CONTAMINATED LAND RISK ASSESSMENT

Phase 1 Desk Study Report

Site Address
Plot 8
Norfolk Road
Gravesend, Kent
DA12 2PS

Client
Mitchell Thurbin

Report Reference
PH1-2026-000035

Prepared by
STM Environmental Consultants Ltd

Date
25/03/2026



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2 DOCUMENT CONTROL

CONTAMINATED LAND RISK ASSESSMENT
Phase 1 Desk Study Report

Site Address:	Plot 8, Norfolk Road, Gravesend, Kent DA12 2PS
Site Coordinates:	566285 174108
Prepared for:	Mitchell Thurbin
Report Reference:	PH1-2026-000035
Version No:	1.0
Date:	25/03/2026
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3 DISCLAIMER

This report and any information or advice which it contains, is provided by STM Environmental Consultants Ltd (STM) and can only be used and relied upon by Mitchell Thurbin (Client). Any party other than the Client using or placing reliance upon any information contained in this report, do so at their own risk.

STM has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant when undertaking works of this nature. However, STM gives no warranty, representation or assurance as to the accuracy or completeness of any information, assessments or evaluations presented within this report.

It is noted that some of the findings presented in this report are based on information obtained from third parties (i.e. Environmental Search Report). Whilst we assume that all information is representative of the site and of present conditions, we can offer no guarantee as to its validity regarding the short term or long-term history of the Site.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

It should be noted that this report has been produced for environmental purposes only. It should not in any way be construed to be or used to replace a geotechnical survey, structural survey, asbestos survey, buried services survey, unexploded ordnance survey or Invasive Plant Survey.

4 EXECUTIVE SUMMARY

SECTION	SUMMARY
Site Location And Size	The site is located at Plot 8, Norfolk Road, Gravesend, Kent, DA12 2PS and is centred at national grid reference 566285 174108. The site has an area of approximately 0.21 ha.
Current Site Use	The site is currently used as a Coach Depot. The main current uses in the immediate surrounding area include industrial and commercial buildings.
Proposed Development	The development proposal is for the demolition of the existing industrial/commercial unit and reconstruction of new commercial unit, including removal of existing containers. It is understood that there are no proposals to include soft landscaping in the development.
Site History	Examination of Ordnance Survey historic maps revealed that from the earliest mapping in 1864, the site comprised 1no. Watercourse intersecting its southeastern corner. As of c.1865, a second Watercourse was shown to run across the length of the northern site border and from c.1888, Ground Workings associated with a nearby canal span the length of this northern border. By c.1953, a pond was shown stretching from the centre of the site to the northwest and intersecting the northwestern site boundary; this pond was no longer present as of c.1964-69, potentially having been infilled. From c.1969-73, an Electricity Substation was developed in the south of the site, intersecting the southern border. By c.1993, neither Watercourse is present, nor the Ground Workings; potentially infilled. In 1993, a Depot was developed in the eastern portion of the site. As of c.2009, 2no. Small Unspecified Structures were present in the northeastern and southeastern corners of the site, in addition to a further Small Unspecified Structure developed in the southeastern corner in c.2018, these are likely to be shipping containers based on present day layout. After this, no further significant changes were observed. The surrounding area has been predominantly industrial and commercial since widescale development occurred in the 1970s.
Geology	According to BGS, the bedrock geology beneath the site consists of Seaford Chalk Formation comprising Chalk while superficial deposits of Alluvium comprising Clay, Silt, Sand and Gravel were identified.
Topography	The site is at an elevation of approximately 3.10 mAOD (above Ordnance Datum).
Hydrogeology	The site is underlain by a Secondary Undifferentiated Superficial Aquifer and a Principal Bedrock Aquifer.
Hydrology	The nearest surface water body is the River Thames located approximately 187m N of the site.
Ecology	There are no designated ecological receptors located on or within 250m of the site.
Relevant Previous Site Investigations	Gravesham Borough Council's online planning portal was searched in an effort to identify any relevant planning applications within a 25m radius. No relevant Contaminated Land Reports were identified in the search.

Contamination Assessment	On site potentially contaminative land uses (PCLUs) have included Depot/Coach Depot, Infilled Watercourse, Infilled Pond, Infilled Ground Workings, Gas Works Historical Landfill, Electricity Substation, Depot, with a potential onsite source of contamination identified in the form of Peat Geology. Off site PCLUs include Ground Workings (adjacent NE & NW, 30m E), 2no. Electricity Substation (adjacent S & 20m SE), Gas Works Historical Landfill (1m N), Depot (5m W & 30m W), Railway Land (25m S), Depot/Works (30m E), Scrap Yard (49m N) and Allotment Gardens (50m NE). A conceptual site risk model was developed and a qualitative risk assessment carried out. Potentially significant potential pollutant linkages were identified in respect of: • Human Health Receptors (i.e. Future Occupiers/Users) - via inhalation; • Human Health Receptors - Explosion/Fire risk due to build-up of Methane/ VOCs in confined spaces; • Groundwater receptors – Principal Bedrock Aquifer; • Property Receptors - Damage to buildings and services due to exposure to aggressive chemicals in the soil; • Property Receptors – Explosion/Fire risk due to build-up of Methane/ VOCs in confined spaces. The identified risks are considered to be Low-Moderate.
Recommendations	Given that potentially significant potential pollutant linkages were identified, it is recommended that an intrusive site investigation is undertaken with the objective of determining the presence and extent of any soil and gaseous contamination at the site.
This table is intended as a summary of the desk study findings and should be read in conjunction with the main report.	

5 INTRODUCTION

STM Environmental Consultants Ltd (STM) were commissioned by Mitchell Thurbin (Client) to undertake a Phase 1 Contaminated Land Risk Assessment (CLRA) at a site located at Plot 8, Norfolk Road, Gravesend, Kent, DA12 2PS.

The study is required to support a planning application.

5.1 Development Proposal

The development proposal is for the demolition of the existing industrial/commercial unit and reconstruction of a new commercial unit, including removal of existing containers. It is understood that there are no proposals to include soft landscaping in the development.

The proposed development plans are contained in Appendix 1.

6 CONTEXT AND OBJECTIVES FOR THE RISK ASSESSMENT

6.1 Legislative Context

6.1.1 Part IIA

Part IIA of the Environmental Protection Act 1990, which came into force in England in April 2000 and in Wales in July 2001, introduced a new statutory regime for the identification and remediation of contaminated land in the United Kingdom.

The legislation considers risks from contaminated land to human beings, controlled waters (surface and ground water), protected ecological systems and property. Under the legislation “contaminated land” is defined as:

"Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that: -

(a) Significant harm is being caused or there is significant possibility of such harm being caused: or

(b) Pollution of controlled waters is being caused, or is likely to be, caused."

In order for land to be considered contaminated, there must be a contaminant, a receptor and a pathway (via which the contaminant can reach the receptor) present at the site. When these three components are identified at a site, a *pollutant linkage* is said to exist.

Pollutant Linkage = Contaminant –> Pathway –> Receptor

In order for a local authority to determine that a site is contaminated land, it must be satisfied that the pollutant linkage is a *significant pollutant linkage* and that the land in question is causing, or that there is a significant possibility that it will cause significant harm (SPOSH) to humans, habitats, buildings or livestock and crops if remedial work is not carried out.

6.1.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the government's policy on dealing with land contamination through the planning process. It states that planning policies and decisions should ensure that:

- a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);
- after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and
- adequate site investigation information, prepared by a competent person, is presented.

6.1.3 Environmental Damage Regulations

The Environmental Damage (Protections and Remediation) Regulations 2015 transpose the provisions of the EU Environmental Liability Directive into law in England and Wales.

The Regulations require action in response to the most significant cases of environmental damage. They cover specific types of:

- damage to species and habitats;
- damage to water; or
- risks to human health from contamination of land.

The Regulations apply to both imminent threats and actual cases of damage. Where these arise, those responsible must take immediate action to prevent damage occurring or remediate damage where it does occur.

The Regulations are based on the polluter pays principle 'requiring those responsible to meet the cost of preventive and remedial measures.

6.2 Objectives

This Desk Study has been written so as to provide an initial overview of the nature and extent of contamination hazards that may exist at the site. It has been undertaken in accordance with the specifications outlined in the British Standard BS 10175:2011+A2:2017 Code of Practice for the Investigation of potentially contaminated sites and the Environment Agency Document, LCRM: Stage 1 Risk Assessment.

The main objectives of the study were to:

- Enable a conceptual site risk model to be constructed;
- Provide sufficient information for a preliminary qualitative risk assessment to be undertaken;
- Inform the need for and scope of any intrusive investigations that may be required.

6.3 Summary of Research Undertaken

Details of information sources researched in order to compile this desk study are given below.

- Environment Agency Open Data (GIS)
- English Nature Open Data (GIS)
- English Heritage Open Data (GIS)
- British Geological Survey GeoIndex Web Map Service
- Coal Authority Open Data and Web Map Service.
- Historical Ordnance Survey Maps
- Local Authority Planning Application Portal
- Groundsure Enviro Insight Report & Historical Maps

7 SITE DESCRIPTION

7.1 Site Location and Size

The site is located at Plot 8, Norfolk Road, Gravesend, Kent, DA12 2PS at grid reference is 566285 174108. The site has an area of approximately 0.21 ha.

The site lies within the jurisdiction of Gravesham Borough Council in terms of the planning process. See Figure 1 below for the Site Location and Aerial Map.

7.2 Current Site Use

The site is currently used as a Coach Depot.

7.3 Surrounding Land Uses

A description of current land uses surrounding the boundaries of the site is given below in Table 1.

Table 1: Summary of surrounding land uses

Boundary	Adjacent Roads	Land Use Description
Northern	Wharf Road	Industrial/Commercial
Eastern	Mark Lane	Industrial/Commercial
Southern	Norfolk Road	Industrial/Commercial
Western	-	Industrial/Commercial

Figure 1: Site Location and Aerial Map





8 SITE HISTORY

8.1 Analysis of Historical Ordnance Survey Mapping

Historical maps published by the Ordnance Survey dating back to the late 1800's were reviewed in order to ascertain any previous industrial use at the site. The Groundsure Historical Maps are presented in Appendix 2. A summary of the historic map analysis is provided in Table 2.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
1864 1:2,500	Partial mapping only; 1no. Watercourse intersects the southeastern corner of the site.	Partial mapping only; the surrounding area predominantly comprises open, undeveloped land to the NE, SE and S of the site. Watercourse adjacent E and S. Thames and Medway Canal 25m NE. Railway Lines 25m S. 2no. Ponds 100m NE and 130m S. Denton Windmill (Corn) 180m NE.
1865 1:10,560	1no. Watercourse running across the length of the northern site border, which connects offsite to the Watercourse cutting across the southeastern corner.	Increased mapping indicates that Thames and Medway Canal 25m NE actually located 10m N. Watercourse adjacent E and W. Pond 160m NW. Orchard 220m SW.
1866 1:2,500	No significant changes.	Partial mapping only; no significant changes.
1888 1:10,560	Ground Workings associated with the canal running along the northern border of the site.	Pond 130m S no longer present, potentially infilled. Denton Windmill (Corn) 180m NE no longer present. Orchard 220m SW no longer present. Ground Workings associated with Canal adjacent NE and NW. Pond 90m SW.
1895 1:10,560	No significant changes.	No significant changes.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
1897 1:2,500	No significant changes.	Tank 175m S.
1907 1:10,560	No significant changes.	Residential development to the SW of the site. Pond 90m SW no longer present, potentially infilled. Tank 175m S no longer labelled.
1909 1:2,500	No significant changes.	No significant changes.
1916 1:10,560	No significant changes.	Partial mapping only; no significant changes.
1923 1:10,560	No significant changes.	No significant changes.
1932 1:2,500 1:10,560	No significant changes.	Pond 160m NW no longer present, potentially infilled. Hospital 60m SE.
1938 1:10,560	No significant changes.	No significant changes.
1946-51 1:10,560	No significant changes.	Laundry 140m S.
1953 1:1,250	Pond stretching from the centre of the site to the northwest and intersecting the northwestern site boundary.	Industrial development to the NW of the site. Hospital 60m SE no longer labelled. Laundry 140m S relabelled Home Services Laundry. 2no. Ponds adjacent NW and 135m N. Electricity Substation 20m SE. 2no. Unspecified Ground Workings 30m E and 180m W. 2no. Allotment Gardens 50m NE and 55m N. Tank 170m NW. Boat Building Yard 180m NW Garage 220m SW.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
1954 1:1,250	No significant changes.	No significant changes.
1955-58 1:2,500 1:10,560	No significant changes.	No significant changes.
1960 1:1,250	Blank Site.	Partial mapping only; Works 170m S.
1964-73 1:1,250 1:2,500 1:10,000 1:10,560	Pond stretching from the centre of the site to the northwest and intersecting the northwestern boundary of the site no longer present in the mapping from c.1969-73, potentially infilled. An Electricity Substation has been constructed in the south of the site, intersecting the southern border.	Large scale industrial/commercial development to the NW, NE and W of the site. 3no. Ponds adjacent NW, 100m NE and 135m N no longer present, potentially infilled. 2no. Unspecified Ground Workings 30m E and 180m W no longer present, potentially infilled. 2no. Allotment Gardens 50m NE and 55m N no longer labelled. Home Services Laundry 140m S redeveloped as a Bakery. Tank 170m NW no longer labelled. Boat Building Yard 180m NW relabelled Marine Engineering Works. Garage 220m SW no longer labelled. 2no. Electricity Substation adjacent S and 85m NW. 3no. Depots 5m W, 150m W and 170m W. 3no. Engineering Works 60m W, 80m W and 90m NW. Joinery Works 95m W. 4no. Warehouses 140m NE, 160m NE, 210m NE and 230m NE. Tank 145m NW. Timber Yard 230m W.
1978-82 1:1,250 1:10,000	Watercourse running through the southeast corner of the site is no longer present, potentially infilled. Watercourse running across the northern border of the site is no longer present, potentially infilled.	Watercourse adjacent E and S no longer present, potentially infilled. Watercourse adjacent NE and NW no longer present, potentially infilled. Ground Workings associated with canal adjacent NE and NW no longer present, potentially infilled.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
	Ground Workings associated with the canal running along the northern border of the site are no longer present, potentially infilled.	Thames and Medway Canal 10m N no longer present, potentially infilled.* Joinery Works 95m W relabelled as Works. 3no. Engineering Works 60m W, 80m W and 90m NW relabelled as Works. Depot 30m E. Tank 130m S. Warehouse 180m E.
1984-88 1:1,250	Blank Site.	Partial Mapping only; no significant changes.
1993 1:1,250	A Depot has been developed in the eastern portion of the site.	Further industrial/commercial development in all directions. Depot 30m E relabelled as Works. Warehouse 140m NE relabelled Works. Marine Engineering Works 190m NW now labelled as Works. 2no. Depots 30m W & 60m E. 2no. Scrap Yards 60m NE and 130m NE. Electricity Substation 65m NE. 2no. Works 90m N & 110m E. 2no. Tanks 230m SE and 240m SE.
2001 1:10,000	No significant changes.	No significant changes.
2003 1:1,250	No significant changes.	No significant changes.
2009 Aerial Imagery	2no. small unspecified structures present in the northeastern and southeastern corners of the site, likely shipping containers based on present day layout.	No significant changes.
2010 1:10,000	No significant changes.	No significant changes.
2015 1:10,000	No significant changes.	No significant changes.

Table 2: Summary of historical land use identified from historical maps

Map Year & Scale	POTENTIALLY CONTAMINATIVE LAND USES	
	On Site	Off Site
2018 Aerial Imagery	1no. small unspecified structure present in the southeastern corner of the site, likely a shipping container based on present day layout.	No significant changes.
2025 1:10,000	No significant changes.	No significant changes.
Current Use	The site is currently used as a Coach Depot.	The main uses in the immediate surrounding area include industrial and commercial buildings.

**Based on images obtained from Google Maps, although the area has since been redeveloped, the Canal appears to be culverted rather than infilled. Therefore, this is not considered to be a PCLU.*

9 ENVIRONMENTAL CHARACTERISTICS

A variety of Environmental datasets provided by the Environment Agency, British Geological Society, English Heritage and English Nature and others were screened in order to assess the environmental sensitivity of the site. The Groundsure Environmental Screen Report is presented in Appendix 3. The results are summarised below.

9.1 Geology

9.1.1 Published Geology

According to the BGS Geoindex, the site is located on bedrock of Seaford Chalk Formation comprising Chalk. The superficial deposits are Alluvium comprising Clay, Silt, Sand and Gravel.

9.1.2 Unpublished Geology

BGS borehole records for the immediate surrounding area were reviewed in order to obtain further information on the ground conditions beneath the site.

The nearest log is located approximately 46m NE of the site (BGS ref. TQ67SE80) and was undertaken in July 1970 to a depth of approximately 17.68mbgl. The strata encountered comprised Made Ground to 1.10mbgl, underlain by Clay to 1.62mbgl, followed by Silt to 3.02mbgl, and Silty Clay to 6.71mbgl. This is in turn underlain by Peat to 7.50mbgl, followed by Silt to 9.14mbgl, Gravel and Flints to 12.50mbgl, Silt to 13.29mbgl, and Gravel with Flints to 15.85mbgl. This is underlain by Gravel to 17.68mbgl, the base of the borehole.

The BGS Borehole Logs are included in Appendix 4.

9.2 Hydrogeology

The Environment Agency classifies the superficial deposits as a Secondary Undifferentiated Aquifer. The bedrock is classified as a Principal Aquifer.

There are no groundwater Source Protection Zones on or within 250m of the site.

9.3 Water Abstractions

No Surface Water or Potable Water Abstraction Licenses were identified on or within 1000m of the site.

The following Groundwater Abstraction Licenses were identified within 1000m of the site:

Table 3: Groundwater Abstraction Licenses identified within 1000m of the site.

Point	Status	Details	Source	Distance/ Direction
Point 1, Borehole at Gravesend Sewage Works In Kent	Active	General Washing/Process Washing	Southern Region Groundwater	370m E
Point A, S Drift, Underground Gravel Strata (Thames Ballast)	Active	Mineral Washing	Southern Region Groundwater	617m E
Point A, S Drift, Underground Gravel Strata (Thames Ballast)	Historical	Mineral Washing	Southern Region Groundwater	617m E
Borehole B, Underground Strata River Terrace Gravels	Active	Mineral Washing	Southern Region Groundwater	621m E
Borehole B, Underground Strata River Terrace Gravels	Historical	Mineral Washing	Southern Region Groundwater	621m E
Point A, S Drift, Underground Gravel Strata (Thames Ballast)	Historical	Mineral Washing	Southern Region Groundwater	650m E

9.4 Groundwater Level

According to BGS, the groundwater is likely to be less than 3.0 metres below the ground surface throughout the year.

9.5 Hydrology

The nearest surface water feature is the River Thames which is located approximately 187m N of the site.

9.6 Flood Risk

9.6.1 River and Tidal (Fluvial and Tidal) Flooding

The risk of fluvial and tidal flooding is therefore considered to be High. The site is located within Flood Zone 3 which is defined by the Environment Agency as follows:

- Flood Zones 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year.

9.6.2 Surface Water (Pluvial) Flooding

The Environment Agency (EA) long term flooding maps indicate that the site is at Very Low risk of surface water flooding. Very Low risk means that each year this area has a chance of flooding of less than 0.1%.

9.6.3 Groundwater Flooding

The BGS groundwater flood maps indicate that the risk of groundwater flooding at the site is High.

9.7 Environmentally Sensitive Sites and Ecological Protection Zones

No Environmentally Sensitive Sites (e.g. Green Belt Land, Ancient Woodlands) or Ecological Protection Zones (e.g. Special Scientific Interest (SSSI), Ramsar Sites, Special Areas of Conservation (SAC)) were identified on or within 250m of the proposed development.

9.8 Conservation Areas, Designated Protected Buildings and Monuments

No Conservation Areas, Listed Buildings or Scheduled Ancient Monuments were identified on or within 50m of the proposed development.

9.9 Topography

According to Google Earth, the general site level is at 3.10 mAOD.

9.10 Waste Disposal Activities & Landfill Sites

The following Historical Waste Sites, Historical Landfills (EA/NRW) sand Licensed Waste Sites were identified on and within 250m of the site:

Table 4: Historical Waste sites identified within 250m of the site.

Site Address	Site Type	Data Source	Distance/ Direction
N/A	Scrap Yard	Historic Mapping (1993)	49m N
N/A	Scrap Yard	Historic Mapping (1993)	78m NE

Table 5: Licensed Waste sites identified within 250m of the site.

Site Address	Site Type	License Issue/ Effective Date	Distance/ Direction
Waste Transfer Station Site Address: Off Mark Lane, Denton, Gravesend, Kent, DA12	Household, Commercial & Industrial Waste	Issue: 25/04/1997 Effective: 25/04/1997	70m N

Site Address	Site Type	License Issue/ Effective Date	Distance/ Direction
2RU			
Denton Industrial Estate, Wharf Road, Gravesend, Kent, DA12 2RU	Metal Recycling Site (mixed MRS's)	Issue: 18/12/1996	84m NE
G M R (Kent) Limited Site Address: Denton Industrial Estate, Wharf Road, Gravesend, Kent, DA12 2RU	Metal Recycling Site (mixed MRS's)	Issue: 18/12/1996 Effective: 18/12/1996	84m NE
Wharf Metals Ltd Site Address: Wharf Metals Ltd, Wharf Road, Gravesend DA12 2RU	Metal Recycling Site	Issue: 08/09/2025 Effective: 29/08/2025	106m NE

Table 6: Historical Landfill (EA/NRW) identified on and within 250m of the site.

Site Address	Waste Type	License Issue/ Surrender Date	Distance/ Direction
Gas Works - Canal, Gravesend, Kent	Inert, Commercial	License Issue: 01/01/1976	On Site
Gas Works - Canal, Gravesend, Kent	Inert, Commercial	License Issue: 01/01/1976	1m N
Norfolk Road, Denton, Kent	Inert, Commercial	-	60m N
Denton-Comma Oil, Denton, Kent	Inert	License Issue: 01/01/1976	141m SE

9.11 Petrol and Fuel Sites

No Petrol or Fuel Sites were identified on or within 500m of the site.

9.12 Historical Tanks

The Groundsure report includes a summary of Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale.

No Historical Tanks were indicated to have been on site. The nearest Tank was identified approximately 113m SW of the site.

9.13 Sites Determined as Contaminated Land under Part 2A EPA 1990

No Sites Determined as Contaminated Land were identified on or within 500m of the site.

9.14 Dangerous or Hazardous Sites

No Control of Major Accident Hazards (COMAH) or Notification of Installations Handling Hazardous Substances (NIHHS) Sites were identified on or within 250m of the site.

9.15 Hazardous Substance Storage/Usage

No 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 were identified on or within 250m of the site.

9.16 IPC Authorisations

No Integrated Pollution Control (IPC) Authorisations were identified on or within 500m of the site.

9.17 Part A(1) and IPPC Authorised Activities

No Part A(1) or Integrated Pollution Prevention Control (IPPC) Authorised Activities were identified on or within 500m of the site.

9.18 Part A(2) and Part B Activities and Enforcements

The following Part B Activity and Enforcement was identified within 250m of the site:

Table 7: Part B Activity and Enforcement identified within 250m of the site.

Site Address	Process	Permit Type	Status	Distance/ Direction
R.S. Dawe, Norfolk Road Industrial Estate, Norfolk Road, Gravesend, Kent, DA12 2PS	Respraying of Road Vehicles	Part B	Surrendered	64m W

9.19 Category 3 or 4 Radioactive Substance Authorisations

No Category 3 or 4 Radioactive Substance Authorisations were identified on or within 500m of the site.

9.20 Discharge Consents

No Red List Discharge Consents were identified on or within 500m of the site.

The following Licensed Discharge Consent was identified within 250m of the site:

Table 8: Licensed Discharge Consent identified within 250m of the site.

Site Address	Effluent Type	Receiving Water	Effective Date- Revocation Date	Distance/ Direction
Empress Rd Denton Catch Chamb' Cs0, Havengore Avenue, Empress Road, Denton, Kent, DA12 2QL	Sewage	Tidal River Thames	06/09/1999 - 06/01/2000	232m NE

9.21 List 1 and List 2 Dangerous Substance Inventory Sites

No List 1 and List 2 Dangerous Substances Inventory Sites were identified on or within 500m of the site.

9.22 Pollution Incidents

No Pollution Incidents occurred on or within 50m of the site.

9.23 Coal Mining

The site is not located in an area potentially affected by Coal Mining.

9.24 Non-Coal Mining

No Non-Coal Mining Areas were identified on or within 50m of the site.

9.25 Radon

A search of the BGS Radon dataset indicates that the property lies in an area with a Less than 1% chance of being affected by naturally occurring Radon gas. Therefore, it is unlikely to be affected by Radon.

9.26 Asbestos within Buildings

The information available indicates that 3no. buildings on the site were developed prior to 2010. It is therefore considered possible that Asbestos may exist within them and that an Asbestos survey may be required in line with The Control of Asbestos Regulations 2012. This is outside the scope of this assessment. An Asbestos survey is recommended.

9.27 Unexploded Ordnance

An Unexploded Ordnance (UXO) risk assessment in line with CIRIA C681 is beyond the scope of this report and should be considered depending on the site's location.

10 RELEVANT PLANNING HISTORY

Gravesham Borough Council's online planning portal was searched in an effort to identify any relevant planning applications.

10.1 Planning Applications for the Site

Table 9 below provides a summary of the previously submitted planning applications identified for the site.

Table 9: Summary of planning applications at the site.

Application Reference	Date	Description of Proposal	Status
19740704	29/05/1975	Erection of a single storey building for storage and repair of coaches and taxis and associated office.	Granted (Prior to Contaminated Land Legislation)
19820283	06/06/1982	Erection of a building for use as a depot for the operation garaging parking maintenance and repair of public service vehicles and provision of a parking area.	Granted (Prior to Contaminated Land Legislation)
20140535	27/10/2014	Retention of residential caravan.	Granted (Without a Contaminated Land Condition)

10.2 Planning Applications for Adjacent Sites

Table 10 below provides a summary of the previously submitted planning applications identified for nearby sites. Although other planning applications were identified on adjacent sites along Norfolk Road; they were not deemed relevant to this report.

Table 10: Summary of planning applications for adjacent sites

Application Reference	Date	Description of Proposal	Status
19970535	09/09/1997	Change of use of premises to an industrial chemical cleaning depot comprising offices, stores, warehousing and open storage for plant and associated car/van parking.	Granted (Without Contaminated Land Condition)
20090504	12/10/2009	Continued mixed use of land for the parking of 15 coaches and 3 mini-buses, storage of 50 skips and parking of 1 skip lorry, MOT testing centre, B2 engineering works, ancillary works, ancillary offices and retention of boundary fence.	Granted (Without Contaminated Land Condition)
20090895	21/12/2009	Application for removal of condition 3 of planning permission reference number 20090504 for change of use of land for the parking of 15 coaches and 3 minibuses, storage of 50 skips and parking of 1 skip lorry, MOT testing centre, B2 engineering works, ancillary works, ancillary offices and retention of the boundary fence; relating to the written lighting plan and report.	Granted (Without Contaminated Land Condition)

11 SITE WALKOVER

A site walkover was not undertaken as part of the initial scope of works. Photographs of the site, which have been provided by the Client, are presented in Appendix 5.

12 PRELIMINARY CONCEPTUAL SITE RISK MODEL (CSM)

A conceptual site risk model (CSM) aims to summarise all the potential pollutant linkages or risk that may be associated with a site. It considers the potential pollution sources, receptors and pathways by which receptors can be impacted.

12.1 Potential Sources

Potentially contaminative land uses (PCLUs) of concern were identified based on their proximity to the site and whether they had the potential to generate significant quantities of ground gases, vapours and/or mobile volatile contamination (i.e. high pollution migration potential).

Any PCLUs within a 50m radius of the site as well as any PCLUs with high pollution migration potential within 250m of the site were considered to be of concern and were included within the assessment.

In addition, the potential for Made Ground to be present was considered to be a possibility.

A summary is provided in Table 11 below.

Table 11: Summary of potential contamination sources, period of operation and distance from site.

Site Name/ Description	Industrial Profile	Approx. Year Use Established	Approx. Year Use Ended	Direction	Approx. Distance from Site (m)
Potential Peat Geology	-	-	Current (2026)	On site	0
Depot/Coach Depot	-	c.1993	Current (2026)	On site	0
Infilled Watercourse	Unknown Filled Ground (Pond, marsh, river, stream, dock etc)	c.1978-82	Current (2026)	On Site	0
				E & S	Adjacent
		c.1978-82		On Site	0
				NE & NW	Adjacent
Infilled Ground Workings	Unknown Filled Ground (Pit, quarry etc)	c.1978-82	Current (2026)	On Site	0
				NE & NW	Adjacent
		c.1969-73	Current (2026)	E	30
Gas Works Historical Landfill	Waste: Landfills and Other Waste Treatment & Disposal Sites	c.1976	Unknown	On Site	0
				N	1
Infilled Pond	Unknown Filled Ground (Pond, marsh, river, stream, dock etc)	c.1964-69	Current (2026)	On site	0
				NW	Adjacent
Electricity Substation	Electricity Substation	c.1969-73	Current (2026)	On site	0
				S	Adjacent
		c.1953		SE	20
2no. Depots	-	c.1969-73	Current (2026)	W	5
		c.1993	Current (2026)	W	30
Railway Lines	Railway Land	c.1864	Current (2026)	S	25
Depot/Works	-	c.1978-82	c.1993	E	30
Scrap Yard	-	c.1993	Unknown	N	49
Allotment Gardens	-	c.1953	c.1969-73	NE	50

Typical contaminants that may be associated with the above PCLUs are:

- Acids & Alkalis
- Asbestos

- Chlorinated & Non-Chlorinated Solvents
- Fuels & Fuel Oils
- Heavy Metals
- Landfill Gases: Methane & Carbon Dioxide
- Organic & Inorganic Compounds
- Pesticides
- Polychlorinated Biphenyls (PCBs)
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Total Petroleum Hydrocarbons (TPHs)
- Volatile Organic Compounds (VOCs)

Please note, this list is not exhaustive of all contaminants that may be present on or off site.

12.2 Potential Receptors

The potential receptors include human, water, ecological and infrastructure receptors.

12.2.1 Potential Human Health receptors

Potential human health receptors include construction workers, future occupiers and users of the site and the proposed development and neighbours of the site.

12.2.2 Potential Groundwater Receptors

Potential groundwater receptors include a Principal Bedrock Aquifer.

12.2.3 Potential Surface Water Receptors

Potential surface water receptors include the River Thames which is located approximately 187m N of the site.

12.2.4 Potential Ecological Receptors

There are no potential ecological receptors in the vicinity of the site.

12.2.5 Potential Property Receptors

Potential property receptors include the proposed development as well as neighbouring properties and associated services.

12.3 Potential Pathways

12.3.1 Potential Pathways for Human Receptors

The main pathways via which on and off-site human receptors are likely to come into contact with, or be affected by any contamination present on the site can be summarised as follows:

- Dermal contact with contaminated soil (i.e. absorption through the skin) – through garden activities such as children playing, gardening etc.
- Ingestion of contaminated soil (either directly or via soil adhering to vegetables grown on the site)
- Inhalation of contaminated soil, fugitive dust and vapours.
- Explosion of landfill gases leading to death/injury

12.3.2 Potential Pathways for Groundwater Receptors

The principal means by which contaminants can reach the groundwater is by leaching (i.e. downward movement through the soil pores with percolating and infiltrating water).

12.3.3 Potential Pathways for Surface Water Receptors

Routes by which contaminants from the site could reach surface water include via overland run-off, drainage and groundwater entering nearby rivers as base flow.

12.3.4 Potential Pathways for Ecological Receptors

The exposure pathways for terrestrial ecological receptors will be similar to those for humans. Pathways for aquatic receptors are via uptake of contaminated sediments and water.

12.3.5 Potential Pathways for Property Receptors

Pathways by which property receptors are exposed to potential contaminants include ground gas and vapour migration through the unsaturated zone and absorption of water containing dissolved contaminants (i.e. as in the case of sulphate attack).

12.4 Potential Pollutant Linkages

The Potential Pollutant Linkages (PPLs) were identified as part of the CSM. These were concerned with the following:

- Risk of direct contact (ingestion and absorption) with and inhalation of contaminants to on-site human health receptors including future occupiers and site visitors (PPL1a)
- Risk of injury/death to future occupiers and visitors as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within on-site buildings. (PPL1b)
- Risk of direct contact (ingestion and absorption) with and inhalation of contaminants to on-site human health receptors such as Construction Workers (PPL1c)
- Risk of injury/death to construction workers as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within on-site buildings. (PPL1d)
- Risk of direct contact with (ingestion and absorption) and inhalation of contaminants to off-site human health receptors as a result of on-site contaminants migrating off-site (PPL2a)
- Risk of injury/death to off-site human health receptors as a result of explosion due to migration of on-site ground gas and subsequent accumulation in confined spaces in off-site buildings. (PPL2b)
- Risk of deterioration of groundwater quality resulting from the migration of on-site contaminants into the underlying aquifer (PPL3)
- Risk of deterioration of surface water quality resulting from the migration and entry of on-site contaminants into the surface water receptor (PPL4)
- Risk of deterioration of ecological quality resulting from the migration and entry of on-site contaminants to the ecological receptor during development and after completion (PPL5);
- Risk of damage to buildings and services from on and off-site contaminants (PPL6a)
- Risk of damage to property as a result of explosion due to accumulation of ground gas from on and off-site sources in confined spaces within buildings (PPL6b).

13 QUALITATIVE RISK ASSESSMENT

For land to be considered 'contaminated land' under Part IIA, the potential contamination source must be causing or have the significant possibility of causing harm to designated receptors. It is therefore necessary to focus on pollutant linkages that have the potential to be significant (i.e. those that are most likely to lead to a determination).

The identified PPLs were therefore individually qualitatively assessed using a basic risk assessment methodology which considers "Likelihood" and "Severity" to assess the magnitude of the potential risk. The methodology is summarised in Appendix 6.

Table 12 below summarises the conceptual site risk model (CSM) including the identified PPLs and the results of the qualitative risk assessment.

Table 12: Conceptual Site Risk Model - Potential Sources, Pathways and Receptors identified on the site.

Source/ Potential Contaminants	**Potential Contaminants Associated with Potential Onsite Peat Geology, Site Use as Depot/Coach Depot, Infilled Watercourse, Infilled Pond, Infilled Ground Workings, Gas Works Historical Landfill, Electricity Substation, Depot and Offsite Land Uses as Depot, Railway Land, Electricity Substation, Ground Workings, Gas Works Historical Landfill, Scrap Yard and Allotment Gardens:** i.e. Acids & Alkalis, Asbestos, Chlorinated & Non-Chlorinated Solvents, Fuels & Fuel Oils, Organic & Inorganic Compounds, Pesticides, PCBs, PAHs, VOCs & TPHs										
	On and Off-Site Contaminants				**On Site Contaminants**		**On Site Contaminants**			**On and Off-Site Contaminants**	
Potential Pathways	• Ingestion of soils, garden vegetables and dust • Ingestion of contaminated drinking water • Dermal absorption • Inhalation of dusts and vapours indoors and outdoors • Migration of ground gases and vapours into properties						Leaching in the unsaturated zone & diffusion in the saturated zone	• Overland run-off • Drainage channels • Base flow	• Direct contact via absorption and ingestion; • Inhalation	• Migration of ground gases and vapours through the unsaturated zone • Attack on water supply service pipes	
Potential Receptors	**ON SITE HUMANS (AFTER COMPLETION)** Visitors		**ON SITE HUMANS (DURING DEVELOPMENT)** Construction Workers		**OFF SITE HUMANS** Neighbours		**GROUND WATER** Principal Bedrock Aquifer	**SURFACE WATER** River Thames 187m N	**ECOLOGICAL** None	**ON SITE PROPERTY** Buildings and Services	
Potential Hazards	• Adverse health effects • Injury/ • Death	Explosion/ Fire - Build-up of Methane/ VOCs in confined spaces	• Adverse health effects • Injury/ Death	Explosion/ Fire - Build-up of Methane/ VOCs in confined spaces	• Adverse health effects • Injury/ Death	Explosion/ Methane build-up in confined spaces	Degradation of groundwater quality	• Degradation of surface water quality • Ecological impacts	Degradation of ecological receptor quality	Damage to property and services	Explosion/ Fire - Build-up of Methane/ VOCs in confined spaces
Plausible?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
PPL ID	**PPL1a**	**PPL1b**	**PPL1c**	**PPL1d**	**PPL2a**	**PPL2b**	**PPL3**	**PPL4**	**PPL5**	**PPL6a**	**PPL6b**
SEVERITY	Major (4)	Major (4)	Major (4)	Major (4)	Major (4)	Major (4)	Moderate (3)	Moderate (3)	Moderate (3)	Moderate (3)	Moderate (3)
LIKELIHOOD	Remote (2)	Remote (2)	Improbable (1)	Improbable (1)	Improbable (1)	Remote (2)	Remote (2)	Improbable (1)	Improbable (1)	Remote (2)	Remote (2)
RISK	Low to Moderate (8)	Low to Moderate (8)	Low (4)	Low (4)	Low (4)	Low to Moderate (8)	Low to Moderate (6)	Very Low (3)	Very Low (3)	Low to Moderate (6)	Low to Moderate (6)
POTENTIALLY SIGNIFICANT?	**YES**	**YES**	**NO**	**NO**	**NO**	**YES**	**YES**	**NO**	**NO**	**YES**	**YES**

13.1 Assessment of Potential Significance of Potential Pollutant Linkages

13.1.1 Potential Risks to On-Site Human Health Receptors

PPL1a is concerned with the risk of direct contact (ingestion and dermal absorption) with and inhalation of on and off-site contaminants by on site human health receptors. PPL1a is considered to have the potential to be significant. Given the proposed development does not include any proposed areas of soft landscaping, it is considered that the risk of human health receptors (i.e. future users of the site) being exposed to contamination via direct contact during after completion is low.

However, given the Historic Landfill identified on and in the vicinity of the site, a potential inhalation risk within the proposed buildings is still present.

PPL1c is concerned with the risk of direct contact (ingestion and dermal absorption) with and inhalation of on and off-site contaminants by construction workers. Although potentially contaminative land uses were identified on and in the vicinity of the site, it is considered that any potential risks can be satisfactorily mitigated by Construction Workers implementing standard health and safety measures (as described in Section 15.3) as required by CDM regulations

PPL1b is concerned with the risk of injury/death of future occupiers and site visitors as a result of explosion due to the potential accumulation of ground gases and vapours from on and off-site sources. PPL1b is considered to have the potential to be significant as potential sources of explosive ground gases and/or vapours (i.e. Infilled Watercourses, Infilled Pond, Infilled Ground Workings, Gas Works Historical Landfill, Peat Geology) were identified on or in the vicinity of the site.

PPL1d is concerned with the risk of injury/death of construction workers as a result of explosion due to the potential accumulation of ground gases and vapours from on and off-site sources. PPL1d is considered unlikely to have the potential to be significant as the likely exposure durations for Construction Workers to this potential risk will be relatively short.

13.1.2 Potential Risks to Off-Site Human Health Receptors

PPL2a is concerned with the risk of direct contact and inhalation of contaminants emanating from the site by off-site human health receptors. PPL2a is considered unlikely to have the potential to be significant. Although a potentially contaminative land uses were identified on the site, it is considered unlikely that any potential contaminants present at the site would be of sufficient magnitude and mobility as to significantly impact off-site human receptors.

PPL2b is concerned with the risk of injury/death of off-site human health receptors as a result of explosion due to accumulation of ground gases from on-site sources. PPL2b is considered to have the potential to be significant as potential sources of explosive ground gases and/or vapours (i.e. Infilled Watercourses, Infilled Pond, Infilled Ground Workings, Gas Works Historical Landfill) were identified on the site.

13.1.3 Potential Risks to Groundwater Receptors

PPL3 is concerned with the risk of degradation of groundwater quality resulting from the migration of on-site contaminants into the underlying aquifer. PPL3 is considered to have the potential to be significant given the potentially contaminative land uses identified on the site, and as the underlying aquifer is classified as a Principal Bedrock Aquifer.

13.1.4 Potential Risks to Surface Water Receptors

PPL4 is concerned with the risk of degradation of surface water quality resulting from the migration and entry of on-site contaminants into surface water receptors. PPL4 is considered to have the potential to be significant. The nearest surface water body is the River Thames located 187m N of the site. Given the distance to the site, it is considered unlikely that any potential contaminants present at the site would be of sufficient magnitude and mobility as to significantly impact surface water receptors.

13.1.5 Potential Risks to Ecological Receptors

PPL5 is concerned with the risk of degradation of ecological receptors resulting from potential on-site contaminants. PPL5 is considered unlikely to have the potential to be significant as no designated ecological receptors were identified on or within 250m of the site.

13.1.6 Potential Risks to Property Receptors

PPL6a is concerned with the risk of damage to on site buildings and services from on and off-site contaminants. If contaminated, the soil may contain aggressive chemicals (i.e. Sulphates, VOCs) that can attack building materials and services. PPL6a is considered to have the potential to be significant as potentially contaminative land uses were identified on and in the vicinity of the site.

PPL6b is concerned with the risk of damage to property as a result of explosion due to migration of on and off-site ground gases and vapours and their subsequent accumulation in confined spaces in on-site buildings. PPL6b is considered to have the potential to be significant for the same reasons as PPL1b.

14 CONCLUSIONS

This Phase 1 Desk Study was carried out to support a planning application.

A review of historical maps and planning records suggests that the site and surrounding land have been subject to previous potentially contaminative land uses (PCLUs). On site PCLUs have included Depot/Coach Depot, Infilled Watercourse, Infilled Pond, Infilled Ground Workings, Gas Works Historical Landfill, Electricity Substation, Depot, with a potential onsite source of contamination identified in the form of Peat Geology. Off site PCLUs include Ground Workings (adjacent NE & NW, 30m E), 2no. Electricity Substation (adjacent S & 20m SE), Gas Works Historical Landfill (1m N), Depot (5m W & 30m W), Railway Land (25m S), Depot/Works (30m E), Scrap Yard (49m N) and Allotment Gardens (50m NE).

A conceptual site risk model was developed and a qualitative risk assessment undertaken. The conclusions of the risk assessment are presented in Table 13 below.

Table 13: Summary of qualitative risk assessment

Potential Receptor	Potential Pathway	Potential Hazard	PSPPL?	Risk
On-Site Human Health (Future Occupiers)	Ingestion/Absorption Inhalation	Adverse health Injury/Death	**Yes**	**Low to Moderate**
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	**Yes**	**Low to Moderate**
On-Site Human Health	Ingestion/Absorption Inhalation	Adverse health Injury/Death	**No**	**Low**

Potential Receptor	Potential Pathway	Potential Hazard	PSPPL?	Risk
(Construction Workers)	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	No	Low
Off-Site Human Health	Ingestion/Absorption Inhalation	Adverse health Injury/Death	No	Low
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Injury/Death	Yes	Low to Moderate
Groundwater	Percolation/Leaching	Adverse groundwater quality	Yes	Low to Moderate
Surface Water	Lateral Migration Groundwater baseflow	Adverse Surface water quality	No	Very Low
Ecology	Ingestion/Absorption	Adverse health Injury/Death	No	Very Low
Property	Physical Contact/Absorption	Damage to building and services	Yes	Low to Moderate
	Buildup of Methane/ VOCs in confined spaces	Explosion/ Fire Damage to building	Yes	Low to Moderate

15 RECOMMENDATIONS

15.1 Intrusive Site Investigation

Given that potentially significant potential pollutant linkages (PSPPLs) were identified, it is recommended that an intrusive site investigation is undertaken with the objective of determining the presence and extent of any soil and gaseous contamination at the site.

15.2 Watching Brief and Discovery Strategy

Therefore, it is recommended that a “watching brief” is kept at all times during the development. Should any unexpected contamination be encountered then the discovery strategy outlined below should be followed.

- Works should be halted if any suspicious ground conditions are identified by groundworkers;
- The Contractor should assess the need for any immediate health and safety or environmental management control measures. If control measures are considered to be required, they should be implemented;
- The Contractor should notify the Client’s Environmental Consultant and the Local Planning Authority;
- The Environmental Consultant should attend the site to record the extent of ‘contamination’ and if necessary, to collect samples;
- If remedial action is considered necessary then the proposed works should be agreed with the Local Planning Authority prior to implementation;
- Once remediation is complete, the Environmental Consultant should collate evidence of work carried out for inclusion in a Remediation Verification Report which should be submitted to the Local Planning Authority.

15.3 Health and Safety

All site works should be carried out in accordance with Health and Safety Executive regulations and guidelines, the Contractor's Construction Health and Safety Plan and the Construction (Design and Management) Regulations 2015.

Precautions should be taken to minimise exposure of site workers during ground works through the implementation of site safety. Such precautions should include, but not be limited to:

- Provision of appropriate Personal Protective Equipment (PPE);
- Availability of site welfare;
- Good personal hygiene, washing and changing procedures;
- Daily safety briefings.

15.4 Services

The local Statutory Water Undertaker should be contacted in the event that new services are proposed as part of the redevelopment in order to determine their specification for the type of pipework which should be used on this site.

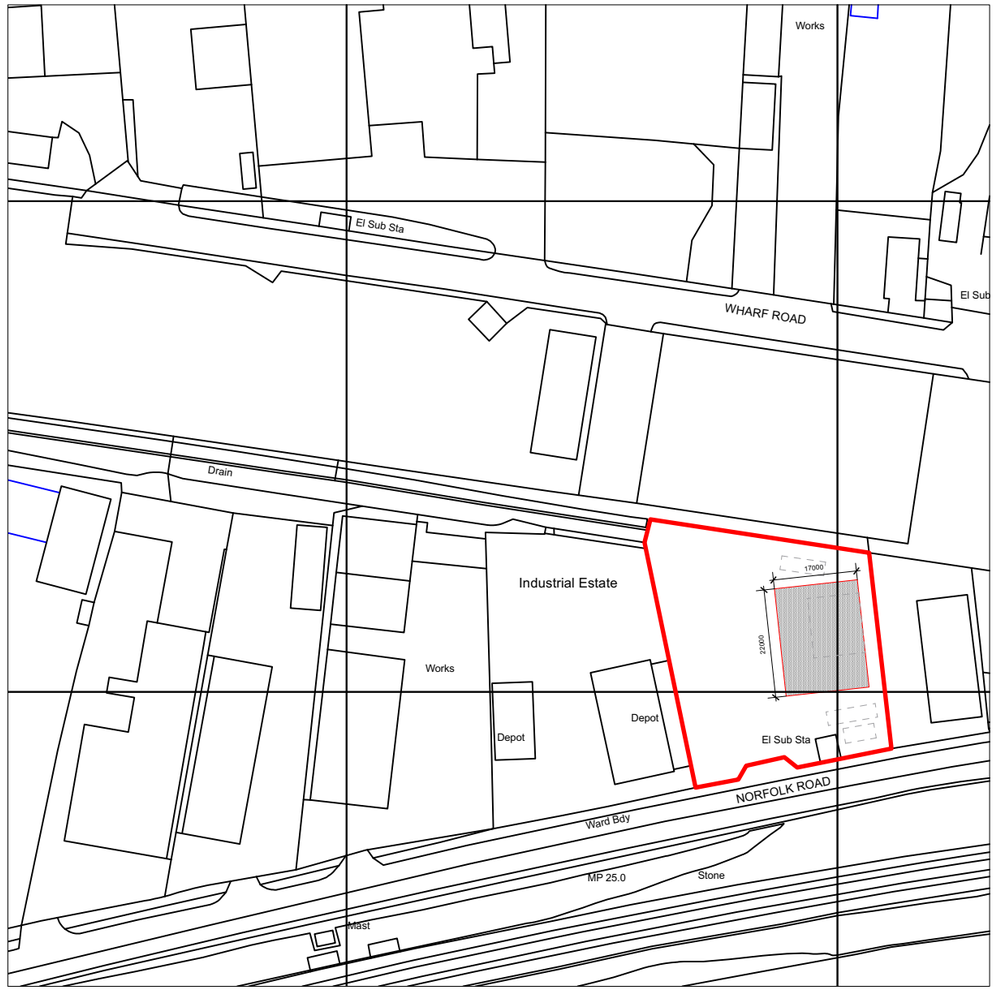
Further information can be found within the published guidance for the '*Selection of Water Supply Pipes to be used in Brownfield Sites'*, issued in January 2011 by the UK Water Industry Research.

16 INFORMATION GAPS AND UNCERTAINTIES

Assumptions have been made regarding the nature and scale of the activities that took place on the site and the types of potential contaminants that may have resulted. These assumptions will need to be reviewed along with the Conceptual Site Model should further information come to light.

17 APPENDIX 1 – PROPOSED DEVELOPMENT PLANS

ALL DIMENSIONS TO BE VERIFIED BY THE CONTRACTOR ON SITE



LOCATION PLAN
Scale: 1:1250 @ A3

Scale bar



BLOCK PLAN
Scale: 1:500 @ A3



Scale bar

REV	DESCRIPTION	DATE	INIT	CHKD
STATUS	FOR INFORMATION			

Client
Mitchell Thurbin

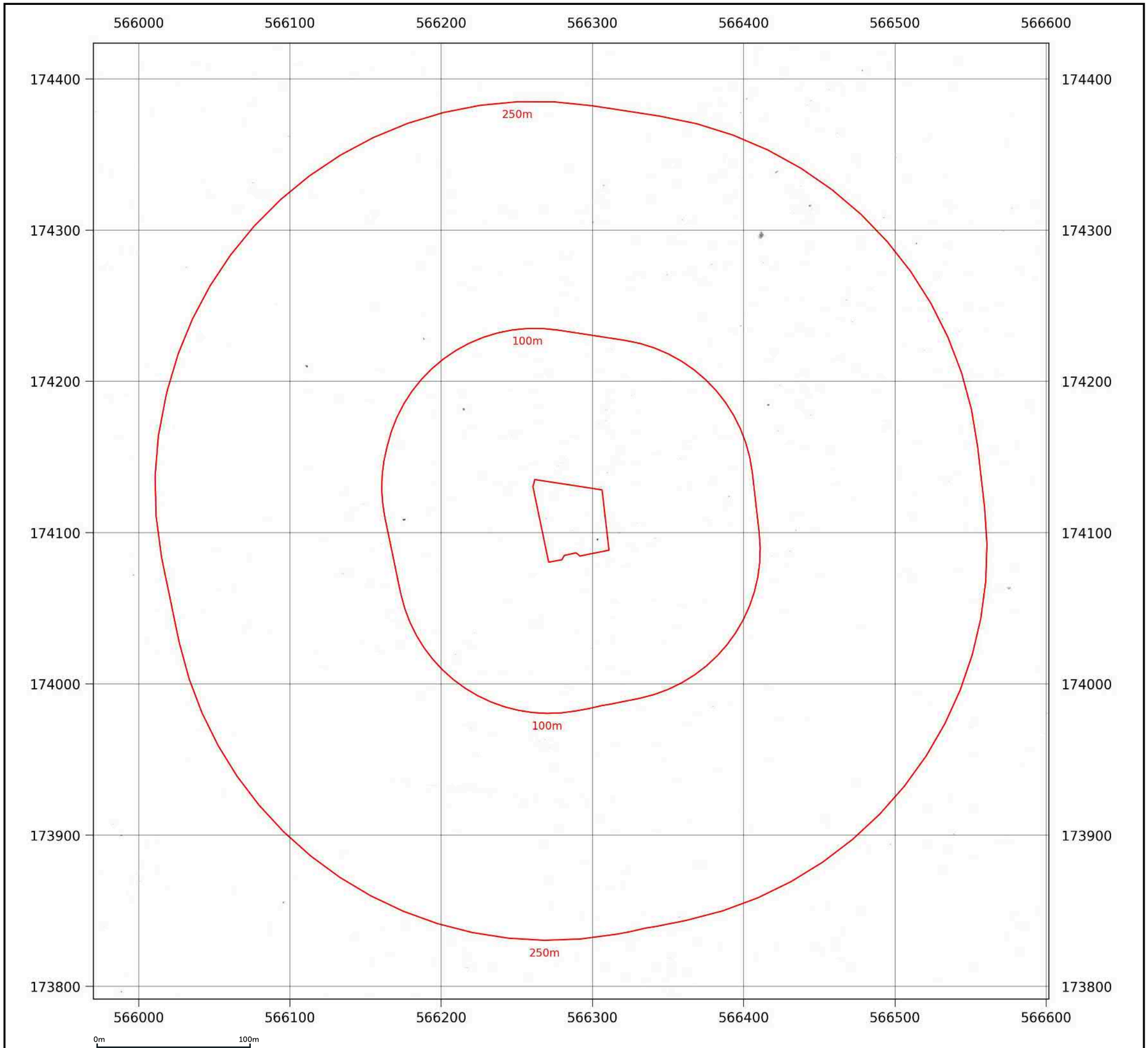
Project
Plot 8, Norfolk Road, Gravesend, Kent DA12 2PS

Title
Proposed Location & Block Plan

Scale	Date	Drawn	Checked
N/A @ A3 N/A @ A1	04.10.2025	N/A	N/A

Project No:	Drawing No.	Revision
2025-085	005	

18 APPENDIX 2 – HISTORICAL MAPS



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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1864
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1864
Surveyed: 1864
Revised: 1864

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

Groundsure
LOCATION INTELLIGENCE

Ordnance Survey
Licensed Data

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
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N W E S

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01273 257 755

566000 566100 566200 566300 566400 566500 566600

174400 174300 174200 174100 174000 173900 173800

250m 100m 100m 250m

Denton Windmill (Corn)
Quay
Jetty
Draw Bridge
THAMES AND M
SOUTH EASTERN RAILWAY
(NORTH KENT BRANCH)
Denton
Well
2 3 4 5 6 7 13 14 17 18 19 20 21 22

0m 100m

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Groundsure LOCATION INTELLIGENCE

Ordnance Survey Licensed Data

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Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1866
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1866
Surveyed: 1866
Revised: 1866

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01273 257 755

566000 566100 566200 566300 566400 566500 566600

174400 174300 174200 174100 174000 173900 173800

250m
100m
100m
250m

136 123 124 127 137

Ward Boundary

B.S.

0m 100m

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Groundsure
LOCATION INTELLIGENCE

Ordnance Survey
Licensed Data

Map Insight

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Production date:	16 March 2026

Map name:	County Series
Map date:	1866
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1866
Surveyed: 1866
Revised: 1866

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01273 257 755

566000 566100 566200 566300 566400 566500 566600

174400 174300 174200 174100 174000 173900 173800

250m
100m
100m
250m

Ordinary Spring Tides
54
55
56
57
HAMES AND MEDWAY CANAL
136
137
138
135
25
Post
C.D.
B.S.
B.M.
F.P.
D.W.
p.wall

0m 100m

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Map legend available at:
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1897
Scale:	1:2,500
Printed at:	1:2,500

N W E S

Date: 1897
Surveyed: 1897
Revised: 1897

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01273 257 755

566000 566100 566200 566300 566400 566500 566600

174400 174300 174200 174100 174000 173900 173800

250m 100m 100m 250m

Mud
Woodville Cottages
Wharf
Gridiron
Sluice
Ship
Saltings
HAMES & MEDWAY CANAL
Towing Path
NORTH S.E.R. KENT LINE
Draw Bridge
Denton
Tank
Institute
ELLIOTT STREET
DENTON STREET
RANGE ROAD
LOWER RANGE ROAD
P.O.
M.P
F.P
B.S
C.D
Def.

0m 100m

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1909
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1909
Surveyed: 1909
Revised: 1909

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1932
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1932
Surveyed: 1932
Revised: 1932

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1953
Scale:	1:1,250
Printed at:	1:2,000

N
W E
S

Date: 1953
Surveyed: 1953
Revised: 1953
Levelled: 1952

Date: 1953
Surveyed: 1953
Revised: 1953
Levelled: 1952

Date: 1953
Surveyed: 1953
Revised: 1953
Levelled: 1952

Date: 1953
Surveyed: 1953
Revised: 1953
Levelled: 1952

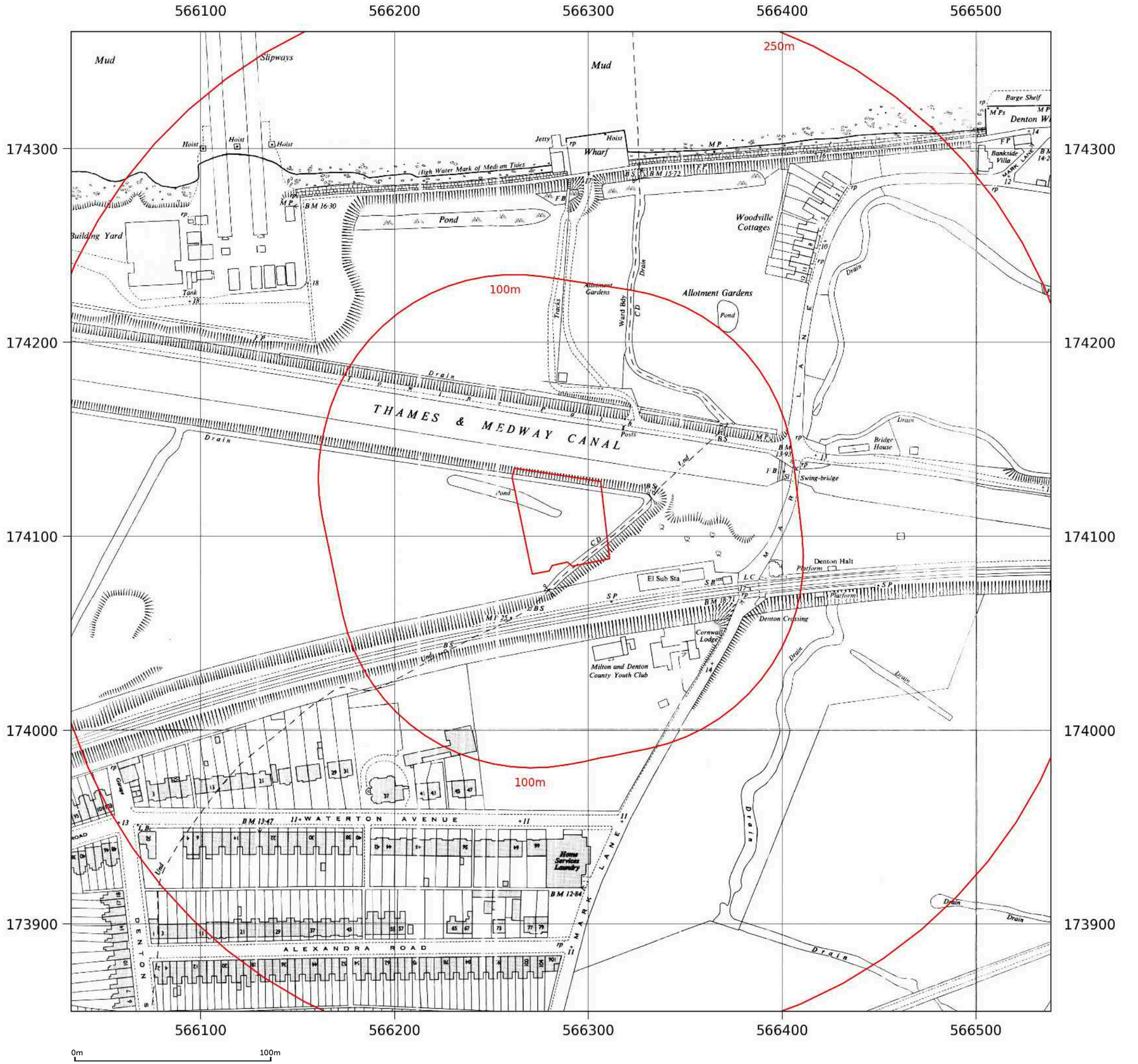
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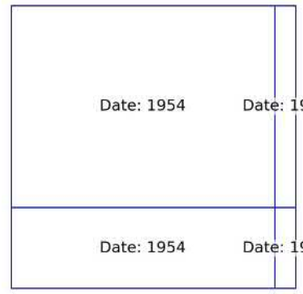
Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1954
Scale:	1:1,250
Printed at:	1:2,000

N
W E
S



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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1955-1958
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1958
Surveyed: 1953
Revised: 1953
Edition: 1958
Levelled: 1952

Date: 1958
Surveyed: 1953
Revised: 1953
Edition: 1958
Levelled: 1952

Date: 1955
Surveyed: 1953
Revised: 1953
Edition: 1955
Levelled: 1954

Date: 1955
Surveyed: 1953
Revised: 1953
Edition: 1955
Levelled: 1952

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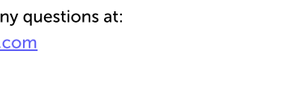
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1960
Scale:	1:1,250
Printed at:	1:2,000

N
W E
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566100 566200 566300 566400 566500

174300 174200 174100 174000 173900

250m
100m
100m

WATERTON AVENUE
ALEXANDRA ROAD
DENTON S
MARSH LANE
BM 13·47
BM 13·84
Home Services Laundry
Works
Drain
Gutter
TP
+11
13

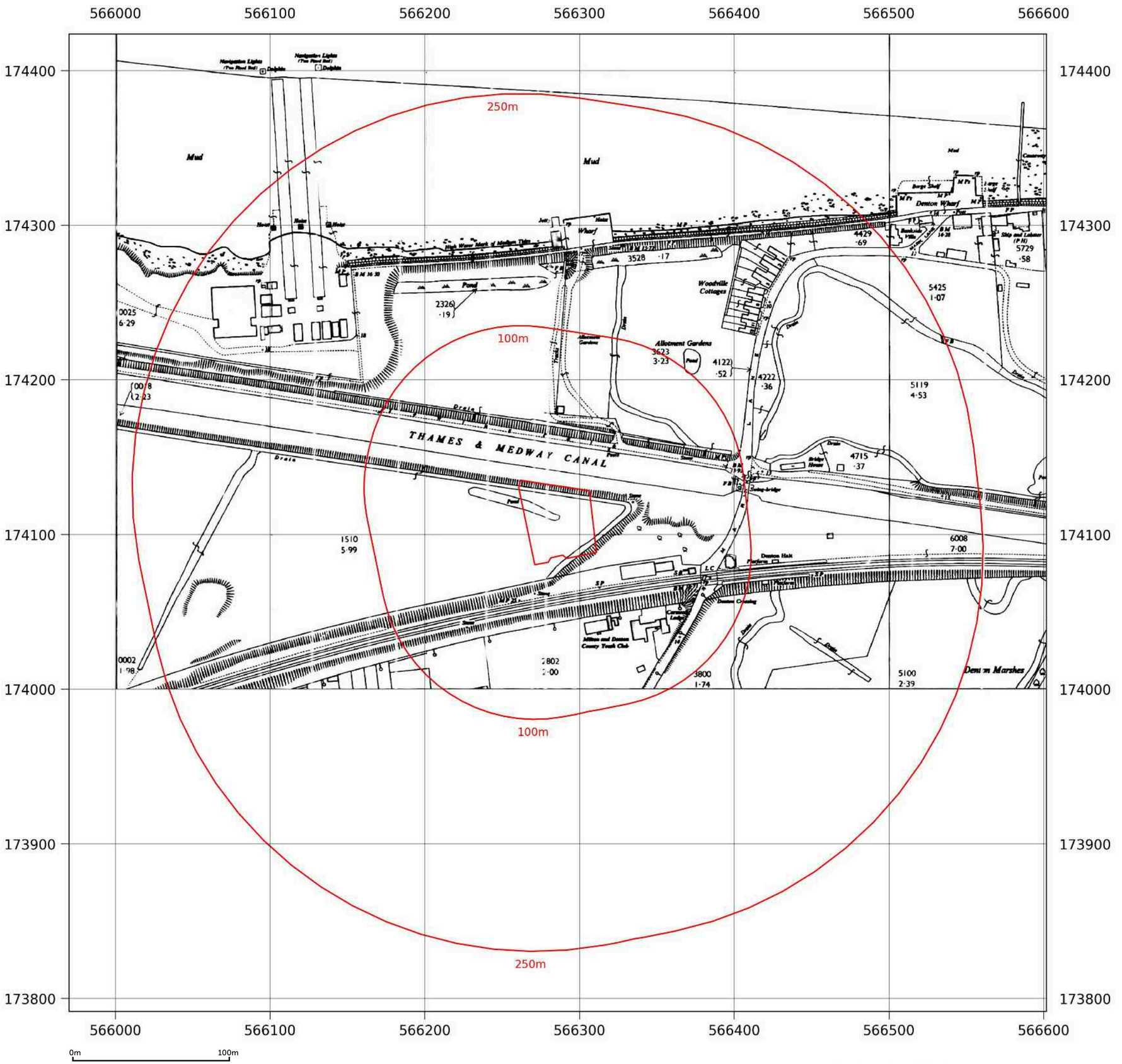
0m 100m

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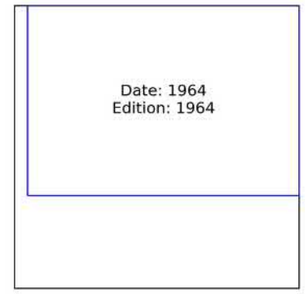
Map legend available at:
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1964
Scale:	1:2,500
Printed at:	1:2,500

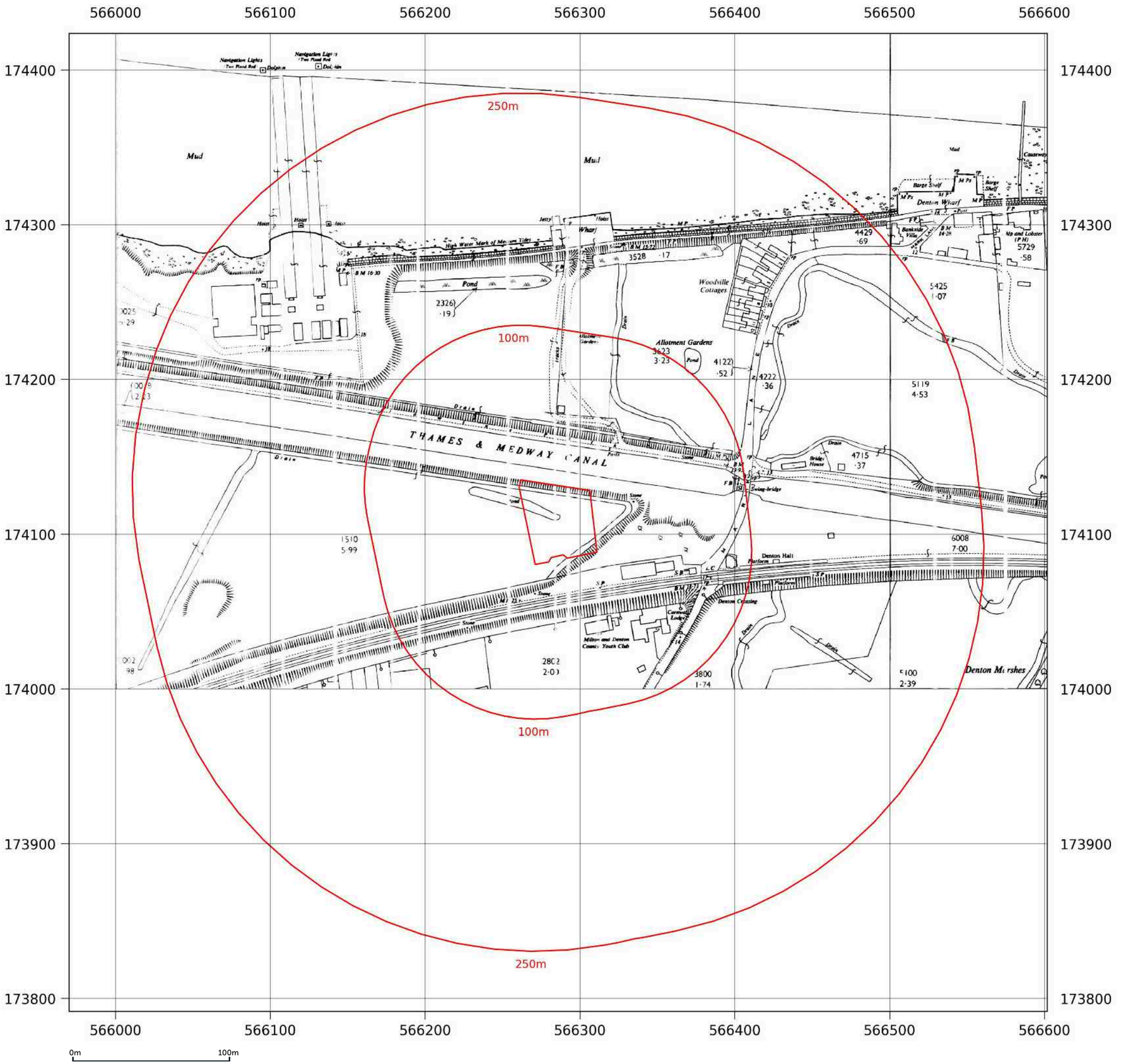
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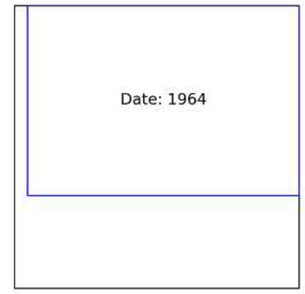
Map legend available at:
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1964
Scale:	1:2,500
Printed at:	1:2,500

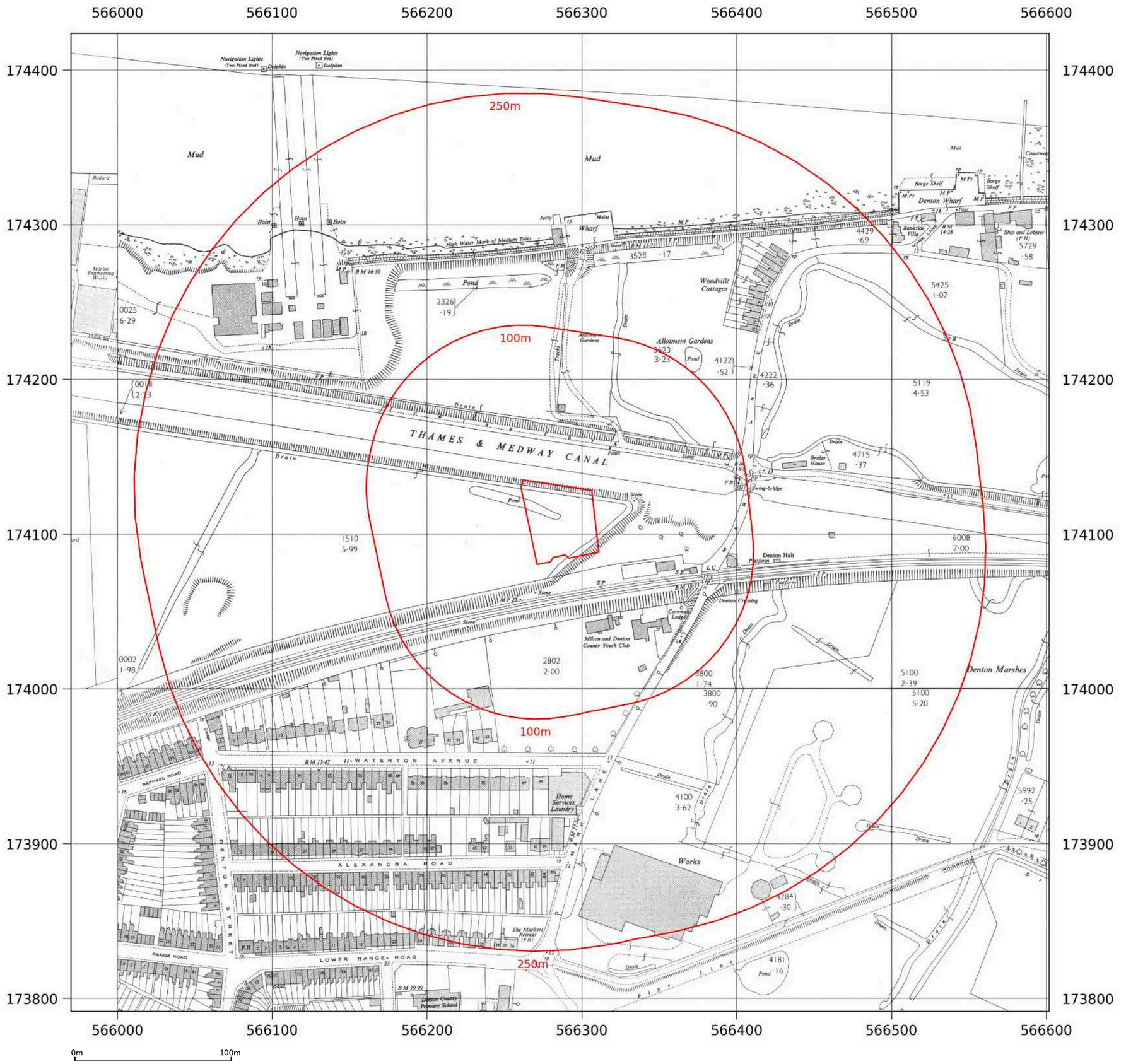
N
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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1964-1969
Scale:	1:2,500
Printed at:	1:2,500

N
W E
S

Date: 1969
Surveyed: 1964
Revised: 1964
Copyright: 1969
Levelled: 1956

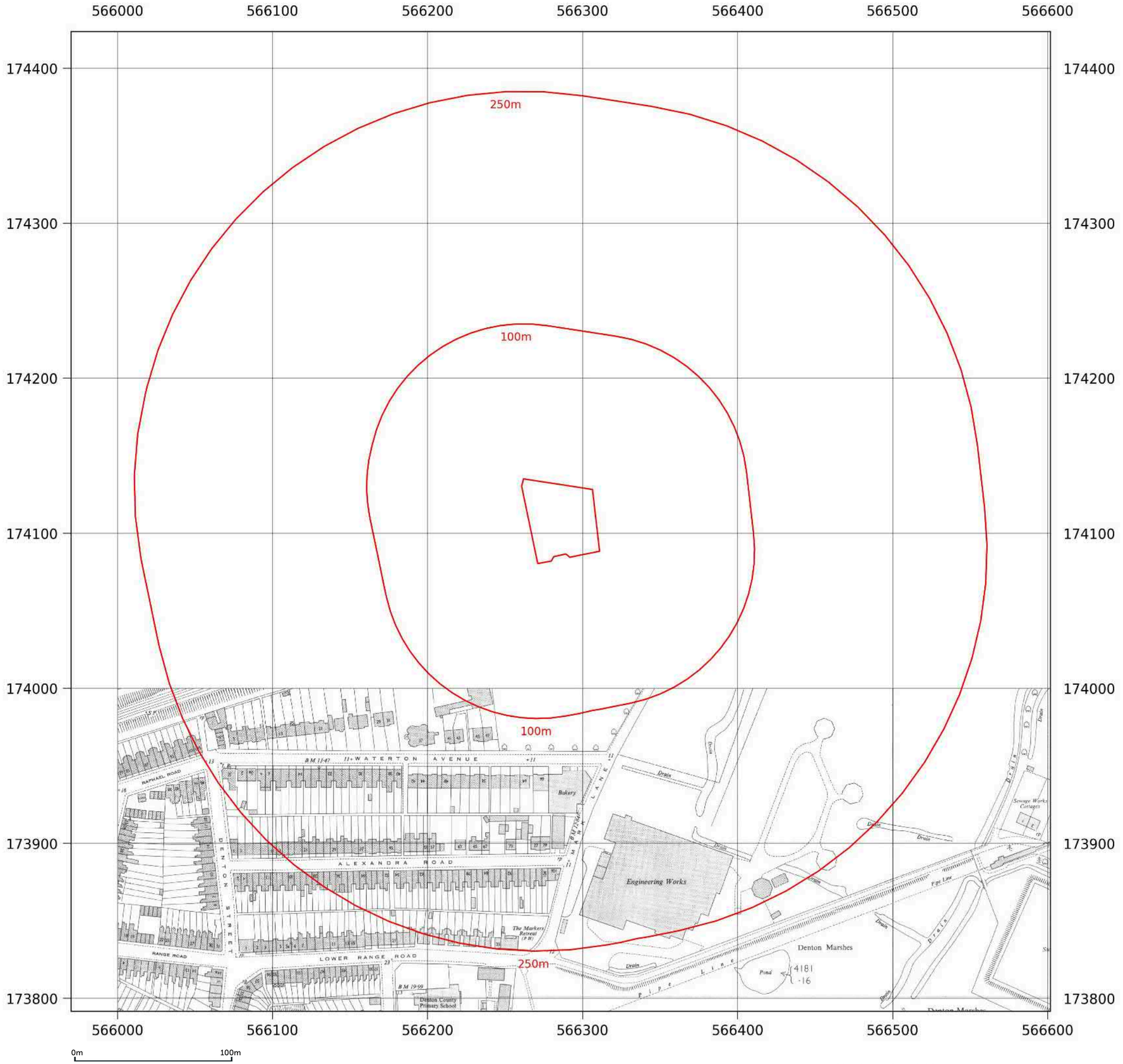
Date: 1964
Surveyed: 1961
Revised: 1961
Edition: 1964
Copyright: 1964
Levelled: 1952

Date: 1964
Surveyed: 1961
Revised: 1961
Edition: 1964
Copyright: 1964
Levelled: 1952

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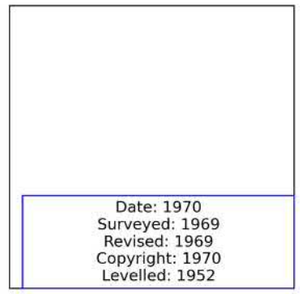
Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1970
Scale:	1:2,500
Printed at:	1:2,500

N
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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1969-1973
Scale:	1:1,250
Printed at:	1:2,000

N
W E
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Date: 1973
Surveyed: 1953
Revised: 1973
Copyright: 1973
Levelled: 1952

Date: 1973
Surveyed: 1953
Revised: 1973
Copyright: 1973
Levelled: 1952

Date: 1969
Surveyed: 1953
Revised: 1968
Copyright: 1969
Levelled: 1952

Date: 1969
Surveyed: 1953
Revised: 1968
Copyright: 1969
Levelled: 1952

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566100 566200 566300 566400 566500

174300 174200 174100 174000 173900

250m
100m
100m

Mud · Slipways · Pier · Crane · Jetty · Wharf · Boulders · Mean High Water · Posts · Path (um) · Marine Engineering Works · Tank · Engineering Works · El Sub Sta · Drain · Stone · Timber Yard · Depot · Joinery Works · NORFOLK ROAD · Denton Wharf · Bol · Denton Wharf · MARK LANE · Warehouses · Thames and Medway Canal · Denton Marshes · Denton Crossing · SB · LC · Cornwall Lodge · Youth Club · Playing Field · WATERTON AVENUE · ALEXANDRA ROAD · DENTON · Bakery · Pipe Line

0m 100m

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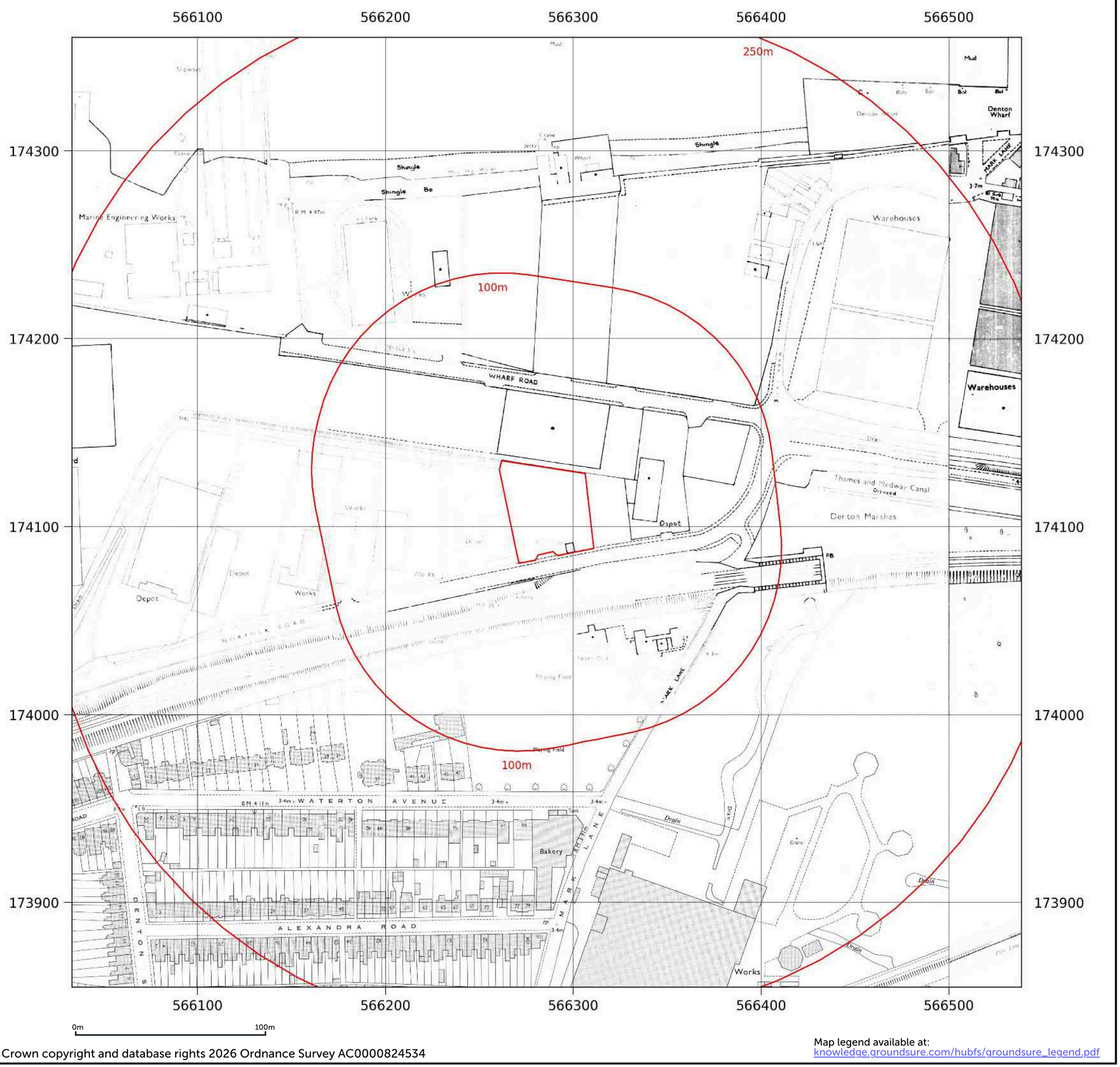
Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1978-1982
Scale:	1:1,250
Printed at:	1:2,000

N
W E
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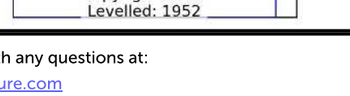
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1984-1988
Scale:	1:1,250
Printed at:	1:2,000

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W E
S



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566100 566200 566300 566400 566500

174300 174200 174100 174000 173900

250m
100m
100m

Denton Wharf
MARK LANE
Warehouses
Playing Field
WATERTON AVENUE
ALEXANDRA ROAD
DENTON ROAD
MARK LANE
Bakery
Works
Train

0m 100m

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1993
Scale:	1:1,250
Printed at:	1:2,000

N
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566100 566200 566300 566400 566500

174300 174200 174100 174000 173900

250m
100m
100m

Mud
Slipways
Pier
Crane
Jetty
Wharf
Shingle
Mean High Water
Shingle
Boulders
Mooring Post
BH 4.97m
Tank
Works
Works
El Sub Sta
WHARF ROAD
Sluice
Drain
Depot
Depot
Depot
Works
Works
Works
El Sub Sta
NORFOLK ROAD
Stone
Club
Playing Field
MARK LANE
Warehouses
Warehouses
Drain
Thames and Medway Canal (disused)
Denton Marshes
Denton Wharf
Cranes
Bollards
Bollard
Denton
Offices
MARK LANE
3.7m
3.0m
4.0m
4.3m
WATERTON AVENUE
Bakery
ALEXANDRA ROAD
DENTON STREET
Works
Tanks
Tanks
Pipe Line

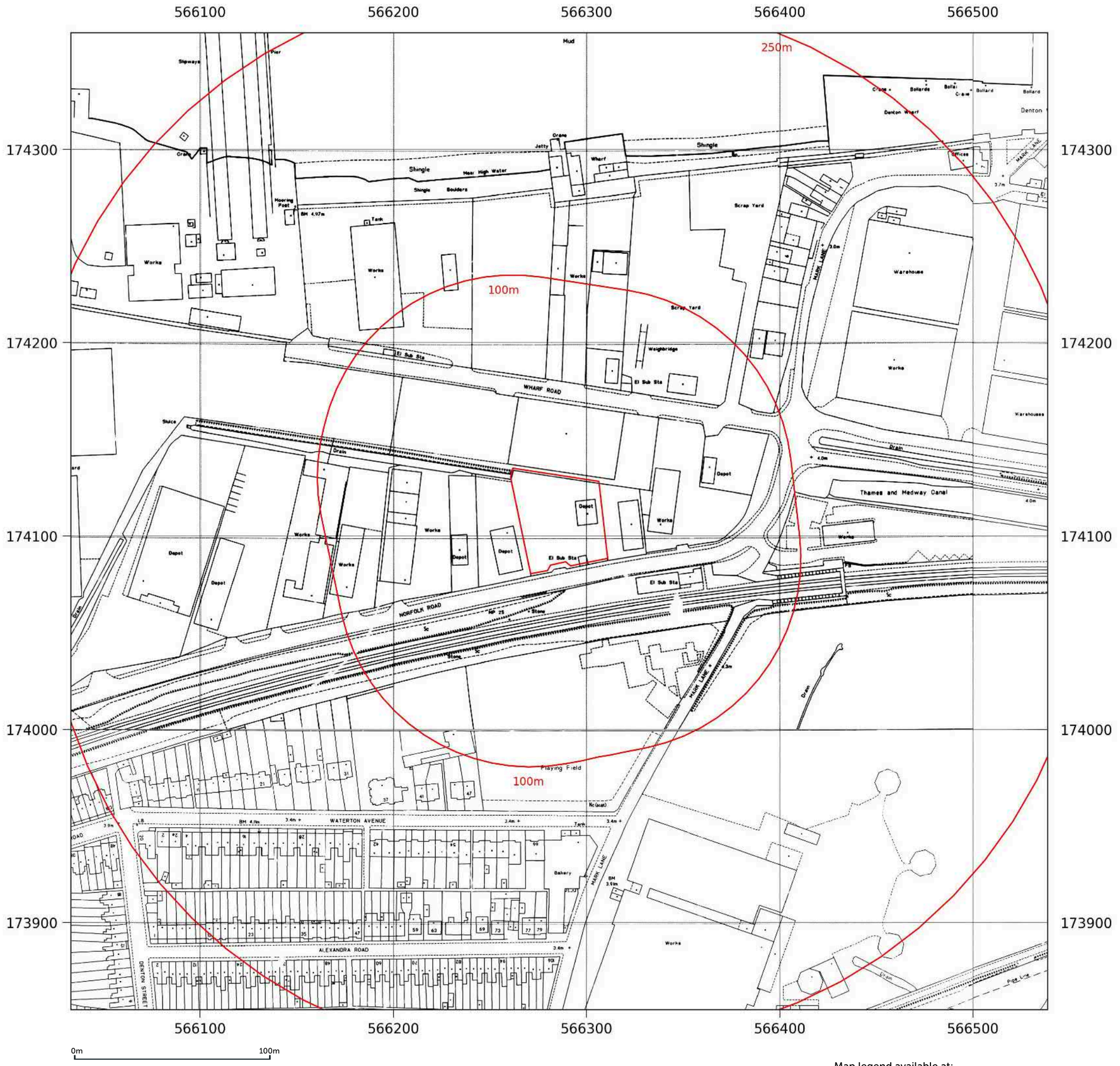
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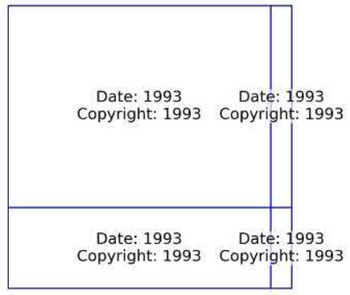
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1993
Scale:	1:1,250
Printed at:	1:2,000

N
W E
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1993
Scale:	1:1,250
Printed at:	1:2,000

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W E
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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	LandLine
Map date:	2003
Scale:	1:1,250
Printed at:	1:1,250

N
W E
S



Date: 2003

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1865
Scale:	1:10,560
Printed at:	1:10,560

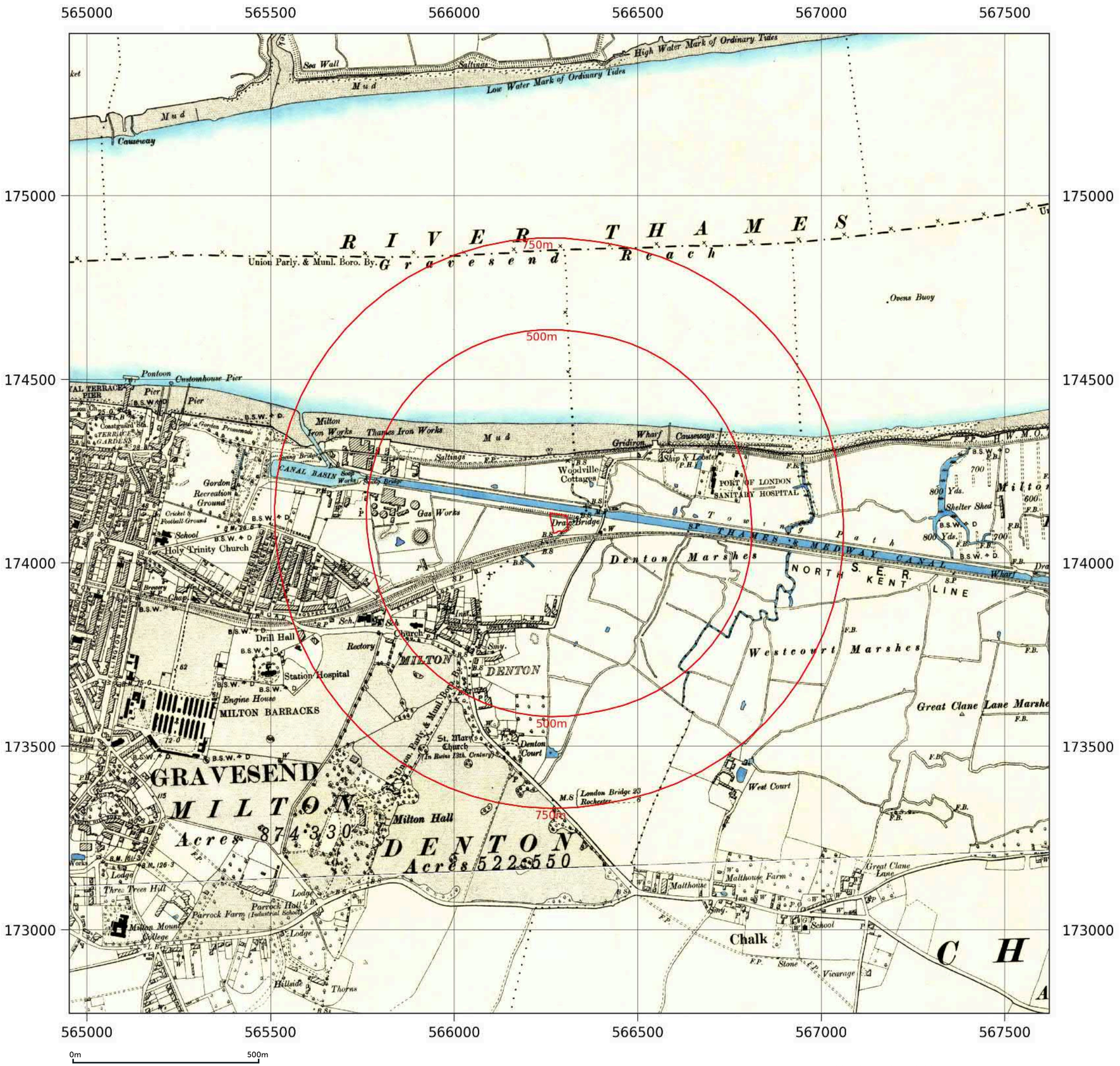
N
W E
S

Date: 1865
Surveyed: 1865
Revised: 1865

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1888
Scale:	1:10,560
Printed at:	1:10,560

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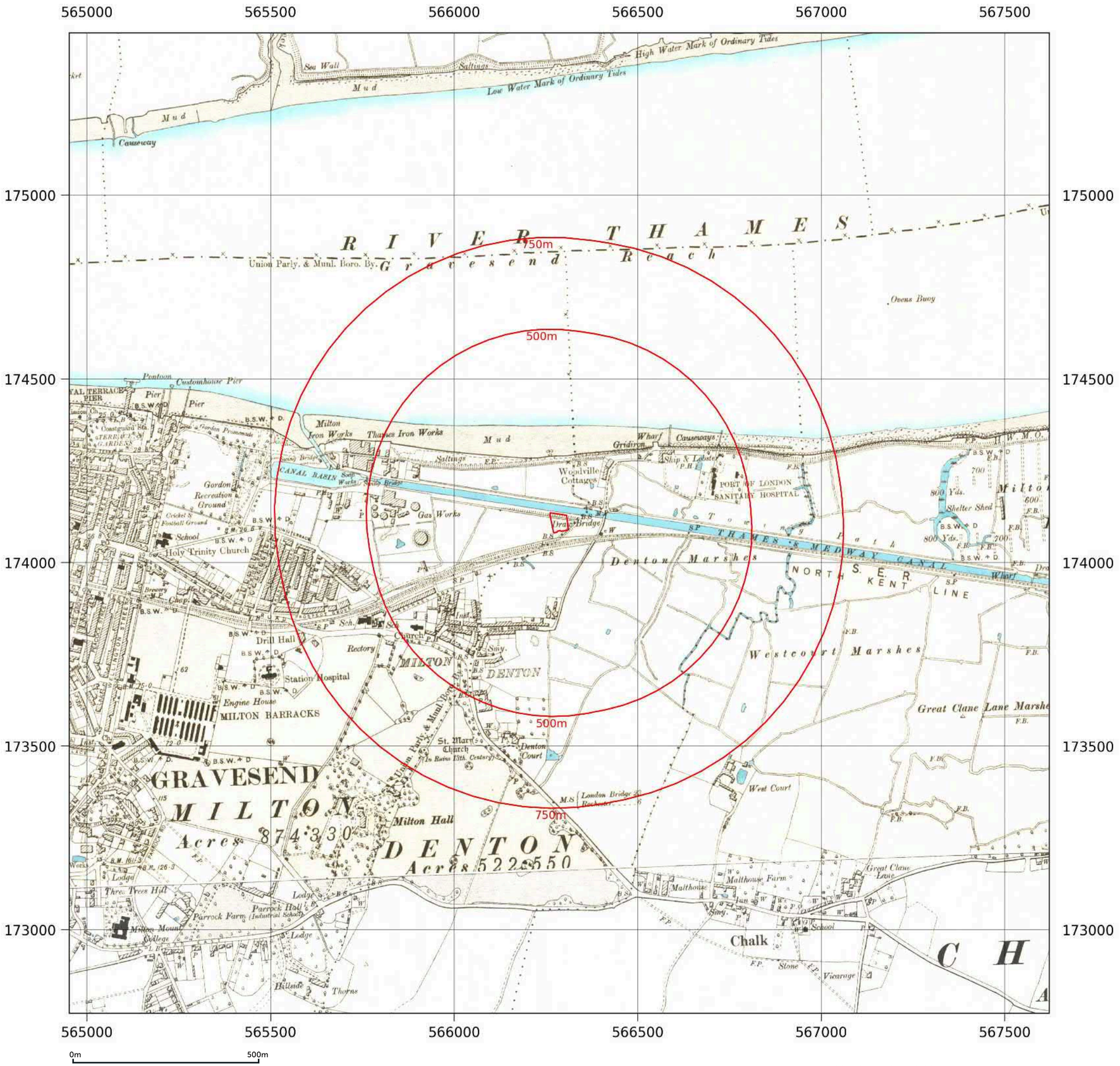
Date: 1888

Date: 1888

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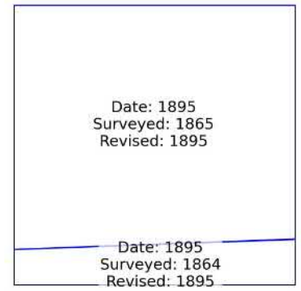
Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1895
Scale:	1:10,560
Printed at:	1:10,560

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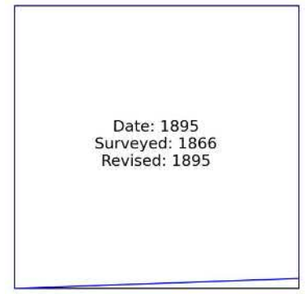
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1895
Scale:	1:10,560
Printed at:	1:10,560

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565000 565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

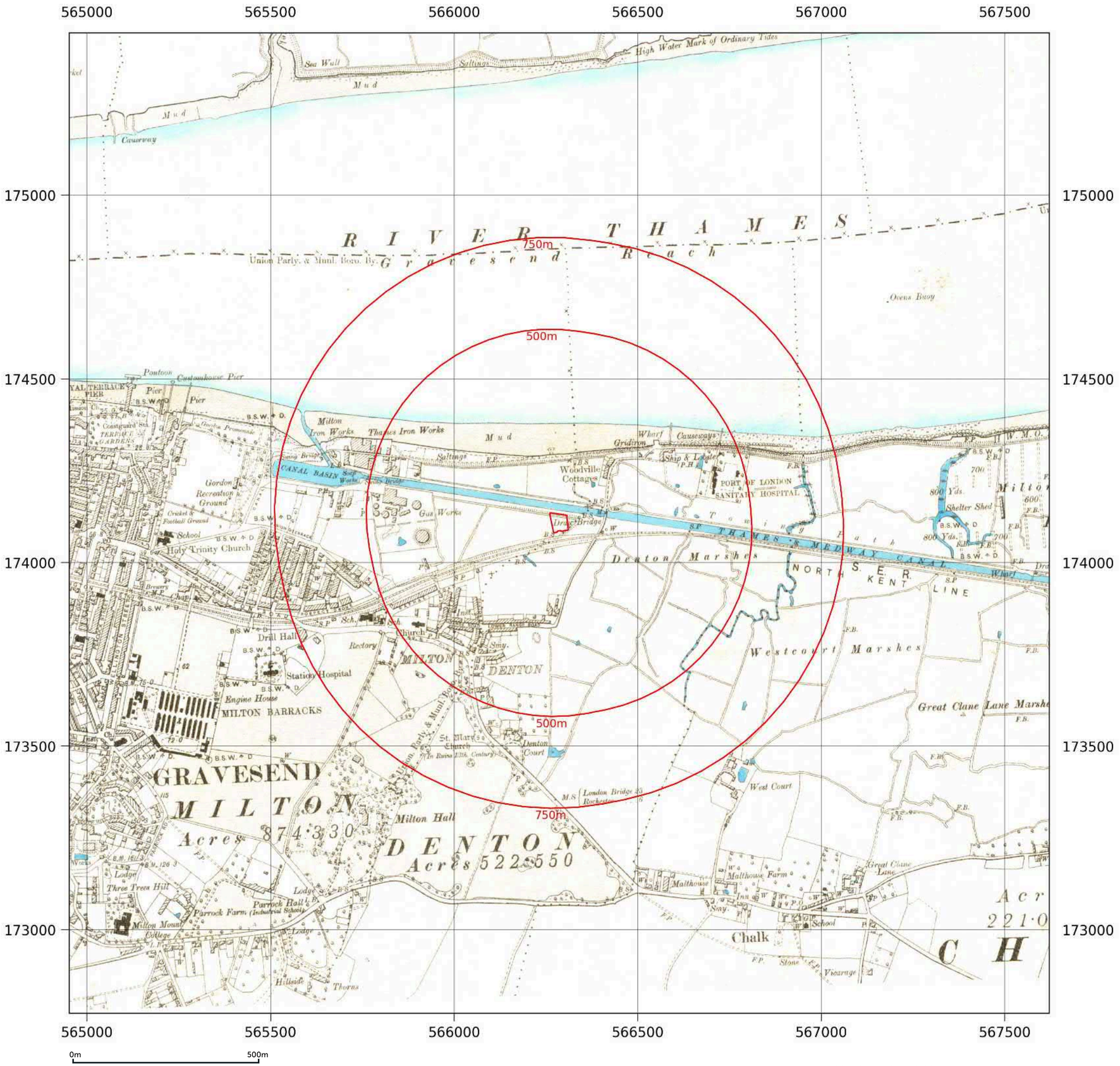
RIVER THAMES
Union Parly. & Munl. Boro. By. Gravesend
Reach
Sea Wall
Saltings
High Water Mark of Ordinary Tides
Mud
Causeway
Ovens Buoy
Pontoon
Customhouse Pier
Pier
Garden Promenade
Coastguard Sta.
TERRACE GARDENS
Miltm Iron Works
Thames Iron Works
Wharf
Gridiron
Causeways
Ship & Lobster (P.H.)
Woodville Cottages
PORT OF LONDON SANITARY HOSPITAL
Shelter Shed
Gordon Recreation Ground
Cricket & Football Ground
School
Holy Trinity Church
Gas Works
Drag Bridge
Canal Basin
Sluice Bridge
Towing Path
SP THAMES & MEDWAY CANAL
Denton Marshes
NORTH KENT LINE
Drill Hall
Rectory
Station Hospital
Engine House
MILTON BARRACKS
MILTON
DENTON
Westcourt Marshes
Great Clane Lane Marsh
St. Mary's Church
Denton Court
West Court
GRAVESEND
MILTON
Acres 874·330
Milton Hall
DENTON
Acres 522·550
Malthouse
Malthouse Farm
Great Clane Lane
Three Trees Hill
Parrock Farm (Industrial School)
Parrock Hall
Milton Mount College
Lodge
Chalk
Stone
Vicarage
Hillside
Thorns
Acr 221·0
C H
500m
750m
0m 500m

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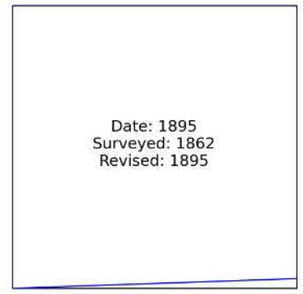
Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Map Insight

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Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1895
Scale:	1:10,560
Printed at:	1:10,560

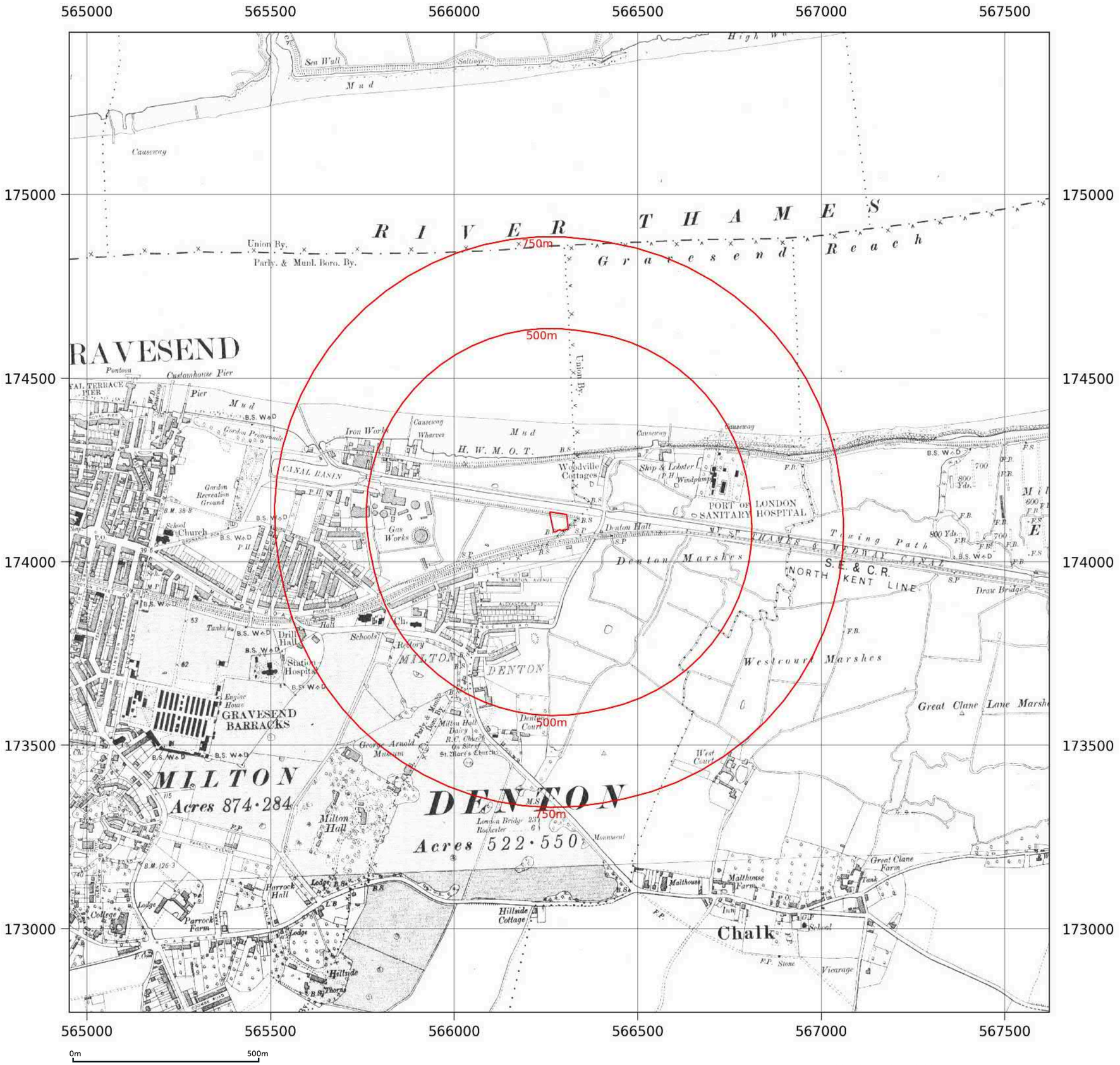
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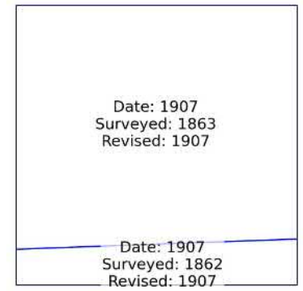
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1907
Scale:	1:10,560
Printed at:	1:10,560

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1916
Scale:	1:10,560
Printed at:	1:10,560

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Date: 1916
Surveyed: 1864
Revised: 1916

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565000 565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

750m
500m
500m
750m

Sea Wall
Mud
Causeway
B.S.W.&D.
Union By.
GRAVESEND
Pontoon
Customhouse Pier
Pier
Mud
Gordon Promenade
Iron Works
Causeway
Wharves
Mud
H. W. M. O. T.
Mun. Boro. By.
Union By.
CANAL BASIN
Woodville Cottages
Gordon Recreation Ground
Gas Works
Denton Halt
Church
Old Drill Hall
Military Hospital
Gymnasium
MILTON BARRACKS
MILTON
Schools
Rectory
MILTON
DENTON
Milton Hall Dairy
R.C. Church
St. Mary's Church
George Arnold Museum
Denton Court

0m 500m

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

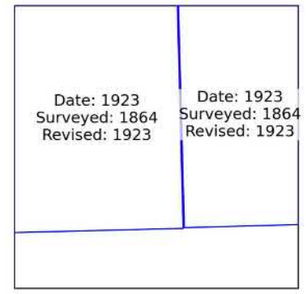
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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1923
Scale:	1:10,560
Printed at:	1:10,560



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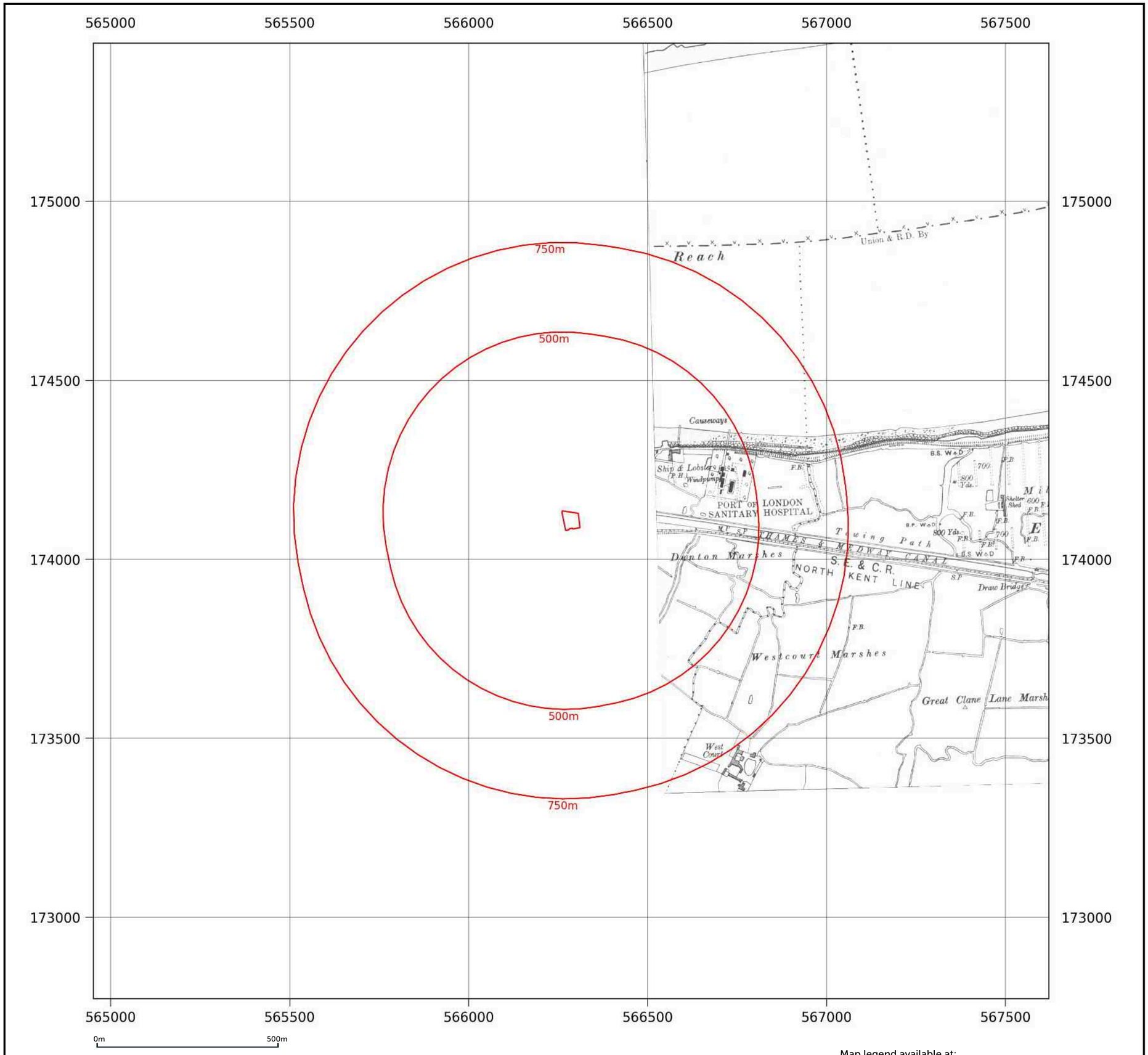
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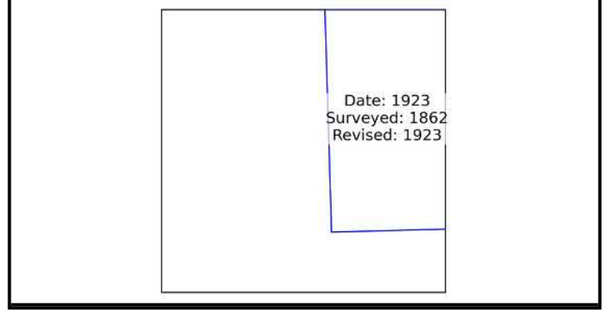
Ordnance Survey Licensed Data

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1923
Scale:	1:10,560
Printed at:	1:10,560





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Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1932
Scale:	1:10,560
Printed at:	1:10,560

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Date: 1932
Surveyed: 1863
Revised: 1932

Date: 1932
Surveyed: 1862
Revised: 1932

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565000 565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

750m
500m
500m
750m

0m 500m

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

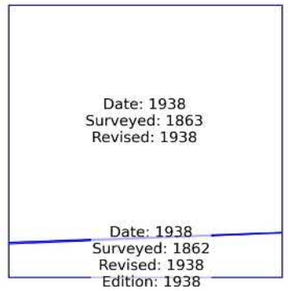
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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1938
Scale:	1:10,560
Printed at:	1:10,560



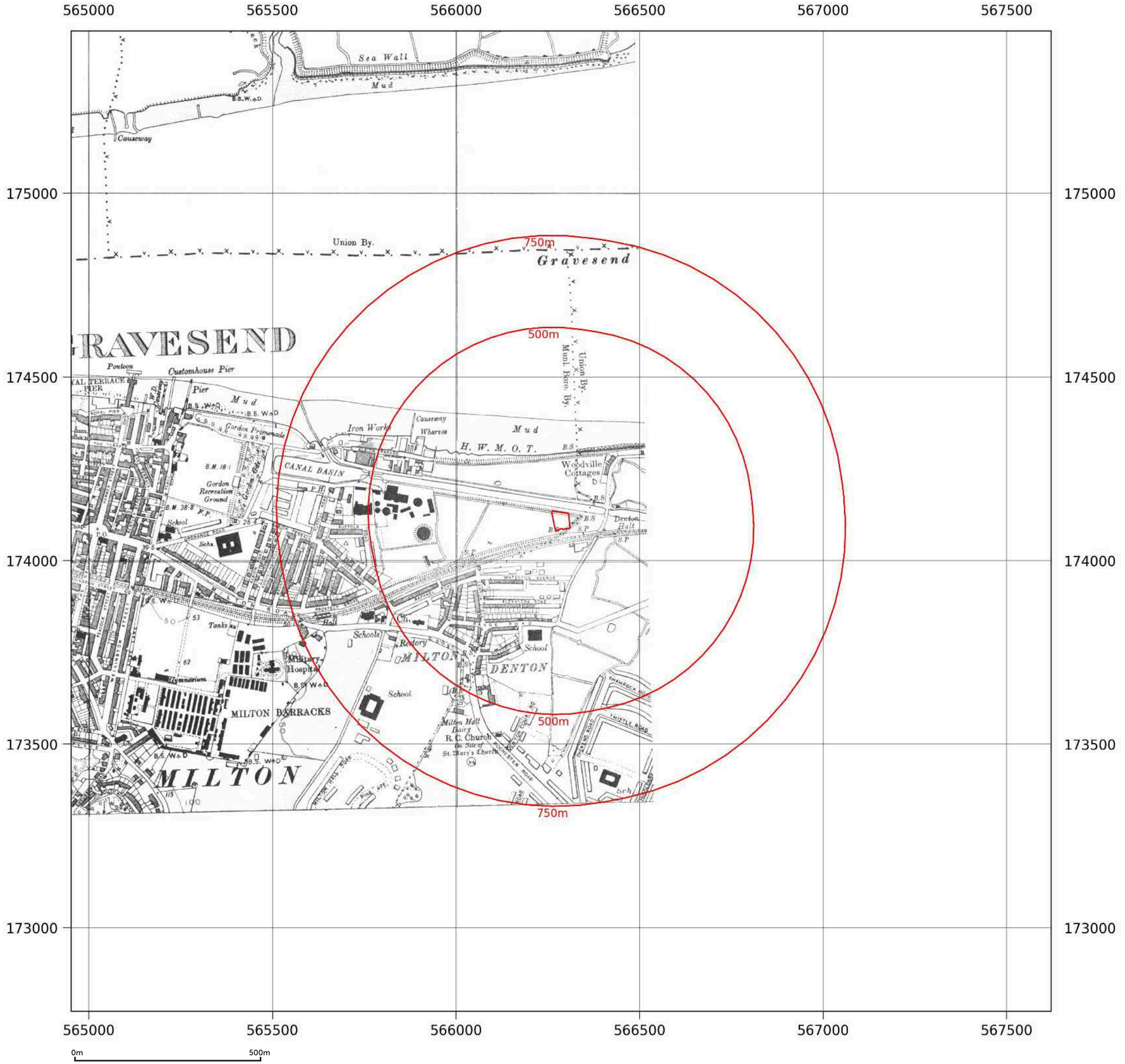
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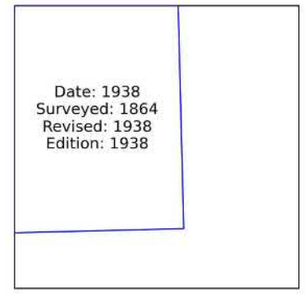
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1938
Scale:	1:10,560
Printed at:	1:10,560

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1938
Scale:	1:10,560
Printed at:	1:10,560

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565000 565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

750m
500m
500m
750m

GRAVESEND
MILTON
MILTON BARRACKS
DENTON
Gravesend
Sea Wall
Mud
Causeway
Union By.
Pontoon
Customhouse Pier
Pier
Iron Works
Causeway Wharves
H. W. M. O. T.
CANAL BASIN
Gordon Promenade
Gordon Recreation Ground
Woodville Cottages
Denton Hall
Schools
Rectory
Military Hospital
School
Milton Hall Dairy
R.C. Church on Site of St. Mary's Church
Manl. Boro. By.

0m 500m

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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	County Series
Map date:	1946-1951
Scale:	1:10,560
Printed at:	1:10,560

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Date: 1951
Surveyed: 1863
Revised: 1948
Edition: 1951

Date: 1946
Surveyed: 1862
Revised: 1946

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0m 500m

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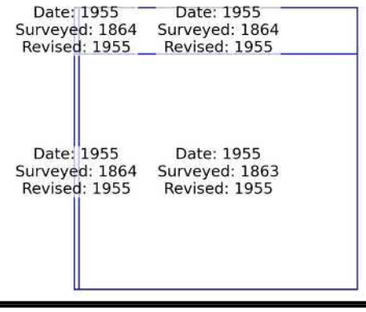
Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	Provisional
Map date:	1955
Scale:	1:10,560
Printed at:	1:10,560

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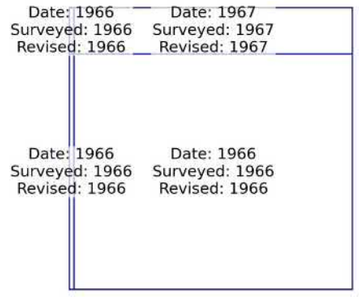
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	Provisional
Map date:	1966-1967
Scale:	1:10,560
Printed at:	1:10,560





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Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1973
Scale:	1:10,000
Printed at:	1:10,000

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Date: 1973
Surveyed: 1972
Revised: 1973

Date: 1973
Surveyed: 1973
Revised: 1973

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565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

River Thames
Gravesend Reach

750m
500m
250m

Eilbury Sort
Causeway
Outfall
Jetty
Mud
Royal Terrace Pier
Customhouse Pier
Gordon Promenade
CANAL BASIN
Recreation Ground
Power Station
Gasholder Station
Timber Yard
Slipways
Denton Wharf
Hospital
Works
Wks
National Sea Training School
Thames & Medway Canal (dis)
Milton
Milton Barracks
Sports Ground
Playing Field
School
Tennis Courts
Allot Gdns
Denton
Denton Marshes
Westcourt Marshes
West Court
Allotment Gardens
Great Clane Lane M
Chalk
Drain
Pond
Tank
Ch
Coll
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0m 500m

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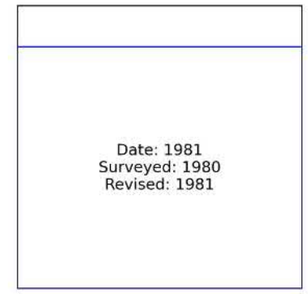
Map legend available at:
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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	1981
Scale:	1:10,000
Printed at:	1:10,000

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	2001
Scale:	1:10,000
Printed at:	1:10,000

N
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Date: 2001

Date: 2001

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565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

River Thames
Gravesend Reach
750m
500m
Slipways
Denton Wharf
Offices
PH
Offices
Gordon Promenade
COMMERCIAL PLACE
THE TERRACE
GORDON PROMENADE EAST
CANAL SN
CANAL ROAD
Gas Holder Station
Depot
WHARF ROAD
National Sea Training College
Gardens
ORDNANCE ROAD
Tel.Ex
Sch
ALBION TERRACE
SUFFOLK ROAD
NORFOLK ROAD
Denton Marshes
Milton
WATERTON AVENUE
Works
Sewage Works
ALEXANDRA ROAD
MARY LANE
PARK PLACE
MILTON ROAD
PW
PROSPECT GROVE
RAPHAEL ROAD
PO
TOWER RANGE ROAD
Denton
School
EMPRESS RD
HAVENGORE AVENUE
Ppg Sta
Westcourt Marshes
Caravan Park
ARTEMIS CLOSE
SHAMROCK ROAD
Great Clane Lane Ma
TRINITY ROAD
Recreation Ground
Recreation Ground
School
THISTLE ROAD
GERALD ROAD
Recreation Ground
Sch
ARMOURY DRIVE
ARTILLERY ROAD
BRONTE VIEW
Recreation Ground
Church Walk
Schools
Racn Gd
ROSE AVENUE
College
Recreation Ground
PARROCK AVENUE
BELLMAN AVENUE
Caravan Park
OLD ROAD EAST
B261
Liby
A226
Chalk
School
Vic
0m 500m

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Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	2010
Scale:	1:10,000
Printed at:	1:10,000

N
W E
S

Date: 2010

Date: 2010

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info@groundsure.com
01273 257 755

565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

River Thames
Gravesend Reach
750m
500m
Milton
Denton
Chalk
Gravesend Grammar School
St John's RC Comprehensive (Secondary School)
Recreation Ground
Recreation Ground Hall
Gordon Promenade
Denton Wharf
Pier
New Tavern
Gas Holder Station
Depot
National Sea Training College
Metropolitan Police Specialist Training Centre
Denton Marshes
Works
Lion Bank Pk
Caravan Park
Westcourt Marshes
Great Clane Lane Ma
Thames and Medway Canal (disused)
North West Kent College
Recn Gd
Gardens
School
Royal Terrace Pier

0m 500m

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	2015
Scale:	1:10,000
Printed at:	1:10,000

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Date: 2015

Date: 2015

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565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

River Thames
Gravesend Reach

750m
500m

Milton
Denton
Chalk
Great Clane Lane Ma

Gordon Promenade
Denton Wharf
Pier
Royal Terrace Pier
New Tavern
Gardens
Gas Holder Station
Depot
National Sea Training College
Metropolitan Police Specialist Training Centre
Denton Marshes
Works
Thames and Medway Canal (disused)
Lion Bsns Pk
Caravan Park
Westcourt Marshes
Recreation Ground
Gravesend Grammar School
St John's RC Primary School
St John's RC Comprehensive School
Recreation Ground Hall
North West Kent College
Recn Gd
Caravan Park
Church Walk
Sch
School
PW
PH
Mus
Vic

0m 500m

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LOCATION INTELLIGENCE

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Map Insight

Site details:	PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS
Client ref:	PH1-2026-000035
Report ref:	GS-71W-N5H-3GQ-9CO
Grid ref:	566285.83, 174108.71
Production date:	16 March 2026

Map name:	National Grid
Map date:	2025
Scale:	1:10,000
Printed at:	1:10,000

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W E
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Date: 2025

Date: 2025

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

565500 566000 566500 567000 567500

175000 174500 174000 173500 173000

Gravesend Reach

750m

500m

Milton

Denton

Chalk

Thames and Medway Canal

0m 500m

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Map legend available at:
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19 APPENDIX 3 – ENVIRONMENTAL SCREENING REPORT

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

PLOT 8, NORFOLK ROAD, GRAVESEND, KENT, DA12 2PS

Order Details

Date: 16/03/2026

Your ref: PH1-2026-000035

Our Ref: GS-43M-8FA-TOV-4FY

Site Details

Location: 566285 174108

Area: 0.21 ha

Authority: Gravesham Borough Council ↗

Site plan



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Quick Links

Summary of findings p. 2 >

OS MasterMap site plan p.14 >

Aerial image p. 9 >

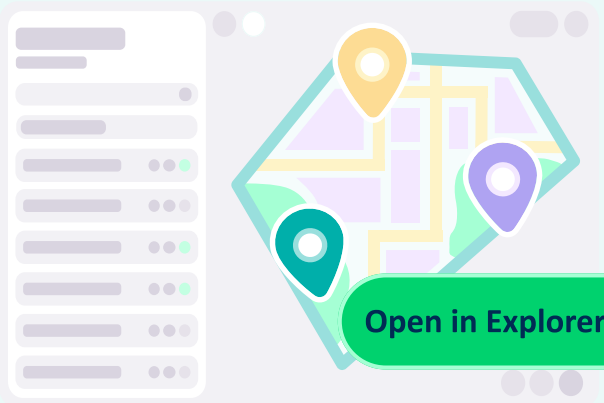
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- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



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Certified B Corporation

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 >	1	6	19	166	-
23 >	1.2 >	Historical tanks >	0	0	9	56	-
25 >	1.3 >	Historical energy features >	2	4	2	39	-
27	1.4	Historical petrol stations	0	0	0	0	-
28 >	1.5 >	Historical garages >	0	0	1	1	-
28	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
29 >	2.1 >	Historical industrial land uses >	1	10	30	218	-
39 >	2.2 >	Historical tanks >	0	0	13	78	-
42 >	2.3 >	Historical energy features >	2	4	3	57	-
45	2.4	Historical petrol stations	0	0	0	0	-
45 >	2.5 >	Historical garages >	0	0	4	2	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
47	3.1	Active or recent landfill	0	0	0	0	-
47	3.2	Historical landfill (BGS records)	0	0	0	0	-
48	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
48 >	3.4 >	Historical landfill (EA/NRW records) >	1	1	2	0	-
49 >	3.5 >	Historical waste sites >	0	1	1	1	-
49 >	3.6 >	Licensed waste sites >	0	0	5	1	-
51 >	3.7 >	Waste exemptions >	0	0	8	13	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
54 >	4.1 >	Recent industrial land uses >	2	4	36	-	-
57 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	0	0	8	-	-
58	4.3	Current or recent petrol stations	0	0	0	0	-
58	4.4	Electricity cables	0	0	0	0	-
58	4.5	Gas pipelines	0	0	0	0	-

58	4.6	Sites determined as Contaminated Land	0	0	0	0	-
58 >	4.7 >	Control of Major Accident Hazards (COMAH) >	0	0	0	1	-
59	4.8	Regulated explosive sites	0	0	0	0	-
59 >	4.9 >	Hazardous substance storage/usage >	0	0	0	2	-
59	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
60	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
60 >	4.12 >	Licensed pollutant release (Part A(2)/B) >	0	0	1	2	-
60	4.13	Radioactive Substance Authorisations	0	0	0	0	-
61 >	4.14 >	Licensed Discharges to controlled waters >	0	0	5	6	-
63	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
63	4.16	Pollutant release to public sewer	0	0	0	0	-
63	4.17	List 1 Dangerous Substances	0	0	0	0	-
63	4.18	List 2 Dangerous Substances	0	0	0	0	-
63 >	4.19 >	Pollution Incidents (EA/NRW) >	0	0	8	12	-
66	4.20	Pollution inventory substances	0	0	0	0	-
66	4.21	Pollution inventory waste transfers	0	0	0	0	-
66	4.22	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
67 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
69 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
71 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
72 >	5.4 >	Groundwater vulnerability- soluble rock risk >	Identified (within 0m)				
72 >	5.5 >	Groundwater vulnerability- local information >	Identified (within 0m)				
73 >	5.6 >	Groundwater abstractions >	0	0	0	1	8
76 >	5.7 >	Surface water abstractions >	0	0	0	0	16
80 >	5.8 >	Potable abstractions >	0	0	0	0	2
80	5.9	Source Protection Zones	0	0	0	0	-
81	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

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

82 >	6.1 >	Water Network (OS MasterMap) >	2	0	5	-	-
83 >	6.2 >	Surface water features >	0	0	2	-	-
83 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
84 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
84 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
85 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
86 >	7.2 >	Historical Flood Events >	1	1	1	-	-
86 >	7.3 >	Flood Defences >	0	0	6	-	-
87 >	7.4 >	Areas Benefiting from Flood Defences >	1	0	0	-	-
87	7.5	Flood Storage Areas	0	0	0	-	-
88 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
89 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
90 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
92 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	2
94 >	10.2 >	Conserved wetland sites (Ramsar sites) >	0	0	0	0	2
95	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
95 >	10.4 >	Special Protection Areas (SPA) >	0	0	0	0	1
95	10.5	National Nature Reserves (NNR)	0	0	0	0	0
96	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
96	10.7	Designated Ancient Woodland	0	0	0	0	0
96	10.8	Biosphere Reserves	0	0	0	0	0
96	10.9	Forest Parks	0	0	0	0	0
97	10.10	Marine Conservation Zones	0	0	0	0	0
97 >	10.11 >	Green Belt >	0	0	0	0	2

97	10.12	Proposed Ramsar sites	0	0	0	0	0
97	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
98	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
98	10.15	Nitrate Sensitive Areas	0	0	0	0	0
98 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	0	0
99 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
100 >	10.18 >	SSSI Units >	0	0	0	0	4
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
105	11.1	World Heritage Sites	0	0	0	-	-
105	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
105	11.3	National Parks	0	0	0	-	-
105	11.4	Listed Buildings	0	0	0	-	-
106	11.5	Conservation Areas	0	0	0	-	-
106	11.6	Scheduled Ancient Monuments	0	0	0	-	-
106	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
107 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
108	12.2	Open Access Land	0	0	0	-	-
108	12.3	Tree Felling Licences	0	0	0	-	-
108	12.4	Environmental Stewardship Schemes	0	0	0	-	-
108	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
109 >	13.1 >	Priority Habitat Inventory >	0	0	3	-	-
110 >	13.2 >	Habitat Networks >	1	0	4	-	-
110 >	13.3 >	Open Mosaic Habitat >	0	0	1	-	-
111	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
112 >	14.1 >	10k Availability >	Identified (within 500m)				
113 >	14.2 >	Artificial and made ground (10k) >	1	2	2	0	-

115 >	14.3 >	Superficial geology (10k) >	1	0	2	2	-
116	14.4	Landslip (10k)	0	0	0	0	-
117 >	14.5 >	Bedrock geology (10k) >	1	0	0	1	-
118	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
119 >	15.1 >	50k Availability >	Identified (within 500m)				
120 >	15.2 >	Artificial and made ground (50k) >	1	1	3	0	-
121 >	15.3 >	Artificial ground permeability (50k) >	1	1	-	-	-
122 >	15.4 >	Superficial geology (50k) >	1	0	2	2	-
123 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
123	15.6	Landslip (50k)	0	0	0	0	-
123	15.7	Landslip permeability (50k)	None (within 50m)				
124 >	15.8 >	Bedrock geology (50k) >	1	0	0	1	-
125 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
125	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
126 >	16.1 >	BGS Boreholes >	0	1	6	-	-
Page	Section	**Natural ground subsidence** >					
128 >	17.1 >	Shrink swell clays >	Low (within 50m)				
129 >	17.2 >	Running sands >	Low (within 50m)				
131 >	17.3 >	Compressible deposits >	High (within 50m)				
133 >	17.4 >	Collapsible deposits >	Negligible (within 50m)				
134 >	17.5 >	Landslides >	Very low (within 50m)				
135 >	17.6 >	Ground dissolution of soluble rocks >	Very low (within 50m)				
Page	Section	**Mining and ground workings** >	On site	0-50m	50-250m	250-500m	500-2000m
137 >	18.1 >	BritPits >	0	0	0	1	-
138 >	18.2 >	Surface ground workings >	0	17	16	-	-
139	18.3	Underground workings	0	0	0	0	0
140	18.4	Underground mining extents	0	0	0	0	-

140	18.5	Historical Mineral Planning Areas	0	0	0	0	-
140 >	18.6 >	Non-coal mining >	0	0	1	0	2
141	18.7	JPB mining areas	None (within 0m)				
141	18.8	The Coal Authority non-coal mining	0	0	0	0	-
141	18.9	Researched mining	0	0	0	0	-
141	18.10	Mining record office plans	0	0	0	0	-
142	18.11	BGS mine plans	0	0	0	0	-
142	18.12	Coal mining	None (within 0m)				
142	18.13	Brine areas	None (within 0m)				
142	18.14	Gypsum areas	None (within 0m)				
142	18.15	Tin mining	None (within 0m)				
143	18.16	Clay mining	None (within 0m)				
Page	Section	**Ground cavities and sinkholes** >	On site	0-50m	50-250m	250-500m	500-2000m
144	19.1	Natural cavities	0	0	0	0	-
145 >	19.2 >	Mining cavities >	0	0	0	0	1
145	19.3	Reported recent incidents	0	0	0	0	-
145	19.4	Historical incidents	0	0	0	0	-
Page	Section	**Radon** >					
146 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
148 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
148	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
148	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
149	22.1	Underground railways (London)	0	0	0	-	-
149	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	1	2	-	-
150	22.5	Royal Mail tunnels	0	0	0	-	-

150	22.6	Historical railways	0	0	0	-	-
151 >	**22.7 >**	**Railways >**	0	3	3	-	-
151	22.8	Crossrail 2	0	0	0	0	-
151	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 0.21ha

Recent site history - 2018 aerial photograph



Capture Date: 01/09/2018

Site Area: 0.21ha

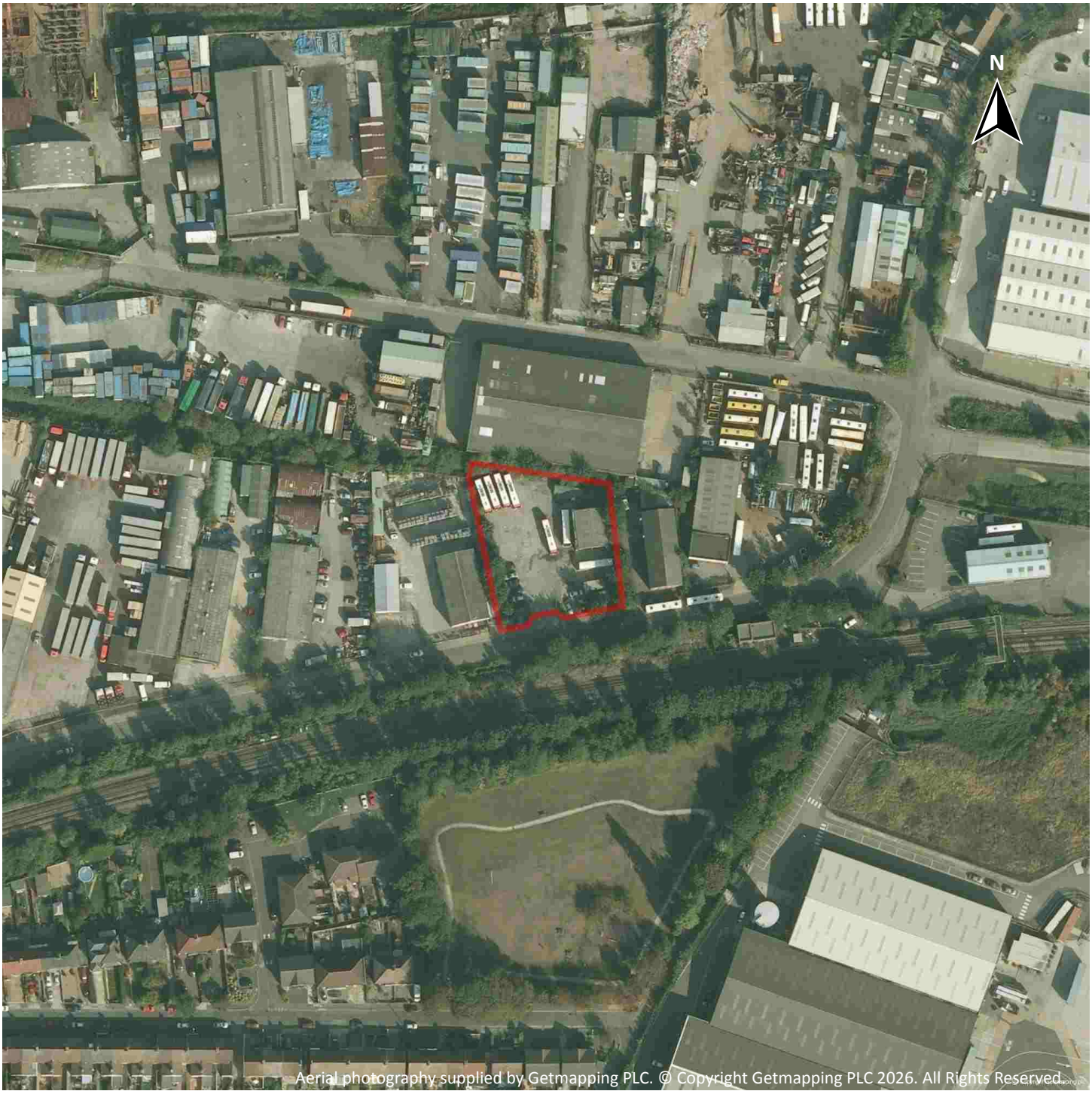
Recent site history - 2014 aerial photograph



Capture Date: 31/07/2014

Site Area: 0.21ha

Recent site history - 2009 aerial photograph



Capture Date: 27/09/2009

Site Area: 0.21ha

Recent site history - 1999 aerial photograph



Capture Date: 03/09/1999

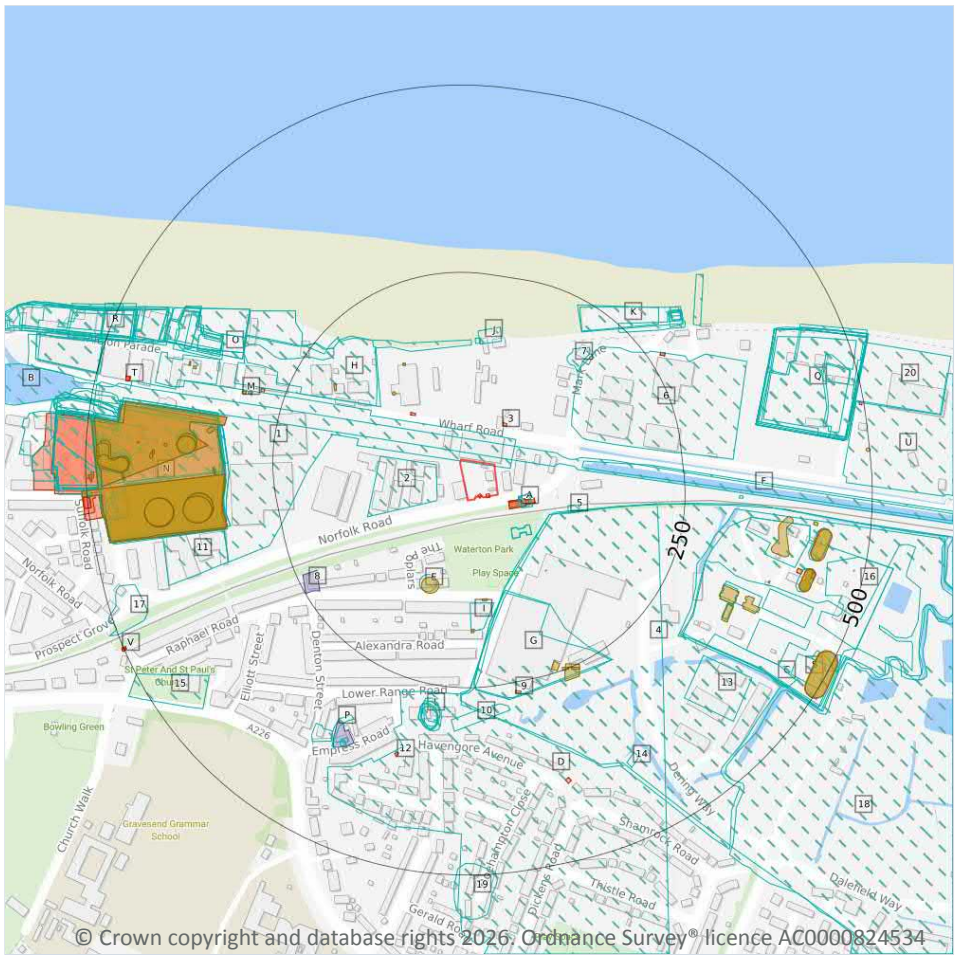
Site Area: 0.21ha

OS MasterMap site plan



Site Area: 0.21ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	192

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**	**Timber Yard**	**1973 - 1981**	**2250413**

ID	Location	Land use	Dates present	Group ID
B	10m N	Disused Canal	1966	2267240
A	28m E	Railway Building	1955 - 1973	2224548
A	29m E	Railway Building	1981	2293248
2	32m W	Unspecified Works	1973 - 1981	2279912
A	48m S	Hospital	1932	2232006
A	49m S	Hospital	1938 - 1951	2220941
4	72m SE	Marshes	1888	2235831
C	73m SE	Marshes	1895	2275604
D	76m SE	Marshes	1916	2235259
5	95m E	Railway Building	1955	2195956
E	111m SW	Unspecified Tank	1932	2190821
6	116m NE	Unspecified Commercial/Industrial	1973 - 1981	2327938
F	116m E	Disused Canal	1981	2201990
G	127m S	Unspecified Works	1981	2258663
H	128m NW	Unspecified Works	1973 - 1981	2318420
G	130m S	Unspecified Works	1966 - 1973	2225608
H	134m NW	Unspecified Works	1955	2295158
I	137m S	Laundry	1951	2188937
J	156m N	Unspecified Wharf	1955 - 1966	2257911
J	156m N	Boat House	1932 - 1951	2230607
7	166m NE	Corn Windmill	1865	2166565
K	212m NE	Unspecified Wharf	1973	2218818
K	213m NE	Unspecified Wharf	1981	2220472
H	220m NW	Refuse Heap	1966	2159551
K	243m NE	Unspecified Wharf	1932 - 1951	2258591
L	268m S	Unspecified Pit	1895	2208540
L	272m S	Unspecified Pit	1916 - 1923	2245488
L	273m S	Unspecified Pit	1895	2248413

ID	Location	Land use	Dates present	Group ID
10	275m S	Unspecified Heap	1951	2186819
L	276m S	Unspecified Pit	1888	2286078
L	277m S	Unspecified Pit	1895	2317059
L	280m S	Unspecified Pit	1907	2241524
C	282m E	Unspecified Works	1955 - 1981	2264532
C	291m E	Sewage Works	1938 - 1951	2271075
C	292m E	Sewage Works	1932	2224286
K	298m NE	Quay	1865	2169368
K	301m NE	Unspecified Wharf	1888 - 1895	2320766
K	306m NE	Unspecified Wharf	1895	2246788
K	306m NE	Unspecified Wharf	1895	2281769
K	308m NE	Unspecified Wharf	1895	2313419
N	309m W	Unspecified Works	1955	2182565
N	309m W	Unspecified Commercial/Industrial	1966	2269849
N	313m W	Gas Works	1916 - 1923	2300346
N	313m W	Unspecified Commercial/Industrial	1938	2258803
N	314m W	Gas Works	1895	2325548
N	315m W	Unspecified Commercial/Industrial	1938	2236071
N	315m W	Gas Works	1895	2290023
N	315m W	Unspecified Commercial/Industrial	1932	2271924
N	316m W	Unspecified Commercial/Industrial	1938 - 1951	2255705
N	317m W	Gas Works	1888 - 1895	2329608
N	319m W	Gas Works	1907	2202788
N	320m W	Gas Holder Station	1973 - 1981	2321505
O	321m NW	Unspecified Wharves	1938	2269553
O	321m NW	Unspecified Wharves	1951	2280589
F	322m E	Railway Building	1923	2195565
O	323m NW	Unspecified Wharves	1966	2231873

ID	Location	Land use	Dates present	Group ID
O	323m NW	Unspecified Wharves	1955	2274358
N	324m W	Unspecified Tank	1938 - 1951	2315709
N	324m W	Unspecified Tank	1932	2328129
N	325m W	Unspecified Heap	1895	2223198
K	325m NE	Unspecified Wharf	1955 - 1966	2213687
N	325m W	Unspecified Heap	1916	2313159
C	325m SE	Unspecified Tanks	1932 - 1938	2290170
C	326m SE	Unspecified Tanks	1951	2246790
P	326m SW	Unspecified Ground Workings	1938 - 1951	2315474
11	327m W	Unspecified Works	1981	2182564
N	327m W	Unspecified Heap	1888	2207171
N	333m W	Gasometer	1916 - 1923	2262954
N	333m W	Unspecified Tank	1938	2326447
N	334m W	Unspecified Tank	1938 - 1951	2231699
C	334m E	Sludge Bed	1951	2194576
N	334m W	Gasometer	1888 - 1895	2311508
N	334m W	Unspecified Tanks	1973 - 1981	2302956
N	335m W	Unspecified Tank	1895	2262508
N	335m W	Unspecified Tank	1938	2312433
N	338m W	Unspecified Tank	1955 - 1966	2241958
N	339m W	Unspecified Tank	1932	2260714
N	339m W	Gasometer	1895	2268953
N	339m W	Unspecified Tank	1938 - 1951	2286177
N	339m W	Gasometer	1907	2293689
C	339m SE	Unspecified Tank	1932	2331168
C	340m SE	Unspecified Tank	1938 - 1951	2324931
O	342m W	Unspecified Works	1966	2182558
C	344m SE	Railway Sidings	1951	2200471

ID	Location	Land use	Dates present	Group ID
O	346m NW	Unspecified Wharves	1923	2294212
13	349m SE	Unspecified Tank	1973 - 1981	2264218
O	350m NW	Unspecified Wharves	1907	2228608
O	351m NW	Unspecified Wharves	1938	2213164
O	352m NW	Wharves	1916	2180815
N	352m W	Gasometer	1916	2257587
O	352m NW	Unspecified Wharves	1938	2285429
N	352m W	Gasometer	1923	2285057
Q	353m E	Hospital	1932 - 1938	2235995
Q	353m E	Hospital	1895	2256681
Q	353m E	Isolation Hospital	1951	2297229
Q	353m E	Hospital	1907	2299868
N	354m W	Unspecified Tank	1938	2326389
N	354m W	Unspecified Tank	1955 - 1966	2305257
N	354m W	Gasometer	1888 - 1895	2304366
N	354m W	Unspecified Tank	1938	2215118
Q	354m E	Sanitary Hospital	1888	2301993
N	355m W	Unspecified Tank	1932	2205120
P	355m SW	Smithy	1895	2243884
Q	355m E	Hospital	1923	2314027
N	355m W	Unspecified Tank	1938 - 1951	2215304
N	355m W	Gasometer	1895	2221988
N	355m W	Gasometer	1907	2270825
N	356m W	Gasometer	1895	2329092
Q	356m E	Sanitary Hospital	1895	2257731
P	357m SW	Smithy	1895	2181047
P	360m SW	Smithy	1888	2305787
P	360m SW	Smithy	1895	2325719

ID	Location	Land use	Dates present	Group ID
Q	361m E	Hospital	1923	2327717
Q	364m E	Hospital	1973	2206009
C	384m SE	Filter Beds	1951	2184493
C	387m SE	Filter Beds	1951	2184494
14	389m SE	Pumping Station	1981	2201128
O	390m W	Unspecified Wharves	1932	2262971
O	390m W	Unspecified Wharves	1932	2316922
N	401m W	Refuse Heap	1895	2302522
N	401m W	Refuse Heap	1895	2308927
N	403m W	Refuse Heap	1888	2204999
N	407m W	Refuse Heap	1895	2297916
C	416m E	Unspecified Tanks	1951 - 1973	2206746
15	417m SW	Grave Yard	1865	2165809
N	417m W	Unspecified Ground Workings	1938 - 1951	2293314
N	418m W	Gas Works	1865	2331282
N	418m W	Unspecified Heap	1932	2323441
C	422m E	Unspecified Tanks	1981	2168396
R	422m W	Iron Works	1938 - 1951	2299870
R	427m W	Iron Works	1932	2207092
R	434m W	Unspecified Works	1966 - 1973	2238917
R	434m W	Unspecified Works	1955	2256872
N	438m W	Gasometer	1923	2250546
N	439m W	Gasometers	1916	2294773
N	439m W	Gasometers	1895	2267533
N	440m W	Unspecified Tanks	1938	2290752
N	440m W	Unspecified Tank	1938	2253277
N	440m W	Unspecified Tanks	1907	2268695
N	440m W	Unspecified Tanks	1951	2278855

ID	Location	Land use	Dates present	Group ID
N	440m W	Gasometer	1895	2261241
N	440m W	Unspecified Tank	1938	2314183
Q	442m E	Isolation Hospital	1955 - 1966	2230804
N	442m W	Gasometers	1888	2268834
N	442m W	Unspecified Tank	1932	2284824
N	444m W	Gasometers	1865	2291742
N	445m W	Unspecified Tank	1895	2327566
N	447m W	Unspecified Tank	1951	2312798
N	447m W	Unspecified Tank	1938	2324945
N	447m W	Unspecified Tank	1932	2210279
16	449m E	Sludge Beds	1951	2167342
17	453m W	Unspecified Heap	1865	2186820
Q	453m E	Unspecified Station	1981	2170611
S	454m SE	Sludge Bed	1951	2194577
N	454m W	Railway Sidings	1923 - 1932	2230146
N	455m W	Railway Sidings	1938	2249030
N	458m W	Railway Sidings	1907	2203015
N	458m W	Railway Sidings	1938 - 1951	2272315
N	459m W	Railway Sidings	1938	2247197
R	460m W	Iron Works	1938	2242599
18	461m SE	Marshes	1888	2271301
N	461m W	Railway Sidings	1966	2277719
U	461m E	Unspecified Works	1981	2227547
R	463m W	Iron Works	1923	2288467
N	464m W	Gasometers	1923	2223255
R	465m W	Iron Works	1895	2323432
R	465m W	Iron Works	1895	2329264
R	466m W	Unspecified Works	1981	2205693

ID	Location	Land use	Dates present	Group ID
R	467m W	Iron Works	1907	2309167
N	467m W	Unspecified Tank	1938	2209879
N	467m W	Gasometers	1865	2314119
N	468m W	Unspecified Tank	1938	2302565
N	468m W	Gasometer	1895	2161481
R	468m W	Iron Works	1895	2243828
N	469m W	Gasometers	1865	2296554
N	469m W	Gasometer	1895	2161434
R	469m W	Iron Works	1888	2236996
R	470m W	Iron Works	1895	2297867
N	470m W	Unspecified Tanks	1895	2315504
N	471m W	Unspecified Tank	1907	2318194
S	472m SE	Refuse Heap	1951	2159506
N	479m W	Power Station	1973	2158347
N	481m W	Electricity Works	1923	2167384
N	481m W	Electric Works	1916	2173888
N	483m W	Coal Store	1865	2169837
19	485m S	Unspecified Heap	1955 - 1966	2263614
20	485m E	Unspecified Works	1973 - 1981	2328906
R	489m W	Iron Works	1916	2271252
R	496m W	Soap Works	1895	2292018
R	498m W	Soap Works	1865 - 1888	2236361
R	499m W	Soap Works	1895	2204618

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m	65

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
E	113m SW	Unspecified Tank	1932	389100
B	123m NW	Unspecified Tank	1973	389114
I	133m S	Unspecified Tank	1978 - 1988	426685
B	146m NW	Unspecified Tank	1973 - 1993	418326
I	172m S	Unspecified Tank	1897	389101
H	190m NW	Unspecified Tank	1953 - 1958	414848
G	234m S	Tanks	1993	378485
G	244m S	Tanks	1993	410283
G	246m S	Tanks	1978 - 1988	409105
G	251m SE	Tanks	1978 - 1988	418017
9	261m S	Unspecified Tank	1978 - 1988	428727
M	300m W	Unspecified Tank	1976 - 1980	410437
N	314m W	Gasholder Station	1980	398546
N	314m W	Gasholder Station	1976	412600
N	315m W	Gasholder Station	1967	429463
N	315m W	Gas Works	1897 - 1909	417340
N	315m W	Gasholder Station	1969	403037
N	317m W	Gas Works	1866	420096
C	325m SE	Sediment Tanks	1932	381164
N	327m W	Unspecified Tank	1932	394723
N	331m W	Unspecified Tank	1909 - 1958	410588

ID	Location	Land use	Dates present	Group ID
N	334m W	Gasholder	1980	415172
N	335m W	Unspecified Tank	1953	424913
N	335m W	Unspecified Tank	1958	421078
N	335m W	Gasholder	1967 - 1976	428930
N	337m W	Unspecified Tank	1932	415779
N	337m W	Gasometer	1897 - 1909	415875
C	340m SE	Syphon Tank	1932	381523
N	352m W	Unspecified Tank	1953 - 1958	404772
N	354m W	Gasometer	1897 - 1909	417445
N	354m W	Unspecified Tank	1932	430297
C	358m SE	Sediment Tanks	1932	381165
C	372m E	Tanks	1993	378486
O	374m W	Unspecified Tank	1976	394724
C	380m E	Unspecified Tank	1993	389118
O	382m W	Unspecified Tank	1980	394725
N	387m W	Gasholder	1980	405109
N	387m W	Gasholder	1967	399110
N	387m W	Gasholder	1976	413418
N	388m W	Gasholder	1969	418322
N	392m W	Unspecified Tank	1953 - 1958	422786
N	408m W	Tanks	1953 - 1958	406024
N	410m W	Tanks	1897 - 1932	419122
C	420m E	Tanks	1970	410919
C	420m E	Tanks	1955 - 1964	417037
C	420m E	Tanks	1953	409432
C	420m E	Tanks	1969	421658
C	423m E	Unspecified Tank	1984	389127
C	424m E	Tanks	1984	398279

ID	Location	Land use	Dates present	Group ID
C	426m E	Tanks	1993	408375
N	429m W	Unspecified Tank	1866	394721
C	433m E	Unspecified Tank	1982	389115
N	441m W	Gasometers	1866	404618
N	442m W	Unspecified Tank	1953 - 1958	425779
N	442m W	Gasometers	1897 - 1909	400683
N	443m W	Tanks	1932	380008
N	449m W	Unspecified Tank	1932	394715
S	478m SE	Settling Tanks	1982	397854
S	479m SE	Tanks	1993	378484
N	482m W	Unspecified Tank	1932	394722
N	489m W	Unspecified Tank	1967 - 1969	401417
N	492m W	Tanks	1932	380003
N	492m W	Tanks	1932	380007
U	495m E	Unspecified Tank	1984 - 1993	414289
N	496m W	Tanks	1932	380006

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m	**47**

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
A	**On site**	**Electricity Substation**	**1993**	**269809**
A	**On site**	**Electricity Substation**	**1973**	**270505**

ID	Location	Land use	Dates present	Group ID
A	17m SE	Electricity Substation	1953	305909
A	17m SE	Electricity Substation	1958	289124
A	17m SE	Electricity Substation	1973	304811
A	18m SE	Electricity Substation	1993	278750
3	53m N	Electricity Substation	1993	269808
B	85m NW	Electricity Substation	1973 - 1993	317273
K	265m NE	Electricity Transformer	1973	276833
K	265m NE	Electricity Substation	1984 - 1993	314380
M	278m W	Electricity Substation	1967 - 1969	301560
M	292m W	Electricity Substation	1980	273134
M	292m W	Electricity Transformer	1976	276770
N	314m W	Gasholder Station	1980	285243
N	314m W	Gasholder Station	1969 - 1976	297062
N	315m W	Gasholder Station	1967	309201
N	315m W	Gas Works	1897 - 1909	304565
N	317m W	Gas Works	1866	277354
N	334m W	Gasholder	1980	317430
N	335m W	Gasholder	1967 - 1976	299237
N	337m W	Gasometer	1897 - 1909	300035
12	348m S	Electricity Substation	1993	269806
N	354m W	Gasometer	1897 - 1909	291882
N	387m W	Gasholder	1980	300695
N	387m W	Gasholder	1976	315663
N	387m W	Gasholder	1967	317473
N	388m W	Gasholder	1969	295562
D	390m S	Electricity Substation	1978 - 1993	321830
C	412m E	Electricity Substation	1982 - 1993	314789
N	441m W	Gasometers	1866	320910

ID	Location	Land use	Dates present	Group ID
N	442m W	Gasometers	1897 - 1909	304464
T	454m W	Electricity Substation	1980	283326
T	455m W	Electricity Substation	1953 - 1969	284961
T	455m W	Electricity Transformer	1976	276771
N	479m W	Power Station	1967 - 1969	292991
N	483m W	Electricity Transformers	1967	316813
N	484m W	Electricity Works	1909	266122
N	489m W	Electricity Transformers	1969	312523
Q	494m E	Electricity Substation	1993	269807
N	496m W	Electricity Substation	1980	273136
N	496m W	Electricity Transformers	1976	314167
V	497m SW	Electricity Substation	1994	309272
V	497m SW	Electricity Substation	1993	320284
V	498m SW	Electricity Substation	1955	311997
V	498m SW	Electricity Substation	1976	299899
V	498m SW	Electricity Substation	1953	303676
V	498m SW	Electricity Substation	1983 - 1992	277470

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	2

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'.

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

ID	Location	Land use	Dates present	Group ID
8	222m SW	Garage	1953 - 1964	91803
P	340m SW	Garage	1953 - 1955	84653

This data is sourced from Ordnance Survey® / Groundsure.

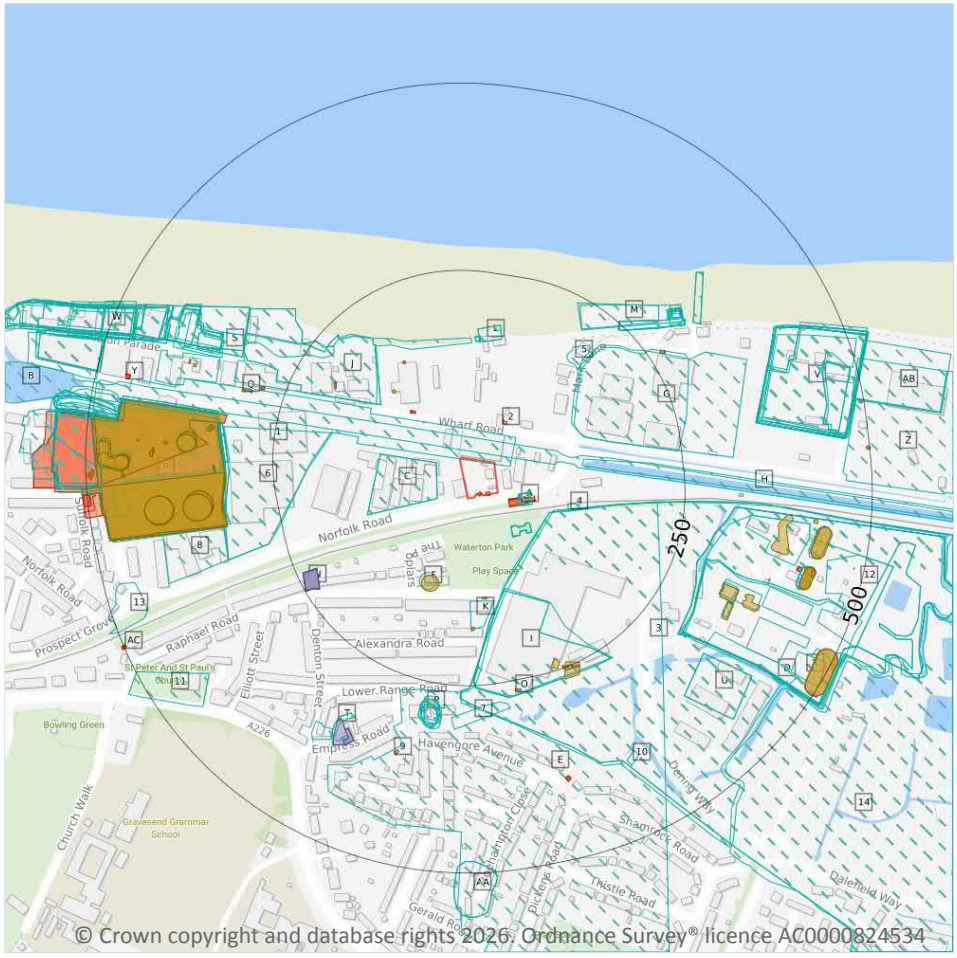
1.6 Historical military land

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

Historical garages

2.1 Historical industrial land uses

Records within 500m	259

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 29 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Timber Yard**	**1981**	**2250413**
B	10m N	Disused Canal	1966	2267240
A	28m E	Railway Building	1973	2224548

ID	Location	Land Use	Date	Group ID
A	28m E	Railway Building	1955	2224548
A	28m E	Railway Building	1966	2224548
A	29m E	Railway Building	1981	2293248
C	32m W	Unspecified Works	1981	2279912
C	32m W	Unspecified Works	1973	2279912
A	48m S	Hospital	1932	2232006
A	49m S	Hospital	1938	2220941
A	49m S	Hospital	1951	2220941
3	72m SE	Marshes	1888	2235831
D	73m SE	Marshes	1895	2275604
D	73m SE	Marshes	1895	2275604
E	76m SE	Marshes	1916	2235259
4	95m E	Railway Building	1955	2195956
F	111m SW	Unspecified Tank	1932	2190821
G	116m NE	Unspecified Commercial/Industrial	1981	2327938
H	116m E	Disused Canal	1981	2201990
G	118m NE	Unspecified Commercial/Industrial	1973	2327938
I	127m S	Unspecified Works	1981	2258663
J	128m NW	Unspecified Works	1981	2318420
J	128m NW	Unspecified Works	1973	2318420
I	130m S	Unspecified Works	1973	2225608
I	130m S	Unspecified Works	1966	2225608
J	134m NW	Unspecified Works	1955	2295158
K	137m S	Laundry	1951	2188937
L	156m N	Unspecified Wharf	1955	2257911
L	156m N	Unspecified Wharf	1966	2257911
L	156m N	Boat House	1938	2230607
L	156m N	Boat House	1951	2230607

ID	Location	Land Use	Date	Group ID
L	157m N	Boat House	1932	2230607
5	166m NE	Corn Windmill	1865	2166565
6	175m W	Timber Yard	1973	2250413
M	212m NE	Unspecified Wharf	1973	2218818
M	213m NE	Unspecified Wharf	1981	2220472
J	220m NW	Refuse Heap	1966	2159551
M	243m NE	Unspecified Wharf	1932	2258591
M	243m NE	Unspecified Wharf	1932	2258591
M	243m NE	Unspecified Wharf	1938	2258591
M	243m NE	Unspecified Wharf	1951	2258591
P	268m S	Unspecified Pit	1895	2208540
P	272m S	Unspecified Pit	1916	2245488
P	273m S	Unspecified Pit	1895	2248413
P	273m S	Unspecified Pit	1895	2248413
7	275m S	Unspecified Heap	1951	2186819
P	276m S	Unspecified Pit	1888	2286078
P	277m S	Unspecified Pit	1895	2317059
P	280m S	Unspecified Pit	1907	2241524
P	281m S	Unspecified Pit	1923	2245488
D	282m E	Unspecified Works	1981	2264532
D	282m E	Unspecified Works	1973	2264532
D	282m E	Unspecified Works	1955	2264532
D	282m E	Unspecified Works	1966	2264532
D	291m E	Sewage Works	1951	2271075
D	292m E	Sewage Works	1932	2224286
D	292m E	Sewage Works	1932	2224286
D	293m E	Sewage Works	1938	2271075
M	298m NE	Quay	1865	2169368

ID	Location	Land Use	Date	Group ID
M	301m NE	Unspecified Wharf	1888	2320766
M	303m NE	Unspecified Wharf	1895	2320766
M	306m NE	Unspecified Wharf	1895	2246788
M	306m NE	Unspecified Wharf	1895	2281769
M	308m NE	Unspecified Wharf	1895	2313419
R	309m W	Unspecified Works	1955	2182565
R	309m W	Unspecified Commercial/Industrial	1966	2269849
R	313m W	Gas Works	1916	2300346
R	313m W	Gas Works	1923	2300346
R	313m W	Unspecified Commercial/Industrial	1938	2258803
R	314m W	Gas Works	1895	2325548
R	314m W	Gas Works	1895	2325548
R	315m W	Unspecified Commercial/Industrial	1938	2236071
R	315m W	Gas Works	1895	2290023
R	315m W	Unspecified Commercial/Industrial	1932	2271924
R	316m W	Unspecified Commercial/Industrial	1938	2255705
R	316m W	Unspecified Commercial/Industrial	1951	2255705
R	317m W	Gas Works	1888	2329608
R	319m W	Gas Works	1907	2202788
R	319m W	Gas Works	1895	2329608
R	320m W	Gas Holder Station	1973	2321505
S	321m NW	Unspecified Wharves	1938	2269553
S	321m NW	Unspecified Wharves	1951	2280589
R	322m W	Gas Holder Station	1981	2321505
H	322m E	Railway Building	1923	2195565
S	323m NW	Unspecified Wharves	1955	2274358
S	323m NW	Unspecified Wharves	1966	2231873
R	324m W	Unspecified Tank	1938	2315709

ID	Location	Land Use	Date	Group ID
R	324m W	Unspecified Tank	1951	2315709
R	324m W	Unspecified Tank	1932	2328129
R	325m W	Unspecified Heap	1895	2223198
R	325m W	Unspecified Heap	1895	2223198
M	325m NE	Unspecified Wharf	1955	2213687
M	325m NE	Unspecified Wharf	1966	2213687
R	325m W	Unspecified Heap	1916	2313159
D	325m SE	Unspecified Tanks	1932	2290170
D	326m SE	Unspecified Tanks	1951	2246790
T	326m SW	Unspecified Ground Workings	1938	2315474
T	326m SW	Unspecified Ground Workings	1951	2315474
8	327m W	Unspecified Works	1981	2182564
D	327m SE	Unspecified Tanks	1938	2290170
R	327m W	Unspecified Heap	1888	2207171
R	333m W	Gasometer	1916	2262954
R	333m W	Unspecified Tank	1938	2326447
R	334m W	Unspecified Tank	1938	2231699
R	334m W	Unspecified Tank	1951	2231699
R	334m W	Gasometer	1923	2262954
D	334m E	Sludge Bed	1951	2194576
R	334m W	Gasometer	1895	2311508
R	334m W	Unspecified Tanks	1981	2302956
R	334m W	Unspecified Tanks	1973	2302956
R	335m W	Unspecified Tank	1895	2262508
R	335m W	Unspecified Tank	1895	2262508
R	335m W	Unspecified Tank	1938	2312433
R	338m W	Gasometer	1888	2311508
R	338m W	Unspecified Tank	1955	2241958

ID	Location	Land Use	Date	Group ID
R	338m W	Unspecified Tank	1966	2241958
R	339m W	Unspecified Tank	1932	2260714
R	339m W	Gasometer	1907	2293689
R	339m W	Gasometer	1895	2268953
R	339m W	Unspecified Tank	1938	2286177
R	339m W	Unspecified Tank	1951	2286177
D	339m SE	Unspecified Tank	1932	2331168
D	340m SE	Unspecified Tank	1938	2324931
D	340m SE	Unspecified Tank	1951	2324931
S	342m W	Unspecified Works	1966	2182558
D	344m SE	Railway Sidings	1951	2200471
S	346m NW	Unspecified Wharves	1923	2294212
U	349m SE	Unspecified Tank	1981	2264218
U	349m SE	Unspecified Tank	1973	2264218
S	350m NW	Unspecified Wharves	1907	2228608
S	351m NW	Unspecified Wharves	1938	2213164
S	351m NW	Unspecified Wharves	1938	2213164
S	352m NW	Wharves	1916	2180815
R	352m W	Gasometer	1916	2257587
S	352m NW	Unspecified Wharves	1938	2285429
R	352m W	Gasometer	1923	2285057
V	353m E	Hospital	1938	2235995
V	353m E	Isolation Hospital	1951	2297229
V	353m E	Hospital	1907	2299868
V	353m E	Hospital	1895	2256681
R	354m W	Unspecified Tank	1938	2326389
R	354m W	Unspecified Tank	1955	2305257
R	354m W	Unspecified Tank	1966	2305257

ID	Location	Land Use	Date	Group ID
R	354m W	Gasometer	1895	2304366
R	354m W	Unspecified Tank	1938	2215118
R	354m W	Gasometer	1888	2304366
V	354m E	Sanitary Hospital	1888	2301993
V	355m E	Hospital	1932	2235995
R	355m W	Unspecified Tank	1932	2205120
T	355m SW	Smithy	1895	2243884
T	355m SW	Smithy	1895	2243884
V	355m E	Hospital	1923	2314027
R	355m W	Gasometer	1907	2270825
R	355m W	Gasometer	1895	2221988
R	355m W	Unspecified Tank	1938	2215304
R	355m W	Unspecified Tank	1951	2215304
R	356m W	Gasometer	1895	2329092
R	356m W	Gasometer	1895	2329092
V	356m E	Sanitary Hospital	1895	2257731
V	356m E	Sanitary Hospital	1895	2257731
T	357m SW	Smithy	1895	2181047
V	357m E	Hospital	1895	2256681
T	360m SW	Smithy	1888	2305787
T	360m SW	Smithy	1895	2325719
V	361m E	Hospital	1923	2327717
V	364m E	Hospital	1973	2206009
D	384m SE	Filter Beds	1951	2184493
D	387m SE	Filter Beds	1951	2184494
10	389m SE	Pumping Station	1981	2201128
S	390m W	Unspecified Wharves	1932	2262971
S	390m W	Unspecified Wharves	1932	2316922

ID	Location	Land Use	Date	Group ID
R	401m W	Refuse Heap	1895	2302522
R	401m W	Refuse Heap	1895	2308927
R	401m W	Refuse Heap	1895	2308927
R	403m W	Refuse Heap	1888	2204999
R	407m W	Refuse Heap	1895	2297916
D	416m E	Unspecified Tanks	1951	2206746
D	416m E	Unspecified Tanks	1973	2206746
D	416m E	Unspecified Tanks	1955	2206746
D	416m E	Unspecified Tanks	1966	2206746
11	417m SW	Grave Yard	1865	2165809
R	417m W	Unspecified Ground Workings	1938	2293314
R	417m W	Unspecified Ground Workings	1951	2293314
R	418m W	Gas Works	1865	2331282
R	418m W	Unspecified Heap	1932	2323441
R	418m W	Unspecified Heap	1932	2323441
D	422m E	Unspecified Tanks	1981	2168396
W	422m W	Iron Works	1938	2299870
W	422m W	Iron Works	1951	2299870
W	427m W	Iron Works	1932	2207092
W	434m W	Unspecified Works	1973	2238917
W	434m W	Unspecified Works	1966	2238917
W	434m W	Unspecified Works	1955	2256872
R	438m W	Gasometer	1923	2250546
R	439m W	Gasometers	1916	2294773
R	439m W	Gasometers	1895	2267533
R	439m W	Gasometers	1895	2267533
R	440m W	Unspecified Tanks	1938	2290752
R	440m W	Unspecified Tank	1938	2253277

ID	Location	Land Use	Date	Group ID
R	440m W	Unspecified Tanks	1951	2278855
R	440m W	Unspecified Tanks	1907	2268695
R	440m W	Gasometer	1895	2261241
R	440m W	Unspecified Tank	1938	2314183
V	442m E	Isolation Hospital	1955	2230804
V	442m E	Isolation Hospital	1966	2230804
R	442m W	Gasometers	1888	2268834
R	442m W	Unspecified Tank	1932	2284824
R	444m W	Gasometers	1865	2291742
R	445m W	Unspecified Tank	1895	2327566
R	447m W	Unspecified Tank	1938	2324945
R	447m W	Unspecified Tank	1951	2312798
R	447m W	Unspecified Tank	1932	2210279
12	449m E	Sludge Beds	1951	2167342
13	453m W	Unspecified Heap	1865	2186820
V	453m E	Unspecified Station	1981	2170611
X	454m SE	Sludge Bed	1951	2194577
R	454m W	Railway Sidings	1923	2230146
R	455m W	Railway Sidings	1938	2249030
R	458m W	Railway Sidings	1938	2272315
R	458m W	Railway Sidings	1951	2272315
R	458m W	Railway Sidings	1907	2203015
R	459m W	Railway Sidings	1938	2247197
R	459m W	Railway Sidings	1932	2230146
W	460m W	Iron Works	1938	2242599
W	460m W	Iron Works	1938	2242599
14	461m SE	Marshes	1888	2271301
R	461m W	Railway Sidings	1966	2277719

ID	Location	Land Use	Date	Group ID
Z	461m E	Unspecified Works	1981	2227547
W	463m W	Iron Works	1923	2288467
R	464m W	Gasometers	1923	2223255
W	465m W	Iron Works	1895	2323432
W	465m W	Iron Works	1895	2329264
W	466m W	Unspecified Works	1981	2205693
W	467m W	Iron Works	1907	2309167
R	467m W	Unspecified Tank	1938	2209879
R	467m W	Gasometers	1865	2314119
R	468m W	Unspecified Tank	1938	2302565
R	468m W	Gasometer	1895	2161481
W	468m W	Iron Works	1895	2243828
R	469m W	Gasometers	1865	2296554
R	469m W	Gasometer	1895	2161434
W	469m W	Iron Works	1888	2236996
W	470m W	Iron Works	1895	2297867
R	470m W	Unspecified Tanks	1895	2315504
R	471m W	Unspecified Tank	1907	2318194
X	472m SE	Refuse Heap	1951	2159506
R	479m W	Power Station	1973	2158347
R	481m W	Electricity Works	1923	2167384
R	481m W	Electric Works	1916	2173888
R	483m W	Coal Store	1865	2169837
AA	485m S	Unspecified Heap	1955	2263614
AA	485m S	Unspecified Heap	1966	2263614
AB	485m E	Unspecified Works	1981	2328906
AB	486m E	Unspecified Works	1973	2328906
W	489m W	Iron Works	1916	2271252

ID	Location	Land Use	Date	Group ID
W	496m W	Soap Works	1895	2292018
W	496m W	Soap Works	1895	2292018
W	498m W	Soap Works	1888	2236361
W	499m W	Soap Works	1895	2204618

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m	**91**

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 29 >**

ID	Location	Land Use	Date	Group ID
F	113m SW	Unspecified Tank	1932	389100
B	123m NW	Unspecified Tank	1973	389114
K	133m S	Unspecified Tank	1978	426685
K	133m S	Unspecified Tank	1988	426685
B	146m NW	Unspecified Tank	1993	418326
B	147m NW	Unspecified Tank	1973	418326
K	172m S	Unspecified Tank	1897	389101
J	190m NW	Unspecified Tank	1958	414848
J	190m NW	Unspecified Tank	1953	414848
I	234m S	Tanks	1993	378485
I	244m S	Tanks	1993	410283
I	246m S	Tanks	1988	409105
I	247m S	Tanks	1978	409105
I	251m SE	Tanks	1988	418017
I	251m SE	Tanks	1978	418017
I	254m S	Tanks	1993	410283

ID	Location	Land Use	Date	Group ID
O	261m S	Unspecified Tank	1988	428727
O	261m S	Unspecified Tank	1978	428727
Q	300m W	Unspecified Tank	1976	410437
Q	301m W	Unspecified Tank	1980	410437
R	314m W	Gasholder Station	1980	398546
R	314m W	Gasholder Station	1976	412600
R	315m W	Gasholder Station	1967	429463
R	315m W	Gas Works	1897	417340
R	315m W	Gas Works	1909	417340
R	315m W	Gasholder Station	1969	403037
R	317m W	Gas Works	1866	420096
D	325m SE	Sediment Tanks	1932	381164
R	327m W	Unspecified Tank	1932	394723
R	331m W	Unspecified Tank	1958	410588
R	331m W	Unspecified Tank	1953	410588
R	334m W	Unspecified Tank	1932	410588
R	334m W	Gasholder	1980	415172
R	334m W	Unspecified Tank	1909	410588
R	335m W	Unspecified Tank	1953	424913
R	335m W	Unspecified Tank	1958	421078
R	335m W	Gasholder	1969	428930
R	335m W	Gasholder	1967	428930
R	335m W	Gasholder	1976	428930
R	337m W	Gasometer	1897	415875
R	337m W	Gasometer	1909	415875
R	337m W	Unspecified Tank	1932	415779
D	340m SE	Syphon Tank	1932	381523
R	352m W	Unspecified Tank	1958	404772

ID	Location	Land Use	Date	Group ID
R	353m W	Unspecified Tank	1953	404772
R	354m W	Gasometer	1897	417445
R	354m W	Gasometer	1909	417445
R	354m W	Unspecified Tank	1932	430297
D	358m SE	Sediment Tanks	1932	381165
D	372m E	Tanks	1993	378486
S	374m W	Unspecified Tank	1976	394724
D	380m E	Unspecified Tank	1993	389118
S	382m W	Unspecified Tank	1980	394725
R	387m W	Gasholder	1980	405109
R	387m W	Gasholder	1967	399110
R	387m W	Gasholder	1976	413418
R	388m W	Gasholder	1969	418322
R	392m W	Unspecified Tank	1958	422786
R	392m W	Unspecified Tank	1953	422786
R	408m W	Tanks	1958	406024
R	408m W	Tanks	1953	406024
R	410m W	Tanks	1897	419122
R	410m W	Tanks	1909	419122
R	410m W	Tanks	1932	419122
D	420m E	Tanks	1955	417037
D	420m E	Tanks	1964	417037
D	420m E	Tanks	1970	410919
D	420m E	Tanks	1953	409432
D	420m E	Tanks	1969	421658
D	423m E	Unspecified Tank	1984	389127
D	424m E	Tanks	1984	398279
D	426m E	Tanks	1993	408375

ID	Location	Land Use	Date	Group ID
R	429m W	Unspecified Tank	1866	394721
D	433m E	Unspecified Tank	1982	389115
R	441m W	Gasometers	1866	404618
R	442m W	Unspecified Tank	1958	425779
R	442m W	Gasometers	1897	400683
R	442m W	Gasometers	1909	400683
R	442m W	Unspecified Tank	1953	425779
R	443m W	Tanks	1932	380008
R	449m W	Unspecified Tank	1932	394715
X	478m SE	Settling Tanks	1982	397854
X	479m SE	Tanks	1993	378484
R	482m W	Unspecified Tank	1932	394722
R	489m W	Unspecified Tank	1967	401417
R	490m W	Unspecified Tank	1969	401417
R	492m W	Tanks	1932	380003
R	492m W	Tanks	1932	380007
Z	495m E	Unspecified Tank	1984	414289
R	496m W	Tanks	1932	380006
Z	496m E	Unspecified Tank	1993	414289

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m	**66**

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 29 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Electricity Substation**	**1993**	**269809**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Electricity Substation**	**1973**	**270505**
A	17m SE	Electricity Substation	1953	305909
A	17m SE	Electricity Substation	1958	289124
A	17m SE	Electricity Substation	1973	304811
A	18m SE	Electricity Substation	1993	278750
2	53m N	Electricity Substation	1993	269808
B	85m NW	Electricity Substation	1973	317273
B	86m NW	Electricity Substation	1993	317273
M	265m NE	Electricity Transformer	1973	276833
M	265m NE	Electricity Substation	1984	314380
M	266m NE	Electricity Substation	1993	314380
Q	278m W	Electricity Substation	1967	301560
Q	278m W	Electricity Substation	1969	301560
Q	292m W	Electricity Substation	1980	273134
Q	292m W	Electricity Transformer	1976	276770
R	314m W	Gasholder Station	1980	285243
R	314m W	Gasholder Station	1976	297062
R	315m W	Gasholder Station	1967	309201
R	315m W	Gas Works	1897	304565
R	315m W	Gas Works	1909	304565
R	315m W	Gasholder Station	1969	297062
R	317m W	Gas Works	1866	277354
R	334m W	Gasholder	1980	317430
R	335m W	Gasholder	1969	299237
R	335m W	Gasholder	1967	299237
R	335m W	Gasholder	1976	299237
R	337m W	Gasometer	1897	300035
R	337m W	Gasometer	1909	300035

ID	Location	Land Use	Date	Group ID
9	348m S	Electricity Substation	1993	269806
R	354m W	Gasometer	1897	291882
R	354m W	Gasometer	1909	291882
R	387m W	Gasholder	1980	300695
R	387m W	Gasholder	1967	317473
R	387m W	Gasholder	1976	315663
R	388m W	Gasholder	1969	295562
E	390m S	Electricity Substation	1988	321830
E	390m S	Electricity Substation	1978	321830
E	390m S	Electricity Substation	1993	321830
D	412m E	Electricity Substation	1982	314789
D	413m E	Electricity Substation	1993	314789
R	441m W	Gasometers	1866	320910
R	442m W	Gasometers	1897	304464
R	442m W	Gasometers	1909	304464
Y	454m W	Electricity Substation	1980	283326
Y	455m W	Electricity Substation	1958	284961
Y	455m W	Electricity Substation	1969	284961
Y	455m W	Electricity Substation	1953	284961
Y	455m W	Electricity Substation	1967	284961
Y	455m W	Electricity Transformer	1976	276771
R	479m W	Power Station	1967	292991
R	480m W	Power Station	1969	292991
R	483m W	Electricity Transformers	1967	316813
R	484m W	Electricity Works	1909	266122
R	489m W	Electricity Transformers	1969	312523
V	494m E	Electricity Substation	1993	269807
R	496m W	Electricity Substation	1980	273136

ID	Location	Land Use	Date	Group ID
R	496m W	Electricity Transformers	1976	314167
AC	497m SW	Electricity Substation	1994	309272
AC	497m SW	Electricity Substation	1993	320284
AC	498m SW	Electricity Substation	1955	311997
AC	498m SW	Electricity Substation	1976	299899
AC	498m SW	Electricity Substation	1953	303676
AC	498m SW	Electricity Substation	1983	277470
AC	498m SW	Electricity Substation	1983	277470
AC	498m SW	Electricity Substation	1992	277470

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	**6**

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'.

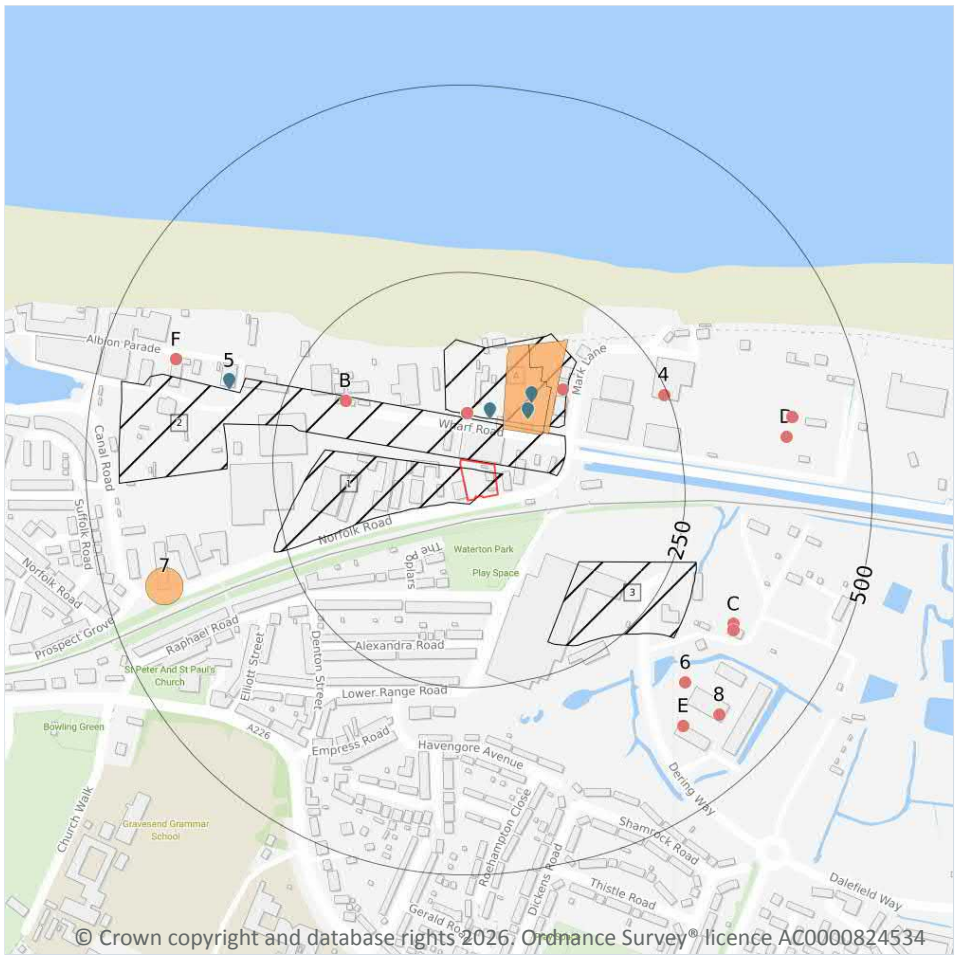
Features are displayed on the Past land use - un-grouped map on **page 29 >**

ID	Location	Land Use	Date	Group ID
N	222m SW	Garage	1955	91803
N	222m SW	Garage	1964	91803
N	222m SW	Garage	1953	91803
N	223m SW	Garage	1960	91803

ID	Location	Land Use	Date	Group ID
T	340m SW	Garage	1955	84653
T	346m SW	Garage	1953	84653

This data is sourced from Ordnance Survey® / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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 47 >**

ID	Location	Details		
1	**On site**	**Site Address: Gas Works - Canal, Gravesend, Kent** **Licence Holder Address: -**	**Waste Licence: Yes** **Site Reference: GR12** **Waste Type: Inert, Commercial** **Environmental Permitting Regulations (Waste) Reference: -** **Licence Issue: 01/01/1976** **Licence Surrender: -**	**Operator: -** **Licence Holder: -** **First Recorded -** **Last Recorded: -**
2	1m N	Site Address: Gas Works - Canal, Gravesend, Kent Licence Holder Address: -	Waste Licence: Yes Site Reference: GR12 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1976 Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -
A	60m N	Site Address: Norfolk Road, Denton, Kent Licence Holder Address: -	Waste Licence: - Site Reference: GR4 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -
3	141m SE	Site Address: Denton-Comma Oil, Denton, Kent Licence Holder Address: -	Waste Licence: Yes Site Reference: GR11 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/01/1976 Licence Surrender: -	Operator: - Licence Holder: J Clubb Limited First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m	3

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 47 >**

ID	Location	Address	Further Details	Date
A	49m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1993
A	78m NE	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1993
7	396m W	Site Address: Nuralite Industrial Estate, Canal Road, Higham, Rochester, Kent, ME3 7JA	Type of Site: Land Reclamation Planning application reference: 20160637 Description: Scheme comprises land reclamation scheme to cover landfill site, including SUDS. 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	6

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

Features are displayed on the Waste and landfill map on **page 47 >**

ID	Location	Details		
A	70m N	Site Name: Waste Transfer Station Site Address: Off Mark Lane, Denton, Gravesend, Kent, DA12 2RU Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 662246 EPR reference: EA/EPR/TP3698HD Operator: Gurbinder Sall Waste Management licence No: 19391 Annual Tonnage: 10000	Issue Date: 25/04/1997 Effective Date: 25/04/1997 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked
A	84m NE	Site Name: Gravesend Metals And Recycling Ltd Site Address: Denton Industrial Estate, Wharf Road, Gravesend, Kent, DA12 2RU Correspondence Address: Denton Industrial Estate, Wharf Road, Gravesend, Kent, DA12 2RU	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GRA001 EPR reference: - Operator: Gravesend Metals And Recycling Ltd Waste Management licence No: 19390 Annual Tonnage: 0	Issue Date: 18/12/1996 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
A	84m NE	Site Name: Gravesend Metals And Recycling Ltd Site Address: Denton Industrial Estate, Wharf Road, Gravesend, Kent, DA12 2RU Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GRA001 EPR reference: EA/EPR/TP3298HC/A001 Operator: Gravesend Metals And Recycling Limited Waste Management licence No: 19390 Annual Tonnage: 11000	Issue Date: 18/12/1996 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
A	84m NE	Site Name: G M R (Kent) Limited Site Address: Denton Industrial Estate, Wharf Road, Gravesend, Kent, DA12 2RU Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 672196 EPR reference: EA/EPR/EB3700UE Operator: G M R (Kent) Limited Waste Management licence No: 19390 Annual Tonnage: 11000	Issue Date: 18/12/1996 Effective Date: 18/12/1996 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked

ID	Location	Details		
A	106m NE	Site Name: Wharf Metals Ltd Site Address: Wharf Metals Ltd, WHARF ROAD, GRAVESEND, DA12 2RU Correspondence Address: -	Type of Site: Metal Recycling Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: 697807 EPR reference: EA/EPR/JP3620LE Operator: Wharf Metals Ltd Waste Management licence No: 600722 Annual Tonnage: 0	Issue Date: 08/09/2025 Effective Date: 29/08/2025 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
5	327m W	Site Name: Bulk Haulage Limited Site Address: BULK HAULAGE LTD, ALBION PARADE, GRAVESEND, GRAVESHAM, DA12 2RN Correspondence Address: -	Type of Site: Vehicle storage, depollution and dismantling (auth treatment) facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 759326 EPR reference: EA/EPR/VP3429SP Operator: Bulk Haulage Group Limited Waste Management licence No: 409015 Annual Tonnage: 750	Issue Date: 19/06/2023 Effective Date: 14/06/2023 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

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

3.7 Waste exemptions

Records within 500m **21**

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 47 >**

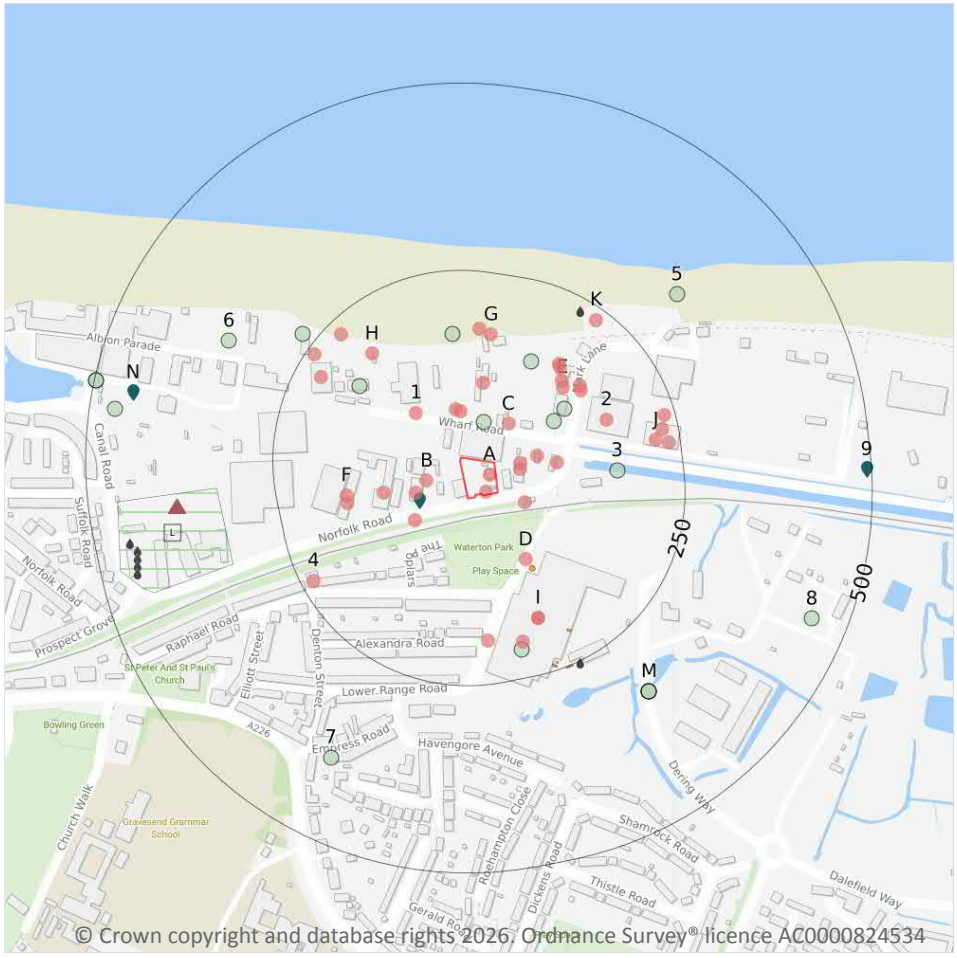
ID	Location	Site	Reference	Category	Sub-Category	Description
A	62m N	7, Wharf Road, Gravesend, Kent, Da12 2ru	WEX148618	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	62m N	7, Wharf Road, Gravesend, Kent, Da12 2ru	WEX148618	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	62m N	7, Wharf Road, Gravesend, Kent, Da12 2ru	WEX148618	Treating waste exemption	Not on a farm	Recovery of scrap metal
A	62m N	-	WEX412175	Treating waste exemption	Not on a farm	Recovery of scrap metal

ID	Location	Site	Reference	Category	Sub-Category	Description
A	135m NE	Wharf Road, Gravesend, Da12 2ru	WEX271461	Treating waste exemption	Not on a farm	Mechanical treatment of end-of-life tyres
B	173m NW	-	WEX285577	Treating waste exemption	Not on a farm	Recovery of scrap metal
B	173m NW	Unit 7b, Wharf Road, Gravesend, Da12 2ru	WEX322252	Treating waste exemption	Not on a farm	Recovery of scrap metal
4	244m E	Mark Lane, Gravesend, Da12 2qb	WEX347979	Treating waste exemption	Not on a farm	Recovery of scrap metal
6	355m SE	-	WEX397251	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	359m SE	-	WEX462940	Storing waste exemption	Not on a farm	Storage of waste in secure containers
C	363m SE	Southern Water Treatment Works, Dering Way, Gravesend, Da12 2qf	WEX200301	Storing waste exemption	Not on a farm	Storage of waste in secure containers
C	363m SE	Southern Water Treatment Works, Dering Way, Gravesend, Da12 2qf	WEX326103	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	391m E	-	WEX472072	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	396m SE	Lion Business Park, Unit 3 Block A, Dering Way, Gravesend, Da12 2dn	WEX159449	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	396m SE	Lion Business Park, Unit 3 Block A, Dering Way, Gravesend, Da12 2dn	WEX294890	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	403m E	Environment Agency, Denton Wharf, Mark Lane, Gravesend, Da12 2qb	WEX119769	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	403m E	Environment Agency, Denton Wharf, Mark Lane, Gravesend, Da12 2qb	WEX119769	Storing waste exemption	Not on a farm	Storage of waste in a secure place
F	403m W	Mobile Mini, Albian Parade, Canal Road, Gravesend, Da12 2rn	WEX247716	Using waste exemption	Not on a farm	Use of waste in construction
F	403m W	Mobile Mini, Albian Parade, Canal Road, Gravesend, Da12 2rn	WEX247716	Storing waste exemption	Not on a farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
F	403m W	Unit 1, Albion Parade, Canal Basin, Gravesend, Da12 2rn	WEX287571	Treating waste exemption	Not on a farm	Mechanical treatment of end-of-life tyres
8	417m SE	Lion Business Park, Unit 3 Block A, Dering Way, Gravesend, Da12 2dn	WEX425230	Storing waste exemption	Not on a farm	Storage of waste in a secure place

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

NGD current or recent tanks

Control of Major Accident Hazards

Hazardous substance storage/usage

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

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	42

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 54 >**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Redwing Coaches Ltd**	**Unit 8 Industrial Estate, Norfolk Road, Gravesend, Kent, DA12 2PS**	**Vehicle Hire and Rental**	**Hire Services**
A	**On site**	**Electricity Sub Station**	**Kent, DA12**	**Electrical Features**	**Infrastructure and Facilities**
A	34m E	Works	Kent, DA12	Unspecified Works Or Factories	Industrial Features

ID	Location	Company	Address	Activity	Category
A	34m E	Goldstar Coaches of Gravesend Ltd	Unit 12-13, Wharf Road, Gravesend, Kent, DA12 2RX	Vehicle Hire and Rental	Hire Services
A	38m E	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities
B	49m W	Works	Kent, DA12	Unspecified Works Or Factories	Industrial Features
C	55m N	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities
A	59m E	Norfolk Road MOT	6-7, Canal Industrial Park, Norfolk Road, Gravesend, Kent, DA12 2PS	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	63m N	A G S Scaffolding	Feabrex Ltd Cornwall Wharf, Wharf Road, Gravesend, Kent, DA12 2RU	Construction and Tool Hire	Hire Services
C	65m N	R K B Concrete Ltd	Wharf Road, Gravesend, Kent, DA12 2RU	Construction Completion Services	Construction Services
B	67m W	Lynx Engineering Kent Ltd	Plots 5-6 Industrial Estate, Norfolk Road, Gravesend, Kent, DA12 2PS	Mechanical Engineers	Engineering Services
B	77m W	Mast	Kent, DA12	Telecommunications Features	Infrastructure and Facilities
A	83m E	Mast	Kent, DA12	Telecommunications Features	Infrastructure and Facilities
1	85m NW	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities
D	97m SE	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities
C	103m N	Works	Kent, DA12	Unspecified Works Or Factories	Industrial Features
B	108m W	Opal Fabrication Ltd	Plot 3 Industrial Estate, Norfolk Road, Gravesend, Kent, DA12 2PS	Car Ports and Steel Buildings	Industrial Products
E	136m NE	Used Tyre Centre	Wharf Road, Gravesend, Kent, DA12 2RU	Vehicle Parts and Accessories	Motoring
E	142m NE	D J Coaches	Unit 7, Mark Lane, Gravesend, Kent, DA12 2QB	Vehicle Hire and Rental	Hire Services
E	151m NE	Pylon	Kent, DA12	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
E	154m NE	Mast (Telecommunication)	Kent, DA12	Telecommunications Features	Infrastructure and Facilities
E	154m NE	Spartan Metal Recycling	Unit 7, Wharf Road, Gravesend, Kent, DA12 2RU	Scrap Metal Merchants	Recycling Services
E	158m NE	1st Bus Stop Bus & Coach Hire Company	Unit 7, Wharf Road, Gravesend, Kent, DA12 2RU	Bus and Coach Stations, Depots and Companies	Public Transport, Stations and Infrastructure
F	158m W	Factory	Kent, DA12	Unspecified Works Or Factories	Industrial Features
F	159m W	N S P Coatings Ltd	Plot 2 Industrial Estate, Norfolk Road, Gravesend, Kent, DA12 2PS	Industrial Coatings and Finishings	Industrial Products
2	160m E	Works	Kent, DA12	Unspecified Works Or Factories	Industrial Features
G	169m N	Wharf	Kent, DA12	Moorings and Unloading Facilities	Water
G	174m N	Crane	Kent, DA12	Travelling Cranes and Gantries	Industrial Features
I	176m S	Comma	Comma Works, Dering Way, Gravesend, Kent, DA12 2QX	Lubricants and Lubricating Equipment	Industrial Products
I	176m S	Moove	Dering Way, Gravesend, Kent, DA12 2QX	Lubricants and Lubricating Equipment	Industrial Products
H	183m NW	Mooring	Kent, DA12	Moorings and Unloading Facilities	Water
I	192m S	Electricity Sub Station	Kent, DA12	Electrical Features	Infrastructure and Facilities
I	201m S	Works	Kent, DA12	Unspecified Works Or Factories	Industrial Features
H	215m NW	Works	Kent, DA12	Unspecified Works Or Factories	Industrial Features
J	218m E	Skyform Ltd	Unit 7 Denton Wharf, Mark Lane, Gravesend, Kent, DA12 2PL	Access Equipment	Industrial Products
J	229m E	J & M Crane & Transport Ltd	Unit 6 Denton Wharf, Mark Lane, Gravesend, Kent, DA12 2QB	Distribution and Haulage	Transport, Storage and Delivery

ID	Location	Company	Address	Activity	Category
H	230m NW	Crane	Kent, DA12	Travelling Cranes and Gantries	Industrial Features
4	233m SW	Gravesend Motor Services	1, Waterton Avenue, Gravesend, Kent, DA12 2PY	Vehicle Repair, Testing and Servicing	Repair and Servicing
J	234m E	Lifting Gear Hire London Ltd	Unit 6 Denton Wharf, Mark Lane, Gravesend, Kent, DA12 2QB	Lifting and Handling Equipment	Industrial Products
K	234m NE	Denton Wharf	Kent, DA12	Moorings and Unloading Facilities	Water
J	236m E	Mechanical Movements & Enabling Services Ltd	Units 4 and 5 Denton Wharf, Mark Lane, Gravesend, Kent, DA12 2QB	Industrial Engineers	Engineering Services
H	239m NW	Mechanical Removals & Installations Ltd	Denton Slipways Site, Wharf Road, Gravesend, Kent, DA12 2RU	Lifting and Handling Equipment	Industrial Products

This data is sourced from Ordnance Survey®.

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

Records within 250m **8**

Current or recent tanks identified from the Ordnance Survey® NGD.

Features are displayed on the Current industrial land use map on **page 54 >**

ID	Location	Tank description	Activity	Date first identified
D	107m SE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	20/07/2004
I	204m SE	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/07/2004
I	239m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/01/2022
I	240m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/01/2022
I	243m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/01/2022
I	249m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/01/2022
I	250m SE	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/01/2022
I	250m S	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/01/2022

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 54 >**

ID	Location	Company	Address	Operational status	Tier
L	325m W	British Gas	British Gas, Gravesend Holder Station, Suffolk Road, Gravesend	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	2

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.

Features are displayed on the Current industrial land use map on **page 54 >**

ID	Location	Details	
L	384m W	Application reference number: 20000242 Application status: Historical Consent Application date: 04/04/2000 Address: Gas Holder, Canal Road, Gravesend, Kent, DA12 2AT	Details: Storage and distribution of natural gas. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
L	384m W	Application reference number: 19920645 Application status: Historical Consent Application date: 05/11/1992 Address: Gas Holder, Canal Road, Gravesend, Kent, DA12 2AT	Details: Storage and distribution of natural gas. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

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	0

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

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

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

Records within 500m	3

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 54 >**

ID	Location	Address	Details	
B	64m W	R.S.Dawe, Norfolk Road Industrial Estate, Norfolk Road, Gravesend, Kent, DA12 2PS	Process: Respraying of Road Vehicles Status: Surrendered Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
N	446m W	Volumetric Concrete Ltd, Albion Parade, Gravesend, Lent, DA12 2RN	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
9	493m E	Clubb Sand & Gravel, Mark Lane, Denton, Gravesend, Kent, DA12 2QB	Process: Use of Bulk Cement Status: Current 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	11

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 54 >**

ID	Location	Address	Details	
K	232m NE	EMPRESS RD DENTON CATCH CHAMB' CS0, HAVENGORE AVENUE, EMPRESS ROAD, DENTON, KENT, DA12 2QL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CASM.0006 Permit Version: 1 Receiving Water: TIDAL RIVER THAMES	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 19/04/1999 Effective Date: 06/09/1999 Revocation Date: 06/01/2000
K	232m NE	EMPRESS RD DENTON CATCH CHAMB' CS0, HAVENGORE AVENUE, EMPRESS ROAD, DENTON, KENT, DA12 2QL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CASM.0006 Permit Version: 2 Receiving Water: TIDAL RIVER THAMES	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/04/1999 Effective Date: 07/01/2000 Revocation Date: 31/01/2019
K	232m NE	EMPRESS RD DENTON CATCH CHAMB' CS0, HAVENGORE AVENUE, EMPRESS ROAD, DENTON, KENT, DA12 2QL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CASM.0006 Permit Version: 3 Receiving Water: THE THAMES ESTUARY (TIDAL)	Status: VARIED UNDER EPR 2010 Issue date: 01/02/2019 Effective Date: 01/02/2019 Revocation Date: -
K	232m NE	EMPRESS RD DENTON CATCH CHAMB' CS0, HAVENGORE AVENUE, EMPRESS ROAD, DENTON, KENT, DA12 2QL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CASM.0006 Permit Version: 3 Receiving Water: THE THAMES ESTUARY (TIDAL)	Status: VARIED UNDER EPR 2010 Issue date: 01/02/2019 Effective Date: 01/02/2019 Revocation Date: -
K	232m NE	EMPRESS RD DENTON CATCH CHAMB' CS0, HAVENGORE AVENUE, EMPRESS ROAD, DENTON, KENT, DA12 2QL	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CASM.0006 Permit Version: 3 Receiving Water: THE THAMES ESTUARY (TIDAL)	Status: VARIED UNDER EPR 2010 Issue date: 01/02/2019 Effective Date: 01/02/2019 Revocation Date: -

ID	Location	Address	Details	
I	253m SE	CABLE TUNNEL AT DENTON, CABLE TUNNEL AT DENTON, GRAVESEND, KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: K02109 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/11/1967 Effective Date: 14/11/1967 Revocation Date: 01/07/1991
L	446m W	CANAL ROAD IND. PARK, CANAL ROAD IND. PARK, GRAVESEND, KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P03509 Permit Version: 1 Receiving Water: INTO LAND	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/03/1991 Effective Date: 19/03/1991 Revocation Date: 01/07/1991
L	448m W	CANAL ROAD IND. PARK, CANAL ROAD IND. PARK, GRAVESEND, KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P03509 Permit Version: 1 Receiving Water: INTO LAND	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/03/1991 Effective Date: 19/03/1991 Revocation Date: 01/07/1991
L	450m W	CANAL ROAD IND. PARK, CANAL ROAD IND. PARK, GRAVESEND, KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P03509 Permit Version: 1 Receiving Water: INTO LAND	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/03/1991 Effective Date: 19/03/1991 Revocation Date: 01/07/1991
L	452m W	CANAL ROAD IND. PARK, CANAL ROAD IND. PARK, GRAVESEND, KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P03509 Permit Version: 1 Receiving Water: INTO LAND	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/03/1991 Effective Date: 19/03/1991 Revocation Date: 01/07/1991
L	454m W	CANAL ROAD IND. PARK, CANAL ROAD IND. PARK, GRAVESEND, KENT	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: P03509 Permit Version: 1 Receiving Water: INTO LAND	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/03/1991 Effective Date: 19/03/1991 Revocation Date: 01/07/1991

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

4.15 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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	0

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.

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

4.18 List 2 Dangerous Substances

Records within 500m	0

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.

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

4.19 Pollution Incidents (EA/NRW)

Records within 500m	20

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 54 >**

ID	Location	Details	
C	52m N	Incident Date: 08/04/2002 Incident Identification: 69772 Pollutant: Specific Waste Materials Pollutant Description: Other Non-Metal Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
E	97m NE	Incident Date: 30/04/2003 Incident Identification: 155229 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
E	118m NE	Incident Date: 28/04/2001 Incident Identification: 9628 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	145m N	Incident Date: 17/01/2003 Incident Identification: 131602 Pollutant: Oils and Fuel Pollutant Description: Other Oil or Fuel	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
3	161m E	Incident Date: 23/09/2024 Incident Identification: 2308294 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	165m N	Incident Date: 01/08/2003 Incident Identification: 178273 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
H	166m NW	Incident Date: 29/10/2003 Incident Identification: 198812 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
I	212m S	Incident Date: 23/02/2004 Incident Identification: 218671 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
H	269m NW	Incident Date: 10/04/2003 Incident Identification: 150109 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
5	332m NE	Incident Date: 10/06/2002 Incident Identification: 83934 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
M	334m SE	Incident Date: 07/05/2004 Incident Identification: 234990 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
M	334m SE	Incident Date: 07/05/2004 Incident Identification: 234990 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
M	334m SE	Incident Date: 07/05/2004 Incident Identification: 234990 Pollutant: Contaminated Water:Sewage Materials Pollutant Description: Other Contaminated Water:Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
M	334m SE	Incident Date: 05/07/2004 Incident Identification: 234990 Pollutant: Contaminated Water : Sewage Materials Pollutant Description: Other Contaminated Water :Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
6	347m NW	Incident Date: 12/07/2002 Incident Identification: 91034 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
7	391m SW	Incident Date: 07/05/2003 Incident Identification: 156500 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	452m E	Incident Date: 21/01/2003 Incident Identification: 132304 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Ammonia/Amine Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
N	466m W	Incident Date: 06/04/2001 Incident Identification: 15205 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
N	498m W	Incident Date: 29/03/2003 Incident Identification: 147063 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
N	498m W	Incident Date: 29/03/2003 Incident Identification: 147063 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) 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	0

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.

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

4.21 Pollution inventory waste transfers

Records within 500m	0

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.

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

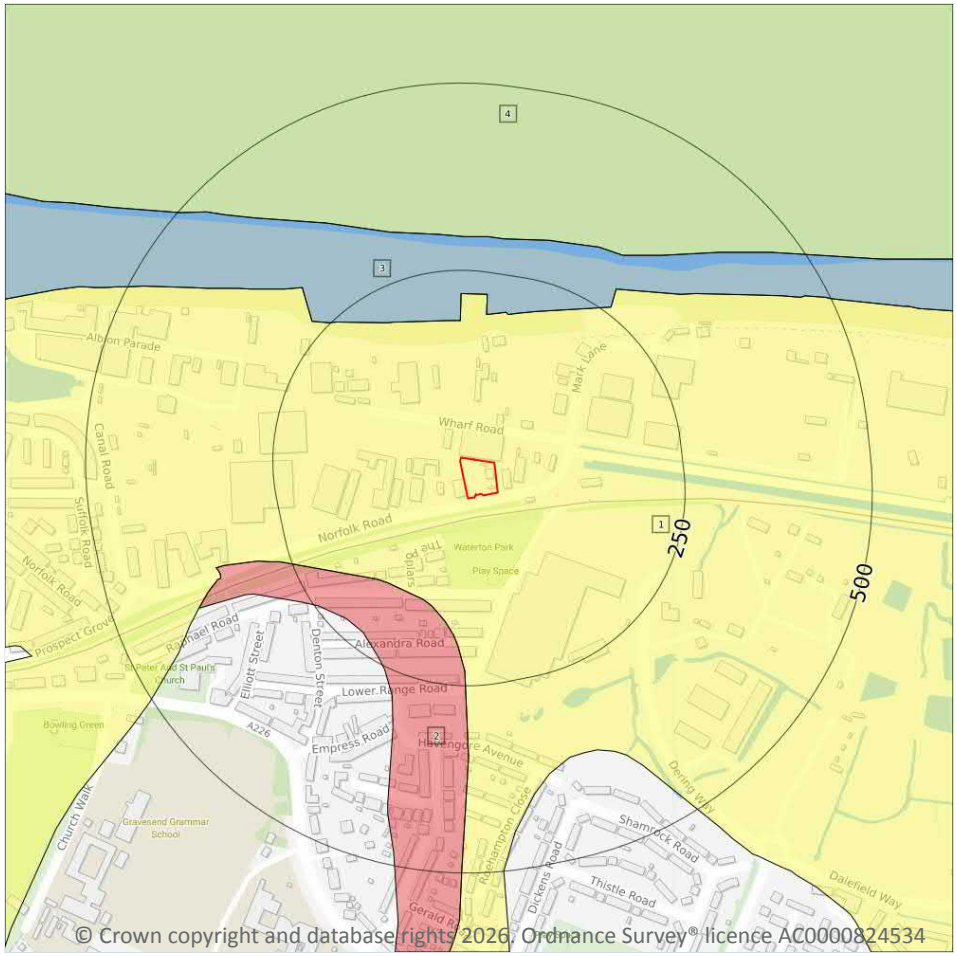
4.22 Pollution inventory radioactive waste

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	4

Aquifer status of groundwater held within superficial geology.

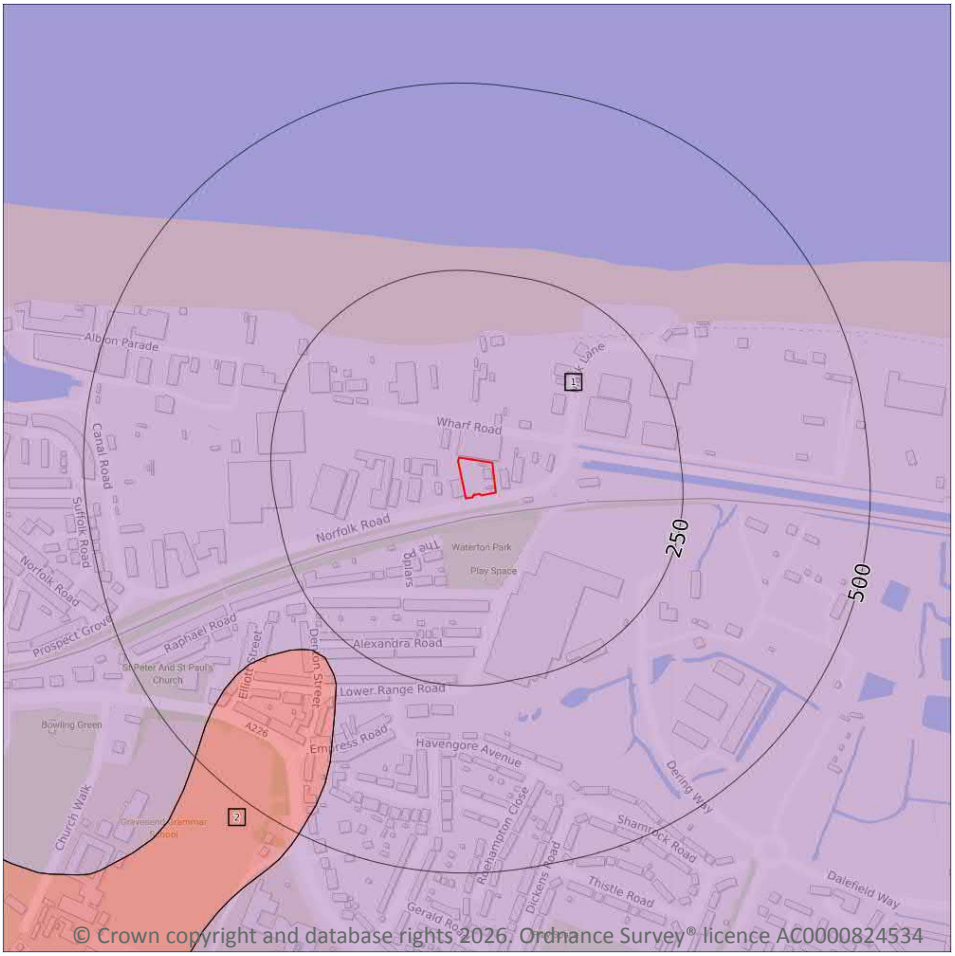
Features are displayed on the Hydrogeology map on **page 67 >**

ID	Location	Designation	Description
1	**On site**	**Secondary Undifferentiated**	**Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type**
2	147m SW	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

ID	Location	Designation	Description
3	183m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	295m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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

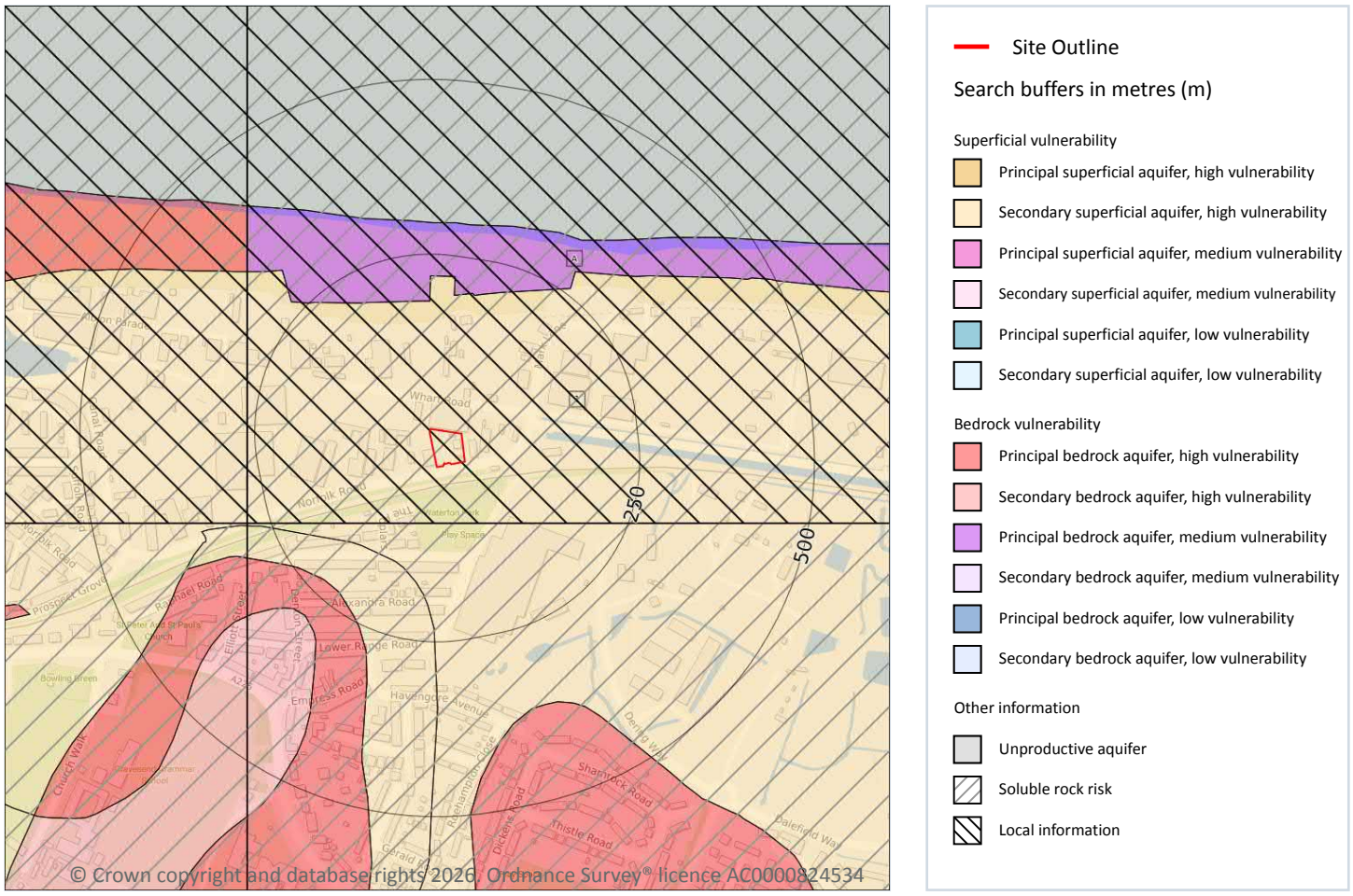
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 69 >**

ID	Location	Designation	Description
1	**On site**	**Principal**	**Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers**
2	284m SW	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.

Groundwater vulnerability



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 71 >**

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: >10m Patchiness value: >90% Recharge potential: No Data**	**Vulnerability: Medium Aquifer type: Principal Flow mechanism: Well connected fractures**

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	**1**

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
A	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**2.0%**

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

5.5 Groundwater vulnerability- local information

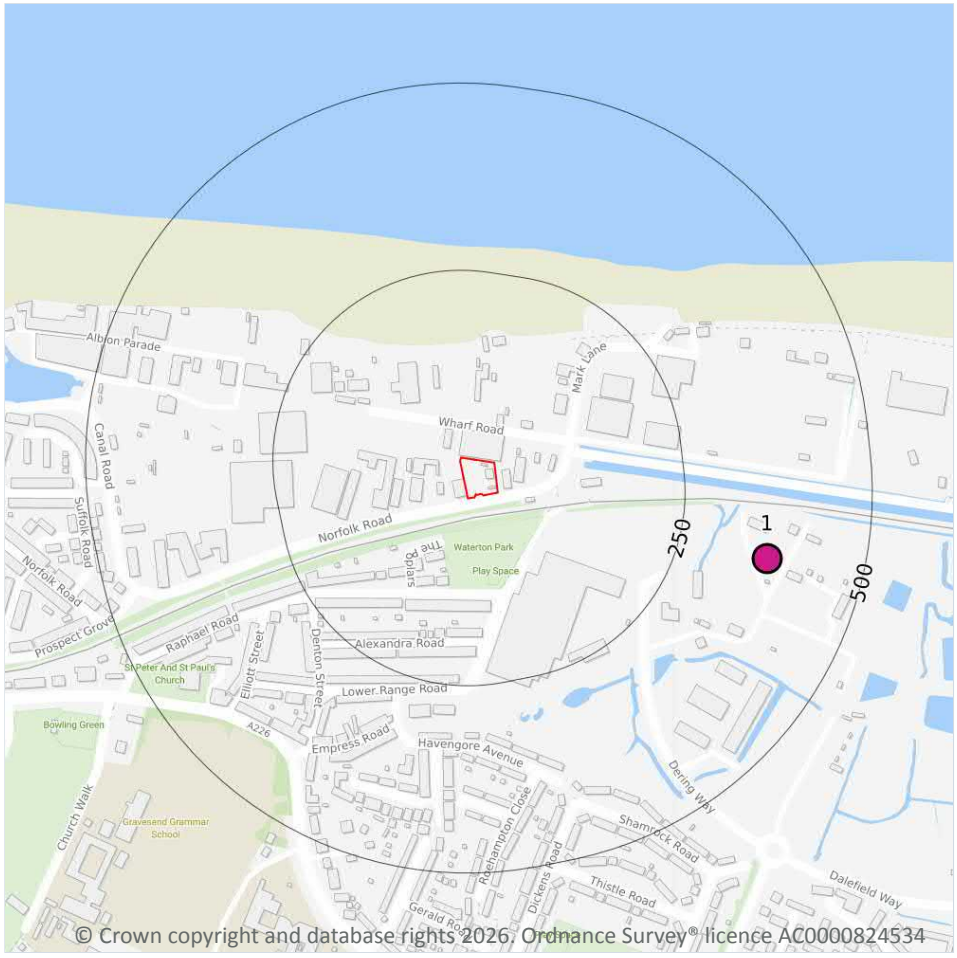
Records on site	**1**

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 ↗.

ID	Summary	Additional information
A	**Potentially increased vulnerability of the bedrock aquifer due to limited cover by superficial deposits**	**Removal of, or limited cover of, superficial deposits within the River Thames**

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	9

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 73 >**

ID	Location	Details	
1	370m E	Status: Active Licence No: 9/40/01/0508/G Details: General Washing/Process Washing Direct Source: Southern Region Groundwater Point: POINT 1, BOREHOLE AT GRAVESEND SEWAGE WORKS IN KENT. Data Type: Point Name: Southern Water Services Ltd Easting: 566670 Northing: 174000	Annual Volume (m^3): 55000 Max Daily Volume (m^3): 340 Original Application No: 169/0449 Original Start Date: 23/03/1989 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -
-	617m E	Status: Active Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, S DRIFT, UNDERGROUND GRAVEL STRATA (THAMES BALLAST) Data Type: Point Name: Clubb Sand and Gravel Easting: 566925 Northing: 174152	Annual Volume (m^3): 83689 Max Daily Volume (m^3): 336 Original Application No: NPS/WR/039725 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2024 Version End Date: -
-	617m E	Status: Historical Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, S DRIFT, UNDERGROUND GRAVEL STRATA (THAMES BALLAST) Data Type: Point Name: J Clubb Ltd Easting: 566925 Northing: 174152	Annual Volume (m^3): 83969 Max Daily Volume (m^3): 336 Original Application No: NPS/WR/022001 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 101 Version Start Date: 26/05/2016 Version End Date: -
-	621m E	Status: Active Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: BOREHOLE B, UNDERGROUND STRATA RIVER TERRACE GRAVELS Data Type: Point Name: Clubb Sand and Gravel Easting: 566929 Northing: 174152	Annual Volume (m^3): 83689 Max Daily Volume (m^3): 336 Original Application No: NPS/WR/039725 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2024 Version End Date: -

ID	Location	Details	
-	621m E	Status: Historical Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: BOREHOLE B, UNDERGROUND STRATA RIVER TERRACE GRAVELS Data Type: Point Name: J Clubb Ltd Easting: 566929 Northing: 174152	Annual Volume (m^3): 83969 Max Daily Volume (m^3): 336 Original Application No: NPS/WR/022001 Original Start Date: 03/05/1976 Expiry Date: - Issue No: 101 Version Start Date: 26/05/2016 Version End Date: -
-	650m E	Status: Historical Licence No: 9/40/01/0498/G Details: Mineral Washing Direct Source: Southern Region Groundwater Point: POINT A, S DRIFT, UNDERGROUND GRAVEL STRATA (THAMES BALLAST) Data Type: Point Name: J Clubb Ltd Easting: 566960 Northing: 174120	Annual Volume (m^3): 33186 Max Daily Volume (m^3): 91 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1457m SW	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m^3): 17700000 Max Daily Volume (m^3): 88000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -
-	1457m SW	Status: Historical Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m^3): 17700000 Max Daily Volume (m^3): 92000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -

ID	Location	Details	
-	1941m N	Status: Historical Licence No: 8/37/56/*G/0084 Details: Make-Up or Top Up Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT TILBURY POWER STN Data Type: Point Name: RWE INNOGY PLC Easting: 565760 Northing: 176010	Annual Volume (m^3): 4000 Max Daily Volume (m^3): 18 Original Application No: - Original Start Date: 16/09/1996 Expiry Date: - Issue No: 103 Version Start Date: 01/10/2003 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**16**

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 73 >**

ID	Location	Details	
-	1157m E	Status: Historical Licence No: SO/040/0001/001/R01 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: Southern Region Surface Waters Point: DENTON NEW CUT-CANAL RESTORATION Data Type: Point Name: GRAVESHAM BOROUGH COUNCIL Easting: 567468 Northing: 174076	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 1728 Original Application No: NPS/WR/017300 Original Start Date: 01/04/2015 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2015 Version End Date: -
-	1157m E	Status: Historical Licence No: SO/040/0001/001 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: Southern Region Surface Waters Point: DENTON NEW CUT-CANAL RESTORATION Data Type: Point Name: GRAVESHAM BOROUGH COUNCIL Easting: 567468 Northing: 174076	Annual Volume (m^3): 175000 Max Daily Volume (m^3): 1728 Original Application No: - Original Start Date: 18/12/2009 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 18/12/2009 Version End Date: -

ID	Location	Details	
-	1726m E	Status: Active Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: SHORNE MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568009 Northing: 174408	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	1726m E	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: SHORNE MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568009 Northing: 174408	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	1733m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -
-	1733m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 11/10/2018 Version End Date: -
-	1733m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -

ID	Location	Details	
-	1733m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -
-	1733m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 2 Version Start Date: 01/04/2022 Version End Date: -
-	1733m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	1733m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568022 Northing: 174370	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/028112 Original Start Date: 01/04/2016 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2024 Version End Date: -
-	1780m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: AREA 1, DITCHES AT SHORNE MARSHES RSPB RESERVE Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 568070 Northing: 174370	Annual Volume (m^3): 70000 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 01/05/2013 Version End Date: -

ID	Location	Details	
-	1842m E	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: HIGHAM MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569828 Northing: 171019	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 4320 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	1842m E	Status: Historical Licence No: 01/150/R02 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: HIGHAM MARSHES ABSTRACTION AREA Data Type: Poly4 Name: The Royal Society for the Protection of Birds Easting: 569828 Northing: 171019	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: NP/WR/039718 Original Start Date: 13/06/2024 Expiry Date: 31/03/2036 Issue No: 1 Version Start Date: 13/06/2024 Version End Date: -
-	1892m E	Status: Historical Licence No: 01/150 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT A, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568194 Northing: 173902	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 05/01/2001 Expiry Date: 31/03/2016 Issue No: 3 Version Start Date: 19/09/2013 Version End Date: -
-	1892m E	Status: Historical Licence No: 01/150/R01 Details: Make-Up Or Top Up Water Direct Source: Southern Region Surface Waters Point: POINT A, DENTON NEW CUT AT SHORNE MARSHES RSPB RESERVE Data Type: Point Name: The Royal Society for the Protection of Birds Easting: 568194 Northing: 173902	Annual Volume (m^3): 244799 Max Daily Volume (m^3): 2160 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2024 Issue No: 1 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	2

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 73 >**

ID	Location	Details	
-	1457m SW	Status: Active Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m^3): 17700000 Max Daily Volume (m^3): 88000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 Version End Date: -
-	1457m SW	Status: Historical Licence No: 9/40/01/0511/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BOREHOLES, ADITS AND CATCHPITS AT WINDMILL HILL PS Data Type: Poly4 Name: Southern Water Services Ltd Easting: 565060 Northing: 173270	Annual Volume (m^3): 17700000 Max Daily Volume (m^3): 92000 Original Application No: 169/0639D Original Start Date: 24/03/1986 Expiry Date: - Issue No: 100 Version Start Date: 27/11/2006 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.

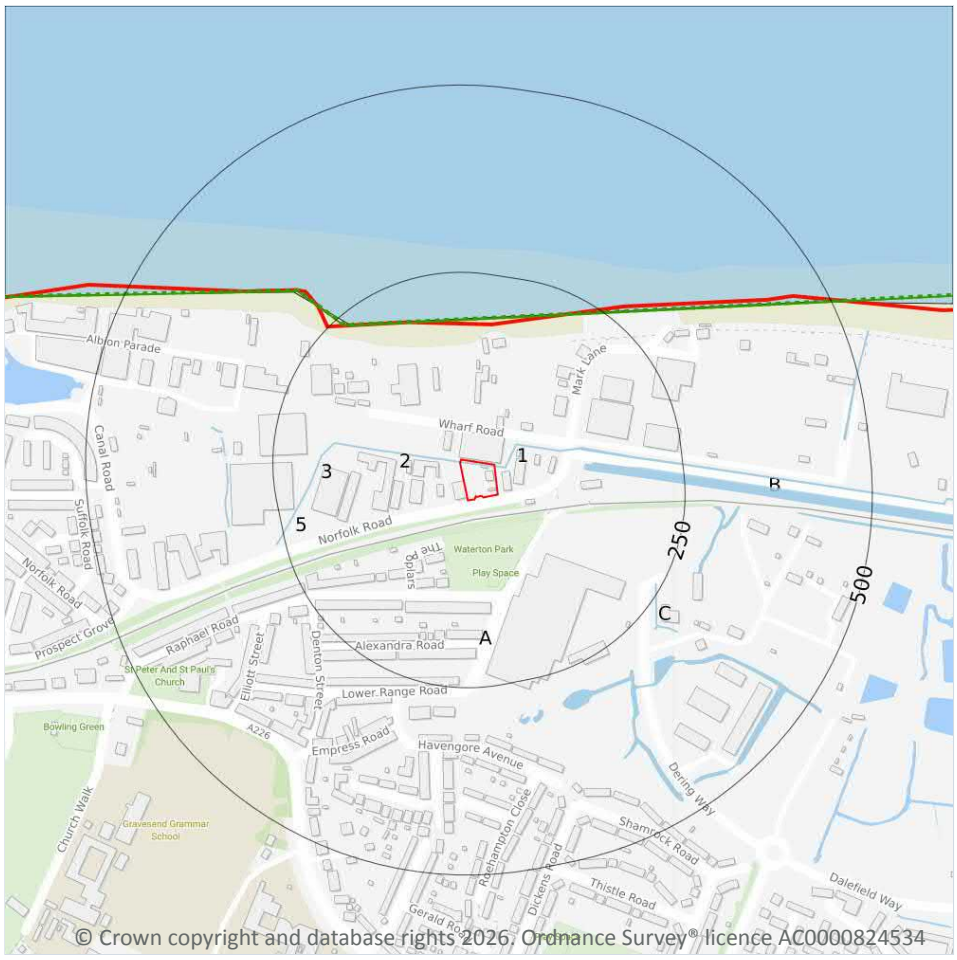
5.10 Source Protection Zones (confined aquifer)

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	**7**

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 82 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**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
2	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
B	116m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	119m E	Canal. A manmade watercourse for inland navigation.	On ground surface	Watercourse contains water year round (in normal circumstances)	Thames and Medway Canal
3	170m W	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
5	204m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	242m SE	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	**2**

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 82 >**

This data is sourced from the Ordnance Survey®.

6.3 WFD Surface water body catchments

Records on site	**1**

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 82 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**Coastal Catchment**	**Not part of a river WB catchment**	**130**	**Lower Medway**	**Medway**

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

6.4 WFD Surface water bodies

Records identified	**1**

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 82 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
4	187m N	Transi	THAMES MIDDLE	GB530603911402 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	**1**

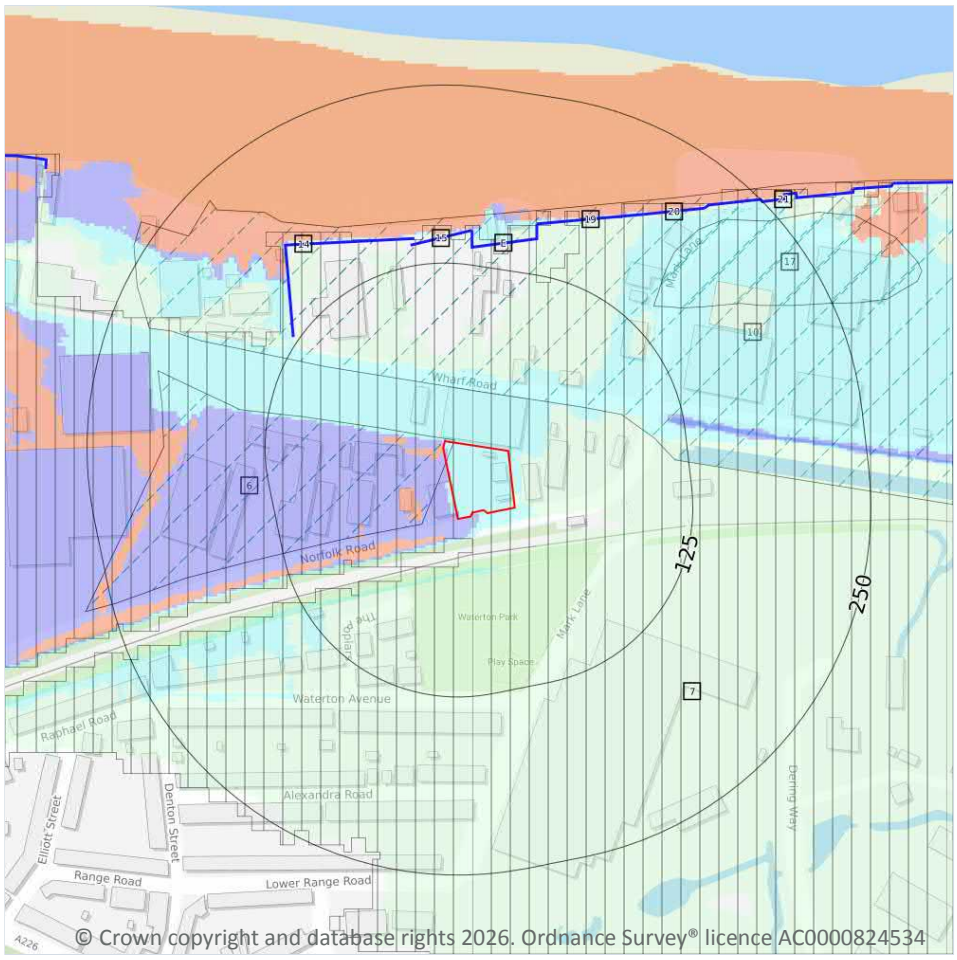
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 82 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	**On site**	**North Kent Medway Chalk**	**GB40601G500300 ↗**	**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	11

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 85 >**

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

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

7.2 Historical Flood Events

Records within 250m	**3**

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 85 >**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
6	**On site**	**07337e200_Sept1968_Darent_ Dartford**	**1968-09-14 1968-09-14**	**Main river**	**Channel capacity exceeded (no raised defences)**	**Fluvial**
10	38m N	07301e900_Feb1953_Dartford Creek_Denton	1953-01-31 1953-02-01	Sea	Overtopping of defences	Tidal
17	144m NE	07337e200_Sept1968_Darent_ Dartford	1968-09-14 1968-09-14	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	**6**

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.

Features are displayed on the River and coastal flooding map on **page 85 >**

ID	Location	Update
14	129m NW	08/11/2022
E	137m N	08/11/2022

ID	Location	Update
15	140m N	08/11/2022
19	161m N	08/11/2022
20	191m NE	08/11/2022
21	219m NE	08/11/2022

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	**1**

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.

Features are displayed on the River and coastal flooding map on **page 85 >**

ID	Location	
7	**On site**	**Area benefiting from flood defences**

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

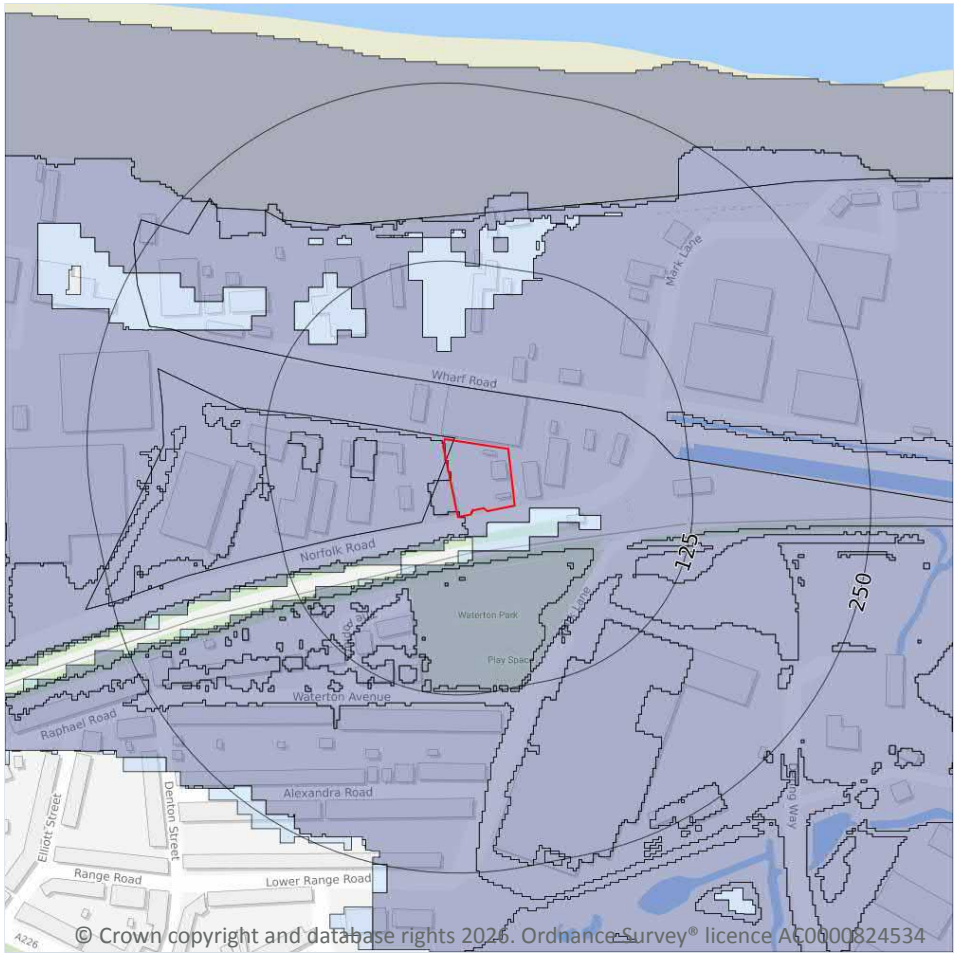
7.5 Flood Storage Areas

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 85 >**

Location	Type
8m S	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

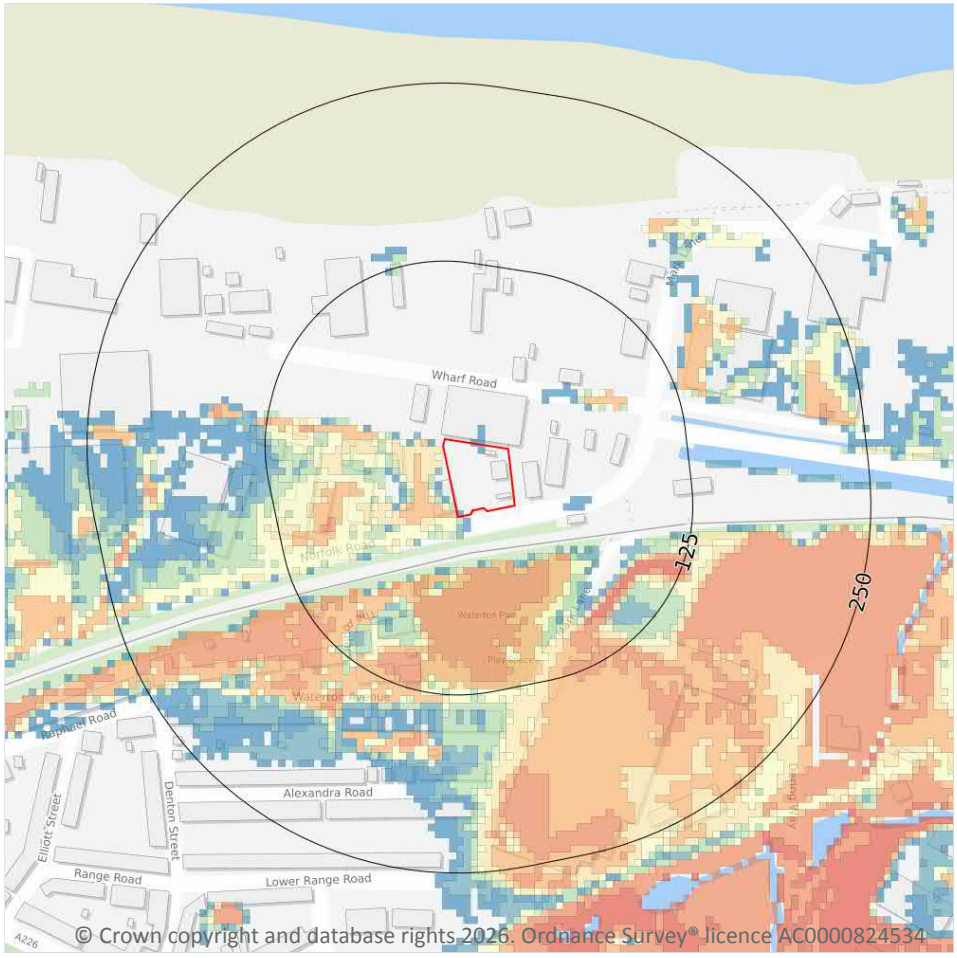
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 85 >**

Location	Type
On site	**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 250 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 90 >**

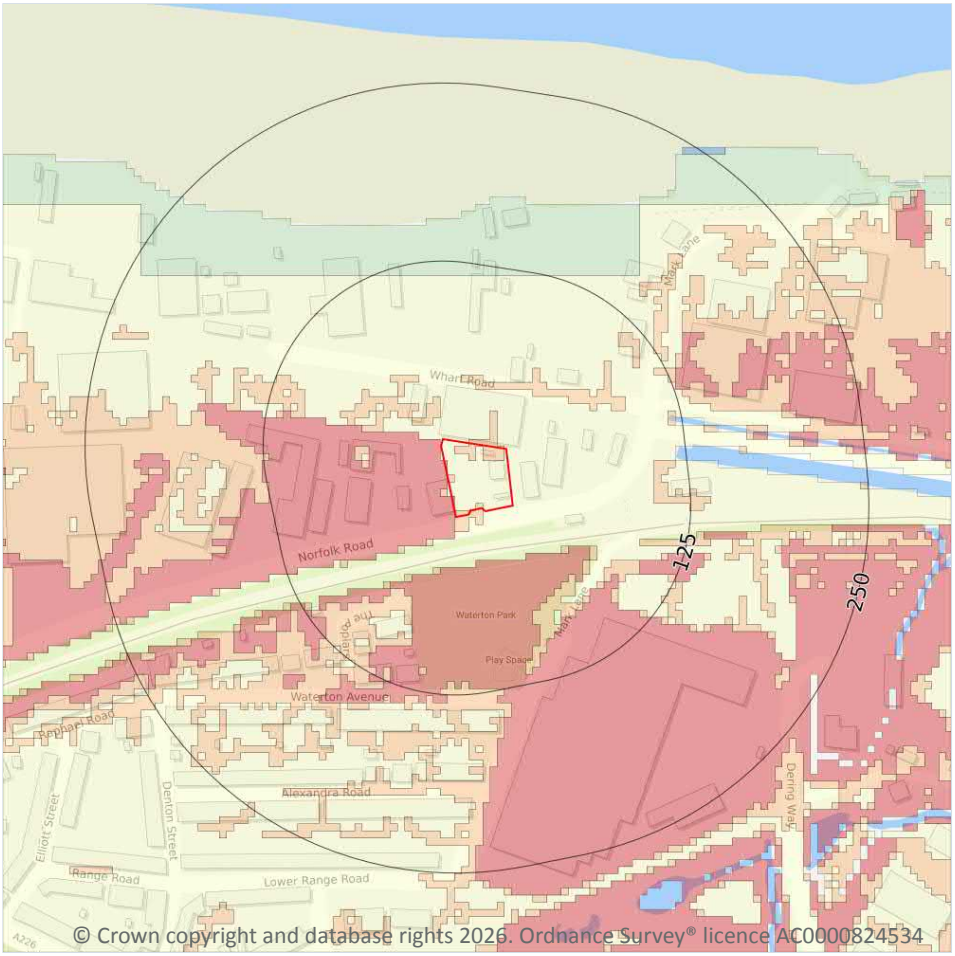
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

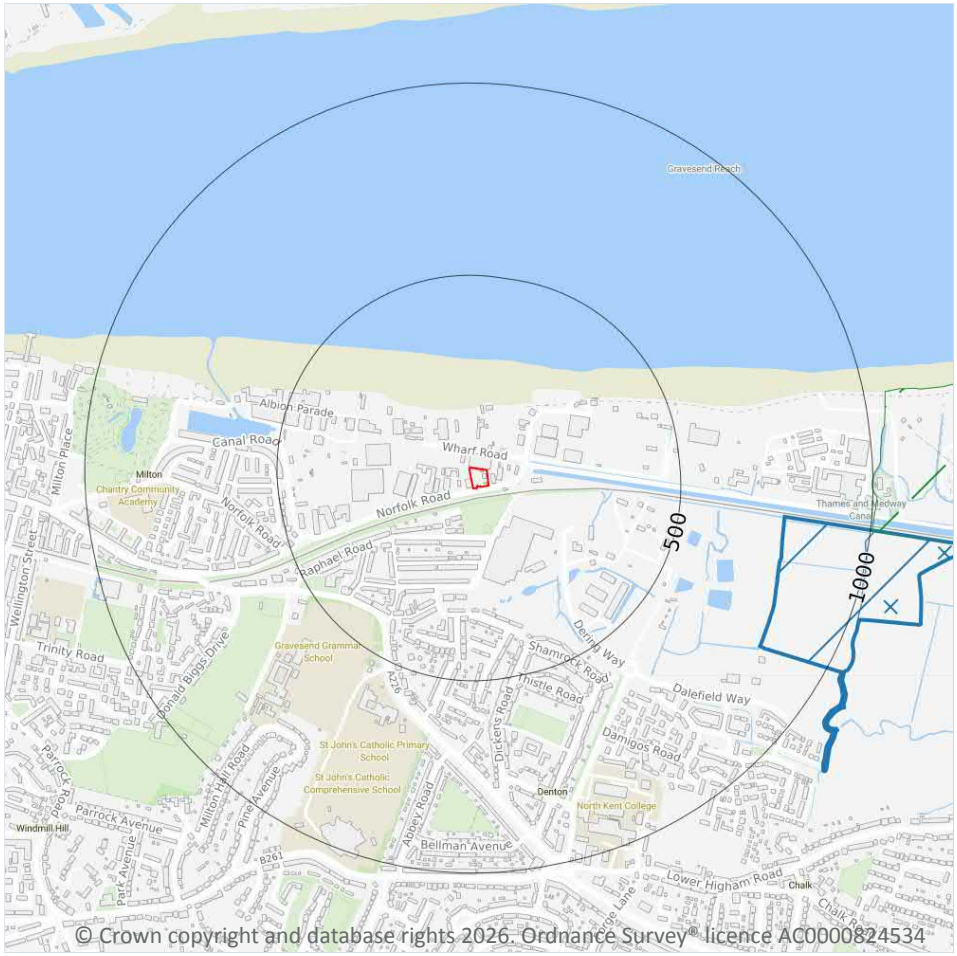
Highest risk on site	**High**
Highest risk within 50m	**High**

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 92 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



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Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Conserved wetland sites (Ramsar sites)

Special Protection Areas (SPA)

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	2

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.

Features are displayed on the Environmental designations map on **page 93 >**

ID	Location	Name	Data source
1	774m E	South Thames Estuary and Marshes SSSI	Natural England

ID	Location	Name	Data source
-	1789m E	South Thames Estuary and Marshes SSSI	Natural England

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	**2**

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.

Features are displayed on the Environmental designations map on **page 93 >**

ID	Location	Site	Details
2	990m E	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.
-	1789m E	Name: Thames Estuary & Marshes Site status: Listed Data source: Natural England	Overview: A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates. Ramsar criteria: Ramsar criterion 2 The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates.

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	1

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.

Features are displayed on the Environmental designations map on **page 93 >**

ID	Location	Name	Species of interest	Habitat description	Data source
-	1789m E	Thames Estuary & Marshes	Hen harrier; Pied avocet; Ringed plover; Grey plover; Red knot; Common redshank; Black-tailed godwit; Dunlin	Shingle, Sea cliffs, Islets; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Inland water bodies (Standing water, Running water); Bogs, Marshes, Water fringed vegetation, Fens; Dry grassland, Steppes; Humid grassland, Mesophile grassland; Salt marshes, Salt pastures, Salt steppes	Natural England

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	2

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

Features are displayed on the Environmental designations map on **page 93 >**

ID	Location	Name	Local Authority name
3	997m E	London Green Belt	Gravesham
-	1236m N	London Green Belt	Thurrock

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

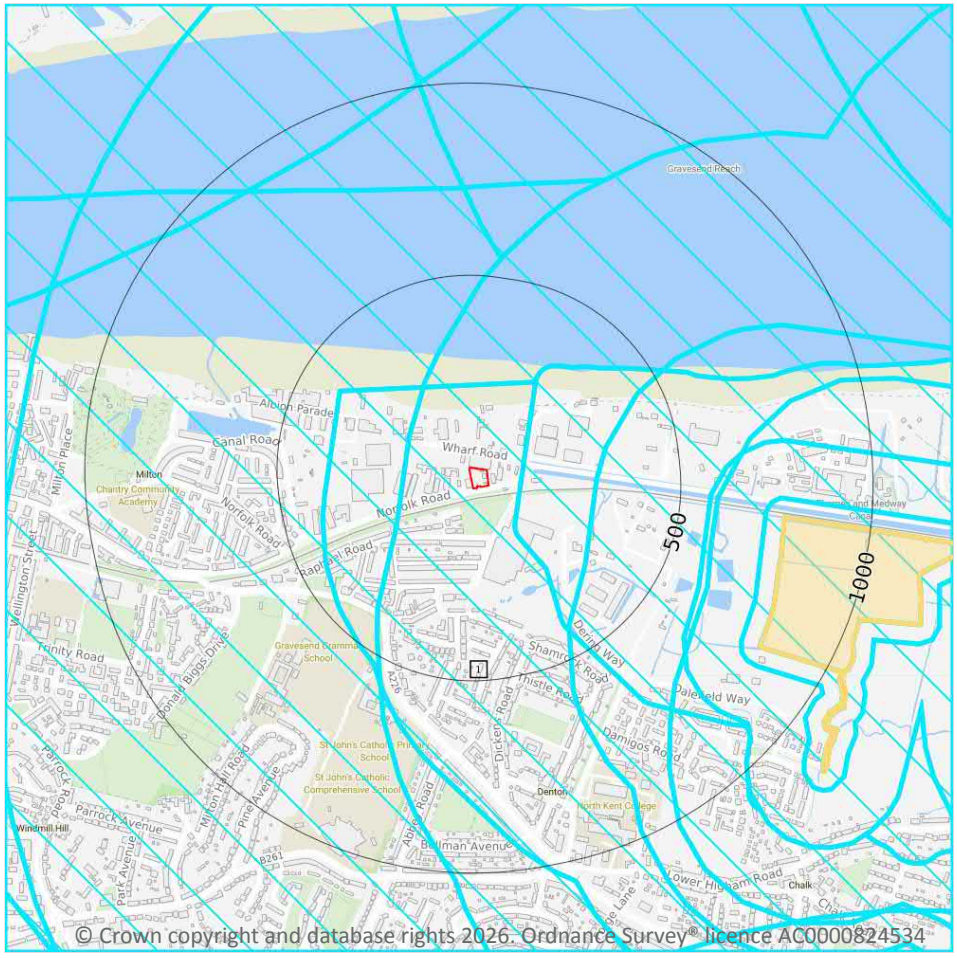
Records within 2000m	2

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	**COASTAL STREAMS TO LOWER THAMES NVZ**	**Surface Water**	**665**	**Existing**
On site	**North Kent**	**Groundwater**	**65**	**Existing**

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

SSSI Impact Zones and Units



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Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site	1

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.

Features are displayed on the SSSI Impact Zones and Units map on **page 99 >**

ID	Location	Type of developments requiring consultation
1	**On site**	**https://irz.geodata.org.uk/IRZ/step2.html?irzcode=01212424320 31&notes=11401&location=566477,173453%20(IRZ%20polygon%20centre)**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	4

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.

Features are displayed on the SSSI Impact Zones and Units map on **page 99 >**

ID: 18
Location: 774m E
SSSI name: South Thames Estuary and Marshes
Unit name: Westcourt And Great Clane Marshes
Broad habitat: Neutral Grassland - Lowland
Condition: Unfavourable - No change
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: -
Location: 1657m E
SSSI name: South Thames Estuary and Marshes
Unit name: Filborough Marsh W
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Vascular plant assemblage	Not Recorded	01/01/1900

ID: -
Location: 1789m E
SSSI name: South Thames Estuary and Marshes
Unit name: Gravesham Mudflats
Broad habitat: Littoral Sediment
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900

ID: -
Location: 1792m E
SSSI name: South Thames Estuary and Marshes
Unit name: Shorne Marsh W
Broad habitat: Neutral Grassland - Lowland
Condition: Favourable
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Bearded tit, Panurus biarmicus	Not Recorded	01/01/1900
Aggregations of breeding birds - Garganey, Anas querquedula	Not Recorded	01/01/1900
Aggregations of breeding birds - Pintail, Anas acuta	Unfavourable - Declining	03/03/2021
Aggregations of breeding birds - Shoveler, Anas clypeata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Avocet, Recurvirostra avosetta	Favourable	02/03/2021
Aggregations of non-breeding birds - Black-tailed godwit, Limosa limosa islandica	Favourable	03/03/2021
Aggregations of non-breeding birds - Curlew, Numenius arquata	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Dunlin, Calidris alpina alpina	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Gadwall, Mareca strepera	Favourable	03/03/2021

Feature name	Feature condition	Date of assessment
Aggregations of non-breeding birds - Greenshank, Tringa nebularia	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Grey plover, Pluvialis squatarola	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Hen harrier, Circus cyaneus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Knot, Calidris canutus	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Pintail, Anas acuta	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Redshank, Tringa totanus	Unfavourable - Declining	03/03/2021
Aggregations of non-breeding birds - Ringed plover, Charadrius hiaticula	Favourable	03/03/2021
Aggregations of non-breeding birds - Shelduck, Tadorna tadorna	Not Recorded	01/01/1900
Aggregations of non-breeding birds - Shoveler, Anas clypeata	Favourable	03/03/2021
Aggregations of non-breeding birds - Teal, Anas crecca	Favourable	03/03/2021
Aggregations of non-breeding birds - White-fronted goose, Anser albifrons albifrons	Unfavourable - Declining	03/03/2021
Assemblages of breeding birds - Lowland damp grasslands	Not Recorded	01/01/1900
Assemblages of breeding birds - Lowland open waters and their margins	Not Recorded	01/01/1900
Assemblages of breeding birds - Sand-dunes and saltmarshes	Not Recorded	01/01/1900
Ditches	Not Recorded	01/01/1900
Invert. assemblage M311 saltmarsh and transitional brackish marsh	Not Recorded	01/01/1900
SM4-28 - Saltmarsh	Not Recorded	01/01/1900

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.

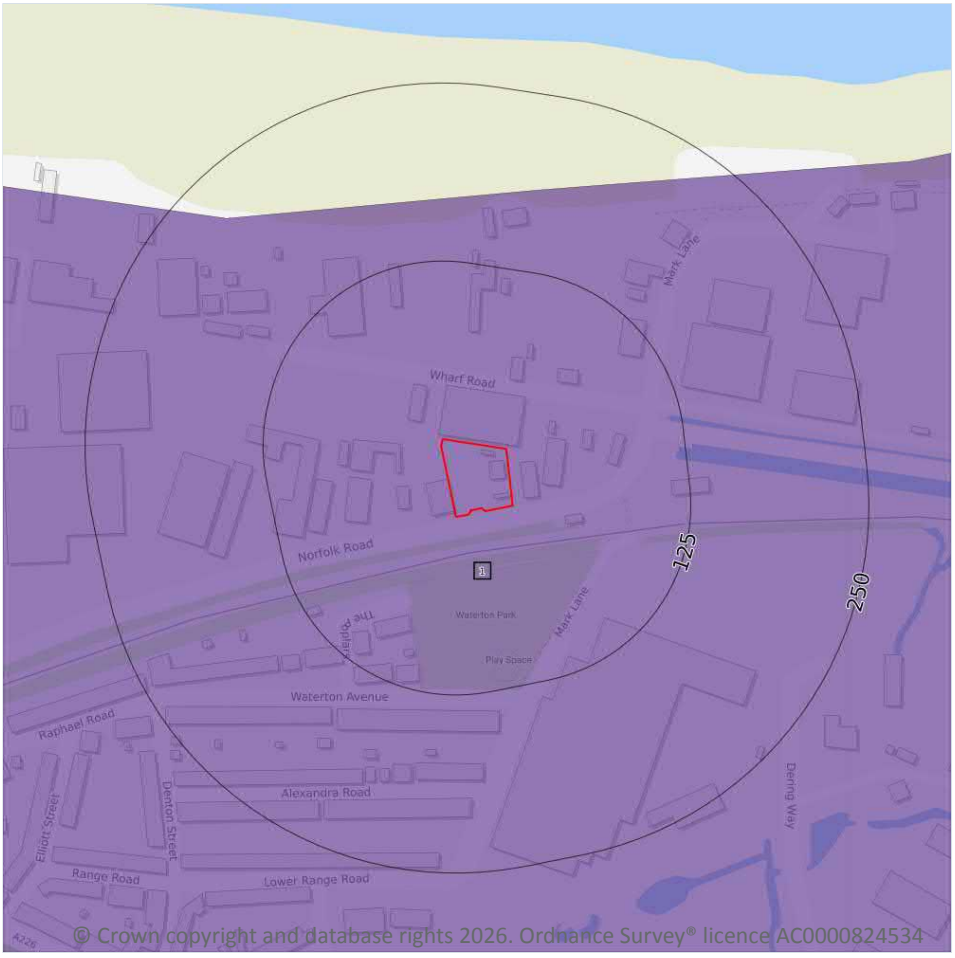
11.7 Registered Parks and Gardens

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 107 >**

ID	Location	Classification	Description
1	**On site**	**Urban**	**Non-agricultural/no quality assigned**

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.

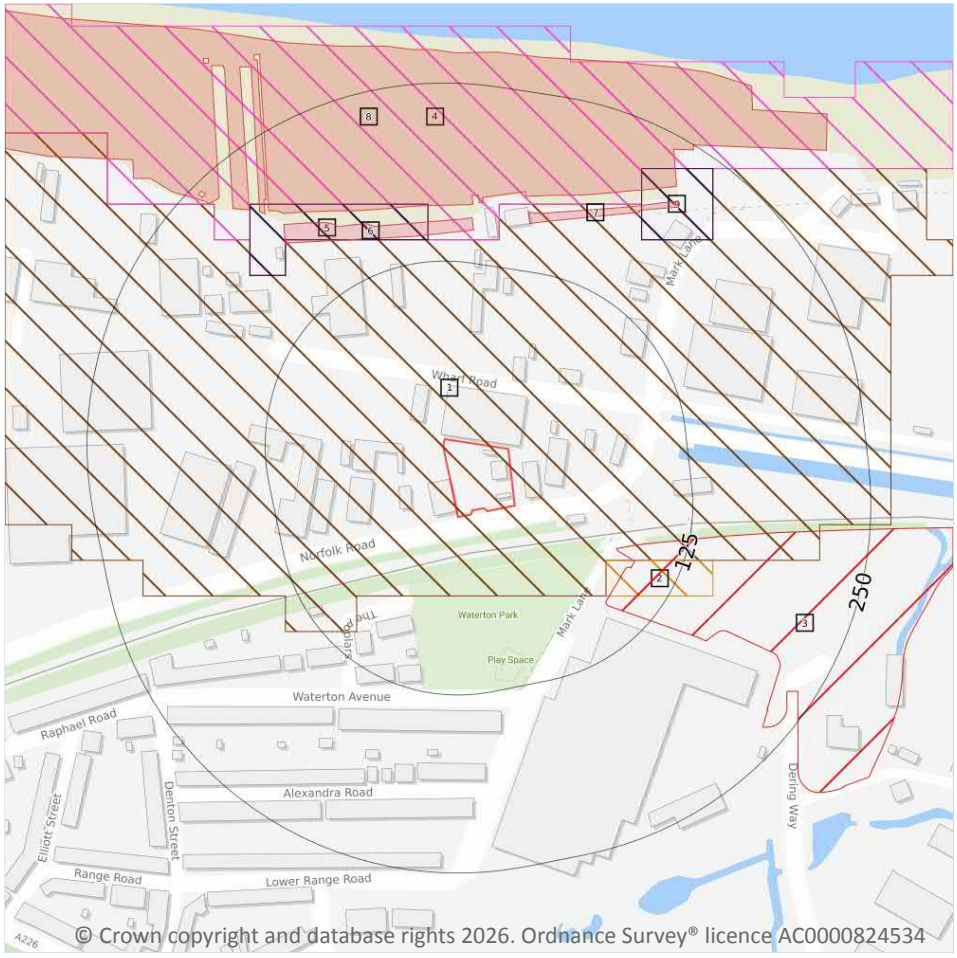
12.5 Countryside Stewardship Schemes

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 109 >**

ID	Location	Main Habitat	Other habitats
6	144m N	Coastal saltmarsh	Main habitat: SALTM (INV > 50%)
7	159m N	Coastal saltmarsh	Main habitat: SALTM (INV > 50%)
8	164m N	Mudflats	Main habitat: MUDFL (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	5

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.

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

ID	Location	Type	Habitat
1	**On site**	**Network Enhancement Zone 2**	**Not specified**
2	75m SE	Network Enhancement Zone 1	Not specified
4	140m N	Associated Habitats	Other associated habitats
5	140m N	Primary Habitat	Saltmarsh
9	174m NE	Primary Habitat	Saltmarsh

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	1

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.

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

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
3	78m SE	Former Quarry at Denton Marshes	High	BugLife All Of A Buzz Data	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

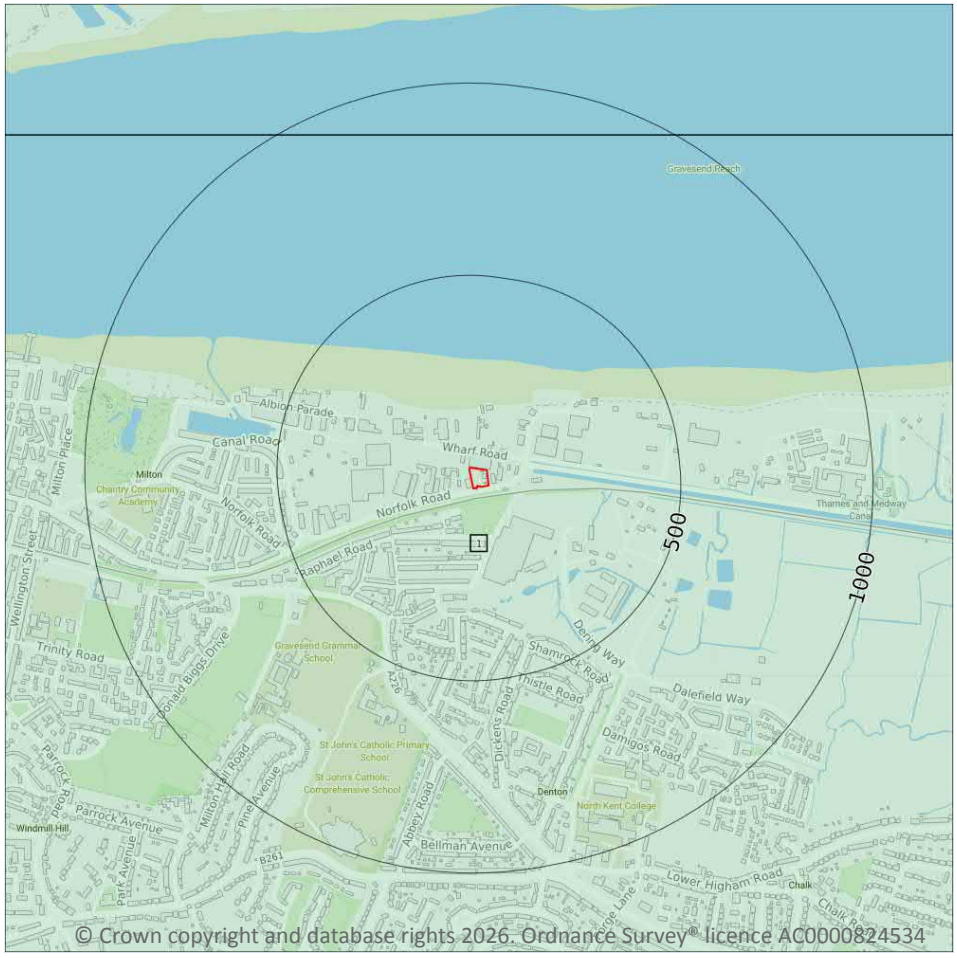
13.4 Limestone Pavement Orders

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



14.1 10k Availability

Records within 500m	1

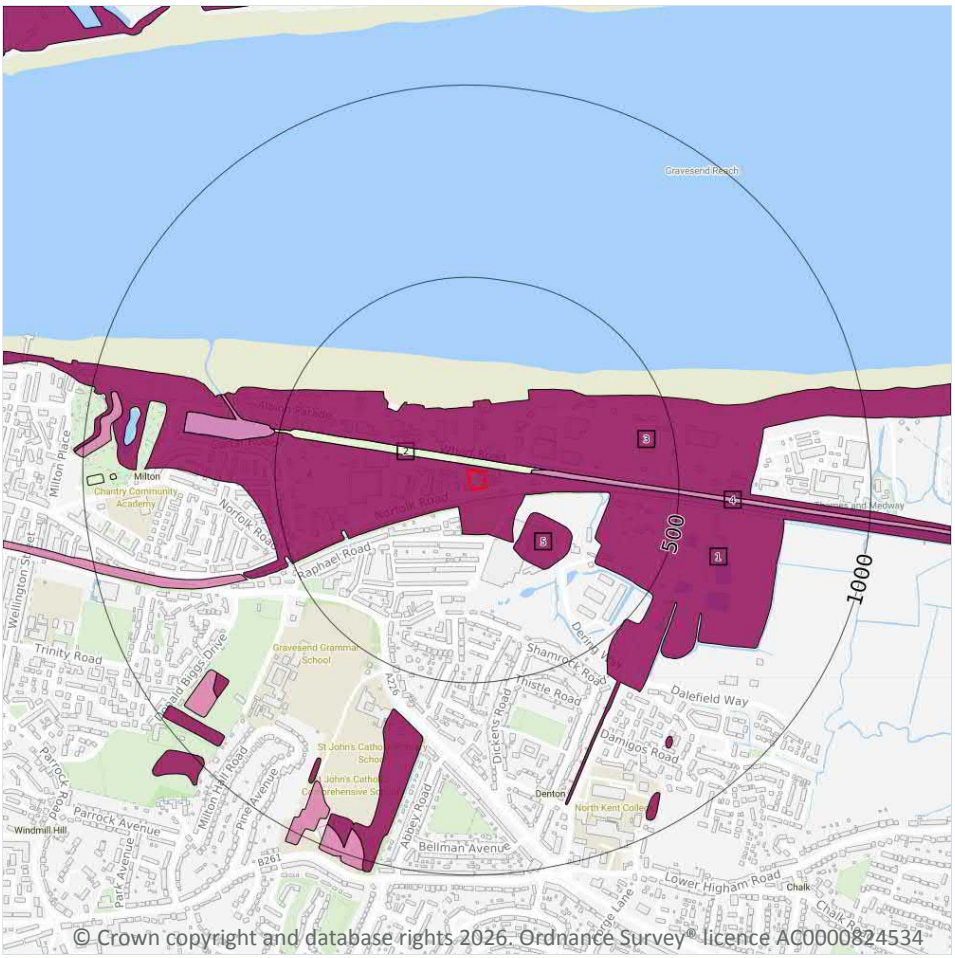
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 112 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**TQ67SE**

This data is sourced from the British Geological Survey.

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



Site Outline

Search buffers in metres (m)

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

14.2 Artificial and made ground (10k)

Records within 500m	5

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.

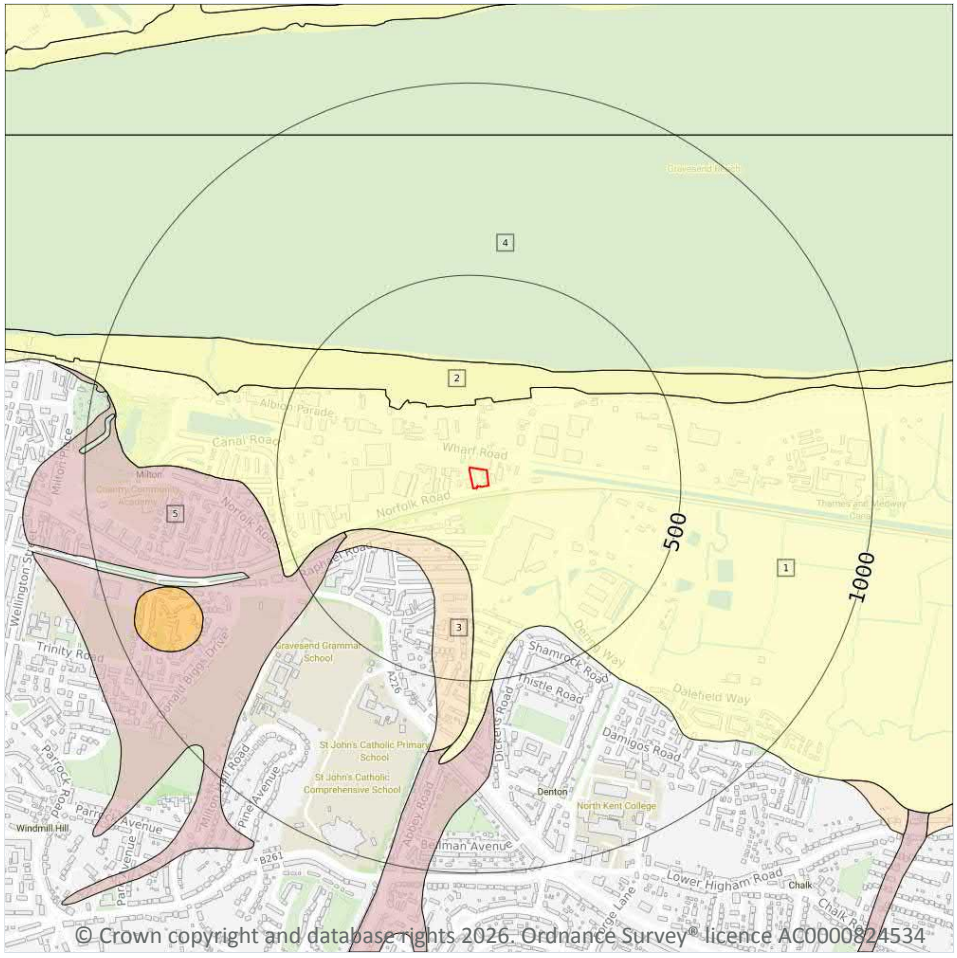
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 113 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial deposit**
2	13m N	WMGR-ARTDP	Infilled Ground	Artificial deposit
3	32m N	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
4	119m E	WGR-VOID	Worked Ground (Undivided)	Void

ID	Location	LEX Code	Description	Rock description
5	134m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



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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	5

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 115 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-Z**	**Alluvium-Silt**	**Silt**
2	162m N	TRD-Z	Tidal River Or Creek Deposits-Silt	Silt
3	167m SW	TPGR-XSV	Taplow Gravel Member-Sand And Gravel	Sand and gravel
4	274m N	ALV-Z	Alluvium-Silt	Silt

ID	Location	LEX Code	Description	Rock description
5	353m W	HEAD-XSVCZ	Head-Sand, Gravel, Clay And Silt	Sand, gravel, clay and silt

This data is sourced from the British Geological Survey.

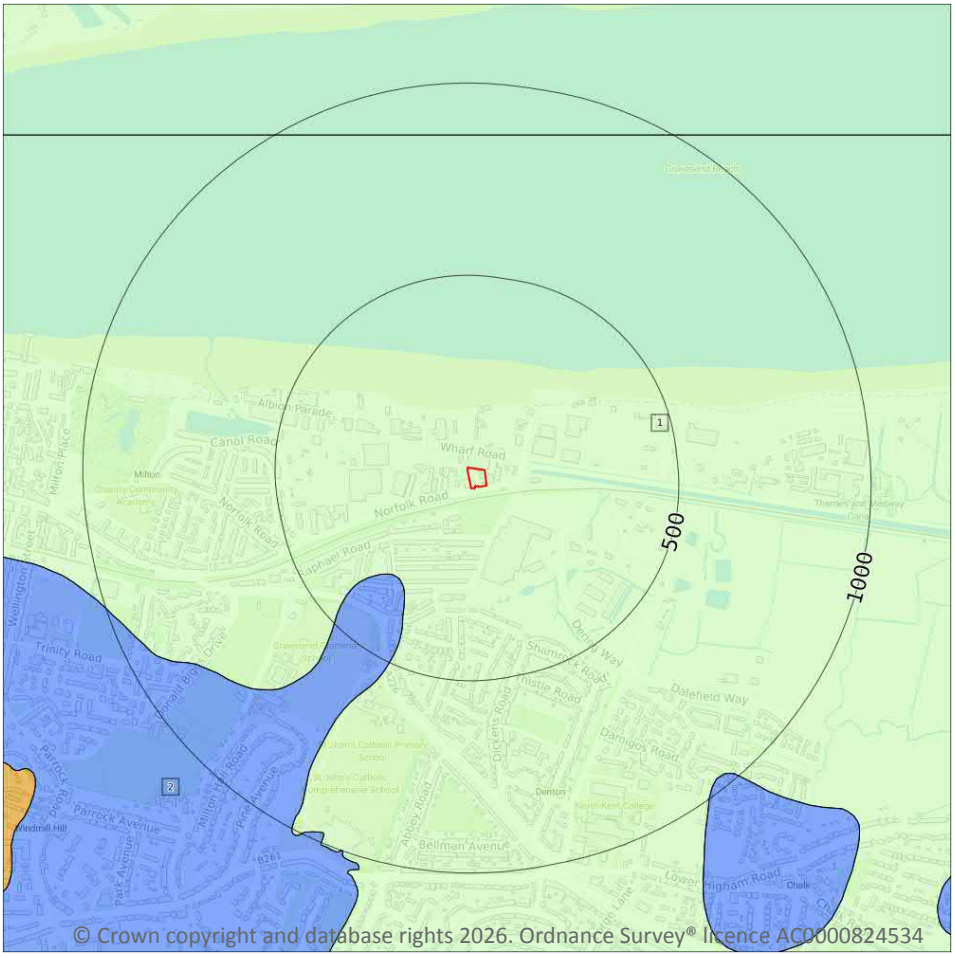
14.4 Landslip (10k)

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 117 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SECK-CHLK**	**Seaford Chalk Formation-Chalk**	**Coniacian**
2	300m SW	TAB-S	Thanet Formation-Sand	Thanetian

This data is sourced from the British Geological Survey.

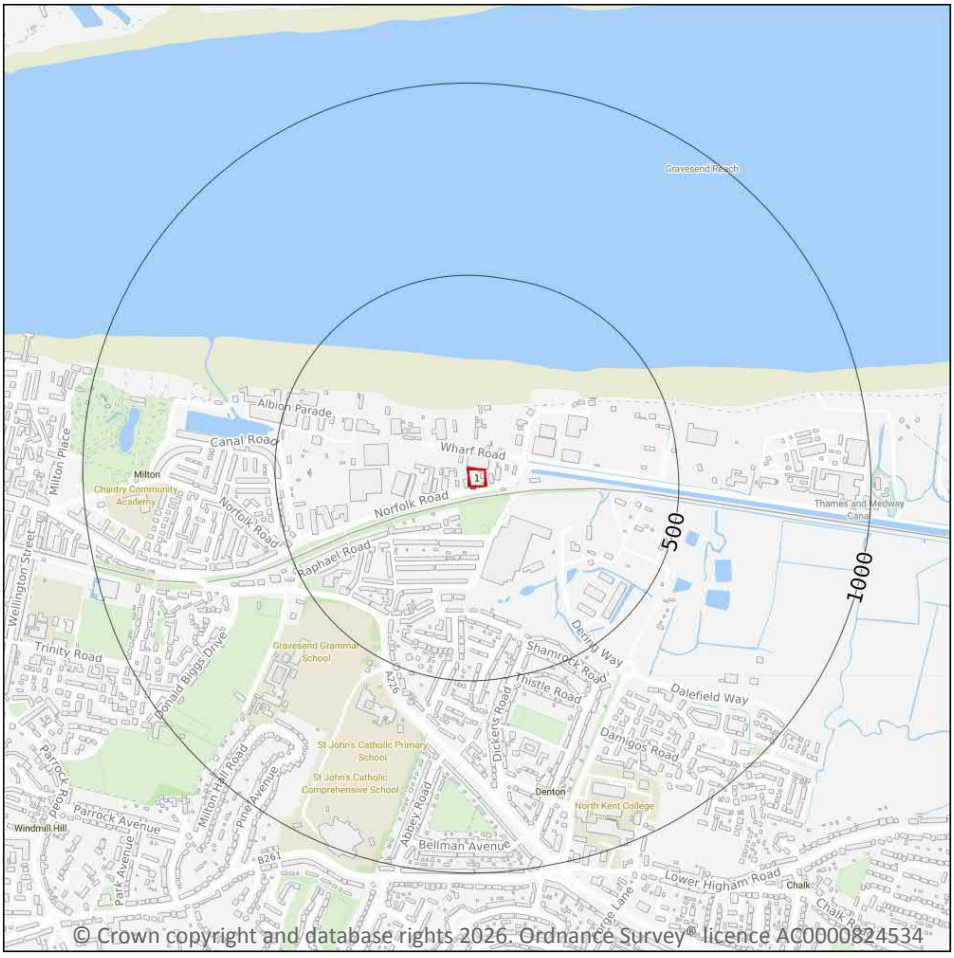
14.6 Bedrock faults and other linear features (10k)

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

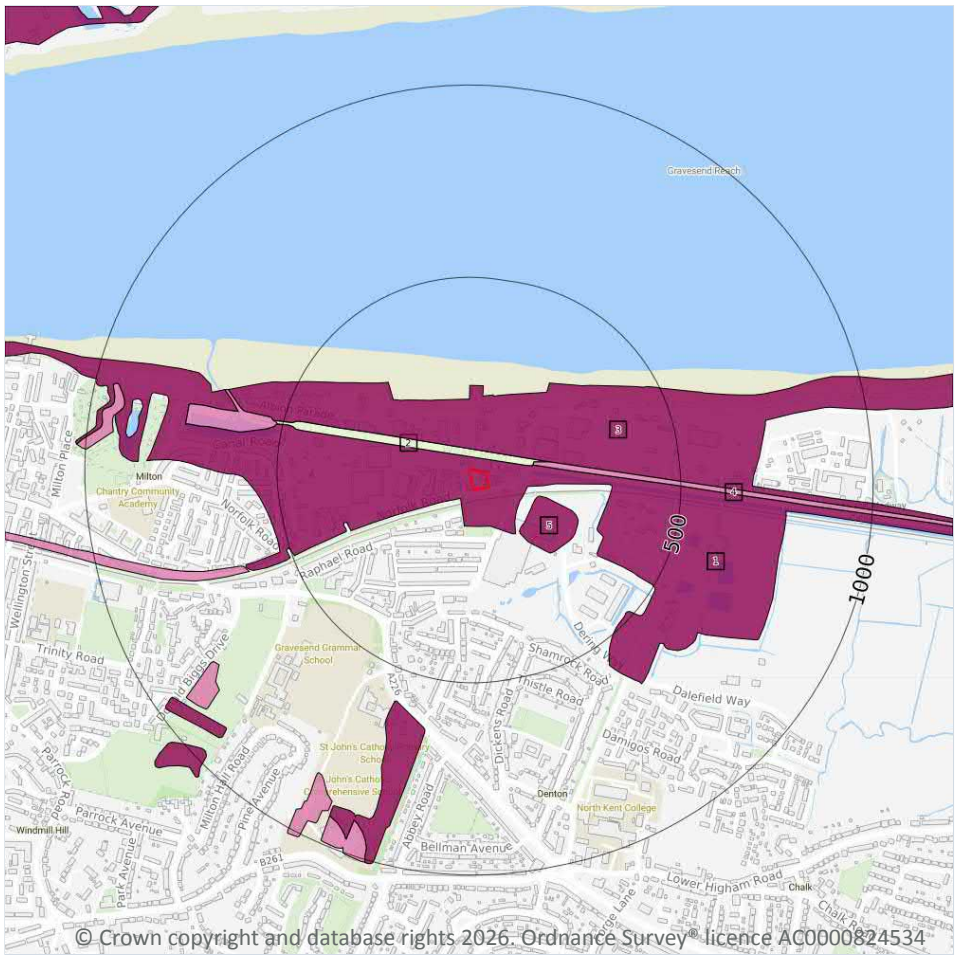
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 119 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW271_dartford_v4**

This data is sourced from the British Geological Survey.

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



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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 **5**

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 120 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground**	**Artificial deposit**
2	33m N	WMGR-ARTDP	Infilled Ground	Artificial deposit
3	53m N	MGR-ARTDP	Made Ground	Artificial deposit
4	121m E	WGR-VOID	Worked Ground	Void

ID	Location	LEX Code	Description	Rock description
5	123m SE	MGR-ARTDP	Made Ground	Artificial deposit

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

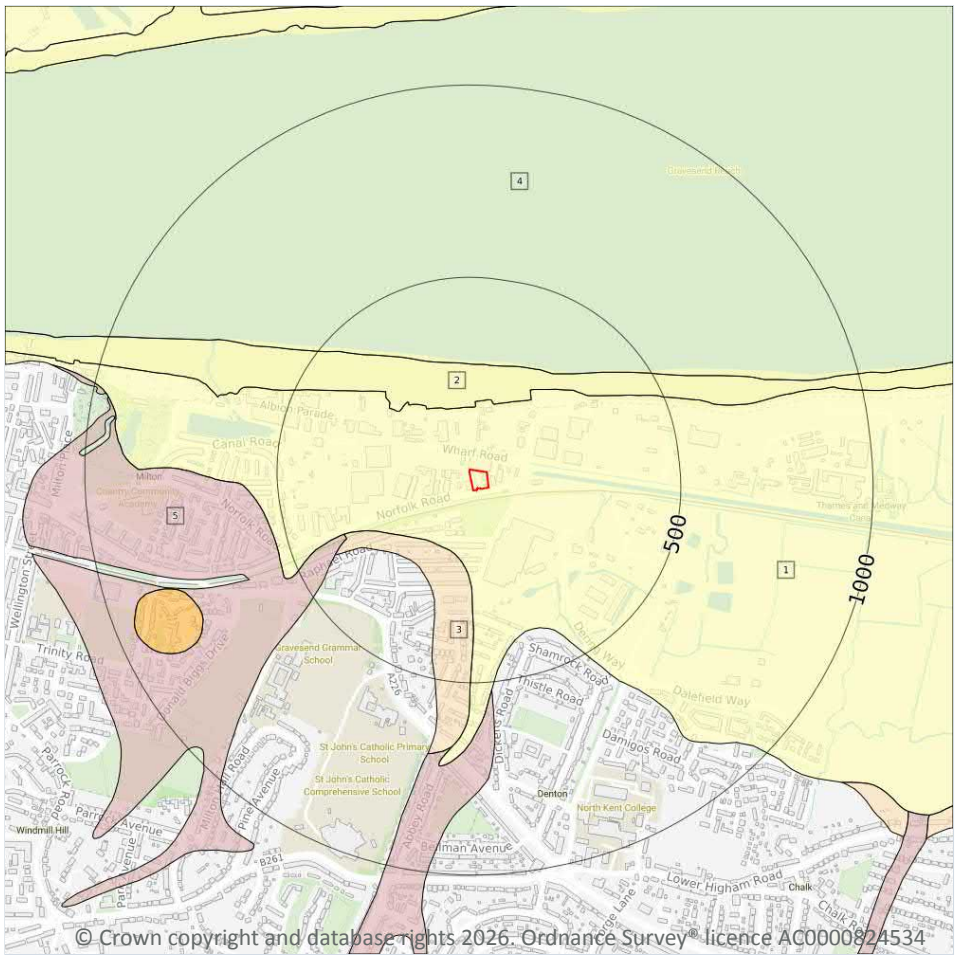
Records within 50m	**2**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any 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**
33m 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 **5**

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 122 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**ALV-Z**	**Alluvium**	**Silt**
2	162m N	TRD-Z	Tidal river or creek deposits	Silt
3	167m SW	TPGR-XSV	Taplow Gravel Member	Sand and gravel
4	274m N	ALV-Z	Alluvium	Silt

ID	Location	LEX Code	Description	Rock description
5	353m W	HEAD-DMTN	Head	Diamicton

This data is sourced from the British Geological Survey.

15.5 Superficial 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 any superficial deposits (the zone between the land surface and the water table).

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

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.

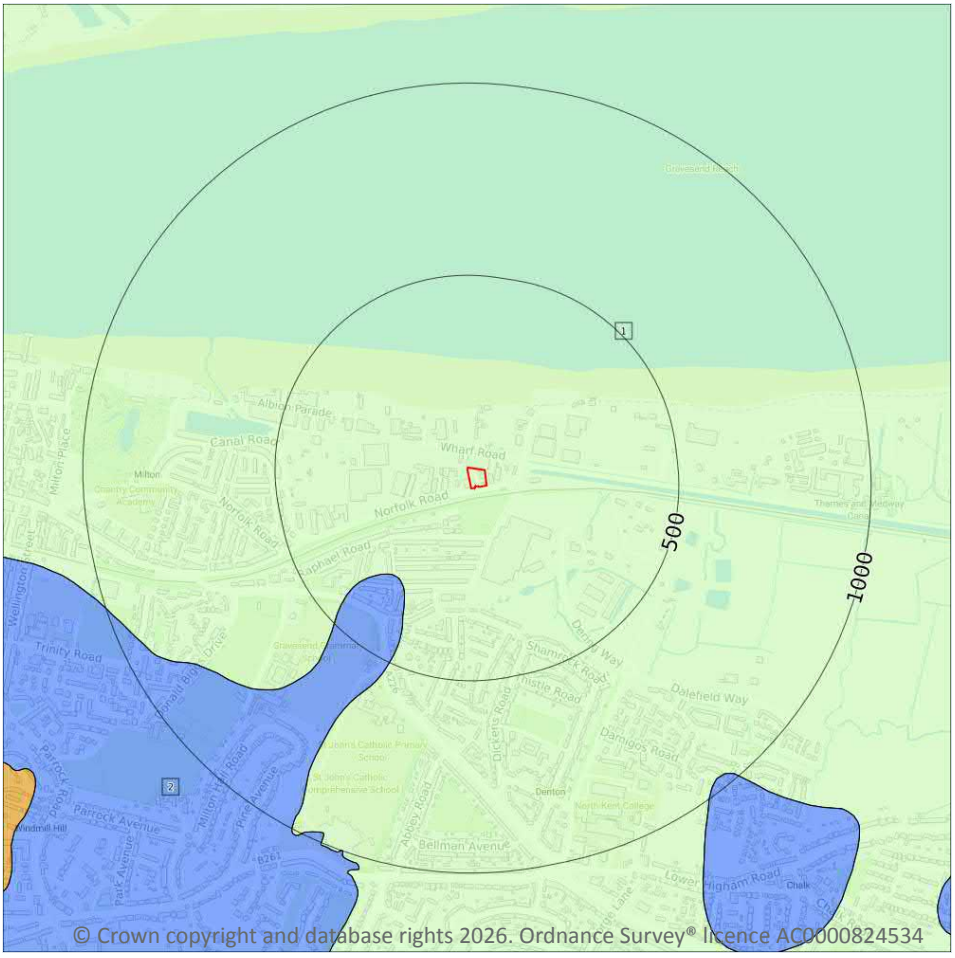
15.7 Landslip permeability (50k)

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 124 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SECK-CHLK**	**Seaford Chalk Formation-Chalk**	**Coniacian**
2	300m SW	TAB-S	Thanet Formation-Sand	Thanetian

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	**Fracture**	**Very High**	**Very High**

This data is sourced from the British Geological Survey.

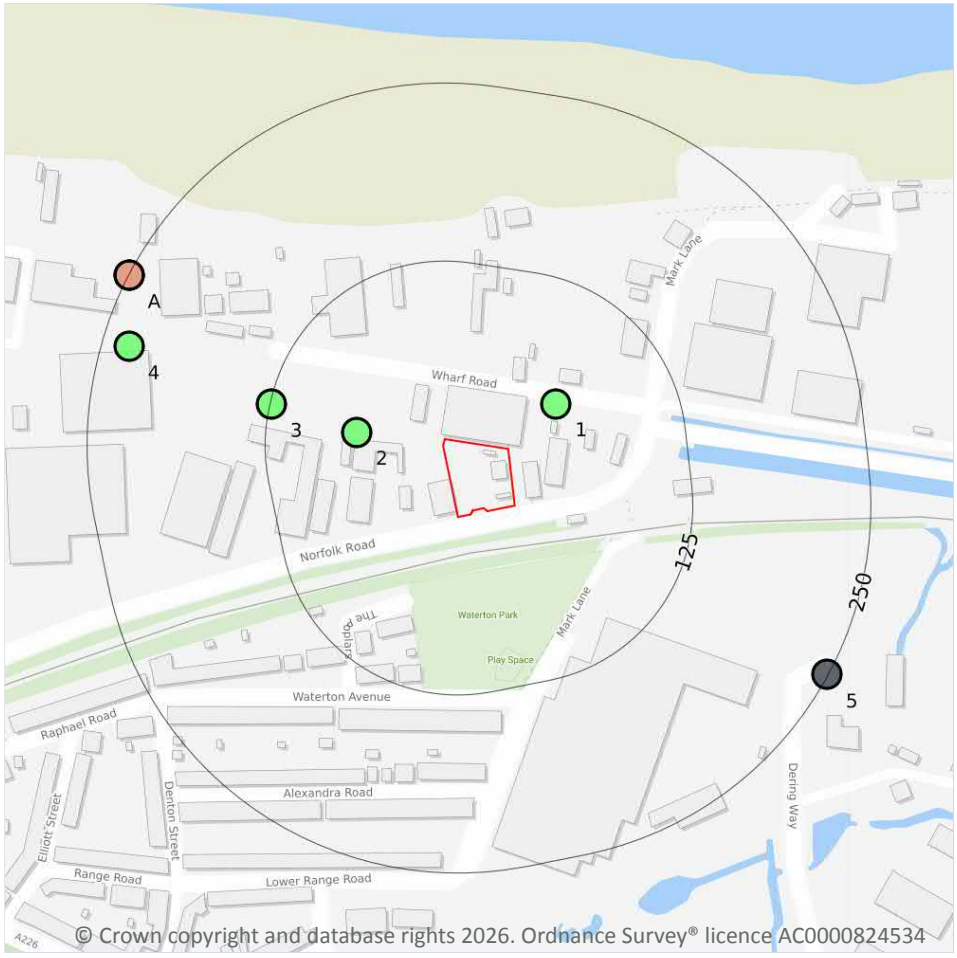
15.10 Bedrock faults and other linear features (50k)

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 **7**

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.

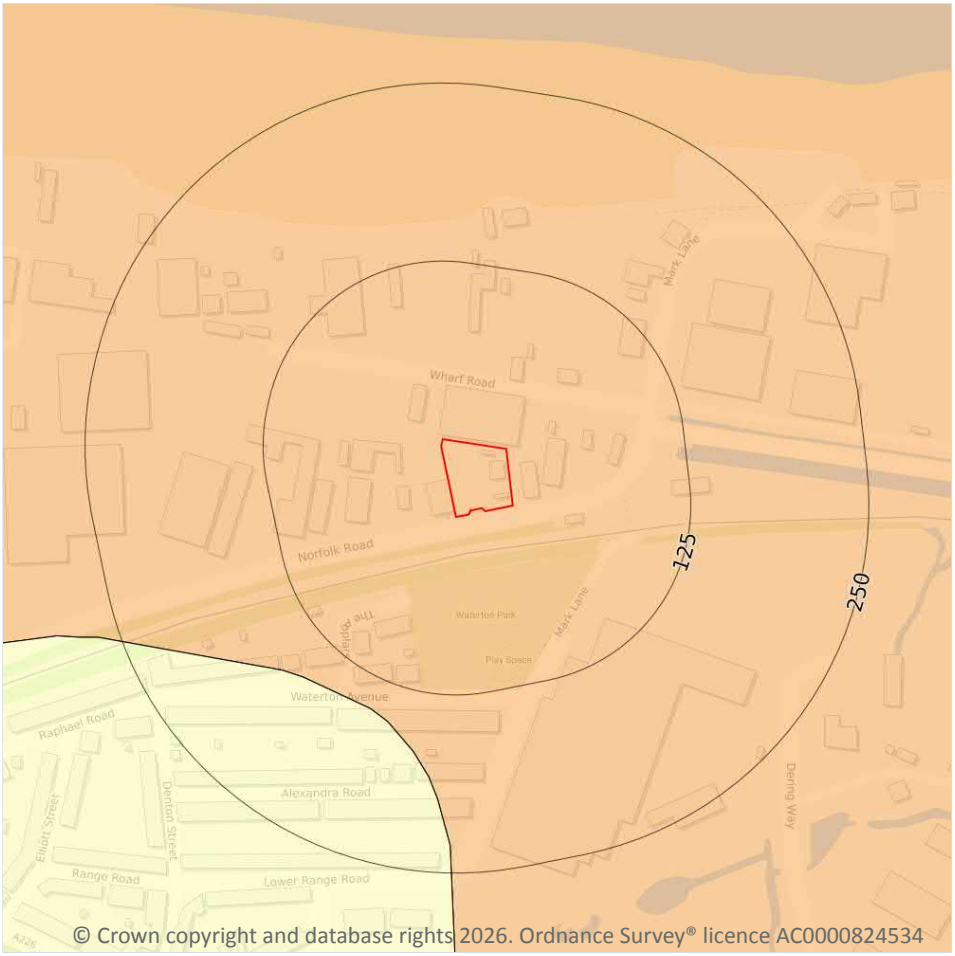
Features are displayed on the Boreholes map on **page 126 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	46m NE	566340 174160	GRAVESEND 8	17.67	N	725624 ↗
2	61m W	566200 174140	GRAVESEND 7	15.24	N	725623 ↗
3	124m W	566140 174160	GRAVESEND 6	12.34	N	725622 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	231m W	566040 174200	GRAVESEND 5	12.64	N	725621 ↗
5	249m SE	566530 173970	DENTON RELIEF ROAD GRAVESEND KENT TP1	-	Y	N/A
A	250m NW	566040 174250	URALITE	13.0	N	725539 ↗
A	250m NW	566040 174250	TILBURY GRAVESEND TUNNEL	37.0	N	725540 ↗

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	1

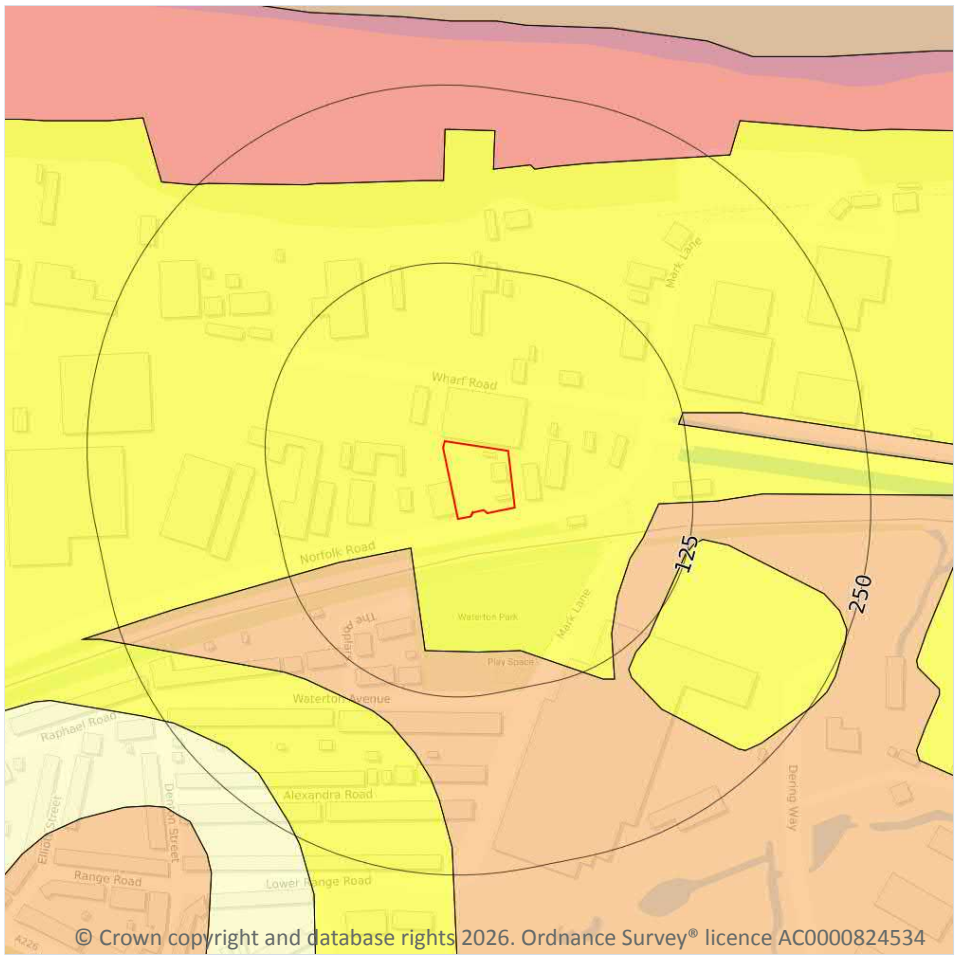
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 128 >**

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**

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	2

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.

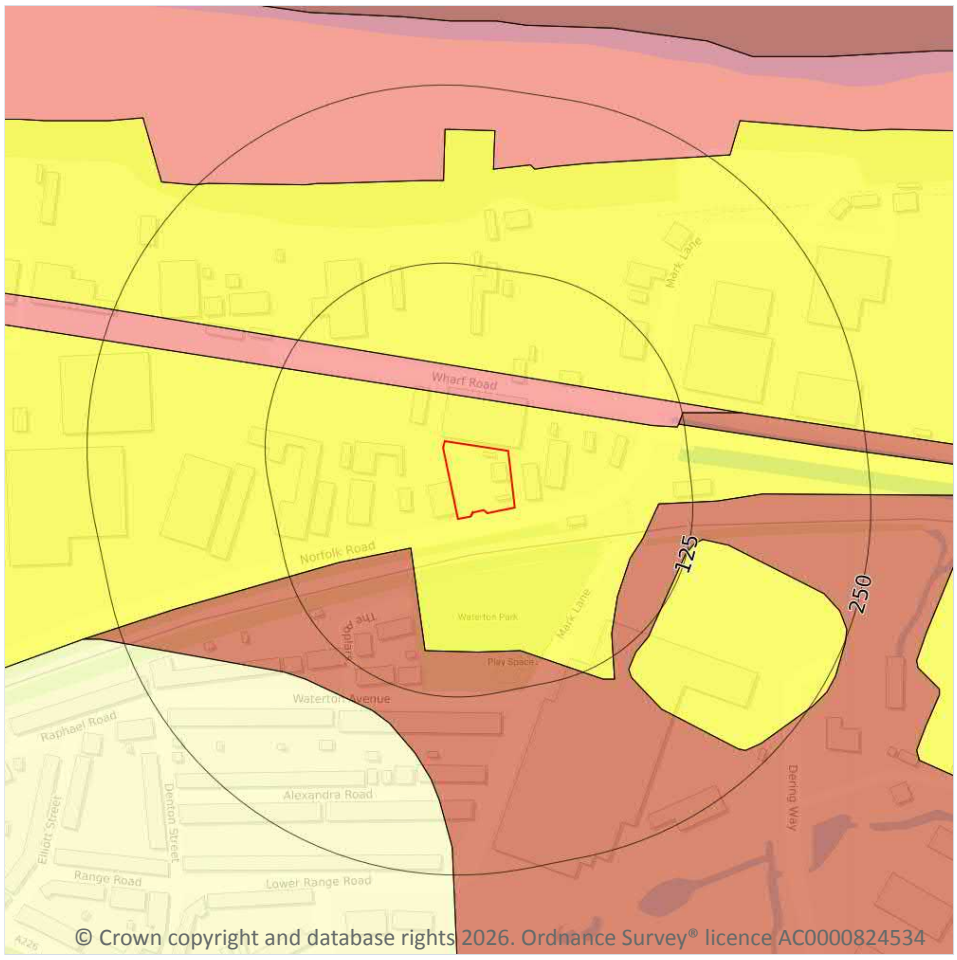
Features are displayed on the Natural ground subsidence - Running sands map on **page 129 >**

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
39m SW	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

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.

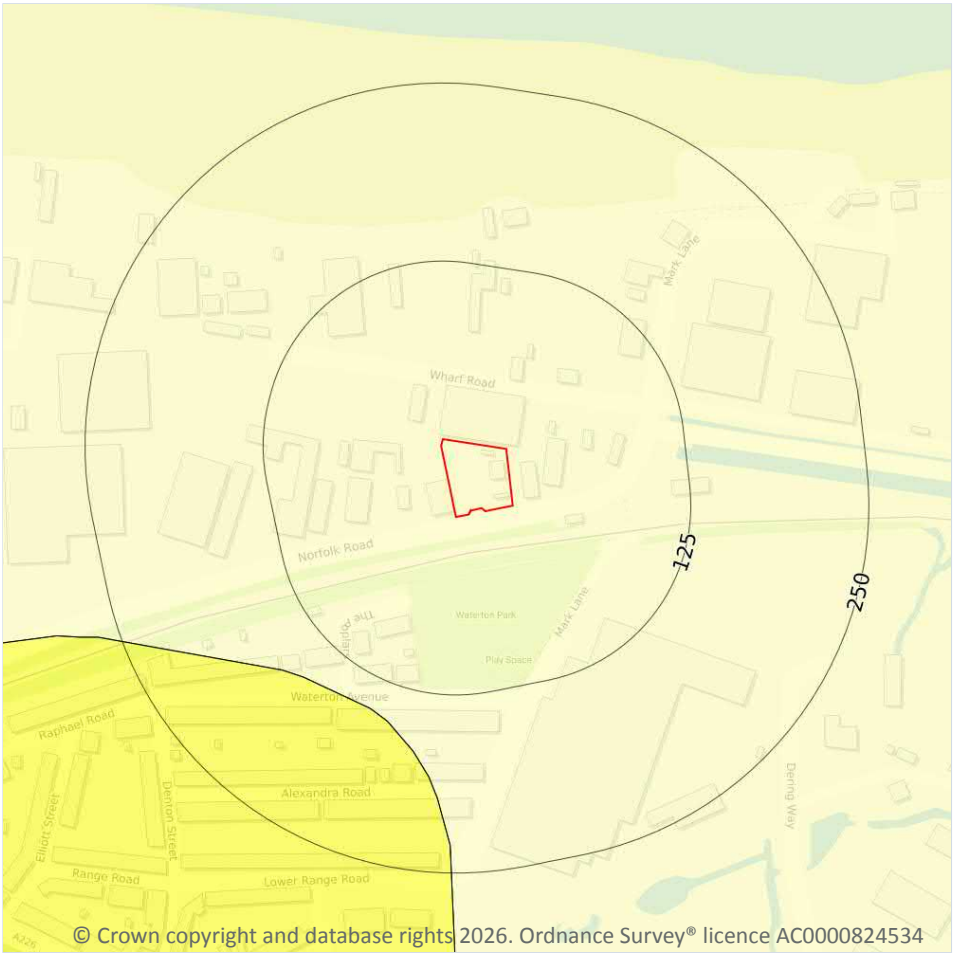
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 131 >**

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
33m N	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.
39m SW	High	Highly compressible strata present. Significant constraint on land use depending on thickness.

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	1

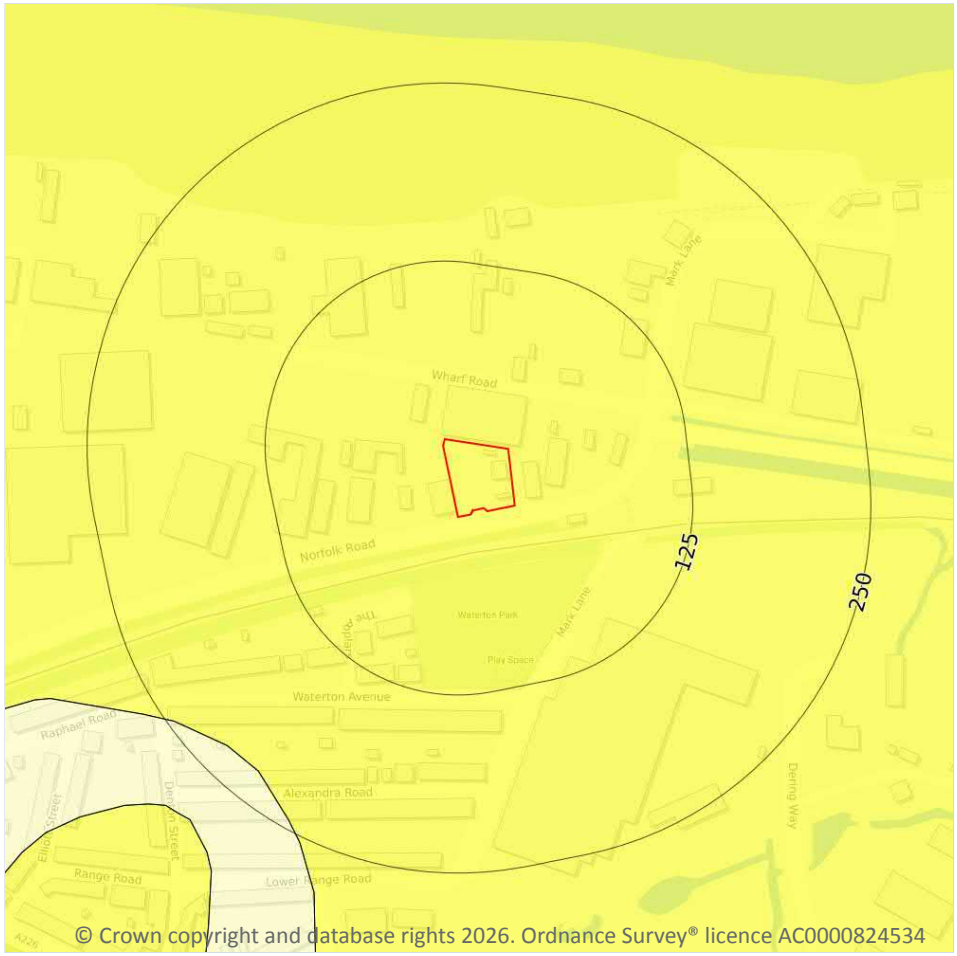
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 133 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not 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

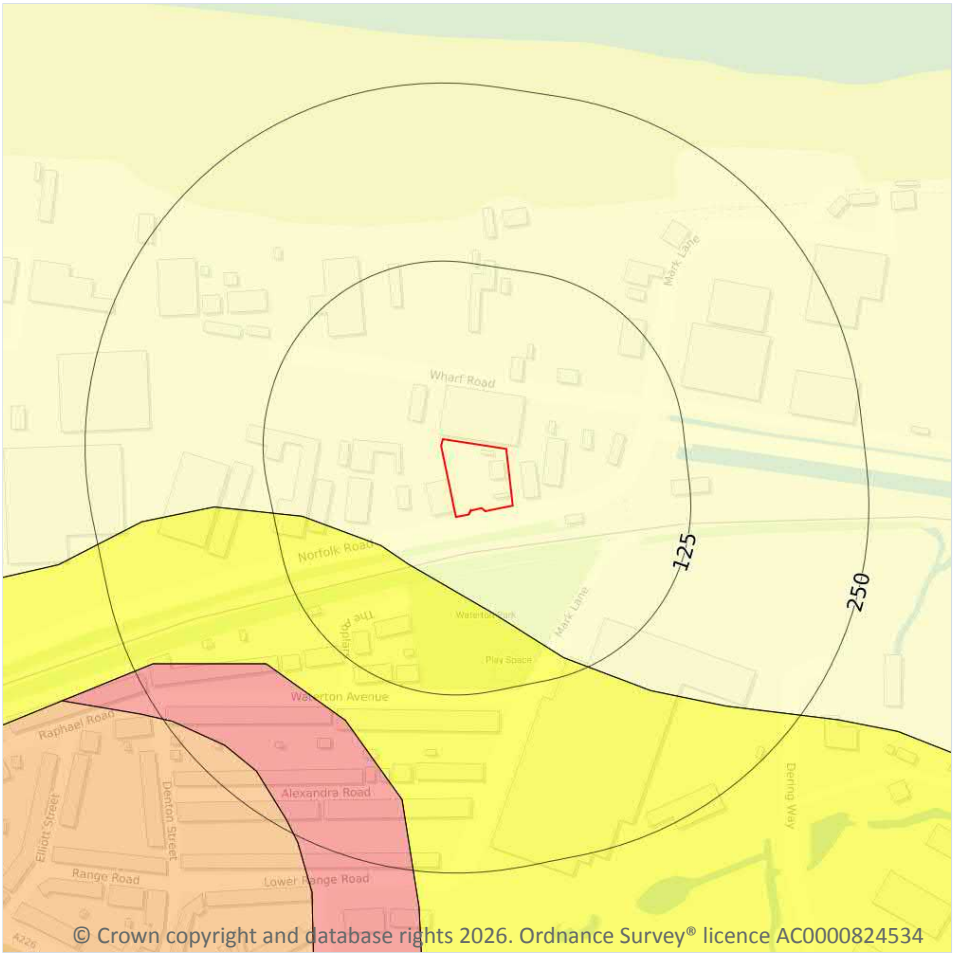
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 134 >**

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



17.6 Ground dissolution of soluble rocks

Records within 50m	2

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.

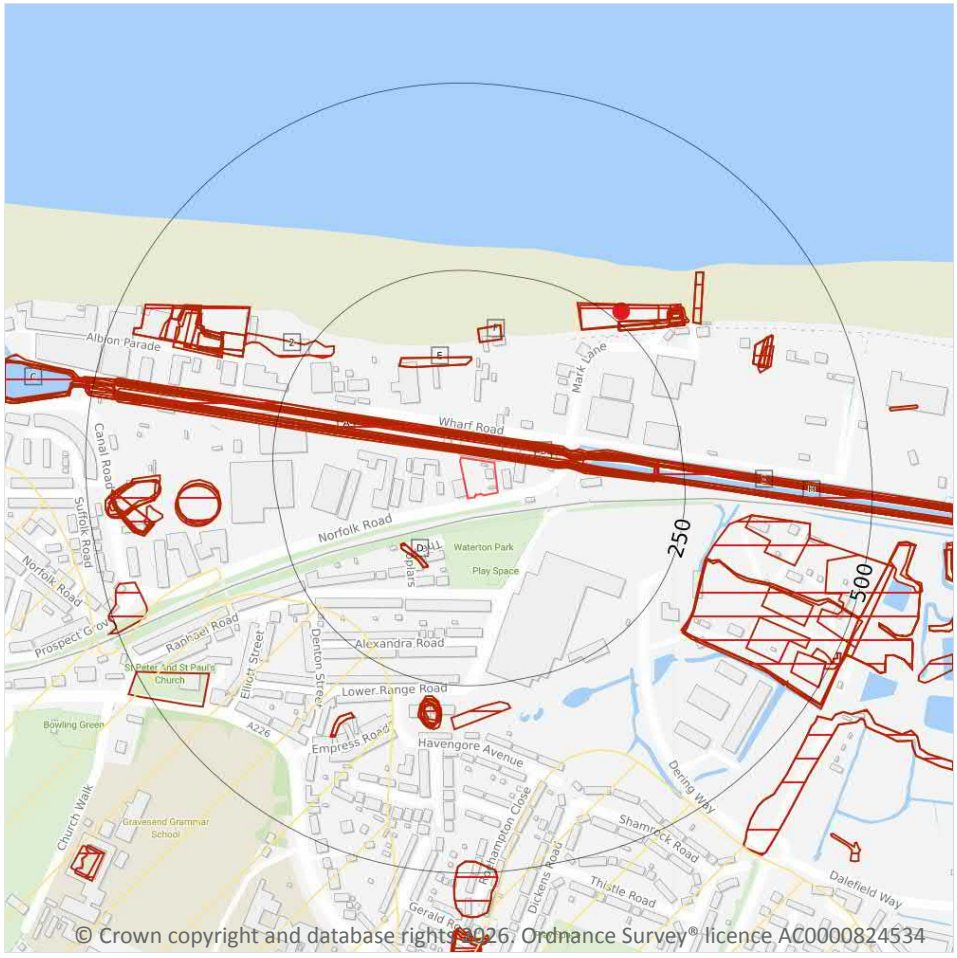
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 135 >**

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.**

Location	Hazard rating	Details
45m SW	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

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 137 >**

ID	Location	Details	Description
G	263m NE	Name: Denton Wharf Address: Denton, GRAVESEND, Kent Commodity: Marine Sand & Gravel Status: Ceased	Type: Sea, river or canal wharf where mineral commodities are unloaded and stored or loaded from. 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 **33**

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 137 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	6m N	Canal	1923	1:10560
B	8m N	Canal	1938	1:10560
B	8m N	Canal	1951	1:10560
B	8m N	Canal	1907	1:10560
B	8m N	Canal	1895	1:10560
B	8m N	Canal	1865	1:10560
C	10m N	Canal	1938	1:10560
A	10m N	Canal	1973	1:10000
A	10m N	Canal	1955	1:10560
A	10m N	Disused Canal	1966	1:10560
B	10m N	Canal	1888	1:10560
C	11m N	Canal	1938	1:10560
A	11m N	Canal	1932	1:10560
B	13m N	Canal	1895	1:10560
B	13m N	Canal	1895	1:10560
A	14m N	Canal	1916	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
A	16m N	Canal	1895	1:10560
D	101m SW	Pond	1895	1:10560
D	102m SW	Pond	1888	1:10560
1	116m E	Disused Canal	1981	1:10000
E	124m N	Pond	1955	1:10560
E	124m N	Pond	1966	1:10560
F	156m N	Unspecified Wharf	1955	1:10560
F	156m N	Unspecified Wharf	1966	1:10560
G	212m NE	Unspecified Wharf	1973	1:10000
G	213m NE	Unspecified Wharf	1981	1:10000
H	215m E	Canal	1923	1:10560
H	216m E	Canal	1923	1:10560
2	220m NW	Refuse Heap	1966	1:10560
G	243m NE	Unspecified Wharf	1932	1:10560
G	243m NE	Unspecified Wharf	1932	1:10560
G	243m NE	Unspecified Wharf	1938	1:10560
G	243m NE	Unspecified Wharf	1951	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	0

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.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	3

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 137 >**

ID	Location	Name	Commodity	Class	Likelihood
3	227m SW	Not available	Chalk	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	813m SW	Milton Hall Road	Chalk	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	863m SW	Milton Hall Road	Chalk	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. 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	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

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	0

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.

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.

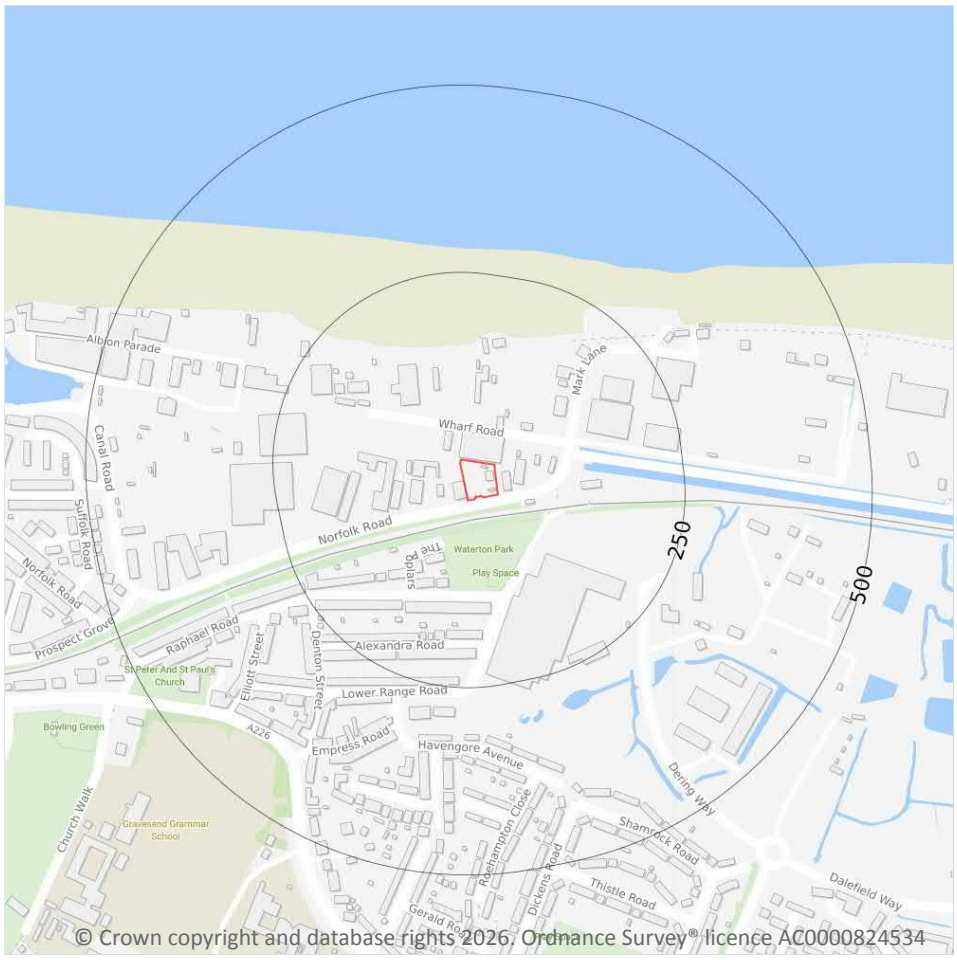
18.16 Clay mining

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 144 >**

ID	Location	Mine Address	Mineral
-	999m SW	Milton Hall Road, Gravesend, Kent	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

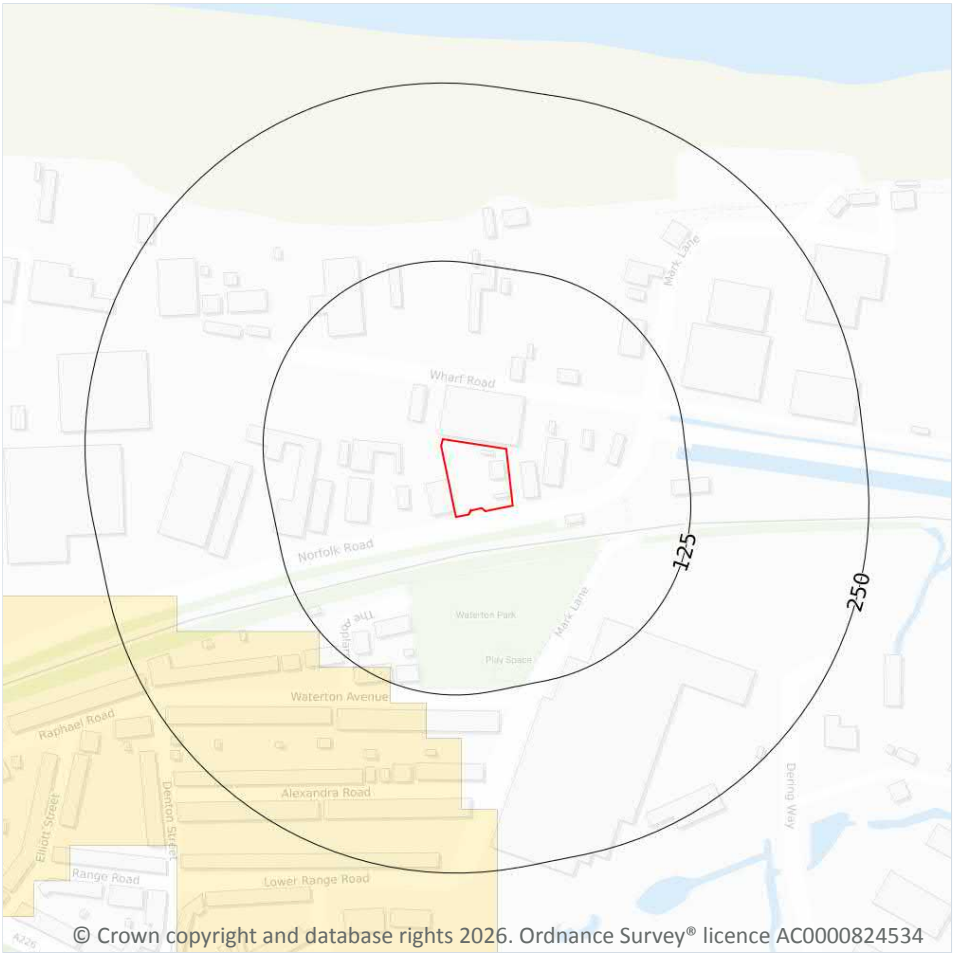
Records within 500m	0

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 146 >**

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	1

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 - 25 mg/kg**	**No data**	**200 - 300 mg/kg**	**120 - 240 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 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.

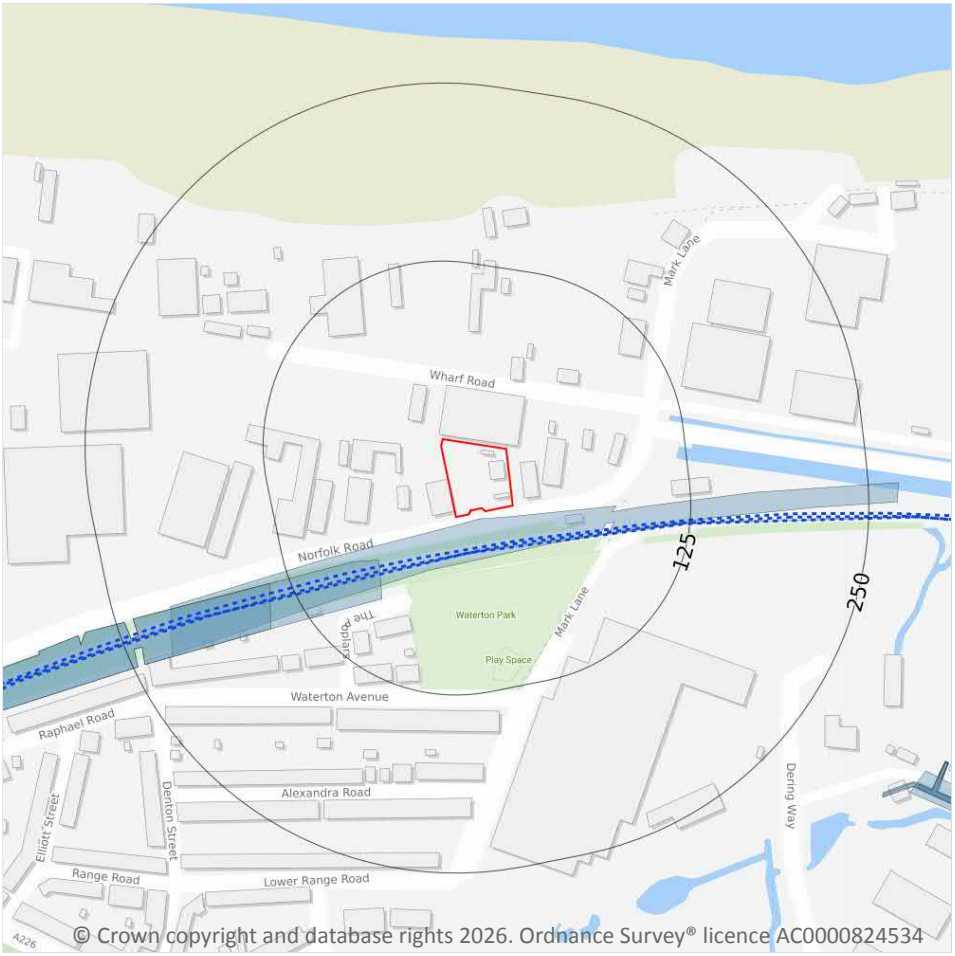
21.3 BGS Measured Urban Soil Chemistry

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



Site Outline

Search buffers in metres (m)

- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

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	3

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.

Features are displayed on the Railway infrastructure and projects map on **page 149 >**

Location	Land Use	Year of mapping	Mapping scale
5m S	Railway	1864	-
62m SW	Railway	1897	-
139m W	Railway	1867	-

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	6

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 149 >**

Location	Name	Type
24m S	North Kent Line	rail
26m S	North Kent Line	rail
26m S	Not given	Multi Track
124m E	Not given	Multi Track
125m SW	North Kent Line	rail
196m E	North Kent Line	rail

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/ ↗.

20 APPENDIX 4 – BGS BOREHOLE LOGS

British Geological Survey

BGS ID: 725624 : BGS Reference: TQ67SE80
British National Grid (27700) : 566340,174160

TQ 67 SE 80
6634 7416

OD c 3·96

HOLST & CO. LTD.

SITE INVESTIGATION DEPT.
PARKSIDE LANE
LEEDS LS11 5SX.

Contract No. T3770/F1622 Borehole No. 8
Location Gravesend Ground Level
Client Livesey, Henderson & Partners Date 27th July, 1970

BOREHOLE LOG

STRATA	Legend	Depth below Ground Level	Thickness of Strata	Type of Sample	c lb/sq. ft.	ø deg.	m.c %	γ lb/cu. ft.	N
MADE GROUND:- Soil, clay, wood and brick		3'6"	3'6"	1'9"					19
Soft light brown mottled clay		5'3"	1'9"	4'0"	360	0	59.0	94	
Black silt		10'0"	4'9"	7'0"	760	0	37.0	112	
Very soft dark grey silty organic clay			12'0"	12'0"	150	0	64.8	95	
				17'6"					7
		22'0"		23'0"					
Brown Peat		24'6"	2'6"		420	0	97.8	63	
Dark grey silt		30'0"	5'6"	29'0"	270	0	10.5	136	
Compact gravel and flints			11'0"	38'6"					57
				38'0"					24
		41'0"							
Compact dark grey silt		43'6"	2'6"	42'0"	2900	10	8.0	131	
Compact sand and gravel with flints			8'6"	46'6"					26
		52'0"		52'0"					27
Compact light brown sand with fine gravel		58'0"	6'0"	57'0"					31

Contact BGS: ngdc@bgs.ac.uk

21 APPENDIX 5 – SITE PHOTOGRAPHY















22 APPENDIX 6 - RISK ASSESSMENT METHODOLOGY

- Severity considers the potential impact of the linkage on the receptors, if the linkage was active. Categories range from slight/superficial to fatal.
- Likelihood considers the chances of the linkage occurring and is classified into categories from improbable to frequent.

By assigning scores with each of the above categories, the risk assessment can be undertaken using the formula:

RISK = LIKELIHOOD × SEVERITY

The matrix given in Table 14 provides a means of calculating the overall risk; while Table 15 provides the qualitative assessment based on the risk score.

Table 14: Contamination Risk Matrix

		Potential Severity				
		Fatal 5	Major 4	Moderate 3	Minor 2	Slight 1
Probable Likelihood	Frequent 5	Very High	High	Moderate	Low - Moderate	Low
	Probable 4	High	High	Moderate	Low - Moderate	Low
	Possible 3	Moderate	Moderate	Low - Moderate	Low - Moderate	Very Low
	Remote 2	Low - Moderate	Low - Moderate	Low - Moderate	Low	Very Low
	Improbable 1	Low	Low	Very Low	Very Low	Very Low

Table 15: Assessment description for risk scores

Risk Score	Risk Assessment
1-3	**Very Low**
4-5	**Low**
6-10	**Low to Moderate**
11-15	**Moderate**
16-20	**High**
21-25	**Very High**

Table 16: Risk Classification System

Risk Term	Description
Very Low	The presence of an identified hazard does not give rise to the potential to cause significant harm to groundwater, surface water, ecological and/or property receptors. In the event of such harm being realized, it is not likely to be Severe.
Low	The presence of an identified hazard does not give rise to the potential to cause significant harm to human health receptors. In the event of such harm being realized, it is not likely to be Severe.
Low to Moderate	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realized, would at worst normally be mild.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
High	Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remedial action. Investigation is required and remedial works may be necessary in the short term and are likely over the longer term.
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or, there is an evidence that severe harm to a designated receptor is currently happening. Urgent investigation and remediation are likely to be required.

23 ABBREVIATIONS

Below is a generic list of commonly used abbreviations.

Abbreviation	Description
ACM	Asbestos Containing Materials
AOD	Above Ordnance Datum
AONB	Areas of Outstanding Natural Beauty
BGS	British Geological Survey
c.	circa
CLRA	Contaminated Land Risk Assessment
COMAH	Control of Major Accident Hazards
CSM	Conceptual Site Risk Model
EA	Environment Agency
IPC	Integrated Pollution Control
IPPC	Integrated Pollution Prevention Control
LAPC	Local Authority Pollution Control
LNR	Local Nature Reserves
NIHHS	Notification of Installations Handling Hazardous Substances
NNR	National Nature Reserves
NP	National Parks
NPPF	National Planning Policy Framework
OS	Ordnance Survey
PAHs	Polycyclic Aromatic Hydrocarbons
Part IIA	Part IIA of the Environmental Protection. Act 1990
PCBs	Polychlorinated Biphenyls
PCLU	Potentially Contaminative Land Use
PPL	Potential Pollutant Linkage
PSPPL	Potentially Significant Potential Pollutant Linkage
SAC	Special Areas of Conservation
SI	Site Investigation
SPA	Special Protection Area
SPOSH	Significant Possibility of Significant Harm
SSSIs	Sites of Special Scientific Interest
TPHs	Total Petroleum Hydrocarbons
UXO	Unexploded Ordnance
VOC	Volatile Organic Compounds