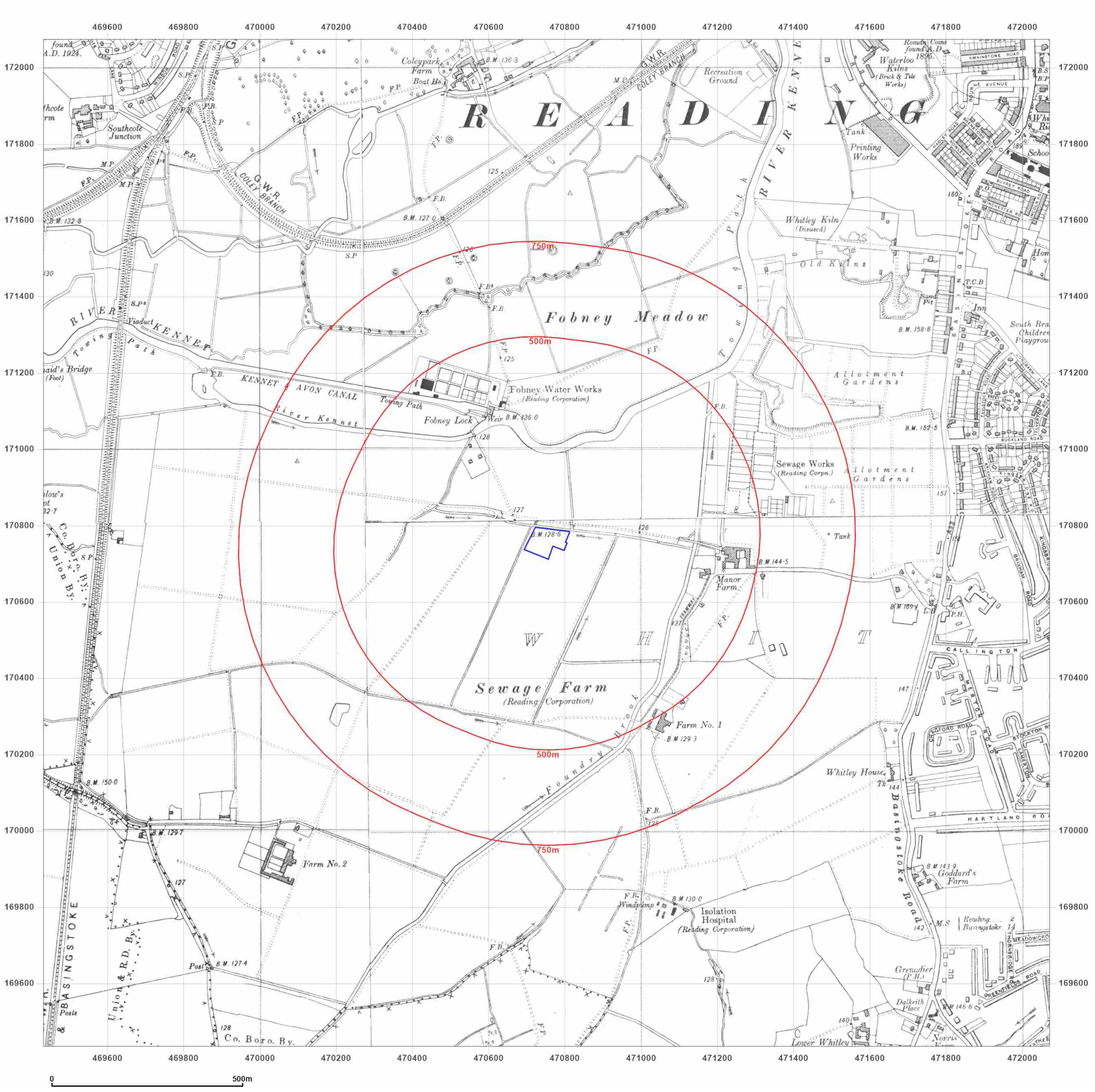
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
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Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1877
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
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Copyright N/A
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Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

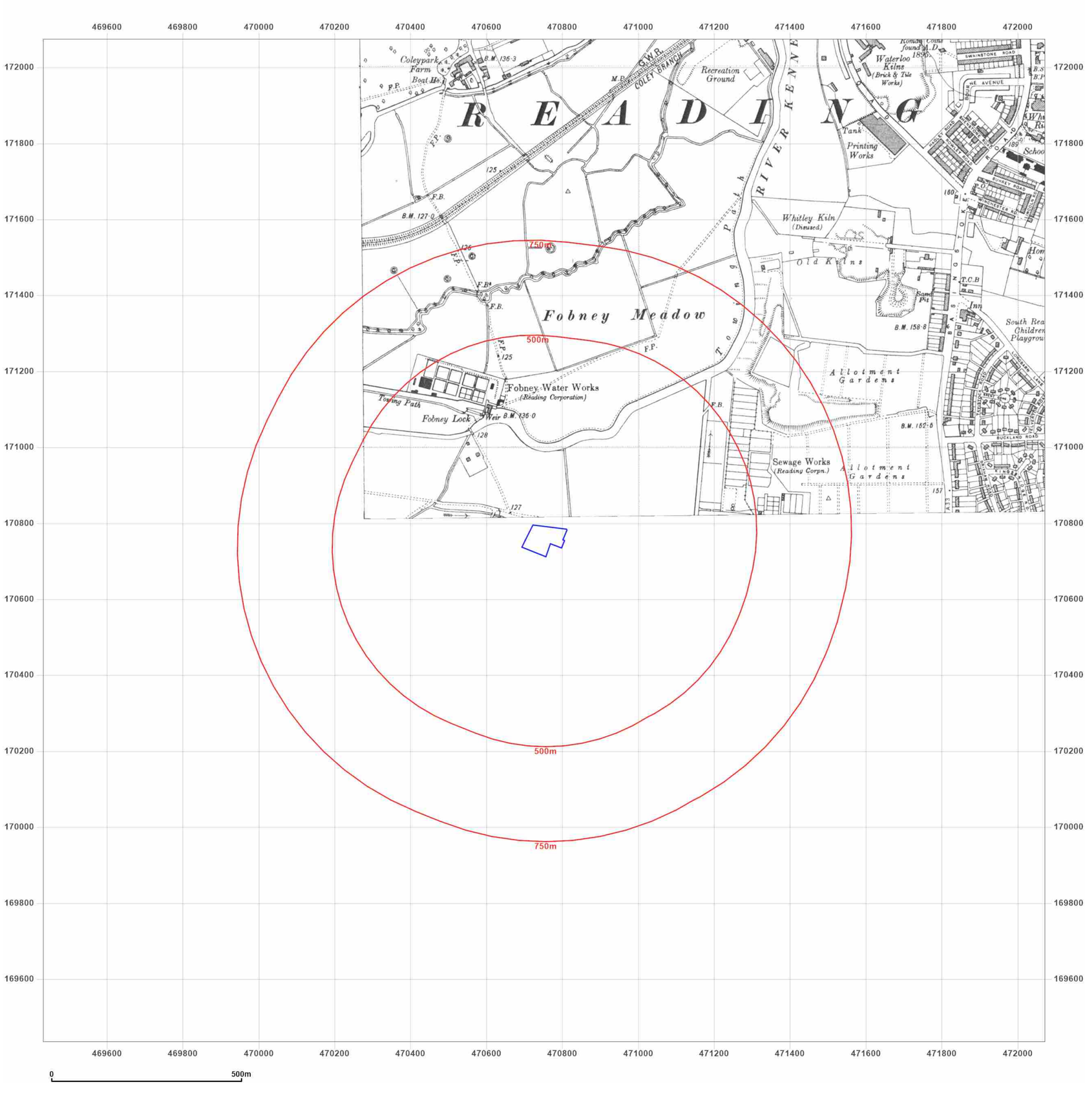
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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: County Series

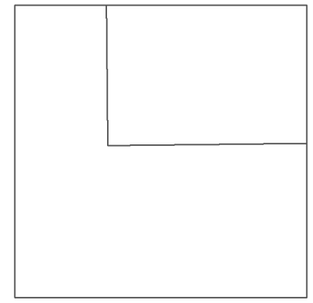
Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed 1877
Revised 1938
Edition 1938
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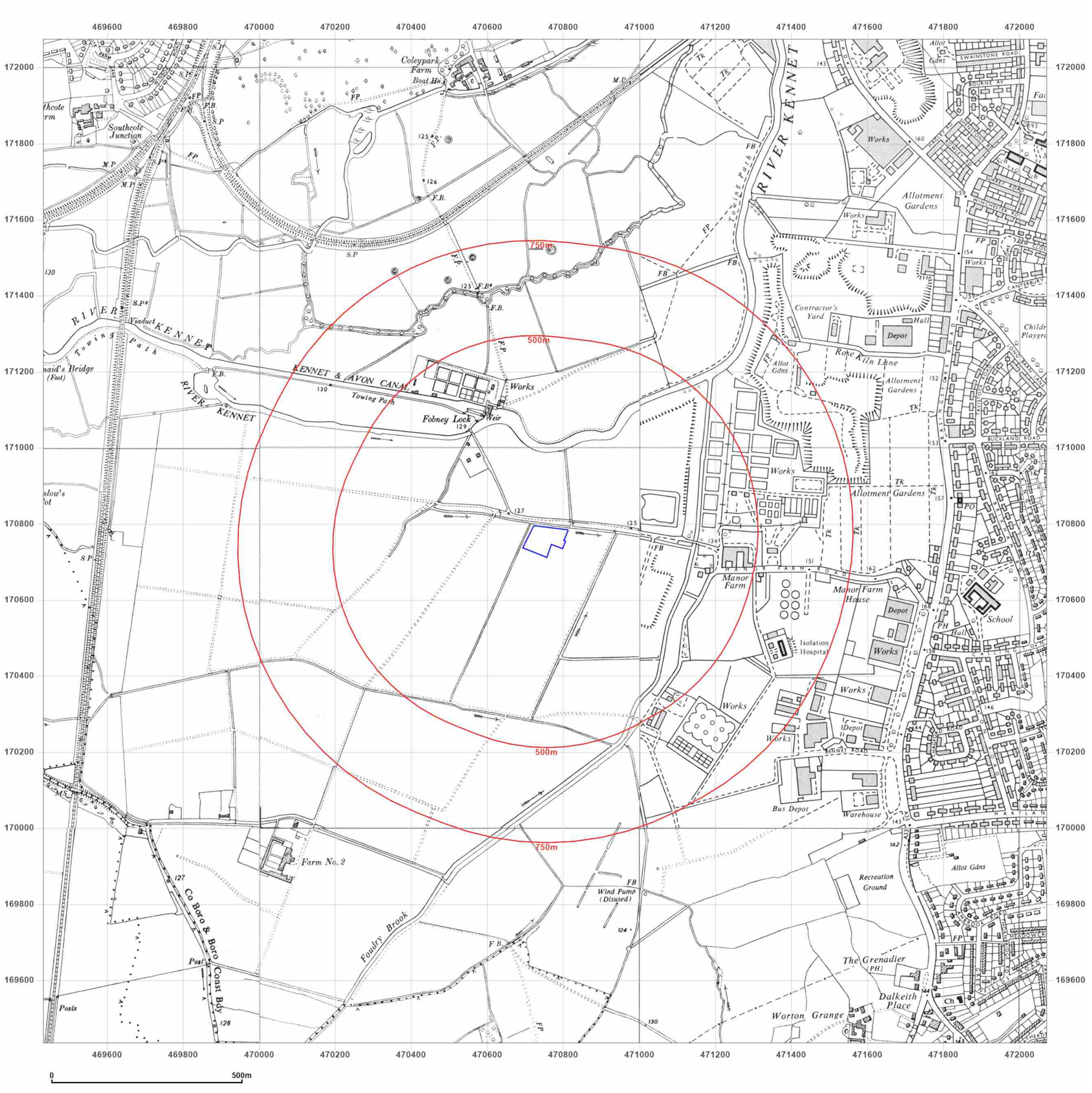
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Groundsure INSIGHTS

Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: Provisional

Map date: **1961-1962**

Scale: 1:10,560

Printed at: 1:10,560

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Revised 1960
Edition 1961
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Surveyed 1959
Revised 1961
Edition N/A
Copyright 1962
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Surveyed N/A
Revised 1960
Edition N/A
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Revised 1961
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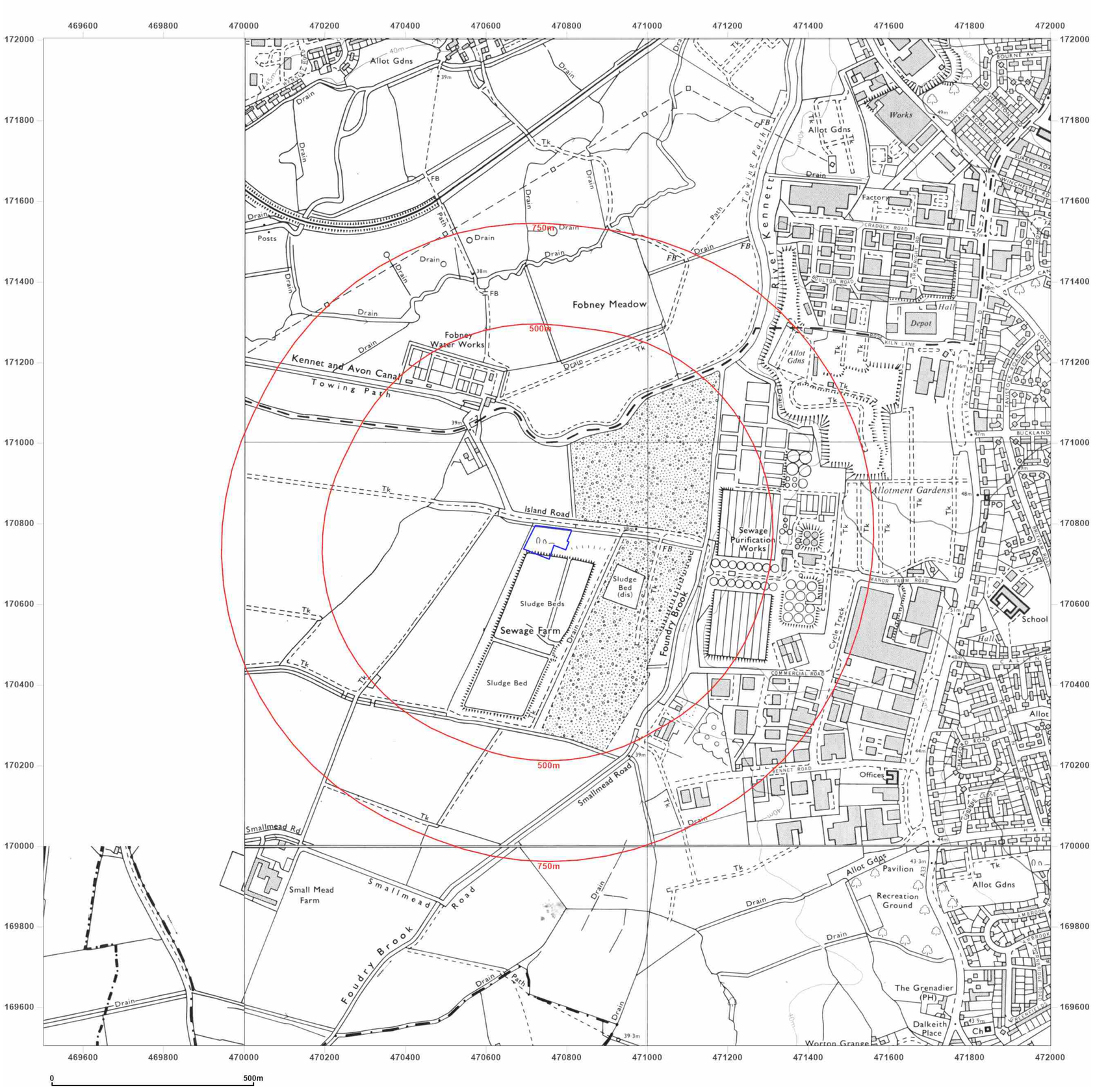
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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **1969-1973**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1970
Revised 1973
Edition N/A
Copyright 1973
Levelled N/A

Surveyed 1969
Revised 1971
Edition N/A
Copyright 1972
Levelled 1969

Surveyed 1969
Revised 1969
Edition N/A
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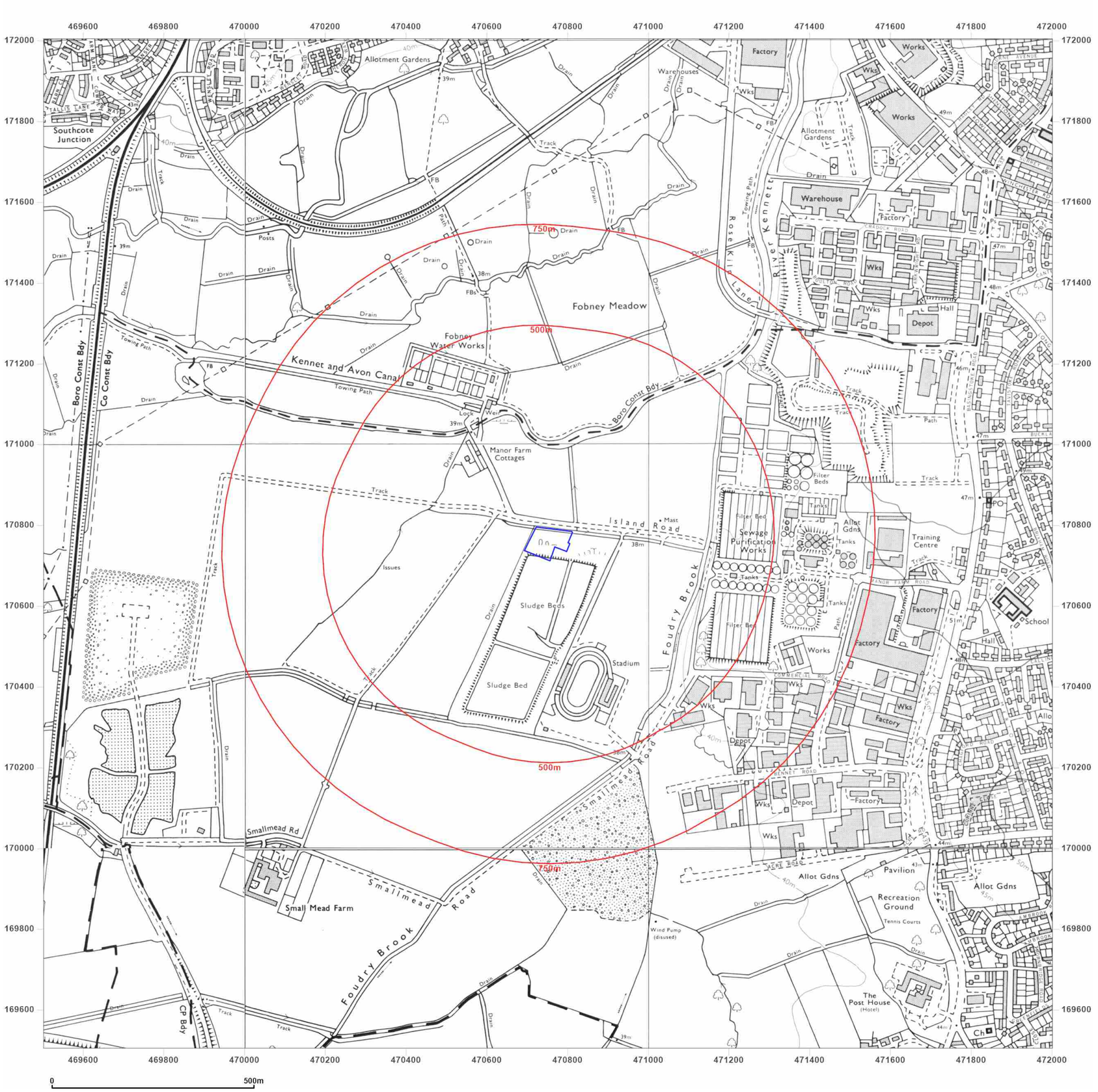
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Site Details:

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Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **1976-1979**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1974 Revised 1976 Edition N/A Copyright 1976 Levelled 1969	Surveyed 1975 Revised 1976 Edition N/A Copyright 1976 Levelled 1969

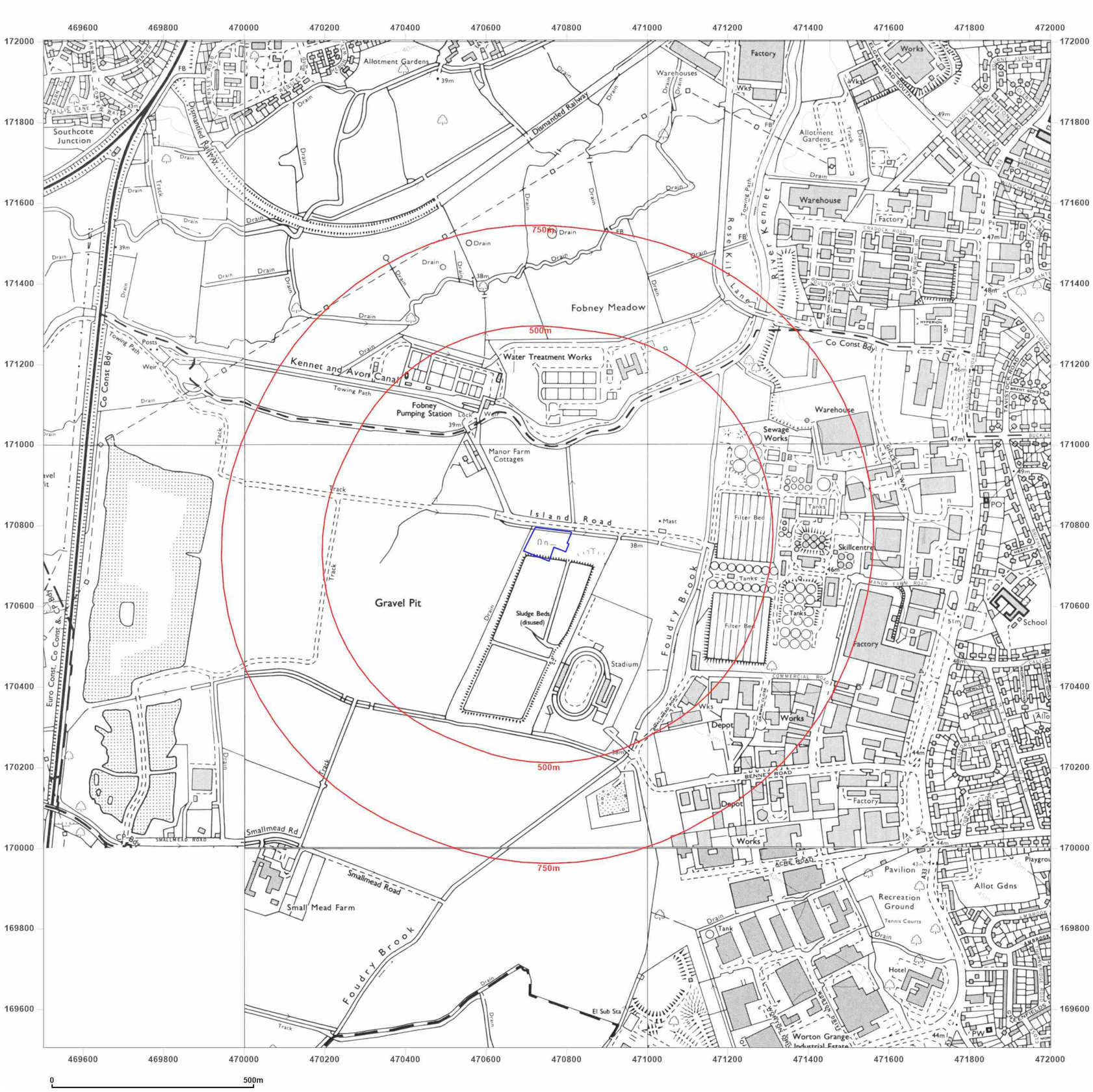
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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **1988-1991**

Scale: 1:10,000

Printed at: 1:10,000

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Revised 1991
Edition N/A
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Surveyed 1987
Revised 1989
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1986
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

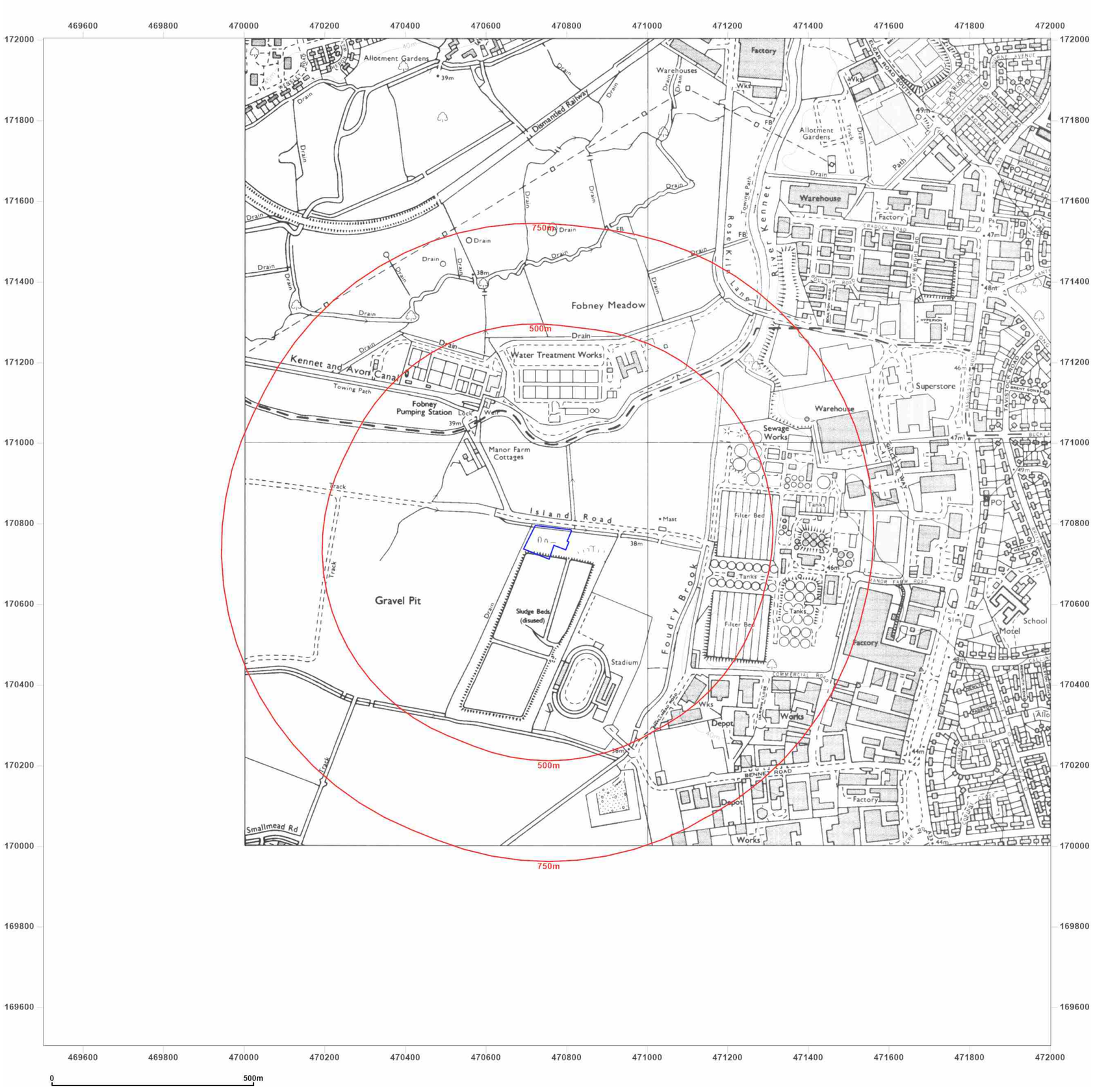
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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

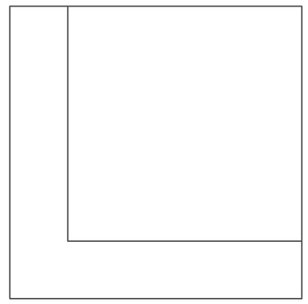
Map date: **1994**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1987
Revised 1994
Edition N/A
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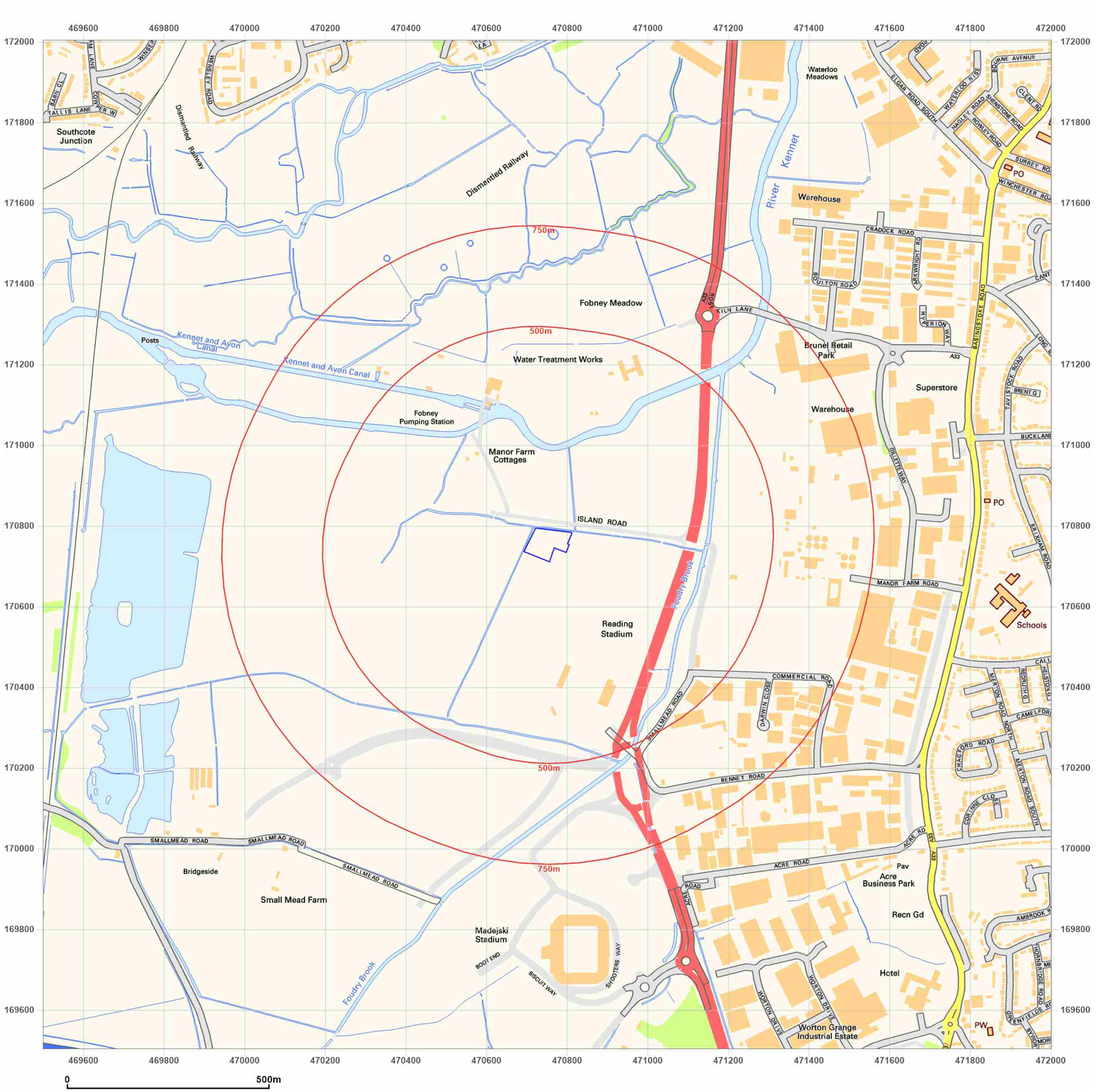
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Groundsure INSIGHTS

Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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2001

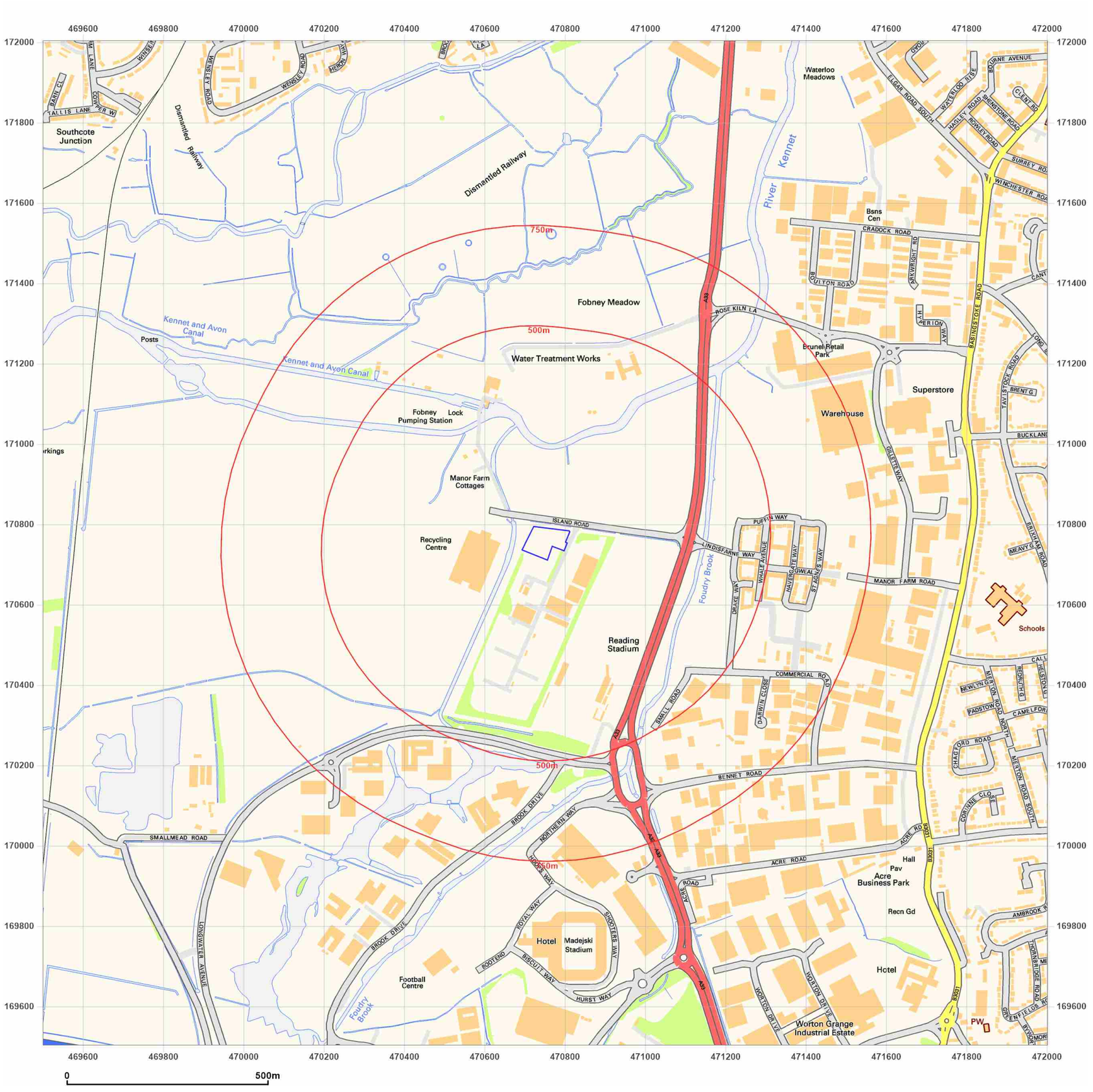
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Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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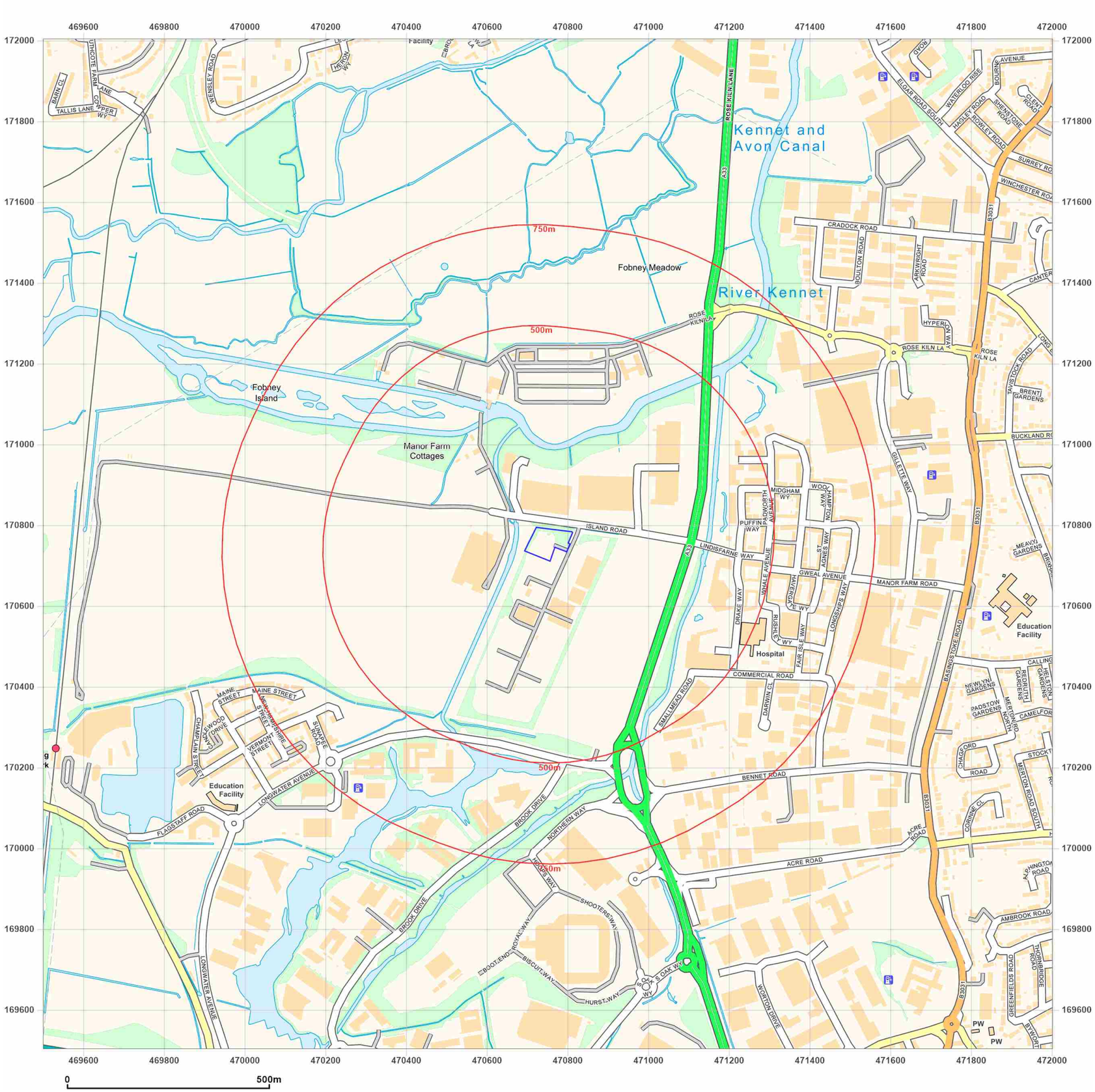
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Groundsure INSIGHTS

Site Details:

STW, Island Road, Reading

Client Ref: J 2727
Report Ref: GS-PZD-ZBK-VAB-NUD
Grid Ref: 470751, 170754

Map Name: National Grid

Map date: **2025**

Scale: 1:10,000

Printed at: 1:10,000

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16.0 GROUNDSURE REPORT GS-UVQ-0QF-YOI-KP6

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

STW, Island Road, Reading

Order Details

Date: 03/11/2025

Your ref: J 2727

Our Ref: GS-UVQ-OQF-YOI-KP6

Site Details

Location: 470750 170758

Area: 0.61 ha

Authority: Reading Borough Council ↗



Summary of findings p. 2 >

OS MasterMap site plan p.14 >

Aerial image p. 9 >

Insight User Guide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	6	1	6	52	-
18 >	1.2 >	Historical tanks >	0	0	0	42	-
20 >	1.3 >	Historical energy features >	0	0	0	4	-
20	1.4	Historical petrol stations	0	0	0	0	-
21	1.5	Historical garages	0	0	0	0	-
21	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
22 >	2.1 >	Historical industrial land uses >	7	1	6	71	-
26 >	2.2 >	Historical tanks >	0	0	0	54	-
28 >	2.3 >	Historical energy features >	0	0	0	8	-
28	2.4	Historical petrol stations	0	0	0	0	-
29	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
30 >	3.1 >	Active or recent landfill >	0	1	0	0	-
31 >	3.2 >	Historical landfill (BGS records) >	0	1	0	0	-
31 >	3.3 >	Historical landfill (LA/mapping records) >	0	0	2	1	-
31 >	3.4 >	Historical landfill (EA/NRW records) >	2	1	1	0	-
32 >	3.5 >	Historical waste sites >	0	0	4	1	-
34 >	3.6 >	Licensed waste sites >	0	0	15	0	-
38 >	3.7 >	Waste exemptions >	0	0	3	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
40 >	4.1 >	Recent industrial land uses >	0	1	9	-	-
41 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	0	0	9	-	-
42	4.3	Current or recent petrol stations	0	0	0	0	-
42	4.4	Electricity cables	0	0	0	0	-
42	4.5	Gas pipelines	0	0	0	0	-

42	4.6	Sites determined as Contaminated Land	0	0	0	0	-
42 >	4.7 >	Control of Major Accident Hazards (COMAH) >	0	0	0	1	-
43	4.8	Regulated explosive sites	0	0	0	0	-
43	4.9	Hazardous substance storage/usage	0	0	0	0	-
43	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
43 >	4.11 >	Licensed industrial activities (Part A(1)) >	0	0	2	0	-
44 >	4.12 >	Licensed pollutant release (Part A(2)/B) >	0	0	1	0	-
44	4.13	Radioactive Substance Authorisations	0	0	0	0	-
44 >	4.14 >	Licensed Discharges to controlled waters >	1	1	0	33	-
50 >	4.15 >	Pollutant release to surface waters (Red List) >	0	0	0	3	-
50	4.16	Pollutant release to public sewer	0	0	0	0	-
51 >	4.17 >	List 1 Dangerous Substances >	0	0	0	2	-
51 >	4.18 >	List 2 Dangerous Substances >	0	0	0	8	-
52 >	4.19 >	Pollution Incidents (EA/NRW) >	0	0	4	2	-
52 >	4.20 >	Pollution inventory substances >	0	0	2	24	-
60 >	4.21 >	Pollution inventory waste transfers >	0	0	0	1	-
61	4.22	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
63 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
64 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
65	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
65	5.5	Groundwater vulnerability- local information	None (within 0m)				
66 >	5.6 >	Groundwater abstractions >	0	0	0	24	31
78 >	5.7 >	Surface water abstractions >	0	0	0	3	4
80 >	5.8 >	Potable abstractions >	0	0	0	24	12
88	5.9	Source Protection Zones	0	0	0	0	-
88	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m

89 >	6.1 >	Water Network (OS MasterMap) >	0	6	14	-	-
91 >	6.2 >	Surface water features >	0	4	4	-	-
91 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
92 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
92 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
94 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
95 >	7.2 >	Historical Flood Events >	1	2	2	-	-
95	7.3	Flood Defences	0	0	0	-	-
96	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
96	7.5	Flood Storage Areas	0	0	0	-	-
97 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
98 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
99 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
101 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
102	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
102	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
102	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
102	10.4	Special Protection Areas (SPA)	0	0	0	0	0
103	10.5	National Nature Reserves (NNR)	0	0	0	0	0
103	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
103	10.7	Designated Ancient Woodland	0	0	0	0	0
103	10.8	Biosphere Reserves	0	0	0	0	0
104	10.9	Forest Parks	0	0	0	0	0
104	10.10	Marine Conservation Zones	0	0	0	0	0
104	10.11	Green Belt	0	0	0	0	0

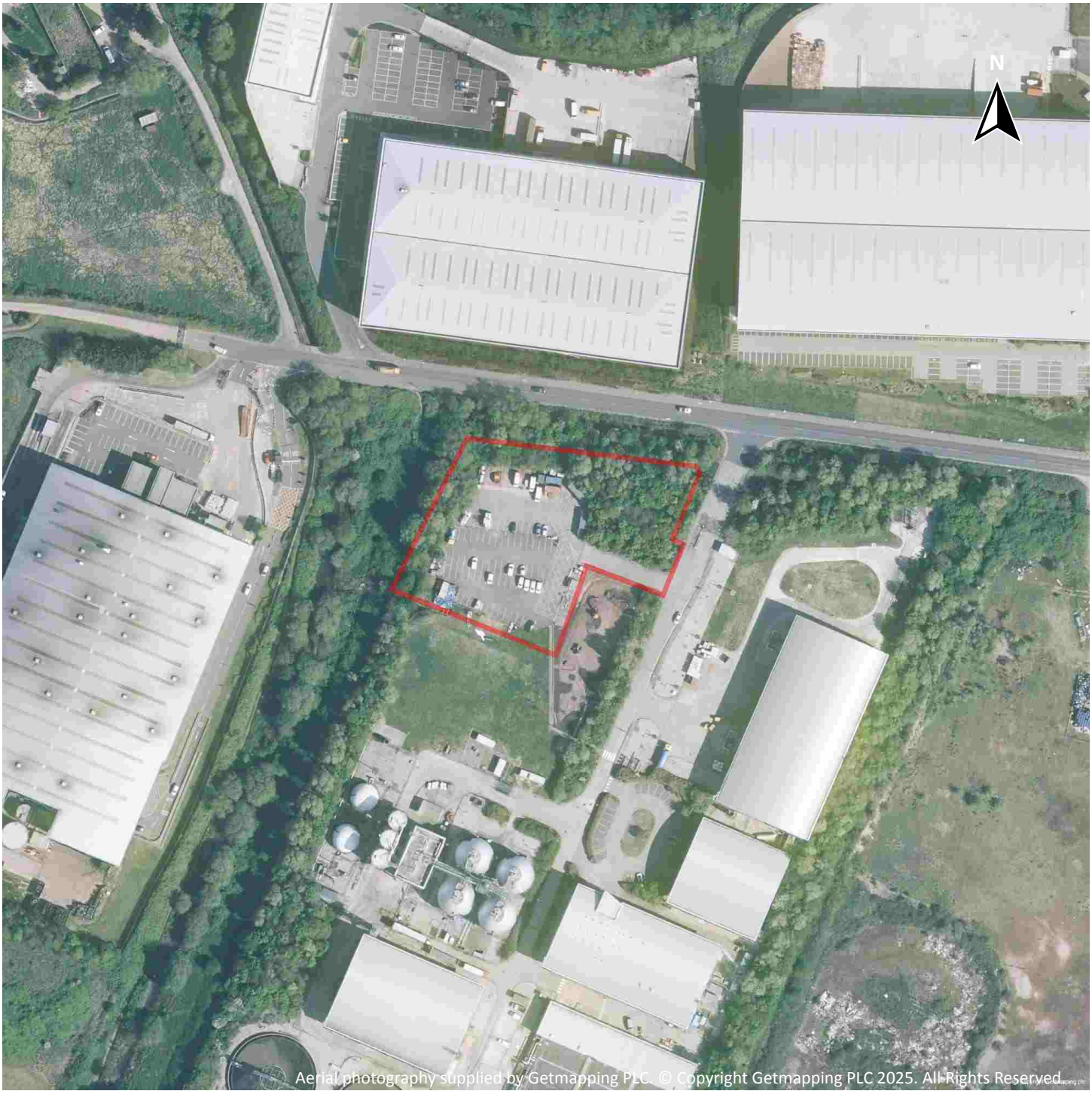
104	10.12	Proposed Ramsar sites	0	0	0	0	0
104	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
105	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
105	10.15	Nitrate Sensitive Areas	0	0	0	0	0
105 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	0
106	10.17	SSSI Impact Risk Zones	0	-	-	-	-
106	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
107	11.1	World Heritage Sites	0	0	0	-	-
107	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
107	11.3	National Parks	0	0	0	-	-
107	11.4	Listed Buildings	0	0	0	-	-
108	11.5	Conservation Areas	0	0	0	-	-
108	11.6	Scheduled Ancient Monuments	0	0	0	-	-
108	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
109 >	12.1 >	Agricultural Land Classification >	Grade 4 (within 250m)				
110	12.2	Open Access Land	0	0	0	-	-
110	12.3	Tree Felling Licences	0	0	0	-	-
110	12.4	Environmental Stewardship Schemes	0	0	0	-	-
110	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
111 >	13.1 >	Priority Habitat Inventory >	0	0	3	-	-
112	13.2	Habitat Networks	0	0	0	-	-
112	13.3	Open Mosaic Habitat	0	0	0	-	-
112	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
113 >	14.1 >	10k Availability >	Identified (within 500m)				
114 >	14.2 >	Artificial and made ground (10k) >	1	2	1	3	-

116 >	14.3 >	Superficial geology (10k) >	1	1	0	0	-
117	14.4	Landslip (10k)	0	0	0	0	-
118 >	14.5 >	Bedrock geology (10k) >	1	0	0	1	-
119	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
120 >	15.1 >	50k Availability >	Identified (within 500m)				
121 >	15.2 >	Artificial and made ground (50k) >	1	2	1	2	-
122 >	15.3 >	Artificial ground permeability (50k) >	1	2	-	-	-
123 >	15.4 >	Superficial geology (50k) >	1	1	0	0	-
124 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
124	15.6	Landslip (50k)	0	0	0	0	-
124	15.7	Landslip permeability (50k)	None (within 50m)				
125 >	15.8 >	Bedrock geology (50k) >	1	0	0	1	-
126 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
126	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
127 >	16.1 >	BGS Boreholes >	1	5	41	-	-
Page	Section	Natural ground subsidence >					
130 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
131 >	17.2 >	Running sands >	Low (within 50m)				
133 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
135 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
136 >	17.5 >	Landslides >	Very low (within 50m)				
137 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
139 >	18.1 >	BritPits >	0	0	0	1	-
140 >	18.2 >	Surface ground workings >	7	1	6	-	-
141	18.3	Underground workings	0	0	0	0	0
141	18.4	Underground mining extents	0	0	0	0	-

141 >	18.5 >	Historical Mineral Planning Areas >	0	1	0	0	-
141 >	18.6 >	Non-coal mining >	0	0	0	1	1
142 >	18.7 >	JPB mining areas >	Identified (within 0m)				
142	18.8	The Coal Authority non-coal mining	0	0	0	0	-
143 >	18.9 >	Researched mining >	0	1	0	0	-
143	18.10	Mining record office plans	0	0	0	0	-
143	18.11	BGS mine plans	0	0	0	0	-
143	18.12	Coal mining	None (within 0m)				
144	18.13	Brine areas	None (within 0m)				
144	18.14	Gypsum areas	None (within 0m)				
144	18.15	Tin mining	None (within 0m)				
144	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes >	On site	0-50m	50-250m	250-500m	500-2000m
145	19.1	Natural cavities	0	0	0	0	-
146 >	19.2 >	Mining cavities >	0	0	0	0	1
146	19.3	Reported recent incidents	0	0	0	0	-
146	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
147 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
149 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	1	-	-	-
149	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
149	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
150	22.1	Underground railways (London)	0	0	0	-	-
150	22.2	Underground railways (Non-London)	0	0	0	-	-
150	22.3	Railway tunnels	0	0	0	-	-
150	22.4	Historical railway and tunnel features	0	0	0	-	-
150	22.5	Royal Mail tunnels	0	0	0	-	-

151	22.6	Historical railways	0	0	0	-	-
151	22.7	Railways	0	0	0	-	-
151	22.8	Crossrail 2	0	0	0	0	-
151	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 30/04/2022

Site Area: 0.61ha

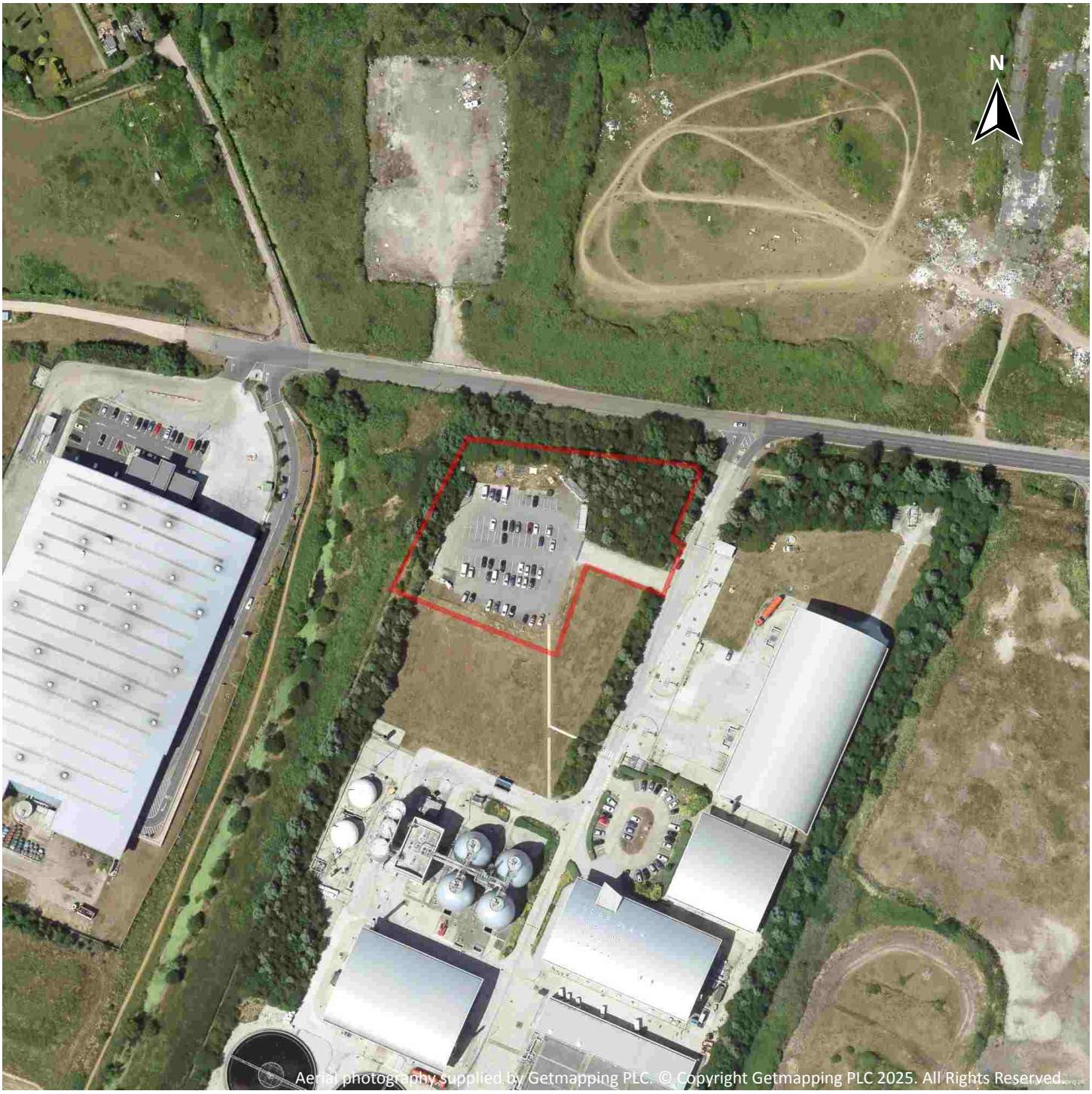
Recent site history - 2019 aerial photograph



Capture Date: 29/06/2019

Site Area: 0.61ha

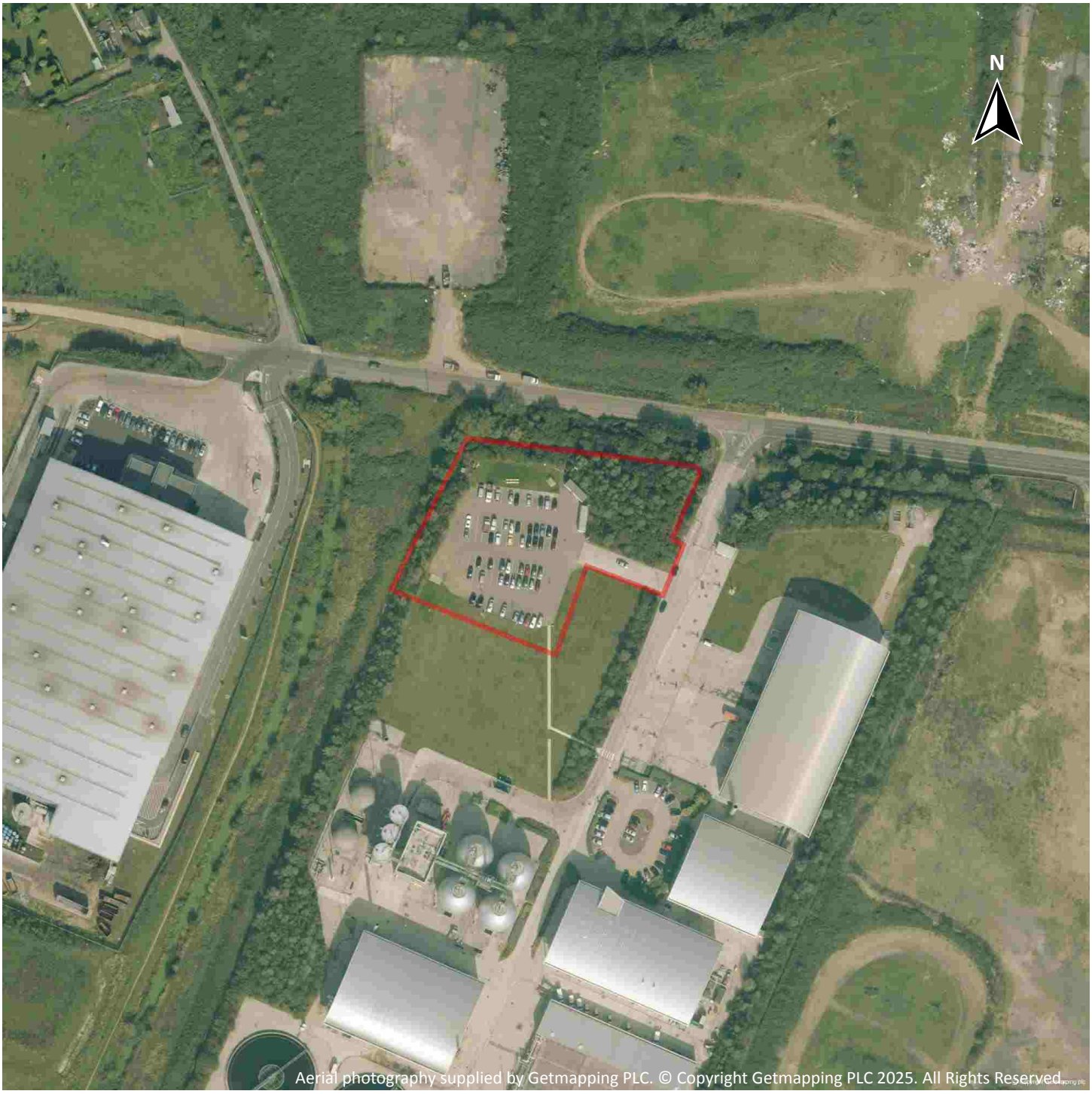
Recent site history - 2013 aerial photograph



Capture Date: 08/07/2013

Site Area: 0.61ha

Recent site history - 2010 aerial photograph



Capture Date: 22/09/2010

Site Area: 0.61ha

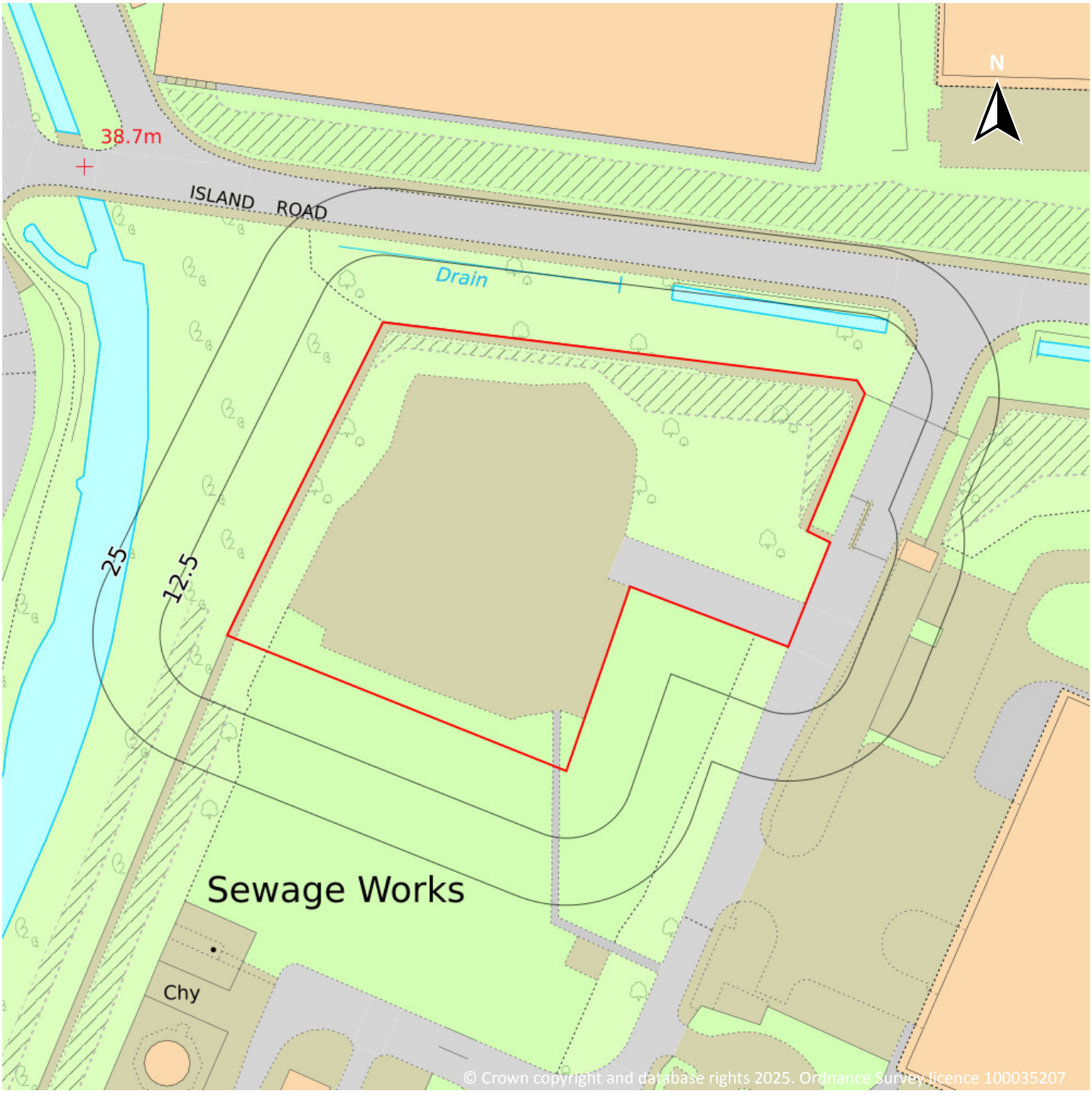
Recent site history - 1999 aerial photograph



Capture Date: 04/09/1999

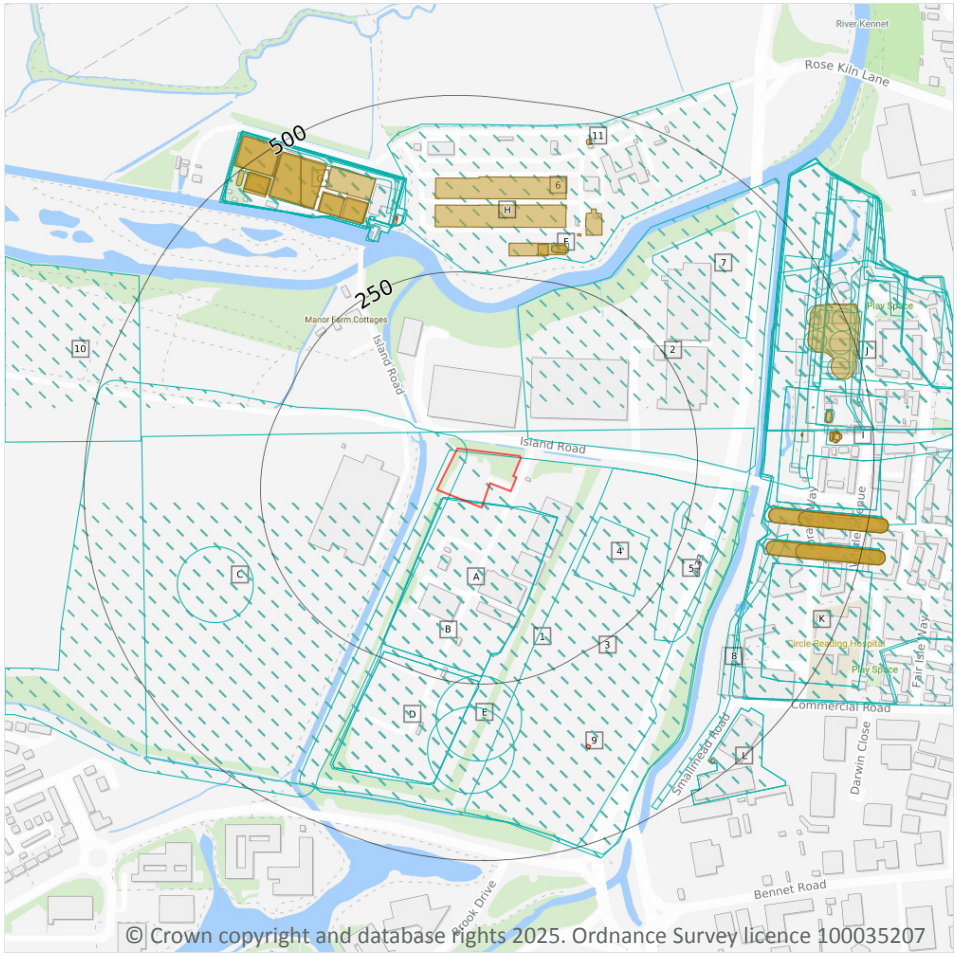
Site Area: 0.61ha

OS MasterMap site plan



Site Area: 0.61ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

1.1 Historical industrial land uses

Records within 500m	65

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Sewage Farm**	**1973**	**1953956**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Sludge Beds**	**1973**	**1915363**
A	**On site**	**Sludge Beds**	**1979**	**1991502**
B	**On site**	**Disused Sludge Beds**	**1989 - 1994**	**1921380**
B	**On site**	**Sewage Farm**	**1976**	**1934211**
C	**On site**	**Gravel Pit**	**1989**	**1927896**
2	27m NE	Refuse Heap	1973	1888513
3	121m SE	Refuse Heap	1973	1888514
4	131m SE	Disused Sludge Beds	1973	1887741
5	230m E	Unspecified Heap	1962	1895158
D	236m S	Sludge Bed	1979	1934713
D	236m S	Sludge Bed	1973	1980380
E	238m S	Sewage Farm	1898	1962445
6	251m N	Water Treatment Works	1989 - 1994	1942921
E	283m S	Sewage Farm	1938	1993720
C	288m SW	Gravel Pit	1994	1981201
F	294m N	Unspecified Tanks	1994	1890320
G	313m N	Water Works	1938	1915975
G	313m N	Water Works	1913	1955952
G	316m N	Pumping Station	1989 - 1994	1991253
G	325m N	Corporation Water Works	1933	1901604
G	327m N	Water Works	1938	1958490
G	328m N	Unspecified Works	1962	1890945
G	328m N	Water Works	1973	1933655
G	330m N	Water Works	1979	1990769
7	330m NE	Unspecified Heap	1962	1895159
G	331m N	Unspecified Commercial/Industrial	1989 - 1994	1916386
I	339m E	Sewage Purification Works	1973	1970627
I	339m E	Sewage Works	1989 - 1994	1939850

ID	Location	Land use	Dates present	Group ID
J	341m E	Unspecified Works	1962	1890957
I	343m E	Sewage Purification Works	1979	1983265
G	346m N	Railway Sidings	1933	1887611
G	346m NW	Filter Beds	1898	1889208
J	347m E	Sewage Works	1938	1995826
J	351m E	Corporation Sewage Works	1933	1888331
I	354m E	Unspecified Tanks	1979	1931373
I	354m E	Unspecified Tanks	1973	1959655
I	354m E	Unspecified Tanks	1989 - 1994	1960389
I	361m E	Unspecified Tanks	1973	1934152
I	361m E	Unspecified Tanks	1979	1957342
I	361m E	Unspecified Tanks	1989 - 1994	1970048
8	362m SE	Tramway Sidings	1913	1889120
I	366m E	Filter Bed	1989 - 1994	1988840
I	366m E	Filter Bed	1979	1996882
K	383m E	Filter Bed	1979	1988362
K	383m E	Filter Bed	1989 - 1994	1993913
J	383m E	Railway Sidings	1962	1960236
J	393m NE	Filter Beds	1979	1889210
I	394m E	Tramway Sidings	1913	1889115
J	407m E	Sewage Works	1938	1959517
J	420m E	Railway Sidings	1938	1972752
10	425m W	Sewage Farm	1932	1979947
J	427m E	Railway Sidings	1933	1937584
J	433m E	Unspecified Tank	1989 - 1994	1979358
I	433m E	Unspecified Tanks	1938	1958885
I	435m E	Unspecified Tanks	1933 - 1938	1980753
J	447m NE	Unspecified Heaps	1989 - 1994	1949810

ID	Location	Land use	Dates present	Group ID
L	448m SE	Unspecified Works	1989 - 1994	1939200
L	448m SE	Unspecified Works	1979	1968467
J	449m NE	Unspecified Tank	1989 - 1994	1999359
J	452m E	Unspecified Tank	1989 - 1994	1914719
J	466m E	Unspecified Tank	1989 - 1994	1984877
J	474m E	Railway Sidings	1933	1933368
J	481m NE	Unspecified Tank	1989 - 1994	1949004
J	495m NE	Unspecified Tank	1989 - 1994	1994286

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**42**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
F	280m N	Unspecified Tank	1988 - 1994	333655
F	284m N	Unspecified Tank	1994	343997
F	292m N	Tanks	1994	316958
H	314m N	Tanks	1988 - 1994	327404
F	323m N	Tanks	1994	317388
F	326m N	Tanks	1988 - 1994	341749
G	346m NW	Settling Tanks	1967	326894
G	346m NW	Tanks	1994	317390
H	354m N	Tanks	1988 - 1994	336751
I	360m E	Tanks	1976 - 1980	336687

ID	Location	Land use	Dates present	Group ID
I	360m E	Tanks	1993	343326
I	367m E	Tanks	1976	343739
I	367m E	Tanks	1980 - 1993	327970
G	368m NW	Settling Tanks	1967	326893
G	373m N	Tanks	1988 - 1994	339832
G	396m NW	Tanks	1994	336334
G	396m NW	Tanks	1988	331915
I	398m E	Tanks	1965	334776
I	399m E	Tanks	1957	341246
I	399m E	Tanks	1969	338262
I	399m E	Tanks	1959	340924
I	402m E	Tanks	1965 - 1969	334415
I	409m E	Tanks	1965 - 1969	331143
G	410m NW	Tanks	-	316628
I	435m E	Tanks	1957 - 1959	328474
J	438m E	Tanks	1980 - 1993	340374
I	438m E	Tanks	1957	337681
I	438m E	Tanks	1959	339668
I	443m E	Tanks	1959	331163
I	445m E	Tanks	1959	341100
I	447m E	Tanks	1959	335850
I	447m E	Tanks	1959	331413
I	448m E	Tanks	1959	341630
G	448m NW	Settling Tanks	1967	326892
G	449m NW	Tanks	1988	317387
G	451m NW	Tanks	-	316630
11	451m N	Tanks	1994	317389
I	452m E	Tanks	1959	339904

ID	Location	Land use	Dates present	Group ID
G	465m NW	Tanks	1988	317386
G	466m NW	Tanks	-	316627
G	483m NW	Tanks	-	316629
J	493m NE	Unspecified Tank	1980	320727

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**4**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 15 >**

ID	Location	Land use	Dates present	Group ID
G	328m N	Electricity Substation	1994	212258
G	335m N	Electricity Substation	1988	233548
9	367m SE	Electricity Substation	1985 - 1993	218311
L	473m SE	Electricity Substation	1974 - 1995	223126

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

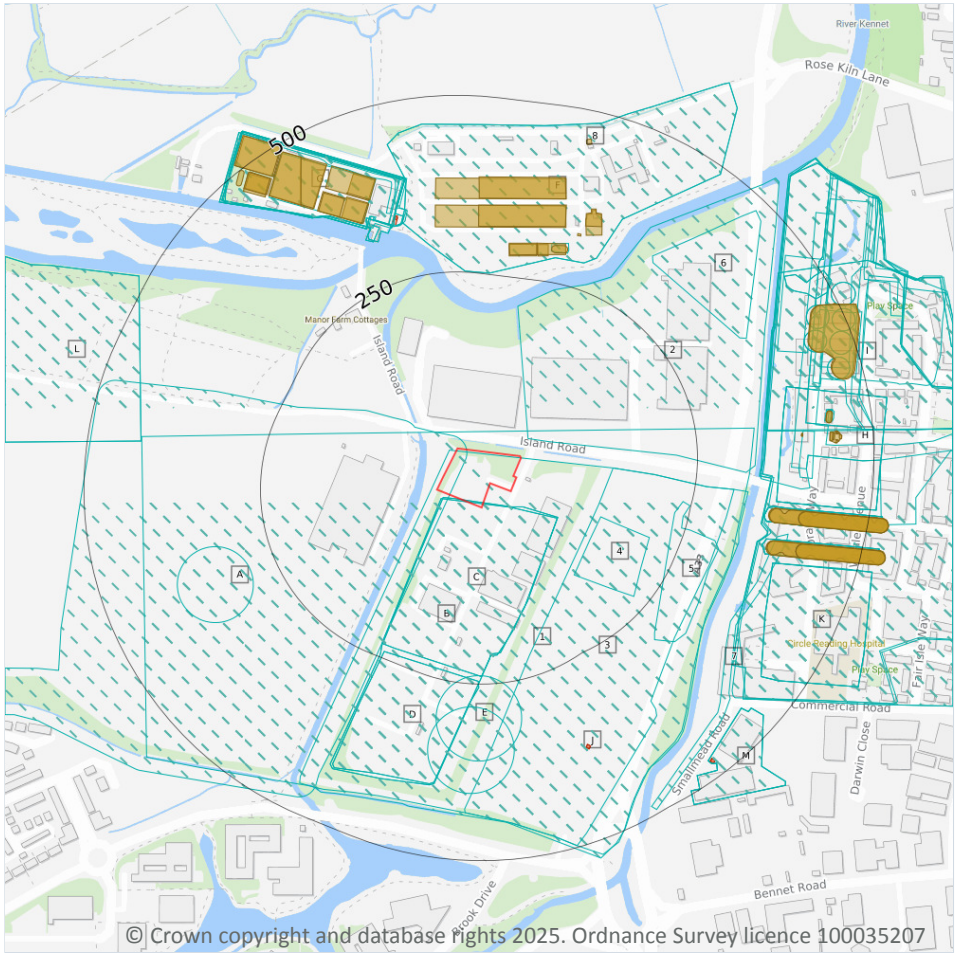
1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

2.1 Historical industrial land uses

Records within 500m	85

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Sewage Farm**	**1973**	**1953956**
A	**On site**	**Gravel Pit**	**1989**	**1927896**
B	**On site**	**Sewage Farm**	**1976**	**1934211**

ID	Location	Land Use	Date	Group ID
B	**On site**	**Disused Sludge Beds**	**1994**	**1921380**
B	**On site**	**Disused Sludge Beds**	**1989**	**1921380**
C	**On site**	**Sludge Beds**	**1979**	**1991502**
C	**On site**	**Sludge Beds**	**1973**	**1915363**
2	27m NE	Refuse Heap	1973	1888513
3	121m SE	Refuse Heap	1973	1888514
4	131m SE	Disused Sludge Beds	1973	1887741
5	230m E	Unspecified Heap	1962	1895158
D	236m S	Sludge Bed	1979	1934713
D	236m S	Sludge Bed	1973	1980380
E	238m S	Sewage Farm	1898	1962445
F	251m N	Water Treatment Works	1994	1942921
F	251m N	Water Treatment Works	1989	1942921
E	283m S	Sewage Farm	1938	1993720
A	288m SW	Gravel Pit	1994	1981201
F	294m N	Unspecified Tanks	1994	1890320
G	313m N	Water Works	1938	1915975
G	313m N	Water Works	1913	1955952
G	316m N	Pumping Station	1994	1991253
G	316m N	Pumping Station	1989	1991253
G	325m N	Corporation Water Works	1933	1901604
G	327m N	Water Works	1938	1958490
G	328m N	Unspecified Works	1962	1890945
G	328m N	Water Works	1973	1933655
G	330m N	Water Works	1979	1990769
6	330m NE	Unspecified Heap	1962	1895159
G	331m N	Unspecified Commercial/Industrial	1994	1916386
G	331m N	Unspecified Commercial/Industrial	1989	1916386

ID	Location	Land Use	Date	Group ID
H	339m E	Sewage Purification Works	1973	1970627
H	339m E	Sewage Works	1994	1939850
H	339m E	Sewage Works	1989	1939850
I	341m E	Unspecified Works	1962	1890957
H	343m E	Sewage Purification Works	1979	1983265
G	346m N	Railway Sidings	1933	1887611
G	346m NW	Filter Beds	1898	1889208
I	347m E	Sewage Works	1938	1995826
I	351m E	Corporation Sewage Works	1933	1888331
H	354m E	Unspecified Tanks	1994	1960389
H	354m E	Unspecified Tanks	1989	1960389
H	354m E	Unspecified Tanks	1979	1931373
H	354m E	Unspecified Tanks	1973	1959655
H	361m E	Unspecified Tanks	1994	1970048
H	361m E	Unspecified Tanks	1989	1970048
H	361m E	Unspecified Tanks	1979	1957342
H	361m E	Unspecified Tanks	1973	1934152
7	362m SE	Tramway Sidings	1913	1889120
H	366m E	Filter Bed	1994	1988840
H	366m E	Filter Bed	1989	1988840
H	366m E	Filter Bed	1979	1996882
K	383m E	Filter Bed	1994	1993913
K	383m E	Filter Bed	1989	1993913
K	383m E	Filter Bed	1979	1988362
I	383m E	Railway Sidings	1962	1960236
I	393m NE	Filter Beds	1979	1889210
H	394m E	Tramway Sidings	1913	1889115
I	407m E	Sewage Works	1938	1959517

ID	Location	Land Use	Date	Group ID
I	407m E	Sewage Works	1938	1959517
I	420m E	Railway Sidings	1938	1972752
L	425m W	Sewage Farm	1932	1979947
L	425m W	Sewage Farm	1932	1979947
I	427m E	Railway Sidings	1933	1937584
I	433m E	Unspecified Tank	1994	1979358
I	433m E	Unspecified Tank	1989	1979358
H	433m E	Unspecified Tanks	1938	1958885
H	435m E	Unspecified Tanks	1938	1980753
H	438m E	Unspecified Tanks	1933	1980753
I	447m NE	Unspecified Heaps	1994	1949810
I	447m NE	Unspecified Heaps	1989	1949810
M	448m SE	Unspecified Works	1994	1939200
M	448m SE	Unspecified Works	1989	1939200
M	448m SE	Unspecified Works	1979	1968467
I	449m NE	Unspecified Tank	1994	1999359
I	449m NE	Unspecified Tank	1989	1999359
I	452m E	Unspecified Tank	1994	1914719
I	452m E	Unspecified Tank	1989	1914719
I	466m E	Unspecified Tank	1994	1984877
I	466m E	Unspecified Tank	1989	1984877
I	474m E	Railway Sidings	1933	1933368
I	481m NE	Unspecified Tank	1994	1949004
I	481m NE	Unspecified Tank	1989	1949004
I	495m NE	Unspecified Tank	1994	1994286
I	495m NE	Unspecified Tank	1989	1994286

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	54

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22 >**

ID	Location	Land Use	Date	Group ID
F	280m N	Unspecified Tank	1994	333655
F	281m N	Unspecified Tank	1988	333655
F	284m N	Unspecified Tank	1994	343997
F	286m N	Unspecified Tank	1988	333655
F	292m N	Tanks	1994	316958
F	314m N	Tanks	1994	327404
F	316m N	Tanks	1988	327404
F	323m N	Tanks	1994	317388
F	326m N	Tanks	1994	341749
F	339m N	Tanks	1988	341749
G	346m NW	Settling Tanks	1967	326894
G	346m NW	Tanks	1994	317390
F	354m N	Tanks	1994	336751
F	356m N	Tanks	1988	336751
H	360m E	Tanks	1976	336687
H	360m E	Tanks	1993	343326
H	361m E	Tanks	1980	336687
H	367m E	Tanks	1976	343739
H	367m E	Tanks	1993	327970
G	368m NW	Settling Tanks	1967	326893
H	369m E	Tanks	1980	327970
G	373m N	Tanks	1994	339832
G	373m N	Tanks	1988	339832

ID	Location	Land Use	Date	Group ID
G	396m NW	Tanks	1994	336334
G	396m NW	Tanks	1988	331915
H	398m E	Tanks	1965	334776
H	399m E	Tanks	1957	341246
H	399m E	Tanks	1969	338262
H	399m E	Tanks	1959	340924
H	402m E	Tanks	1965	334415
H	402m E	Tanks	1969	334415
H	409m E	Tanks	1965	331143
H	409m E	Tanks	1969	331143
G	410m NW	Tanks	-	316628
H	435m E	Tanks	1957	328474
H	435m E	Tanks	1959	328474
I	438m E	Tanks	1993	340374
H	438m E	Tanks	1957	337681
H	438m E	Tanks	1959	339668
I	439m E	Tanks	1980	340374
H	443m E	Tanks	1959	331163
H	445m E	Tanks	1959	341100
H	447m E	Tanks	1959	335850
H	447m E	Tanks	1959	331413
H	448m E	Tanks	1959	341630
G	448m NW	Settling Tanks	1967	326892
G	449m NW	Tanks	1988	317387
G	451m NW	Tanks	-	316630
8	451m N	Tanks	1994	317389
H	452m E	Tanks	1959	339904
G	465m NW	Tanks	1988	317386

ID	Location	Land Use	Date	Group ID
G	466m NW	Tanks	-	316627
G	483m NW	Tanks	-	316629
I	493m NE	Unspecified Tank	1980	320727

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**8**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22 >**

ID	Location	Land Use	Date	Group ID
G	328m N	Electricity Substation	1994	212258
G	335m N	Electricity Substation	1988	233548
J	367m SE	Electricity Substation	1993	218311
J	368m SE	Electricity Substation	1985	218311
M	473m SE	Electricity Substation	1974	223126
M	474m SE	Electricity Substation	1987	223126
M	474m SE	Electricity Substation	1987	223126
M	474m SE	Electricity Substation	1995	223126

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

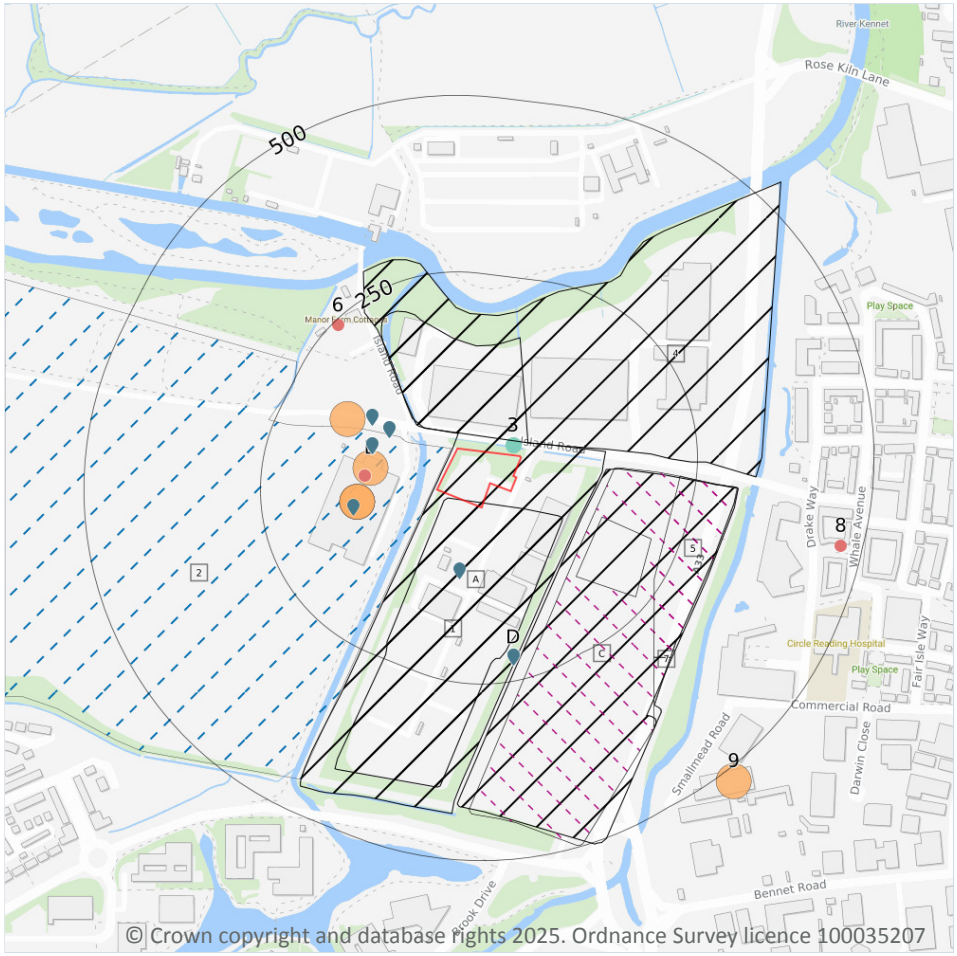
2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

- Active or recent landfill
- Historical landfill (EA/NRW)
- Historical landfill (BGS)
- Historical landfill (LA/OS)
- Historical waste sites
- Licensed waste sites
- Waste exemptions

3.1 Active or recent landfill

Records within 500m	1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Details	
2	6m NW	Operator: Cemex Uk Materials Limited Site Address: Cemex Uk Materials Limited, Smallmead Farm, Burghfield, Reading, Berkshire, RG30 3UR	WML Number: 86029 EPR Reference: 650934 Landfill type: A04: Household, Commercial & Industrial Waste Landfill Status: Closure IPPC Reference: - EPR Number: EA/EPR/FB3105XW

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	1

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Address	BGS Number	Risk	Waste Type
3	14m N	Island Road Tip, Island Road, Reading	567	Risk to major and minor aquifer	N/A

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	3

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Site address	Source	Data type
C	121m SE	Refuse Tip	1966 mapping	Polygon
5	225m E	Refuse Tip	1965 mapping	Polygon
7	310m SE	Refuse Tip	1966 mapping	Polygon

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	4

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Details		
1	**On site**	**Site Address: Sludge Beds, Reading, Berkshire** **Licence Holder Address: -**	**Waste Licence: -** **Site Reference: TP0519, RDG13** **Waste Type: -** **Environmental Permitting Regulations (Waste) Reference: -** **Licence Issue: -** **Licence Surrender: -**	**Operator: -** **Licence Holder: -** **First Recorded -** **Last Recorded: -**
A	**On site**	**Site Address: Island Road Tip, Island Road, Reading, Berkshire** **Licence Holder Address: -**	**Waste Licence: -** **Site Reference: -** **Waste Type: Inert, Industrial, Commercial, Liquid sludge** **Environmental Permitting Regulations (Waste) Reference: -** **Licence Issue: -** **Licence Surrender: -**	**Operator: County Borough of Reading** **Licence Holder: -** **First Recorded 17/11/1970** **Last Recorded: 22/03/1975**
4	20m N	Site Address: Island Road, Reading, Berkshire Licence Holder Address: -	Waste Licence: Yes Site Reference: RDG9, 54/12/4/23, TP0429, OCC/104 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 10/01/1978 Licence Surrender: 05/12/1984	Operator: - Licence Holder: Mr J Bucknell First Recorded 31/12/1977 Last Recorded: 31/12/1985
C	107m SE	Site Address: Smallmead Stadium, Reading, Berkshire Licence Holder Address: -	Waste Licence: Yes Site Reference: TP0166, RDG5, 54/12/4/43 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 31/12/1980 Licence Surrender: -	Operator: Hall Aggregates Limited Licence Holder: - First Recorded - Last Recorded: -

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	**5**

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Address	Further Details	Date
B	74m W	Site Address: Island Road, READING, Berkshire, RG2 0RP	Type of Site: Recycling Site Mechanical & Electrical Planning application reference: N/A Description: Scheme comprises the installation of mechanical and electrical for a new recycling site. This will include control system and units and screening works. Data source: Historic Planning Application Data Type: Point	-
B	90m W	Site Address: Civic Amenity Site, Island Road, READING, Berkshire, RG2 0RP	Type of Site: Waste Management Centre Planning application reference: 06/00870/FUL Description: Scheme comprises construction of a waste management centre and use of land as a construction compound. An application (ref: 06/00870/FUL) for detailed planning permission was granted by Reading B.C. Completion due in June 2008. Data source: Historic Planning Application Data Type: Point	16/03/2007
B	90m W	Site Address: Smallmead Tip, READING, Berkshire, RG1	Type of Site: Waste Recycling Centre Planning application reference: N/A Description: Scheme comprises the installation of a new waste recycling centre, with an output of 175 thousand tonnes. Data source: Historic Planning Application Data Type: Point	01/05/1997
B	133m NW	Site Address: Island Road, READING, Berkshire, RG2 0RP	Type of Site: Recycling Centre Planning application reference: 95/0712 Description: Scheme comprises the construction of a new recycling centre. This will include process and separation plants and sludge tanks, this will process 125 thousand tonnes of waste a year. A detailed planning application has been submitted to Reading Borough Council and will go to committee 11th January, 1996. The final decision will be made by Berkshire County Council. Data source: Historic Planning Application Data Type: Point	-
9	493m SE	Site Address: Smallmead Road, READING, Berkshire, RG2 0QS	Type of Site: Waste Transfer Station Planning application reference: N/A Description: Scheme to provide mineral waste transfer station. An application (ref: -) for Detailed Planning permission was submitted to Reading B.C. on 14th May 1993. Design and Build tenders are currently being invited return date not available. Data source: Historic Planning Application Data Type: Point	-

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m **15**

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Details		
A	95m S	Site Name: Reading Sludge Treatment Centre - EPR/MP3338LU Site Address: Reading Sewage Treatment Centre, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 664443 EPR reference: EA/EPR/MP3338LU Operator: Thames Water Utilities Limited Waste Management licence No: 400034 Annual Tonnage: 0	Issue Date: 03/04/2013 Effective Date: 03/04/2013 Modified: 25/07/2023 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	99m NW	Site Name: Smallmead Waste Management Centre Site Address: Land/premises At, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: 75kte HCI Waste TS + treatment + asbestos Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRG001 EPR reference: BP3298EE/A001 Operator: W R G Berkshire Ltd Waste Management licence No: 100243 Annual Tonnage: 0	Issue Date: 31/03/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	99m NW	Site Name: Smallmead Waste Management Centre Site Address: Land/premises At, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRG001 EPR reference: EA/EPR/BP3298EE/A001 Operator: W R G Berkshire Ltd Waste Management licence No: 100243 Annual Tonnage: 295000	Issue Date: 31/03/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
B	99m NW	Site Name: Smallmead Waste Management Centre Site Address: Smallmead Waste Management Centre, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRG001 EPR reference: EA/EPR/BP3298EE/V002 Operator: F C C Environment (Berkshire) Limited Waste Management licence No: 100243 Annual Tonnage: 295000	Issue Date: 31/03/2008 Effective Date: - Modified: 12/11/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
B	111m NW	Site Name: Smallmead Ca Site 2 Site Address: Reading Borough Council, Smallmead CAS, Island road, Reading, Berks, RG2 0RP Correspondence Address: Mr Andrew Withy c/o Reading CC, Civic Centre, Reading, Berkshire, RG1 7TD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: REA004 EPR reference: - Operator: Reading Borough Council Waste Management licence No: 86007 Annual Tonnage: 0	Issue Date: 23/03/1993 Effective Date: 22/01/2000 Modified: 31/05/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
B	111m NW	Site Name: Smallmead C A Site 2 Site Address: Reading Borough Council, Smallmead Ca Site, Island road, Reading, Berks, RG2 0RP Correspondence Address: Ground Floor West, Pavilion Drive, Northampton Business Park, Northampton, Northants, NN4 7RG	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RE3001 EPR reference: - Operator: R E 3 Ltd Waste Management licence No: 86007 Annual Tonnage: 0	Issue Date: 23/03/1993 Effective Date: 13/01/2007 Modified: 12/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred

ID	Location	Details		
B	111m NW	Site Name: Smallmead Civic Amenity Site Site Address: Reading Borough Council, Smallmead Civic Amenity Site, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RE3001 EPR reference: EA/EPR/MP3999EA/S007 Operator: R E 3 Ltd Waste Management licence No: 86007 Annual Tonnage: 0	Issue Date: 23/03/1993 Effective Date: 13/01/2007 Modified: 12/12/2003 Surrendered Date: Feb 1 2013 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered
B	111m NW	Site Name: Smallmead Civic Amenity Site Site Address: Smallmead Civic Amenity Site, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: Household Waste Amenity Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 646184 EPR reference: EA/EPR/MP3999EA Operator: R E 3 Limited Waste Management licence No: 86007 Annual Tonnage: 0	Issue Date: 23/03/1993 Effective Date: 23/03/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Surrendered
B	121m W	Site Name: Smallmead Waste Management Centre Site Address: Smallmead Waste Management Centre, Island Road, Reading, Berkshire, RG2 0RP Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 638727 EPR reference: EA/EPR/BP3298EE Operator: Fcc Environment (Berkshire) Limited Waste Management licence No: 100243 Annual Tonnage: 295000	Issue Date: 31/03/2008 Effective Date: 31/03/2008 Modified: 20/12/2023 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
B	128m NW	Site Name: Burghfield Landfill Site Address: RMC Aggregates (Southern) Ltd, Smallmead Farm, Island Road, Burghfield, Reading, Berkshire, RG30 3UR Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste Landfill Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RMC001 EPR reference: EA/EPR/UP3699ED/V006 Operator: Biffa Waste Services Ltd Waste Management licence No: 86028 Annual Tonnage: 250000	Issue Date: 10/10/1980 Effective Date: - Modified: 03/07/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC
B	128m NW	Site Name: Burghfield Landfill Site Address: Smallmead Farm, Island Road, Burghfield, Reading, Berkshire, RG30 3UR Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste Landfill Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 645028 EPR reference: EA/EPR/UP3699ED Operator: Biffa Waste Services Limited Waste Management licence No: 86028 Annual Tonnage: 250000	Issue Date: 10/10/1980 Effective Date: 10/10/1980 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Superceded
D	217m S	Site Name: Island Road Transfer Station Site Address: John Mould, Island Road, Reading, Berks, RG2 0RP Correspondence Address: John Mould, Hydecrete Pit, Pingewood Road North, Burghfield, Reading, Berks, RG3 3XN	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MOU001 EPR reference: - Operator: John Mould Waste Management licence No: 86010 Annual Tonnage: 300000	Issue Date: 13/05/1992 Effective Date: - Modified: 13/06/1995 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	217m S	Site Name: Island Road Transfer Station Site Address: John Mould, Island Road, Reading, Berks, RG2 0RP Correspondence Address: John Mould, Hydecrete Pit, Pingewood Road North, Burghfield, Reading, Berks, RG3 3XN	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MOU001 EPR reference: - Operator: Mould John Waste Management licence No: 86010 Annual Tonnage: 300000	Issue Date: 13/05/1992 Effective Date: - Modified: 13/06/1995 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

ID	Location	Details		
D	217m S	Site Name: Smallmead Transfer Station Site Address: John Mould, Reading Speedway Stadium, A33 Relief Road, Reading, Berkshire, RG2 0JL Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MOU001 EPR reference: EA/EPR/CP3698LG/S003 Operator: Mould J Waste Management licence No: 86010 Annual Tonnage: 0	Issue Date: 13/05/1992 Effective Date: - Modified: 13/06/1995 Surrendered Date: Nov 28 2008 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered
D	217m S	Site Name: Smallmead Transfer Station Site Address: Reading Speedway Stadium, A33 Relief Road, Reading, Berkshire, RG2 0JL Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 646842 EPR reference: EA/EPR/CP3698LG Operator: J Mould Waste Management licence No: 86010 Annual Tonnage: 0	Issue Date: 13/05/1992 Effective Date: 13/05/1992 Modified: - Surrendered Date: 13/05/1992 Expiry Date: - Cancelled Date: - Status: Surrendered

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m **4**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

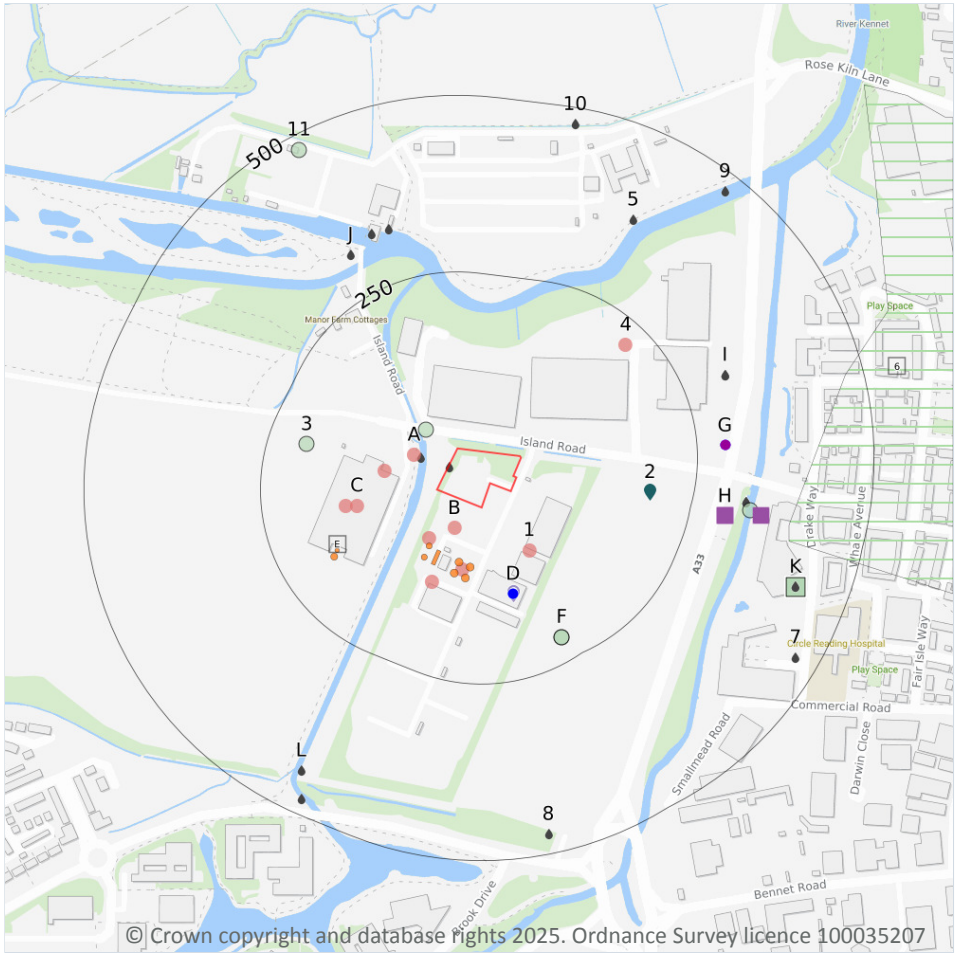
Features are displayed on the Waste and landfill map on **page 30 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
B	104m W	-	WEX269747	Using waste exemption	Not on a farm	Use of waste in construction
B	104m W	Island Road, Reading, Rg2 0rp	WEX358434	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
6	243m NW	Reading Stw, Island Road, Reading, Reading, Rg2 0rp	WEX003484	Treating waste exemption	Not on a farm	Treatment of waste aerosol cans

ID	Location	Site	Reference	Category	Sub-Category	Description
8	469m E	-	WEX418067	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m	10

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 40 >

ID	Location	Company	Address	Activity	Category
B	42m S	Sewage Works	Berkshire, RG2	Waste Storage, Processing and Disposal	Infrastructure and Facilities
A	51m NW	Electricity Sub Station	Berkshire, RG2	Electrical Features	Infrastructure and Facilities
B	68m S	Chimney	Berkshire, RG2	Chimneys	Industrial Features

ID	Location	Company	Address	Activity	Category
A	79m W	Electricity Sub Station	Berkshire, RG2	Electrical Features	Infrastructure and Facilities
1	87m S	Chimney	Berkshire, RG2	Chimneys	Industrial Features
B	92m S	Chimney	Berkshire, RG2	Chimneys	Industrial Features
C	116m W	R E 3	Smallmead Recycling Centre, Island Road, Reading, Berkshire, RG2 0RP	Recycling, Reclamation and Disposal	Recycling Services
B	124m S	Chimney	Berkshire, RG2	Chimneys	Industrial Features
C	132m W	Recycling Centre	Berkshire, RG2	Recycling Centres	Infrastructure and Facilities
4	218m NE	Electricity Sub Station	Berkshire, RG2	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	**9**

Current or recent tanks identified from the Ordnance Survey NGD.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Tank description	Activity	Date first identified
B	74m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
B	78m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
B	79m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
B	80m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
B	91m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
B	95m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
B	97m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	22/09/2014
E	162m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	29/02/2008
E	169m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	09/10/2018

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m	1

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Company	Address	Operational status	Tier
6	391m E	Gillette Uk Ltd	Gillette Uk Ltd, Manor Farm Ind Est, Off Basingstoke Road, Reading, RG2 0QE	Historical NIHHS Site	-

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed industrial activities (Part A(1))

Records within 500m	2

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Details	
D	130m S	Operator: THAMES WATER UTILITIES LTD Installation Name: READING COMBINED HEAT AND POWER PLANT Process: ASSOCIATED PROCESS Permit Number: VP3134ZV Original Permit Number: MP3338LU	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 01/04/2013 Status: DETERMINATION

ID	Location	Details	
D	130m S	Operator: Thames Water Utilities Ltd Installation Name: Reading C H P Process: COMBUSTION; WASTE DERIVED FUEL =>3MW BUT 50MW Permit Number: MP3338LU Original Permit Number: MP3338LU	EPR Reference: - Issue Date: 19/12/2006 Effective Date: 19/12/2006 Last date noted as effective: 21/03/2023 Status: Superceded

This data is sourced from the Environment Agency and Natural Resources Wales.

4.12 Licensed pollutant release (Part A(2)/B)

Records within 500m	**1**

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Address	Details	
2	189m E	J Mould (Demolition) Ltd, Island Road, RG2 0QX	Process: Other Mineral Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m	**0**

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Licensed Discharges to controlled waters

Records within 500m	**35**

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Address	Details	
A	**On site**	**SMALLMEAD RECYCLING PLANT, ISLAND R, SMALLMEAD RECYCLING PLANT, ISLAND ROAD, READING, BERKSHIRE**	**Effluent Type: TRADE DISCHARGES - SITE DRAINAGE** **Permit Number: CATM.2926** **Permit Version: 1** **Receiving Water: FOUDRY BR. FLOOD RELIEF CH'NEL**	**Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88)** **Issue date: 24/06/1997** **Effective Date: 24/06/1997** **Revocation Date: -**
A	40m NW	NEW CIVIC AMENITY SITE, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CAWM.1451 Permit Version: 1 Receiving Water: TRIBUTARY OF RIVER KENNET	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 09/02/2007 Effective Date: 09/02/2007 Revocation Date: 04/03/2009
G	289m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CTCR.0327 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 12/06/1958 Effective Date: 31/01/1985 Revocation Date: 08/04/2005
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 5 Receiving Water: FOUDRY BROOK	Status: VARIED UNDER EPR 2010 Issue date: 17/07/2018 Effective Date: 17/07/2018 Revocation Date: 16/01/2019
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 2 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 13/02/2006 Effective Date: 13/02/2006 Revocation Date: 28/06/2007
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 4 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 28/01/2009 Effective Date: 01/04/2009 Revocation Date: 16/07/2018
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 5 Receiving Water: FOUDRY BROOK	Status: VARIED UNDER EPR 2010 Issue date: 17/07/2018 Effective Date: 17/07/2018 Revocation Date: 16/01/2019

ID	Location	Address	Details	
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/05/2005 Effective Date: 31/03/2005 Revocation Date: 12/02/2006
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 4 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 28/01/2009 Effective Date: 01/04/2009 Revocation Date: 16/07/2018
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 3 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 29/06/2007 Effective Date: 29/06/2007 Revocation Date: 31/03/2009
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 3 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 29/06/2007 Effective Date: 29/06/2007 Revocation Date: 31/03/2009
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 2 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 13/02/2006 Effective Date: 13/02/2006 Revocation Date: 28/06/2007
H	300m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 26/05/2005 Effective Date: 31/03/2005 Revocation Date: 12/02/2006
I	312m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CTCR.1965 Permit Version: 3 Receiving Water: FOUDRY BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 21/12/2000 Effective Date: 21/12/2000 Revocation Date: 08/04/2005

ID	Location	Address	Details	
I	312m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CTCR.1965 Permit Version: 2 Receiving Water: FOUDRY BROOK	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 28/02/1983 Effective Date: 18/12/1998 Revocation Date: 20/12/2000
I	312m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CTCR.1965 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 28/02/1983 Effective Date: 31/01/1985 Revocation Date: 17/12/1998
J	313m NW	FOBNEY WATER TREATMENT WORKS, FOBNEY WATER TREATMENT WORKS, ROSE KILN LANE, READING, BERKSHIRE, RG2 0SF	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CATS.0029 Permit Version: 1 Receiving Water: RIVER KENNET	Status: NEW CONSENT, (WATER INDUSTRY ACT 1991, SECTION 166) Issue date: 18/10/1996 Effective Date: 18/10/1996 Revocation Date: 31/12/1996
H	325m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 6 Receiving Water: FOUDRY BROOK	Status: VARIED UNDER EPR 2010 Issue date: 17/01/2019 Effective Date: 17/01/2019 Revocation Date: 21/12/2022
H	325m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 6 Receiving Water: FOUDRY BROOK	Status: VARIED UNDER EPR 2010 Issue date: 17/01/2019 Effective Date: 17/01/2019 Revocation Date: 21/12/2022
H	325m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 7 Receiving Water: FOUDRY BROOK	Status: VARIED UNDER EPR 2010 Issue date: 19/12/2022 Effective Date: 22/12/2022 Revocation Date: -
H	325m E	READING SEWAGE TREATMENT WORKS, ISLAND ROAD, READING, BERKSHIRE, RG2 0RP	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: CAWM.0942 Permit Version: 7 Receiving Water: FOUDRY BROOK	Status: VARIED UNDER EPR 2010 Issue date: 19/12/2022 Effective Date: 22/12/2022 Revocation Date: -

ID	Location	Address	Details	
J	325m N	FOBNEY FISH FARM, FOBNEY MEAD, ROSE, FOBNEY FISH FARM, FOBNEY MEAD, R, OSE KILN LANE, READING, BERKSHIR, E	Effluent Type: AGRICULTURE - FISH FARMING - NOT WATER COMPANY Permit Number: CSSM.0003 Permit Version: 2 Receiving Water: RIVER KENNET	Status: SURRENDERED UNDER EPR 2010 Issue date: 03/11/2010 Effective Date: 03/11/2010 Revocation Date: 20/07/2012
J	328m N	FOBNEY FISH FARM, FOBNEY MEAD, ROSE, FOBNEY FISH FARM, FOBNEY MEAD, R, OSE KILN LANE, READING, BERKSHIR, E	Effluent Type: AGRICULTURE - FISH FARMING - NOT WATER COMPANY Permit Number: CSSM.0003 Permit Version: 1 Receiving Water: RIVER KENNET	Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 04/09/1997 Effective Date: 04/09/1997 Revocation Date: 02/11/2010
H	349m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CNTW.0661 Permit Version: 3 Receiving Water: FOUDRY BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 17/08/1990 Effective Date: 18/12/1998 Revocation Date: 08/04/2005
H	349m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CNTW.0661 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: TRANSFERRED FROM WATER ACT 1989 Issue date: 17/08/1990 Effective Date: 17/08/1990 Revocation Date: 29/09/1994
H	349m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CNTW.0661 Permit Version: 2 Receiving Water: FOUDRY BROOK	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 17/08/1990 Effective Date: 30/09/1994 Revocation Date: 17/12/1998
5	371m NE	FOBNEY WATER TREATMENT WORKS, FOBNEY WATER TREATMENT WORKS, ROSE KILN LANE, READING, BERKSHIRE, RG2 0SF	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CATS.0030 Permit Version: 1 Receiving Water: RIVER KENNET	Status: NEW CONSENT, (WATER INDUSTRY ACT 1991, SECTION 166) Issue date: 18/10/1996 Effective Date: 18/10/1996 Revocation Date: 31/12/1996
K	424m E	READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CTCR.0326 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: REVOKED - UNSPECIFIED Issue date: 12/06/1958 Effective Date: 31/01/1985 Revocation Date: 15/02/1991

ID	Location	Address	Details	
K	424m E	MANOR FARM STW, READING, BERKS, MANOR FARM STW, READING, BERKS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: CTCR.1327 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: REVOKED - UNSPECIFIED Issue date: 12/02/1973 Effective Date: 31/01/1985 Revocation Date: 16/08/1990
L	442m SW	GREEN PARK OUTLET A, GREEN PARK, RE, GREEN PARK OUTLET A, GREEN PARK, READING, BERKSHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CATM.3309 Permit Version: 1 Receiving Water: FOUDRY BR. FLOOD RELIEF CH'NEL	Status: CONSENT REVOKED - DISCHARGE CEASED (SECTION 37(1)) Issue date: 15/07/1998 Effective Date: 15/07/1998 Revocation Date: 02/10/1999
7	467m SE	LAND BETWEEN CIRCUIT LANE PS, & MAN, LAND BETWEEN CIRCUIT LANE PS, &, MANOR FARM STW, READING	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CNTM.0374 Permit Version: 1 Receiving Water: HOLY BROOK	Status: REVOKED - UNSPECIFIED Issue date: 24/06/1992 Effective Date: 24/06/1992 Revocation Date: 29/10/1992
8	472m S	GREEN PARK OUTLET B, GREEN PARK, RE, GREEN PARK OUTLET B, GREEN PARK, READING, BERKSHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CATM.3310 Permit Version: 1 Receiving Water: FOUDRY BROOK	Status: CONSENT REVOKED - DISCHARGE CEASED (SECTION 37(1)) Issue date: 15/07/1998 Effective Date: 15/07/1998 Revocation Date: 08/04/1999
9	474m NE	FOBNEY WATER TREATMENT WORKS, FOBNEY WATER TREATMENT WORKS, ROSE KILN LANE, READING, BERKSHIRE, RG2 0SF	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CTWC.2479 Permit Version: 1 Receiving Water: RIVER KENNET	Status: REVOKED - UNSPECIFIED Issue date: 08/06/1988 Effective Date: 08/06/1988 Revocation Date: 11/01/1989
10	476m N	FOBNEY AWTW CONSTRUCTION, FOBNEY AWTW CONSTRUCTION, ROSE KILN LANE, READING, BERKSHIRE, RG20 0HP	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CAWM.1387 Permit Version: 1 Receiving Water: TRIBUTARY OF THE RIVER KENNET	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 05/07/2006 Effective Date: 05/07/2006 Revocation Date: 31/07/2007
L	478m SW	BUSINESS PARK, SMALLMEAD FARM, SMAL, BUSINESS PARK, SMALLMEAD FARM, S, MALLMEAD ROAD, PINGEWOOD, READIN, G, BERKS	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: CATM.3041 Permit Version: 1 Receiving Water: FOUDRY BR. FLOOD RELIEF CH'NEL	Status: REVOKED - UNSPECIFIED Issue date: 02/10/1997 Effective Date: 02/10/1997 Revocation Date: 31/12/1998

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to surface waters (Red List)

Records within 500m	3

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Address	Details	
H	300m E	THAMES WATER UTILITIES LTD, READING SEWAGE TREATMENT WORKS, READING, BERKSHIRE	Permit Number: CAWM.0942 Permit Version: 2 Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage Disposal Works - water company	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Catchment: - Approval Date: 13/02/2006
H	300m E	THAMES WATER UTILITIES LTD, READING SEWAGE TREATMENT WORKS, READING, BERKSHIRE	Permit Number: CAWM.0942 Permit Version: 1 Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage Disposal Works - water company	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Catchment: - Approval Date: 31/03/2005
H	349m E	THAMES WATER UTILITIES LIMITED, READING STW, MANOR FARM ROAD, READI, READING STW, MANOR FARM ROAD, RE, ADING, BERKSHIRE	Permit Number: CNTW.0661 Permit Version: 3 Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Discharge Type: Sewage Disposal Works - water company	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Catchment: - Approval Date: 18/12/1998

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 1 Dangerous Substances

Records within 500m	2

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Name	Status	Receiving Water	Authorised Substances
K	424m E	Reading Stw	Active	-	-
K	424m E	Reading Stw	Active	Kennet	Cadmium

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 List 2 Dangerous Substances

Records within 500m	8

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Name	Status	Receiving Water	Authorised Substances
K	424m E	Unimet Enamellers Ltd	Active	Kennet	Chromium, Copper, Nickel, Zinc
K	424m E	Reading Scientific Services Ltd	Active	-	Zinc
K	424m E	Veolia Es West Berkshire Ltd	Active	-	Chromium, Copper, Lead, Nickel, Zinc
K	424m E	Quick Circuits Ltd, 1 Lovelock Rd, Reading	Active	Kennet	Chromium, Copper, Lead, Nickel
K	424m E	Precision Aircraft Ltd, 215 Cardiff Rd, Reading	Active	Kennet	Chromium, Copper, Cyanide, Lead, Nickel, Zinc
K	424m E	Oxkem Ltd, Loverock Rd, Reading	Active	Kennet	Chromium, Copper, Lead, Nickel
K	424m E	Moog Componants Group Ltd, Suttons Business Park, Reading	Active	Kennet	Chromium, Copper, Cyanide, Lead, Nickel, Zinc
K	424m E	Reading Stw, Thames Water Utilities	Active	Kennet	Iron

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution Incidents (EA/NRW)

Records within 500m	6

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 40 >**

ID	Location	Details	
A	52m NW	Incident Date: 09/10/2024 Incident Identification: 2313037 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
3	196m W	Incident Date: 15/11/2008 Incident Identification: 635254 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 1 (Major) Air Impact: Category 3 (Minor)
F	216m SE	Incident Date: 27/04/2002 Incident Identification: 75161 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
F	216m SE	Incident Date: 27/04/2002 Incident Identification: 75161 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
H	333m E	Incident Date: 09/12/2001 Incident Identification: 47376 Pollutant: Sewage Materials Pollutant Description: Final Effluent	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
11	479m NW	Incident Date: 03/07/2002 Incident Identification: 89041 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.20 Pollution inventory substances

Records within 500m	26

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year

available.

Features are displayed on the Current industrial land use map on **page 40 >**

ID: D, Location: 130m S, Permit: MP3338LU
Operator: Thames Water Utilities Limited
Activity: ASSOCIATED PROCESS
Address: Reading STW CHP Plant Island Road Reading Berkshire RG2 0RP
Sector: Biowaste Treatment, Sub-sector: Biowaste Treatment
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Carbon monoxide	100000kg	19002.29kg

ID: D, Location: 130m S, Permit: MP3338LU
Operator: Thames Water Utilities Limited
Activity: ASSOCIATED PROCESS
Address: Reading STW CHP Plant Island Road Reading Berkshire RG2 0RP
Sector: Biowaste Treatment, Sub-sector: Biowaste Treatment
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Nitrous oxide	10000kg	3441.18kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Di(2-ethylhexyl)phthalate (DEHP)	0.1kg	45.6kg

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ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Anthracene	0.1kg	0.95kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Copper	20kg	343kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Halogenated organic compounds - as AOX	1000kg	2650kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Nickel	20kg	137kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Arsenic	5kg	9.13kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Ammonia	1000kg	Below Reporting Threshold
Controlled Waters	Brominated diphenylethers - penta-, octa- and deca-BDE	0.1kg	Below Reporting Threshold
Controlled Waters	Chlorides - as Cl	2000000kg	Below Reporting Threshold
Controlled Waters	Benzo(a)pyrene	1kg	Below Reporting Threshold
Controlled Waters	Benzo(b)fluoranthene	1kg	Below Reporting Threshold
Controlled Waters	Benzo(k)fluoranthene	1kg	Below Reporting Threshold
Controlled Waters	Octylphenols and octylphenol ethoxylates	1kg	Below Reporting Threshold
Air	Nitrous oxide	10000kg	Below Reporting Threshold
Air	Chloroform (Trichloromethane)	100kg	Below Reporting Threshold
Controlled Waters	Carbon tetrachloride (Tetrachloromethane)	1kg	Below Reporting Threshold
Controlled Waters	Chloroform (Trichloromethane)	5kg	Below Reporting Threshold
Air	Carbon dioxide	10000000kg	Below Reporting Threshold
Controlled Waters	Cyanides - as CN	50kg	Below Reporting Threshold

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Dichloromethane (DCM) (Methylene chloride)	10kg	Below Reporting Threshold
Controlled Waters	Organotin compounds - as Sn	5kg	Below Reporting Threshold
Controlled Waters	Phenols - total as C	20kg	Below Reporting Threshold
Controlled Waters	Chromium	20kg	Below Reporting Threshold
Controlled Waters	Dioxins and furans (PCDDs/PCDFs) - as WHO TEQ	0.0001kg	Below Reporting Threshold
Controlled Waters	Dioxins and furans (PCDDs/PCDFs) - as ITEQ	0.0001kg	Below Reporting Threshold

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Methane	10000kg	12000kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Fluorides - as F	2000kg	5580kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Benzo(g,h,i)perylene	0.1kg	0.31kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Naphthalene	1kg	26.2kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Diuron	0.05kg	2.1kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Mercury	0.1kg	0.65kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Indeno(1,2,3-cd)pyrene	1kg	1.12kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Nonylphenols and nonylphenol ethoxylates	1kg	62.9kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Phosphorus - as total P	5000kg	21500kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Cadmium	1kg	2.79kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Fluoranthene	0.1kg	0.2kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Tributyltin and compounds - as TBT	0.005kg	0.0169kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Zinc	100kg	1050kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Lead	20kg	27kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Asbestos	0.1kg	1.98kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Total organic carbon (TOC)	50000kg	110000kg

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Controlled Waters	Nitrogen - as total N	50000kg	514000kg

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory waste transfers

Records within 500m	**1**

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on **page 40 >**

ID: G, Location: 289m E, Permit: CAWM.0942
Operator: THAMES WATER UTILITIES LTD
Activity: -
Address: READING STW RG2 0RP
Sector: Water Industry, Sub-sector: Water Industry
Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D1	Deposit into or onto land (eg landfill, etc.)	201.78	Absolute Value	19 08 01	screenings	No
R10	Land treatment resulting in benefit to agriculture or ecological improvement	3692.93	Absolute Value	19 08 05	sludges from treatment of urban waste water	No

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

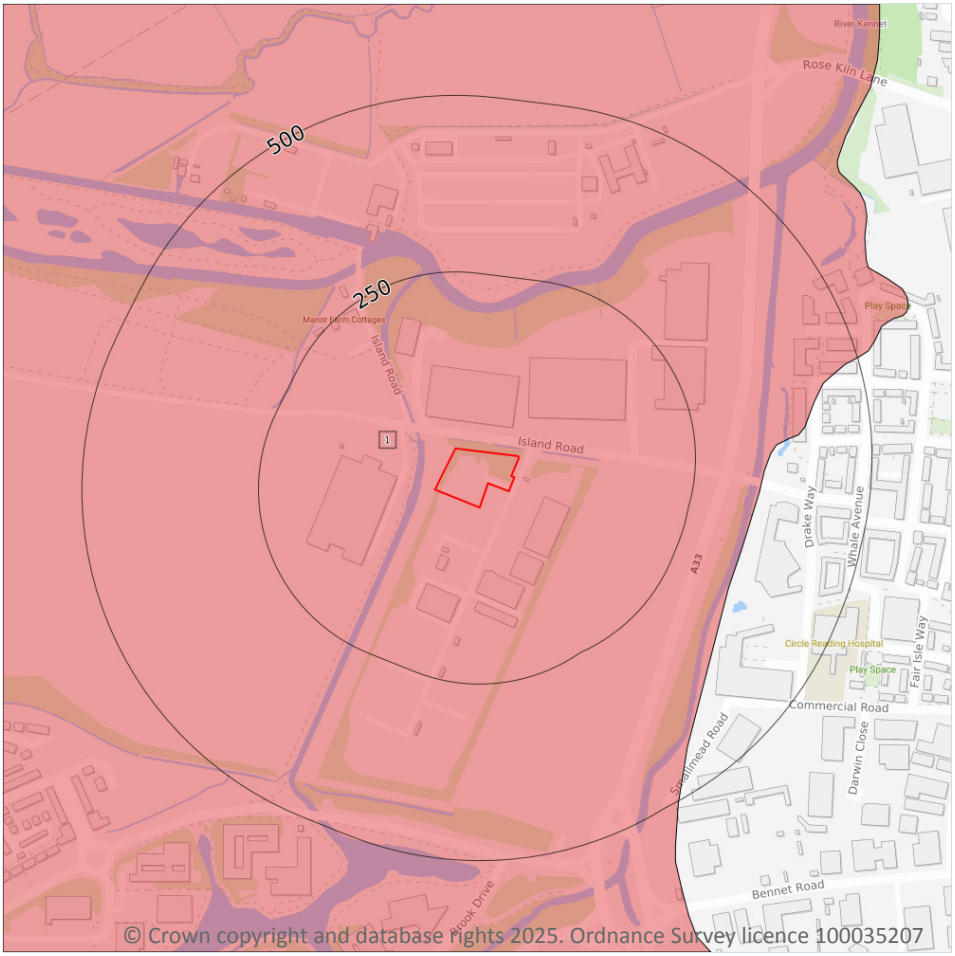
4.22 Pollution inventory radioactive waste

Records within 500m	**0**

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	1

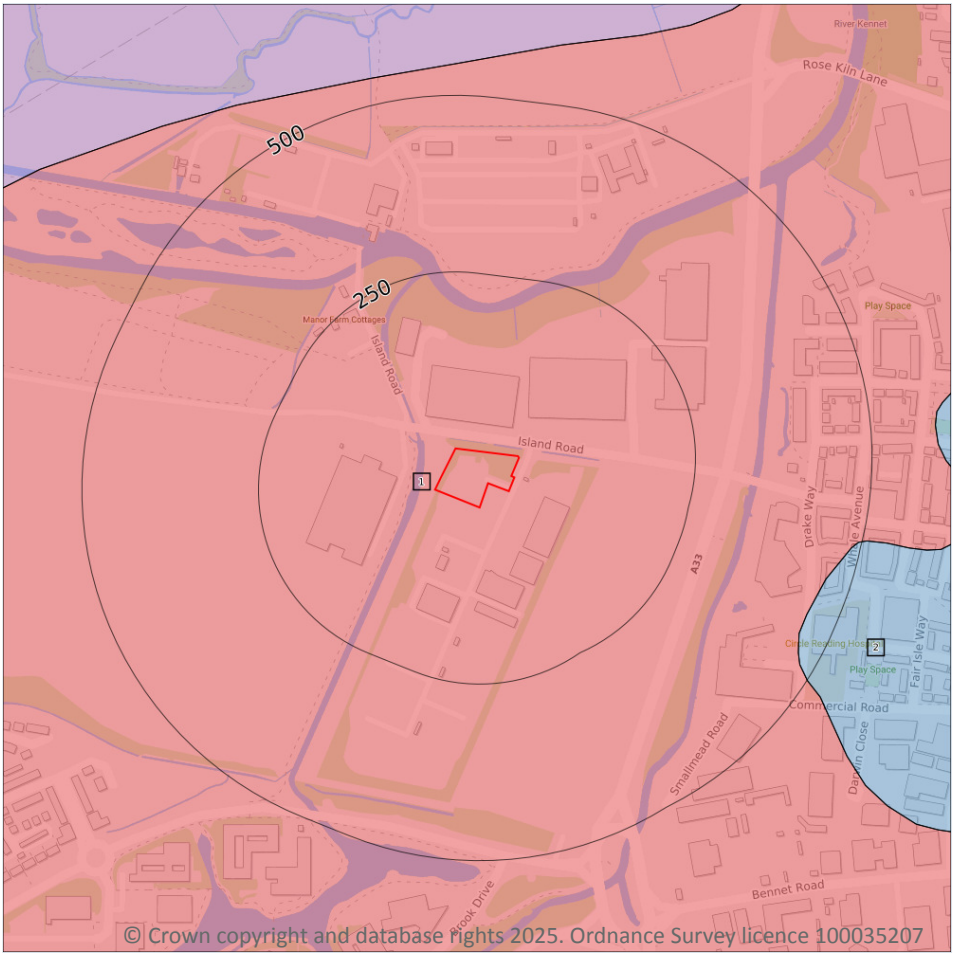
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 62 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**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**

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

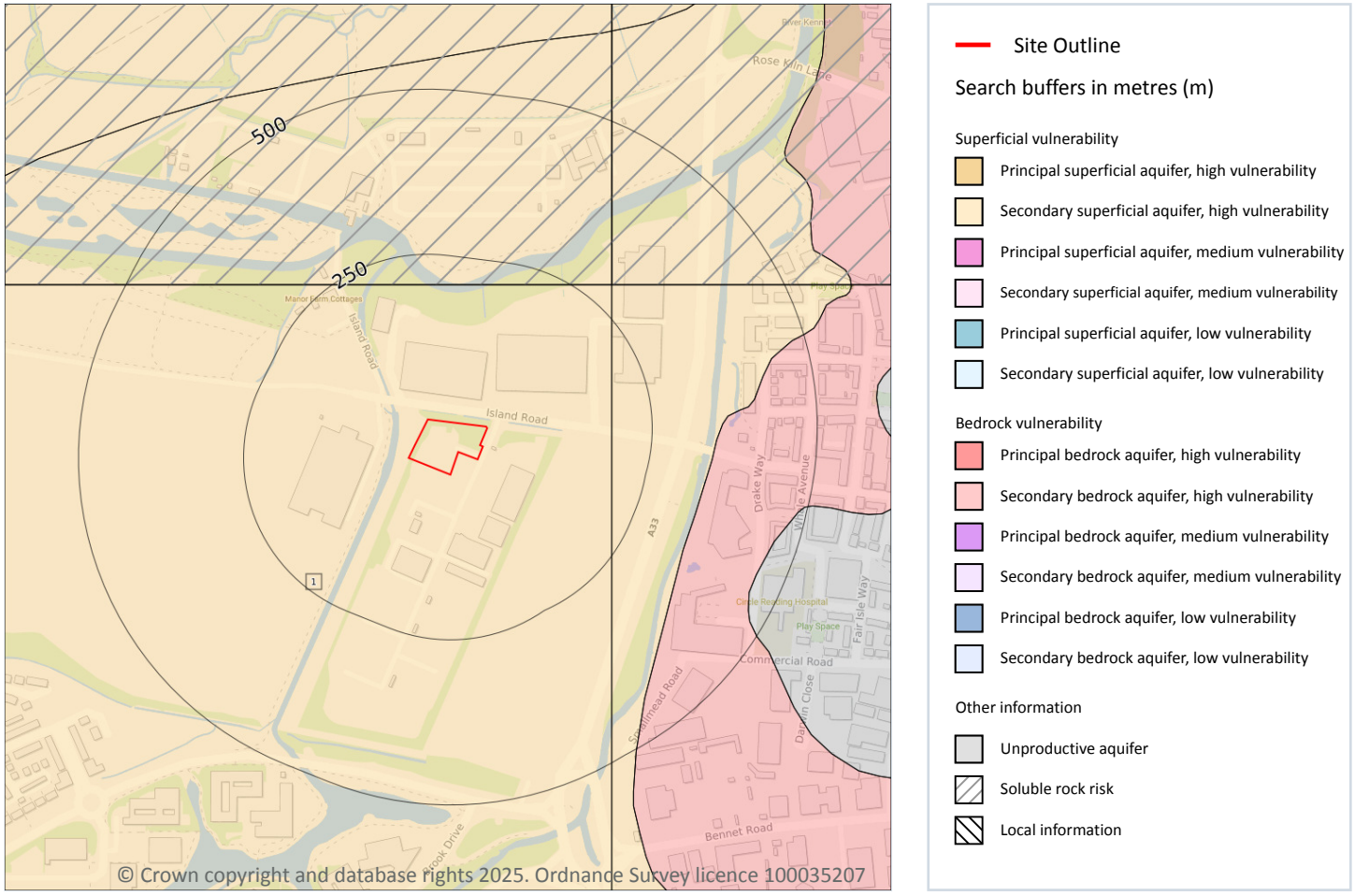
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 63 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**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**
2	457m E	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



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5.3 Groundwater vulnerability

Records within 50m	1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 64 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: Medium**	**Vulnerability: Low Aquifer type: Secondary Flow mechanism: Mixed**

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

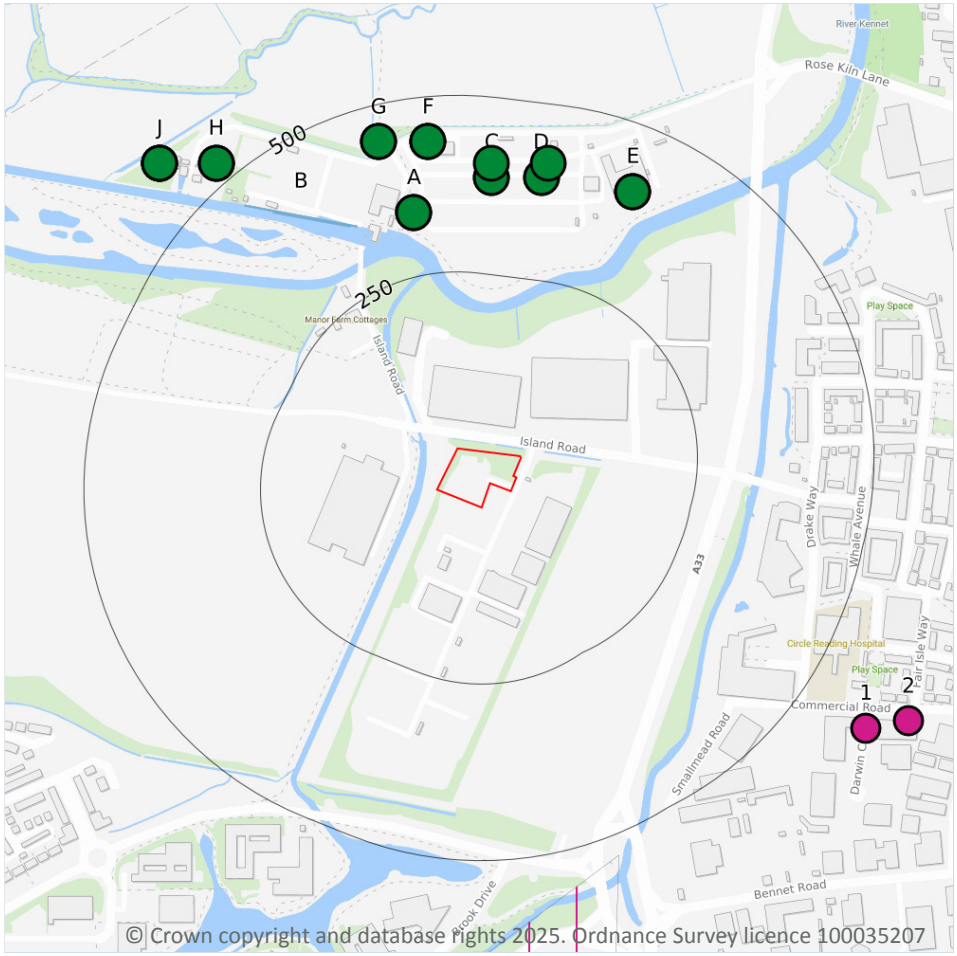
5.5 Groundwater vulnerability- local information

Records on site	**0**

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	55

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 66 >**

ID	Location	Details	
A	340m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH H' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
A	340m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'H' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
A	340m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH H' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
A	340m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH H' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
C	387m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH B' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470770 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
C	387m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH B' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470770 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
C	387m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH B' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470770 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
D	396m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH A' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470840 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
D	396m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH A' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470840 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
D	396m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH A' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470840 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
C	407m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'B' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470770 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
E	408m NE	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH D' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
E	408m NE	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'D' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
E	408m NE	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH D' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
E	408m NE	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH D' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
D	417m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'A' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470850 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
F	436m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH C' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
F	436m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'C' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
F	436m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH C' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
F	436m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH C' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
G	448m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH G' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
G	448m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'G' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
G	448m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH G' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
G	448m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH G' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
H	529m NW	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH F' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
H	529m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'F' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
H	529m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH F' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
H	529m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH F' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
I	529m S	Status: Historical Licence No: 28/39/22/0578 Details: General Use Relating To Secondary Category (Low Loss) Direct Source: THAMES GROUNDWATER Point: MADEJSKI STADIUM WELLPOINTS Data Type: Poly4 Name: READING FOOTBALL CLUB PLC Easting: 470520 Northing: 169900	Annual Volume (m^3): 189734 Max Daily Volume (m^3): 518.4 Original Application No: - Original Start Date: 08/06/1998 Expiry Date: 30/06/2008 Issue No: 100 Version Start Date: 08/06/1998 Version End Date: -
J	584m NW	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH E' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
J	584m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'E' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
J	584m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH E' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
J	584m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH E' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
1	605m SE	Status: Historical Licence No: 28/39/22/0525 Details: Laundry Use Direct Source: THAMES GROUNDWATER Point: DARWIN CLOSE, WHITLEY, READING Data Type: Point Name: CLEAN LINEN SERVICES LTD Easting: 471300 Northing: 170400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/12/2001 Issue No: 101 Version Start Date: 01/04/2000 Version End Date: -
2	650m SE	Status: Historical Licence No: 28/39/22/0612 Details: Laundry Use Direct Source: THAMES GROUNDWATER Point: DARWIN CLOSE, WHITLEY, READING, BERKSHIRE Data Type: Point Name: CLEAN LINEN SERVICES LTD Easting: 471360 Northing: 170410	Annual Volume (m^3): 181840 Max Daily Volume (m^3): 655 Original Application No: - Original Start Date: 01/01/2002 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 01/01/2002 Version End Date: -

ID	Location	Details	
-	669m S	Status: Historical Licence No: 28/39/22/0644/R01 Details: General Use Relating To Secondary Category (Low Loss) Direct Source: THAMES GROUNDWATER Point: SELECT CAR LEASING STADIUM, READING - 424 WELLPOINTS Data Type: Poly4 Name: THE READING FOOTBALL CLUB PLC Easting: 470695 Northing: 170046	Annual Volume (m^3): 189735 Max Daily Volume (m^3): 519 Original Application No: NPS/WR/06576 Original Start Date: 18/05/2023 Expiry Date: 31/03/2035 Issue No: 1 Version Start Date: 18/05/2023 Version End Date: -
-	693m S	Status: Historical Licence No: 28/39/22/0644 Details: General Use Relating To Secondary Category (Low Loss) Direct Source: THAMES GROUNDWATER Point: MADEJSKI STADIUM COMPLEX - 424 WELLPOINTS Data Type: Poly4 Name: READING FOOTBALL CLUB PLC Easting: 470720 Northing: 170020	Annual Volume (m^3): 189735 Max Daily Volume (m^3): 518.4 Original Application No: WRW/A/1220 Original Start Date: 28/07/2008 Expiry Date: 31/03/2023 Issue No: 1 Version Start Date: 28/07/2008 Version End Date: -
-	719m S	Status: Active Licence No: 28/39/22/0644/R01 Details: General Use Relating To Secondary Category (Low Loss) Direct Source: THAMES GROUNDWATER Point: CAR LEASING STADIUM READING #1 Data Type: Poly4 Name: The Reading Football Club Limited Easting: 470333 Northing: 169655	Annual Volume (m^3): 189735 Max Daily Volume (m^3): 519 Original Application No: NPS/WR/036576 Original Start Date: 18/05/2023 Expiry Date: 31/03/2035 Issue No: 1 Version Start Date: 18/05/2023 Version End Date: -
-	817m S	Status: Active Licence No: 28/39/22/0644/R01 Details: General Use Relating To Secondary Category (Low Loss) Direct Source: THAMES GROUNDWATER Point: CAR LEASING STADIUM READING #2 Data Type: Poly4 Name: The Reading Football Club Limited Easting: 470664 Northing: 169705	Annual Volume (m^3): 189735 Max Daily Volume (m^3): 519 Original Application No: NPS/WR/036576 Original Start Date: 18/05/2023 Expiry Date: 31/03/2035 Issue No: 1 Version Start Date: 18/05/2023 Version End Date: -

ID	Location	Details	
-	969m SW	Status: Historical Licence No: 28/39/22/0463 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: PINGEWOOD BUSINESS ESTATE, SMALLMEAD ROAD, READING Data Type: Point Name: KENNET VALLEY PARK LTD Easting: 469900 Northing: 170180	Annual Volume (m^3): 6819 Max Daily Volume (m^3): 22.73 Original Application No: - Original Start Date: 29/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
-	969m SW	Status: Historical Licence No: 28/39/22/0463 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: PINGEWOOD BUSINESS ESTATE, SMALLMEAD ROAD, READING Data Type: Point Name: KENNET VALLEY PARK LTD Easting: 469900 Northing: 170180	Annual Volume (m^3): 6819 Max Daily Volume (m^3): 22.73 Original Application No: - Original Start Date: 29/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
-	1008m SW	Status: Historical Licence No: 28/39/22/0276 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: SMALLMEAD FARM, PINGEWOOD Data Type: Point Name: THE PRUDENTIAL ASSUR. COM. LTD Easting: 470090 Northing: 169930	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 09/01/1967 Expiry Date: - Issue No: 101 Version Start Date: 30/07/1999 Version End Date: -
-	1117m S	Status: Historical Licence No: 28/39/22/0614 Details: Process Water Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY - POINT 'E' Data Type: Point Name: Heineken UK Ltd Easting: 471100 Northing: 169650	Annual Volume (m^3): 3000000 Max Daily Volume (m^3): 9550 Original Application No: - Original Start Date: 01/01/2002 Expiry Date: 31/12/2011 Issue No: 4 Version Start Date: 23/11/2009 Version End Date: -
-	1135m W	Status: Active Licence No: TH/039/0022/058 Details: Dewatering Direct Source: THAMES GROUNDWATER Point: POINT A AT BURGHFIELD LANDFILL Data Type: Point Name: CEMEX UK MATERIALS LIMITED Easting: 469613 Northing: 170388	Annual Volume (m^3): 1008790 Max Daily Volume (m^3): 6250 Original Application No: NPS/WR/039767 Original Start Date: 22/07/2022 Expiry Date: 31/03/2035 Issue No: 2 Version Start Date: 08/06/2023 Version End Date: -

ID	Location	Details	
-	1135m W	Status: Historical Licence No: TH/039/0022/058 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: THAMES GROUNDWATER Point: POINT A AT BURGHFIELD LANDFILL Data Type: Point Name: CEMEX UK MATERIALS LIMITED Easting: 469613 Northing: 170388	Annual Volume (m^3): 1008790 Max Daily Volume (m^3): 6250 Original Application No: NPS/NA/001662 Original Start Date: 22/07/2022 Expiry Date: 31/03/2035 Issue No: 1 Version Start Date: 22/07/2022 Version End Date: -
-	1314m W	Status: Historical Licence No: 28/39/22/0432 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: SEB COTTAGE LANE, BURGHFIELD Data Type: Point Name: SOUTHERN ELECTRICITY BOARD Easting: 469400 Northing: 170500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 28/07/1976 Expiry Date: - Issue No: 100 Version Start Date: 28/07/1976 Version End Date: -
-	1441m NW	Status: Historical Licence No: 28/39/22/0266 Details: General use relating to Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: RAILTRACK PROPERTY, SOUTHCOTE, READING Data Type: Point Name: NETWORK RAIL INFRASTR LTD Easting: 469600 Northing: 171700	Annual Volume (m^3): 250035 Max Daily Volume (m^3): 909.22 Original Application No: - Original Start Date: 12/12/1966 Expiry Date: - Issue No: 101 Version Start Date: 03/02/2003 Version End Date: -
-	1492m S	Status: Historical Licence No: 28/39/22/0614 Details: Process Water Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY POINT 'D' Data Type: Point Name: Heineken UK Ltd Easting: 470740 Northing: 169220	Annual Volume (m^3): 3000000 Max Daily Volume (m^3): 9550 Original Application No: - Original Start Date: 01/01/2002 Expiry Date: 31/12/2011 Issue No: 4 Version Start Date: 23/11/2009 Version End Date: -

ID	Location	Details	
-	1513m S	Status: Historical Licence No: 28/39/22/0556 Details: General use relating to Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY POINT 'D' Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 470700 Northing: 169200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/12/2001 Issue No: 100 Version Start Date: 09/05/2000 Version End Date: -
-	1613m S	Status: Historical Licence No: 28/39/22/0556 Details: General use relating to Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY POINT 'C' Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 470800 Northing: 169100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/12/2001 Issue No: 100 Version Start Date: 09/05/2000 Version End Date: -
-	1618m S	Status: Historical Licence No: 28/39/22/0614 Details: Process Water Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY - POINT 'C' Data Type: Point Name: Heineken UK Ltd Easting: 470890 Northing: 169100	Annual Volume (m^3): 3000000 Max Daily Volume (m^3): 9550 Original Application No: - Original Start Date: 01/01/2002 Expiry Date: 31/12/2011 Issue No: 4 Version Start Date: 23/11/2009 Version End Date: -
-	1763m S	Status: Historical Licence No: 28/39/22/0614 Details: Process Water Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY - POINT 'A' Data Type: Point Name: Heineken UK Ltd Easting: 471130 Northing: 168990	Annual Volume (m^3): 3000000 Max Daily Volume (m^3): 9550 Original Application No: - Original Start Date: 01/01/2002 Expiry Date: 31/12/2011 Issue No: 4 Version Start Date: 23/11/2009 Version End Date: -
-	1845m S	Status: Historical Licence No: 28/39/22/0556 Details: General use relating to Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: BERKSHIRE BREWERY POINT 'A' Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 471100 Northing: 168900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/12/2001 Issue No: 100 Version Start Date: 09/05/2000 Version End Date: -

ID	Location	Details	
-	1869m S	Status: Historical Licence No: 28/39/22/0166 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: HARTLEY COURT FARM, THREE MILE CROSS Data Type: Point Name: HEWISON Easting: 470300 Northing: 168900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/11/1985 Version End Date: -
-	1956m S	Status: Historical Licence No: 28/39/22/0601 Details: Make-Up or Top Up Water Direct Source: THAMES GROUNDWATER Point: READING INTERNATIONAL BUSINESS PARK Data Type: Point Name: AKELER DEVELOPMENTS LTD Easting: 471320 Northing: 168840	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 10/11/2000 Expiry Date: - Issue No: 1 Version Start Date: 10/11/2000 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m **7**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 66 >**

ID	Location	Details	
B	345m NW	Status: Historical Licence No: 28/39/22/0527 Details: Fish Farm/Cress Pond Throughflow Direct Source: THAMES SURFACE WATER - NON TIDAL Point: FOBNEY FISH FARM INTAKES Data Type: Line Name: ENVIRONMENT AGENCY Easting: 470420 Northing: 171140	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 11/08/1993 Version End Date: -

ID	Location	Details	
B	345m NW	Status: Historical Licence No: 28/39/22/0527 Details: Fish Farm/Cress Pond Throughflow Direct Source: THAMES SURFACE WATER - NON TIDAL Point: KENNET AND AVON CANAL AT FOBNEY FISH FARM INTAKES Data Type: Line Name: ENVIRONMENT AGENCY Easting: 470420 Northing: 171140	Annual Volume (m^3): 2382154 Max Daily Volume (m^3): 12730 Original Application No: - Original Start Date: 11/08/1993 Expiry Date: - Issue No: 100 Version Start Date: 11/08/1993 Version End Date: -
B	349m NW	Status: Historical Licence No: 28/39/22/0527 Details: Fish Farm/Cress Pond Throughflow Direct Source: THAMES SURFACE WATER - NON TIDAL Point: KENNET AND AVON CANAL AT FOBNEY FISH FARM INTAKES Data Type: Line Name: ENVIRONMENT AGENCY Easting: 470460 Northing: 171130	Annual Volume (m^3): - Max Daily Volume (m^3): 5000 Original Application No: - Original Start Date: 11/08/1993 Expiry Date: 31/03/2011 Issue No: 101 Version Start Date: 10/10/2006 Version End Date: -
J	584m NW	Status: Active Licence No: 28/39/22/0435 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: KENNET AND AVON CANAL AT FOBNEY WATERWORKS INTAKE Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 26621933 Max Daily Volume (m^3): 72737.52 Original Application No: S228 Original Start Date: 05/04/1977 Expiry Date: - Issue No: 100 Version Start Date: 05/04/1977 Version End Date: -
J	584m NW	Status: Historical Licence No: 28/39/22/0435 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: FOBNEY WATERWORKS INTAKE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470300 Northing: 171200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 05/04/1977 Expiry Date: - Issue No: 100 Version Start Date: 05/04/1977 Version End Date: -
-	1332m S	Status: Historical Licence No: 28/39/22/0232 Details: Spray Irrigation - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: FOUDRY BROOK AT HARTLEY COURT FARM Data Type: Line Name: Hewison Farms limited Easting: 470200 Northing: 168600	Annual Volume (m^3): 18184 Max Daily Volume (m^3): 681.91 Original Application No: - Original Start Date: 14/11/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2016 Version End Date: -

ID	Location	Details	
-	1686m SW	Status: Historical Licence No: 28/39/22/0232 Details: Spray Irrigation - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: BURGHFIELD BROOK AT HARTLEY COURT FARM Data Type: Line Name: Hewison Farms limited Easting: 469500 Northing: 168800	Annual Volume (m^3): 18184 Max Daily Volume (m^3): 681.91 Original Application No: - Original Start Date: 14/11/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2016 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	**36**

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 66 >**

ID	Location	Details	
A	340m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH H' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
A	340m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'H' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -

ID	Location	Details	
A	340m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH H' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
A	340m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH H' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470660 Northing: 171130	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
C	387m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH B' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470770 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
C	387m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH B' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470770 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
C	387m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH B' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470770 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
D	396m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH A' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470840 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
D	396m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH A' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470840 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
D	396m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH A' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470840 Northing: 171180	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
C	407m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'B' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470770 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
E	408m NE	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH D' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
E	408m NE	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'D' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
E	408m NE	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH D' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
E	408m NE	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH D' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470970 Northing: 171160	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
D	417m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'A' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470850 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
F	436m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH C' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -

ID	Location	Details	
F	436m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'C' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
F	436m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH C' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
F	436m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH C' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470680 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
G	448m N	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH G' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
G	448m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'G' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -

ID	Location	Details	
G	448m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH G' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
G	448m N	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH G' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470610 Northing: 171230	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
H	529m NW	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH F' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
H	529m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'F' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -
H	529m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH F' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -

ID	Location	Details	
H	529m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH F' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470380 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
J	584m NW	Status: Active Licence No: 28/39/22/0435 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: KENNET AND AVON CANAL AT FOBNEY WATERWORKS INTAKE Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 26621933 Max Daily Volume (m^3): 72737.52 Original Application No: S228 Original Start Date: 05/04/1977 Expiry Date: - Issue No: 100 Version Start Date: 05/04/1977 Version End Date: -
J	584m NW	Status: Active Licence No: 28/39/022/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH E' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 1 Version Start Date: 22/03/2023 Version End Date: -
J	584m NW	Status: Historical Licence No: 28/39/22/0435 Details: Potable Water Supply - Direct Direct Source: THAMES SURFACE WATER - NON TIDAL Point: FOBNEY WATERWORKS INTAKE Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470300 Northing: 171200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 05/04/1977 Expiry Date: - Issue No: 100 Version Start Date: 05/04/1977 Version End Date: -
J	584m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION BH 'E' Data Type: Point Name: THAMES WATER UTILITIES LTD Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: - Original Start Date: 05/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/06/1998 Version End Date: -

ID	Location	Details	
J	584m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH E' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/008557 Original Start Date: 05/09/1966 Expiry Date: 31/03/2023 Issue No: 101 Version Start Date: 01/01/2013 Version End Date: -
J	584m NW	Status: Historical Licence No: 28/39/22/0132 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: FOBNEY PUMPING STATION 'BH E' Data Type: Point Name: Thames Water Utilities Ltd Easting: 470300 Northing: 171200	Annual Volume (m^3): 1500000 Max Daily Volume (m^3): 30000 Original Application No: NPS/WR/036727 Original Start Date: 05/09/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/03/2023 Version End Date: -
-	969m SW	Status: Historical Licence No: 28/39/22/0463 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: THAMES GROUNDWATER Point: PINGEWOOD BUSINESS ESTATE, SMALLMEAD ROAD, READING Data Type: Point Name: KENNET VALLEY PARK LTD Easting: 469900 Northing: 170180	Annual Volume (m^3): 6819 Max Daily Volume (m^3): 22.73 Original Application No: - Original Start Date: 29/07/1980 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
-	1314m W	Status: Historical Licence No: 28/39/22/0432 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: SEB COTTAGE LANE, BURGHFIELD Data Type: Point Name: SOUTHERN ELECTRICITY BOARD Easting: 469400 Northing: 170500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 28/07/1976 Expiry Date: - Issue No: 100 Version Start Date: 28/07/1976 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	20

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 89 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
C	10m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
C	12m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	12m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	12m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	27m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	33m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	51m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	51m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	59m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
3	68m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	114m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	127m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	145m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
5	164m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
6	202m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Kennet
8	215m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Kennet
H	230m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	238m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	246m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	248m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	8

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 89 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 89 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Lower Kennet (Sheffield Bottom to Reading)**	**GB106039023140**	**Kennet**	**Kennet and Trib**
A	**On site**	**River**	**Foudry Brook (West End Brook to M4)**	**GB106039017380**	**Kennet**	**Kennet and Trib**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	**2**

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 89 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
7	202m N	River	Lower Kennet (Sheffield Bottom to Reading)	GB106039023140 ↗	Moderate	Fail	Moderate	2019
12	327m E	River	Foudry Brook (West End Brook to M4)	GB106039017380 ↗	Poor	Fail	Poor	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	**1**

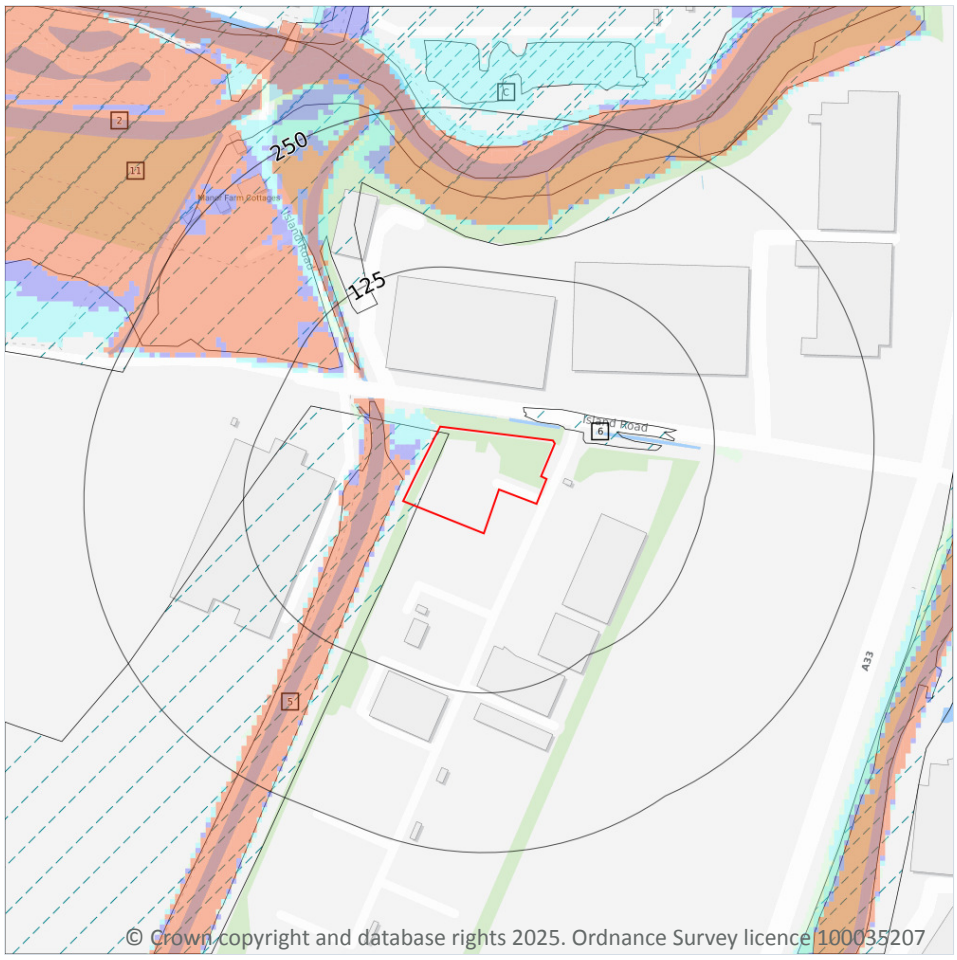
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 89 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
B	**On site**	**Berkshire Downs Chalk**	**GB40601G600900** ↗	**Poor**	**Poor**	**Poor**	**2019**

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	10

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on **page 94 >**

Distance	Flood risk category
On site	**Very Low**
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	**5**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

Features are displayed on the River and coastal flooding map on **page 94 >**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
2	**On site**	**06junesummer1971**	**1971-01-01 1971-12-12**	**Main river**	**Channel capacity exceeded (no raised defences)**	**Fluvial**
5	7m NW	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
6	13m N	06januarynewyear2003	2002-12-23 2003-01-12	Other	Channel capacity exceeded (no raised defences)	Fluvial
11	77m NW	06januarynewyear2003	2002-12-23 2003-01-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial
C	197m N	06septemberautumn1992	1992-01-01 1992-12-12	Main river	Channel capacity exceeded (no raised defences)	Fluvial

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	**0**

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on **page 94 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 94 >**

Location	Type
4m NW	Zone 3 - (Fluvial /Tidal Models)

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.1m - 0.3m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 99 >**

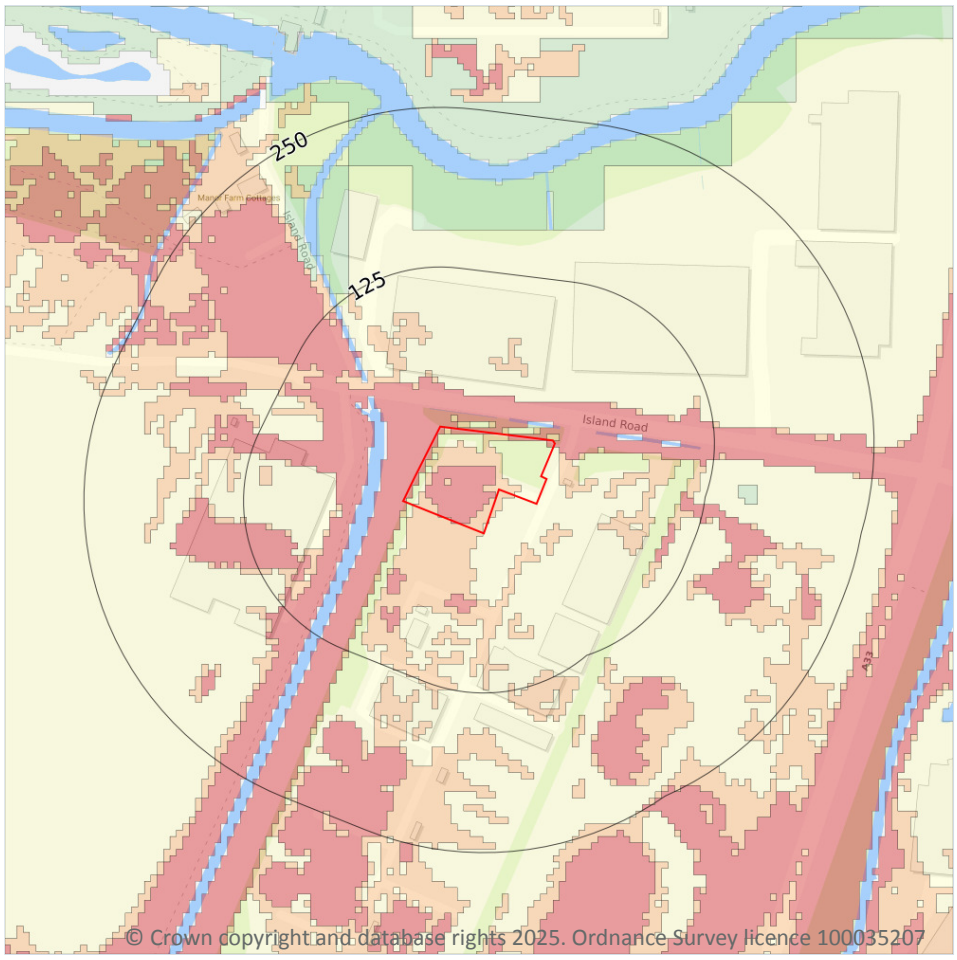
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.1m and 0.3m
1 in 100 year	Between 0.1m and 0.3m
1 in 30 year	Between 0.1m and 0.3m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

Highest risk on site	**High**
Highest risk within 50m	**High**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 101 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	1

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Foudry Brook (West End Brook to M4) NVZ**	**Surface Water**	**459**	**Existing**

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 109 >**

ID	Location	Classification	Description
1	On site	Grade 4	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	3

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 111 >**

ID	Location	Main Habitat	Other habitats
1	160m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	173m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	246m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

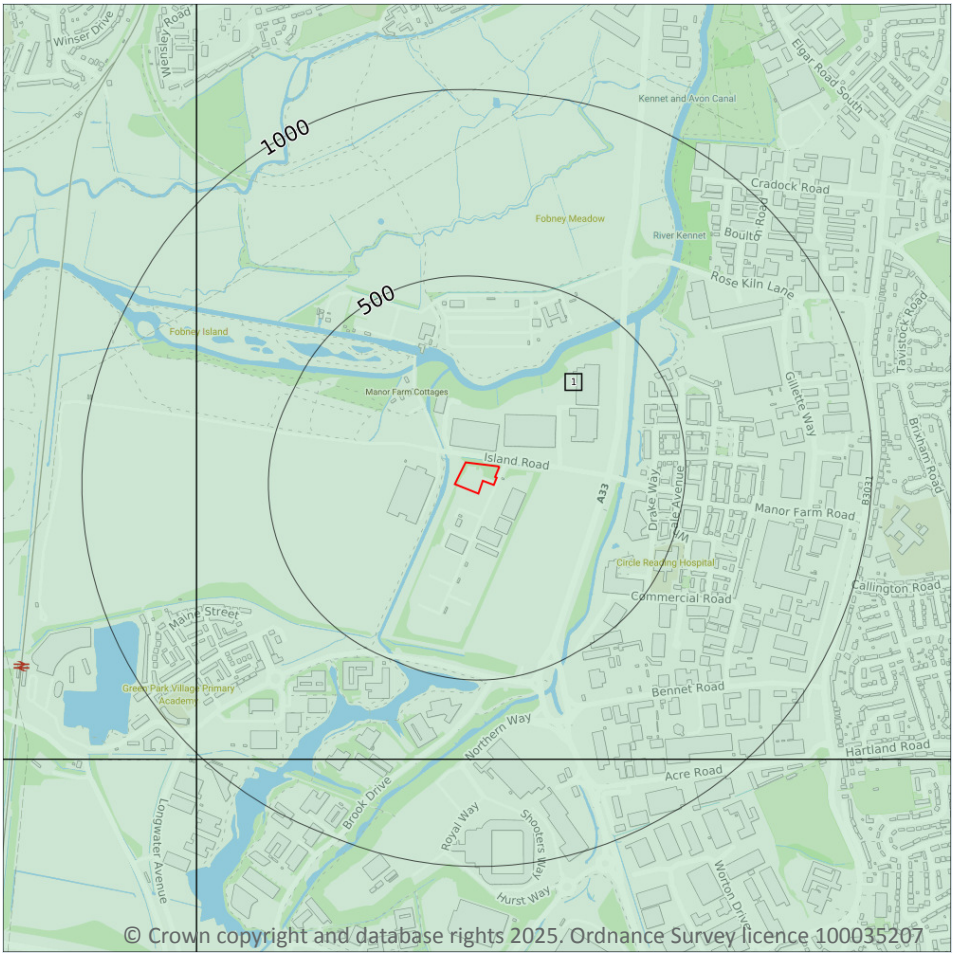
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m	1

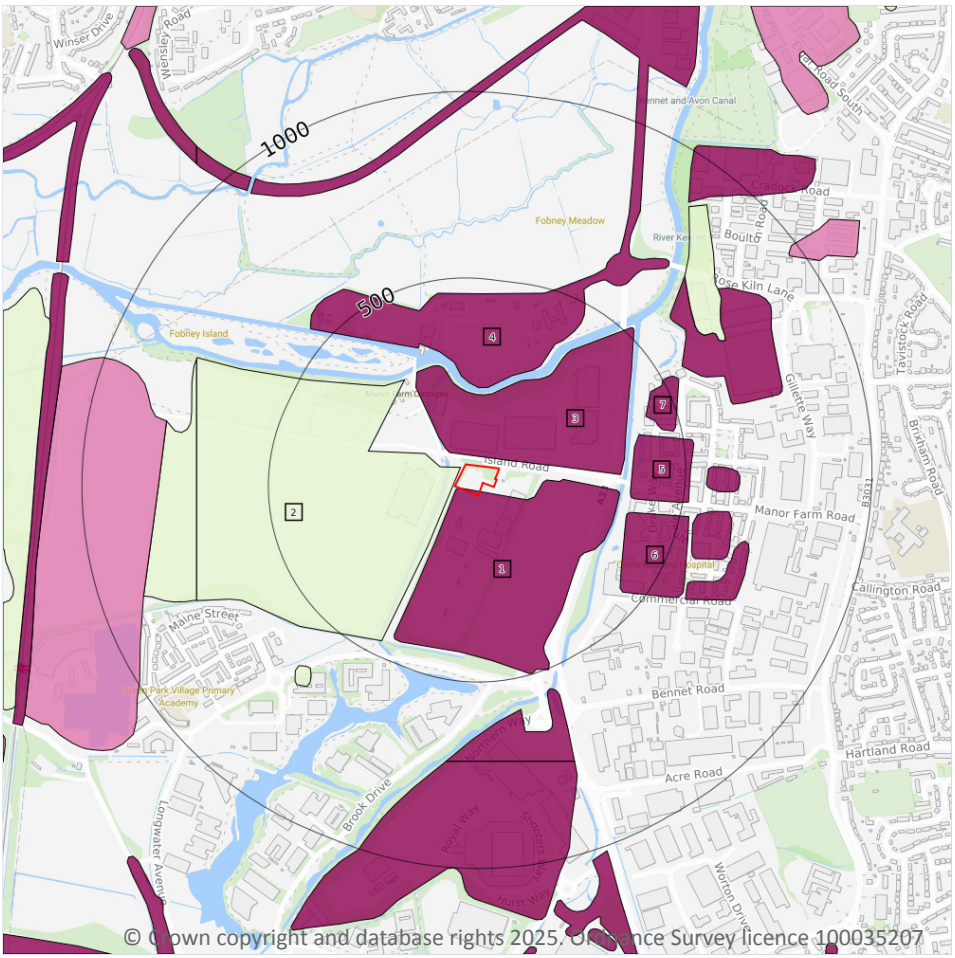
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 113 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SU77SW**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground



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14.2 Artificial and made ground (10k)

Records within 500m	7

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

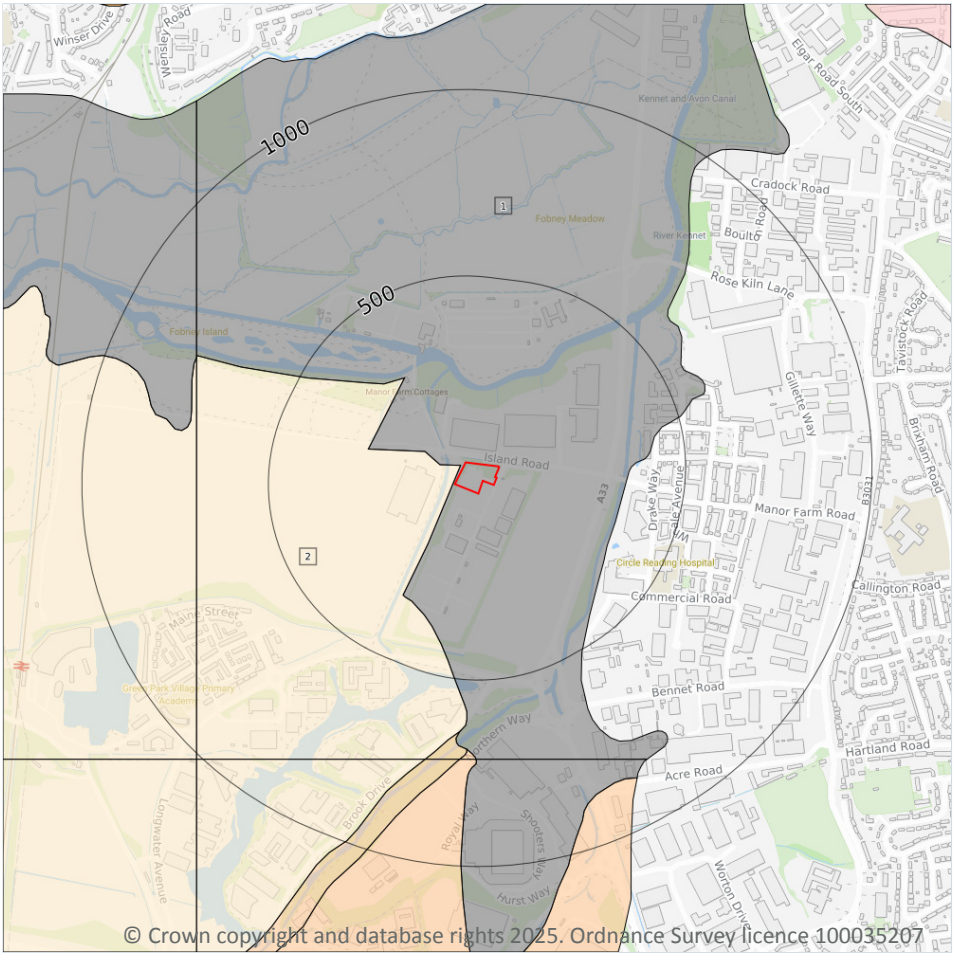
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 114 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial Deposit**
2	5m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	25m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	209m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

ID	Location	LEX Code	Description	Rock description
5	356m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	361m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
7	418m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m	2

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 116 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-Z**	**Alluvium - Silt (unlithified Deposits Coding Scheme)**	**Silt**
2	5m NW	BGGR-XSV	Beenham Grange Gravel Member - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

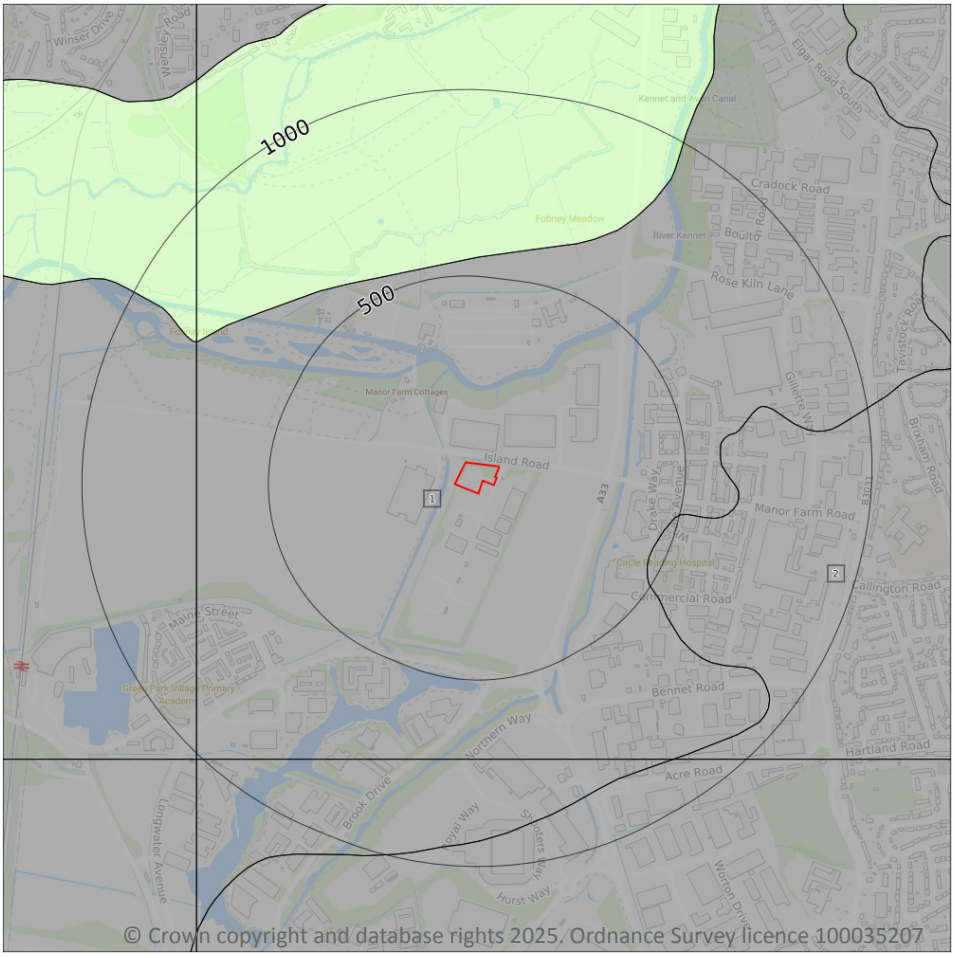
14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m	2

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 118 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LMBE-CLSISA**	**Lambeth Group - Clay, Silt And Sand**	**Paleocene Epoch**
2	459m SE	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	Eocene Epoch

This data is sourced from the British Geological Survey.

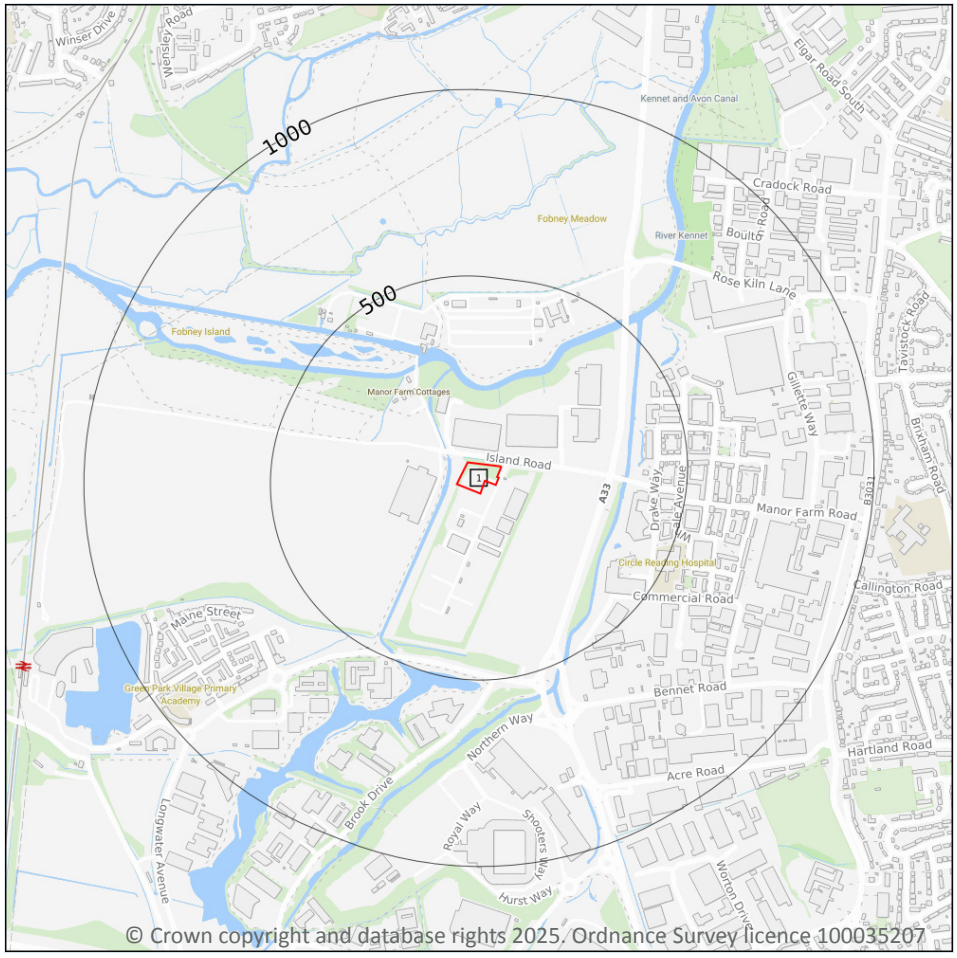
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

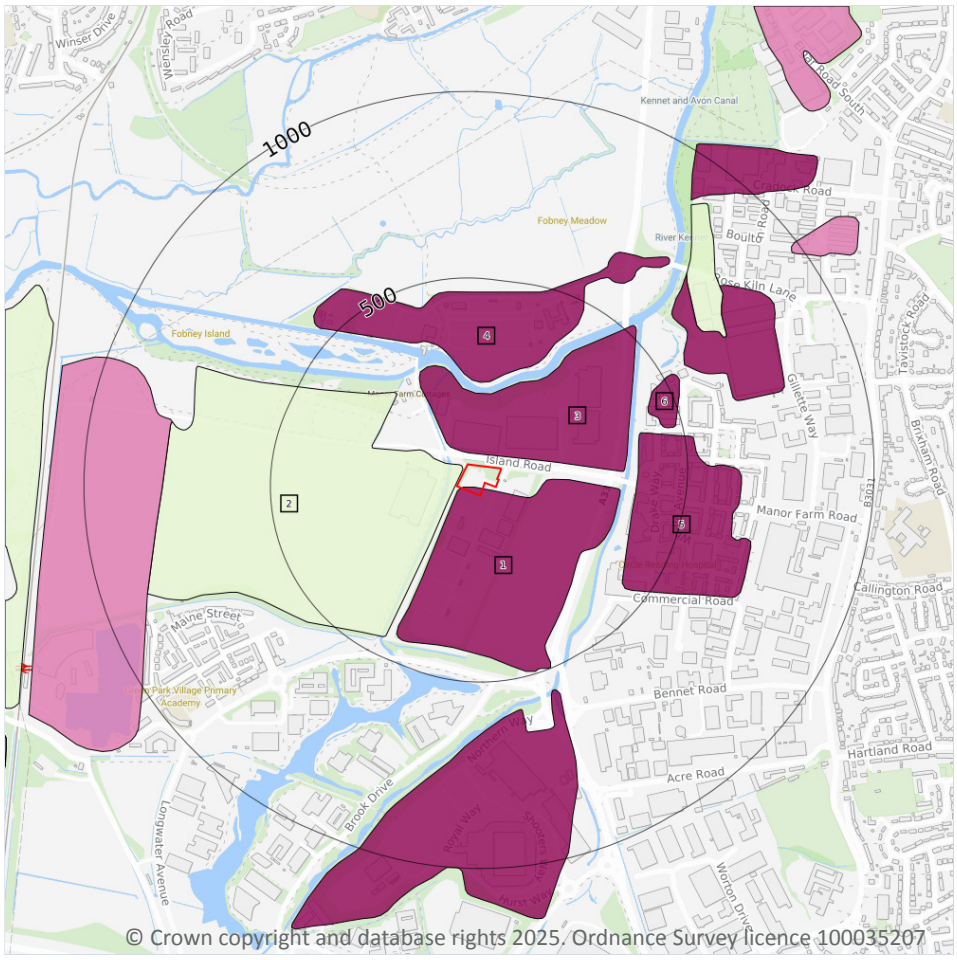
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 120 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW268_reading_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m **6**

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 121 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**MADE GROUND (UNDIVIDED)**	**ARTIFICIAL DEPOSIT**
2	4m NW	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	31m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
4	223m N	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

ID	Location	LEX Code	Description	Rock description
5	366m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	423m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

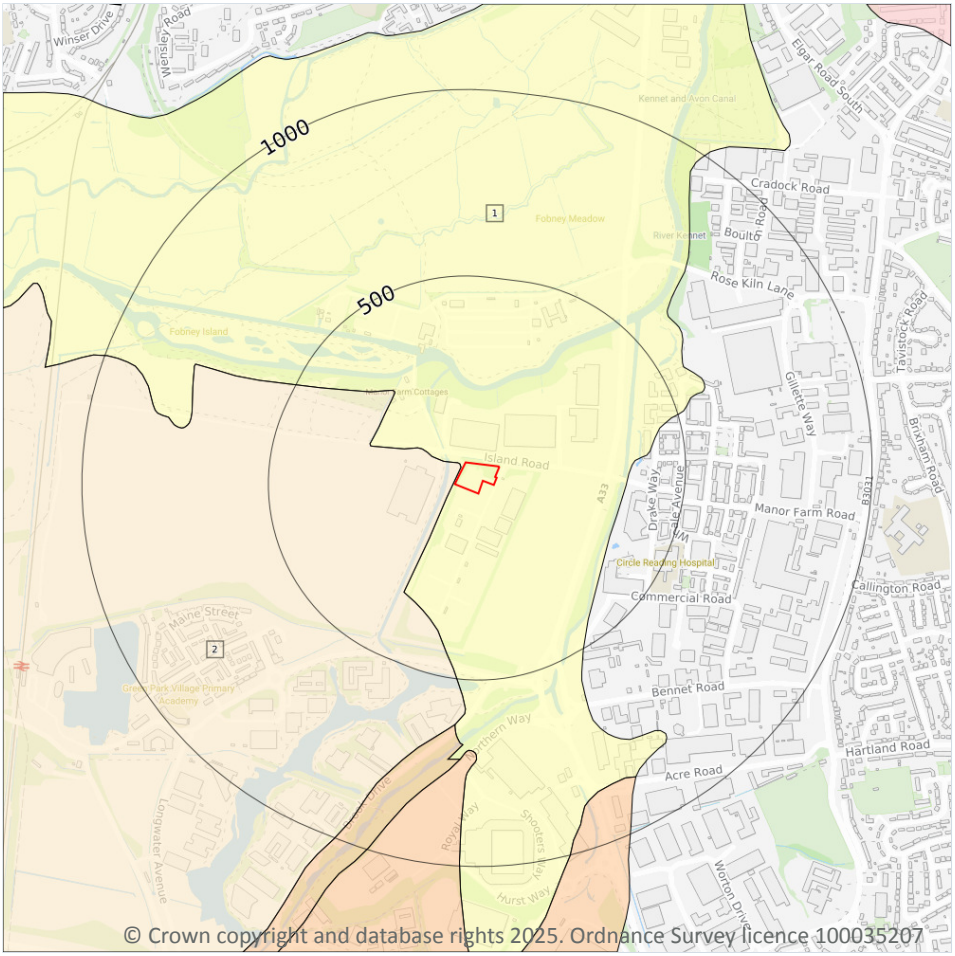
Records within 50m	**3**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Very High**	**Low**
4m NW	Mixed	Very High	Low
31m N	Mixed	Very High	Low

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m	2

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 123 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
2	4m NW	BGGR-XSV	BEENHAM GRANGE GRAVEL MEMBER	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**High**	**Very Low**
4m NW	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

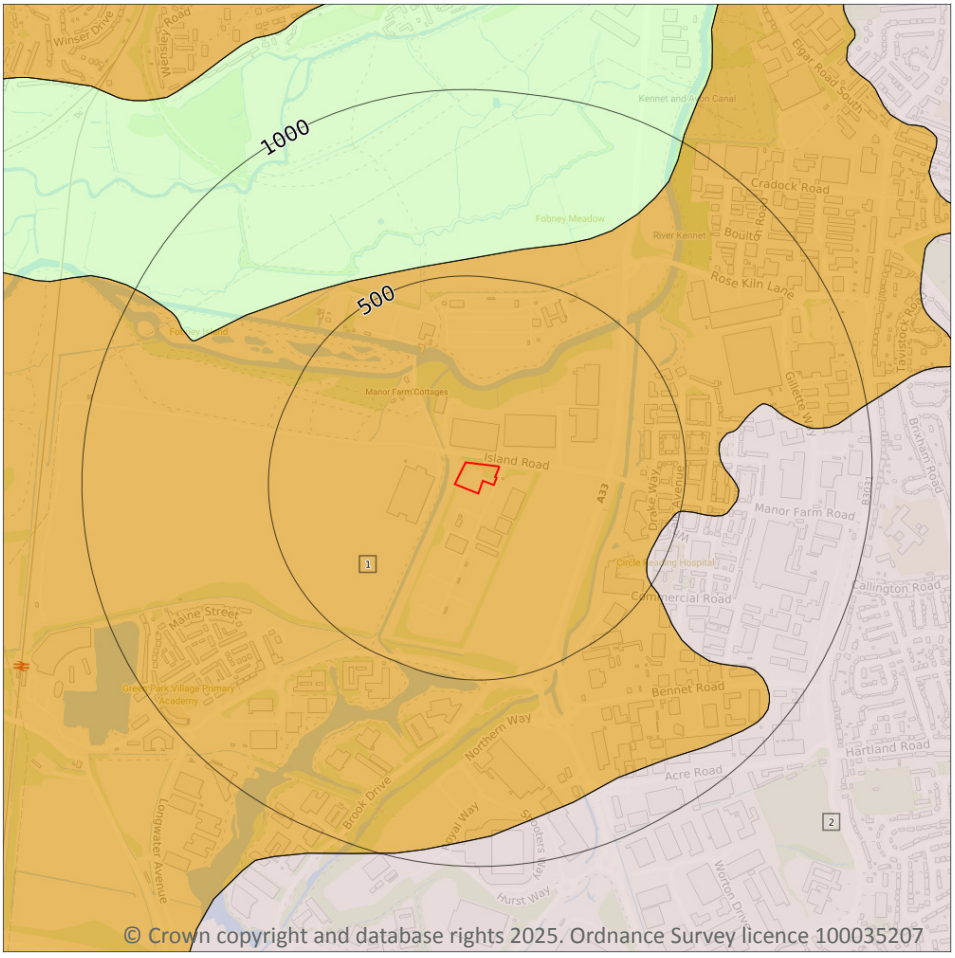
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m	2

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 125 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LMBE-XCZS**	**LAMBETH GROUP - CLAY, SILT AND SAND**	**THANETIAN**
2	457m E	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Moderate**	**Very Low**

This data is sourced from the British Geological Survey.

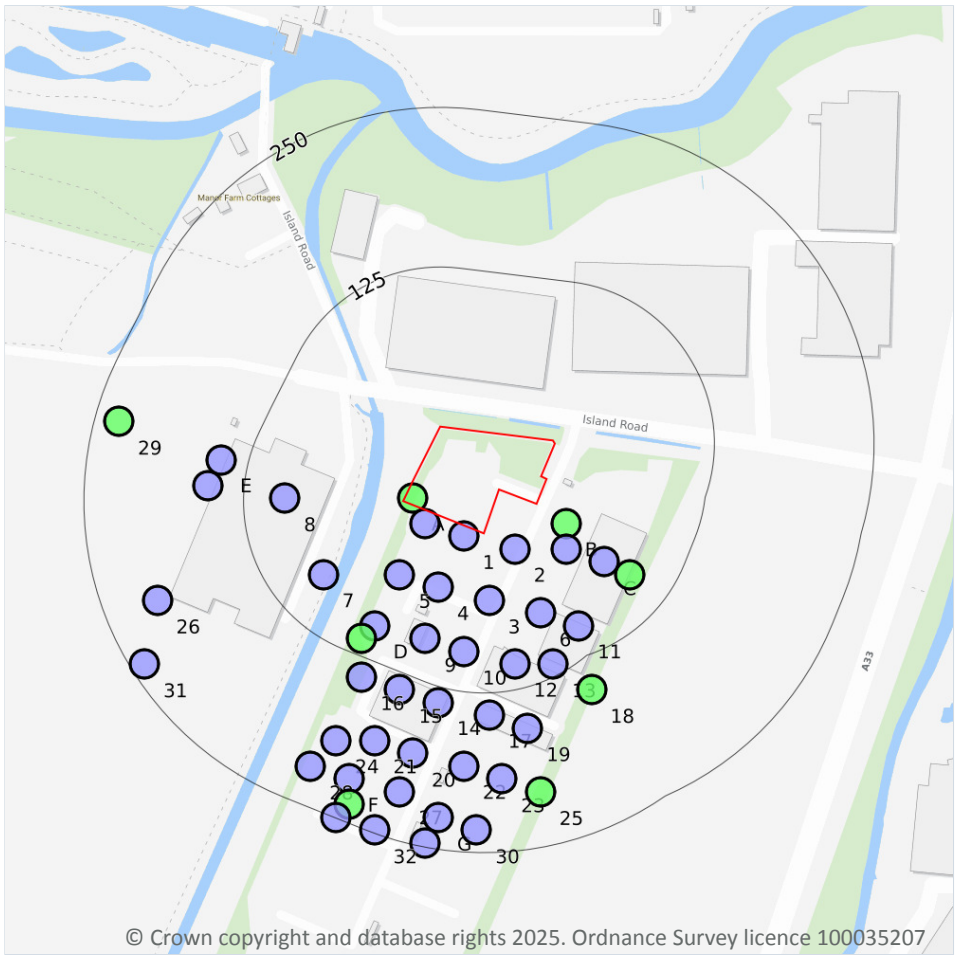
15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m	47

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 127 >**

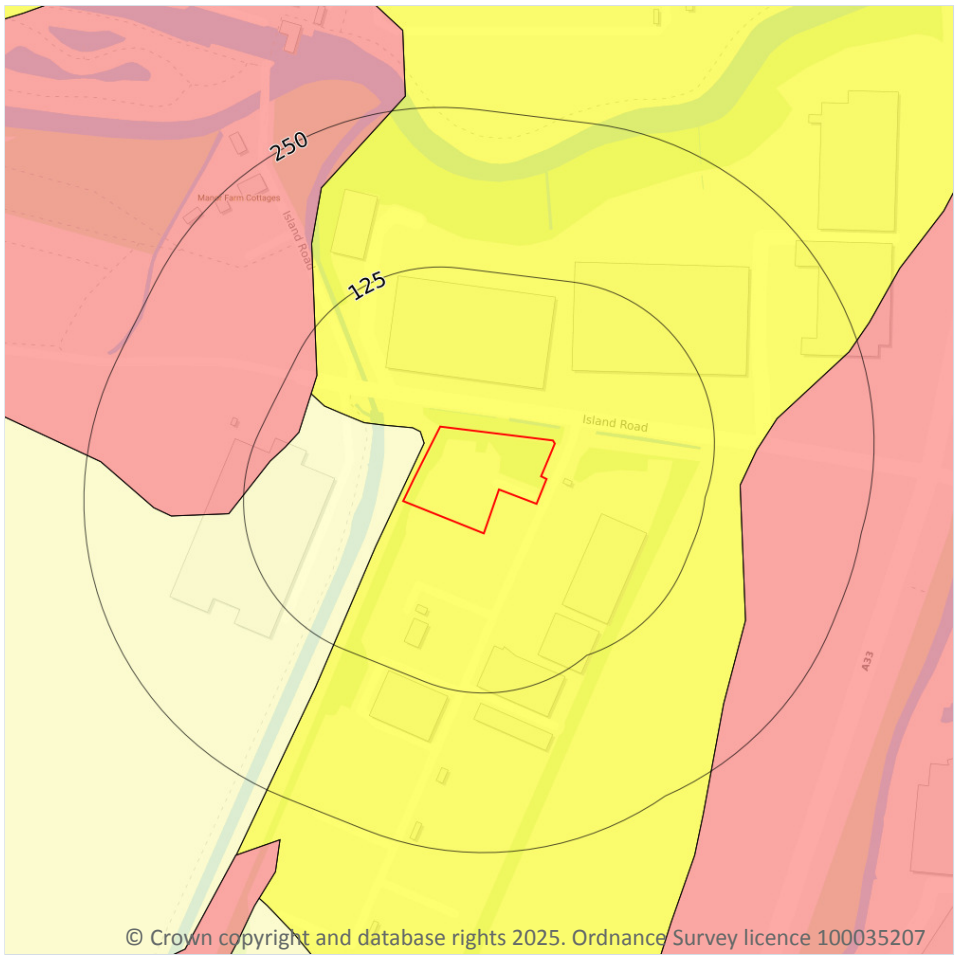
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	**On site**	**470700 170740**	**SMALLMEAD SLUDGE LAGOONS 1**	**22.0**	**N**	**428367** ↗
1	8m S	470740 170710	SMALLMEAD SLUDGE LAGOONS P2	4.0	N	428380 ↗
A	10m S	470710 170720	SMALLMEAD SLUDGE LAGOONS P1	3.0	N	428379 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
2	27m SE	470780 170700	SMALLMEAD SLUDGE LAGOONS P3	4.0	N	428381 ↗
B	28m SE	470820 170720	SMALLMEAD SLUDGE LAGOONS 2	22.0	N	428368 ↗
B	42m SE	470820 170700	SMALLMEAD SLUDGE LAGOONS P4	4.0	N	428382 ↗
3	53m S	470760 170660	SMALLMEAD SLUDGE LAGOONS P8	4.0	N	428386 ↗
4	53m S	470720 170670	SMALLMEAD SLUDGE LAGOONS P7	4.0	N	428385 ↗
5	55m S	470690 170680	SMALLMEAD SLUDGE LAGOONS P6	4.0	N	428384 ↗
C	70m SE	470850 170690	SMALLMEAD SLUDGE LAGOONS P5	1.0	N	428383 ↗
6	76m SE	470800 170650	SMALLMEAD SLUDGE LAGOONS P9	4.0	N	428387 ↗
7	85m SW	470630 170680	SMALLMEAD FARM NO 11	4.57	N	428790 ↗
C	92m SE	470870 170680	SMALLMEAD SLUDGE LAGOONS 3	22.0	N	428369 ↗
8	93m W	470600 170740	SMALLMEAD FARM NO 18	3.65	N	428795 ↗
9	93m S	470710 170630	SMALLMEAD SLUDGE LAGOONS BHP12	4.0	N	428390 ↗
10	94m S	470740 170620	SMALLMEAD SLUDGE LAGOONS BHP13	4.0	N	428391 ↗
D	99m S	470670 170640	SMALLMEAD SLUDGE LAGOONS BHP11	3.0	N	428389 ↗
11	101m S	470830 170640	SMALLMEAD SLUDGE LAGOONS BHP10	2.0	N	428388 ↗
12	105m S	470780 170610	SMALLMEAD SLUDGE LAGOONS BHP14	4.0	N	428392 ↗
D	112m S	470660 170630	SMALLMEAD SLUDGE LAGOONS 4	20.0	N	428370 ↗
13	116m SE	470810 170610	SMALLMEAD SLUDGE LAGOONS BHP15	4.0	N	428393 ↗
14	137m S	470720 170580	SMALLMEAD SLUDGE LAGOONS BHP18	4.0	N	428396 ↗
15	138m S	470690 170590	SMALLMEAD SLUDGE LAGOONS BHP17	3.0	N	428395 ↗
16	140m S	470660 170600	SMALLMEAD SLUDGE LAGOONS BHP16	3.0	N	428394 ↗
17	142m S	470760 170570	SMALLMEAD SLUDGE LAGOONS BHP19	3.0	N	428397 ↗
E	146m W	470550 170770	SMALLMEAD FARM NO 8	3.96	N	428787 ↗
18	149m SE	470840 170590	SMALLMEAD SLUDGE LAGOONS 5	20.0	N	428371 ↗
E	153m W	470540 170750	SMALLMEAD FARM M8	3.0	N	428650 ↗
19	156m S	470790 170560	SMALLMEAD SLUDGE LAGOONS BHP20	4.0	N	428398 ↗
20	181m S	470700 170540	SMALLMEAD SLUDGE LAGOONS BHP23	4.0	N	428401 ↗
21	183m S	470670 170550	SMALLMEAD SLUDGE LAGOONS BHP22	3.0	N	428400 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
22	183m S	470740 170530	SMALLMEAD SLUDGE LAGOONS BHP24	3.0	N	428402 ↗
23	193m S	470770 170520	SMALLMEAD SLUDGE LAGOONS BHP25	3.0	N	428403 ↗
24	194m S	470640 170550	SMALLMEAD SLUDGE LAGOONS BHP21	3.0	N	428399 ↗
25	207m S	470800 170510	SMALLMEAD SLUDGE LAGOONS 7	25.0	N	428373 ↗
26	208m W	470500 170660	SMALLMEAD FARM 18	0.0	N	428651 ↗
27	213m S	470690 170510	SMALLMEAD SLUDGE LAGOONS BHP28	3.0	N	428406 ↗
F	218m S	470650 170520	SMALLMEAD SLUDGE LAGOONS BHP27	3.0	N	428405 ↗
28	220m S	470620 170530	SMALLMEAD SLUDGE LAGOONS BHP26	3.0	N	428404 ↗
G	225m S	470720 170490	SMALLMEAD SLUDGE LAGOONS BHP29	3.0	N	428407 ↗
29	231m W	470470 170800	SMALLMEAD FARM 72/B	12.0	N	428648 ↗
30	232m S	470750 170480	SMALLMEAD SLUDGE LAGOONS BHP30	3.0	N	428408 ↗
F	236m S	470650 170500	SMALLMEAD SLUDGE LAGOONS 6	20.0	N	428372 ↗
31	239m SW	470490 170610	SMALLMEAD FARM M11	4.0	N	428652 ↗
G	247m S	470710 170470	SMALLMEAD SLUDGE LAGOONS BHP34	3.0	N	428412 ↗
32	248m S	470670 170480	SMALLMEAD SLUDGE LAGOONS BHP33	3.0	N	428411 ↗
F	249m S	470640 170490	SMALLMEAD SLUDGE LAGOONS BHP32	3.0	N	428410 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

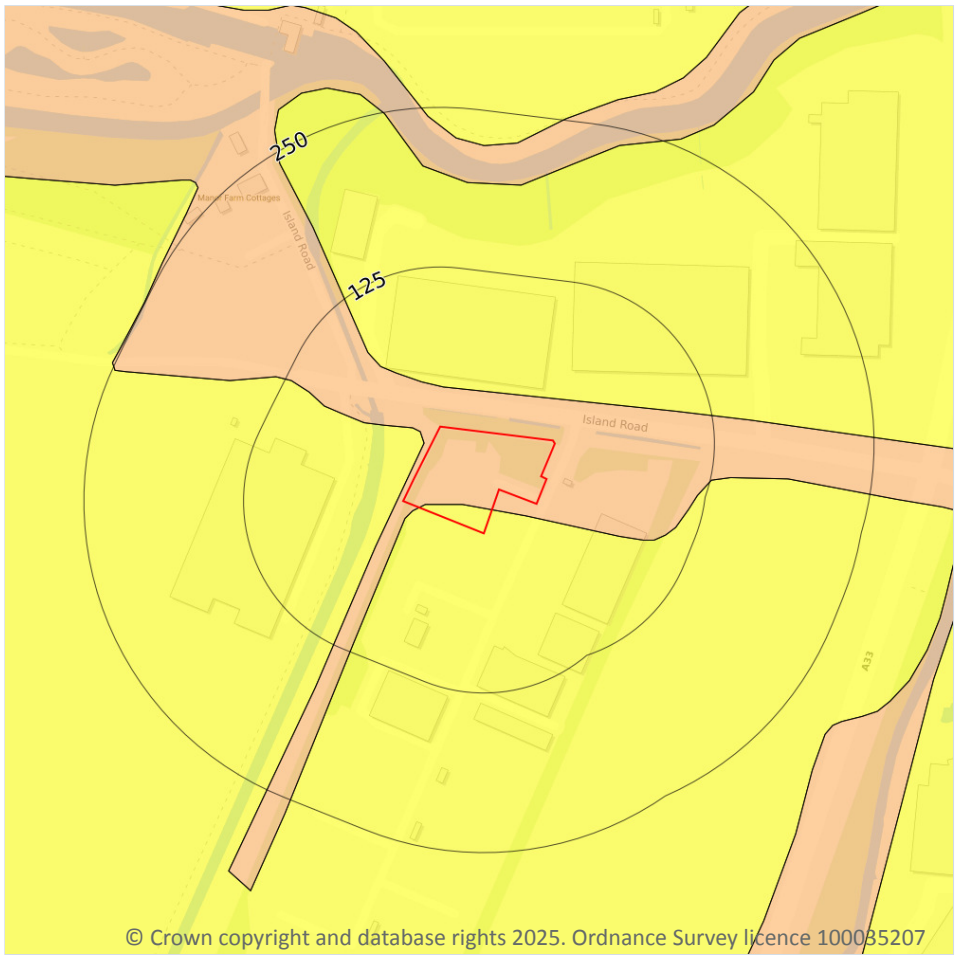
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 130 >**

Location	Hazard rating	Details
On site	**Very low**	**Ground conditions predominantly low plasticity.**
4m NW	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

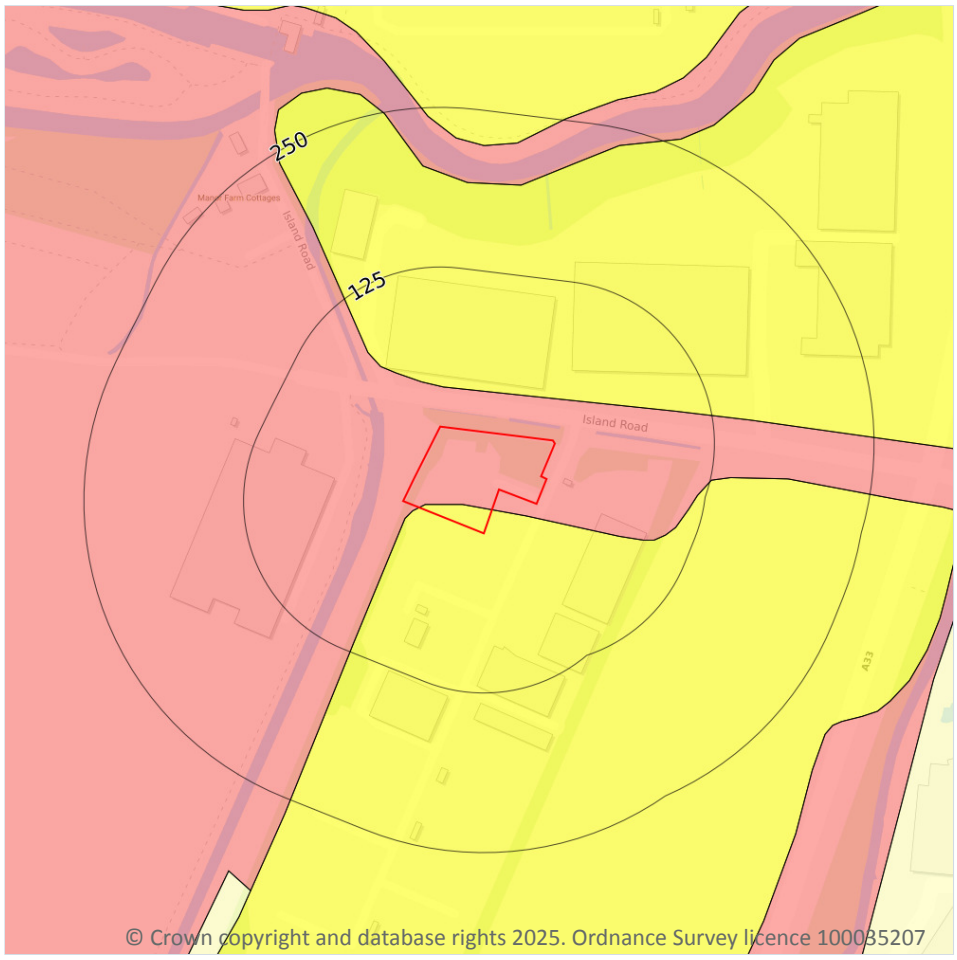
Features are displayed on the Natural ground subsidence - Running sands map on **page 131 >**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

Location	Hazard rating	Details
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
31m N	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	3

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

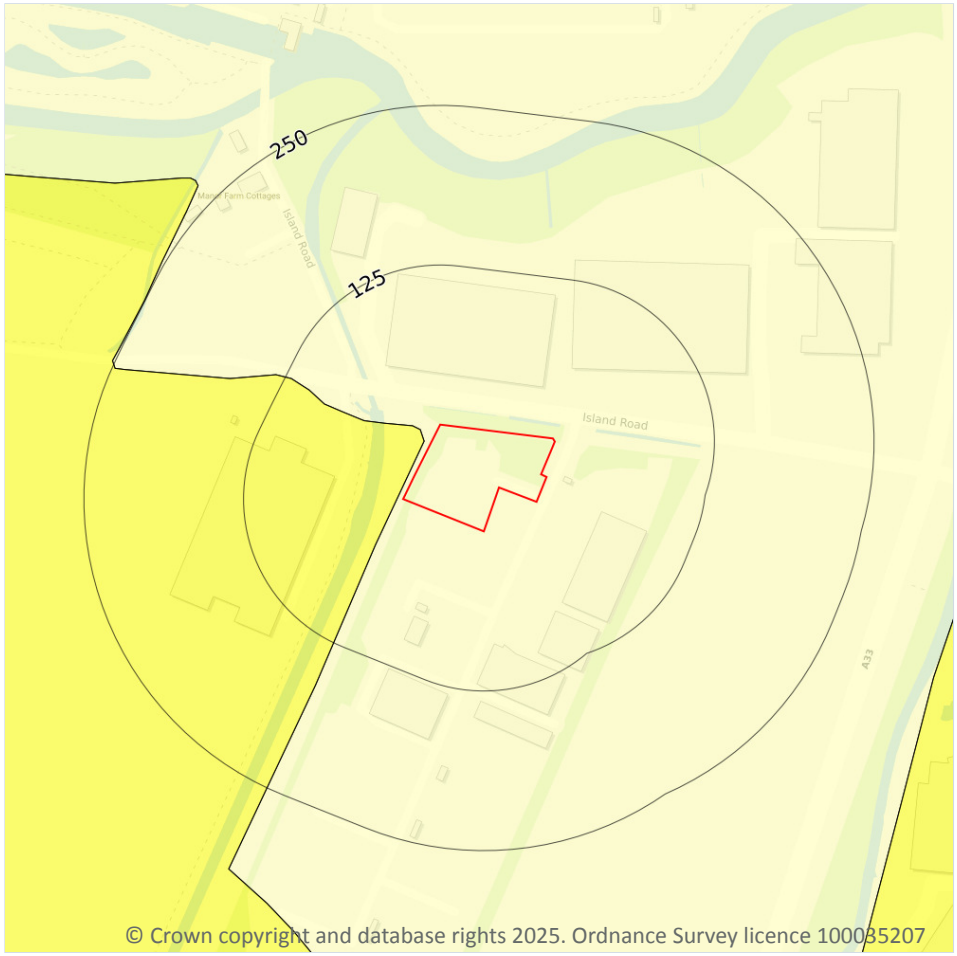
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 133 >**

Location	Hazard rating	Details
On site	**Very low**	**Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.**

Location	Hazard rating	Details
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**
31m N	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

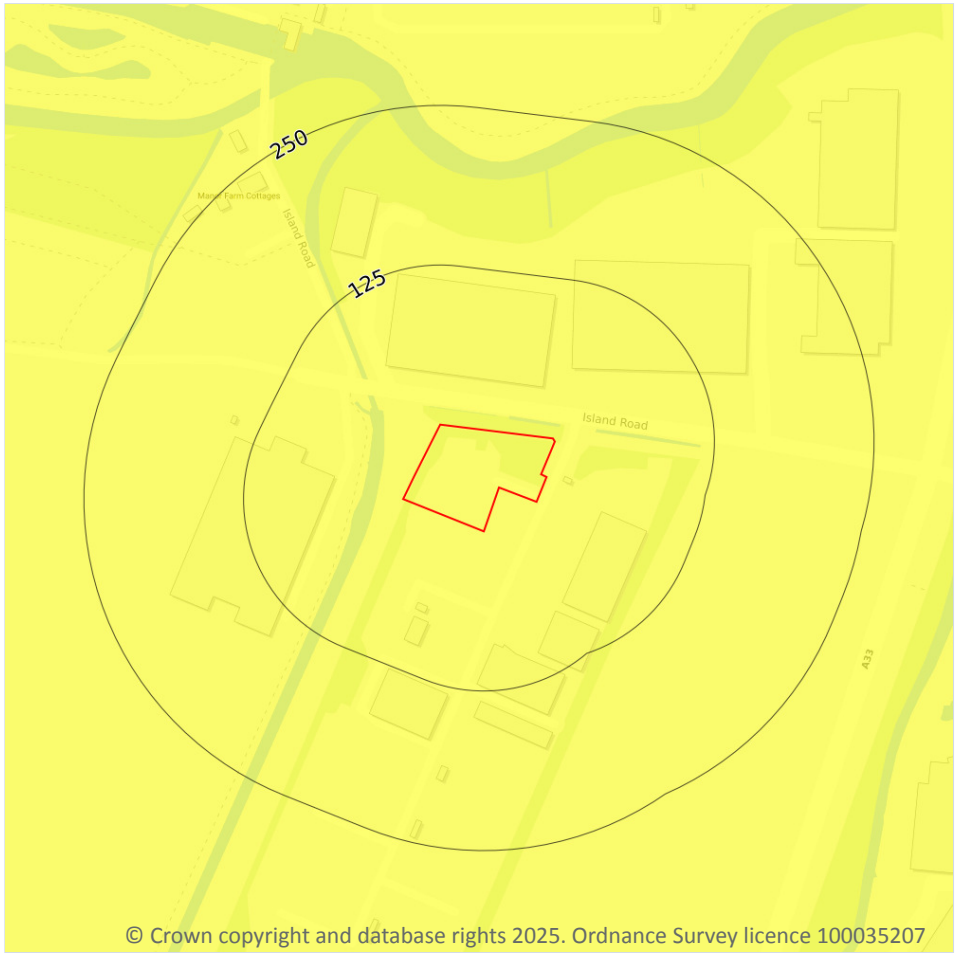
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 135 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
4m NW	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 136 >**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

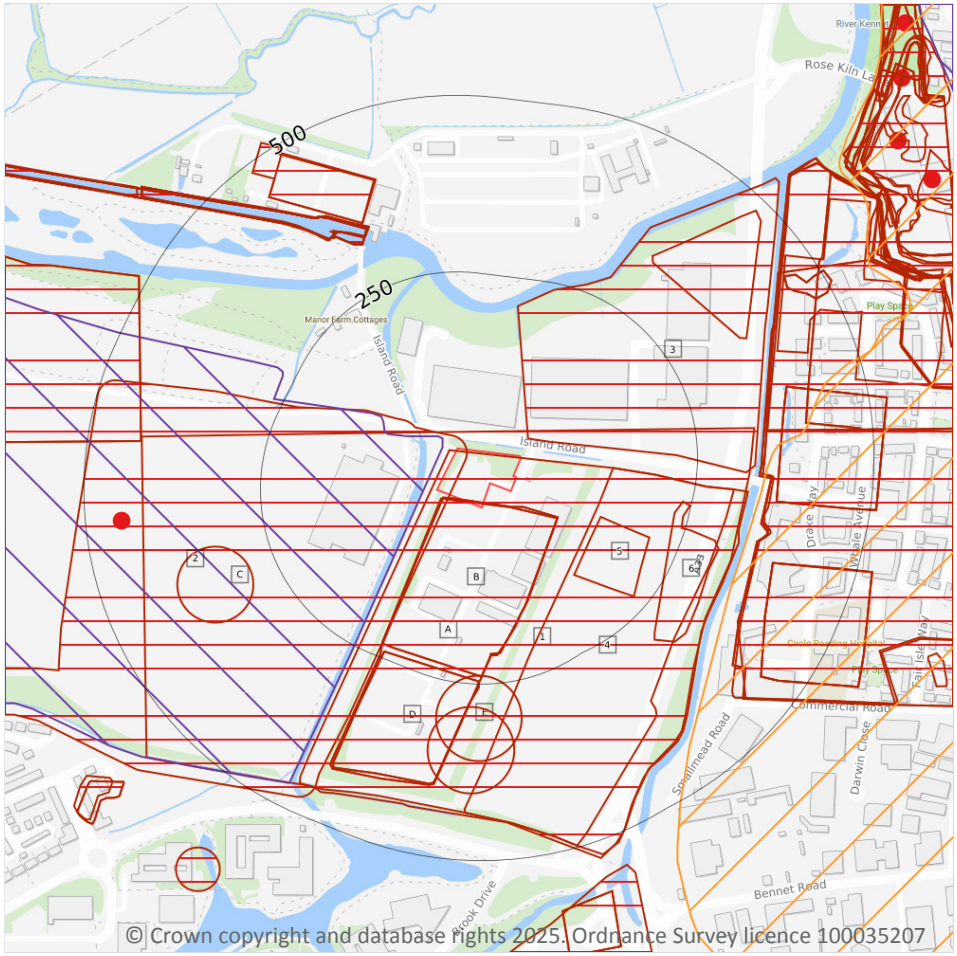
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 137 >**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining and ground workings



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18.1 BritPits

Records within 500m	1

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 139 >**

ID	Location	Details	Description
9	448m W	Name: Smallmead Farm Gravel Pit Address: Smallmead Farm, READING, Berkshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m **14**

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on **page 139 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Sewage Farm**	**1973**	**1:10000**
A	**On site**	**Disused Sludge Beds**	**1989**	**1:10000**
A	**On site**	**Disused Sludge Beds**	**1994**	**1:10000**
A	**On site**	**Sewage Farm**	**1976**	**1:10560**
B	**On site**	**Sludge Beds**	**1979**	**1:10000**
B	**On site**	**Sludge Beds**	**1973**	**1:10000**
C	**On site**	**Gravel Pit**	**1989**	**1:10000**
3	27m NE	Refuse Heap	1973	1:10000
4	121m SE	Refuse Heap	1973	1:10000
5	131m SE	Disused Sludge Beds	1973	1:10000
6	230m E	Unspecified Heap	1962	1:10560
D	236m S	Sludge Bed	1979	1:10000
D	236m S	Sludge Bed	1973	1:10000
E	238m S	Sewage Farm	1898	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	1

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on **page 139 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
2	17m NW	Smallmead Farm	Sand and gravel	Surface mineral working	Application	Not available

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	2

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining and ground workings map on **page 139 >**

ID	Location	Name	Commodity	Class	Likelihood
8	338m E	Not available	Chalk	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
-	843m SE	Not available	Chalk	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	**1**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

Location	Details
On site	**Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) may have information such as mining plans and maps held within their archive that have occurred within 1km of this property. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk ↗.**

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	**0**

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	1

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
4m NW	Stone

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes



Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

Mining cavities

Reported recent incidents

Historical incidents

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	1

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

Features are displayed on the Ground cavities and sinkholes map on **page 145 >**

ID	Location	Mine Address	Mineral
1	852m NE	Rose Kiln, Reading, Berkshire	Chalk

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

20 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 147 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
4m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

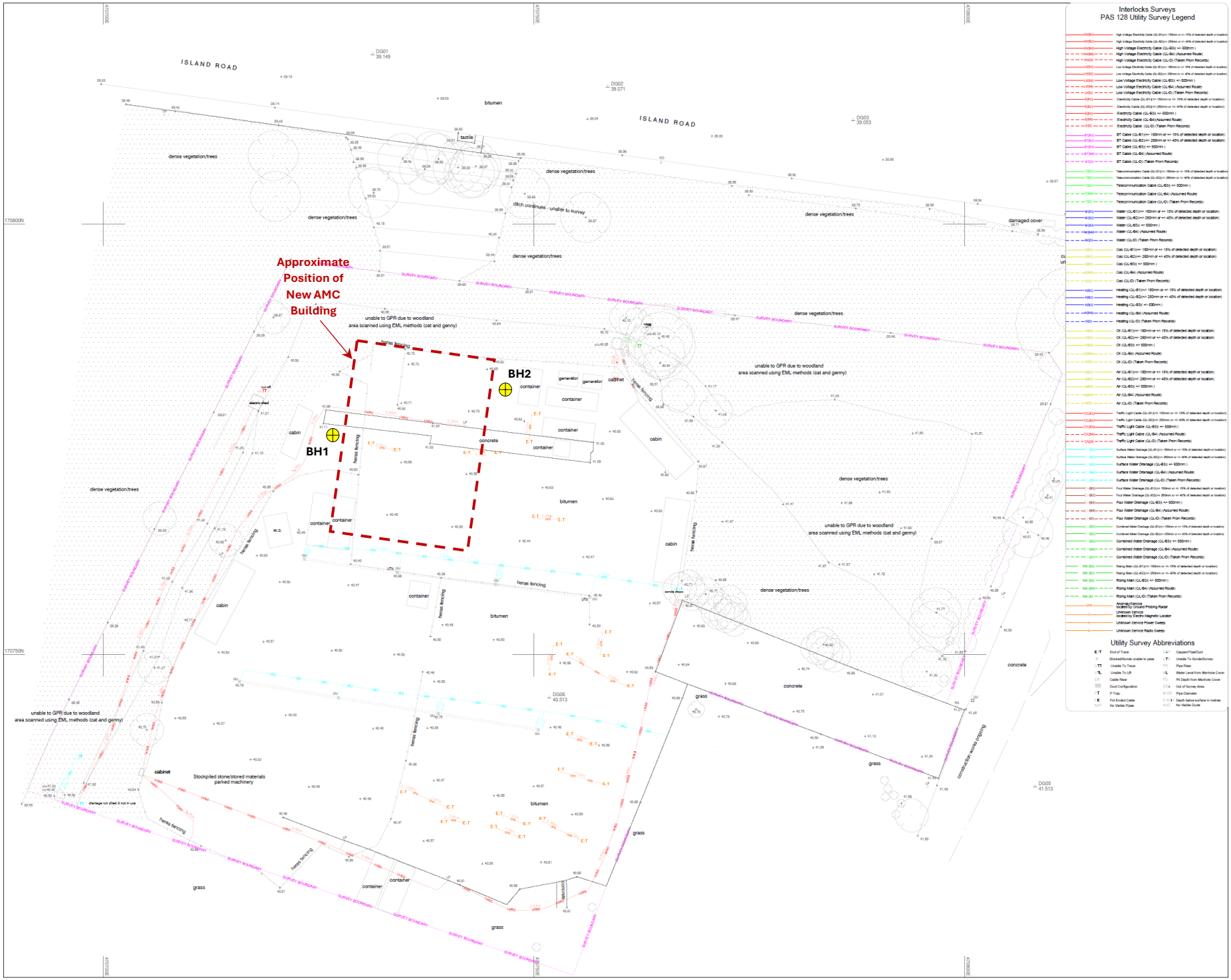
Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

17.0 SITE PLANS



Interlocks Surveys
PAS 128 Utility Survey Legend

Utility Survey Abbreviations

E/T	End of Trace	CP	Capped Pipe/Duct
S	Stocked/Grade unable to pass	UT	Unable To Scrape/Survey
UTT	Unable To Trace	PR	Pipe Riser
UTL	Unable To Lift	WL	Water Level from Manhole Cover
CR	Cable Riser	PD	Pit Depth from Manhole Cover
DC	Duct Configuration	OSA	Out of Survey Area
PT	P Trap	PDIA	Pipe Diameter
PE	Pot Ended Cable No Visible Pipes	DUCT	Depth below surface in metres No Visible Ducts

Symbol & Abbreviation Key.

- BARBED WIRE FENCE
- POST & RAIL FENCE
- CLOSE BOARD FENCE
- RAILINGS
- CHAIN LINK FENCE
- OTHER FENCE
- KERB
- DROPPED KERB
- GULLY CHANNEL
- TOP / BOTTOM OF BANK
- FOLIAGE
- DITCH
- VERGE
- OVERHEAD CABLES
- GATE
- HEDGE
- TREE - BROAD LEAVED
- TREE - CONIFEROUS
- BUSH
- BUILDING
- BOREHOLE
- SURVEY STATION
- ORDNANCE SURVEY BENCH MARK

A/C	AIR CONDITIONING UNIT	KO	KERB OFFLET
AV	AIR VALVE	LC	LIGHTING COLUMN
BOL	BOLLARD	LP	LAMP POST
BH	BOREHOLE	NP	NAME PLATE
BL	BED LEVEL	NB	NOTICE BOARD
BM	BENCH MARK	PR	PIPE RISER
BT	BRITISH TELECOM	RP	RODDING POINT
CTV	CABLE TV	RS	ROAD SIGN
CL	COVER LEVEL	SP	SIGN POST
CR	CABLE RISER	SV	STOP VALVE
DP	DOWN PIPE	TL	TRAFFIC LIGHT
ER	EARTH ROD	TP	TELEGRAPH POLE
EP	ELECTRICITY POLE	TOF	TOP OF FENCE
EM	ELECTRICITY MARKER	TOH	TOP OF HEDGE
FB	FUSE BOX	TOR	TOP OF RAILINGS
FH	FIRE HYDRANT	TOS	SERVICE LEVEL
FP	FENCE POST	TOW	TOP OF WALL
FL	FLOOR LEVEL	UTL	UNABLE TO LIFT
GV	GAS VALVE	VM	VALVE MARKER
GM	GAS MARKER	VP	VENT PIPE
GU	GULLY	WL	WATER LEVEL
HM	HYDRANT MARKER	WM	WATER MARKER
IL	INVERT LEVEL	WO	WASH OUT

Limit of Liability.

This survey has been carried out under the British Standards Institution PAS 128:2022. Specification for underground utility detection, verification and location.

The location and/or identification of a service will not necessarily indicate whether it is live or dead.

The fact that a service has not been located or identified and added on (GL+0) does not necessarily imply that it does not exist or is dead, their presence should be anticipated.

This survey is on a public, safe digging position are to be used in conjunction with this plan before any mechanical plant is used. On site verification (C.A.T. & Genny) by a trained operative is strongly advised during the excavation process.

At Interlocks Surveys Ltd we use skilled staff and modern, calibrated equipment to perform our surveys to the highest of qualities. However, a well-designed and executed survey should find 80%-95% of services, but it may not be possible to achieve a 100% detection rate. As a result, these types of surveys are not infallible.

Notes.

Results overlain on topographical drawing reference 250688
Levels related to GPS.

N

INDICATIVE ONLY

Rev	Details of Revision	Drawn	Date

Surveyed	Drawn	Date	Checked	Date	Approved	Date
ASH	ASH	26/08/25	GD	01/09/25	GD	01/09/25

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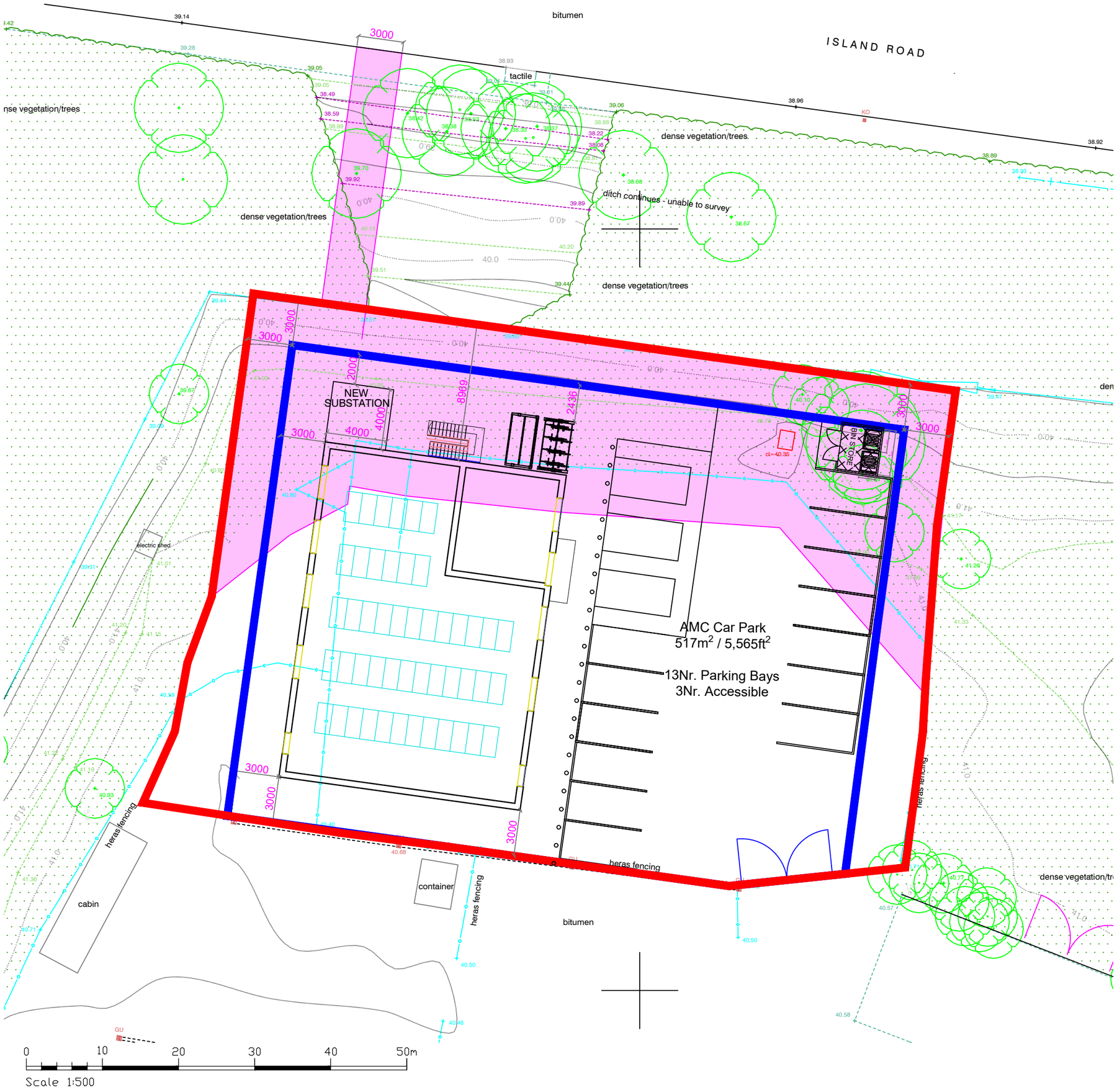
Title.

UNDERGROUND UTILITY SURVEY
READING STW
ISLAND ROAD
READING
RG2 0RP

Dwg No. **250688 UGS** Sheet **1 of 1**

Scale 1:200 A1 Sheet Rev. -

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N

AMC COMPOUND
(1,563m² / 16,824ft²)

SECURITY FENCE LINE

VEGETATION REMOVAL
(659m² / 7.093ft²)

REV	DESCRIPTION	DATE	INITIAL
B	Bike Store and Smoking Shelter added.	17.10.2025	LW
A	Site boundary amended to include external stiar and substation.	13.10.2025	LW

STAGE:

PROJECT STAGE

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PROJECT:

READING STW, ISLAND ROAD,
READING, RG2 0RP

TITLE:

AMC COMPOUND
PROPOSED SITE LAYOUT

DRAWN:	CHECKED:	DATE:
LW	LW	17/10/2025

SCALE:	DRAWING NO.	REV:
1:250 @ A3	4052309	B

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