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Perseus Ltd

Phase I Desk Study

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Phase II

Geotechnical and Geo-Environmental Report

Land North of Lavant Drive

Havant

PO9 2AW

Report No: 26-04-21

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EXECUTIVE SUMMARY

Site Location	Land North of Lavant Drive, Havant, PO9 2AW			
OS Grid Reference	471981, 107097			
Development Proposals	The proposed development is to construct a care-home with associated parking, road access and soft landscaping areas.			
Published Geology	Reference to the British Geological Survey website and Sheet 316; Fareham; 1998; indicates that the site is directly located on Quaternary-aged Superficial Deposits known as Head Deposits and River Terrace Deposits, underlain by the Shepperton Gravel Member, underlain by Eocene Bedrock known as the London Clay Formation. The London Clay Formation comprises the Bognor Sand Member within and is underlain by Tertiary Bedrock known as the Lambeth Group, in turn underlain by Cretaceous Bedrock known as the White Chalk Group (Undifferentiated).			
Site History	Historical information indicates the site was an undeveloped field up until between 1940 and 1965, when a school was constructed on-site comprising school buildings, footpaths and soft landscaping. By 1993, the school was demolished. An electricity substation was constructed at the west of the site between 2010 and 2015. Between 2015 and present day the site has been derelict with overgrown vegetation and sporadic fly-tipping.			
Ground Conditions Encountered	Stratum	Top Depth (m bgl)	Bottom Depth (m bgl)	Description
	Topsoil (MG)	GL	0.20 – 0.30	Dark brown friable silty organic clay
	Made Ground	0.3 – 0.4	0.40 – 0.90	Brown sand and gravel, locally clay-bound, with gravels of fine to coarse sub-angular to sub-rounded flint, brick and concrete
	Fill	0.20 – 0.70	0.40 – 1.50	Cobbles/boulders of concrete and brick with some silty sand and gravel, the gravels being brick and concrete
	River Terrace Deposits	0.20 – 1.50	4.00 (CT2)	Highly variable with layers of very loose to dense orange grey clay-bound gravel, and very soft to firm light brown silty clay. Gravels being fine to coarse, sub-angular to sub-rounded with occasional cobbles of flint. Layers of fine-grained soils comprised very low to high strength (BS5930:2015) with Low to Medium Volume-Change Potential (NHBC Standards)
	Shallow groundwater table resting at depths ranging between 1.55m and 2.70m bgl			
	London Clay Formation	4.00 (CT2)	>4.45 (CT2)	Poor sample recovery – further assessment required to obtain representative samples. Current data not deemed representative of this material.
Contamination	The presence of asbestos within the near-surface soils poses a significant risk to both the end user and the construction workers. Further testing should be undertaken in the areas not accessible by this investigation. Remedial measures will be required as part of the proposed development, the scope of which should be determined after the recommended further sampling and testing. An asbestos risk assessment and plan of works should be undertaken prior to any site activities which will disturb the near surface soils, ensuring compliance with the Control of Asbestos Regulations (CAR) and Construction (Design and Management) Regulations (CDM).			
Sulphate Attack on Underground Concrete	<p>The following design sulphate class and aggressive chemical environment classification should be applied: DS2/AC2</p> <p>However, the London Clay Formation was not tested as part of this investigation, and this stratum typically comprises significant quantities of sulphates. Sulphate testing should be undertaken to determine the design sulphate class and aggressive chemical environment classification.</p>			
Shallow Foundations	This ground investigation has identified localised deepened Made Ground (found locally to be as deep as 1.50m), shallow groundwater levels (shallowest recorded during this investigation was 1.55m), and highly variable material forming the River Terrace Deposits. This included layers of very soft fine-grained soils and very loose coarse-grained soils (SPT 'N' values of <3 at 2.00m bgl). Therefore, given the problematic near-surface ground conditions, it is considered that shallow foundations will not be viable for the proposed development.			

Piled Foundations	<p>Deeper foundations, such as piles, could be adopted to bypass the variable River Terrace Deposits, founding within the underlying competent London Clay Formation.</p> <p>A deeper borehole investigation will be required to obtain soil parameters for the underlying London Clay Formation to aid pile design.</p> <p>A specialist piling contractor should be consulted to formulate a suitable piling technique and type for the ground conditions encountered at this site, before commencement of the works.</p>
Waste Soil Classification	<p>Currently, the waste soil on site is recommended to be classified as follows:</p> <p>Topsoil (MG): 17 05 04 – Non-hazardous</p> <p>Made Ground: 17 05 04 – Non-Hazardous</p> <p>Fill: 17 01 06* - Hazardous</p> <p>Natural Soil: 17 05 04 – Inert</p>
Recommendations	<p>We recommend that a watching brief should be undertaken during the construction phase, and if, during development, any previously undiscovered contamination (including visual or olfactory evidence) is found, then site management should be immediately informed and inspection by a suitably qualified person should be undertaken.</p> <p>A detailed UXO risk assessment will be required prior to the development works.</p> <p>Basic radon protection will be required as part of the proposed development.</p> <p>Due to overgrown brambles, the majority of the site was not accessible; therefore, it is considered that further investigation should be undertaken to confirm that the ground conditions are similar to those sampled and tested as part of this investigation.</p> <p>Due to the presence of asbestos within the near-surface soils this poses a significant risk to both the end user and the construction workers. Further testing should be undertaken in the areas not accessible by this investigation. Remedial measures will be required as part of the proposed development, the scope of which should be determined after the recommended further sampling and testing. An asbestos risk assessment and plan of works should be undertaken prior to any site activities which will disturb the near surface soils, ensuring compliance with the Control of Asbestos Regulations (CAR) and Construction (Design and Management) Regulations (CDM).</p> <p>Given the findings of this investigation, remedial measures will be required, however further sampling and testing is required to fully characterise the site conditions. This should be undertaken following the removal of overgrown brambles.</p> <p>Further investigation should include:</p> <ul style="list-style-type: none">  Additional near-surface soil sampling and testing to complete the human health and controlled water risk assessment for the entire site  Deeper boreholes within the footprint of the proposed care home to obtain soil parameters for pile design due to the problematic near-surface ground conditions  Groundwater monitoring over the winter period to assess the viability of conventional soakaways.

This executive summary must be read in conjunction with the full report text.

FACTUAL

1.1 INTRODUCTION

Geo-Integrity Ltd were commissioned by Fed3 Projects Ltd. on behalf of the client Perseus Ltd. via an appointment form dated 13th of May 2026 to undertake a Phase I Desk Study and Phase II Factual and Interpretative Geotechnical and Geo-Environmental Report for Land North of Lavant Drive, Havant, PO9 2AW in order to inform the design and construction of the proposed development.

This report describes desk-based searches of geological, environmental and historical information, the fieldwork and laboratory testing undertaken and provides an interpretative section of the geotechnical and geo-environmental data from this investigation to inform the proposed development.

The site is located at National Grid Reference 471981, 107097.

The report is likely to be reviewed by the Local Authority with reference to the NPPF. Once the redevelopment is completed, and as a minimum, the land must not be capable of being determined as 'contaminated land' under the terms of Part IIA of the Environmental Protection Act 1990. However, it also states that "Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner." As such, the desk study in this report is the first stage in investigating whether the site is likely to be considered "contaminated", in accordance with clause 197 of the NPPF.

The objectives of this phase I and phase II interpretative report are: -

-  To undertake a site walkover to identify any potential pollution sources or geotechnical hazards on the site.
-  To gather historical, geological and environmental information.
-  Briefly summarise the site development proposals and site setting.
-  To describe and report the fieldwork undertaken at the site.
-  To describe and report the geotechnical and chemical laboratory work undertaken on selected samples.
-  To provide an interpretation of the results of this investigation with regards to the geotechnical properties, and geo-environmental and waste disposal implications for the proposed development.

The investigation was performed in accordance with the general requirements of BS 5930:2015, BS EN 1997-2 (2007), BS EN ISO 22475-1 (2006) and other relevant related standards identified below. The fieldwork took place across two days on the 4th and 5th of June 2026.

It should be noted that the information provided in the desk study is obtained from independent third-party sources. It is provided in good faith, but no guarantee can be provided as to its accuracy. The desk study information is not necessarily exhaustive, and further information relevant to the site may be available from other sources.

1.2 DEVELOPMENT PROPOSALS

The proposed development is to construct a care-home with associated parking, road access and soft landscaping areas.

2 PHASE I DESK STUDY

2.1 SOURCES OF INFORMATION

The following sources of information have been used to compile this desk study: -

-  Extracts of available historical Ordnance Survey (OS) maps covering the period from 1869 to 2025, which are presented in the Appendices.
-  Groundsure Report Ref GS-WCL-58I-SNU-1QF included in the Appendices.
-  The British Geological Survey (BGS) and Environment Agency (EA) websites.
-  A site reconnaissance visit was undertaken on the 4th of June 2026.
-  Information from various internet sites on site history and environmental setting.

2.2 WALKOVER SURVEY

A site walkover survey was undertaken on the 4th of June 2026. Site location and layout plans are included in Appendix A, along with a selection of photographs taken during the survey.

The site is located north of Lavant Drive in Havant, Hampshire. The investigation area is almost square in shape with a maximum east-west distance of 84m and a maximum north-south distance of 83 m. The site topography is flat lying.

The investigation area is currently accessed via a small gate along the western boundary leading to the on-site electricity substation. There is a narrow access to the electricity substation bounded by metal fencing and overgrown vegetation. The eastern side of the site is accessed via a wooden bridge which leads around the northern side of the electricity substation to the east. The majority of the site comprises overgrown vegetation (predominantly brambles) with mature trees along the western boundary. A small area at the north-east is accessible with long grass and immature trees located in this area. Tarmacked footpaths trend east-west along the northern half of the site and at the south-west corner of the site.

The site is surrounded by residential dwellings to the west, derelict land (historic car park) to the north and east, and a carpark and Oak Park Community Clinic to the south.

The walkover survey was undertaken to identify potential sources of contamination to aid the human-health risk assessment. No significant sources of contamination were recorded during the walkover survey, other than the on-site electricity substation which, depending on the age of construction, could be a potential source of polychlorinated biphenyls (PCBs). In addition, a bonfire was present

at the centre of the site with fly-tipped waste including a pram, pieces of wood and plastic. It should be understood that the majority of the site was overgrown with brambles and could not be visually inspected.

2.3 GEOLOGY

2.3.1 *Published Geology*

Reference to the British Geological Survey website and Sheet 316; Fareham; 1998; indicates that the site is directly located on Quaternary-aged Superficial Deposits known as Head Deposits and River Terrace Deposits, underlain by the Shepperton Gravel Member, underlain by Eocene Bedrock known as the London Clay Formation. The London Clay Formation comprises the Bognor Sand Member within and is underlain by Tertiary Bedrock known as the Lambeth Group, in turn underlain by Cretaceous Bedrock known as the White Chalk Group (Undifferentiated).

2.3.2 *Superficial Bedrock*

Head Deposits are generally described by the BGS as a hillwash deposit comprising unsorted clay, sand and gravel with local lenses of organic material including peat. The thickness is typically less than 2m.

River Terrace Deposits are generally described by the BGS as sand and gravel with local lenses of fine-grained material and potentially organic material. The thickness typically ranges between 0m and 5m.

2.3.3 *Bedrock*

The **London Clay Formation** is generally described by the BGS as a blue grey, weathered brown silty to very silt clay with some layers of sandy clay. The thickness in the site area is typically between 77m and 120m.

The **Bognor Sand Member** is generally described by the BGS as a glauconitic, cross-bedded fine to medium grained sand, partially cemented. The thickness is typically up to 5m.

The **Lambeth Group** is generally described by the BGS as a vertically and laterally variable sequence of clay, silt, sand and gravel, with some limestones, lignites and occasional sandstone and conglomerate. The Lambeth Group was deposited in a fluvial, estuarine, lagoonal, and proximal marine environment. The thickness of this unit in the site area is recorded between 30m and 35m.

The **White Chalk Group (formerly the Upper Chalk)** is generally described by the BGS as firm white chalk with conspicuous semi-continuous nodular and tabular flint seams.

2.3.4 Historical Borehole Records

The BGS holds records of historical exploratory holes, including boreholes; one such record is located 260m west of the site (ref. SU70NW137).

The borehole records clayey gravel down to a depth of 3.00m bgl (interpreted to be superficial deposits) underlain by firm to stiff fissured silty clay (interpreted to be the London Clay Formation) down to the base of the borehole at a depth of 12.20m bgl. Water seepages were noted at 10.00m bgl.

2.3.5 Solution Features

Chalk, as a calcium-carbonate-rich rock, is highly susceptible to dissolution by water containing carbon dioxide. This dissolution can create three common types of features within the chalk, grouped together under the generic term 'dissolution features'. These include:

Sinkholes: Depressions at the ground surface caused by the collapse of overlying chalk or superficial deposits into underground voids created by dissolution. Shape and size are dependent on underlying void features.

Solution pipes: A feature in the surface of the chalk caused by increased dissolution in an area of closely spaced discontinuities. These features may or may not have a ground surface expression. Up to 20 metres in diameter, though commonly much smaller.

Swallow Holes: A void within the surface of the chalk where a stream is 'swallowed' by the chalk to flow underground. Often occur at the junction of impermeable strata and chalk. Infilled ancient swallow holes do exist where streams used to flow and may not have any surface expression. Up to 14m in diameter, though commonly a few metres.

There are no records of natural cavities within the 500m of the site (data sourced from Stantec UK Ltd.)

2.3.6 Natural Cavities Risk Assessment

A natural cavities risk assessment has been undertaken following the paper written by Clive Edmonds in 2001, 'Predicting natural cavities in chalk'. This gives a score to various factors, including: type of chalk, topography, groundwater level, strata overlying the chalk, periglacial and

glacial history. The score of this site was 312, which means there is predicted to be a moderately high anticipated risk of natural cavities beneath this site (11.9% occurrence). The data sheets are provided in the Appendix.

It should be appreciated that the subsidence from dissolution features hazard rating is based on the statistical relationship of cavity occurrences, adopting database information referenced within the Predicting Natural Cavities in Chalk, 2001 publication. As a result, this rating is not unequivocal and does not take into consideration updated records or the occurrence of new subsidence features that may have occurred.

The White Chalk Subgroup is at a higher risk of dissolution when compared to the underlying Grey Chalk Subgroup. However, the protection offered by thick layers of fine-grained soil associated with the London Clay Formation and the Lambeth Group may lower the risk of dissolution features at this site.

2.3.7 Mining and Man-Made Cavities

In addition to the above natural cavities, man-made cavities, such as deneholes or chalk mines, can also be encountered in chalk strata. Deneholes are produced by ancient chalk mining for flint and are commonly vertical shafts excavated through any overburden material and undermined at the base, similar to bell-pits in coal mining areas. Chalk Mines are more modern and are excavated in a similar way to coal mines. Both are often insufficiently backfilled, initiating collapse at a later date. They are seldom found in areas with a high-water table. The Chelsea Speleological Society holds records of caves, tunnels and deneholes in the south of England, however, there are no such records within or nearby the investigation area.

Chalk mines are not well-documented in the area; this is likely due to the significant overburden thickness. As such, they are considered unlikely to pose a significant geotechnical risk to the proposed development.

2.4 HISTORY OF THE SITE

The history of the site has been established by the review of old Ordnance Survey (OS) maps going back to 1869. The maps and any other relevant information are included in Appendix D and indicated the following.

2.4.1 Ordnance Survey

Historical Publication Data		
Date	Features On Site	Features Off-Site
1869	<ul style="list-style-type: none"> The site is shown to be agricultural land forming part of a larger field belonging to Havant Farm 	<ul style="list-style-type: none"> A road trends north-south along the western boundary Havant Farm farmhouse is located immediately west of the site A gravel pit is recorded 200m north of the site The wider surrounding area comprises predominantly undeveloped agricultural fields A drainage channel is recorded 80m east of the site A railway line is located 500m south of the site, as well as other industrial land-uses including a gas works, and a railway station
1899	<ul style="list-style-type: none"> No significant changes are recorded to the site 	<ul style="list-style-type: none"> A gravel pit is shown 80m north of the site A new building is constructed 40m west of the site forming part of Havant Farm
1932	<ul style="list-style-type: none"> No significant changes are recorded to the site 	<ul style="list-style-type: none"> Residential development to the south
1940	<ul style="list-style-type: none"> No significant changes are recorded to the site 	<ul style="list-style-type: none"> New road configuration constructed 100m north-west of the site.
1955-1960	<ul style="list-style-type: none"> The site is developed with the construction of Oak Park County Secondary School Three main buildings are recorded on site located centrally west, east and south-west. Footpaths are observed to the north and south 	<ul style="list-style-type: none"> Significant residential development recorded to the north.
1986	<ul style="list-style-type: none"> No significant changes are recorded to the site 	<ul style="list-style-type: none"> A health centre is constructed 120m west of the site.
1993	<ul style="list-style-type: none"> Oak Park County Secondary School is demolished with no recorded structure seen on-site 	<ul style="list-style-type: none"> Oak Park County Secondary School demolished; an education office is constructed immediately east of the site
2003	<ul style="list-style-type: none"> No significant changes are recorded to the site 	<ul style="list-style-type: none"> An unknown commercial building is constructed 90m north of the site
2015	<ul style="list-style-type: none"> No significant changes are recorded to the site 	<ul style="list-style-type: none"> No significant changes are recorded in the surrounding area

Historical Publication Data		
Date	Features On Site	Features Off-Site
2025	<ul style="list-style-type: none"> A small structure matching the electricity substation seen during the walkover survey is shown on site 	<ul style="list-style-type: none"> Education office to the east is demolished, the unknown commercial building to the north is demolished A car park is constricted immediately south of the site

2.4.2 Freely Available Satellite Imagery

Satellite imagery provided within the desk study information

Freely available satellite imagery records the site from 1999 to 2025. The satellite imagery correlates with the findings of the historical OS maps. It can be seen that in 1999 the only building on site is a small structure located centrally along the western boundary. In 2005, the car park immediately south of the site was constructed and spoil heaps were shown along the southern boundary of the site. Between 2011 and 2015, the small building was demolished, and an electricity substation was constructed, matching that seen during the walkover survey. Between 2015 and 2025, the site becomes overgrown with vegetation, and evidence of fly-tipping is seen at the east of the site.

2.4.3 Unexploded Ordnance and Bomb Sites

Reference to the site-specific unexploded bomb risk map (UXO) produced by Zetica indicates that the site is located in an area where there is a moderate risk of unexploded ordnance. Moderate-risk regions are those with a bombing density of 15-49 bombs per 1000 acres or less.

As such, a preliminary UXO Risk Assessment was undertaken by Impartial Assessments Ltd, report ref. PRA.10360.26. The risk assessment identified a potentially elevated likelihood of explosive ordnance (EO) encounter during the proposed ground investigation and during the proposed development works. Therefore, a detailed UXO risk assessment will be required prior to the development works. However, for the intrusive ground investigation, a UXO Engineer supervised the site works.

2.5 HYDROLOGY

The nearest surface water course is recorded as Lavant Stream located 66m east of the site trending NE-SW. Lavant Stream flows in a southerly direction towards the coast.

The EA's Catchment Data Explorer situates the site within the Lavant (Hants) Water Body Catchment listed as having a poor ecological status for the latest reported period, 2022.

There are no current active or historical surface water abstraction licenses recorded within 2km of the site. The following flood risks are recorded for the site:

-  Fluvial/Tidal Models – Flood Zone 2 located 13m east of the site
-  Fluvial/Tidal Models – Flood Zone 3 located 19m east of the site
-  Groundwater Flooding: High

These data do not constitute a site-specific Flood Risk Assessment, and we recommend further enquiries to determine if such an assessment would be required to support a development application for the site.

2.6 HYDROGEOLOGY

Reference to the Environment Agency website indicates that the site is located on the following Aquifers:

-  Secondary A Aquifer (Superficial) – associated with the underlying superficial deposits (Head/RTD)
-  Unproductive (Bedrock) – associated with the underlying London Clay Formation

The aquifer designation data is based on geological mapping provided by the British Geological Survey. The maps are divided into two different types of aquifer designation:

Superficial (Drift) - permeable, unconsolidated (loose) deposits. For example, sand and gravel.

Bedrock - solid permeable formations, e.g., sandstone, chalk and limestone.

For each type, there are four designations: - Principal, Secondary A, Secondary B and Unproductive Strata, ranked by importance.

The site is located within a source protection zone 1c (Inner Catchment – Confined Aquifer). A zone 1c designates the subsurface footprint of an inner drinking water catchment where a confined aquifer is protected by overlying low-permeable geology. As such, surface activities are less restricted, but deep drilling is tightly regulated to prevent pollution scenarios.

A Source Protection Zone (SPZ) is a designated area around a well or abstraction borehole.

There are records of groundwater abstraction licenses within 2km of the site. The nearest active groundwater abstraction license is recorded 1139m south-west of the site, operated by Portsmouth Water Ltd., detailed as a potable water supply.

2.7 WASTE TREATMENT AND LANDFILL SITES

2.7.1 Landfills

There are no historical records of landfill sites located within 500m of the site.

There are no records of operational or historical landfill sites within 500m of the site.

2.7.2 Other Licensed Waste Sites

There is one record of a historical waste site within 500m of the site, situated 433m south of the site listed as a waste transfer station.

2.7.3 Waste Exemptions

There are twenty-four records of waste exemptions within 500m of the site, none of which are located within 50m of the site. The majority of these relate to the sorting and de-naturing of controlled drugs for disposal associated with the medical clinic located south of the site, The nearest record is located 54m west of the site. Given the distance from the site and fact two water bodies run along the east and western boundaries, the risk of potential contaminants associated with waste exceptions leaching from the source to the site is considered to be very low.

2.8 ENVIRONMENTAL PERMITTING AND INCIDENTS

There are three historic IPC authorisations within 500m of the site. These include:

-  Inorganic chemical processes operated by Asahi Thermofil, dated 2000, located 372m east
-  Manufacture and use of organic chemicals, operated by John Wyeth and Brother Ltd., dated 1994, located 378m east
-  Manufacture and use of organic chemicals, operated by Wyeth Research Ltd., dated 1994, located 375m east

There are six records of Part A(1) licensed industrial activities within 500m of the site, associated with the same operator Sumika Polymer Compounds Ltd. located 372m east of the site, use of inorganic chemicals.

There are two record of a Part A(2)/B licensed pollutant release within 500m of the site. These include:

-  Various plastic processes, operated by Sumika Polymer Compound Ltd., no enforcement, located 438m east, status surrendered.

- Coating process, operated by Wyeth Labs, no enforcement, located 476m east, status historical permit.

There has been one licensed discharge to controlled waters recorded within 500m of the site. This relates to miscellaneous to surface water located 372m south.

Given the age, distance from the site and nature of these records, it is considered the above records will have had no significant impact on the site.

2.9 INDUSTRIAL USAGE SITES

There are records of past or present potentially contaminative industrial sites recorded within 250m of the site.

The closest past potentially contaminative industrial site includes an old gravel pit located 65m north of the site.

The recent potentially contaminative industrial site includes an electricity substation located 129m south-east, and a clothing producer located 169m south-east. The walkover survey also recorded an on-site electricity substation.

Of the past potentially contaminative sources, it is considered that the gravel pit could be a potential source of ground gas due to backfilling.

Of the recent potential contaminative sources, it is considered that none will pose a significant risk to the proposed development. Electricity substations constructed pre 1986 could be sources of polychlorinated biphenyls. However, PCBs were banned after 1986 in the UK. As such, given that the on-site electricity substation was constructed after 2000, the risk of PCBs is negligible.

2.9.1 Historical Site Usage

Historical information indicates the site was an undeveloped field up until between 1940 and 1965, when a school was constructed on-site comprising school buildings, footpaths and soft landscaping. By 1993, the school was demolished. An electricity substation was constructed at the west of the site between 2010 and 2015. Between 2015 and present day the site has been derelict with overgrown vegetation and sporadic fly-tipping.

2.10 WORKED OUT GROUND/MADE GROUND

The desk study information records no Made Ground or Worked Ground within 500m of the site. However, given that the site was developed into a school and later demolished, Made Ground soils

should be expected. In addition, the old gravel pit located 65m north of the site has likely been backfilled.

2.11 GROUND GASES

2.11.1 Radon

Information obtained from the BGS and the National Geoscience Information Service indicates that the site lies within an area where between than 5% and 10% of homes exceed the action level of 200Bq/m³ for radon gas. Therefore, basic radon protection measures are necessary in the construction of new dwellings.

2.11.2 Landfill Gasses

In accordance with BS8576:2013, the site has been provisionally assessed for the risk of ground gases. This has been done with reference to “A pragmatic approach to ground gas risk assessment for the 21st Century” Card and Wilson, 2011.

-  No credible sources or pathways for landfill gas migration have been identified
-  The site has not been a registered landfill
-  The Made Ground is not expected to be 5m deep or an average of 3m in thickness. A historic gravel pit is located 65m north of the site, which, if backfilled, could be a potential source of ground gas
-  The site is not directly located on a carbonate-rich rock. Chalk is located beneath a significant coverage of impermeable strata, including the London Clay Formation and the Lambeth Group
-  Basic radon protection measures are recommended for this site
-  The site is not directly located on potentially naturally organic soil

It is considered that there is a low anticipated risk of ground gas affecting this site. The desk study has identified the only potential source of ground gas relates to a nearby gravel pit located 65m north of the site. As such, gas monitoring will be undertaken as part of this investigation.

2.12 POTENTIAL GEOTECHNICAL HAZARDS

The desk study information identified that the site does not lie within an area affected by coal mining or non-coal mining activities.

The desk study information indicates that there are records of surface ground workings surrounding the site, including an old gravel pit located 65m north of the site, and a gravel pit located 203m north of the site.,

The risk of naturally occurring geotechnical hazards at the site is recorded in the Groundsure report as follows:

Ground Stability Hazard	Maximum Hazard Potential Rating
Shrinking and Swelling Clays	Low
Landslides	Very Low
Ground Dissolution of Soluble Rocks	Negligible
Compressible Deposits	Negligible
Collapsible Deposits	Negligible to Low
Running Sand	Negligible to Low

The Groundsure Information assigned a low risk of shrinking and swelling clays. It is expected that the local layers of the superficial deposits and the underlying London Clay Formation will be subject to volume change potential. Therefore, the effects of any trees or hedgerows within desiccation influencing the distance of the development (as described in the NHBC Standards, Chapter 4.2) should also be considered during design and construction. Where such vegetation is within the influence of new buildings, then foundations will need to extend to depths where soils are moisture/volume stable and appropriate precautionary foundation and floor slab design measures adopted in accordance with the NHBC Building Near Trees protocol.

The Groundsure information assigned a negligible risk to ground dissolution of soluble rock. The site is underlain by chalk strata; however, overlain by a significant thickness of overburden comprising the Lambeth Group, overlain by the London Clay Formation, and overlain by superficial deposits. Given the significant overburden, the risk of dissolution features impacting the proposed development is likely to reduce the risk posed by dissolution features.

2.13 POTENTIALLY SENSITIVE LAND USES

The site is located within a nitrate vulnerable zone for Eutrophic water labelled as Chichester, Langstone and Portsmouth Harbours Eutrophic NVZ (TraC).

3 INITIAL GEO-ENVIRONMENTAL CONCEPTUAL SITE MODEL

In accordance with the Environment Agency guidance LCRM *Land Contamination: Risk Management*, (EA, 2019), this desk study and site reconnaissance report constitutes a preliminary risk assessment in order to establish the potential presence of pollutant linkages.

Contamination Sources

On-site Sources:

-  Made Ground soils associated with the previous development of Oak Park School and the subsequent demolition, and the visible spoils along the southern boundary associated with the construction of the adjacent car park. Made Ground may contain local elevations of a range of contaminants and asbestos, given their unknown origin.
-  Unexploded Ordnance (UXO).

Off-site Sources:

-  Historic gravel pit (assumed to have been backfilled) located 65m north of the site. Potential source of ground gas.

Potential Pathways:

-  Ingestion, inhalation, or absorption from direct contact with soil.
-  Leaching through the ground (vertically/laterally)
-  Inhalation of ground gas.

Potential Receptors:

-  Human Receptors (Future Site Users, Construction Workers)
-  Controlled Water Receptors (Secondary A Aquifer, Lavant Stream).

Therefore, currently, it is considered that the following potential source/pathway/receptors may be present at and around the site;

Potential Source	Potential Pathway	Potential Receptor	Considered Risk
Made Ground soils from the previous development and demolition of Oak Park School, and spoil heaps seen on satellite imagery associated with the construction of the adjacent car park	Ingestion, inhalation, or absorption from direct contact with soil.	End Users	Moderate Risk
	Leaching through the ground	Controlled Waters	Moderate Risk
	Possible contact during the work phase	Construction Workers	Moderate Risk

Potential Source	Potential Pathway	Potential Receptor	Considered Risk
Gas from off-site historic gravel pit (assumed to have been backfilled)	Inhalation	End Users	Low to Moderate Risk
UXO	Explosion	End Users	Low to Moderate
		Construction Workers	Moderate to High

4 PHASE II INTRUSIVE INVESTIGATION

4.1 SITE WORK AND SAMPLING STRATEGY

The fieldwork was undertaken in accordance with BS 5930:2015, BS EN 1997-2 (2007) and BS EN ISO 22475-1 (2006), with the exploratory locations being selected by Geo-Integrity Ltd. The exploratory hole locations can be seen in the Appendices.

The fieldwork was undertaken across two days on the 4th and 5th of June 2026 and consisted of No.5 shallow boreholes utilising a modular limited access windowless sampling rig, one TRL DCP (equivalent CBR) test and one infiltration test following the methods set out within BRE365 Digest. A standpipe was installed within CT4a for subsequent gas and groundwater monitoring.

Disturbed samples were taken at selected depths down to the base of the exploratory holes for subsequent laboratory testing and inspection. On completion, all exploratory holes were carefully backfilled with arisings in thin layers, ensuring that the excavated material was replaced in the same order as it had been removed

4.1.1 Limitations

It was agreed with Fed3 Projects Ltd. to undertake works in areas where vegetation was not overgrown due to nesting birds. The majority of the site was covered in overgrown brambles; the main limitation of this investigation was the fact that the majority of the site could not be investigated.

4.2 GROUND CONDITIONS

4.2.1 Summary

The site and laboratory test work revealed that the general succession of strata can be represented by Made Ground/Topsoil, underlain by Fill, underlain by River Terrace Deposits, underlain by the London Clay Formation. Descriptions of the strata encountered are given on the exploratory hole records and are summarised below. Further information is provided on the exploratory hole logs within the Appendices.

4.2.2 Topsoil (MG)

Encountered across the entire site from ground level down to depths ranging between 0.20m and 0.30m bgl. The material was generally encountered as dark brown friable silty organic clay.

4.2.3 Made Ground

Encountered in each borehole from depths of 0.30m and 0.40m down to depths ranging between 0.40m and 0.90m bgl. The material was generally encountered as brown sand and gravel, locally clay-bound, with gravels of fine to coarse sub-angular to sub-rounded flint, brick and concrete.

4.2.4 Fill

Encountered in CT1 and CT2 from depths of 0.20m and 0.70m bgl down to depths ranging between 1.50m and 0.40m bgl. The material was encountered as cobbles/boulders of concrete and brick with some silty sand and gravel, the gravels being brick and concrete.

4.2.5 River Terrace Deposits

Encountered within each of the exploratory holes from depths of 0.20m and 1.50m down to a proven depth of 4.00m bgl (within CT2). The material was variable with layers of very loose to dense orange grey clay-bound gravel, and very soft to firm light brown silty clay. Gravels were encountered as fine to coarse, sub-angular to sub-rounded with occasional cobbles of flint.

Laboratory classification testing undertaken on a representative sample taken from this material revealed:

Parameter	Results	Comments
Water Content (%)	1 – 22	CLAY of Intermediate Plasticity (BS5930 Casagrande)
Liquid Limit (%)	38 – 42	
Plastic Limit (%)	19 – 22	
Plasticity Index (%)	18 – 20	
Modified Plasticity Index (%)	13 – 20	Shrinkable soil of Low to Medium Volume-Change Potential (NHBC Standards)
Retained on 425µm sieve (%)	0 - 26	BS1377 'Coarse Soil' Fraction
Passing 63µm sieve (%)	64 – 84	Fines (silt/clay) fraction

SPT 'N' values recorded within the fine-grained layers ranged between 3 and 31. Low 'N' values were sporadically recorded within this stratum, with no increase in strength with depth. 'N' values indicate layers of very soft fine-grained material.

Laboratory partial-size distribution testing undertaken on representative coarse-grained soil samples revealed the following proportions:

Parameter	Range	Comments
Passing 63µm sieve (%)	12 – 41	Fines (silt/clay) Fraction
Portion <2mm and >63µm (%)	7 – 55	Sand Fraction
Portion <63mm and >2mm (%)	4 – 81	Gravel Fraction

The grain size percentage shows the high variability of material with dominant fractions of sand and gravel and smaller proportions of clay/silt.

SPT 'N' values undertaken within this coarse-grained material ranged between 2 and 50, indicating variably very loose to very dense coarse-grained soils.

4.2.6 London Clay Formation

Encountered within CT2 from a depth of 4.00m down to the base of the borehole in excess of 4.45m. The material was encountered as firm dark grey silty clay. On-site field description indicated sample recovery was poor.

Laboratory classification testing undertaken on a representative sample taken from this material revealed:

Parameter	Results	Comments
Water Content (%)	23	CLAY of Low Plasticity (BS5930 Casagrande)
Liquid Limit (%)	32	
Plastic Limit (%)	20	
Plasticity Index (%)	12	
Modified Plasticity Index (%)	6	Non-Shrinkable (NHBC Standards)
Retained on 425µm sieve (%)	51	BS1377 'Coarse Soil' Fraction
Passing 63µm sieve (%)	42	Fines (silt/clay) fraction

It is considered that the above results are not representative of the London Clay Formation and, due to the poor nature of the sample, should not be used for design purposes.

A single SPT was undertaken at a depth of 4.00m bgl and recorded an 'N' value of 12, indicating a firm fine-grained soil.

4.3 SULPHATE AND PH TESTS

Water soluble sulphate, pH, acid soluble sulphate and total sulphur tests were carried out on one sample of Made Ground taken at a depth of 0.20m bgl, and four samples from the River Terrace Deposits at depths ranging between 1.00m and 2.50m bgl. These recorded values are shown in the table below:

Parameter	Range	
	Made Ground	River Terrace Deposits
Soluble Sulphate (mg/l)	200	17-260
pH units	8.3	7.8-8.5
Acid Soluble Sulphate (%)	0.22	0.02-0.35
Total Sulphur (%)	0.08	<0.01-0.06

4.3.1 Groundwater

Groundwater was encountered during the intrusive investigation at depths ranging between 2.50m and 2.70m bgl.

Groundwater monitoring is currently being undertaken within the standpipe installed within CT4a. The results are presented in the table below.

Standpipe	Groundwater Level (mbgl)			
	01/07/2026	09/07/2026	TBC	TBC
CT4a	1.55	Dry	-	-

4.3.2 Infiltration Tests

Infiltration testing was undertaken within a hand-dug trial pit (SA1) put down to a depth of 0.79m bgl within the coarse-grained River Terrace Deposits. Three repeat tests were undertaken, and the following infiltration rates were recorded:

-  Test 1: 1.73×10^{-3} m/s
-  Test 2: 8.03×10^{-4} m/s
-  Test 3: 6.01×10^{-4} m/s

An average infiltration rate from the three tests is calculated to be 1.04×10^{-3} m/s. The graphs are included in Appendix B.

4.3.3 California Bearing Ratio Testing

TRL DCP (equivalent CBR) Testing was undertaken adjacent to SA1 from ground level and recorded a CBR value of 17% for the River Terrace Gravels.

4.3.4 Gas Monitoring

Gas monitoring was undertaken alongside groundwater monitoring within the standpipe installed within CT4a. The gas monitoring recorded methane below detectable limits, carbon dioxide levels between 1.6% and 2.4%, oxygen levels between 18.9% and 19.4%, with hexane levels recorded between below detectable limits and 0.001% and carbon monoxide recorded below detectable limits. Peak flow was recorded at 0l/h, and atmospheric pressure was recorded between 1023mbar and 1017mbar. A further two monitoring visits will be undertaken as part of this investigation.

4.3.5 Evidence of Contamination

No obvious or significant contamination was identified within the near-surface Made Ground soils and underlying natural soils encountered during the fieldwork. Made Ground soil was proven across the site, with construction fill encountered locally within CT1 and CT2 comprising cobbles and boulders of concrete and brick.

5 GEOENVIRONMENTAL TESTING

Geo-environmental laboratory testing was scheduled by Geo-Integrity on seven soil samples (six Made Ground, one Natural Soil sample) recovered during the fieldwork. The testing was carried out at an MCERTS and UKAS-accredited laboratory. The results are presented in the Appendices.

Seven soil samples were tested for a varied suite containing the following

-  Metals and inorganic substances
-  Speciated Polycyclic Aromatic Hydrocarbons (PAH)
-  Benzene, Toluene, Ethylbenzene and Xylene (BTEX)
-  Total Petroleum Hydrocarbons (TPH), with eight band split
-  Asbestos Screen on the six Made Ground samples

WAC testing was undertaken on a representative near-surface Made Ground soil sample recovered from CT1 to aid waste classification of the soils.

6 GEOTECHNICAL INTERPRETIVE SECTION

The proposed development is to construct a care-home with associated parking, road access and soft landscaping areas.

The proposed development plan is provided in Appendix A.

6.1 GROUND MODEL SUMMARY

The exploratory fieldwork undertaken during this investigation has confirmed the following ground model:

Stratum	Top Depth (m bgl)	Bottom Depth (m bgl)	Description
Topsoil (MG)	GL	0.20 – 0.30	Dark brown friable silty organic clay
Made Ground	0.3 – 0.4	0.40 – 0.90	Brown sand and gravel, locally clay-bound, with gravels of fine to coarse sub-angular to sub-rounded flint, brick and concrete
Fill	0.20 – 0.70	0.40 – 1.50	Cobbles/boulders of concrete and brick with some silty sand and gravel, the gravels being brick and concrete
River Terrace Deposits	0.20 – 1.50	4.00 (CT2)	Highly variable with layers of very loose to dense orange grey clay-bound gravel, and very soft to firm light brown silty clay. Gravels being fine to coarse, sub-angular to sub-rounded with occasional cobbles of flint. Layers of fine-grained soils comprised very low to high strength (BS5930:2015) with Low to Medium Volume-Change Potential (NHBC Standards)
Shallow groundwater table resting at depths ranging between 1.55m and 2.70m bgl			
London Clay Formation	4.00 (CT2)	>4.45 (CT2)	Poor sample recovery – further assessment required to obtain representative samples. Current data not deemed representative of this material.

6.1.1 Chalk Cavity Hazards

The site is underlain by chalk, so the potential of chalk dissolution and the development of sinkholes must be considered. Such features can develop unpredictably in the upper weathered surface of the chalk and, if present, require special measures to be incorporated in foundation design. A natural cavities risk assessment undertaken as part of the desk study (using methodology outlined in Edmonds) provided a moderately high anticipated risk of natural cavities beneath this site. The potential for ground instability from unrecorded chalk mining beneath the site is unlikely due to the significant thickness of overburden and shallow groundwater table.

This ground investigation penetrated a maximum depth of 4.25m and encountered River Terrace Deposits down to a proven depth of 4.00m bgl, underlain by the London Clay Formation. Published historical borehole data from the BGS records a nearby borehole which penetrated a maximum depth

of 12.20m bgl which recorded clayey gravel down to a depth of 3.00m bgl (interpreted to be superficial deposits) underlain by firm to stiff fissured silty clay (interpreted to be the London Clay Formation) down to the base of the borehole at a depth of 12.20m bgl. Water seepages were noted at 10.00m bgl.

The nearest deep borehole penetrating through the London Clay Formation, the Lambeth Group and the White Chalk Group is located 800m south-west of the site and records the London Clay Formation down to 39m bgl, underlain by the Lambeth Group down to 104m bgl, underlain by the White Chalk Group.

Therefore, given the significant thickness of overburden (>100m) the risk of dissolution features impacting the site is considered to be negligible.

6.2 EXCAVATIONS

Conventional plant should be sufficient for the excavation of the underlying soils at the site. However, Excavations may be unstable in the short term due to water-bearing coarse-grained material. During the intrusive investigation, boreholes collapsed below 2.00m bgl within the River Terrace Deposits.

Excavations are likely to remain dry down to depths of 1.50m bgl. Significant groundwater should be expected when excavating below 1.50m bgl. It should be appreciated that seasonal variations may exist, and hence groundwater entries may occur particularly during the wetter months.

6.3 FOUNDATIONS

6.3.1 Shallow Foundations

This ground investigation has identified localised deepened Made Ground (found locally to be as deep as 1.50m), shallow groundwater levels (shallowest recorded during this investigation was 1.55m), and highly variable material forming the River Terrace Deposits. This included layers of very soft fine-grained soils and very loose coarse-grained soils (SPT 'N' values of <3 at 2.00m bgl). Therefore, given the problematic near-surface ground conditions, it is considered that shallow foundations will not be viable for the proposed development.

6.3.2 Piled Foundations

Deeper foundations, such as piles, could be adopted to bypass the variable River Terrace Deposits, founding within the underlying competent London Clay Formation.

A deeper borehole investigation will be required to obtain soil parameters for the underlying London Clay Formation to aid pile design.

A specialist piling contractor should be consulted to formulate a suitable piling technique and type for the ground conditions encountered at this site, before commencement of the works.

6.4 SULPHATE ATTACK ON UNDERGROUND CONCRETE

Using the results of the concrete aggression tests, the concrete design mix recommendations for subsurface concrete have been assessed in terms of BRE Special Digest 1. The classification is as follows:

Type of Site	Ground-water	Characteristic Sulphate			Characteristic	
		Soil Soluble (mg/l)	Ground-water (mg/l)	Total Potential (%)	Design Sulphate Class	pH (pH units)
Brownfield	Mobile	200	n/a	0.24	DS-2	7.8

The above assessment provides an Aggressive Chemical Environment for Concrete (ACEC) class of AC-2.

However, the London Clay Formation characteristically contains substantial sulphate concentrations. As such, sulphate testing should be undertaken on representative samples from the London Clay Formation to determine the design sulphate class and the aggressive chemical environment.

6.5 INFILTRATION MEASURES

Appropriately designed sustainable drainage systems (SuDS) are more sustainable than using piped drainage to local sewer systems. However, infiltration measures close to buildings may result in undermining of foundations and softening of soils, leading to instability. Attenuation measures should be located at suitable distances from foundations and infrastructure.

Given the shallow groundwater table recorded at 1.55m bgl, and locally deepened Made Ground soil encountered down to a maximum depth of 1.50m, soakaways may not be viable at this site. The LLFA require 1m clearance between the base of the soakaway and the groundwater table. An infiltration test was undertaken at 0.79m bgl within the coarse-grained soils of the River Terrace Deposits and recorded very fast infiltration rates (average infiltration rate $1.04 \times 10^{-3} \text{m/s}$). It is

considered that winter groundwater monitoring should be undertaken to assess the groundwater levels over the wetter winter months, which will determine the viability of conventional soakaways.

6.6 ACCESS ROADS AND PAVEMENT DESIGN

Made Ground soils have been proven down to a maximum depth of 1.50 m bgl. It is recommended that the following precautions be taken: -

-  Heavy proof-rolling of the exposed sub-grade strata
-  Excavation of soft spots encountered and replacement with well-compacted granular material
-  The usage of a geo-textile separator layer above the sub-grade
-  Assume CBR value of 10% for the underlying River Terrace Deposits in line with the Highways Department document HD 25-94 Road foundations and results of the CBR tests undertaken during this investigation.

Additionally, the soils on site are likely to be frost susceptible, and suitable minimum construction thicknesses should be adopted in this regard.

6.7 GAS PROTECTION

The risk of ground gases impacting the site was assessed by reference to the following industry standards and guidance papers: BS8485: 2015, BS8576:2013, NHBC Hazardous Ground Gas 2023, and “A pragmatic approach to ground gas risk assessment for the 21st Century” Card and Wilson, 2011.

Four monitoring visits are scheduled as part of the ground investigation with two visits currently undertaken at the site. The visits currently undertaken recorded methane gas below detectable limits, carbon dioxide levels between 1.6% and 2.4%, and oxygen levels between 18.9% and 19.4%. A peak flow rate of 0l/h has been recorded.

The worst-case gas screening value (GSV) is 0l/h due to no flow being recorded.

From the data obtained so far, the characteristic gas situation would be CS1, in accordance with BS8485:2015. Full details of gas concentrations and gas flow data recorded during the monitoring visits thus far are given in the Appendices. Upon completion of the monitoring visits, this classification may change.

The site is located in an area where between 5% and 10% of homes exceed the action level of 200Bq/m³ for radon gas, and therefore, **basic radon protection measures are necessary in the construction of new dwellings or extensions.**

7 GEO-ENVIRONMENTAL INTERPRETATIVE SECTION

7.1 RISKS TO HUMAN HEALTH

7.1.1 Introduction

Environment Agency guidance LCRM *Land Contamination: Risk Management*, (EA, 2019), states that human health risk assessment should be undertaken by a tiered approach using the source-pathway-receptor principle. The desk study undertaken as part of this investigation identified the following:

Contamination Sources

On-site Sources:

-  Made Ground soils associated with the previous development of Oak Park School and the subsequent demolition, and the visible spoils along the southern boundary associated with the construction of the adjacent car park. Made Ground may contain local elevations of a range of contaminants and asbestos, given their unknown origin.
-  Unexploded Ordnance (UXO)

Off-site Sources:

-  Historic gravel pit (assumed to have been backfilled) located 65m north of the site. Potential source of ground gas.

Potential Pathways:

-  Ingestion, inhalation, or absorption from direct contact with soil.
-  Leaching through the ground (vertically/laterally)
-  Inhalation of ground gas
-  Explosion

Potential Receptors:

-  Human Receptors (Future Site Users, Construction Workers)
-  Controlled Water Receptors (Secondary A Aquifer, Lavant Stream).

Therefore, an initial phase of sampling and testing was undertaken as part of this phase II investigation. However, given the restricted access on site only a small portion of the site was investigated, as shown on the exploratory hole plan. It is considered that further investigation will be

required to characterise the entire site. The samples collected and tested as part of this investigation provide a preliminary assessment of the contamination levels within the near-surface soils.

Results are analysed under the second tier, known as a Generic Quantitative Risk Assessment (GQRA), which uses generic guideline values to compare site chemical data against, and the final tier would be a Detailed Quantitative Risk Assessment (DQRA), which uses data derived from the ground investigation to assess risks to identified receptors.

The assessment included in this report comprises a GQRA, which is undertaken by comparing soil contaminant concentrations from this investigation with conservative Generic Assessment Criteria (GAC). GACs for various land use and exposure scenarios have been selected from the following sources:

-  CL:AIRE Category 4 Screening Levels (C4SL);
-  LQM Suitable for Use Levels (S4UL);
-  CL:AIRE/EIC/AGS GAC

The GAC have been derived using the Environment Agency Contaminated Land Exposure Assessment (CLEA) model, for a range of land uses and exposure scenarios, including:

-  Residential with the consumption of home-grown produce;
-  Residential without the consumption of home-grown produce;
-  Commercial;
-  Allotments;
-  Public Open Space near residential housing (POS_{resi}); and
-  Public Open Space public park scenario (POS_{park})

Given that the proposed development is to construct a care home, a “residential without the consumption of home-grown produce” land-use scenario has been selected for this assessment.

7.2 RESULTS OF CHEMICAL TESTING

Seven soil samples were screened as part of this investigation.

Topsoil (MG):

-  CT1 at a depth of 0.20m bgl
-  SA1 at a depth of 0.20m bgl

Made Ground:

-  CT2 at a depth of 0.50m bgl
-  CT3 at a depth of 0.30m bgl
-  CT4 at a depth of 0.35m bgl

Fill:

-  CT1 at a depth of 1.20m bgl

The above soil samples were screened against the relevant GAC for a “Residential without the consumption of home-grown produce” land-use scenario as described above and recorded asbestos within three samples.

7.2.1 Asbestos

Screening for the presence of asbestos revealed loose fibres of asbestos within one sample of Fill taken from CT1 at a depth of 1.20m bgl, and two samples of Made Ground taken from CT2 at a depth of 0.50m bgl and CT3 at a depth of 0.30m bgl. The table below summarises the type of asbestos and the total asbestos content:

Sample	Stratum	Asbestos Type	Total Asbestos Content (%)
CT1 (1.20m bgl)	Fill	Chrysotile and amosite (cement and loose fibres)	0.435
CT2 (0.50m bgl)	Made Ground	Amosite (loose fibres)	0.002
CT3 (0.30m bgl)	Made Ground	Amosite (loose fibres)	0.002

7.2.2 Risk To End Users

Given the findings of the desk study, walkover survey, intrusive investigation and laboratory testing, it is considered that the risk of contamination to construction workers, end users and surrounding residents from the proposed development at this site is high due to asbestos cement and fibres within the near-surface Made Ground/Fill.

The Joint Industry Working Group (JIWG) decision support tool for CAR2012 for receptor ranking has been used to assess the risk posed to end users. The proposed development is a care home, the critical receptors are elderly residents and young adults working full-time. Potential disturbance

of near-surface soils is expected through activities such as gardening. The decision support tool has deemed a medium risk to receptors, therefore remedial measures will be required to reduce the risk to acceptable levels. Remedial measures will be required as part of the proposed development. However, further sampling and testing should be undertaken to assess areas not investigated due to overgrown brambles.

We recommend that the conclusions of this report be agreed with the relevant Local Authority at the earliest stage, to reduce potential delays to the development.

7.2.3 Reducing the Risk to Construction Workers

To reduce the risk to as low as reasonably practicable for the construction workers, it is recommended that high standards of personal hygiene should be maintained amongst the site personnel at all times. All personnel coming into contact with the soil, ground workers in particular, should be instructed to use gloves when on site to avoid dermal contact and restrict inadvertent hand-to-mouth ingestion. Washing facilities should be provided for the site staff to use and should be used prior to eating or smoking. Reference should be made to the HSE Document, "Protection of Workers and the General Public during Development of Contaminated Land".

Additionally, the initial works risk assessment has been undertaken using the JIWG Decision Support Tool CAR2012 to establish the probably licensing status of the works under CAR2012 and any precautionary procedures required for workers coming into contact with the Made Ground soils impacted by asbestos pieces. The worksheets are included in the Appendices and indicate that given the type of asbestos encountered and its distribution, the works are likely to be Non-Licensed, however further recommendations on RPE, dust suppression and hygiene/decontamination are also included, and these should be referred to in the first instance.

These include localised mechanical dust suppression and the wearing of EN140 with P3 filter half face masks when dealing with the asbestos-impacted Made Ground, and the provision of localised and enhanced personal decontamination facilities.

It is also recommended that a watching brief for undiscovered contamination is included in the Works Method Statement. Given the long human history of the site, it is always possible that some previous undiscovered contamination may be encountered. If this is the case, the area should be isolated, and contact should be made with a suitably qualified professional for further advice. This is particularly important if the contamination is possibly ACM or liquid-based.

7.3 RISK TO CONTROLLED WATERS

None of the metals and inorganic contaminants tested for within the total soil chemical tests recorded significantly elevated values. Furthermore, no evidence of free-phase/mobile contamination was observed during the fieldwork. Therefore, based on the sampling/testing currently undertaken, there is no elevated risk to controlled waters. However, further testing within the areas not investigated should be undertaken.

The Environment Agency is the regulatory body charged with the protection of controlled waters and may be a consultee in the planning process. We recommend that the conclusions of this report be agreed with the relevant Local Authority at the earliest stage, to reduce potential delays to the development.

7.4 RISK TO UNDERGROUND WATER SUPPLY PIPES

Based upon the guidance document from the UK Water Industry Research (UK WIR), 'Contaminated Land Assessment Guidance', February 2014, and the results of the samples tested specifically for the UKWIR suite from the site, it is considered that conventional PE water pipes would be suitable at this site, as no elevated levels of hydrocarbons were encountered. However, further testing within the areas not investigated should be undertaken.

This should be confirmed with the local water company, as not all authorities use this guidance.

8 WASTE DISPOSAL CLASSIFICATION

8.1 INTRODUCTION

Excavation for foundations or services will produce waste soil and possibly other waste streams. As a waste producer, you have a duty of care under section 34 of the Environmental Protection Act 1990 to ensure, amongst other things, that these wastes are:

-  Correctly stored
-  Correctly classify
-  Handed only to an authorised person
-  Disposed of properly

To aid with these obligations, we have used HazWasteOnline to undertake the Hazard Assessment Screen as part of this investigation, to establish whether the sampled soils should be considered as either hazardous or non-hazardous waste. This classification process is in line with the Environment Agency's guidance WM3 "Guidance on the classification and assessment of waste", Version 1.2, October 2021.

8.2 RESULTS OF HAZARD ASSESSMENT

The samples analysed for human health listed in section 7.2 have been classified using HazWasteOnline.

The full results of the HazWasteOnline Stage-One analyses can be seen in the Appendices.

The HazWasteOnline classification summary sheet from this investigation provides a waste classification of Non-Hazardous for six of the seven samples analysed. One sample taken from the Fill material at a depth of 1.20m bgl recorded >0.1% asbestos and was therefore classified as hazardous waste. Should any visible pieces of asbestos be encountered, this would be classified as mixed waste, and the visible pieces of asbestos would need to be separated prior to disposal at a landfill.

8.3 WASTE ACCEPTANCE CRITERIA (WAC) TESTING RESULTS

To further classify the waste soil for landfill disposal, Waste Acceptance Criteria (WAC) testing has been carried out on a representative Made Ground sample taken from CT1 at a depth of 0.20m bgl. However, due to asbestos fibres encountered within the Made Ground soils quantified at 0.002%,

the material cannot be classified as inert material and is therefore immediately classified as non-hazardous waste.

It is considered that the underlying natural soils beneath the site qualify in accordance with EU Council Decision 2003/33/EC para. 2.1.1. "uncontaminated soil can be classified as Inert without testing".

As such, given the testing results, currently the underlying soils from the site are considered likely to be classified as follows:

Strata	Classification	Description of Material	EWC Code	Recommended Landfill Tax Rate
Topsoil (MG)	Non-Hazardous	"Soils and stones with some man-made material, including brick"	17 05 04	Lower Rate
Made Ground	Non-Hazardous	"Soils and Stones with some man-made material including brick and concrete and loose fibres of asbestos (0.002%)"	17 05 04	Lower Rate
Fill	Hazardous	"mixtures of fractions of concrete and bricks containing hazardous substances"	17 01-06*	Standard Rate
Natural Soil	Inert	"Soils and stones"	17 05 04	Lower Rate

Under section 63(2) of the Finance Act 1996 it states where a disposal to landfill consists mainly of qualifying material(s), but includes a small amount of standard-rated material, the whole load is taxable at the lower rate. As such, the surrounding Made Ground soils (excluding any Topsoil) are considered to be taxable at the lower rate. The natural soils are taxable at the lower rate.

We recommend that analytical results relevant to the materials being disposed of should be provided to the landfill operators or waste management contractors to confirm whether it meets their licence agreements and to confirm tipping costs.

All wastes removed from the site should be consigned, transported and disposed of in full accordance with all relevant UK legislation.

9 RECOMMENDATIONS

We recommend that a watching brief should be undertaken during the construction phase, and if, during development, any previously undiscovered contamination (including visual or olfactory evidence) is found, then site management should be immediately informed and inspection by a suitably qualified person should be undertaken.

A detailed UXO risk assessment will be required prior to the development works.

Basic radon protection will be required as part of the proposed development.

Due to overgrown brambles, the majority of the site was not accessible; therefore, it is considered that further investigation should be undertaken to confirm that the ground conditions are similar to those sampled and tested as part of this investigation.

Due to the presence of asbestos within the near-surface soils this poses a significant risk to both the end user and the construction workers. Further testing should be undertaken in the areas not accessible by this investigation. Remedial measures will be required as part of the proposed development, the scope of which should be determined after the recommended further sampling and testing. An asbestos risk assessment and plan of works should be undertaken prior to any site activities which will disturb the near surface soils, ensuring compliance with the Control of Asbestos Regulations (CAR) and Construction (Design and Management) Regulations (CDM).

Given the findings of this investigation, remedial measures will be required, however further sampling and testing is required to fully characterise the site conditions. This should be undertaken following the removal of overgrown brambles.

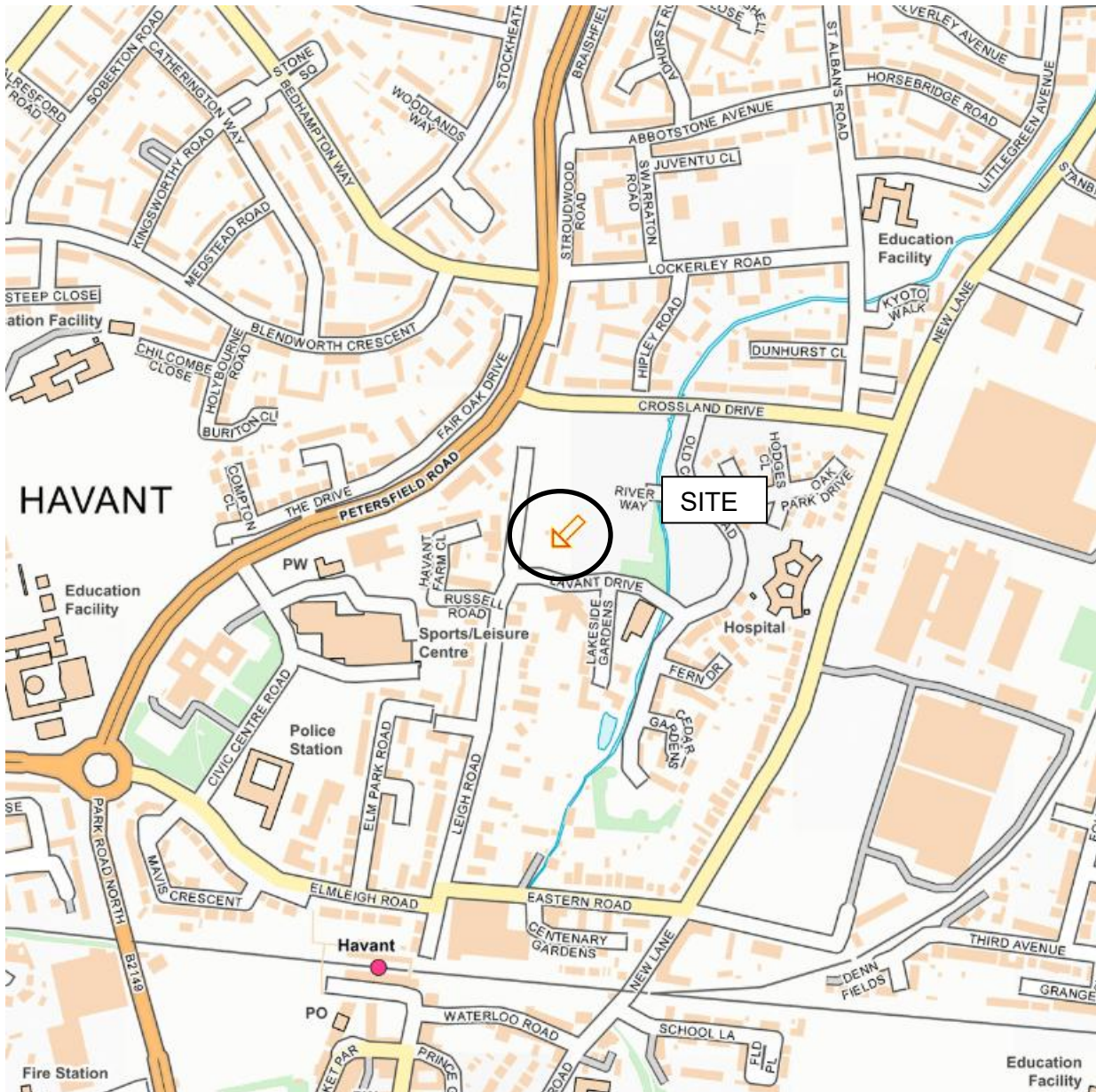
Further investigation should include:

-  Additional near-surface soil sampling and testing to complete the human health and controlled water risk assessment
-  Deeper boreholes within the footprint of the proposed care home to obtain soil parameters for pile design due to the problematic near-surface ground conditions.
-  Groundwater monitoring over the winter period to assess the viability of conventional soakaways.

REFERENCES

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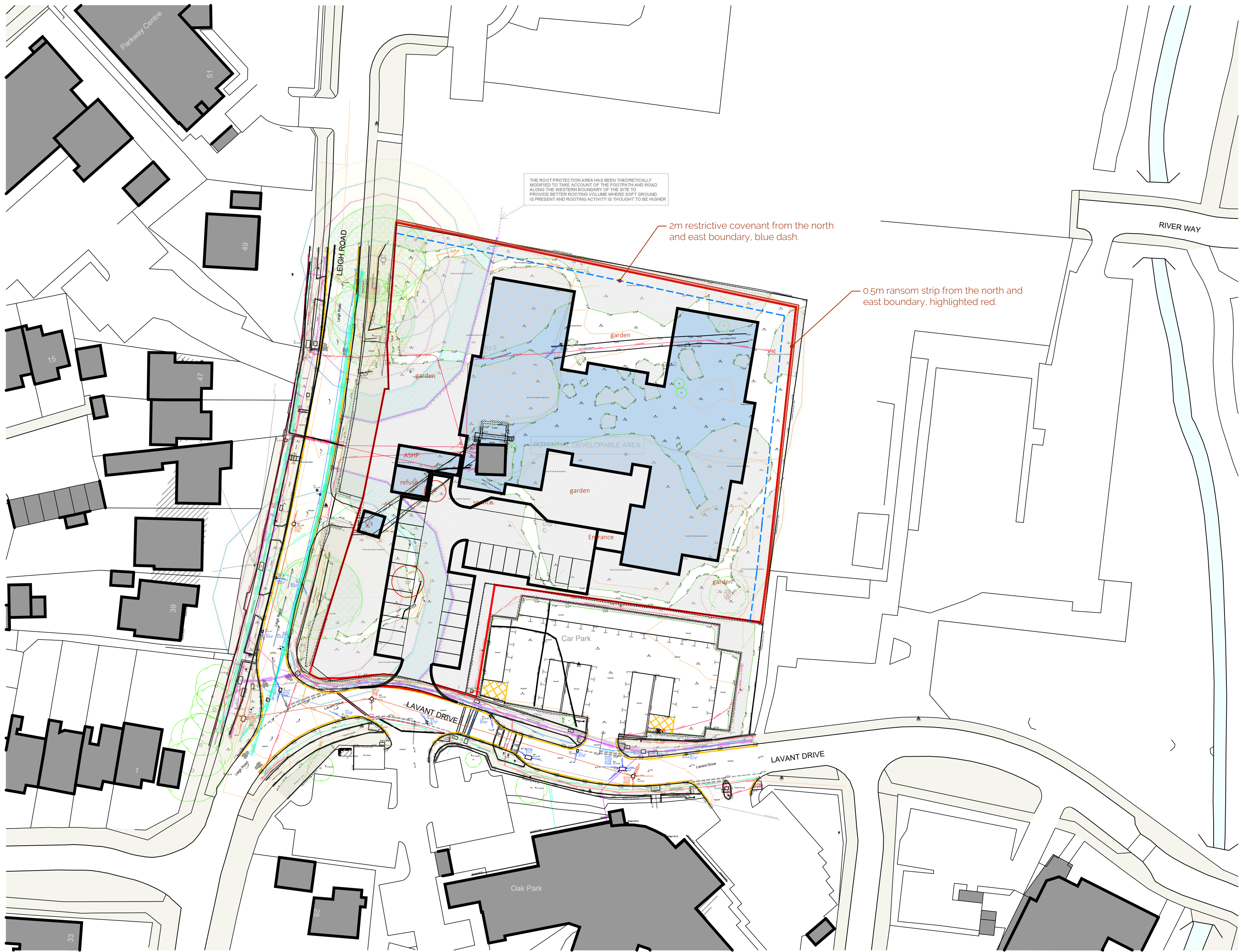
APPENDIX A



May 2026

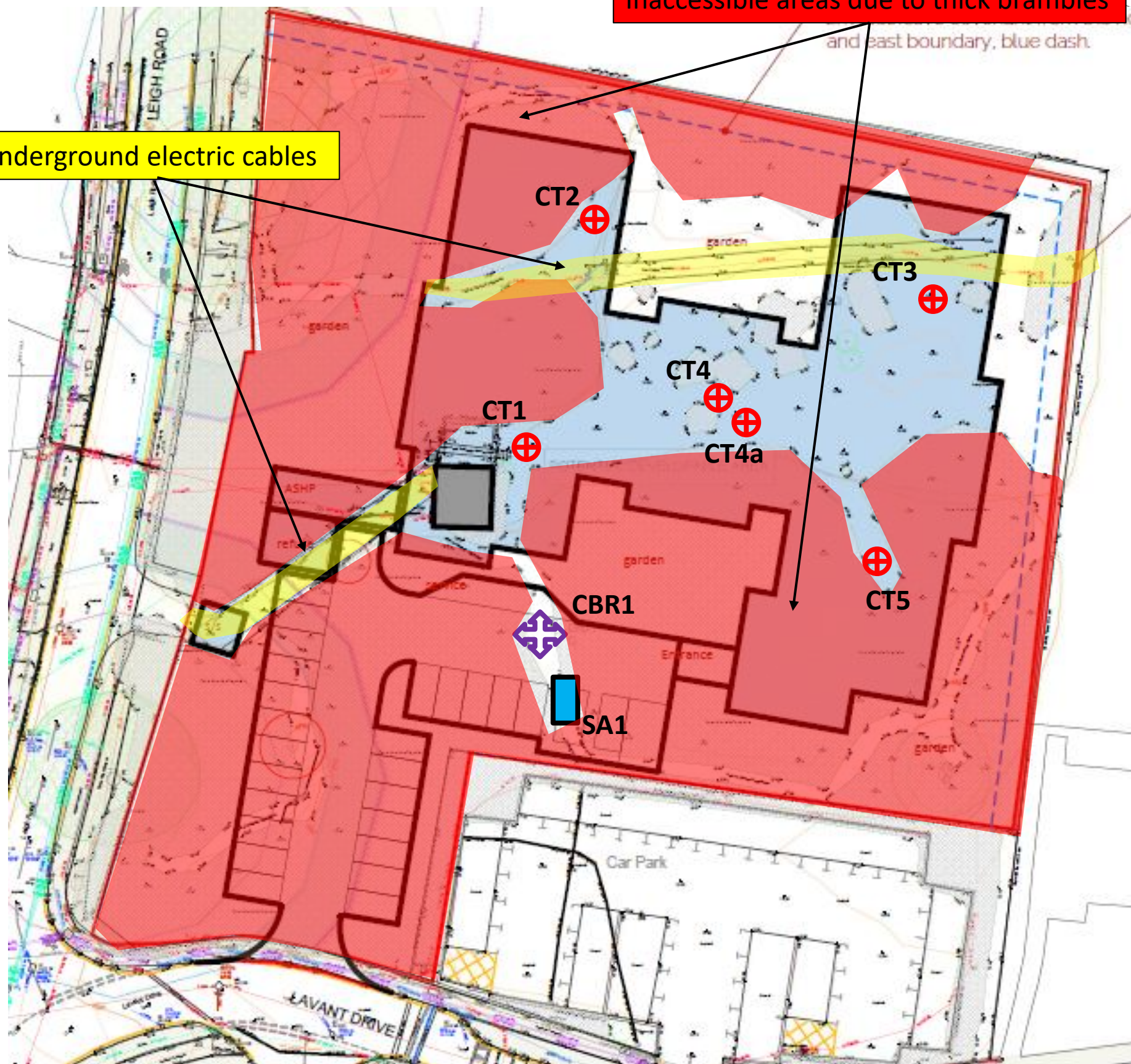
SITE LOCATION PLAN

Report No:-26-04-21



Underground electric cables

Inaccessible areas due to thick brambles



Key

⊕ Modular Windowless Sampling Boreholes

Hand-dug soakaway

⊕ CBR Test



4 Church Street
Maids Moreton
MK18 1QE

Tel:- 01280 816409
Mob:- 07858 367 125
www. geo-integrity.co.uk

Exploratory Hole Location Plan

SITE:- Lavant Drive,
Havant

JOB NO.:- 26-04-21

CLIENT:- Fed3

Drawn
LA

Checked
MB

Scale: Not To Scale, for
indicative purposes only



Site Access



On-site substation

July 2026

SITE PHOTOGRAPHS

26-04-21



Wooden bridge providing access to the site



Window Sampling

July 2026

SITE PHOTOGRAPHS

26-04-21



Window Sampling



Window Sampling

July 2026

SITE PHOTOGRAPHS

26-04-21



Infiltration Testing



Large portions of the site were not accessible due to overgrown vegetation

July 2026

SITE PHOTOGRAPHS

26-04-21



Large portions of the site were not accessible due to overgrown vegetation



Large portions of the site were not accessible due to overgrown vegetation

July 2026

SITE PHOTOGRAPHS

26-04-21

APPENDIX B



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01280 816409

Site

Land North of Lavant Drive, Havant, PO92AW

Number
CT1

Machine : Window Sampling Rig

Method : Drive-in Windowless
Sampler

Dimensions

102mm to 2.00m
87mm to 3.00m
77mm to 4.00m

Ground Level (mOD)**Client**

Fed3 Projects

**Job
Number**
26-04-21

Location**Dates**

04/06/2026

Engineer

Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20	D				(0.30)	TOPSOIL (MG) - Dark brown friable silty organic CLAY		
					0.30			
					(0.40)	MADE GROUND - Dark brown claybound GRAVEL. Gravel is fine to coarse subangular to subrounded flint, brick and concrete		
					0.70			
1.00-1.45	SPT N=13	4,5/3,4,3,3			(0.80)	FILL - COBBLES/BOULDERS of concrete and brick with some silty SAND AND GRAVEL. Gravel is brick and concrete		
1.20	D							
					1.50			
1.75	D				(0.60)	RIVER TERRACE DEPOSITS - Very loose becoming dense orange-grey-brown claybound GRAVEL. Gravel is fine to coarse subangular to subrounded flint		
2.00-2.45	SPT N=2	2,1/1,1,0,0			2.10			
						RIVER TERRACE DEPOSITS - Firm orange-brown very silty slightly sandy CLAY with rare flint gravel		
2.50	D	very slight(1) at 2.50m.			(1.40)			
3.00-3.45	SPT N=31	3,5/7,7,8,9						
					3.50			
3.80	D				(0.50)	RIVER TERRACE DEPOSITS - Medium dense orange-brown slightly clayey silty fine SAND		
					4.00			
						Complete at 4.00m		

Remarks

Moist 2-3m
Hole collapsed to 3m

**Scale
(approx)**

1:25

**Logged
By**

HF

Figure No.

26-04-21.CT1



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Site

Land North of Lavant Drive, Havant, PO92AW

Number
CT2

Machine : Window Sampling Rig

Method : Drive-in Windowless Sampler

Dimensions

102mm to 2.00m
87mm to 3.00m
77mm to 4.00m

Ground Level (mOD)**Client**

Fed3 Projects

Job
Number
26-04-21

Location**Dates**

04/06/2026

Engineer

Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	D				(0.20)	TOPSOIL (MG) - Dark brown friable organic silty CLAY		
					0.20	FILL - Concrete rubble		
					(0.20)			
					0.40	MADE GROUND - Loose brown-grey silty SAND AND GRAVEL. Gravel is fine to coarse subangular to subrounded concrete, brick and flint		
					(0.30)			
					0.70	RIVER TERRACE DEPOSITS - Loose red-brown-grey claybound GRAVEL. Gravel is fine to coarse, subangular to subrounded flint		
1.00-1.45	SPT N=14		4,5/4,5,3,2					
1.50	D				(1.60)			
2.00-2.45	SPT N=9		5,4/4,3,1,1					
2.50	D				2.30	RIVER TERRACE DEPOSITS - Soft to firm light brown silty CLAY		
					(0.50)			
			Water strike(1) at 2.70m, no rise after 5 mins.		2.80	RIVER TERRACE DEPOSITS - Loose to medium dense dense light brown silty slightly clayey fine SAND		
3.00-3.45	SPT N=19		3,5/5,4,5,5					
3.50	D				(1.20)			
4.00-4.45	SPT N=12		2,3/3,3,3,3		4.00	LONDON CLAY FORMATION - Firm dark grey silty CLAY		
4.25	D				(0.45)			
					4.45	Complete at 4.45m		

Remarks

Collapsed to 2.80m

Scale
(approx)

1:25

Logged
By

HF

Figure No.

26-04-21.CT2



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Site

Land North of Lavant Drive, Havant, PO92AW

Number
CT3

Machine : Window Sampling Rig

Method : Drive-in Windowless Sampler

Dimensions

102mm to 2.00m
87mm to 3.00m

Ground Level (mOD)**Client**

Fed3 Projects

Job
Number
26-04-21

Location**Dates**

04/06/2026

Engineer

Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.30	D				(0.30)	TOPSOIL (MG) - Dark brown friable organic silty CLAY		
					0.30	MADE GROUND - Medium dense grey-brown silty sandy GRAVEL. Gravel is fine to coarse subangular to subrounded flint and brick		
					(0.60)			
					0.90	RIVER TERRACE DEPOSITS - Dense brown beige clay bound GRAVEL. Gravel is fine to coarse, subangular to subrounded flint		
1.00-1.45 1.00	SPT N=38 D		7,8/11,12,8,7		(1.10)			
1.50	D							
					2.00	RIVER TERRACE DEPOSITS - Soft becoming firm brown silty CLAY		
2.00-2.45	SPT N=7		1,1/2,1,2,2		(1.00)			
2.50	D							
					3.00	Complete at 3.00m		
3.00-3.45	SPT N=15		3,4/4,3,4,4					

Remarks

Collapsed in to 2.00m

Scale
(approx)

1:25

Logged
By

HF

Figure No.

26-04-21.CT3



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Site

Land North of Lavant Drive, Havant, PO92AW

Number
CT4

Machine : Window Sampling Rig

Method : Drive-in Windowless
Sampler

Dimensions

102mm to 1.00m
67mm to 1.50m

Ground Level (mOD)**Client**

Fed3 Projects

Job
Number
26-04-21

Location**Dates**

04/06/2026

Engineer

Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.35	D				(0.30) 0.30 (0.10) 0.40	TOPSOIL (MG) - Dark brown friable organic silty CLAY		
						MADE GROUND - Loose brown silty SAND AND GRAVEL. Gravel is fine to coarse, subangular to subrounded flint and brick		
						RIVER TERRACE DEPOSITS - Very dense red-brown claybound GRAVEL. Gravel is fine to coarse subangular to subrounded flint		
1.00-1.40 1.00	SPT 50/245 D		4,5/11,17,16,6		(1.10)			
1.40-1.44 1.50	SPT 25*/10 50/25 D		21,4/21,21,8		1.50	Complete at 1.50m		

Remarks

SPT Refused at 1.00m and 1.40m
Repositioned 2m south (CT4A)

Scale
(approx)

1:25

Logged
By

HF

Figure No.

26-04-21.CT4



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Site
Land North of Lavant Drive, Havant, PO92AW

Number
CT4A

Machine : Window Sampling Rig
Method : Drive-in Windowless Sampler

Dimensions
102mm to 2.00m
87mm to 3.00m

Ground Level (mOD)

Client
Fed3 Projects

Job Number
26-04-21

Location

Dates
04/06/2026

Engineer
Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.50	D				(0.20) 0.20	TOPSOIL (MG) - Dark brown friable organic silty CLAY			
					(0.90)	RIVER TERRACE DEPOSITS - Firm brown gravelly CLAY. Gravel is fine to coarse subangular to subrounded flint			
1.00-1.45	SPT N=14		7,7/5,5,2,2		1.10	RIVER TERRACE DEPOSITS - Soft sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded flint			
1.50	D				(0.90)				
2.00-2.45	SPT N=3		1,0/1,1,0,1		2.00	RIVER TERRACE DEPOSITS - Very soft becoming soft to firm brown silty CLAY			
					(0.80)				
2.50	D				2.80	RIVER TERRACE DEPOSITS - Loose orange-brown wet silty fine SAND			
3.00	D				(0.50) 3.30	Complete at 3.30m			

Remarks
Collapsed to 2.00m, redrilled to 3.30m

Scale (approx)
1:25
Logged By
HF
Figure No.
26-04-21.CT4A



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Site
Land North of Lavant Drive, Havant, PO92AW

Number
CT5

Machine : Window Sampling Rig
Method : Drive-in Windowless Sampler

Dimensions
67mm to 1.40m
57mm to 1.80m

Ground Level (mOD)

Client
Fed3 Projects

Job Number
26-04-21

Location

Dates
04/06/2026

Engineer
Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.50	D				(0.30) 0.30	TOPSOIL (MG) - Dark brown friable organic silty CLAY		
1.00-1.35 1.00	SPT 50/200 D		3,5/14,16,20		(0.90) 1.20	RIVER TERRACE DEPOSITS - Very dense brown claybound GRAVEL. Gravel is fine to coarse, subangular to subrounded flint		
1.40-1.66 1.50	SPT 25*/80 50/180 D		23,2/19,20,11		(0.60) 1.80	RIVER TERRACE DEPOSITS - Very dense gravelly silty gravelly SAND with weathered chalk and sporadic flint gravel		
1.80-2.03	SPT 25*/75 50/150		24,1/31,17,2			Complete at 1.80m		

Remarks SPT at 1.00m refused SPT at 1.50m refused SPT at 1.80m refused	Scale (approx)	Logged By
	1:25	HF
	Figure No. 26-04-21.CT5	



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Site
Land North of Lavant Drive, Havant, PO92AW

Trial Pit
Number
SA1

Machine : Hand Dug
Method : Trial Pit

Dimensions

Ground Level (mOD)

Client
Fed3 Projects

Job
Number
26-04-21

Location

Dates
04/06/2026

Engineer
Lee Ashworth

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Topsoil (MG) Dark brown friable organic clayey gravelly organic SILT. Gravel is fine to coarse sub-angular to sub-rounded brick and flint		
					0.30 (0.25)	RIVER TERRACE DEPOSITS Orange brown clay bound GRAVEL. Gravel is fine to coarse sub-angular to sub-rounded flint with cobbles of flint		
					0.55 (0.24)	RIVER TERRACE DEPOSITS Orange brown slightly clayey GRAVEL of fine to coarse sub-angular to sub-rounded flint with cobbles of flint		
					0.79	Complete at 0.79m		

Plan

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Remarks

Infiltration Test Undertaken
Trial backfilled with arisings

Scale (approx)

1:25

Logged By

LA

Figure No.

26-04-21.SA1

Trial Pit Infiltration Testing to BRE Digest 365

Client: Fed3 Projects

Report No: 26-04-21

Site: Land north of Lavant Drive, Havant, PO9 2J Date Tested 05/06/2026

Dimensions: 0.3m x 0.3m x 0.79m
 (width x length x depth)

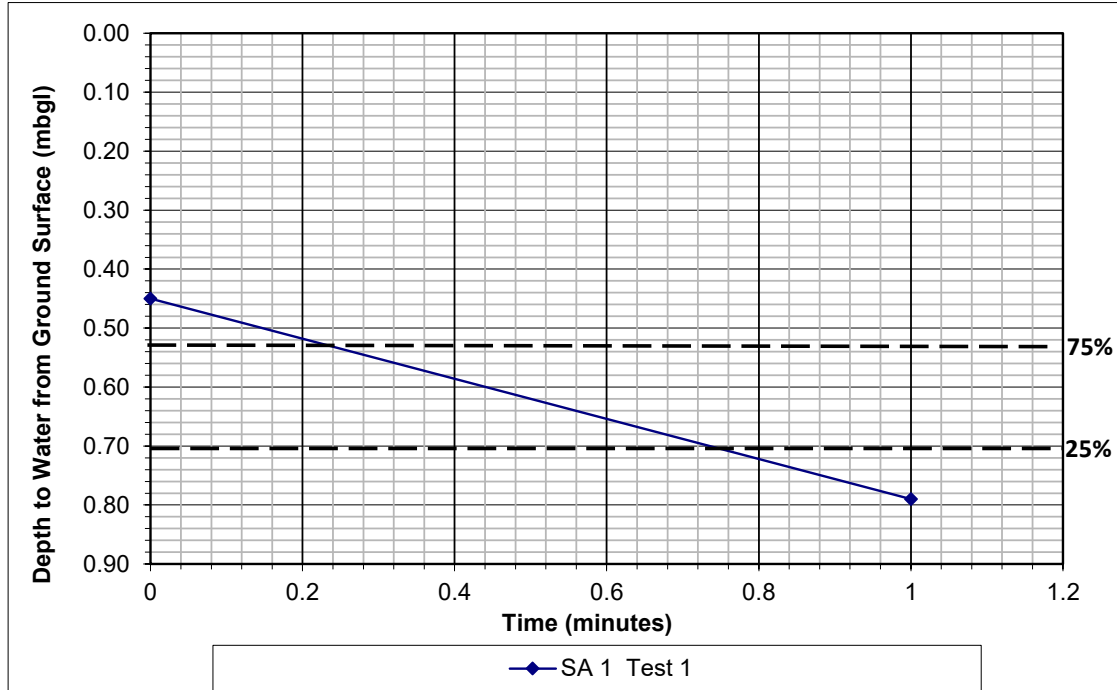
Test Location: SA1

Test Response Zone Description - : RIVER TERRACE DEPOSITS

Time	Depth BGL	Time	Depth BGL	Time	Depth BGL
0	0.45				
1	0.79				

Soil Infiltration Rate: $1.73 \times 10^{-3} \text{ m/s}$

Comments:



Trial Pit Infiltration Testing to BRE Digest 365

Client: Fed3 Projects

Report No: 26-04-21

Site: Land north of Lavant Drive, Havant, PO9 2J Date Tested 05/06/2026

Dimensions: 0.3m x 0.3m x 0.79m
 (width x length x depth)

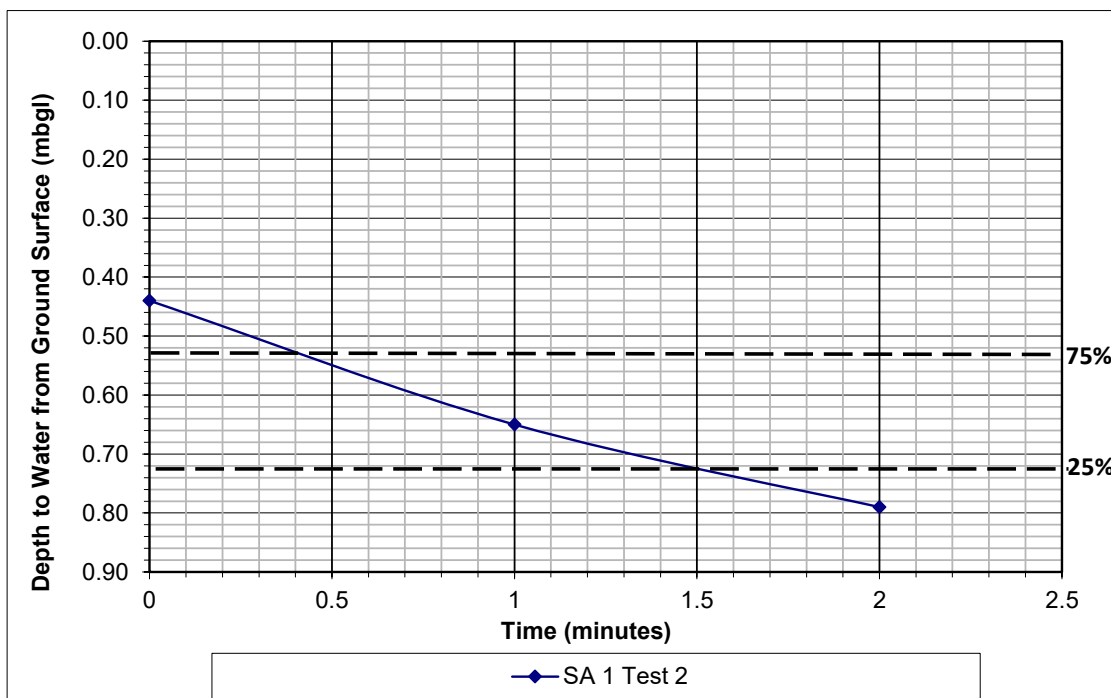
Test Location: SA1

Test Response Zone Description - : RIVER TERRACE DEPOSITS

Time	Depth BGL	Time	Depth BGL	Time	Depth BGL
0	0.44				
1	0.65				
2	0.79				

Soil Infiltration Rate: 8.03×10^{-4} m/s

Comments:



Trial Pit Infiltration Testing to BRE Digest 365

Client: Fed3 Projects

Report No: 26-04-21

Site: Land north of Lavant Drive, Havant, PO9 2J Date Tested 05/06/2026

Dimensions: 0.3m x 0.3m x 0.71m
(width x length x depth)

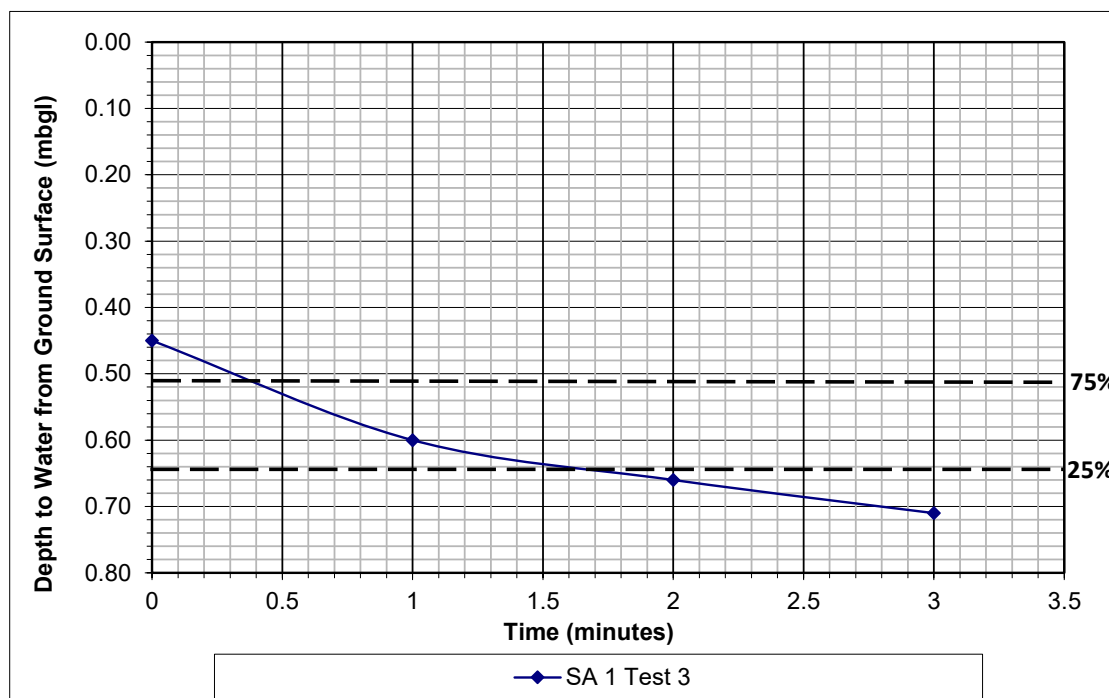
Test Location: SA1

Test Response Zone Description - : RIVER TERRACE DEPOSITS

Time	Depth BGL	Time	Depth BGL	Time	Depth BGL
0	0.45				
1	0.60				
2	0.66				
3	0.71				

Soil Infiltration Rate: 6.01×10^{-4} m/s

Comments:





TRL DYNAMIC CONE PENETROMETER RECORD

Job No:- 26-04-21

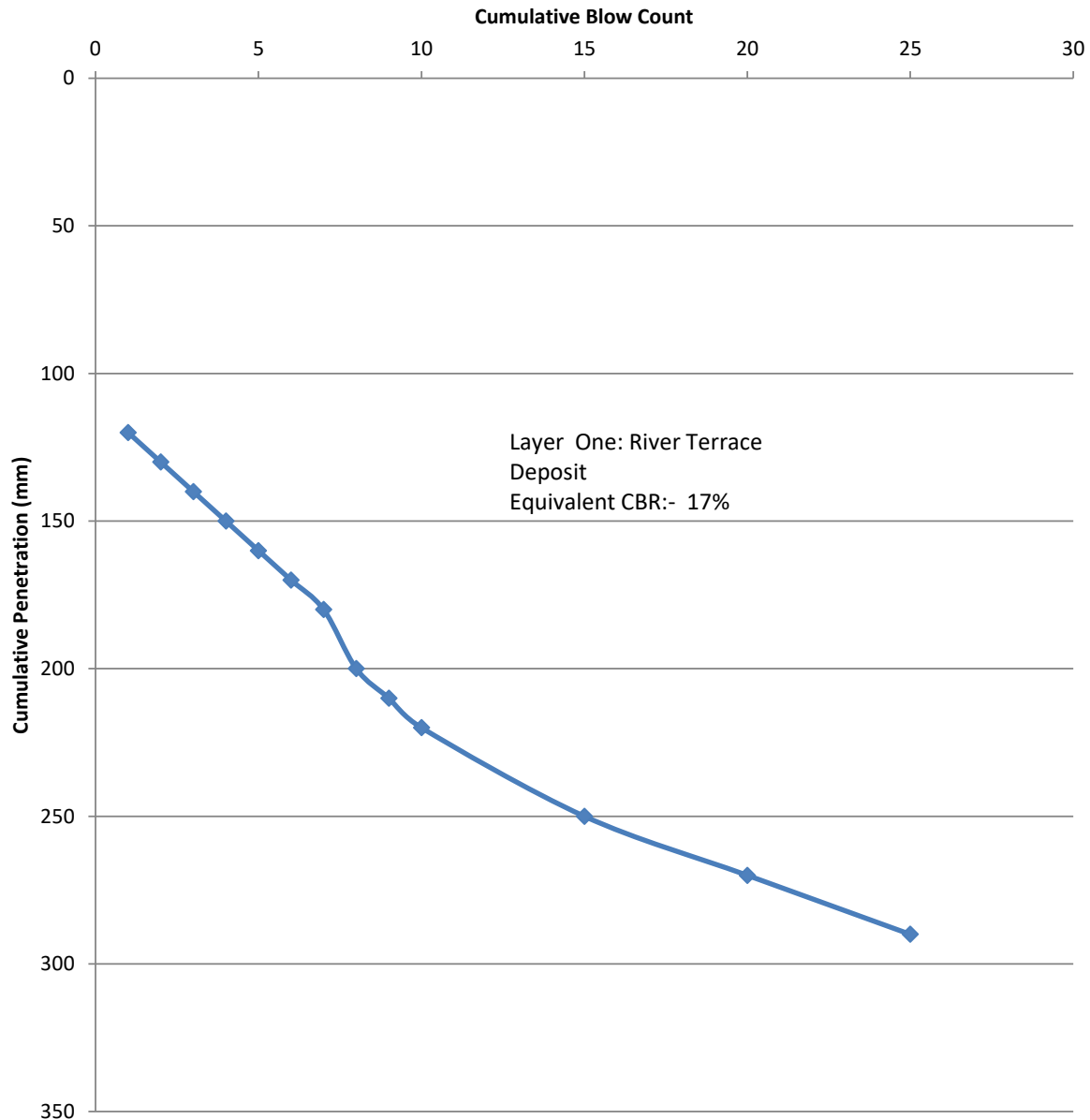
Job Name:- Lavant Drive, Havant

Equivalent CBR:- 17

Position:- CBR1

Depth below ground level at start of test:- GL

Cumulative Blows Vs Penetration (mm)



Date	Job No.	BH	CH4(%)	LEL(%)	CO2(%)	O2(%)	H2S (ppm)	CO (ppm)	Hex(%)	PIDCf()	PkFlw (lh)	AP (mbar)	GW (m bgl)	Pmp (s)	Bal(%)
01/07/26	26-04-21	CT4A	0	0	2.4	18.9	0	0	0.001	1	0	1023	1.51	63	78.7
09/07/26	26-04-21	CT4A	0	0	1.6	19.4	0	0	0	1	0	1017	0	1	79

APPENDIX C

GroundTech Laboratories

Geotechnical Testing Facility

Slapton Hill Barn, Blakesley Road, Slapton, Towcester, Northants. NN12 8QD

Telephone:- 01327 860947/860060

Email: lab@listersgeotechnics.co.uk

PROJECT INFORMATION		SAMPLE INFORMATION																																																							
Site Location:- Lavant Drive, Havant	Laboratory Tests Undertaken:-	<table border="1"> <thead> <tr> <th>TEST TYPE</th> <th>TEST METHOD</th> <th>TESTED</th> </tr> </thead> <tbody> <tr> <td>Natural Moisture Contents (MC%)</td> <td>(BS 1377:Part 2:1990 Clause 3.2)</td> <td>✓</td> </tr> <tr> <td>Liquid Limits (%)</td> <td>(BS 1377:Part 2:1990 Clause 4.3)</td> <td>✓</td> </tr> <tr> <td>Plastic Limits (%)</td> <td>(BS 1377:Part 2:1990 Clause 5.3)</td> <td>✓</td> </tr> <tr> <td>Plasticity Index (%)</td> <td>(BS 1377:Part 2:1990 Clause 5.4)</td> <td>✓</td> </tr> <tr> <td>Saturated Moisture Content (%)</td> <td>(BS1377 : Part 2 : 1990, clause 3.3)</td> <td></td> </tr> <tr> <td>PSD - Wet Sieving</td> <td>(BS 1377:Part 2:1990 Clause 9.2)</td> <td>✓</td> </tr> <tr> <td>Engineering Sample Descriptions</td> <td>(BS 5930 : Section 6)</td> <td></td> </tr> <tr> <td>Passing 425/63 (µm)</td> <td>-</td> <td>✓</td> </tr> <tr> <td>Hydrometer</td> <td>(BS 1377:Part 2:1990 Clause 9.5)</td> <td></td> </tr> <tr> <td>Loss on Ignition (%)</td> <td>-</td> <td></td> </tr> <tr> <td>Soil Suctions (kPa)</td> <td>BRE Digest IP 4/93, 1993</td> <td></td> </tr> <tr> <td>Bulk Density (Mg/m³)</td> <td>(BS 1377:Part 2:1990 Clause 7.2)</td> <td></td> </tr> <tr> <td>Strength Tests</td> <td>(BS 1377:Part 7:1990 Clause 8 & 9)</td> <td></td> </tr> <tr> <td>Soluble Sulphate Content (SO₄g/l)</td> <td>(BS 1377:Part 3:1990 Clause 5.3)</td> <td></td> </tr> <tr> <td>pH value</td> <td>(BS 1377:Part 3:1990 Clause 9.4)</td> <td></td> </tr> <tr> <td>California Bearing Ratios (CBR)</td> <td>(BS 1377:Part 4:1990 Clause 7)</td> <td></td> </tr> <tr> <td>Compaction Tests</td> <td>(BS 1377:Part 4:1990 Clauses 3.0-3.6)</td> <td></td> </tr> </tbody> </table>	TEST TYPE	TEST METHOD	TESTED	Natural Moisture Contents (MC%)	(BS 1377:Part 2:1990 Clause 3.2)	✓	Liquid Limits (%)	(BS 1377:Part 2:1990 Clause 4.3)	✓	Plastic Limits (%)	(BS 1377:Part 2:1990 Clause 5.3)	✓	Plasticity Index (%)	(BS 1377:Part 2:1990 Clause 5.4)	✓	Saturated Moisture Content (%)	(BS1377 : Part 2 : 1990, clause 3.3)		PSD - Wet Sieving	(BS 1377:Part 2:1990 Clause 9.2)	✓	Engineering Sample Descriptions	(BS 5930 : Section 6)		Passing 425/63 (µm)	-	✓	Hydrometer	(BS 1377:Part 2:1990 Clause 9.5)		Loss on Ignition (%)	-		Soil Suctions (kPa)	BRE Digest IP 4/93, 1993		Bulk Density (Mg/m ³)	(BS 1377:Part 2:1990 Clause 7.2)		Strength Tests	(BS 1377:Part 7:1990 Clause 8 & 9)		Soluble Sulphate Content (SO ₄ g/l)	(BS 1377:Part 3:1990 Clause 5.3)		pH value	(BS 1377:Part 3:1990 Clause 9.4)		California Bearing Ratios (CBR)	(BS 1377:Part 4:1990 Clause 7)		Compaction Tests	(BS 1377:Part 4:1990 Clauses 3.0-3.6)		
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Client Reference:-																																																									
Date Samples Received:- 10 June 2026																																																									
Date Testing Completed:- 29 June 2026																																																									
The results relate only to the samples tested																																																									
This test-report may not be reproduced, except with full and written approval of GROUNDTECH LABORATORIES		Laboratory testing in accord with BS EN ISO/IEC 17025-2000 and Quality Management in accord with ISO 9001																																																							
Signed on behalf of GroundTech Laboratories:- _____ Technical Signatory			Quality Assured to ISO 9001																																																						
GEOTECHNICAL LABORATORY TEST RESULTS		Report No:	26.06.011																																																						

GroundTech Laboratories

Geotechnical Testing Facility

Slapton Hill Barn, Blakesley Road, Slapton, Towcester, Northants. NN12 8QD
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Email: groundtech@listersgeotechnics.co.uk

Quality Assured
to ISO 9001

SAMPLES				CLASSIFICATION TESTS							CLASSIFICATION TESTS							STRENGTH TESTS					CHEMICAL TESTS	
Test Location	Sample Type	Sample Depth -m	Test Type	WC %	LL %	PL %	PI %	Passing 425 µm %	Modified PI %	Class	Passing 63 µm %	WC/ LL	PL+ 2%	Liquidity Index	Loss on Ignition %	Soil Suction kPa	Bulk Density Mg/m³	Test Type	Cell Pressure kN/m²	Deviator Stress kN/m²	Apparent Cohesion kN/m²	φ	pH Value	Soluble Sulphate Content SO4 g/l
CT 01	D	2.50	PI/63	21	38	20	18	74	13	CI	64	0.55	22	0.06										
CT 02	D	1.50	PSD																					
	D	2.50	PI/63	22	39	19	20	100	20	CI	81	0.56	21	0.15										
	D	4.25	PI/63	23	32	20	12	49	6	CL	42	0.72	22	0.25										
CT 03	D	1.50	PSD																					
CT 04A	D	0.50	PI/63	14	42	22	20	99	20	CI	79	0.33	24	-0.40										
	D	1.50	PI/63	20	38	19	19	100	19	CI	84	0.53	21	0.05										
	D	2.50	PSD																					
CT 05	D	3.00	PSD																					
	D	3.00	PSD																					
	D	1.00	PSD																					
Symbols:				U	Undisturbed Sample					R	Remoulded			PI	Plasticity Index			T	Triaxial Undrained			L	100mm specimen	
				D	Disturbed Sample					63	Passing 63µm			F	Filter Paper Suction Tests			M	Multistage Triaxial			S	38mm specimen	
				B	Bulk Sample					H	Hydrometer			CC	Continuous Core			HP	Hand Penetrometer					
				W	Water Sample					PSD	Wet Sieving							V	Vane Test					
LABORATORY TEST RESULTS																				Project Reference 26.06.011				

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Site: Lavan Drive, Havant

Test Location: CT 02

Sample Depth: 1.50m

Hydrometer No.:

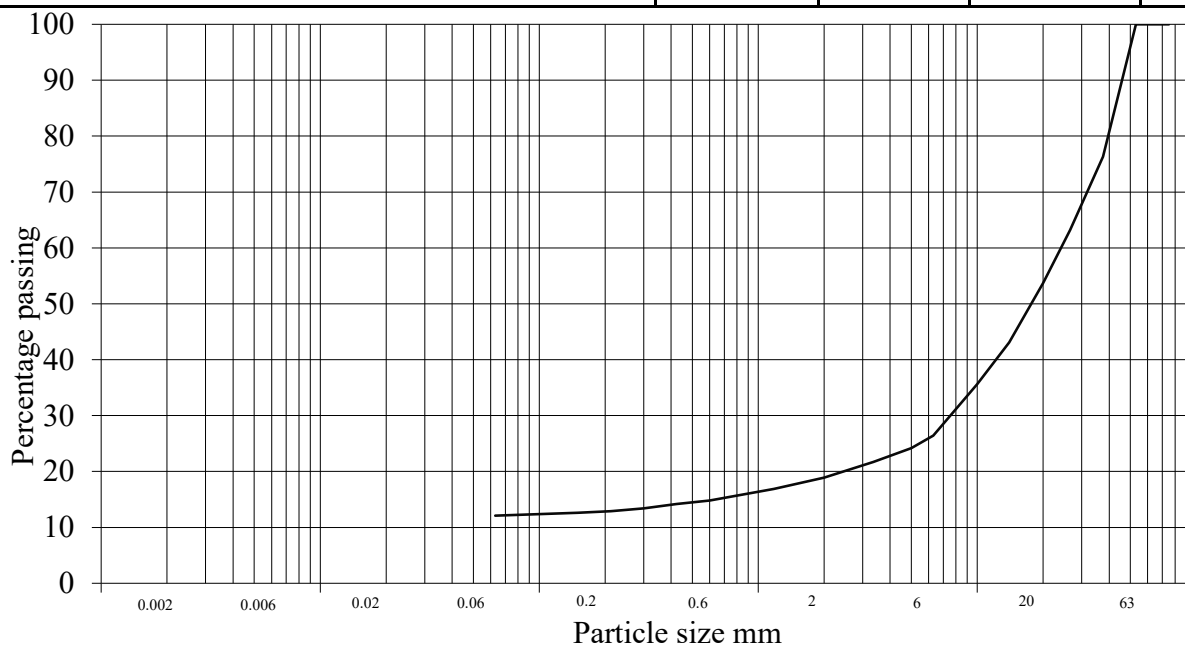
SG Gs:

Water Visc. (N):

Dry Mass of Soil after pretreatment (g):

Test Method: BS 1377 : Part 2 : 1990 : 9.2

BS test sieve	Cumulative Passing - %	Hydrometer Particle Diameter	Cumulative Passing - %
75mm	100.00		
63mm	100.00		
50mm	100.00		
37.5mm	76.30		
26.5mm	63.20		
20mm	53.70		
14mm	43.10		
10mm	35.60		
6.3mm	26.40		
5mm	24.20		
3.5mm	21.70		
2mm	18.90		
1.18mm	16.90		
600µm	14.80		
425µm	14.20		
300µm	13.40		
212µm	12.90		
150µm	12.60		
63µm	12.10		



CLAY	SILT			SAND			GRAVEL			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
12%				7%			81%			0%

PARTICLE SIZE DISTRIBUTION

Project Reference
26.06.011

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Site: Lavan Drive, Havant

Test Location: CT 03

Sample Depth: 1.50m

Hydrometer No.:

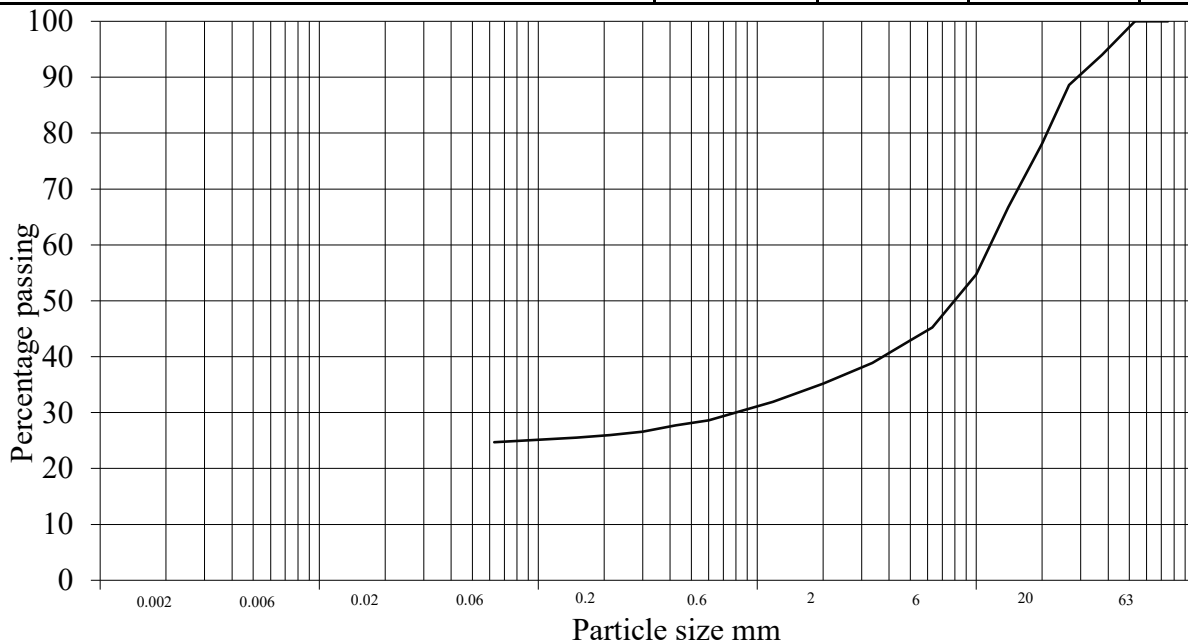
SG Gs:

Water Visc. (N):

Dry Mass of Soil after pretreatment (g):

Test Method: BS 1377 : Part 2 : 1990 : 9.2

BS test sieve	Cumulative Passing - %	Hydrometer Particle Diameter	Cumulative Passing - %
75mm	100.00		
63mm	100.00		
50mm	100.00		
37.5mm	94.00		
26.5mm	88.60		
20mm	78.10		
14mm	66.70		
10mm	54.70		
6.3mm	45.20		
5mm	42.90		
3.5mm	38.90		
2mm	35.20		
1.18mm	31.90		
600µm	28.60		
425µm	27.70		
300µm	26.60		
212µm	26.00		
150µm	25.50		
63µm	24.70		



CLAY	SILT			SAND			GRAVEL			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
25%				11%			65%			0%

PARTICLE SIZE DISTRIBUTION

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Site: Lavan Drive, Havant

Test Location: CT 04A

Sample Depth: 2.50m

Hydrometer No.:

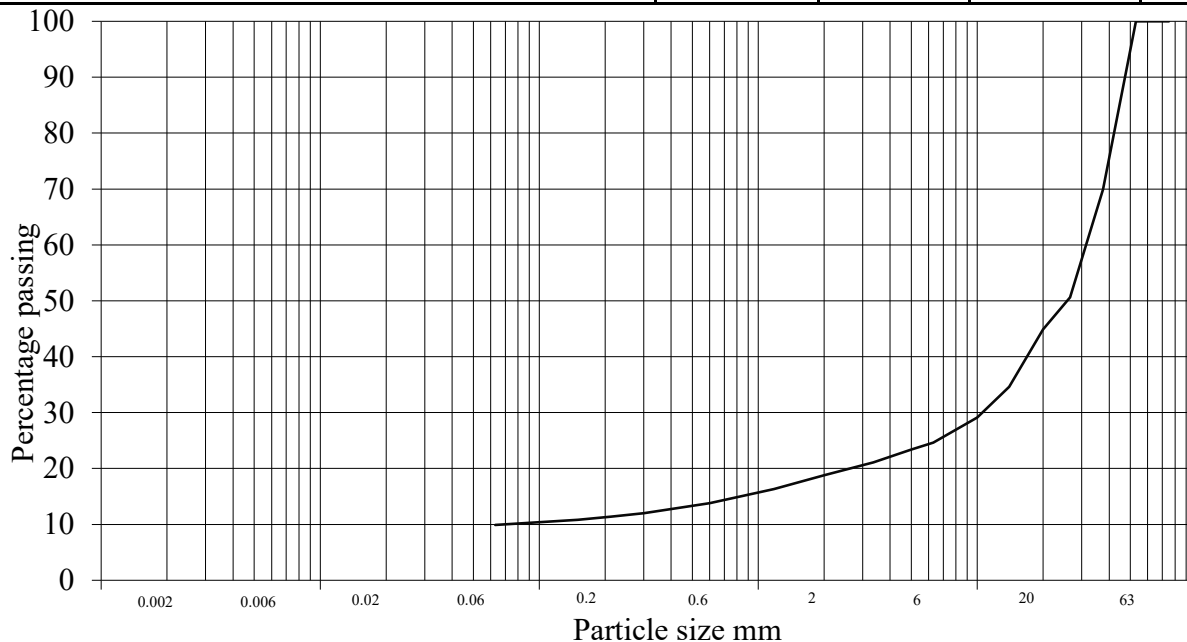
SG Gs:

Water Visc. (N):

Dry Mass of Soil after pretreatment (g):

Test Method: BS 1377 : Part 2 : 1990 : 9.2

BS test sieve	Cumulative Passing - %	Hydrometer Particle Diameter	Cumulative Passing - %
75mm	100.00		
63mm	100.00		
50mm	100.00		
37.5mm	69.90		
26.5mm	50.60		
20mm	44.90		
14mm	34.60		
10mm	29.10		
6.3mm	24.60		
5mm	23.40		
3.5mm	21.10		
2mm	18.80		
1.18mm	16.30		
600µm	13.80		
425µm	12.90		
300µm	12.00		
212µm	11.40		
150µm	10.80		
63µm	9.90		



CLAY	SILT			SAND			GRAVEL			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
10%				9%			81%			0%

PARTICLE SIZE DISTRIBUTION

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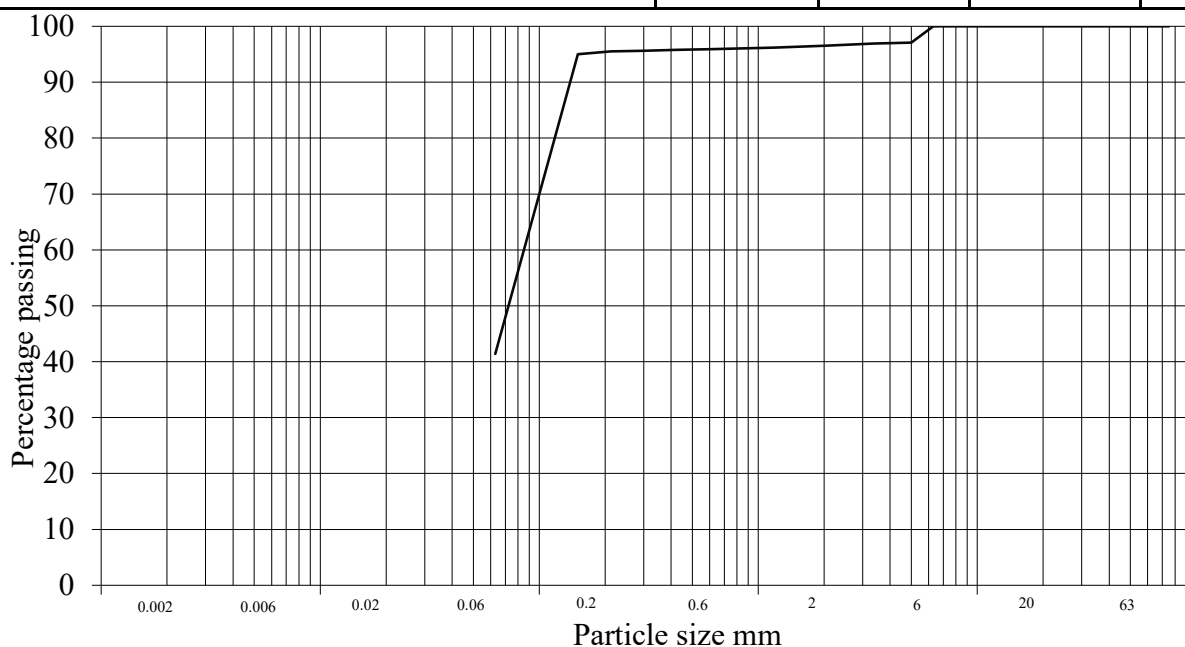
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		Test Method: BS 1377 : Part 2 : 1990 : 9.2			
		BS test sieve	Cumulative Passing - %	Hydrometer Particle Diameter	Cumulative Passing - %
Site:	Lavan Drive, Havant	75mm	100.00		
		63mm	100.00		
Test Location:	CT 04A	50mm	100.00		
		37.5mm	100.00		
Sample Depth:	3.00m	26.5mm	100.00		
		20mm	100.00		
Hydrometer No.:		14mm	100.00		
		10mm	100.00		
SG Gs:		6.3mm	100.00		
		5mm	97.10		
Water Visc. (N):		3.5mm	96.90		
		2mm	96.50		
Dry Mass of Soil after pretreatment (g):		1.18mm	96.20		
		600µm	95.90		
		425µm	95.80		
		300µm	95.60		
		212µm	95.50		
		150µm	95.00		
		63µm	41.40		



CLAY	SILT			SAND			GRAVEL			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
41%				55%			4%			0%

PARTICLE SIZE DISTRIBUTION

Project Reference
26.06.011

GroundTech Laboratories

Geotechnical Testing Facility

Slapton Hill Barn, Blakesley Road, Slapton, Towcester, Northants. NN12 8QD

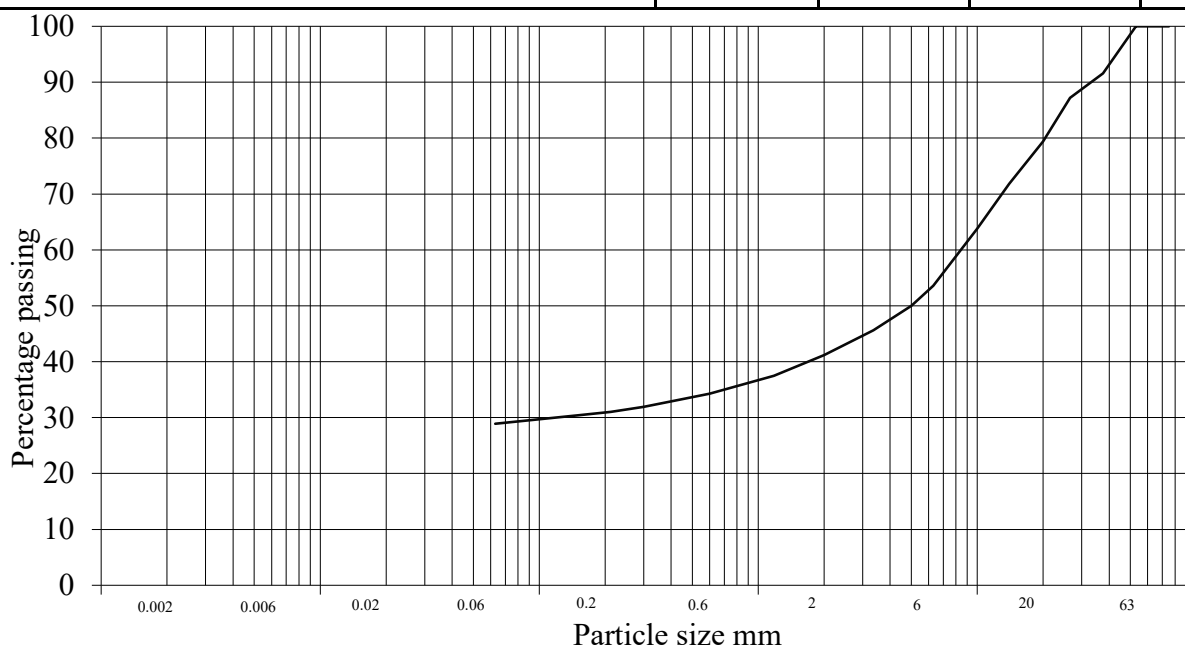
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Fax: 01327 860430

Email: groundtech@listersgeotechnics.co.uk

**Quality
Assured
ISO 9001**

		Test Method: BS 1377 : Part 2 : 1990 : 9.2			
		BS test sieve	Cumulative Passing - %	Hydrometer Particle Diameter	Cumulative Passing - %
Site:	Lavan Drive, Havant	75mm	100.00		
		63mm	100.00		
Test Location:	CT 05	50mm	100.00		
		37.5mm	91.60		
Sample Depth:	1.00m	26.5mm	87.20		
		20mm	79.40		
Hydrometer No.:		14mm	71.80		
		10mm	63.80		
SG Gs:		6.3mm	53.60		
		5mm	50.00		
Water Visc. (N):		3.5mm	45.60		
		2mm	41.20		
Dry Mass of Soil after pretreatment (g):		1.18mm	37.50		
		600µm	34.30		
		425µm	33.10		
		300µm	31.90		
		212µm	31.00		
		150µm	30.40		
		63µm	28.90		



CLAY	SILT			SAND			GRAVEL			COBBLES
	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
29%				12%			59%			0%

PARTICLE SIZE DISTRIBUTION

Project Reference
26.06.011

Analytical Test Report **E26/07877/GIN/26-25262**

Clients Project Reference Lavant Drive, Havant 26-04-21

Clients Order Number Q24-00626/1

Sample(s) Analysed 10

Sample(s) received / instructed 10/06/2026 / 10/06/2026

Sample(s) Tested 10/06/2026 to 19/06/2026

Report issued 22/06/2026

Report issue number 1

Tested on Behalf of

Geo-Integrity

4 Church Street

Buckingham

MK18 1QE

Signed



James Gane
Analytical Services Manager

Notes:

General

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Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples were supplied by customer, results apply to the samples as received.

Samples will be retained for 14 days after issue of this report with the exception of the asbestos test portion which is held for 6 months unless otherwise requested.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Moisture Content was determined in accordance with CTS method statement MS - CL - Sample Prep, oven dried at <30°C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Stone Content was determined in accordance with CTS method statement MS - CL - Sample Prep and refers to the percentage of stones retained on a 10mm BS test sieve.

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

Please note: Where further analysis is required, samples identified as containing asbestos are screened and tested on an as received basis. No correction is made for moisture content and other than the asbestos test(s) these results are not covered by our accreditation.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

U = UKAS Accreditation, M = MCERTS Accreditation, N = Unaccredited, SC = Subcontracted

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

Analytical Test Results - ENV Analysis Solids

Lab Reference					803552	803553	803554
Client Sample ID					-	-	-
Client Sample Location					CT1	CT1	CT2
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					0.2	1.2	0.5
Depth - Bottom (m)					0.2	1.2	0.5
Date of Sampling					04/06/2026	04/06/2026	04/06/2026
Time of Sampling					-	-	-
Sample Matrix					Clay	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Arsenic	ICPMETS	mg/kg	10	M	< 10	< 10	< 10
Cadmium	ICPMETS	mg/kg	0.2	M	1.0	0.8	0.8
Chromium (Total)	ICPMETS	mg/kg	1	U	15	14	9.6
Copper	ICPMETS	mg/kg	2	M	29	41	40
Lead	ICPMETS	mg/kg	1.5	M	54	110	41
Mercury	ICPMETS	mg/kg	2.5	U	< 2.5	< 2.5	< 2.5
Nickel	ICPMETS	mg/kg	1	M	18	19	18
Selenium	ICPMETS	mg/kg	8	N	< 8.0	< 8.0	< 8.0
Zinc	ICPMETS	mg/kg	2	M	160	220	53
Chromium (Hexavalent)	SKALARHCS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Asbestos	ASB	p/a	-	U	No Asbestos Detected	Chrysotile Amosite	Amosite
ACM Type Detected	ASBQ	-	-	N	-	Cement and Loose Fibres	Loose Fibres
Total Asbestos Content	ASBQ	%	0.001	U	-	0.435	0.002
Asbestos Stage Used	ASBQ	-	-	N	-	3	3
Mass of Sample Tested	ASBQ	g	0	N	-	702	556
Acenaphthene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	< 0.02
Acenaphthylene	PAHASRDS	mg/kg	0.02	U	< 0.02	< 0.20	0.04
Anthracene	PAHASRDS	mg/kg	0.02	U	< 0.02	< 0.20	0.04
Benzo[a]anthracene	PAHASRDS	mg/kg	0.02	M	< 0.02	0.26	0.19
Benzo[a]pyrene	PAHASRDS	mg/kg	0.02	M	< 0.02	0.21	0.28
Benzo[b]fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.02	0.21	0.29
Benzo[ghi]perylene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	0.27
Benzo[k]fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	0.12
Chrysene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	0.17
Dibenzo[a,h]anthracene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	0.03
Fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.02	0.50	0.32
Fluorene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	< 0.02
Indeno[1,2,3-cd]pyrene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	0.23
Naphthalene	PAHASRDS	mg/kg	0.02	M	< 0.02	< 0.20	< 0.02
Phenanthrene	PAHASRDS	mg/kg	0.02	M	< 0.02	0.25	0.09
Pyrene	PAHASRDS	mg/kg	0.02	M	< 0.02	0.37	0.29
Total PAH (Sum of USEPA 16)	PAHASRDS	mg/kg	0.32	U	< 0.32	< 3.20	2.4

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

Analytical Test Results - ENV Analysis Solids

Lab Reference					803555	803556	803557
Client Sample ID					-	-	-
Client Sample Location					CT3	SA1	CT4
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					0.3	0.2	0.35
Depth - Bottom (m)					0.3	0.2	0.35
Date of Sampling					04/06/2026	04/06/2026	04/06/2026
Time of Sampling					-	-	-
Sample Matrix					Sand	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Arsenic	ICPMETS	mg/kg	10	M	< 10	< 10	< 10
Cadmium	ICPMETS	mg/kg	0.2	M	0.9	0.9	0.9
Chromium (Total)	ICPMETS	mg/kg	1	U	13	15	14
Copper	ICPMETS	mg/kg	2	M	30	24	25
Lead	ICPMETS	mg/kg	1.5	M	48	47	50
Mercury	ICPMETS	mg/kg	2.5	U	< 2.5	< 2.5	< 2.5
Nickel	ICPMETS	mg/kg	1	M	18	17	16
Selenium	ICPMETS	mg/kg	8	N	< 8.0	< 8.0	< 8.0
Zinc	ICPMETS	mg/kg	2	M	88	120	120
Chromium (Hexavalent)	SKALARHCS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Asbestos	ASB	p/a	-	U	Amosite	No Asbestos Detected	No Asbestos Detected
ACM Type Detected	ASBQ	-	-	N	Loose Fibres	-	-
Total Asbestos Content	ASBQ	%	0.001	U	0.002	-	-
Asbestos Stage Used	ASBQ	-	-	N	3	-	-
Mass of Sample Tested	ASBQ	g	0	N	504	-	-
Acenaphthene	PAHASRDS	mg/kg	0.02	M	< 0.20	< 0.20	< 0.20
Acenaphthylene	PAHASRDS	mg/kg	0.02	U	< 0.20	< 0.20	< 0.20
Anthracene	PAHASRDS	mg/kg	0.02	U	< 0.20	< 0.20	< 0.20
Benzo[a]anthracene	PAHASRDS	mg/kg	0.02	M	< 0.20	0.42	< 0.20
Benzo[a]pyrene	PAHASRDS	mg/kg	0.02	M	0.41	0.46	< 0.20
Benzo[b]fluoranthene	PAHASRDS	mg/kg	0.02	M	0.36	0.42	< 0.20
Benzo[ghi]perylene	PAHASRDS	mg/kg	0.02	M	0.35	0.43	< 0.20
Benzo[k]fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.20	< 0.20	< 0.20
Chrysene	PAHASRDS	mg/kg	0.02	M	< 0.20	0.30	< 0.20
Dibenzo[a,h]anthracene	PAHASRDS	mg/kg	0.02	M	< 0.20	< 0.20	< 0.20
Fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.20	0.77	0.36
Fluorene	PAHASRDS	mg/kg	0.02	M	< 0.20	< 0.20	< 0.20
Indeno[1,2,3-cd]pyrene	PAHASRDS	mg/kg	0.02	M	0.29	0.29	< 0.20
Naphthalene	PAHASRDS	mg/kg	0.02	M	< 0.20	< 0.20	< 0.20
Phenanthrene	PAHASRDS	mg/kg	0.02	M	< 0.20	0.33	< 0.20
Pyrene	PAHASRDS	mg/kg	0.02	M	< 0.20	0.64	0.29
Total PAH (Sum of USEPA 16)	PAHASRDS	mg/kg	0.32	U	< 3.20	4.5	< 3.20

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

Analytical Test Results - ENV Analysis Solids

Lab Reference	803558
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Client Sample ID	-
Client Sample Location	CT5
Client Sample Type	-
Client Sample Number	-
Depth - Top (m)	1.5
Depth - Bottom (m)	1.5
Date of Sampling	05/06/2026
Time of Sampling	-
Sample Matrix	Other

Determinant	Code	Units	LOD	Accreditation	
Arsenic	ICPMETS	mg/kg	10	M	< 10
Cadmium	ICPMETS	mg/kg	0.2	M	0.4
Chromium (Total)	ICPMETS	mg/kg	1	U	< 1.0
Copper	ICPMETS	mg/kg	2	M	9.9
Lead	ICPMETS	mg/kg	1.5	M	3.0
Mercury	ICPMETS	mg/kg	2.5	U	< 2.5
Nickel	ICPMETS	mg/kg	1	M	5.0
Selenium	ICPMETS	mg/kg	8	N	< 8.0
Zinc	ICPMETS	mg/kg	2	M	12
Chromium (Hexavalent)	SKALARHCS	mg/kg	1	N	< 1.0
Asbestos	ASB	p/a	-	U	-
ACM Type Detected	ASBQ	-	-	N	-
Total Asbestos Content	ASBQ	%	0.001	U	-
Asbestos Stage Used	ASBQ	-	-	N	-
Mass of Sample Tested	ASBQ	g	0	N	-
Acenaphthene	PAHASRDS	mg/kg	0.02	M	< 0.02
Acenaphthylene	PAHASRDS	mg/kg	0.02	U	< 0.02
Anthracene	PAHASRDS	mg/kg	0.02	U	< 0.02
Benzo[a]anthracene	PAHASRDS	mg/kg	0.02	M	< 0.02
Benzo[a]pyrene	PAHASRDS	mg/kg	0.02	M	< 0.02
Benzo[b]fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.02
Benzo[ghi]perylene	PAHASRDS	mg/kg	0.02	M	< 0.02
Benzo[k]fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.02
Chrysene	PAHASRDS	mg/kg	0.02	M	< 0.02
Dibenzo[a,h]anthracene	PAHASRDS	mg/kg	0.02	M	< 0.02
Fluoranthene	PAHASRDS	mg/kg	0.02	M	< 0.02
Fluorene	PAHASRDS	mg/kg	0.02	M	< 0.02
Indeno[1,2,3-cd]pyrene	PAHASRDS	mg/kg	0.02	M	< 0.02
Naphthalene	PAHASRDS	mg/kg	0.02	M	< 0.02
Phenanthrene	PAHASRDS	mg/kg	0.02	M	< 0.02
Pyrene	PAHASRDS	mg/kg	0.02	M	< 0.02
Total PAH (Sum of USEPA 16)	PAHASRDS	mg/kg	0.32	U	< 0.32

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Analytical Test Results - EPHVPHS

Lab Reference					803552	803553	803554
Client Sample ID					-	-	-
Client Sample Location					CT1	CT1	CT2
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					0.2	1.2	0.5
Depth - Bottom (m)					0.2	1.2	0.5
Date of Sampling					04/06/2026	04/06/2026	04/06/2026
Time of Sampling					-	-	-
Sample Matrix					Clay	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Benzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Toluene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Ethylbenzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
m&p Xylene	VPHS	mg/kg	0.02	M	< 0.02	< 0.02	< 0.02
o-Xylene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Methyl tert-butyl ether (MTBE)	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Total >C5-C40 (Ali/Aro) [10]	CWGS	mg/kg	10	M	150	140	100
Total TPH (>C5-C6) [7]	VPHS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Total TPH (>C6-C7) [7]	VPHS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Total TPH (>C7-C8) [7]	VPHS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Total TPH (>C8 to C10) [12]	GCXGCS	mg/kg	5	M	< 5.0	< 5.0	< 5.0
Total TPH (>C10 to C12) [12]	GCXGCS	mg/kg	5	M	< 5.0	< 5.0	< 5.0
Total TPH (>C12 to C16) [12]	GCXGCS	mg/kg	5	M	< 5.0	5.7	6.8
Total TPH (>C16 to C21) [12]	GCXGCS	mg/kg	5	M	28	49	29
Total TPH (>C21 to C35) [12]	GCXGCS	mg/kg	10	M	88	70	50
Total TPH (>C35-C44) [12]	GCXGCS	mg/kg	10	N	49	18	22

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Analytical Test Results - EPHVPHS

Lab Reference					803555	803556	803557
Client Sample ID					-	-	-
Client Sample Location					CT3	SA1	CT4
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					0.3	0.2	0.35
Depth - Bottom (m)					0.3	0.2	0.35
Date of Sampling					04/06/2026	04/06/2026	04/06/2026
Time of Sampling					-	-	-
Sample Matrix					Sand	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Benzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Toluene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Ethylbenzene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
m&p Xylene	VPHS	mg/kg	0.02	M	< 0.02	< 0.02	< 0.02
o-Xylene	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Methyl tert-butyl ether (MTBE)	VPHS	mg/kg	0.01	M	< 0.01	< 0.01	< 0.01
Total >C5-C40 (Ali/Aro) [10]	CWGS	mg/kg	10	M	90	160	110
Total TPH (>C5-C6) [7]	VPHS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Total TPH (>C6-C7) [7]	VPHS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Total TPH (>C7-C8) [7]	VPHS	mg/kg	1	N	< 1.0	< 1.0	< 1.0
Total TPH (>C8 to C10) [12]	GCXGCS	mg/kg	5	M	< 5.0	< 5.0	< 5.0
Total TPH (>C10 to C12) [12]	GCXGCS	mg/kg	5	M	< 5.0	< 5.0	< 5.0
Total TPH (>C12 to C16) [12]	GCXGCS	mg/kg	5	M	< 5.0	< 5.0	< 5.0
Total TPH (>C16 to C21) [12]	GCXGCS	mg/kg	5	M	26	33	28
Total TPH (>C21 to C35) [12]	GCXGCS	mg/kg	10	M	48	82	61
Total TPH (>C35-C44) [12]	GCXGCS	mg/kg	10	N	21	61	24

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Analytical Test Results - EPHVPHS

Lab Reference	803558
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Client Sample ID	-
Client Sample Location	CT5
Client Sample Type	-
Client Sample Number	-
Depth - Top (m)	1.5
Depth - Bottom (m)	1.5
Date of Sampling	05/06/2026
Time of Sampling	-
Sample Matrix	Other

Determinant	Code	Units	LOD	Accreditation	
Benzene	VPHS	mg/kg	0.01	M	< 0.01
Toluene	VPHS	mg/kg	0.01	M	< 0.01
Ethylbenzene	VPHS	mg/kg	0.01	M	< 0.01
m&p Xylene	VPHS	mg/kg	0.02	M	< 0.02
o-Xylene	VPHS	mg/kg	0.01	M	< 0.01
Methyl tert-butyl ether (MTBE)	VPHS	mg/kg	0.01	M	< 0.01
Total >C5-C40 (Ali/Aro) [10]	CWGS	mg/kg	10	M	33
Total TPH (>C5-C6) [7]	VPHS	mg/kg	1	N	< 1.0
Total TPH (>C6-C7) [7]	VPHS	mg/kg	1	N	< 1.0
Total TPH (>C7-C8) [7]	VPHS	mg/kg	1	N	< 1.0
Total TPH (>C8 to C10) [12]	GCXGCS	mg/kg	5	M	< 5.0
Total TPH (>C10 to C12) [12]	GCXGCS	mg/kg	5	M	< 5.0
Total TPH (>C12 to C16) [12]	GCXGCS	mg/kg	5	M	< 5.0
Total TPH (>C16 to C21) [12]	GCXGCS	mg/kg	5	M	26
Total TPH (>C21 to C35) [12]	GCXGCS	mg/kg	10	M	< 10
Total TPH (>C35-C44) [12]	GCXGCS	mg/kg	10	N	11

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Analytical Test Results - BRE Associated Analysis

Lab Reference					803552	803553	803559
Client Sample ID					-	-	-
Client Sample Location					CT1	CT1	CT3
Client Sample Type					-	-	-
Client Sample Number					-	-	-
Depth - Top (m)					0.2	1.2	1
Depth - Bottom (m)					0.2	1.2	1
Date of Sampling					04/06/2026	04/06/2026	04/06/2026
Time of Sampling					-	-	-
Sample Matrix					Clay	Clay	Clay
Determinant	Code	Units	LOD	Accreditation			
Water Soluble Sulphate (as SO4)	ANIONSSBRE	mg/L	10	N	200	23	83
Acid Soluble Sulphate	ASSO4SBRE	%	0.01	N	0.22	0.35	0.05
Total Sulphur Content (as S)	1377TS-EBR	%	0.01	U	0.08	0.06	0.02
pH	PHSBRE	pH units	1	M	8.3	8.4	7.8

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Analytical Test Results - BRE Associated Analysis

Lab Reference					803560	803561
Client Sample ID					-	-
Client Sample Location					CT2	CT4
Client Sample Type					-	-
Client Sample Number					-	-
Depth - Top (m)					2.5	1.5
Depth - Bottom (m)					2.5	1.5
Date of Sampling					04/06/2026	04/06/2026
Time of Sampling					-	-
Sample Matrix					Clay	Clay
Determinant	Code	Units	LOD	Accreditation		
Water Soluble Sulphate (as SO ₄)	ANIONSSBRE	mg/L	10	N	17	260
Acid Soluble Sulphate	ASSO4SBRE	%	0.01	N	0.02	0.09
Total Sulphur Content (as S)	1377TS-EBR	%	0.01	U	< 0.01	0.03
pH	PHSBRE	pH units	1	M	8.5	8.2

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Certificate Of Analysis - WAC Suite

Lab Reference	803552
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Client Sample ID	-
Client Sample Location	CT1
Client Sample Type	-
Client Sample Number	-
Depth - Top (m)	0.2
Depth - Bottom (m)	0.2
Date of Sampling	04/06/2026
Time of Sampling	-
Sample Description	Made Ground- brown gravelly sandy silty clay with occasional brick fragments concrete organic matter
Sample Matrix	Clay
Moisture Content (%)	13
Stone content (%)	35

	Determined Result	Inert Waste Landfill	Stable non reactive hazardous waste in a non hazardous landfill	Hazardous Waste Landfill
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Solid Analysis

Total Organic Carbon	%	MCERTS	2.5	3.0	5.0	6.0
Loss on Ignition	%	UKAS	6.6	-	-	10.0
BTEX	mg/kg	MCERTS	< 0.06	6.00	-	-
PCB's (7 Congeners)	mg/kg	MCERTS	0.05	1.00	-	-
Mineral Oil (>C10 to C40) [EH_CU_1D_Total]	mg/kg	MCERTS	200	500	-	-
PAH	mg/kg	u	< 0.34	100	-	-
pH	units	MCERTS	8.3	-	> 6	-

Eluate Analysis

Arsenic	mg/kg	UKAS	0.01	0.50	2	25
Barium	mg/kg	UKAS	0.18	20	100	300
Cadmium	mg/kg	UKAS	< 0.0025	0.04	1	5
Chromium (total)	mg/kg	UKAS	0.01	0.5	10	70
Copper	mg/kg	UKAS	0.03	2.0	50	100
Mercury	mg/kg	UKAS	< 0.00050	0.01	0.2	2
Molybdenum	mg/kg	UKAS	0.02	0.5	10.0	30
Nickel	mg/kg	UKAS	< 0.075	0.4	10.0	40
Lead	mg/kg	UKAS	< 0.035	0.5	10.0	50
Antimony	mg/kg	UKAS	< 0.050	0.06	0.7	5
Selenium	mg/kg	UKAS	0.01	0.1	0.5	7
Zinc	mg/kg	N	< 0.25	4	50	200
Chloride	mg/kg	UKAS	5	800	15000	25000
Fluoride	mg/kg	N	3	10	150	500
Sulphate (as SO ₄)	mg/kg	UKAS	51	1000	20000	50000
Total Dissolved Solids	mg/kg	N	1400	4000	60000	100000
Phenol Index	mg/kg	N	< 1.0	1	-	-
Dissolved Organic Carbon	mg/kg	UKAS	35.0	500	800	1000

Date of issue: 08.06.2026

Issued by: J.Gane

Issue No: 1

Rev No: 2

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

Analytical Test Results - ENV Analysis Leachates

Lab Reference					
803552					
Client Sample ID					
-					
Client Sample Location					
CT1					
Client Sample Type					
-					
Client Sample Number					
-					
Depth - Top (m)					
0.2					
Depth - Bottom (m)					
0.2					
Date of Sampling					
04/06/2026					
Time of Sampling					
-					
Sample Matrix					
Clay					
Determinant	Code	Units	LOD	Accreditation	
10:1 SS Soil Leachate Prep	LEACH-SS-P	-	-	U	10:1 Extraction

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Sample Descriptions

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Description	Moisture Content (%)	Stone Content (%)	Passing 2mm test sieve (%)
803552	-	CT1	SOIL	-	Made Ground- brown gravelly sandy silty clay with occasional brick fragments concrete organic matter	13	35	57
803553	-	CT1	SOIL	-	Made Ground- brown gravelly sandy silty clay with occasional brick fragments concrete organic matter	U/S	U/S	U/S
803554	-	CT2	SOIL	-	Brown gravelly sandy silty clay with occasional organic matter	16	17	-
803555	-	CT3	SOIL	-	Made Ground- brown gravelly slightly clayey silty sand with occasional brick fragments glass organic	8.9	13	-
803556	-	SA1	SOIL	-	Made Ground- brown gravelly slightly sandy silty clay with rare brick fragments concrete organic mat	17	18	-
803557	-	CT4	SOIL	-	Made Ground- brown gravelly slightly sandy silty clay with rare brick fragments concrete organic mat	20	23	-
803558	-	CT5	SOIL	-	Light brownish cream sandy crushed rock with rare organic matter	9.9	19	-
803559	-	CT3	SOIL	-	Brown gravelly slightly sandy silty clay	-	-	42
803560	-	CT2	SOIL	-	Light brown silty clay with rare organic matter	-	-	100
803561	-	CT4	SOIL	-	Made Ground- greyish brown gravelly sandy silty clay with occasional concrete organic matter	-	-	52

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Sample Comments

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Comments
803553	-	CT1	SOIL	-	PAHAR - 1/10 dilution.
803555	-	CT3	SOIL	-	PAHAR - 1/10 dilution.
803556	-	SA1	SOIL	-	PAHAR - 1/10 dilution.
803557	-	CT4	SOIL	-	PAHAR - 1/10 dilution.

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Lavant Drive, Havant 26-04-21

Analysis Methodologies - Please refer to sample comments page (if present) for any changes to methods Methods

Site addresses where testing is performed: Leicester - 7-11 Harding Street, Leicester, LE1 4DH

Poole - Unit D11, Admiralty Park, Station Road, Holton Heath, Poole, BH16 6HX & Unit 14B, Blackhill Road West, Holton Heath Trading Park, Poole, Dorset, BH16 6LE

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preparation	Test Site	Test Details
1377LOIWAC	BS1377 Loi	Oven dried	Passing 2mm test sieve	Leicester	Testing was in accordance with BS 1377: Part 3: 2018 + A1 :2021 Clause 6. Determination of the mass loss on ignition. Some information required by BS1377: 2016: Part 1 has not been reported. This information is available on request.
1377TS-EBR	BS1377 Total Sulphur Content by HTC	Oven dried	BS1377 : Part 1 : 2016	Leicester	Total Sulphur Content testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.10 (using Eltra CS-800 Analyser)
ANIONSSBRE	MS - CL - Anions by Aquakem (2:1Extract)	Oven dried	Passing 2mm test sieve	Leicester	Determination of Anions (inc Sulphate, chloride etc.) in soils by Aquakem. Analysis is based on a 2:1 water to soil extraction ratio
ASB	MS - AS - Asbestos	-	-	Leicester	Fibre identification is in accordance with in house documented methods which are based on the procedure documented in the HSE Document HSG 248 "Asbestos: The analysts guide for sampling, analysis and clearance procedures"
ASBQ	MS - AS - Asbestos Quantification	-	-	Leicester	Documented in-house method MS-AS-Asbestos Quantification using polarising light microscopy, gravimetric analysis, fibre counting and sizing through phase contrast optical microscopy (Stages 2 + 3 Gravimetric, Stage 4 fibre count + sizing)
ASSO4SBRE	MS - CL - Acid Soluble Sulphate	Oven Dried	Passing 2mm test sieve	Leicester	Determination of total sulphate in soils by acid extraction followed by ICP analysis
CWGS	Calculation from VPH-S and EPH-S	As received	Passing 10mm test sieve	Leicester	Determination of TPH CWG (Volatile Petroleum Hydrocarbons and Extractable Petroleum Hydrocarbons) in soils via Headspace-GC-MS and GC-GC-FID respectively
GXCXCS	MS - CL - TPH & EPH by GCXGC	As received	Passing 10mm test sieve	Leicester	Determination of TPH and EPH in soils via GCxGC-FID
ICPMETS	MS - CL - ICP Metals	Air dried	Passing 10mm test sieve	Leicester	Determination of metals in soils via ICP
LEACH-SS-P	MS-CL-Soil Leachate Preparation (SS)	As Received	All crushed to pass 4mm test sieve	Leicester	Preparation of single stage soil leachates in accordance with MS-CL-Soil Leachate Preparation
PAHASRDS	MS - CL - PAH (As Received)	As received	Passing 10mm test sieve	Leicester	Determination of Polyaromatic hydrocarbons in soil via GC-MS
PAHASRDSW	MS - CL - PAH (As Received - WAC)	As received	Passing 10mm test sieve	Leicester	Determination of Polyaromatic hydrocarbons in soil via GC-MS
PCB7S	MS - CL - PCB Soils	As received	Passing 10mm test sieve	Leicester	Determination of PCB's (7 congeners) in soils via GC-MS
PHSBRE	MS - CL - pH in Soils	As received	Passing 10mm test sieve	Leicester	Determination of pH in soils using a pH probe (using a 1:3 soil to water extraction)
SAMPLEPREP	MS - CL - Sample Preparation	-	-	Leicester	Preparation of samples (including determination of moisture content) to allow for subsequent analysis
SKALARHCS	MS - CL - Hexavalent Chromium by Skalar	As received	Passing 10mm test sieve	Leicester	Determination of hexavalent chromium in soil using Skalar segmented flow analyser

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Analysis Methodologies - Please refer to sample comments page (if present) for any changes to methods Methods

Site addresses where testing is performed: Leicester - 7-11 Harding Street, Leicester, LE1 4DH

Poole - Unit D11, Admiralty Park, Station Road, Holton Heath, Poole, BH16 6HX & Unit 14B, Blackhill Road West, Holton Heath Trading Park, Poole, Dorset, BH16 6LE

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preparation	Test Site	Test Details
TDSL	MS-CL-Conductivity in Water(TDS by Calc)	As received	BSEN:12457 Leaching	Leicester	Determination of total dissolved solids in leachates (by calculation)
TPHSCWAC	MS - CL - TPH (GC-FID) Scrubbed	As received	Passing 10mm test sieve	Leicester	Determination of Total Petroleum Hydrocarbons in soil using GC-FID. Sample is subjected to a fluorocil cleanup (scrubbing stage) prior to analysis (WAC)
VPHS	MS - CL - VPH	As received	Passing 10mm test sieve	Leicester	Determination of VPH in soils via Headspace-GC-MS
VPHSWAC	MS - CL - VPH	As received	Passing 10mm test sieve	Leicester	Determination of VPH in soils via Headspace-GC-MS
WACANIONS	MS - CL - Anions by Aquakem (WAC)	As received	BSEN:12457 Leaching	Leicester	Determination of sulphate, chloride and fluoride in a leachate as part of a WAC test using a Aquakem analyser
WACDOC	MS - CL - DOC (WAC)	As received	BSEN:12457 Leaching	Leicester	Determination of dissolved organic carbon in a leachate as part of a WAC test
WACMETALS1	MS-CL-Metals in Waters by ICP-MS (WAC)	As received	MS-CL-Soil Leachate Preparation	Leicester	Determination of dissolved metals in leachates via ICP-MS, expressed as quantity of analyte leached from the original material.
WACPHS	MS - CL - pH in Soils (WAC)	As received	BSEN:12457 Leaching	Leicester	Determination of pH in soils as part of a WAC test via pH probe
WACSKALAR	MS - CL - Phenols by Skalar (WAC)	As received	BSEN:12457 Leaching	Leicester	Determination of Total Phenols within leachate as part of a WAC test using a Skalar Segmented flow analyser
WACTOCS	MS - CL - TOC Eltra (WAC)	Air dried	Passing 10mm test sieve	Leicester	Determination of Total Organic Carbon in soil as part of a WAC test

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Sample Deviations

Deviations are listed below against each sample and associated test method, where deviation(s) are noted it means data may not be representative of the sample at the time of sampling and it is possible that results provided may be compromised.

Observations on receipt

A - No date of sampling provided

W - No time of sampling provided

C - Received in inappropriate container

H - Contains headspace

T - Temperature on receipt exceeds storage temperature

R - Sample(s) received outside standard identified timescales for testing to commence/complete, any result formally classed as deviating will be marked with an X against the applicable test (i.e. RX)

Observations whilst in laboratory

X - Exceeds sampling to extraction or analysis timescales

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Test	Deviations
803552		CT1			MS - CL - pH in Soils (WAC)	RX
803552		CT1			MS - CL - pH in Soils	RX
803552		CT1			MS-CL-Soil Leachate Preparation (SS)	C
803553		CT1			MS - CL - pH in Soils	RX
803559		CT3			MS - CL - pH in Soils	RX
803560		CT2			MS - CL - pH in Soils	RX
803561		CT4			MS - CL - pH in Soils	RX

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

HWOL TPH Acronym Index

Acronym	Description
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics and Aromatics
AL	Aliphatics Only
AR	Aromatics Only
2D	GC-GC - Double Coil Gas Chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (except for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Key of Codes	
[1]	EH_1D_TOTAL
[2]	EH_CU_1D_TOTAL
[3]	EH_CU+HS_1D_TOTAL
[4]	EH_1D+HS_MS_TOTAL
[5]	HS_MS_1D_AL
[6]	HS_MS_1D_AR
[7]	HS_MS_1D_TOTAL
[8]	EH_CU_1D_AL
[9]	EH_CU_1D_AR
[10]	EH_2D+HS_1D_TOTAL
[11]	EH_CU_2D+HS_1D_TOTAL
[12]	EH_2D_TOTAL
[13]	EH_2D_AL
[14]	EH_2D_AR
[15]	EH_CU_2D_TOTAL
[16]	EH_CU_2D_AL
[17]	EH_CU_2D_AR

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

Additional Method Notes

Method	Notes
TRL 447 Suite	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with TRL 447 Appendix C. 2. Testing was carried out in accordance with methods 1, 2 and 4 of TRL 447 2001 (Updated 2005). 3. Oxidisable sulphides and total potential sulphate have been calculated in accordance with TRL 447, Appendix C Test 4. Values are reported against a dry mass of sample passing a 2mm test sieve after oven drying, where required material retained on the 2mm test sieve was recombined with the test portion prior to analysis.
BS1377 Acid Soluble Chloride	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021, acid soluble method. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Loss on Ignition	Testing was in accordance with BS 1377: Part 3: 2018 + A1: 2021 Clause 6. Determination of the mass loss on ignition. Some information required by BS1377: 2016: Part 1 has not been reported. This information is available on request.
BS1377 Organic Matter Content	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377: Part 3 : 2018 + A1: 2021 Clause 4. 3. The reported % organic content is the average organic matter content present in the soil fraction passing the 2mm test sieve to the nearest 0.1% of the original oven dry mass of soil. 4. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 pH Value	pH testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021 Clause 12
BS1377 Sulphate (acid soluble)	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016. 2. Sulphate testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.9 & 7.5. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Total Dissolved Solids	Determination of TDS in accordance with BS 1377: Part 3
BS1377 Total Sulphur	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016.
BS1377 Water Soluble Chloride	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016 2. Testing was in accordance with BS 1377 : Part 3 : 2018 + A1: 2021, Clause 7.2, water soluble method. 3. Some information required by BS 1377 has not been reported. This information is available on request.
BS1377 Sulphate (water soluble) (ICP-OES)	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS 1377 : Part 1 : 2016. 2. Sulphate testing of Soil in accordance with BS 1377 : Part 3 : 2018 + A1 : 2021 Clause 7.3 & 7.5. 3. pH of the water extract was not recorded. 4. Some information required by BS 1377 has not been reported. This information is available on request.
EN1744 Acid Soluble Sulphate	<p>Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 12.</p> <p>Analysis subcontracted to a UKAS accredited laboratory</p>
EN1744 Total Sulphur by HTC (Cl. 11.2)	<p>Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11.2</p> <p>Analysis subcontracted to a UKAS accredited laboratory</p>
EN1744 Total Sulphur (Cl. 11.1)	<p>Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 11.</p> <p>Analysis subcontracted to a UKAS accredited laboratory</p>
EN1744 Water Soluble Chloride	<p>Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 7 (Reference Method).</p> <p>Analysis subcontracted to a UKAS accredited laboratory</p>

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Lavant Drive, Havant 26-04-21

Additional Method Notes

Method	Notes
EN1744 Water Soluble Sulphate	Testing was in accordance with BS EN 1744-1:2009 + A1:2012 clause 10. Analysis subcontracted to a UKAS accredited laboratory
Oxidisable Sulphides Calculation (HTC)	Calculated in accordance with TRL 447 using results determined in accordance with EN1744
Oxidisable Sulphides Calculation (Grav)	Calculated in accordance with TRL 447 using results determined in accordance with EN1744
Total Potential Sulphate (Calc from 1744 Total S)	Derived from the Total sulphur concentration determined in accordance with EN1744.
BS1881 Alkali (Na ₂ O + K ₂ O)	<ol style="list-style-type: none"> 1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 12.3. 2. A concrete density of 2300kg/m³ was used in the calculation of equivalent sodium oxide content per m³ of concrete. 3. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 4. Quality control samples are tested with each batch of samples.
BS1881 Calcium Oxide Content (EDTA Titration)	<ol style="list-style-type: none"> 1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 6.4. 2. Cement content (%m/m) has been calculated assuming the presence in the concrete of Ordinary Portland Cement, containing 64.5% by mass of Calcium Oxide. 3. Samples of the original constituents of the mix were not submitted. 4. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 5. Quality control samples are tested with each batch of samples. 6. Samples were identified as being part of a batch and therefore the results are from a single analysis only.
BS1881 Cement Content (ICP method)	<ol style="list-style-type: none"> 1. Testing was in accordance with BS 1881: Part 124: 2015 Clause 6.5 by ICP. 2. Cement content has been calculated assuming the presence in the concrete of Ordinary Portland Cement, containing 20.2% and 64.5% by mass of soluble silica and calcium oxide respectively. 3. Samples of the original constituents of the mix were not submitted. 4. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 5. Quality control samples are tested with each batch of samples. 6. Samples were identified as being part of a batch
Chloride in Concrete by Aquakem (Acid Soluble)	<ol style="list-style-type: none"> 1. Testing was in accordance with in house method statement MS - CL - Chloride in Hardened concrete by Aquakem. 2. Samples were not passed over the 125micron BS Test Sieve before testing. 3 Quality control samples are tested with each batch of samples.
Moisture Content of Grout Mortar & Concrete	<ol style="list-style-type: none"> 1. Testing was in accordance with in house method statement MS Moisture Content of Grout, Mortar and Concrete
MS - Sulphate in Hardened Concrete by ICP	<ol style="list-style-type: none"> 1. Testing undertaken in accordance with in house method statement MS - Sulphate in hardened concrete by ICP. 2. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015. 3. Quality control samples are tested with each batch of samples.
BS1881 Water Cement Ratio	<ol style="list-style-type: none"> 1 Testing was in accordance with BS 1881: Part 124: 2015+A1:2021. 2. Cement content was determined in accordance with BS 1881: Part 124: 2015+A1:2021 Clause 6.5 by ICP. 3. Samples of the original constituents of the mix was/was not submitted. 4. Original water/cement ratio has been calculated in accordance with BS 1881: Part 124: 2015+A1:2021 Clause 9.6. 5. Samples received were smaller than required by Clause 4.1 of BS 1881 : Part 124 :2015+A1:2021.

E26/07877/GIN/26-25262

Lavant Drive, Havant 26-04-21

Additional Method Notes

Method	Notes
BS4551 Mix Proportion	<ol style="list-style-type: none"> 1. Sample preparation was in accordance with BS4551 2005 + A2:2013 Clause 7. 4.5. 2. Testing was in accordance with BS 4551: Part 2: 2005 + A2:2013 Clause 7.5.3 and 7.5.3.4. 3. Cement content has been calculated assuming the presence in the mix of Ordinary Portland Cement containing 20.2% and 64.5% by mass of soluble silica and calcium oxide respectively.
BS6463-102 Neutralizing Value	Testing was undertaken in accordance with an in house method statement based on BS6463-102
BS3882:2015 Specification for topsoil	Testing was undertaken in accordance with the methodologies within BS3882:2015
BS8601:2013 Specification for subsoil	Testing was undertaken in accordance with the methodologies within BS8601:2013
Depth of Carbonation (BS EN 14630:2006)	<ol style="list-style-type: none"> 1. Testing was carried out in accordance with BS EN 14630:2006 Depth of Carbonation. 2. Testing was carried out in the laboratory. 3. Indicator Solution Used– 1g of Phenolphthalein powder dissolved in a solution of 50ml of Methylated Spirits and 100ml of deionised water
HAC	<ol style="list-style-type: none"> 1. Testing was in accordance with BRE Information Sheet IS 15/74. 2. Contaminated samples may give a false result. 3. Samples taken from extensively carbonated concrete containing Portland Cement may give a false positive result. 4. If conclusive identification of the presence of High Alumina Cement is required this result should be confirmed by a more definitive test.
pH Value of Concrete	<ol style="list-style-type: none"> 1. Testing was in accordance with in house method statement MS – pH Value of Hardened Concrete, Grout and Water from voids
Sub - EN1744 Sulphide	Analysis was in accordance with BS EN 1744-1 : 2009 + A1 : 2012, clause 13 and subcontracted to a UKAS accredited laboratory for this test

Waste Classification Report

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

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



WRX7Z-KRHGH-DZBS2

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

Report is invalid if pages are removed.

Job name

Land North of Lavant Drive, Havant

Description/Comments

Project

26-04-21

Site

Land North of Lavant Drive, Havant, PO9 2AW

Classified by

Name: **Fiona White**
Date: **15 Jul 2026 08:26 GMT**
Telephone: **01280 816409**
Company: **Geo-Integrity Limited**
Geo-Integrity
Unit 7
Towcester
NN12 8TA

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

HazWasteOnline™ Certification:

CERTIFIED

Course
Hazardous Waste Classification

Date
05 Oct 2023

Next 3 year Refresher due by Oct 2026

Purpose of classification

7 - Disposal of Waste

Address of the waste

Land North of Lavant Drive, Havant, PO9 2AW

Post Code **PO9 2AW**

SIC for the process giving rise to the waste

41201 Construction of commercial buildings

Description of industry/producer giving rise to the waste

Redevelopment of derelict land

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

waste created from trench excavations

Description of the waste

made ground comprising sand and gravel

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	CT1	0.20	Non Hazardous		3
2	CT1[2]	1.20	Hazardous	HP 7	5
3	CT2	0.50	Non Hazardous		8
4	CT3	0.30	Non Hazardous		11
5	SA1	0.20	Non Hazardous		14
6	CT4	0.35	Non Hazardous		16
7	CT5	1.50	Non Hazardous		18

Related documents

#	Name	Description
1	Geo-Integrity Suite 2026	waste stream template used to create this Job

Report

Created by: Fiona White

Created date: 15 Jul 2026 08:26 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	20
Appendix B: Rationale for selection of metal species	21
Appendix C: Version	22

Classification of sample: CT1

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
CT1	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.20 m		
Moisture content:		
13%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	asbestos fibres detected (Yes/No)				No						
			ACM_FIBRES								
2	pH				8.3 pH		8.3	pH	8.3 pH		
			PH								
3	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203	mg/kg	<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3								
4	cadmium { cadmium sulfate }				1 mg/kg	1.855	1.641	mg/kg	0.000164 %	✓	
	048-009-00-9	233-331-6	10124-36-4								
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				15 mg/kg	1.462	19.401	mg/kg	0.00194 %	✓	
		215-160-9	1308-38-9								
6	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
7	copper { copper sulphate pentahydrate }				29 mg/kg	3.929	100.834	mg/kg	0.0101 %	✓	
	029-023-00-4	231-847-6	7758-99-8								
8	lead { lead chromate }			1	54 mg/kg	1.56	74.54	mg/kg	0.00478 %	✓	
	082-004-00-2	231-846-0	7758-97-6								
9	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384	mg/kg	<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel chromate }				18 mg/kg	2.976	47.41	mg/kg	0.00474 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
11	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431	mg/kg	<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
12	zinc { zinc chromate }				160 mg/kg	2.774	392.8	mg/kg	0.0393 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
13	TPH (C6 to C40) petroleum group				150 mg/kg		132.743	mg/kg	0.0133 %	✓	
			TPH								
14	benzene				<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
15	toluene				<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3								
16	ethylbenzene				<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	xylene 601-022-00-9	215-535-7	1330-20-7		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
18	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X	216-653-1	1634-04-4		<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
19	acenaphthene 201-469-6	33-32-9			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
20	acenaphthylene 205-917-1	208-96-8			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
21	anthracene 204-371-1	120-12-7			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
22	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
23	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
24	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
25	benzo[ghi]perylene 205-883-8	191-24-2			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
26	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
27	chrysene 601-048-00-0	205-923-4	218-01-9		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
28	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
29	fluoranthene 205-912-4	206-44-0			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
30	fluorene 201-695-5	86-73-7			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
31	indeno[123-cd]pyrene 205-893-2	193-39-5			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
32	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
33	phenanthrene 201-581-5	85-01-8			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
34	pyrene 204-927-3	129-00-0			<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
Total:									0.0743 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%) because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0133%)

Classification of sample: CT1[2]

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

Sample details

Sample name:	LoW Code:
CT1[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.20 m	Entry:
	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which may induce cancer or increase its incidence."

Hazard Statements hit:

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

Because of determinand:

asbestos (conc.: 0.435%)

Determinands

Moisture content: None

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos fibres detected (Yes/No)				Yes					
			ACM_FIBRES							
2	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.435 %		0.435 %	0.435 %		
3	pH				8.4 pH		8.4 pH	8.4 pH		
			PH							
4	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203 mg/kg	<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3							
5	cadmium { cadmium sulfate }				0.8 mg/kg	1.855	1.484 mg/kg	0.000148 %		
	048-009-00-9	233-331-6	10124-36-4							
6	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				14 mg/kg	1.462	20.462 mg/kg	0.00205 %		
		215-160-9	1308-38-9							
7	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
8	copper { copper sulphate pentahydrate }				41 mg/kg	3.929	161.091 mg/kg	0.0161 %		
	029-023-00-4	231-847-6	7758-99-8							
9	lead { lead chromate }			1	110 mg/kg	1.56	171.58 mg/kg	0.011 %		
	082-004-00-2	231-846-0	7758-97-6							
10	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384 mg/kg	<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel chromate }				19 mg/kg	2.976	56.549 mg/kg	0.00565 %		
	028-035-00-7	238-766-5	14721-18-7							
12	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431 mg/kg	<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
13	zinc { zinc chromate }				220	mg/kg	2.774	610.312	mg/kg	0.061 %		
	024-007-00-3	236-878-9	13530-65-9									
14	TPH (C6 to C40) petroleum group				140	mg/kg		140	mg/kg	0.014 %		
			TPH									
15	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
16	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
	601-022-00-9	215-535-7	1330-20-7									
19	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
20	acenaphthene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		201-469-6	83-32-9									
21	acenaphthylene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		205-917-1	208-96-8									
22	anthracene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		204-371-1	120-12-7									
23	benzo[a]anthracene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
	601-033-00-9	200-280-6	56-55-3									
24	benzo[a]pyrene; benzo[def]chrysene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
	601-032-00-3	200-028-5	50-32-8									
25	benzo[b]fluoranthene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
	601-034-00-4	205-911-9	205-99-2									
26	benzo[ghi]perylene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		205-883-8	191-24-2									
27	benzo[k]fluoranthene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
28	chrysene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
29	dibenz[a,h]anthracene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
30	fluoranthene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
		205-912-4	206-44-0									
31	fluorene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		201-695-5	86-73-7									
32	indeno[123-cd]pyrene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		205-893-2	193-39-5									
33	naphthalene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
34	phenanthrene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
		201-581-5	85-01-8									
35	pyrene				0.37	mg/kg		0.37	mg/kg	0.000037 %		
		204-927-3	129-00-0									
Total:										0.545 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%)
because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.014%)

Classification of sample: CT2

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
CT2	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.50 m		
Moisture content:		
16%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos fibres detected (Yes/No)				Yes					
			ACM_FIBRES							
2	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.002 %		0.0017 %	0.00172 %	✓	
3	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203 mg/kg	<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3							
4	cadmium { cadmium sulfate }				0.8 mg/kg	1.855	1.279 mg/kg	0.000128 %	✓	
	048-009-00-9	233-331-6	10124-36-4							
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				9.6 mg/kg	1.462	12.096 mg/kg	0.00121 %	✓	
		215-160-9	1308-38-9							
6	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { copper sulphate pentahydrate }				40 mg/kg	3.929	135.485 mg/kg	0.0135 %	✓	
	029-023-00-4	231-847-6	7758-99-8							
8	lead { lead chromate }			1	41 mg/kg	1.56	55.131 mg/kg	0.00353 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384 mg/kg	<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				18 mg/kg	2.976	46.183 mg/kg	0.00462 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431 mg/kg	<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				53 mg/kg	2.774	126.75 mg/kg	0.0127 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				100 mg/kg		86.207 mg/kg	0.00862 %	✓	
			TPH							
14	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
15	toluene 601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
16	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
17	xylene 601-022-00-9	215-535-7	1330-20-7		<0.02 mg/kg		<0.02 mg/kg		<0.000002 %		<LOD
18	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X	216-653-1	1634-04-4		<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
19	acenaphthene 201-469-6	83-32-9			<0.02 mg/kg		<0.02 mg/kg		<0.000002 %		<LOD
20	acenaphthylene 205-917-1	208-96-8			0.04 mg/kg		0.0345 mg/kg		0.00000345 %	✓	
21	anthracene 204-371-1	120-12-7			0.04 mg/kg		0.0345 mg/kg		0.00000345 %	✓	
22	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.19 mg/kg		0.164 mg/kg		0.0000164 %	✓	
23	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.28 mg/kg		0.241 mg/kg		0.0000241 %	✓	
24	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.29 mg/kg		0.25 mg/kg		0.000025 %	✓	
25	benzo[ghi]perylene 205-883-8	191-24-2			0.27 mg/kg		0.233 mg/kg		0.0000233 %	✓	
26	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		0.12 mg/kg		0.103 mg/kg		0.0000103 %	✓	
27	chrysene 601-048-00-0	205-923-4	218-01-9		0.17 mg/kg		0.147 mg/kg		0.0000147 %	✓	
28	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		0.03 mg/kg		0.0259 mg/kg		0.00000259 %	✓	
29	fluoranthene 205-912-4	206-44-0			0.32 mg/kg		0.276 mg/kg		0.0000276 %	✓	
30	fluorene 201-695-5	86-73-7			<0.02 mg/kg		<0.02 mg/kg		<0.000002 %		<LOD
31	indeno[123-cd]pyrene 205-893-2	193-39-5			0.23 mg/kg		0.198 mg/kg		0.0000198 %	✓	
32	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.02 mg/kg		<0.02 mg/kg		<0.000002 %		<LOD
33	phenanthrene 201-581-5	85-01-8			0.09 mg/kg		0.0776 mg/kg		0.00000776 %	✓	
34	pyrene 204-927-3	129-00-0			0.29 mg/kg		0.25 mg/kg		0.000025 %	✓	
Total:									0.0463 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%) because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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



Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00862%)

Classification of sample: CT3

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
CT3	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.30 m		
Moisture content:		
8.9%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 8.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos fibres detected (Yes/No)				Yes					
			ACM_FIBRES							
2	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.002 %		0.0018 %	0.00184 %	✓	
3	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203 mg/kg	<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3							
4	cadmium { cadmium sulfate }				0.9 mg/kg	1.855	1.533 mg/kg	0.000153 %	✓	
	048-009-00-9	233-331-6	10124-36-4							
5	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				13 mg/kg	1.462	17.447 mg/kg	0.00174 %	✓	
		215-160-9	1308-38-9							
6	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { copper sulphate pentahydrate }				30 mg/kg	3.929	108.238 mg/kg	0.0108 %	✓	
	029-023-00-4	231-847-6	7758-99-8							
8	lead { lead chromate }			1	48 mg/kg	1.56	68.752 mg/kg	0.00441 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
9	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384 mg/kg	<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				18 mg/kg	2.976	49.194 mg/kg	0.00492 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431 mg/kg	<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
12	zinc { zinc chromate }				88 mg/kg	2.774	224.173 mg/kg	0.0224 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
13	TPH (C6 to C40) petroleum group				90 mg/kg		82.645 mg/kg	0.00826 %	✓	
			TPH							
14	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
15	toluene 601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
16	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
17	xylene 601-022-00-9	215-535-7	1330-20-7		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
18	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X	216-653-1	1634-04-4		<0.01 mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
19	acenaphthene 201-469-6	83-32-9			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
20	acenaphthylene 205-917-1	208-96-8			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
21	anthracene 204-371-1	120-12-7			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
22	benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
23	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.41 mg/kg		0.376	mg/kg	0.0000376 %	✓	
24	benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.36 mg/kg		0.331	mg/kg	0.0000331 %	✓	
25	benzo[ghi]perylene 205-883-8	191-24-2			0.35 mg/kg		0.321	mg/kg	0.0000321 %	✓	
26	benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
27	chrysene 601-048-00-0	205-923-4	218-01-9		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
28	dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
29	fluoranthene 205-912-4	206-44-0			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
30	fluorene 201-695-5	86-73-7			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
31	indeno[123-cd]pyrene 205-893-2	193-39-5			0.29 mg/kg		0.266	mg/kg	0.0000266 %	✓	
32	naphthalene 601-052-00-2	202-049-5	91-20-3		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
33	phenanthrene 201-581-5	85-01-8			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	pyrene 204-927-3	129-00-0			<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
Total:									0.0547 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%) because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00826%)

Classification of sample: SA1

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
SA1	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.20 m		
Moisture content:		
17%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	asbestos fibres detected (Yes/No)				No						
			ACM_FIBRES								
2	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203 mg/kg		<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium sulfate }				0.9 mg/kg	1.855	1.427 mg/kg		0.000143 %	✓	
	048-009-00-9	233-331-6	10124-36-4								
4	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				15 mg/kg	1.462	18.738 mg/kg		0.00187 %	✓	
		215-160-9	1308-38-9								
5	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg		<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	copper { copper sulphate pentahydrate }				24 mg/kg	3.929	80.596 mg/kg		0.00806 %	✓	
	029-023-00-4	231-847-6	7758-99-8								
7	lead { lead chromate }			1	47 mg/kg	1.56	62.659 mg/kg		0.00402 %	✓	
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384 mg/kg		<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	nickel { nickel chromate }				17 mg/kg	2.976	43.245 mg/kg		0.00432 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
10	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431 mg/kg		<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
11	zinc { zinc chromate }				120 mg/kg	2.774	284.528 mg/kg		0.0285 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
12	TPH (C6 to C40) petroleum group				160 mg/kg		136.752 mg/kg		0.0137 %	✓	
			TPH								
13	benzene				<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
14	toluene				<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3								
15	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4								
16	xylene				<0.02 mg/kg		<0.02 mg/kg		<0.000002 %		<LOD
	601-022-00-9	215-535-7	1330-20-7								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
18	acenaphthene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		201-469-6	83-32-9								
19	acenaphthylene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		205-917-1	208-96-8								
20	anthracene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		204-371-1	120-12-7								
21	benzo[a]anthracene				0.42 mg/kg		0.359 mg/kg	0.0000359 %		✓	
	601-033-00-9	200-280-6	56-55-3								
22	benzo[a]pyrene; benzo[def]chrysene				0.46 mg/kg		0.393 mg/kg	0.0000393 %		✓	
	601-032-00-3	200-028-5	50-32-8								
23	benzo[b]fluoranthene				0.42 mg/kg		0.359 mg/kg	0.0000359 %		✓	
	601-034-00-4	205-911-9	205-99-2								
24	benzo[ghi]perylene				0.43 mg/kg		0.368 mg/kg	0.0000368 %		✓	
		205-883-8	191-24-2								
25	benzo[k]fluoranthene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
26	chrysene				0.3 mg/kg		0.256 mg/kg	0.0000256 %		✓	
	601-048-00-0	205-923-4	218-01-9								
27	dibenz[a,h]anthracene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
28	fluoranthene				0.77 mg/kg		0.658 mg/kg	0.0000658 %		✓	
		205-912-4	206-44-0								
29	fluorene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		201-695-5	86-73-7								
30	indeno[123-cd]pyrene				0.29 mg/kg		0.248 mg/kg	0.0000248 %		✓	
		205-893-2	193-39-5								
31	naphthalene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
32	phenanthrene				0.33 mg/kg		0.282 mg/kg	0.0000282 %		✓	
		201-581-5	85-01-8								
33	pyrene				0.64 mg/kg		0.547 mg/kg	0.0000547 %		✓	
		204-927-3	129-00-0								
Total:									0.0609 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%) because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0137%)

Classification of sample: CT4

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
CT4	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.35 m		
Moisture content:		
20%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 20% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	asbestos fibres detected (Yes/No)				No						
			ACM_FIBRES								
2	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203 mg/kg		<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3								
3	cadmium { cadmium sulfate }				0.9 mg/kg	1.855	1.391 mg/kg		0.000139 %	✓	
	048-009-00-9	233-331-6	10124-36-4								
4	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				14 mg/kg	1.462	17.051 mg/kg		0.00171 %	✓	
		215-160-9	1308-38-9								
5	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg		<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0								
6	copper { copper sulphate pentahydrate }				25 mg/kg	3.929	81.855 mg/kg		0.00819 %	✓	
	029-023-00-4	231-847-6	7758-99-8								
7	lead { lead chromate }			1	50 mg/kg	1.56	64.992 mg/kg		0.00417 %	✓	
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384 mg/kg		<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	nickel { nickel chromate }				16 mg/kg	2.976	39.684 mg/kg		0.00397 %	✓	
	028-035-00-7	238-766-5	14721-18-7								
10	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431 mg/kg		<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5								
11	zinc { zinc chromate }				120 mg/kg	2.774	277.415 mg/kg		0.0277 %	✓	
	024-007-00-3	236-878-9	13530-65-9								
12	TPH (C6 to C40) petroleum group				110 mg/kg		91.667 mg/kg		0.00917 %	✓	
			TPH								
13	benzene				<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2								
14	toluene				<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3								
15	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg		<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4								
16	xylene				<0.02 mg/kg		<0.02 mg/kg		<0.000002 %		<LOD
	601-022-00-9	215-535-7	1330-20-7								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	603-181-00-X	216-653-1	1634-04-4								
18	acenaphthene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		201-469-6	83-32-9								
19	acenaphthylene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		205-917-1	208-96-8								
20	anthracene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		204-371-1	120-12-7								
21	benzo[a]anthracene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
22	benzo[a]pyrene; benzo[def]chrysene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
23	benzo[b]fluoranthene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
24	benzo[ghi]perylene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		205-883-8	191-24-2								
25	benzo[k]fluoranthene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
26	chrysene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
27	dibenz[a,h]anthracene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
28	fluoranthene				0.36 mg/kg		0.3 mg/kg	0.00003 %		✓	
		205-912-4	206-44-0								
29	fluorene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		201-695-5	86-73-7								
30	indeno[123-cd]pyrene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		205-893-2	193-39-5								
31	naphthalene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
32	phenanthrene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %			<LOD
		201-581-5	85-01-8								
33	pyrene				0.29 mg/kg		0.242 mg/kg	0.0000242 %		✓	
		204-927-3	129-00-0								
Total:									0.0551 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%) because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00917%)

Classification of sample: CT5

 **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:	
CT5	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.50 m		
Moisture content:		
9.9%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				<10 mg/kg	1.32	<13.203 mg/kg	<0.00132 %		<LOD
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium sulfate }				0.4 mg/kg	1.855	0.675 mg/kg	0.0000675 %	✓	
	048-009-00-9	233-331-6	10124-36-4							
3	chromium in Cr(III) compounds { chromium(III) oxide (worst case) }				<1 mg/kg	1.462	<1.462 mg/kg	<0.000146 %		<LOD
		215-160-9	1308-38-9							
4	chromium in Cr(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
5	copper { copper sulphate pentahydrate }				9.9 mg/kg	3.929	35.394 mg/kg	0.00354 %	✓	
	029-023-00-4	231-847-6	7758-99-8							
6	lead { lead chromate }			1	3 mg/kg	1.56	4.258 mg/kg	0.000273 %	✓	
	082-004-00-2	231-846-0	7758-97-6							
7	mercury { mercury dichloride }				<2.5 mg/kg	1.353	<3.384 mg/kg	<0.000338 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel chromate }				5 mg/kg	2.976	13.541 mg/kg	0.00135 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
9	selenium { nickel selenate }				<8 mg/kg	2.554	<20.431 mg/kg	<0.00204 %		<LOD
	028-031-00-5	239-125-2	15060-62-5							
10	zinc { zinc chromate }				12 mg/kg	2.774	30.291 mg/kg	0.00303 %	✓	
	024-007-00-3	236-878-9	13530-65-9							
11	TPH (C6 to C40) petroleum group		TPH		33 mg/kg		30.027 mg/kg	0.003 %	✓	
12	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
13	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
14	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
15	xylene				<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
	601-022-00-9	215-535-7	1330-20-7							
16	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
17	acenaphthene	201-469-6	83-32-9		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
18	acenaphthylene	205-917-1	208-96-8		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
19	anthracene	204-371-1	120-12-7		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
21	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
23	benzo[ghi]perylene	205-883-8	191-24-2		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
24	benzo[k]fluoranthene	601-036-00-5	205-916-6		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
25	chrysene	601-048-00-0	205-923-4		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
27	fluoranthene	205-912-4	206-44-0		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
28	fluorene	201-695-5	86-73-7		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
29	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
30	naphthalene	601-052-00-2	202-049-5		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
31	phenanthrene	201-581-5	85-01-8		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
32	pyrene	204-927-3	129-00-0		<0.02 mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
Total:									0.0113 %		

Key

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

Supplementary Hazardous Property Information

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

Force this Hazardous Property to non-hazardous for cumulative determinand results below the concentration of: 500 mg/kg (0.05%) because: Long chain hydrocarbons non-flammable

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.003%)

Appendix A: Classifier defined and non GB MCL determinands

asbestos fibres detected (Yes/No) (CAS Number: ACM_FIBRES)

Description/Comments: not classified, information only
Data source: N/A
Data source date: 15 Jan 2020
Hazard Statements: None.

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 version 1.1.NI and 1.2.GB 2021
Data source date: 30 Jan 2021
Hazard Statements: None.

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

Description/Comments: Data from ECHACHEM; notifications <1% & outliers (H360, H413) ignored
Data source: <https://chem.echa.europa.eu/100.013.783/overview>
Data source date: 16 Mar 2026
Hazard Statements: Acute Tox. 4; H302 , Skin Sens. 1; H317 , Eye Irrit. 2; H319 , Resp. Sens. 1; H334

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

Description/Comments: Unknown Oil
Hazard statements taken from WM3 version 1.1.NI and 1.2.GB 2021
Data source: WM3 version 1.1.NI and 1.2.GB 2021
Data source date: 30 Jan 2021
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

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

GB MCL index number: 601-023-00-4
Description/Comments: IARC considers ethylbenzene Group 2B; Possibly carcinogenic to humans;
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
03 Jun 2026 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

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

Description/Comments: Data from ECHACHEM; CLP submissions;
SDS Sigma Aldrich v6.8 dated 12/12/2025
Data source: <https://chem.echa.europa.eu/100.001.336/industry/113817?searchText=83-32-9>
<https://www.sigmaaldrich.com/GB/en/sds/aldrich/215376>
Data source date: 02 Mar 2026
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

Description/Comments: Data from ECHACHEM; CLP submissions;
SDS Sigma Aldrich v6.7 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.005.380/overview>
<https://www.sigmaaldrich.com/GB/en/sds/aldrich/416703>
Data source date: 02 Mar 2026
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H310 , Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Acute Tox. 1; H330 , STOT SE 3; H335

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

Description/Comments: Data from ECHACHEM; CLP submissions
SDS Sigma Aldrich v9.3 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.003.974/overview>
<https://www.sigmaaldrich.com/GB/en/sds/supelco/48567>
Data source date: 03 Mar 2026
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , PBT; EUH440

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

Description/Comments: Data from ECHACHEM; CLP submissions; Sigma Aldrich SDS v7.1 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.005.350/overview>
<https://www.sigmaaldrich.com/GB/en/sds/aldrich/b9009>
Data source date: 18 May 2026
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , vPvB; EUH441 , PBT; EUH440

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

Description/Comments: Data from ECHACHEM; CLP submissions
SDS Sigma Aldrich v7.2 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.005.376/overview>
<https://www.sigmaaldrich.com/GB/en/sds/aldrich/f807>
Data source date: 03 Mar 2026
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , PBT; EUH440 , EUH441

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

Description/Comments: Data from ECHACHEM; CLP submissions;
SDS Sigma Aldrich v6.6 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.001.541/overview>
<https://www.sigmaaldrich.com/GB/en/sds/aldrich/128333>
Data source date: 02 Mar 2026
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

Description/Comments: Data from ECHACHEM database; CLP submissions
SDS Sigma Aldrich v6.8 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.005.359/overview>
<https://www.sigmaaldrich.com/GB/en/sds/supelco/48499>
Data source date: 03 Mar 2026
Hazard Statements: Carc. 2; H351 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

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

Description/Comments: Data from ECHACHEM; CLP submissions;
SDS Sigma Aldrich v7.2 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.001.437/overview>
<https://www.sigmaaldrich.com/GB/en/sds/supelco/48569>
Data source date: 02 Mar 2026
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , EUH441

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

Description/Comments: Data from ECHACHEM; CLP submissions
SDS Sigma Aldrich v7.2 dated 25/12/2025
Data source: <https://chem.echa.europa.eu/100.004.481/overview>
<https://www.sigmaaldrich.com/GB/en/sds/aldrich/185515>
Data source date: 03 Mar 2026
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , PBT; EUH440 , EUH441

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worse case species based on risk phase

cadmium {cadmium sulfate}

Worst case CLP species based on hazard statements/molecular weight

chromium in Cr(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on risk phase

chromium in Cr(VI) compounds {chromium(VI) oxide}

Worst case species based on risk phase

copper {copper sulphate pentahydrate}

Worst case CLP species based on hazard statements/molecular weight.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Reasonable worst case CLP species based on hazard statements/molecular weight and assuming no evidence for the use of explosives.

nickel {nickel chromate}

Worst case species based on risk phase

selenium {nickel selenate}

Worst case CLP species based on hazard statements/molecular weight

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2026.165.7172.12905 (14 Jun 2026)

HazWasteOnline Database: 2026.165.7172.12905 (14 Jun 2026)

This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

CLP Regulation - Regulation 1272/2008/EC of 16 December 2008

1st ATP - Regulation 790/2009/EC of 10 August 2009

2nd ATP - Regulation 286/2011/EC of 10 March 2011

3rd ATP - Regulation 618/2012/EU of 10 July 2012

4th ATP - Regulation 487/2013/EU of 8 May 2013

Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013

5th ATP - Regulation 944/2013/EU of 2 October 2013

6th ATP - Regulation 605/2014/EU of 5 June 2014

WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014

Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015

8th ATP - Regulation (EU) 2016/918 of 19 May 2016

9th ATP - Regulation (EU) 2016/1179 of 19 July 2016

10th ATP - Regulation (EU) 2017/776 of 4 May 2017

HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017

13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

14th ATP - Regulation (EU) 2020/217 of 4 October 2019

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020

GB MCL List - version 1.1 of 09 June 2021

GB MCL List v2.0 - version 2.0 of 20th October 2023

GB MCL List v3.0 - version 3.0 of 11th January 2024

GB MCL List v4.0 - version 4.0 of 2nd March 2024

GB MCL List v5.0 - version 5.0 of 26th June 2024

GB MCL List v6.0 - version 6.0 of 15th February 2025

GB MCL List v7.0 - version 7.0 of 23rd September 2025



Joint Industry Working Group
Asbestos in Soil and Construction & Demolition Materials

Project Reference	,26-04-21
Site Name	Land North of Lavant Drive, Havant
Client	Fed3 Projects Ltd.
Run by	Lee Ashworth
Date	15-Jul-26
Scenario details	Chrysotile and amosite were found in three MG samples as cement/loose fibres (quantified at 0.002% - 0.435%)

Decision Support Tool for CAR2012 Work Categories

Stage 1

Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)
Extent of degradation of ACMs at outset of work
Friability and degree of bonding by matrix (ACM matrix, not ground materials)
Distribution of Visible Asbestos Across Affected Area
Amount of asbestos fibre in selected ACM/fibre type as % of host material

Free dispersed fibres/fibre bundles	2
Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
No visible ACMs/fibre bundles	0
Large quantities - >0.1 %wt/wt	4

Score

Sub-total

14

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking

Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.

It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Stage 2

Exposure Factors

Anticipated airborne fibre concentration - Control Limit or SALI?
Anticipated duration of exposure to asbestos
Activity type and effect on deterioration of ACMs during work
Best description of primary host material matrix (soil/made ground)
Respirable fibre index for ACM - RIVM report 711701034 (2003)

<0.001 fibres/ml	0
> 2 hours in a 7 day period and Up to 10 hours in a day (e.g. full time occupational exposure)	4
Sampling, manual or mechanical (significant deterioration expected)	2
Coarse to Fine Sand	2
Low	2

Sub-total

10

Exposure ranking

Low

Combined hazard and exposure ranking

24

Medium



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Stage 3

Risk Assessment Outputs

Probable Licensing Status	Non-Licensed Work
RPE*	EN140 with P3 filter half mask
Dust Suppression**	Localised mechanical dust suppression
Hygiene/Decontamination***	Localised and enhanced personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis



Joint Industry Working Group
Asbestos in Soil and Construction & Demolition Materials

Decision Support Tool for Receptor Risk Ranking

Stage 1 Hazard Identification		Score
Select ACM type (run model for each type to generate 'Worst Case' output)	Free dispersed fibres/fibre bundles	2
Extent of degradation of ACMs	Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Distribution of Visible Asbestos Across Affected Area	No visible ACMs/fibre bundles	0
Asbestos fibre type	Mainly amosite (and possible trace tremolite/anthophyllite) with/without chrysotile (no crocidolite)	3
Sub-total		13
Hazard ranking		Medium

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.

It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.



Joint Industry Working Group
Asbestos in Soil and Construction & Demolition Materials

Stage 2		Score
Emission Factors		
Amount of asbestos fibre in selected ACM/fibre type as % of host material	Large quantities - ≥ 0.1 %wt/wt	4
Respirable fibre index for ACM - RIVM report 711701034 (2003)	Low	2
Activity type and effect on deterioration of ACMs	High disturbance, significant deterioration expected	4
Best description of primary host material matrix	Coarse to Fine Gravel	3
Sub-total		13
Exposure ranking		Medium

Stage 3		
Pathway and Receptor Sensitivity		Score
Receptor category	Residential	No score required
Age of Receptor	Young adult (>16 and <24)	2
Duration of exposure/site occupancy	>> 10 hours per day (e.g. 24 hour residential exposure)	4
Receptor ranking		6 Medium
Combined hazard, exposure and receptor ranking		Medium
Pathway: Distance of Receptor from Source	In or within 10m of area of disturbance	4
Pathway: Depth to impacted material	Material present near the surface, potential to be disturbed during non-construction/routine use of land	D
Pathway ranking		4D Medium
Overall ranking		Medium



Joint Industry Working Group
Asbestos in Soil and Construction & Demolition Materials

Project Reference	,26-04-21
Site Name	Land north of Lavant Drive, Havant
Client	Fed3 Projects
Run by	Lee Ashworth
Date	15-Jul-26
Reviewed by	Fiona White
Characterisation of scenario being evaluated	Asbestos fibres within the near-surface Made Ground soils - loose fibres of amosite and chrysotile (quantified at 0.002- 0.435%
Interpretation of scenario ranking by DST	The proposed development is a care home, therefore the critical receptors are elderly residents and young adults working full-time. Potential disturbance of near-surface soils is expected through activities such as gardening. The decision support tool has deemed a medium risk to receptors, therefore remedial measures will be required to reduce the risk to acceptable levels.

APPENDIX D

LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW**Order Details**

Date: 11/05/2026
Your ref: 26-04-21
Our Ref: GS-WCL-58I-SNU-1QF

Site Details

Location: 471982 107087
Area: 0.61 ha
Authority: [Havant Borough Council](#) ↗

Site plan**Quick Links**

Summary of findings [p. 2](#) >
OS MasterMap site plan [p.14](#) >
Aerial image [p. 9](#) >

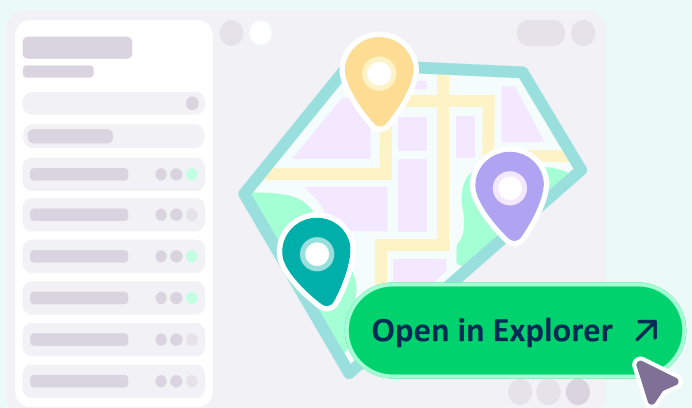
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- 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.



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 >	0	0	4	91	-
19 >	1.2 >	Historical tanks >	0	0	0	14	-
20 >	1.3 >	Historical energy features >	0	0	3	33	-
22	1.4	Historical petrol stations	0	0	0	0	-
22	1.5	Historical garages	0	0	0	0	-
22	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
23 >	2.1 >	Historical industrial land uses >	0	0	5	115	-
28 >	2.2 >	Historical tanks >	0	0	0	23	-
29 >	2.3 >	Historical energy features >	0	0	4	64	-
32	2.4	Historical petrol stations	0	0	0	0	-
32	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
33	3.1	Active or recent landfill	0	0	0	0	-
33	3.2	Historical landfill (BGS records)	0	0	0	0	-
34	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
34	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
34 >	3.5 >	Historical waste sites >	0	0	0	1	-
35 >	3.6 >	Licensed waste sites >	0	0	0	2	-
35 >	3.7 >	Waste exemptions >	0	0	13	11	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
38 >	4.1 >	Recent industrial land uses >	0	0	4	-	-
39	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
39	4.3	Current or recent petrol stations	0	0	0	0	-
39	4.4	Electricity cables	0	0	0	0	-
39	4.5	Gas pipelines	0	0	0	0	-



39	4.6	Sites determined as Contaminated Land	0	0	0	0	-
40	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
40	4.8	Regulated explosive sites	0	0	0	0	-
40	4.9	Hazardous substance storage/usage	0	0	0	0	-
40 >	4.10 >	<u>Historical licensed industrial activities (IPC) ></u>	0	0	0	5	-
41 >	4.11 >	<u>Licensed industrial activities (Part A(1)) ></u>	0	0	0	6	-
42 >	4.12 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	0	0	2	-
43	4.13	Radioactive Substance Authorisations	0	0	0	0	-
43 >	4.14 >	<u>Licensed Discharges to controlled waters ></u>	0	0	0	1	-
43	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
43 >	4.16 >	<u>Pollutant release to public sewer ></u>	0	0	0	1	-
44	4.17	List 1 Dangerous Substances	0	0	0	0	-
44	4.18	List 2 Dangerous Substances	0	0	0	0	-
44 >	4.19 >	<u>Pollution Incidents (EA/NRW) ></u>	0	0	0	15	-
46	4.20	Pollution inventory substances	0	0	0	0	-
46	4.21	Pollution inventory waste transfers	0	0	0	0	-
46	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
47 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
49 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
51 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
52	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
53	5.5	Groundwater vulnerability- local information	None (within 0m)				
54 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	3
55	5.7	Surface water abstractions	0	0	0	0	0
56 >	5.8 >	<u>Potable abstractions ></u>	0	0	0	0	3
56	5.9	Source Protection Zones	0	0	0	0	-
57 >	5.10 >	<u>Source Protection Zones (confined aquifer) ></u>	1	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m



58 >	6.1 >	Water Network (OS NGD) >	0	0	11	-	-
59 >	6.2 >	Surface water features >	0	0	5	-	-
60 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
60 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
61	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	7.1 >	Risk of flooding from rivers and the sea >	Medium (within 50m)				
63 >	7.2 >	Historical Flood Events >	0	0	1	-	-
63	7.3	Flood Defences	0	0	0	-	-
63	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
64	7.5	Flood Storage Areas	0	0	0	-	-
65 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
66 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
67 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
69 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
70 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	2
71 >	10.2 >	Conserved wetland sites (Ramsar sites) >	0	0	0	0	1
71 >	10.3 >	Special Areas of Conservation (SAC) >	0	0	0	0	1
72 >	10.4 >	Special Protection Areas (SPA) >	0	0	0	0	1
73	10.5	National Nature Reserves (NNR)	0	0	0	0	0
73	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
73 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	10
74	10.8	Biosphere Reserves	0	0	0	0	0
74	10.9	Forest Parks	0	0	0	0	0
74	10.10	Marine Conservation Zones	0	0	0	0	0
74	10.11	Green Belt	0	0	0	0	0



74	10.12	Proposed Ramsar sites	0	0	0	0	0
75	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
75	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
75	10.15	Nitrate Sensitive Areas	0	0	0	0	0
75 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	3
77 >	10.17 >	SSSI Impact Risk Zones >	2	-	-	-	-
78 >	10.18 >	SSSI Units >	0	0	0	0	2
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
80	11.1	World Heritage Sites	0	0	0	-	-
81	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
81	11.3	National Parks	0	0	0	-	-
81 >	11.4 >	Listed Buildings >	0	0	1	-	-
82	11.5	Conservation Areas	0	0	0	-	-
82	11.6	Scheduled Ancient Monuments	0	0	0	-	-
82	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
83 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
84	12.2	Open Access Land	0	0	0	-	-
84	12.3	Tree Felling Licences	0	0	0	-	-
84	12.4	Environmental Stewardship Schemes	0	0	0	-	-
84	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
85	13.1	Priority Habitat Inventory	0	0	0	-	-
85	13.2	Habitat Networks	0	0	0	-	-
86 >	13.3 >	Open Mosaic Habitat >	1	0	0	-	-
86	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
87 >	14.1 >	10k Availability >	Identified (within 500m)				
88	14.2	Artificial and made ground (10k)	0	0	0	0	-



89 >	14.3 >	Superficial geology (10k) >	2	0	1	2	-
90	14.4	Landslip (10k)	0	0	0	0	-
91 >	14.5 >	Bedrock geology (10k) >	1	0	0	2	-
92 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	0	1	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	15.1 >	50k Availability >	Identified (within 500m)				
94	15.2	Artificial and made ground (50k)	0	0	0	0	-
94	15.3	Artificial ground permeability (50k)	0	0	-	-	-
95 >	15.4 >	Superficial geology (50k) >	2	0	1	3	-
96 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
96	15.6	Landslip (50k)	0	0	0	0	-
96	15.7	Landslip permeability (50k)	None (within 50m)				
97 >	15.8 >	Bedrock geology (50k) >	1	0	0	2	-
98 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
98 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	0	1	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
99 >	16.1 >	BGS Boreholes >	0	0	12	-	-
Page	Section	Natural ground subsidence >					
101 >	17.1 >	Shrink swell clays >	Low (within 50m)				
102 >	17.2 >	Running sands >	Low (within 50m)				
104 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
105 >	17.4 >	Collapsible deposits >	Low (within 50m)				
106 >	17.5 >	Landslides >	Very low (within 50m)				
107 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
109 >	18.1 >	BritPits >	0	0	1	1	-
110 >	18.2 >	Surface ground workings >	0	0	5	-	-
111	18.3	Underground workings	0	0	0	0	0
111	18.4	Underground mining extents	0	0	0	0	-



111	18.5	Historical Mineral Planning Areas	0	0	0	0	-
111	18.6	Non-coal mining	0	0	0	0	0
111	18.7	JPB mining areas	None (within 0m)				
112	18.8	The Coal Authority non-coal mining	0	0	0	0	-
112	18.9	Researched mining	0	0	0	0	-
112	18.10	Mining record office plans	0	0	0	0	-
112	18.11	BGS mine plans	0	0	0	0	-
113	18.12	Coal mining	None (within 0m)				
113	18.13	Brine areas	None (within 0m)				
113	18.14	Gypsum areas	None (within 0m)				
113	18.15	Tin mining	None (within 0m)				
113	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
114	19.1	Natural cavities	0	0	0	0	-
114	19.2	Mining cavities	0	0	0	0	0
114	19.3	Reported recent incidents	0	0	0	0	-
114	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
116 >	20.1 >	Radon >	Between 5% and 10% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
118 >	21.1 >	BGS Estimated Background Soil Chemistry >	6	4	-	-	-
119	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
119	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
120	22.1	Underground railways (London)	0	0	0	-	-
120	22.2	Underground railways (Non-London)	0	0	0	-	-
120	22.3	Railway tunnels	0	0	0	-	-
120	22.4	Historical railway and tunnel features	0	0	0	-	-
120	22.5	Royal Mail tunnels	0	0	0	-	-



121	22.6	Historical railways	0	0	0	-	-
121	22.7	Railways	0	0	0	-	-
121	22.8	Crossrail 2	0	0	0	0	-
121	22.9	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 20/04/2021

Site Area: 0.61ha



Recent site history - 2018 aerial photograph



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Capture Date: 26/06/2018

Site Area: 0.61ha



Recent site history - 2013 aerial photograph



Capture Date: 20/08/2013

Site Area: 0.61ha



Recent site history - 2005 aerial photograph



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Capture Date: 16/05/2005

Site Area: 0.61ha



Recent site history - 1999 aerial photograph



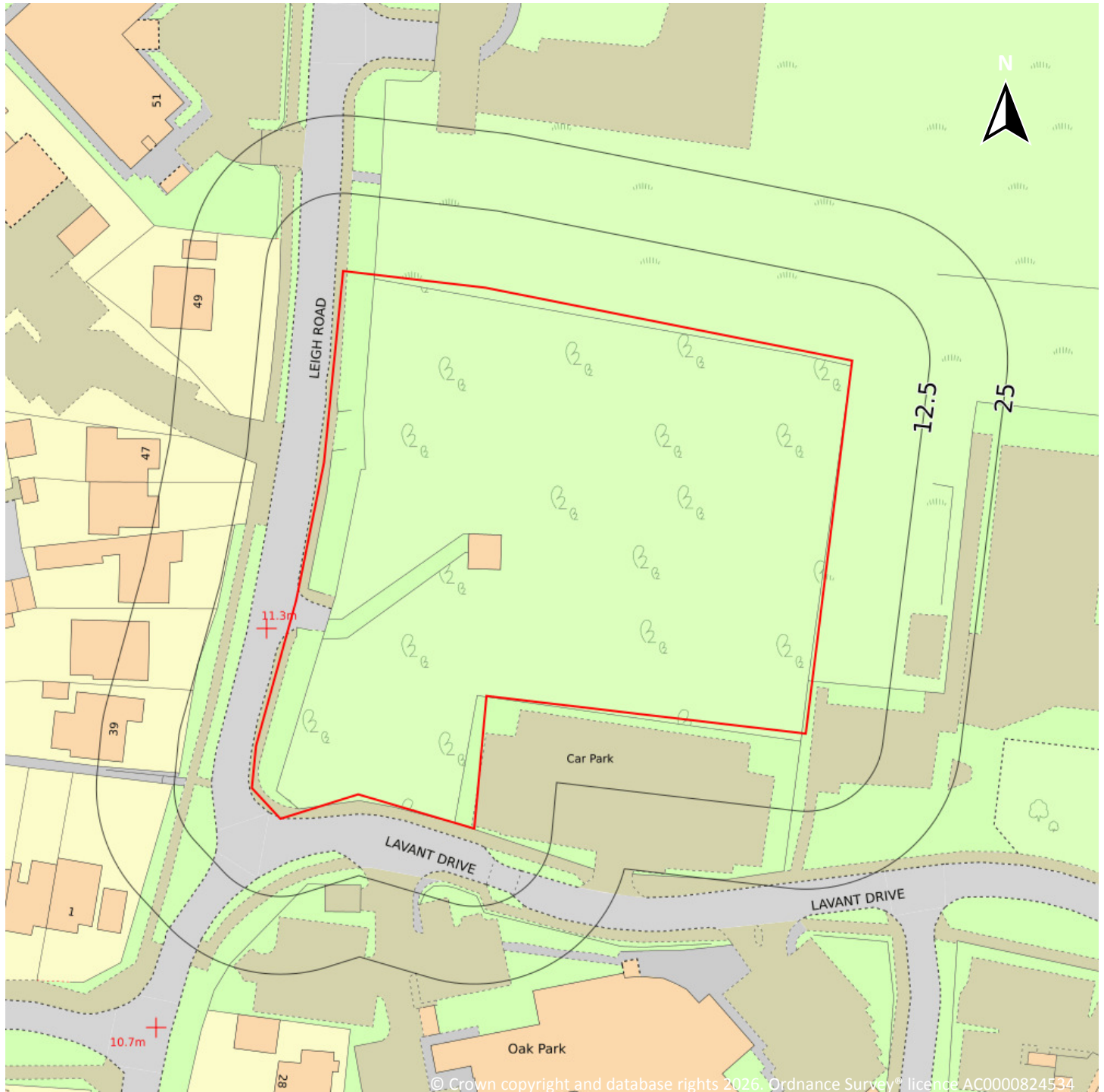
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2026. All Rights Reserved.

Capture Date: 04/09/1999

Site Area: 0.61ha



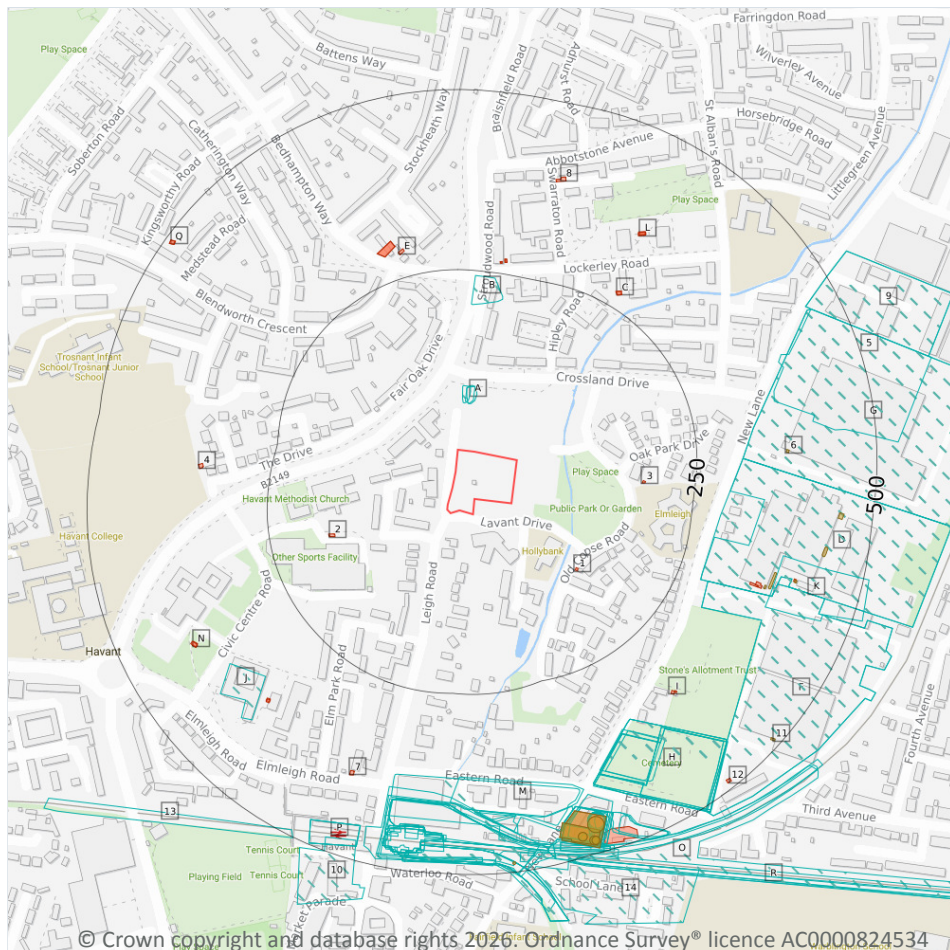
OS MasterMap site plan



Site Area: 0.61ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

1.1 Historical industrial land uses

Records within 500m

95

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
A	65m N	Old Gravel Pit	1898	1947720



ID	Location	Land use	Dates present	Group ID
A	66m N	Old Gravel Pit	1896	1990323
A	66m N	Old Gravel Pit	1895	1933631
B	203m N	Gravel Pit	1866	1913034
D	282m E	Unspecified Factory	1991	1962612
D	282m E	Unspecified Factory	1975	1939250
F	293m E	Unspecified Works	1991	1987150
F	293m E	Unspecified Works	1975	1991481
G	314m E	Unspecified Factory	1975	1921966
G	314m E	Unspecified Factory	1991	1930448
H	342m SE	Cemetery	1895	1941862
H	342m SE	Cemetery	1931 - 1938	1965715
H	342m SE	Cemetery	1907	1974745
J	342m SW	Police Station	1991	1908968
H	350m SE	Cemetery	1896	1937532
H	354m SE	Cemetery	1866	1966795
H	355m SE	Cemetery	1898	1965289
H	355m SE	Cemetery	1932	1970351
H	355m SE	Cemetery	1914	1976055
M	365m S	Timber Yard	1895	1955403
5	367m E	Unspecified Factory	1963	1983032
M	367m S	Timber Yard	1907	1960932
H	374m SE	Cemetery	1963	1938692
H	374m SE	Cemetery	1975 - 1991	1952436
K	380m E	Nursery	1963	1898217
M	387m S	Railway Sidings	1963	1979291
M	399m S	Railway Sidings	1896	1995043
M	402m S	Railway Sidings	1898 - 1907	1918344
M	402m S	Railway Sidings	1938	1944469



ID	Location	Land use	Dates present	Group ID
M	402m S	Railway Sidings	1895	1983906
O	402m S	Railway Sidings	1931	1997828
O	403m S	Railway Sidings	1932	1993960
M	403m S	Railway Sidings	1914	1930900
M	404m S	Railway Sidings	1931	1996594
M	410m S	Timber Yard	1896	1983576
M	412m S	Timber Yard	1898	1937612
M	414m S	Timber Yard	1914	1981736
O	418m S	Unspecified Commercial/Industrial	1931	1926244
M	426m S	Railway Sidings	1866	1935705
O	430m S	Gas Works	1914	1957480
O	430m S	Gas Works	1896	1980614
O	430m S	Unspecified Commercial/Industrial	1931	1942241
O	430m S	Gas Works	1907	1969690
O	433m S	Gas Works	1898	1917582
O	433m S	Unspecified Commercial/Industrial	1895	1922380
M	436m S	Railway Station	1914	1928537
M	436m S	Railway Station	1932	1944339
M	436m S	Railway Station	1895 - 1896	1975623
M	436m S	Railway Building	1963	1910552
M	437m S	Railway Station	1898	1967165
M	438m S	Railway Station	1931 - 1938	1951085
M	438m S	Railway Station	1907	1966609
M	441m S	Goods Station	1866	1889153
M	441m S	Railway Station	1931	1968895
O	444m S	Gasometers	1914	1930538
O	444m S	Unspecified Tank	1895	1916384
O	444m S	Gasometer	1907	1962247



ID	Location	Land use	Dates present	Group ID
O	444m S	Unspecified Tank	1938	1977232
O	444m S	Unspecified Tank	1931	1992305
O	445m S	Unspecified Tanks	1932	1985220
O	445m S	Gasometer	1896	1987638
O	446m S	Unspecified Tanks	1931	1961266
O	447m S	Gasometers	1898	1994823
O	449m S	Gas Works	1866	1961569
M	450m S	Railway Building	1866	1910554
P	451m S	Railway Station	1975	1955813
P	451m S	Railway Station	1991	1962038
P	451m S	Railway Station	1963	1968692
O	452m S	Old Gravel Pit	1896 - 1898	1979595
O	452m S	Unspecified Pit	1907 - 1914	1990153
9	454m NE	Unspecified Factory	1975	1948180
M	460m S	Railway Sidings	1898	1941436
O	460m S	Old Gravel Pit	1895	1969059
M	462m S	Railway Sidings	1931	1934404
M	462m S	Railway Sidings	1907	1994324
M	463m S	Railway Sidings	1895	1917066
M	463m S	Railway Sidings	1938	1917746
M	465m S	Railway Station	1866	1953961
O	469m S	Unspecified Tank	1938	1962514
O	469m S	Unspecified Tank	1931	1972812
O	469m S	Unspecified Tank	1895	1981532
O	470m S	Gasometer	1866	1910957
O	471m S	Unspecified Tank	1907	1967438
O	471m S	Railway Sidings	1898	1959489
O	471m S	Railway Sidings	1898	1964486



ID	Location	Land use	Dates present	Group ID
O	472m S	Unspecified Tank	1896	1939610
10	473m S	Cattle Market	1898	1995358
M	473m S	Railway Building	1896	1996149
M	474m S	Railway Building	1963	1983459
M	476m S	Railway Sidings	1931	1915640
M	476m S	Railway Sidings	1931	1934332
13	492m SW	Cuttings	1866	1886368
14	496m S	Gas Works	1895	1909151
R	497m S	Railway Sidings	1931	1921136
R	498m S	Railway Sidings	1914	1954426

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m

14

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 ungrouped 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
K	370m E	Tanks	1962 - 1964	340615
6	374m E	Unspecified Tank	1969 - 1972	331404
K	376m E	Tanks	1962 - 1964	328414
K	407m E	Unspecified Tank	1973	326645
O	435m S	Gas Works	1897 - 1909	338786
D	437m E	Tanks	1973 - 1998	330631
O	446m S	Gas Works	1869	328199
O	450m S	Gasometer	1897 - 1909	331306



ID	Location	Land use	Dates present	Group ID
D	453m E	Tanks	1995	318580
O	467m S	Gasometer	1869	320061
O	475m S	Unspecified Tank	1932	326642
O	477m S	Gasometer	1897 - 1909	339530
M	486m S	Unspecified Tank	1952 - 1964	327669
11	486m SE	Unspecified Tank	1998	326633

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m

36

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 ungrouped 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	127m SE	Electricity Substation	1998	210397
2	160m W	Electricity Substation	1986 - 1993	232941
3	177m E	Electricity Substation	1995	208674
B	264m N	Electricity Substation	1969	212475
B	264m N	Electricity Substation	1972	222163
B	266m N	Electricity Substation	1995	208673
B	266m N	Electricity Substation	-	206872
C	268m NE	Electricity Substation	-	206875
C	268m NE	Electricity Substation	1969 - 1995	212226
E	282m N	Electricity Substation	1979 - 1993	233700
E	286m N	Electricity Substation	1970 - 1971	219188
E	286m N	Electricity Substation	1951 - 1955	228427



ID	Location	Land use	Dates present	Group ID
I	342m SE	Electricity Substation	1973	218216
4	343m W	Electricity Substation	1970 - 1993	213913
I	345m SE	Electricity Substation	1998	222735
K	349m E	Electricity Substation	1998	216985
L	355m NE	Electricity Substation	1972 - 1995	225484
L	355m NE	Electricity Substation	-	206873
L	356m NE	Electricity Substation	1969	228554
K	357m E	Electricity Substation	1973	217491
J	359m SW	Electricity Substation	1971 - 1973	219398
J	360m SW	Electricity Substation	1993	229114
7	382m S	Electricity Substation	1971 - 1993	216251
8	390m N	Electricity Substation	1973 - 1997	221693
N	393m SW	Electricity Substation	1971 - 1978	226921
N	394m SW	Electricity Substation	1993	217800
K	406m E	Electricity Substation	1998	210398
O	435m S	Gas Works	1897 - 1909	223323
O	446m S	Gas Works	1869	231207
O	450m S	Gasometer	1897 - 1909	218438
O	467m S	Gasometer	1869	211325
O	473m S	Electricity Substation	1952	210407
O	477m S	Gasometer	1897 - 1909	216613
Q	486m NW	Electricity Substation	1970 - 1993	213572
12	486m SE	Electricity Substation	1973 - 1998	214758
Q	487m NW	Electricity Substation	1955	211676

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 ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey® / Groundsure.

1.5 Historical garages

Records within 500m**0**

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

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

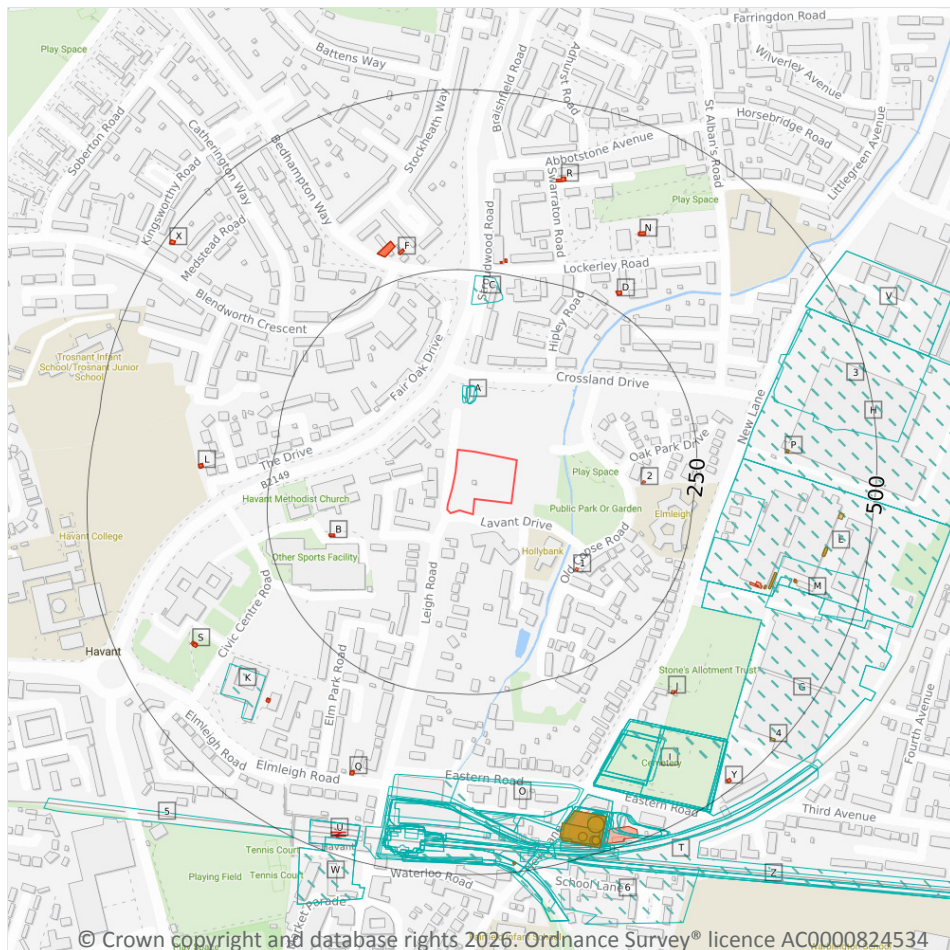
Records within 500m**0**

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

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



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

2.1 Historical industrial land uses

Records within 500m

120

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 23](#) >

ID	Location	Land Use	Date	Group ID
A	65m N	Old Gravel Pit	1898	1947720
A	65m N	Old Gravel Pit	1898	1947720
A	66m N	Old Gravel Pit	1896	1990323

ID	Location	Land Use	Date	Group ID
A	66m N	Old Gravel Pit	1895	1933631
C	203m N	Gravel Pit	1866	1913034
E	282m E	Unspecified Factory	1991	1962612
E	282m E	Unspecified Factory	1975	1939250
G	293m E	Unspecified Works	1991	1987150
G	293m E	Unspecified Works	1975	1991481
H	314m E	Unspecified Factory	1991	1930448
H	314m E	Unspecified Factory	1975	1921966
I	342m SE	Cemetery	1895	1941862
I	342m SE	Cemetery	1938	1965715
I	342m SE	Cemetery	1931	1965715
I	342m SE	Cemetery	1907	1974745
K	342m SW	Police Station	1991	1908968
I	345m SE	Cemetery	1931	1965715
I	345m SE	Cemetery	1931	1965715
I	350m SE	Cemetery	1896	1937532
I	354m SE	Cemetery	1866	1966795
I	355m SE	Cemetery	1898	1965289
I	355m SE	Cemetery	1898	1965289
I	355m SE	Cemetery	1914	1976055
I	355m SE	Cemetery	1932	1970351
O	365m S	Timber Yard	1895	1955403
3	367m E	Unspecified Factory	1963	1983032
O	367m S	Timber Yard	1907	1960932
I	374m SE	Cemetery	1991	1952436
I	374m SE	Cemetery	1975	1952436
I	374m SE	Cemetery	1963	1938692
M	380m E	Nursery	1963	1898217



ID	Location	Land Use	Date	Group ID
O	387m S	Railway Sidings	1963	1979291
O	399m S	Railway Sidings	1896	1995043
O	402m S	Railway Sidings	1938	1944469
O	402m S	Railway Sidings	1907	1918344
O	402m S	Railway Sidings	1895	1983906
T	402m S	Railway Sidings	1931	1997828
T	403m S	Railway Sidings	1932	1993960
O	403m S	Railway Sidings	1914	1930900
O	404m S	Railway Sidings	1931	1996594
O	404m S	Railway Sidings	1931	1996594
O	405m S	Railway Sidings	1898	1918344
O	405m S	Railway Sidings	1898	1918344
O	410m S	Timber Yard	1896	1983576
O	412m S	Timber Yard	1898	1937612
O	412m S	Timber Yard	1898	1937612
O	414m S	Timber Yard	1914	1981736
T	418m S	Unspecified Commercial/Industrial	1931	1926244
T	418m S	Unspecified Commercial/Industrial	1931	1926244
O	426m S	Railway Sidings	1866	1935705
T	430m S	Gas Works	1914	1957480
T	430m S	Gas Works	1896	1980614
T	430m S	Unspecified Commercial/Industrial	1931	1942241
T	430m S	Gas Works	1907	1969690
T	433m S	Gas Works	1898	1917582
T	433m S	Gas Works	1898	1917582
T	433m S	Unspecified Commercial/Industrial	1895	1922380
O	436m S	Railway Station	1914	1928537
O	436m S	Railway Station	1932	1944339



ID	Location	Land Use	Date	Group ID
O	436m S	Railway Station	1896	1975623
O	436m S	Railway Building	1963	1910552
O	437m S	Railway Station	1898	1967165
O	437m S	Railway Station	1898	1967165
O	438m S	Railway Station	1938	1951085
O	438m S	Railway Station	1931	1951085
O	438m S	Railway Station	1907	1966609
O	438m S	Railway Station	1895	1975623
O	441m S	Goods Station	1866	1889153
O	441m S	Railway Station	1931	1968895
O	441m S	Railway Station	1931	1968895
T	444m S	Gasometers	1914	1930538
T	444m S	Gasometer	1907	1962247
T	444m S	Unspecified Tank	1938	1977232
T	444m S	Unspecified Tank	1931	1992305
T	444m S	Unspecified Tank	1895	1916384
T	445m S	Unspecified Tanks	1932	1985220
T	445m S	Gasometer	1896	1987638
T	446m S	Unspecified Tanks	1931	1961266
T	446m S	Unspecified Tanks	1931	1961266
T	447m S	Gasometers	1898	1994823
T	447m S	Gasometers	1898	1994823
T	449m S	Gas Works	1866	1961569
O	450m S	Railway Building	1866	1910554
U	451m S	Railway Station	1991	1962038
U	451m S	Railway Station	1975	1955813
U	451m S	Railway Station	1963	1968692
T	452m S	Old Gravel Pit	1896	1979595



ID	Location	Land Use	Date	Group ID
T	452m S	Unspecified Pit	1914	1990153
T	452m S	Unspecified Pit	1907	1990153
V	454m NE	Unspecified Factory	1975	1948180
V	454m NE	Unspecified Factory	1963	1983032
T	456m S	Old Gravel Pit	1898	1979595
T	456m S	Old Gravel Pit	1898	1979595
O	460m S	Railway Sidings	1898	1941436
O	460m S	Railway Sidings	1898	1941436
T	460m S	Old Gravel Pit	1895	1969059
O	462m S	Railway Sidings	1931	1934404
O	462m S	Railway Sidings	1907	1994324
O	463m S	Railway Sidings	1938	1917746
O	463m S	Railway Sidings	1895	1917066
O	465m S	Railway Station	1866	1953961
T	469m S	Unspecified Tank	1938	1962514
T	469m S	Unspecified Tank	1931	1972812
T	469m S	Unspecified Tank	1895	1981532
T	470m S	Gasometer	1866	1910957
T	471m S	Unspecified Tank	1907	1967438
T	471m S	Railway Sidings	1898	1964486
T	471m S	Railway Sidings	1898	1959489
T	472m S	Unspecified Tank	1896	1939610
W	473m S	Cattle Market	1898	1995358
W	473m S	Cattle Market	1898	1995358
O	473m S	Railway Building	1896	1996149
O	474m S	Railway Building	1963	1983459
O	476m S	Railway Sidings	1931	1934332
O	476m S	Railway Sidings	1931	1915640



ID	Location	Land Use	Date	Group ID
5	492m SW	Cuttings	1866	1886368
6	496m S	Gas Works	1895	1909151
Z	497m S	Railway Sidings	1931	1921136
Z	497m S	Railway Sidings	1931	1921136
Z	498m S	Railway Sidings	1914	1954426

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m

23

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 23 >](#)

ID	Location	Land Use	Date	Group ID
M	370m E	Tanks	1962	340615
M	370m E	Tanks	1964	340615
P	374m E	Unspecified Tank	1972	331404
P	374m E	Unspecified Tank	1969	331404
M	376m E	Tanks	1964	328414
M	376m E	Tanks	1962	328414
M	407m E	Unspecified Tank	1973	326645
T	435m S	Gas Works	1897	338786
T	435m S	Gas Works	1909	338786
E	437m E	Tanks	1998	330631
E	438m E	Tanks	1973	330631
T	446m S	Gas Works	1869	328199
T	450m S	Gasometer	1897	331306
T	450m S	Gasometer	1909	331306
E	453m E	Tanks	1995	318580



ID	Location	Land Use	Date	Group ID
T	467m S	Gasometer	1869	320061
T	475m S	Unspecified Tank	1932	326642
T	477m S	Gasometer	1897	339530
T	477m S	Gasometer	1909	339530
O	486m S	Unspecified Tank	1962	327669
4	486m SE	Unspecified Tank	1998	326633
O	486m S	Unspecified Tank	1964	327669
O	486m S	Unspecified Tank	1952	327669

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m

68

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 23 >](#)

ID	Location	Land Use	Date	Group ID
1	127m SE	Electricity Substation	1998	210397
B	160m W	Electricity Substation	1993	232941
B	160m W	Electricity Substation	1986	232941
2	177m E	Electricity Substation	1995	208674
C	264m N	Electricity Substation	1969	212475
C	264m N	Electricity Substation	1972	222163
C	266m N	Electricity Substation	1995	208673
C	266m N	Electricity Substation	-	206872
D	268m NE	Electricity Substation	-	206875
D	268m NE	Electricity Substation	1995	212226
D	269m NE	Electricity Substation	1972	212226
D	269m NE	Electricity Substation	1969	212226



ID	Location	Land Use	Date	Group ID
F	282m N	Electricity Substation	1979	233700
F	282m N	Electricity Substation	1986	233700
F	283m N	Electricity Substation	1993	233700
F	286m N	Electricity Substation	1970	219188
F	286m N	Electricity Substation	1955	228427
F	286m N	Electricity Substation	1955	228427
F	286m N	Electricity Substation	1971	219188
F	286m N	Electricity Substation	1951	228427
J	342m SE	Electricity Substation	1973	218216
L	343m W	Electricity Substation	1979	213913
L	343m W	Electricity Substation	1986	213913
L	344m W	Electricity Substation	1993	213913
L	344m W	Electricity Substation	1971	213913
L	344m W	Electricity Substation	1970	213913
J	345m SE	Electricity Substation	1998	222735
M	349m E	Electricity Substation	1998	216985
N	355m NE	Electricity Substation	1995	225484
N	355m NE	Electricity Substation	-	206873
N	356m NE	Electricity Substation	1972	225484
N	356m NE	Electricity Substation	1969	228554
M	357m E	Electricity Substation	1973	217491
K	359m SW	Electricity Substation	1971	219398
K	359m SW	Electricity Substation	1973	219398
K	360m SW	Electricity Substation	1993	229114
Q	382m S	Electricity Substation	1978	216251
Q	382m S	Electricity Substation	1971	216251
Q	382m S	Electricity Substation	1973	216251
Q	383m S	Electricity Substation	1993	216251



ID	Location	Land Use	Date	Group ID
R	390m N	Electricity Substation	1973	221693
R	390m N	Electricity Substation	1996	221693
R	390m N	Electricity Substation	1995	221693
R	390m N	Electricity Substation	1997	221693
R	390m N	Electricity Substation	1991	221693
S	393m SW	Electricity Substation	1978	226921
S	394m SW	Electricity Substation	1993	217800
S	395m SW	Electricity Substation	1971	226921
S	395m SW	Electricity Substation	1973	226921
M	406m E	Electricity Substation	1998	210398
T	435m S	Gas Works	1897	223323
T	435m S	Gas Works	1909	223323
T	446m S	Gas Works	1869	231207
T	450m S	Gasometer	1897	218438
T	450m S	Gasometer	1909	218438
T	467m S	Gasometer	1869	211325
T	473m S	Electricity Substation	1952	210407
T	477m S	Gasometer	1897	216613
T	477m S	Gasometer	1909	216613
X	486m NW	Electricity Substation	1979	213572
X	486m NW	Electricity Substation	1986	213572
Y	486m SE	Electricity Substation	1998	214758
X	487m NW	Electricity Substation	1970	213572
X	487m NW	Electricity Substation	1955	211676
X	487m NW	Electricity Substation	1993	213572
Y	487m SE	Electricity Substation	1973	214758
X	487m NW	Electricity Substation	1955	211676
X	487m NW	Electricity Substation	1971	213572

This data is sourced from Ordnance Survey® / Groundsure.



2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.

2.5 Historical garages

Records within 500m

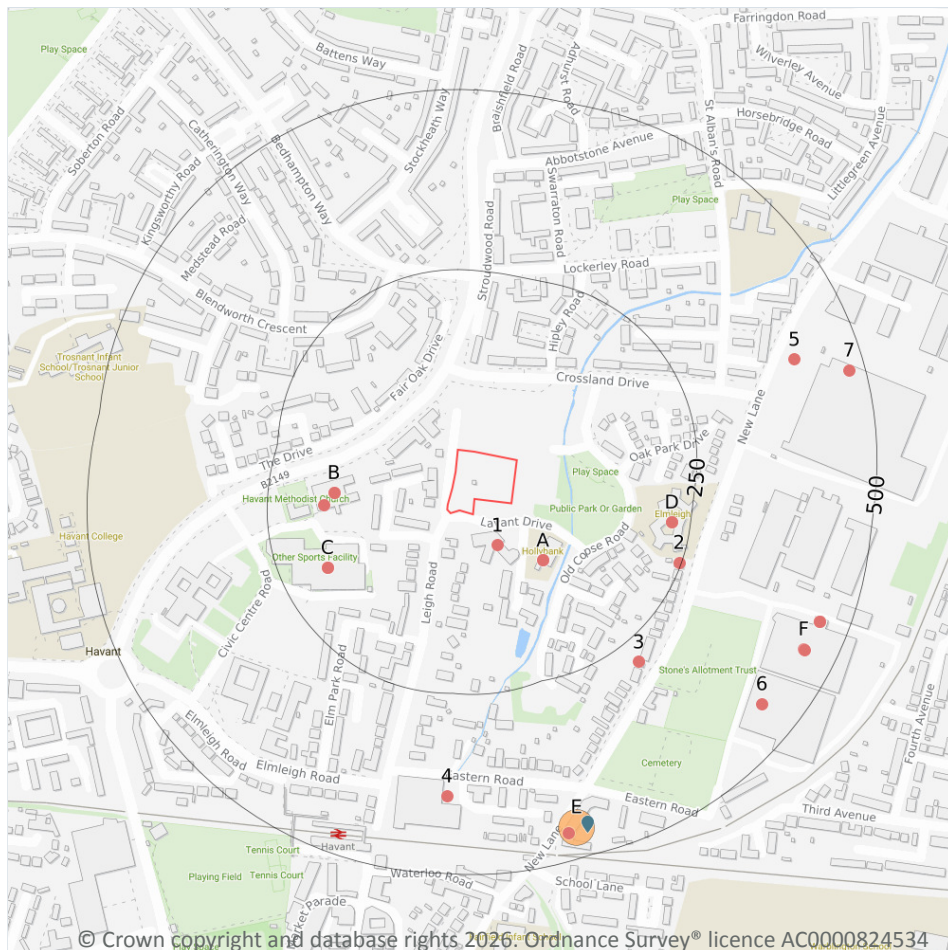
0

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

This data is sourced from Ordnance Survey® / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- 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

0

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.

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

3.5 Historical waste sites

Records within 500m

1

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 33 >](#)

ID	Location	Address	Further Details	Date
E	433m S	Site Address: New Lane, HAVANT, Hampshire, PO9 2JH	Type of Site: Waste Transfer Centre Planning application reference: 02/50472/005 Description: Scheme comprises improvements to waste transfer centre including construction of a new building of 1,822 sqm. Includes 2 roller shutter doors and steel portal frame. Some demolition work required. Construction - concrete, profiled steel cladding walls; low pitched, profiled steel cladding roof; 2 roller shutter doors; portal, steel frame. An application (ref: 02/50472/005) for Detailed Planning permission was refused by Havant B.C. on 28th November 2002. Tender details have not been established at this time. Detailed plans refused. Wessex Construction and Plant Hire have declined to comment on whether a new application will be made. 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

2

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

Features are displayed on the Waste and landfill map on [page 33 >](#)

ID	Location	Details		
E	458m S	Site Name: Transfer Station At New Lane Site Address: 8, New Lane, Havant, Hampshire, PO9 2JH Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 646005 EPR reference: EA/EPR/WP3292HL Operator: Wessex Construction And Plant Hire Company Limited Waste Management licence No: 19986 Annual Tonnage: 75000	Issue Date: 05/12/1991 Effective Date: 05/12/1991 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
E	458m S	Site Name: Transfer Station At New Lane Site Address: 8, New Lane, Havant, Hampshire, PO9 2JH Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: 660569 EPR reference: EA/EPR/WP3292HL Operator: Wessex Construction And Plant Hire Company Limited Waste Management licence No: 19986 Annual Tonnage: 0	Issue Date: 05/12/1991 Effective Date: 05/12/1991 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired

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

3.7 Waste exemptions

Records within 500m

24

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 33 >](#)



ID	Location	Site	Reference	Category	Sub-Category	Description
1	55m SE	Hollybank 10 Lavant Drive Havant Hampshire Po9 2aw	EPR/NF0909U L/A001	Treating waste exemption	Non- agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
A	91m SE	Hollybank, 10 Lavant Drive, Havant, Po9 2aw	WEX393401	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	91m SE	-	WEX263045	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
A	91m SE	Hollybank, 10 Lavant Drive, Havant, Po9 2aw	WEX120842	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
B	159m W	-	WEX260953	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
B	159m W	Havant Health Centre, Civic Road, Havant, Po9 2ay	WEX389382	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
B	172m W	Po Box 45 Havant Health Centre Havant Hampshire Po9 2az	EPR/WF0606Z U/A001	Treating waste exemption	Non- agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
C	185m SW	-	WEX479231	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	185m SW	Havant Health Centre, Civic Road, Havant, Po9 2ay	WEX117640	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	185m SW	-	WEX357152	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
D	224m E	-	WEX263065	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
D	224m E	61a, New Lane, Havant, Po9 2jj	WEX393395	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
2	247m E	61a, New Lane, Havant, Po9 2jj	WEX120827	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
3	283m SE	Elmleigh Hospital 61a New Lane Hants Po9 2jj	EPR/NF0309U E/A001	Treating waste exemption	Non- agricultural waste only	Sorting and de-naturing of controlled drugs for disposal
4	393m S	Centenary Gardens, Havant, Po9 2ls	WEX154261	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
5	409m E	-	WEX251544	Using waste exemption	Not on a farm	Use of waste in construction



ID	Location	Site	Reference	Category	Sub-Category	Description
6	446m SE	Syncreon, Unit 2 Kenwood Bus Park, New Lane, West Sussex, Po9 2nt	WEX272293	Storing waste exemption	Not on a farm	Storage of waste in secure containers
F	453m SE	Syncreon New Lane, Unit 2 Kenwood Business Havant Po9 2nt	EPR/UF0305M X/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in secure containers
F	455m SE	Syncreon, Unit 2 Kenwood Bus Park, New Lane, West Sussex, Po9 2nt	WEX128880	Storing waste exemption	Not on a farm	Storage of waste in secure containers
F	458m E	-	WEX478044	Storing waste exemption	Not on a farm	Storage of waste in a secure place
F	458m E	-	WEX478044	Storing waste exemption	Not on a farm	Storage of waste in secure containers
F	458m E	-	WEX355871	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	463m S	8, New Lane, Havant, Po9 2jh	WEX234617	Using waste exemption	Not on a farm	Use of waste in construction
7	477m E	-	WEX195956	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)

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



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- Site Outline**
- Search buffers in metres (m)**
- Recent industrial land uses
 - Historical licensed industrial activities
 - Part A(1) industrial activities
 - Licensed pollutant release (Part A(2)/B)
 - Licensed Discharges to controlled waters
 - Pollutant release to public sewer
 - Pollution Incidents (EA/NRW)

4

Features are displayed on the Current industrial land use map on [page 38](#) >

ID	Location	Company	Address	Activity	Category
A	129m SE	Electricity Sub Station	Hampshire, PO9	Electrical Features	Infrastructure and Facilities
1	162m W	Electricity Sub Station	Hampshire, PO9	Electrical Features	Infrastructure and Facilities
A	169m SE	Itk Services	6, Fern Drive, Havant, Hampshire, PO9 2YH	Clothing, Components and Accessories	Consumer Products

ID	Location	Company	Address	Activity	Category
2	179m E	Electricity Sub Station	Hampshire, PO9	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey®.

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

Records within 250m	0
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Current or recent tanks identified from the Ordnance Survey® NGD.

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
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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

0

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.

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m

5

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.

Features are displayed on the Current industrial land use map on [page 38 >](#)

ID	Location	Details	
B	372m E	Operator: Asahi Thermofil (UK) Ltd Address: 28 New Lane, Havant, Hampshire, PO9 2NQ Process: Inorganic Chemical Processes Permit Number: AO0598	Original Permit Number: IPCAIRAPP Date Approved: 18-11-1994 Effective Date: 28-11-1994 Status: Superseded By Variation
B	372m E	Operator: Asahi Thermofil (UK) Ltd Address: 28 New Lane, Havant, Hampshire, PO9 2NQ Process: Inorganic Chemical Processes Permit Number: BC9461	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Superseded By Variation

ID	Location	Details	
B	372m E	Operator: Asahi Thermofil (UK) Ltd Address: 28 New Lane, Havant, Hampshire, PO9 2NQ Process: Inorganic Chemical Processes Permit Number: BG1861	Original Permit Number: IPCMAJVAR Date Approved: 16-2-2000 Effective Date: 29-2-2000 Status: Revoked - Now Ippc
C	378m E	Operator: John Wyeth and Brother Ltd Address: New Lane, Havant, Hampshire, PO9 2NG Process: Manufacture And Use Of Organic Chemicals Permit Number: AK5458	Original Permit Number: IPCAIRAPP Date Approved: 24-2-1994 Effective Date: 24-2-1994 Status: Revoked
C	378m E	Operator: Wyeth Research (UK) Ltd Address: New Lane, Havant, Hampshire, PO9 2NG Process: Manufacture And Use Of Organic Chemicals Permit Number: AK5571	Original Permit Number: IPCAPP Date Approved: 24-2-1994 Effective Date: 24-2-1994 Status: Revoked

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

4.11 Licensed industrial activities (Part A(1))

Records within 500m

6

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

Features are displayed on the Current industrial land use map on [page 38 >](#)

ID	Location	Details	
B	372m E	Operator: SUMIKA POLYMER COMPOUNDS (UK) LTD Installation Name: Havant Plastics Compounder Process: ASSOCIATED PROCESS Permit Number: BX8076IX Original Permit Number: BX8076IX	EPR Reference: EPR/BX8076IX Issue Date: 07/09/2005 Effective Date: 15/04/2010 Last date noted as effective: 07/01/2026 Status: Surrendered
B	372m E	Operator: SUMIKA POLYMER COMPOUNDS (UK) LTD Installation Name: Havant Plastics Compounder Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERWISE PRESCRINED) (UNLESS GLAZING ETC) Permit Number: BX8076IX Original Permit Number: BX8076IX	EPR Reference: EPR/BX8076IX Issue Date: 07/09/2005 Effective Date: 15/04/2010 Last date noted as effective: 07/01/2026 Status: Surrendered
B	372m E	Operator: Sumika Polymer Compounds (UK) Ltd Installation Name: Havant Plastics Compounder Process: ASSOCIATED PROCESS Permit Number: MP3431KV Original Permit Number: BX8076IX	EPR Reference: - Issue Date: - Effective Date: 15/04/2010 Last date noted as effective: 21/03/2023 Status: Surrender Effective



ID	Location	Details	
B	372m E	Operator: Sumika Polymer Compounds (UK) Ltd Installation Name: Havant Plastics Compounder Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERWISE PRESCRINED) (UNLESS GLAZING ETC) Permit Number: MP3431KV Original Permit Number: BX8076IX	EPR Reference: - Issue Date: - Effective Date: 15/04/2010 Last date noted as effective: 21/03/2023 Status: Surrender Effective
B	372m E	Operator: Sumika Polymer Compounds (UK) Ltd Installation Name: Havant Plastics Compounder Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERWISE PRESCRINED) (UNLESS GLAZING ETC) Permit Number: QP3235GD Original Permit Number: BX8076IX	EPR Reference: EA/EPR/BX8076IX/V002 Issue Date: 17/06/2009 Effective Date: 17/06/2009 Last date noted as effective: 21/03/2023 Status: Superseded
B	372m E	Operator: Sumika Polymer Compounds (UK) Ltd Installation Name: Havant Plastics Compounder Process: ASSOCIATED PROCESS Permit Number: QP3235GD Original Permit Number: BX8076IX	EPR Reference: EA/EPR/BX8076IX/V002 Issue Date: 17/06/2009 Effective Date: 17/06/2009 Last date noted as effective: 21/03/2023 Status: Superseded

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

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

Records within 500m

2

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 38 >](#)

ID	Location	Address	Details	
5	438m E	Sumika Polymer Compounds (U.K) Ltd, Havant Plastics Compounder, 28 New Lane, Havant, Hampshire, PO9 2NQ	Process: Various Plastic Processes Status: Surrendered Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
6	476m E	Wyeth Labs, New Lane, Havant	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement 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

1

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 38](#) >

ID	Location	Address	Details	
3	372m S	EASTERN ROAD, EASTERN ROAD, HAVANT, HAMPSHIRE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: H01597 Permit Version: 1 Receiving Water: FRESHWATER STREAM OR RIVER	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 18/01/1963 Effective Date: 18/01/1963 Revocation Date: 23/02/2010

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

1

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on [page 38](#) >

ID	Location	Address	Details	
C	378m E	AC STUBBINGS, WYETH LABORATORIES, NEW LANE, HAVANT, HAMPSHIRE, PO9 2NG	Permission reference: AJ2917 Local Authority: HAVANT BOROUGH COUNCIL First received date: 01/06/2001	Last received date: 01/01/2015 Status: EFFECTIVE



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

15

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 38](#) >

ID	Location	Details	
4	391m S	Incident Date: 06/06/2001 Incident Identification: 7816 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	395m E	Incident Date: 27/03/2003 Incident Identification: 146587 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	403m E	Incident Date: 17/01/2003 Incident Identification: 131715 Pollutant: Oils and Fuel Pollutant Description: Other Oil or Fuel	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	416m S	Incident Date: 30/04/2003 Incident Identification: 155182 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)



ID	Location	Details	
E	434m S	Incident Date: 01/05/2003 Incident Identification: 155437 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	434m S	Incident Date: 21/08/2003 Incident Identification: 183977 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
E	435m S	Incident Date: 17/07/2003 Incident Identification: 175312 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
E	441m S	Incident Date: 09/06/2003 Incident Identification: 164348 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
E	447m S	Incident Date: 13/11/2003 Incident Identification: 201375 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	453m S	Incident Date: 14/04/2003 Incident Identification: 150864 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	457m S	Incident Date: 17/10/2003 Incident Identification: 196773 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
E	459m S	Incident Date: 03/08/2001 Incident Identification: 21654 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
E	461m S	Incident Date: 23/07/2002 Incident Identification: 93760 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
E	474m S	Incident Date: 22/11/2001 Incident Identification: 44550 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



ID	Location	Details	
E	482m S	Incident Date: 10/06/2002 Incident Identification: 83813 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	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.

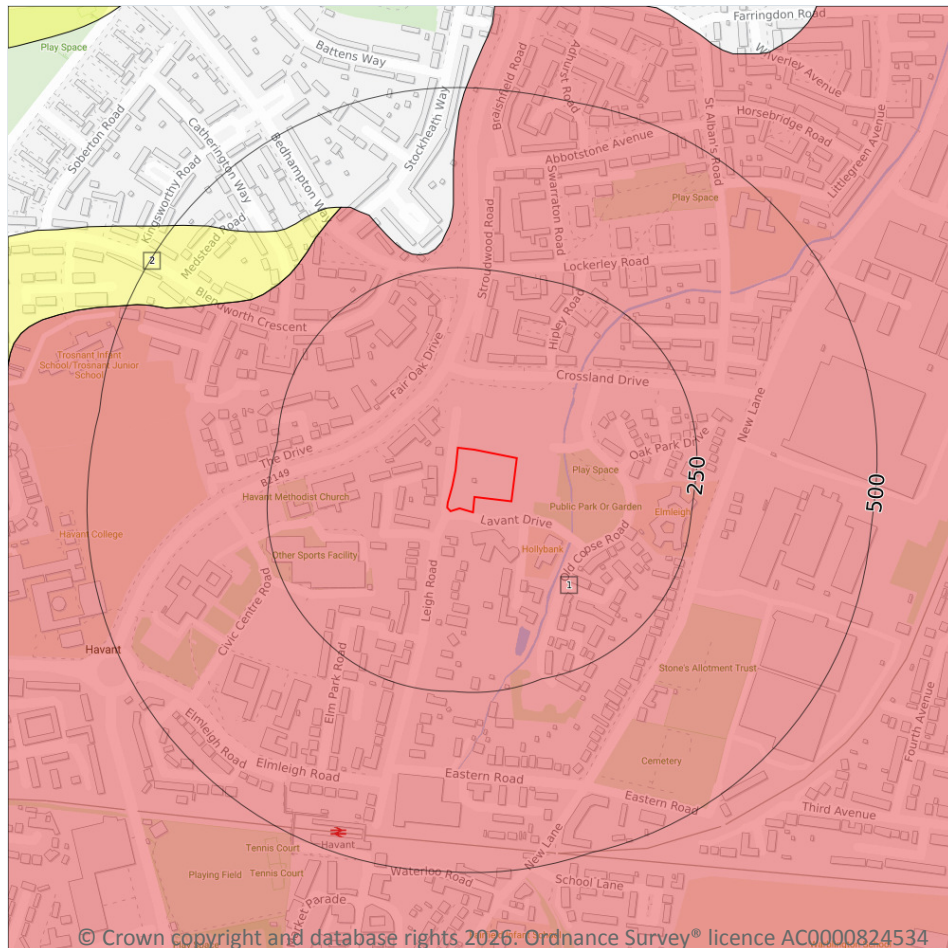
4.22 Pollution inventory radioactive waste

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

2

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 47 >](#)

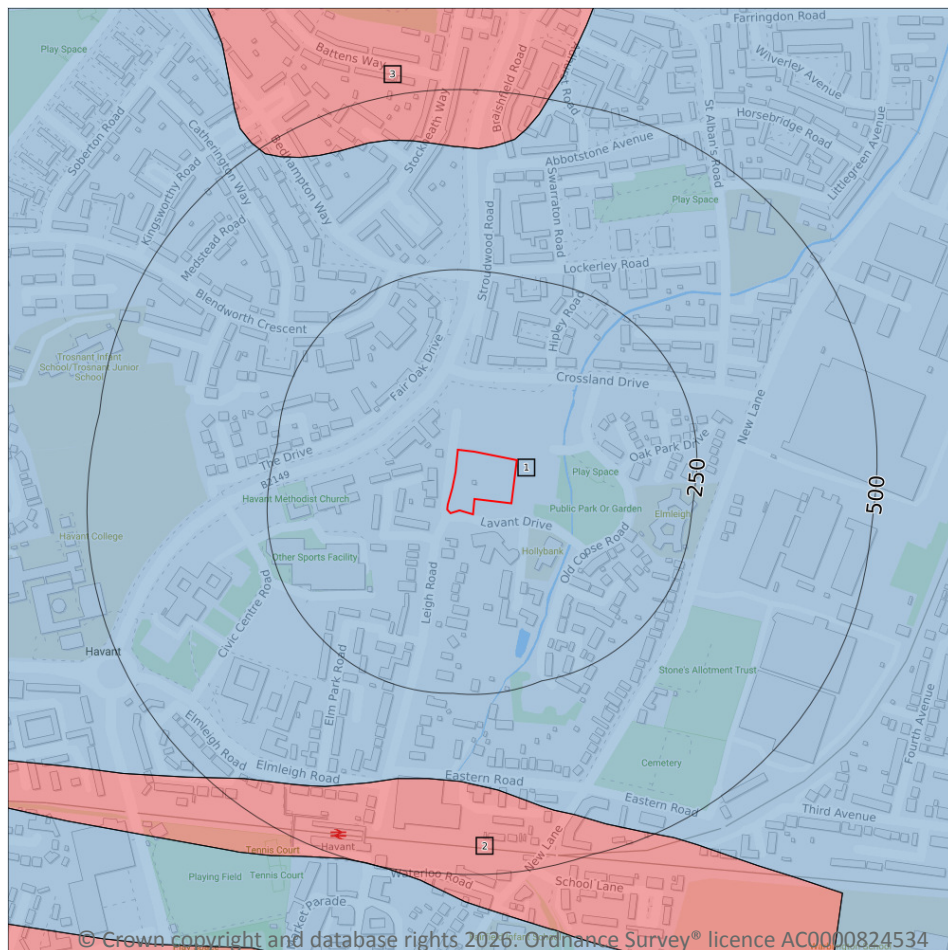
ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	335m NW	Secondary 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

3

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 49](#) >

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	370m S	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

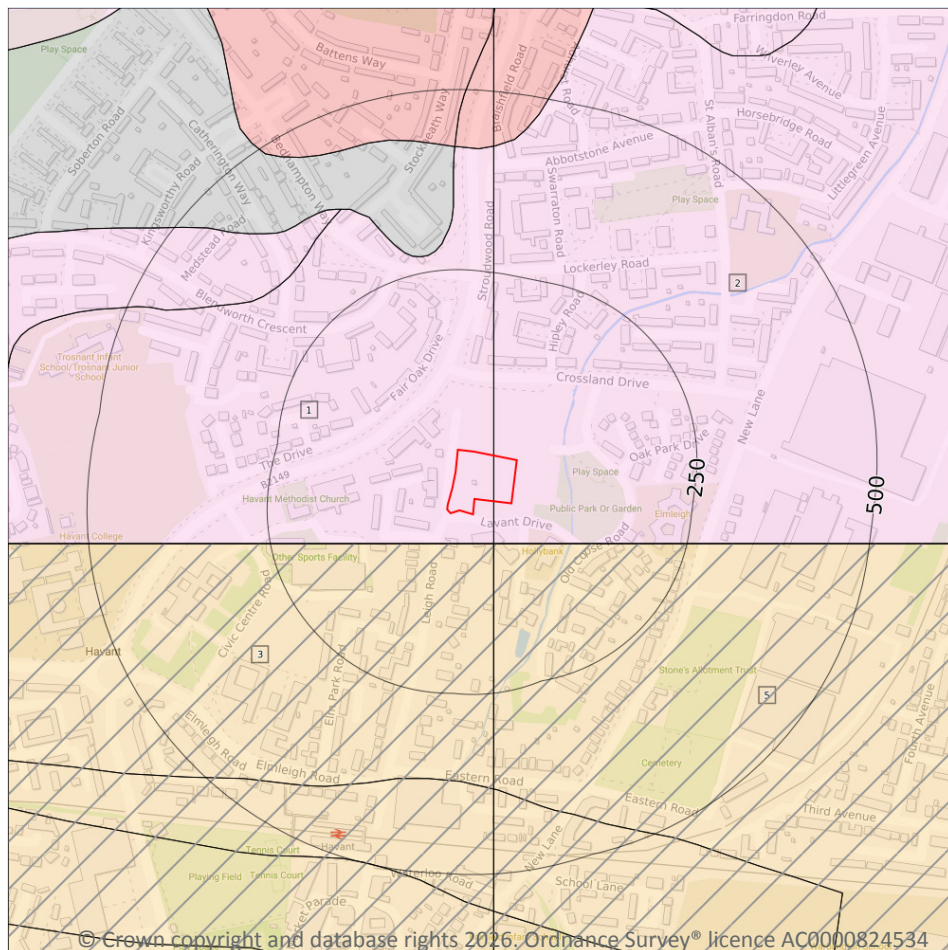


ID	Location	Designation	Description
3	419m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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



Groundwater vulnerability



— Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m

4

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 51](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed
3	41m S	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
5	50m SE	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive 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

0

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

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



5.5 Groundwater vulnerability- local information

Records on site

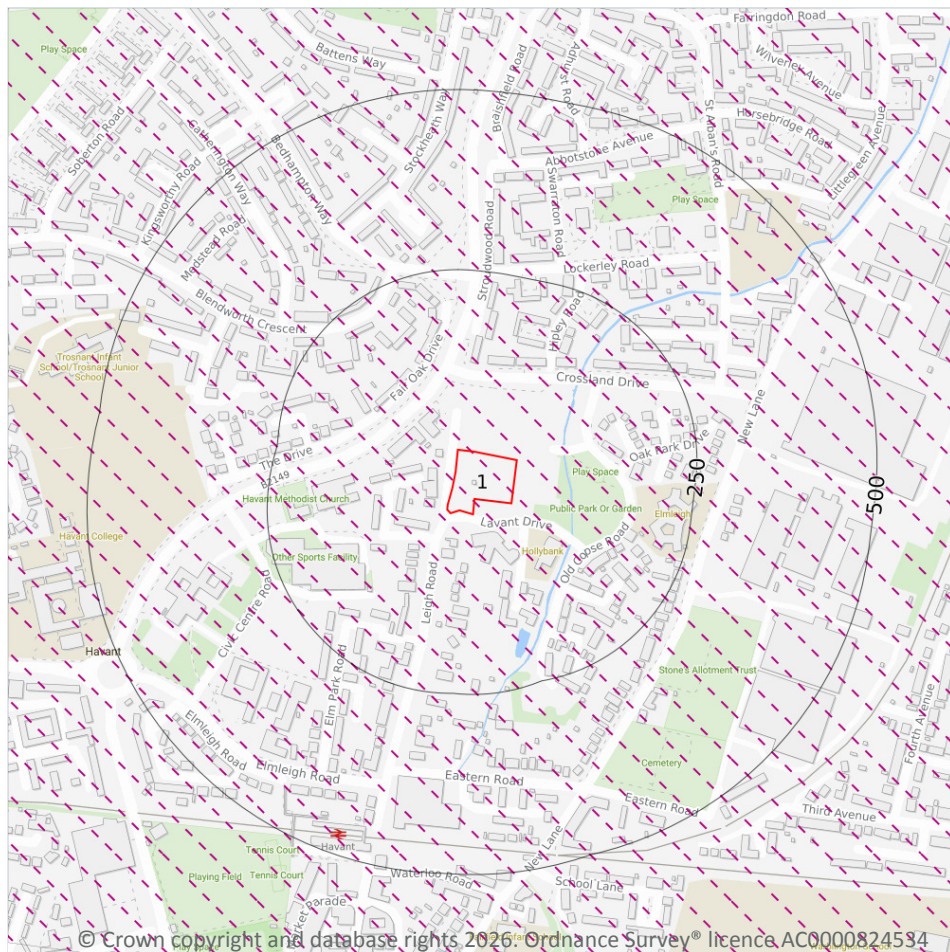
0

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

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



Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
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

3

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 54](#) >

ID	Location	Details	
-	1139m SW	Status: Active Licence No: 11/42/36.2/1 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BEDHAMPTON PS SPRING NO 2 Data Type: Point Name: Portsmouth Water Ltd Easting: 471020 Northing: 106370	Annual Volume (m ³): 35770000 Max Daily Volume (m ³): 137000 Original Application No: NPS/WR/003341 Original Start Date: 23/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 09/06/2009 Version End Date: -
-	1515m SW	Status: Active Licence No: 11/42/36.2/1 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BEDHAMPTON PS SPRING NO 1 Data Type: Point Name: Portsmouth Water Ltd Easting: 470580 Northing: 106370	Annual Volume (m ³): 35770000 Max Daily Volume (m ³): 137000 Original Application No: NPS/WR/003341 Original Start Date: 23/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 09/06/2009 Version End Date: -
-	1650m SW	Status: Active Licence No: 11/42/36.2/1 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: HAVANT PS Data Type: Point Name: Portsmouth Water Ltd Easting: 470480 Northing: 106270	Annual Volume (m ³): 35770000 Max Daily Volume (m ³): 137000 Original Application No: NPS/WR/003341 Original Start Date: 23/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 09/06/2009 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

0

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.

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



5.8 Potable abstractions

Records within 2000m

3

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 54 >](#)

ID	Location	Details	
-	1139m SW	Status: Active Licence No: 11/42/36.2/1 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BEDHAMPTON PS SPRING NO 2 Data Type: Point Name: Portsmouth Water Ltd Easting: 471020 Northing: 106370	Annual Volume (m ³): 35770000 Max Daily Volume (m ³): 137000 Original Application No: NPS/WR/003341 Original Start Date: 23/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 09/06/2009 Version End Date: -
-	1515m SW	Status: Active Licence No: 11/42/36.2/1 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: BEDHAMPTON PS SPRING NO 1 Data Type: Point Name: Portsmouth Water Ltd Easting: 470580 Northing: 106370	Annual Volume (m ³): 35770000 Max Daily Volume (m ³): 137000 Original Application No: NPS/WR/003341 Original Start Date: 23/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 09/06/2009 Version End Date: -
-	1650m SW	Status: Active Licence No: 11/42/36.2/1 Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: HAVANT PS Data Type: Point Name: Portsmouth Water Ltd Easting: 470480 Northing: 106270	Annual Volume (m ³): 35770000 Max Daily Volume (m ³): 137000 Original Application No: NPS/WR/003341 Original Start Date: 23/12/1965 Expiry Date: - Issue No: 102 Version Start Date: 09/06/2009 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**1**

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.

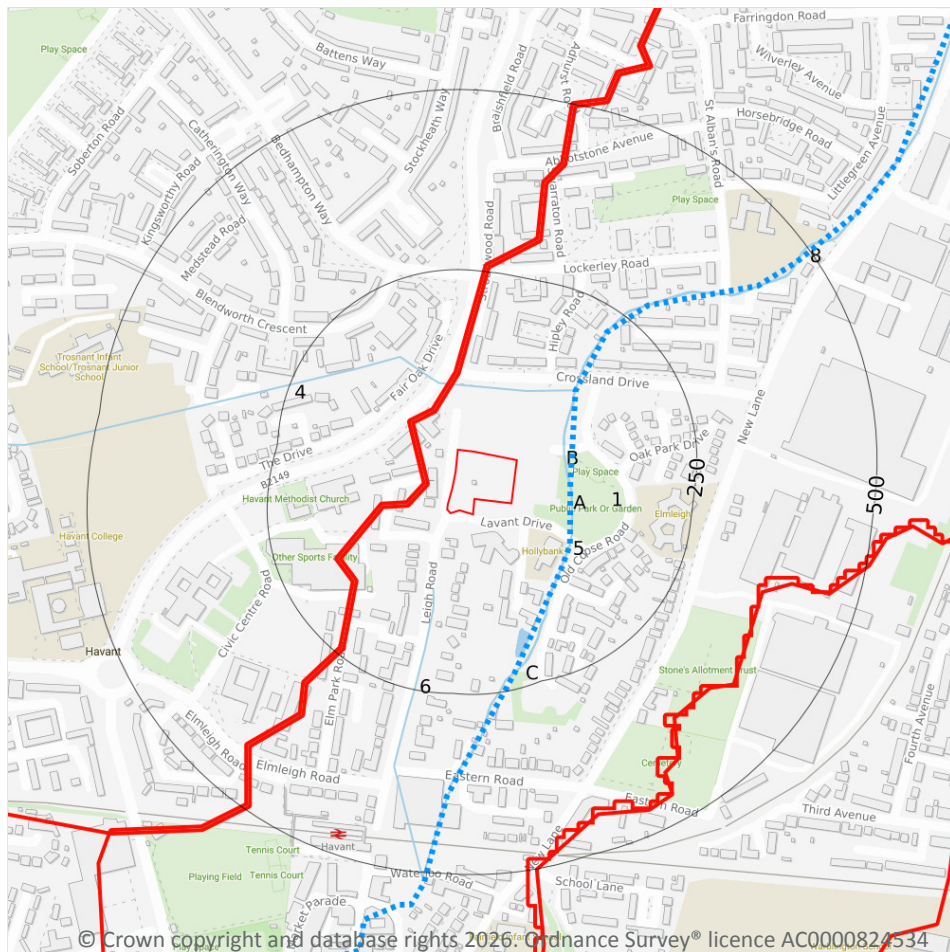
Features are displayed on the Abstractions and Source Protection Zones map on [page 54 >](#)

ID	Location	Type	Description
1	On site	1c	Inner catchment within confined aquifer

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- 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 NGD)

Records within 250m

11

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 58 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
A	66m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Lavant Stream



ID	Location	Type of water feature	Ground level	Permanence	Name
B	66m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Lavant Stream
B	69m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Lavant Stream
4	90m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
5	95m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Lavant Stream
C	99m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Lavant Stream
6	107m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	124m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	127m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Lavant Stream
B	133m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Lavant Stream
8	150m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Lavant Stream

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m

5

Covering rivers, streams and lakes (some overlap with OS NGD 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 58](#) >



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 58 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Lavant (Hants)	GB107042016420	East Hampshire Rivers	East Hampshire

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 58 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
3	76m E	River	Lavant (Hants)	GB107042016420 ↗	No longer applicable	Does not require assessment	Poor	2022

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



6.5 WFD Groundwater bodies

Records on site

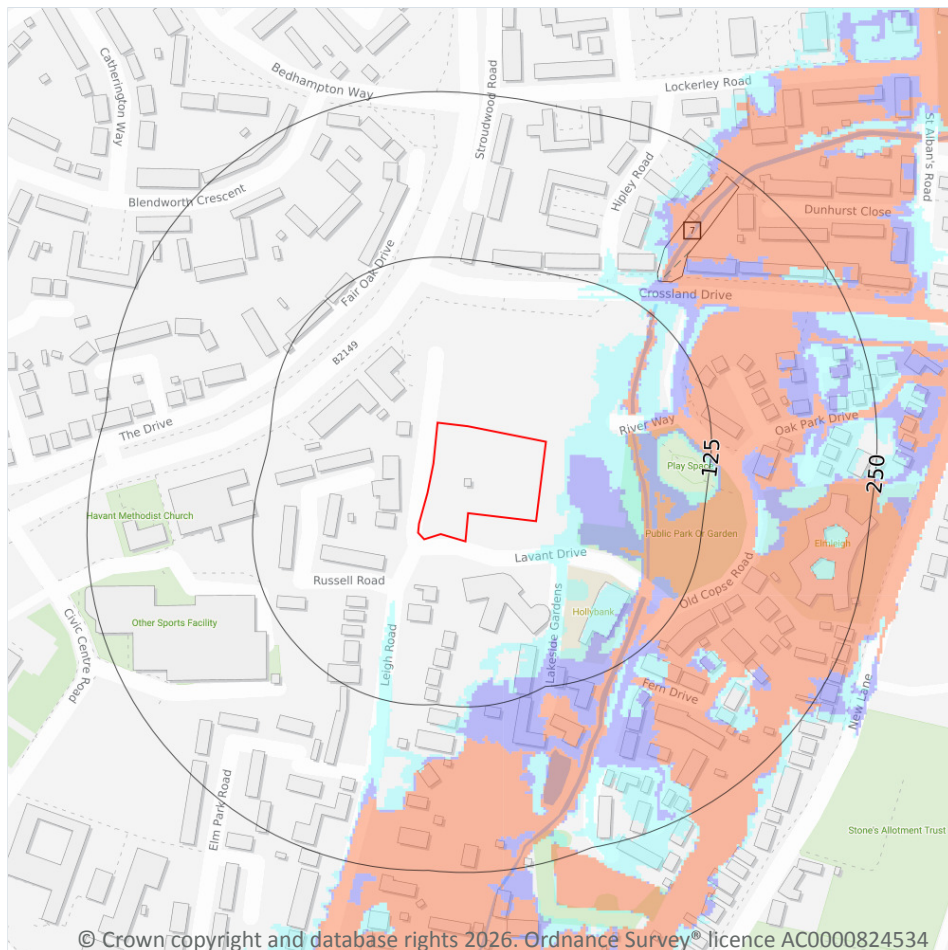
0

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.

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

2

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 62](#) >



Distance	Flood risk category
On site	N/A
0 - 50m	Medium

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

7.2 Historical Flood Events

Records within 250m	1
----------------------------	----------

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 62](#) >

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
7	148m NE	Winter 2000/01g_Lavant Stream_Havant	2000-12-01 2000-12-01	Unknown	Unknown	Fluvial

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

7.3 Flood Defences

Records within 250m	0
----------------------------	----------

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0
----------------------------	----------

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

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



7.5 Flood Storage Areas

Records within 250m

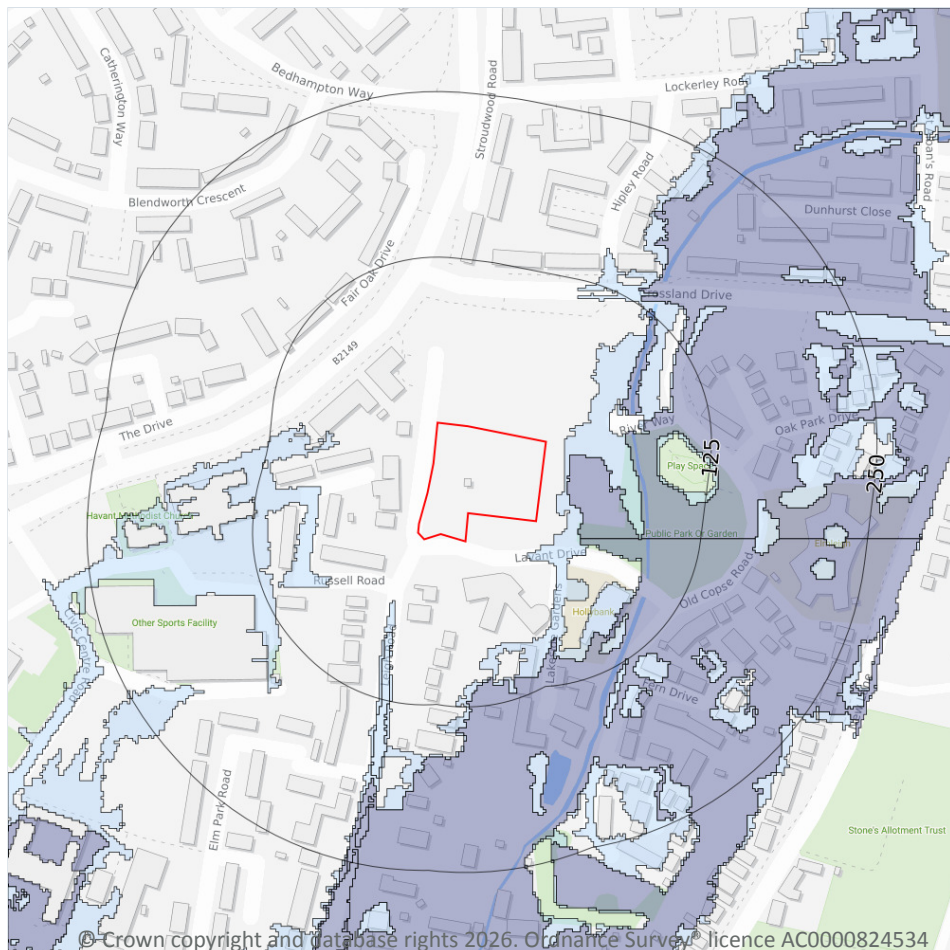
0

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

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



River and coastal flooding - Flood Zones



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

7.6 Flood Zone 2

Records within 50m

1

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

Features are displayed on the River and coastal flooding map on [page 62 >](#)

Location	Type
13m E	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.

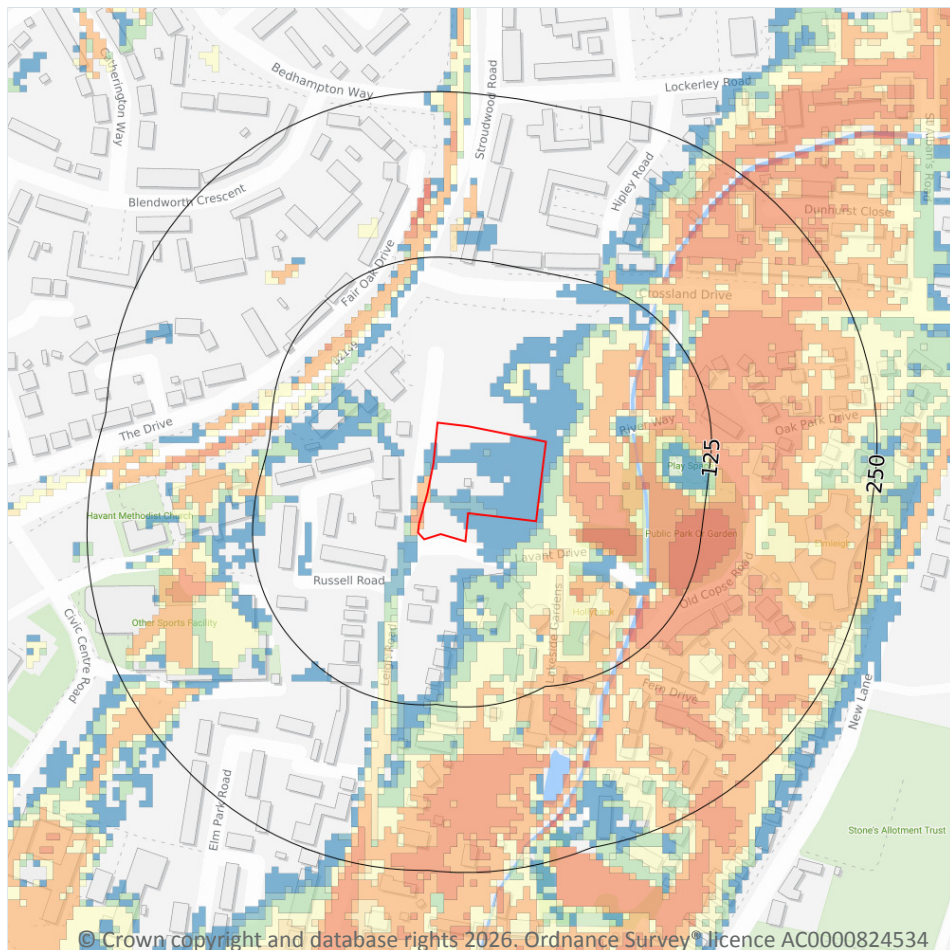
Features are displayed on the River and coastal flooding map on [page 62](#) >

Location	Type
19m E	Zone 3 - (Fluvial /Tidal Models)

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



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.3m - 1.0m

Highest risk within 50m

1 in 30 year, Greater than 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 67 >](#)

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.

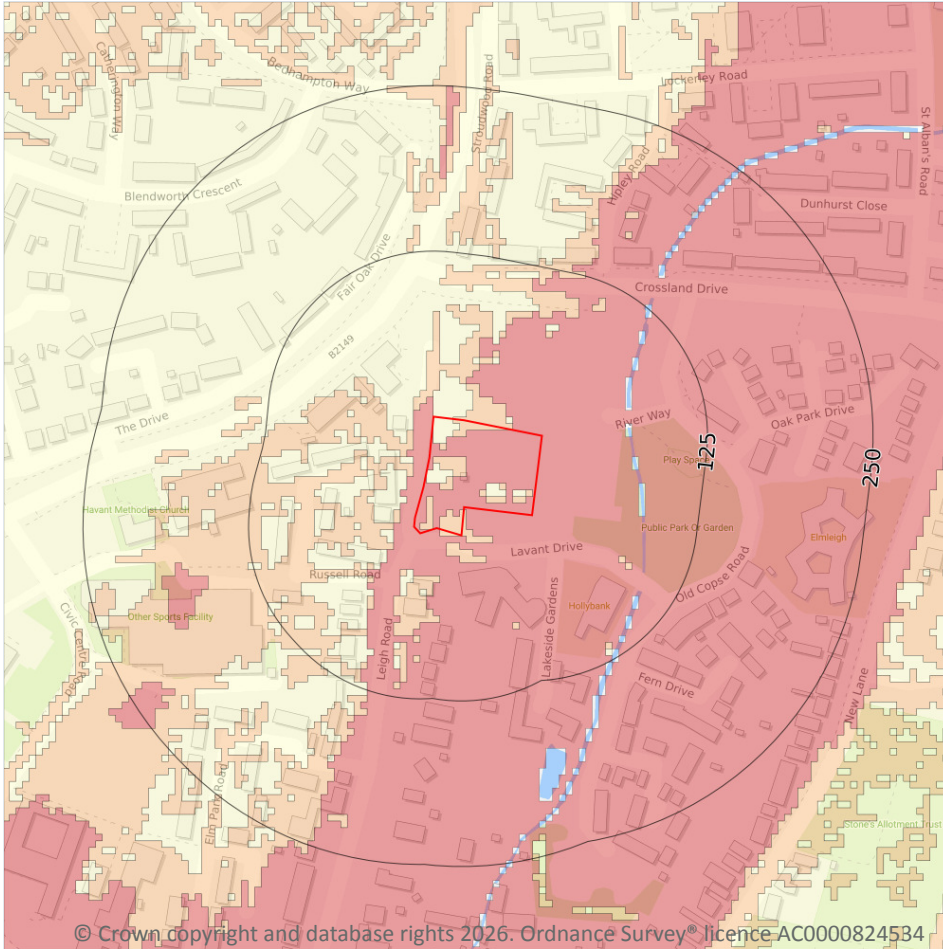
The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

High

Highest risk within 50m

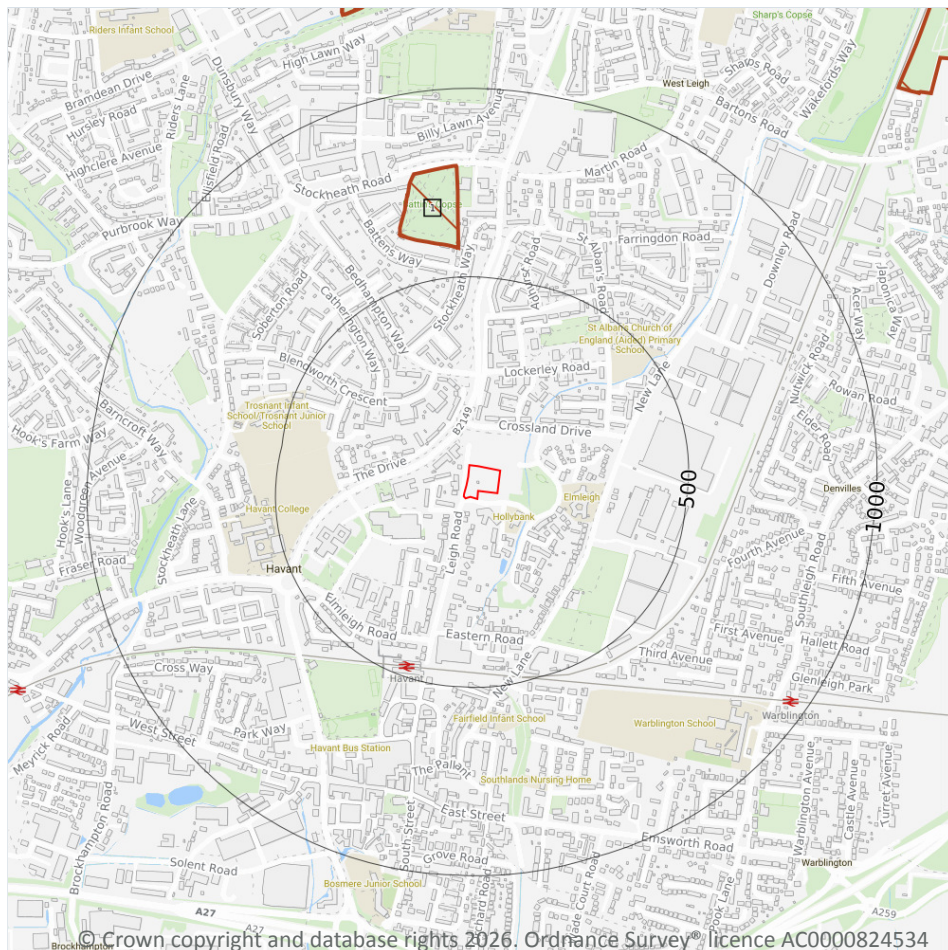
High

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

Features are displayed on the Groundwater flooding map on [page 69](#) >

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- × Conserved wetland sites (Ramsar sites)
- + Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Designated Ancient Woodland

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 70 >](#)

ID	Location	Name	Data source
-	1817m S	Chichester Harbour SSSI	Natural England



ID	Location	Name	Data source
-	1946m SE	Warblington Meadow 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

1

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 70 >](#)

ID	Location	Site	Details
-	1817m S	Name: Chichester and Langstone Harbours Site status: Listed Data source: Natural England	Overview: Chichester and Langstone Harbours are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site is of particular significance for over-wintering wildfowl and waders and also a wide range of coastal and transitional habitats supporting important plant and animal communities. Ramsar criteria: Ramsar criterion 1 Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes.

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

1

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.

Features are displayed on the Environmental designations map on [page 70 >](#)



ID	Location	Name	Features of interest	Habitat description	Data source
-	1817m S	Solent Maritime	Subtidal sandbanks; Estuaries; Intertidal mudflats and sandflats; Lagoons; Annual vegetation of drift lines; Coastal shingle vegetation outside the reach of waves; Glasswort and other annuals colonising mud and sand; Cord-grass swards; Atlantic salt meadows; Shifting dunes with marram; Dune grassland; Desmoulin's whorl snail; Otter; Common seal	Broad-leaved deciduous woodland; Shingle, Sea cliffs, Islets; Coastal sand dunes, Sand beaches, Machair; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Marine areas, Sea inlets	Natural England

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 70 >](#)

ID	Location	Name	Species of interest	Habitat description	Data source
-	1817m S	Chichester and Langstone Harbours	Common shelduck; Eurasian wigeon; Eurasian teal; Northern pintail; Northern shoveler; Red-breasted merganser; Ringed plover; Grey plover; Sanderling; Bar-tailed godwit; Eurasian curlew; Common redshank; Ruddy turnstone; Sandwich tern; Common tern; Little tern; Dunlin; Dark-bellied brent goose	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Coastal sand dunes, Sand beaches, Machair; Salt marshes, Salt pastures, Salt steppes; Improved grassland; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens	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

10

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.

Features are displayed on the Environmental designations map on [page 70 >](#)

ID	Location	Name	Woodland Type
1	577m N	Battin's Copse	Ancient & Semi-Natural Woodland
A	1241m N	Great Copse	Ancient & Semi-Natural Woodland
A	1241m N	Great Copse	Ancient & Semi-Natural Woodland
-	1349m N	Bondfields Copse	Ancient & Semi-Natural Woodland
3	1466m NE	Unknown	Ancient & Semi-Natural Woodland
-	1762m NE	The Slip	Ancient & Semi-Natural Woodland
-	1787m N	Wakeford's Copse	Ancient & Semi-Natural Woodland
-	1787m N	Wakeford's Copse	Ancient & Semi-Natural Woodland
-	1805m NE	The Slip	Ancient & Semi-Natural Woodland
-	1974m NE	Unknown	Ancient & Semi-Natural Woodland



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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m

0

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

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

10.11 Green Belt

Records within 2000m

0

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

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.



10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

4

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	Chichester,Langstone and Portsmouth Harbours Eutrophic NVZ (TraC)	Eutrophic Water	2	Existing

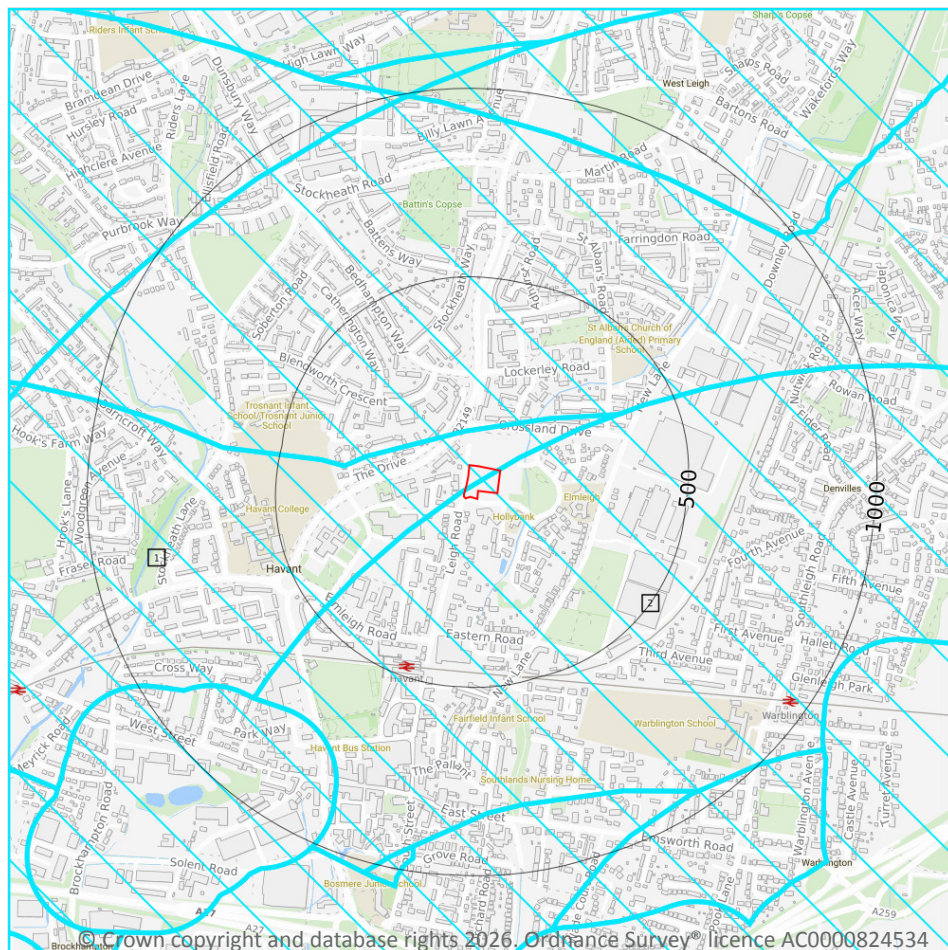


Location	Name	Type	NVZ ID	Status
739m SE	WARBLINGTON STREAM - NO.2 NVZ	Surface Water	667	Existing
1059m S	Chichester,Langstone and Portsmouth Harbours Eutrophic NVZ (TraC)	Eutrophic Water	2	Existing
1296m SE	WARBLINGTON STREAM - NO.2 NVZ	Surface Water	667	Existing

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



SSSI Impact Zones and Units



- 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

2

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 77](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0121355322342&notes=11101+11414&location=471010,106809 %20(IRZ%20polygon%20centre)
2	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0111344322342&notes=11101+11414&location=473072,106722 %20(IRZ%20polygon%20centre)



This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

2

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 77 >](#)

ID: -
 Location: 1817m S
 SSSI name: Chichester Harbour
 Unit name: Warblington / Emsworth Foreshore
 Broad habitat: Littoral Sediment
 Condition: Unfavourable - Declining
 Reportable features:

Feature name	Feature condition	Date of assessment
H1130 Estuaries	Unfavourable - No change	26/09/2018
H1140 Mudflats and sandflats not covered by seawater at low tide	Unfavourable - Recovering	29/11/2010
H1210 Annual vegetation of drift lines	Unfavourable - Recovering	29/11/2010
H1220 Perennial vegetation of stony banks	Favourable	29/11/2010
H1310 Salicornia and other annuals colonising mud and sand	Unfavourable - Recovering	29/11/2010
H1320 Spartina swards (<i>Spartinion maritimae</i>)	Unfavourable - Recovering	29/11/2010
H1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	Unfavourable - Declining	07/04/2021
Littoral sediment	Unfavourable - Recovering	13/08/2014
SM4-28 - Saltmarsh	Unfavourable - Declining	07/04/2021

ID: -
 Location: 1946m SE
 SSSI name: Warblington Meadow
 Unit name: 1
 Broad habitat: Neutral Grassland - Lowland
 Condition: Unfavourable - No change
 Reportable features:

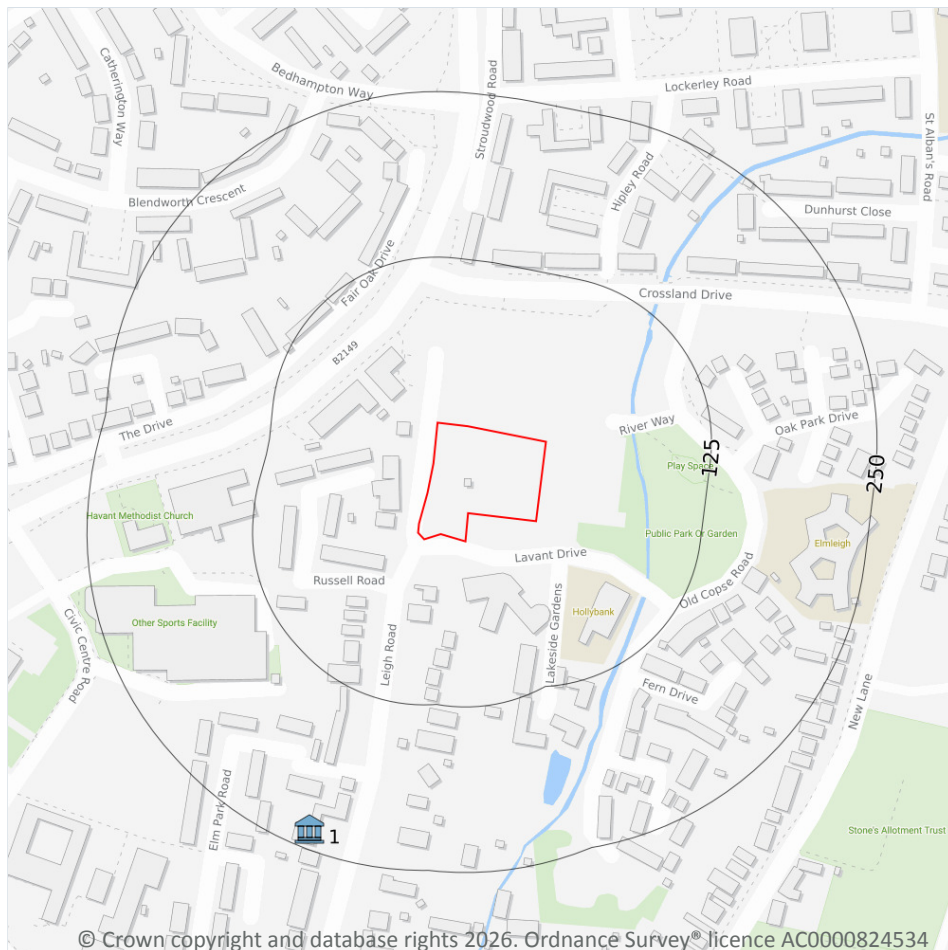


Feature name	Feature condition	Date of assessment
Lowland mire grassland and rush pasture	Unfavourable - No change	25/02/2025
SM4-28 - Saltmarsh	Favourable	25/02/2025

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



11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

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

1

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.

Features are displayed on the Visual and cultural designations map on [page 80 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
1	235m S	Elmleigh House	II	1154964	16/05/1952

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

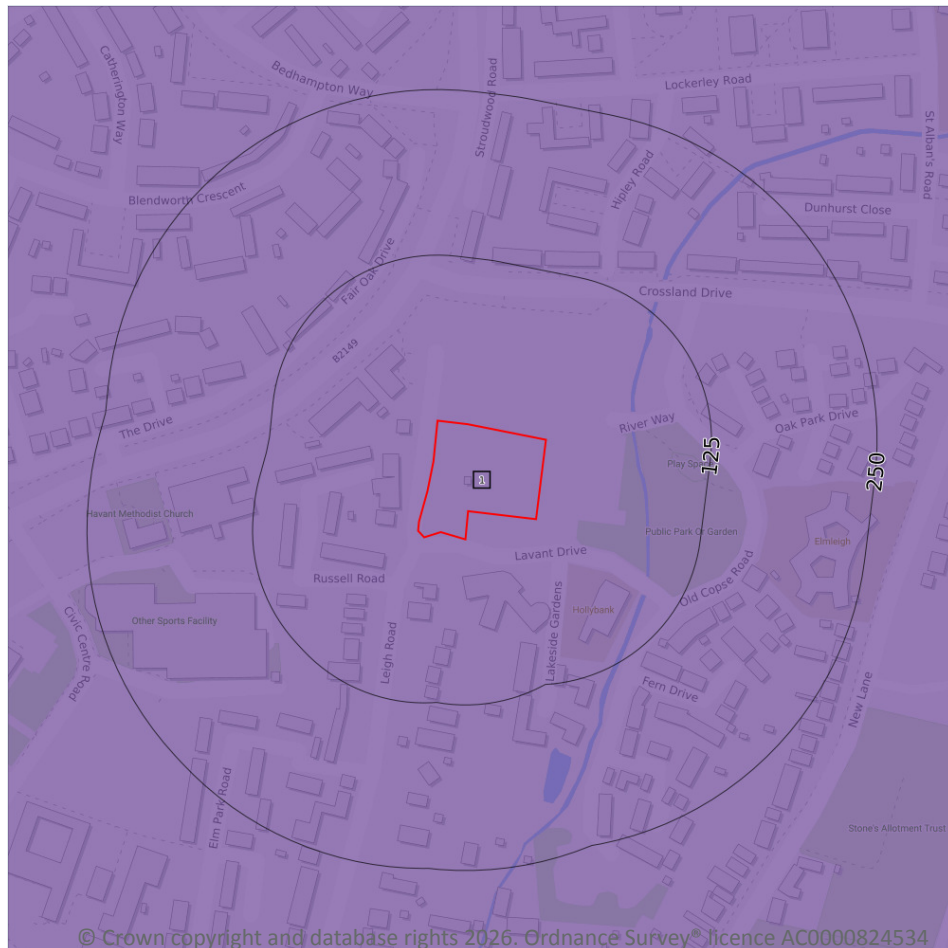
0

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 83](#) >

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

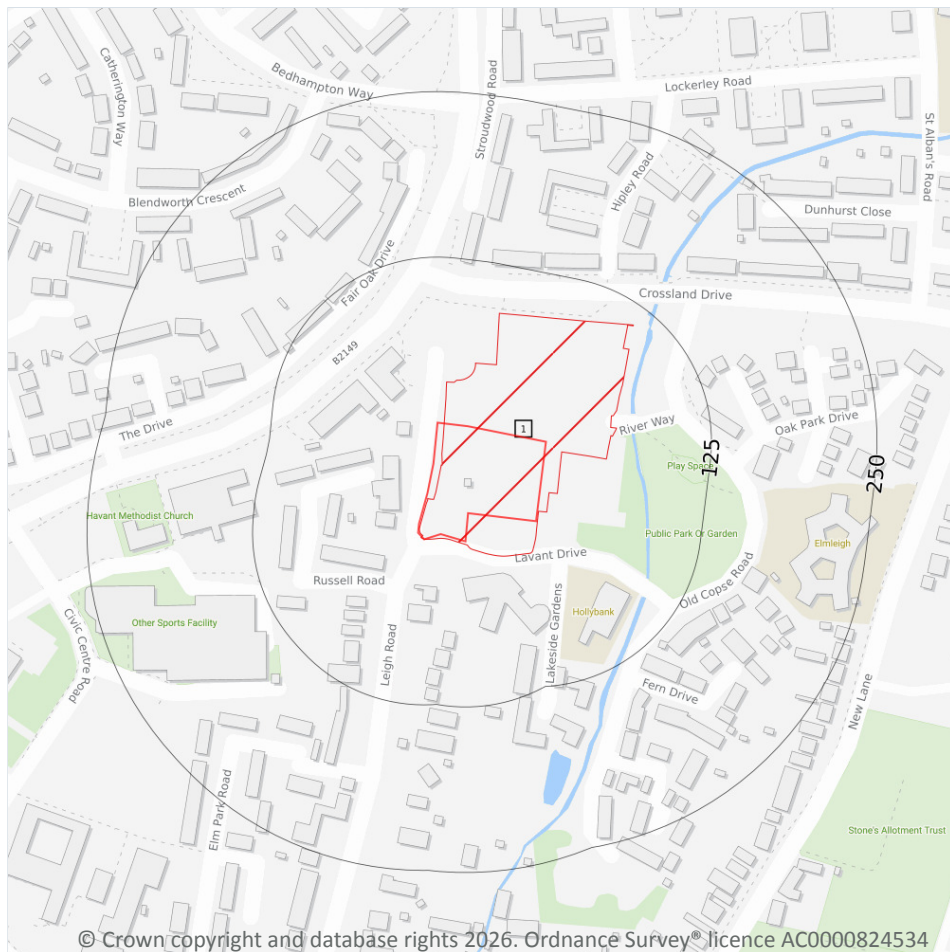
0

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

0

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

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.



13.3 Open Mosaic Habitat

Records within 250m

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 85 >](#)

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	On site	NLUD Ref: 173500089	Low	National Land Use Database - Previously Developed Land	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



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 87](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SU70NW

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

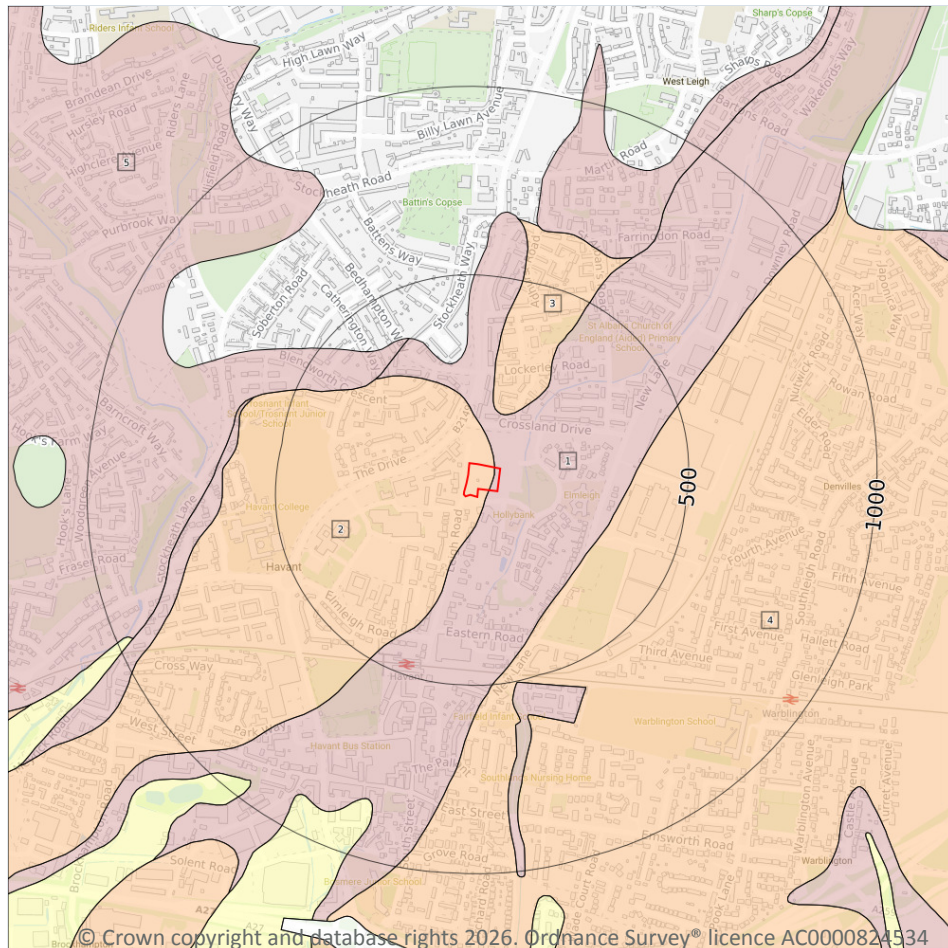
0

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.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

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 89](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD-XCZSV	Head-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
2	On site	RTDU-XSZC	River Terrace Deposits (Undifferentiated)-Sand, Silt And Clay	Sand, silt and clay



ID	Location	LEX Code	Description	Rock description
3	142m N	RTDU-XSZC	River Terrace Deposits (Undifferentiated)-Sand, Silt And Clay	Sand, silt and clay
4	289m SE	RTDU-XSZC	River Terrace Deposits (Undifferentiated)-Sand, Silt And Clay	Sand, silt and clay
5	333m NW	HEAD-XCZSV	Head-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

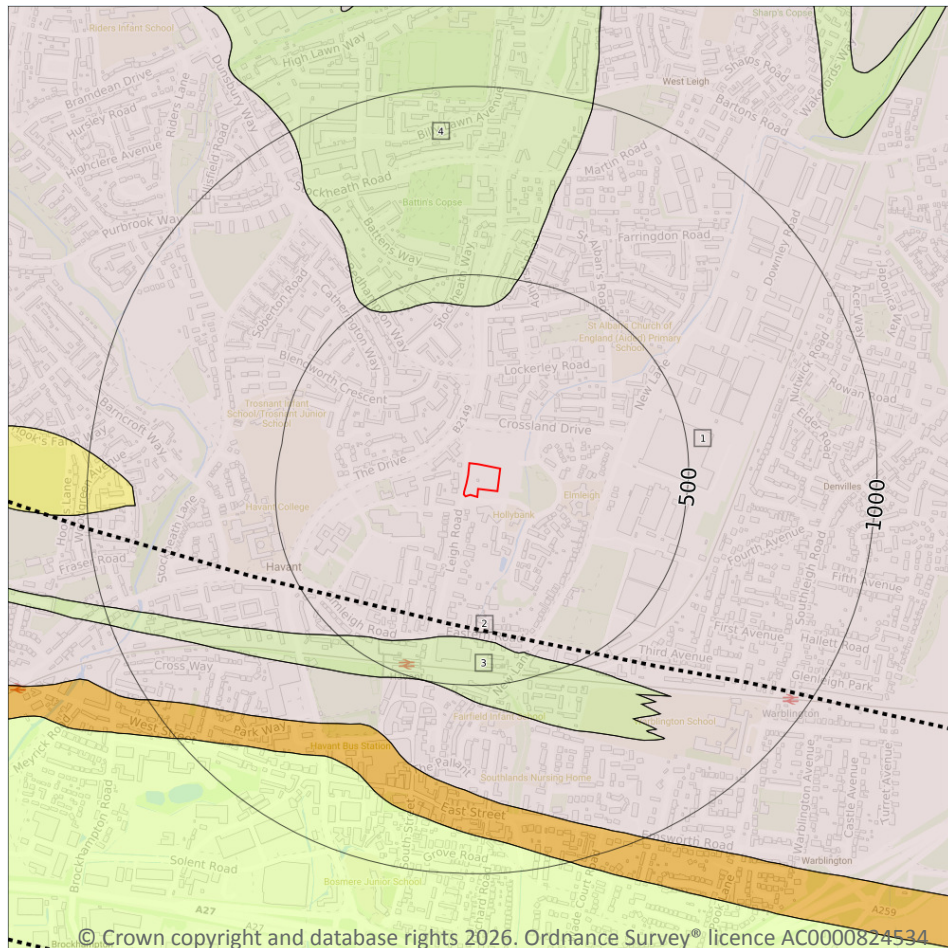
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



14.5 Bedrock geology (10k)

Records within 500m

3

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 91](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZS	London Clay Formation-Clay, Silt And Sand	Ypresian
3	373m S	BOSA-S	Bognor Sand Member-Sand	Not Defined
4	416m N	BOSA-S	Bognor Sand Member-Sand	Not Defined

This data is sourced from the British Geological Survey.



14.6 Bedrock faults and other linear features (10k)

Records within 500m

1

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.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 91](#) >

ID	Location	Category	Description
2	339m S	FOLD_AXIS	Axial plane trace of major syncline

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 93](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW316_fareham_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

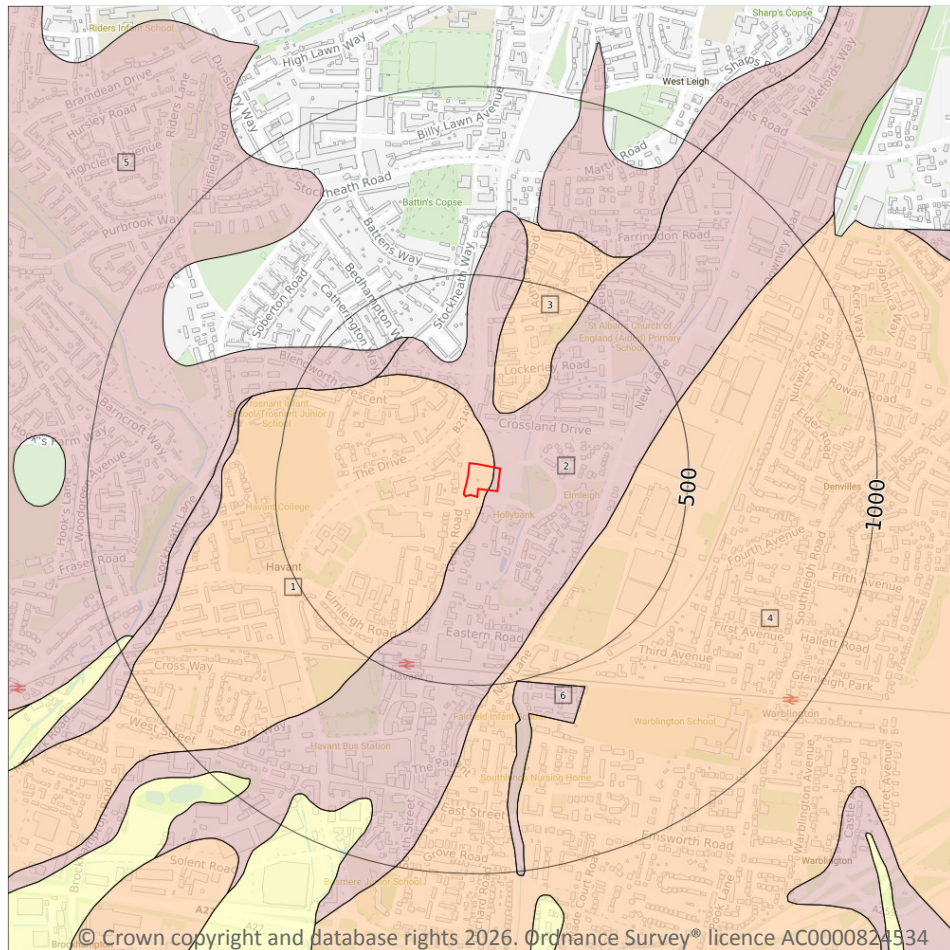
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial 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 - 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

6

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 95](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	RTDU-XSZC	River Terrace Deposits (Undifferentiated)	Sand, silt and clay
2	On site	HEAD-XCV	Head	Clay and gravel
3	145m N	RTDU-XSZC	River Terrace Deposits (Undifferentiated)	Sand, silt and clay
4	286m SE	RTDU-XSZC	River Terrace Deposits (Undifferentiated)	Sand, silt and clay



ID	Location	LEX Code	Description	Rock description
5	335m NW	HEAD-XCZSV	Head	Clay, silt, sand and gravel
6	500m S	HEAD-XCV	Head	Clay and gravel

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low
On site	Intergranular	High	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

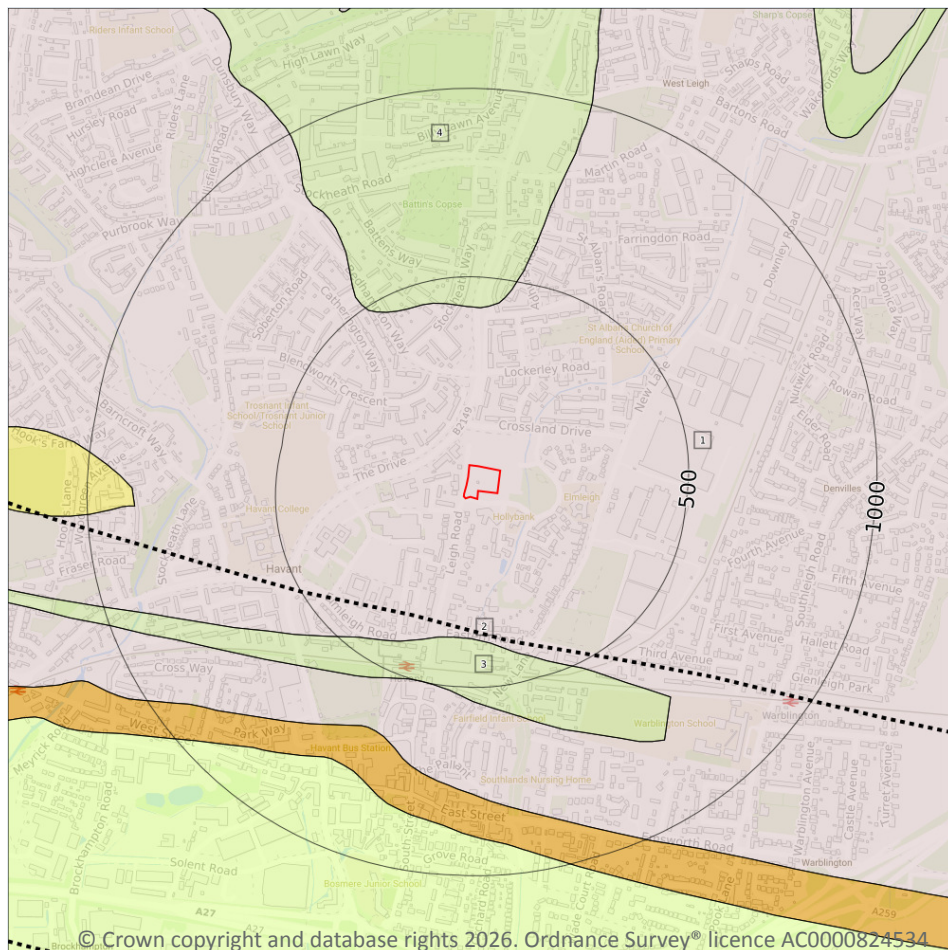
0

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

3

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 97](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	LC-XCZS	London Clay Formation-Clay, silt and sand	Ypresian
3	370m S	BOSA-S	Bognor Sand Member-Sand	Not Defined
4	419m N	BOSA-S	Bognor Sand Member-Sand	Not Defined

This data is sourced from the British Geological Survey.



15.9 Bedrock permeability (50k)

Records within 50m

1

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

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

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

1

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.

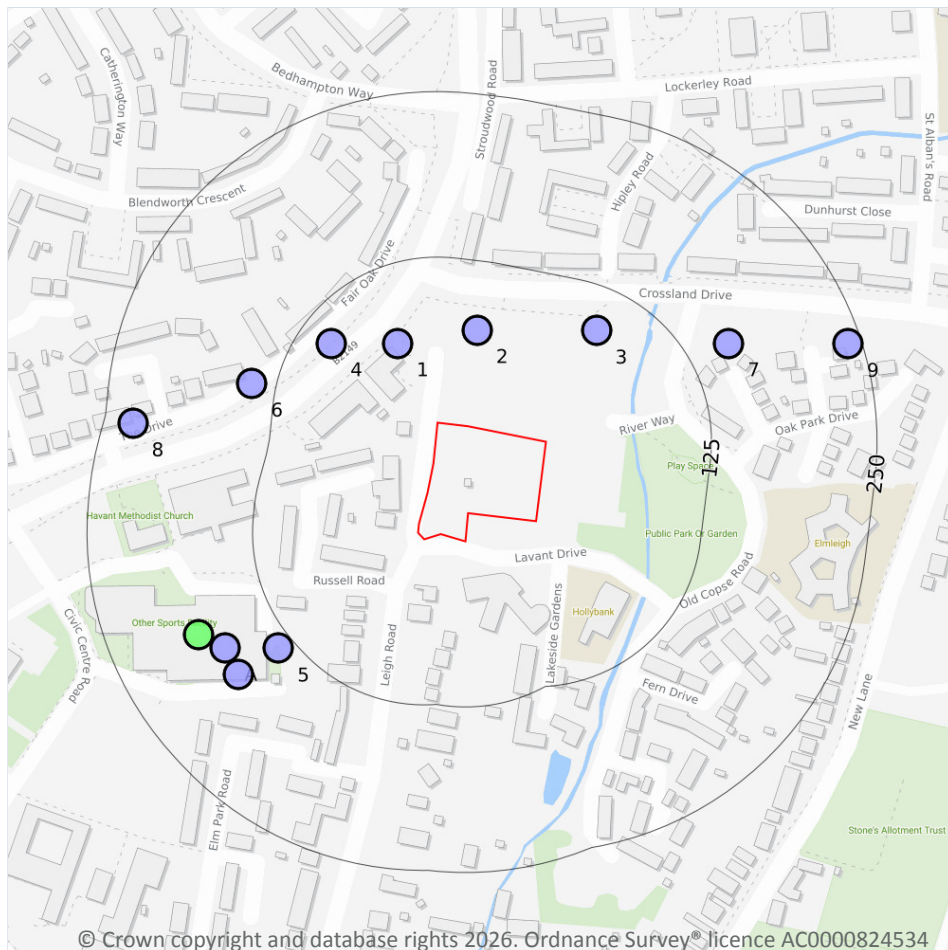
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 97](#) >

ID	Location	Category	Description
2	336m S	FOLD_AXIS	Axial plane trace of major syncline

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

12

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 99](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	67m NW	471920 107190	ROWLANDS CASTLE MAIN SEWER B10	5.02	N	425546 ↗
2	73m N	471980 107200	ROWLANDS CASTLE MAIN SEWER B11	4.0	N	425547 ↗
3	92m NE	472070 107200	ROWLANDS CASTLE MAIN SEWER B12	3.0	N	425548 ↗

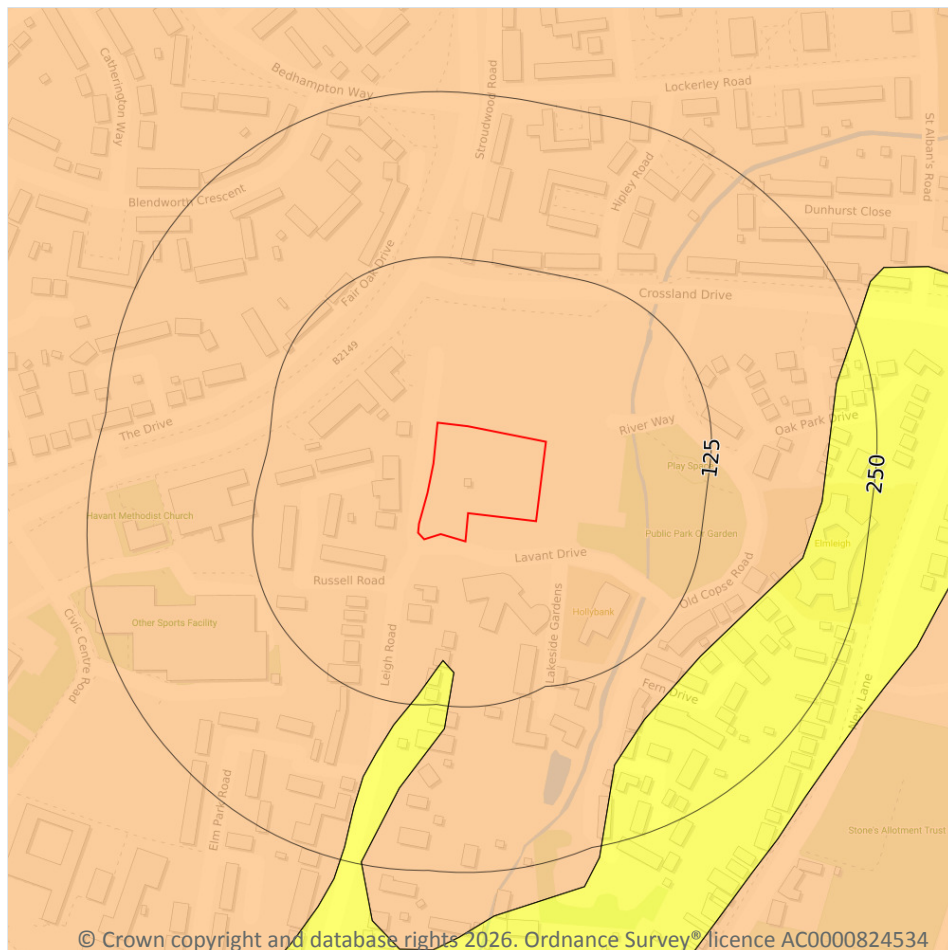


ID	Location	Grid reference	Name	Length	Confidential	Web link
4	100m NW	471870 107190	HOWLANDS CASTLE MAIN SEWER B9	5.02	N	425545 ↗
5	137m SW	471830 106960	HAVANT SWIMMING POOL BH4	5.6	N	425520 ↗
6	143m W	471810 107160	ROWLANDS CASTLE MAIN SEWER BH8	4.0	N	425544 ↗
7	157m NE	472170 107190	ROWLANDS CASTLE MAIN SEWER B13	2.0	N	425549 ↗
A	170m SW	471790 106960	HAVANT SWIMMING POOL BH1A	4.0	N	425518 ↗
A	173m SW	471800 106940	HAVANT SWIMMING POOL BH1	5.4	N	425517 ↗
A	183m SW	471770 106970	HAVANT SWIMMING POOL BH2	12.2	N	425519 ↗
8	229m W	471720 107130	ROWLANDS CASTLE MAIN SEWERBH7A	4.0	N	425543 ↗
9	240m E	472260 107190	ROWLANDS CASTLE MAIN SEWER B14	2.0	N	425550 ↗

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).

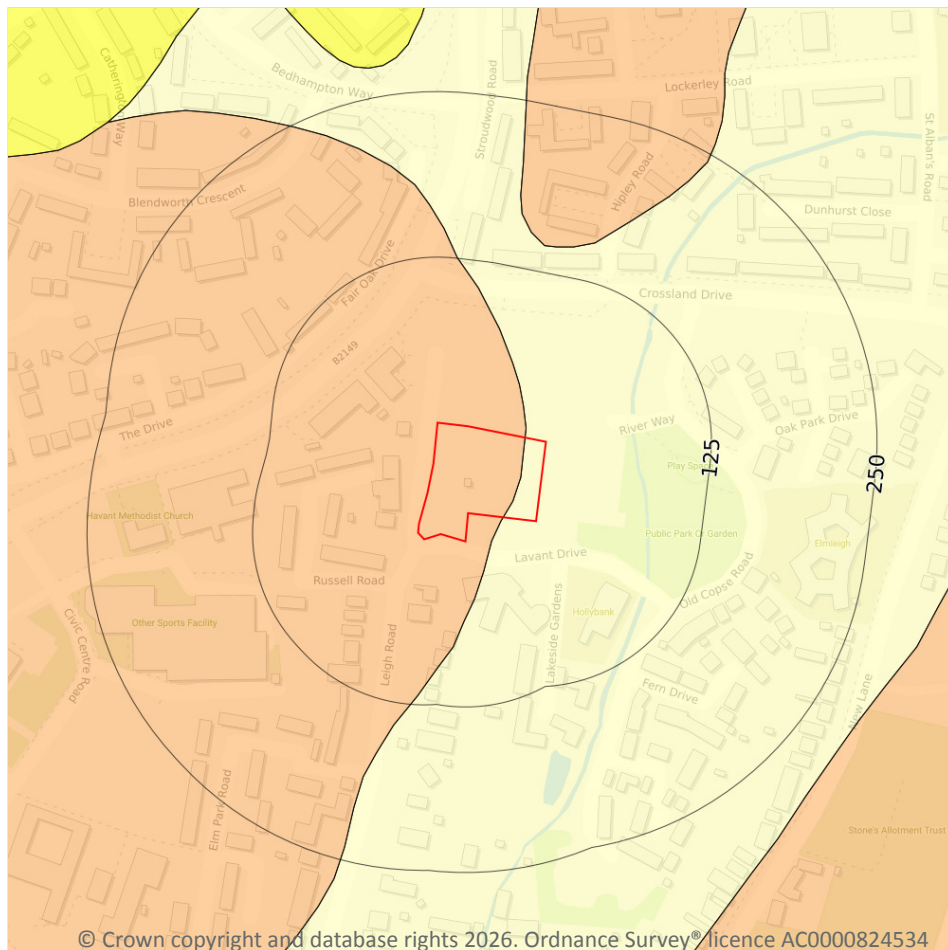
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 101 >](#)

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 102 >](#)

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

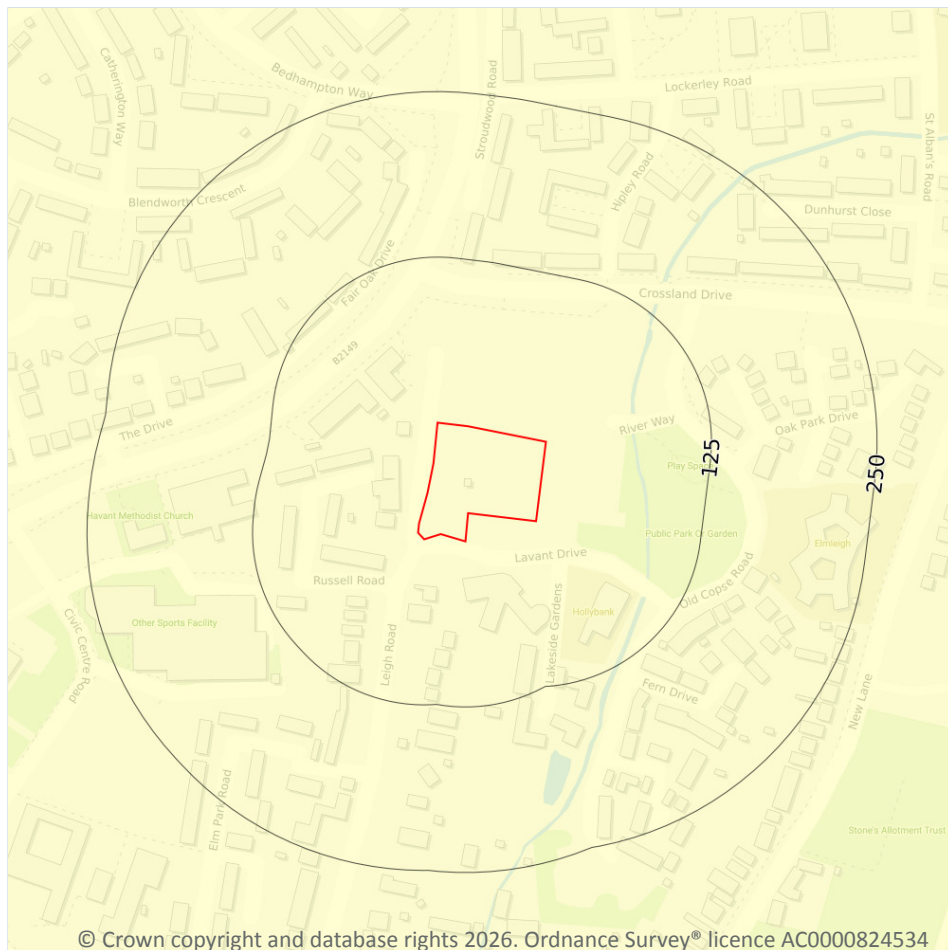
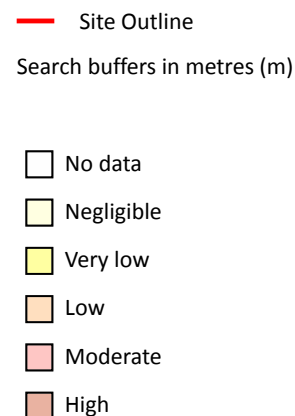


Location	Hazard rating	Details
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

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.

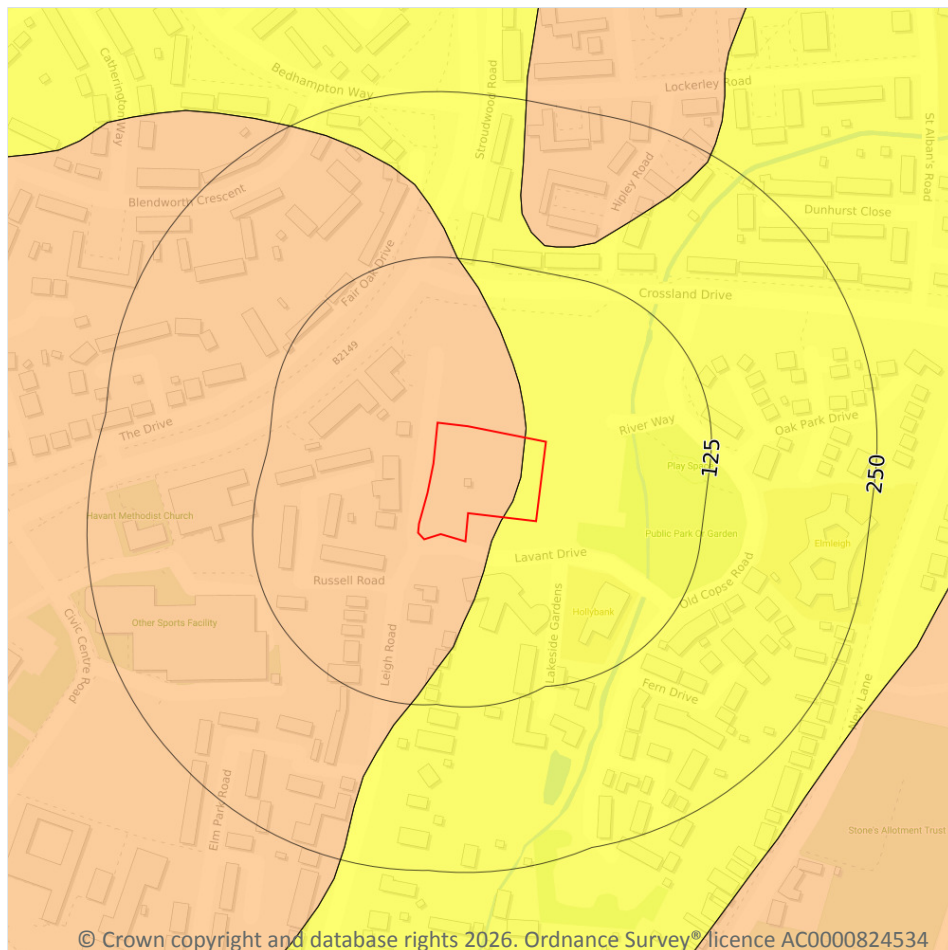
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 104](#) >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

2

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

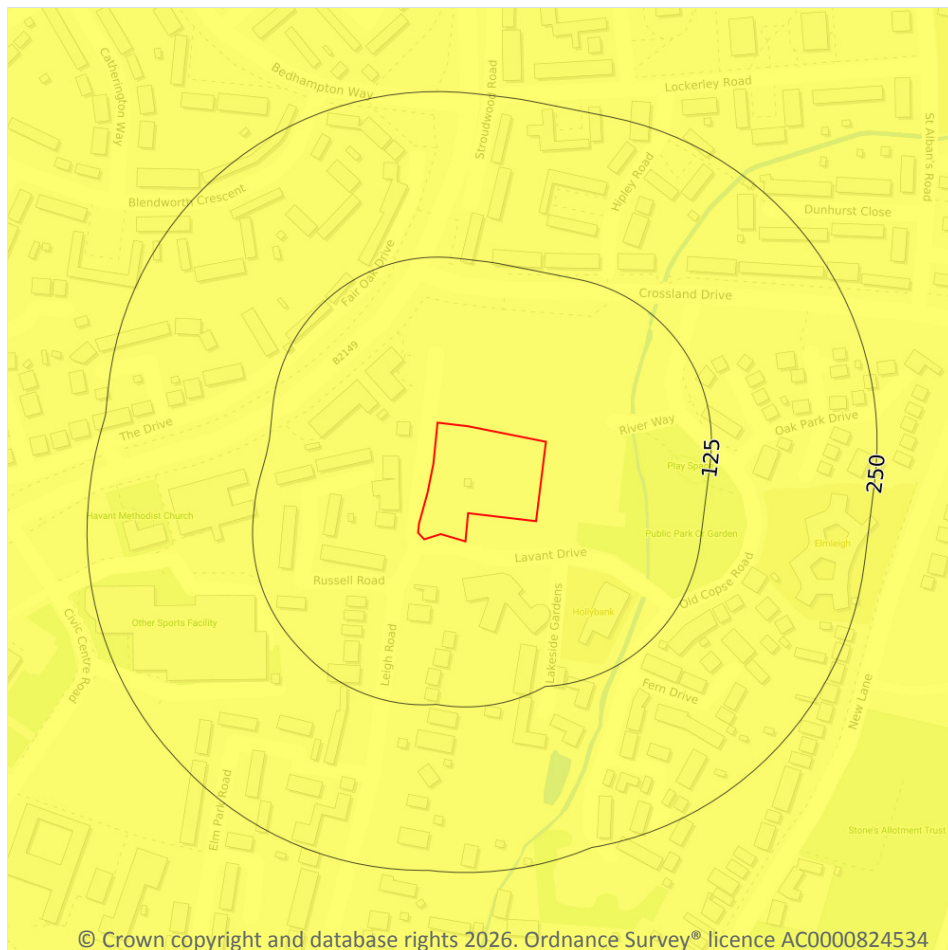
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 105 >](#)

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
On site	Low	Deposits with potential to collapse when loaded and saturated are possibly present in places.

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.

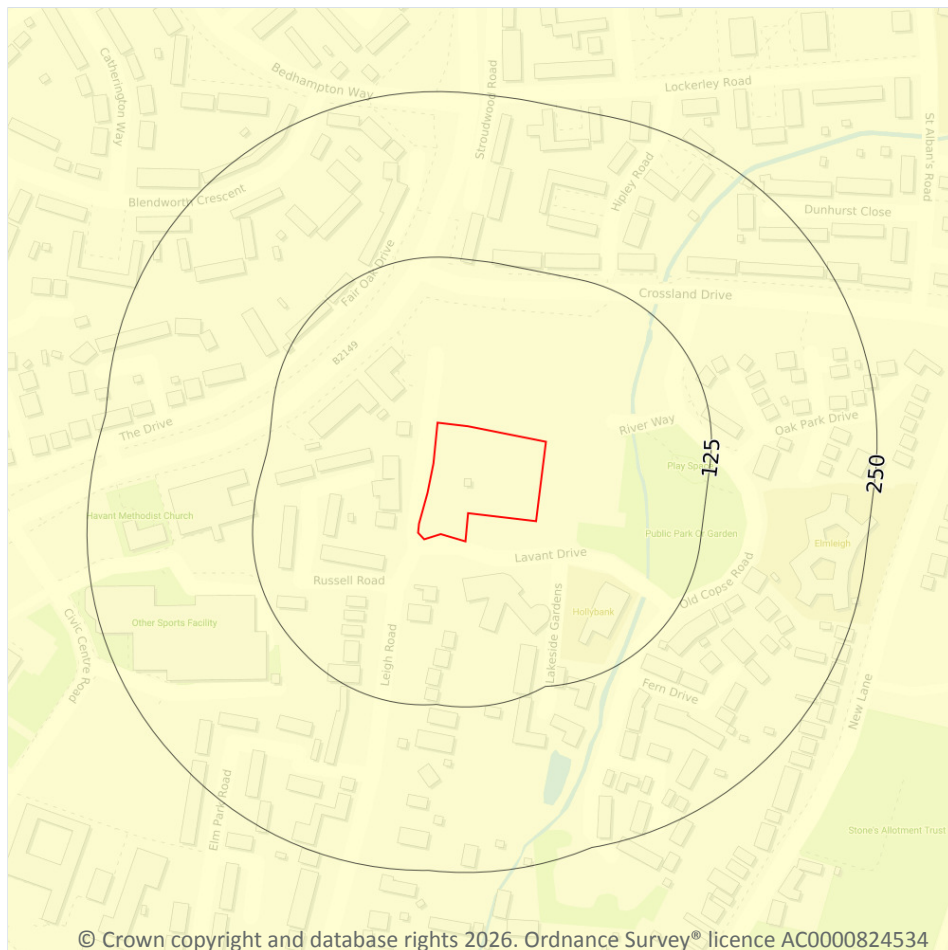
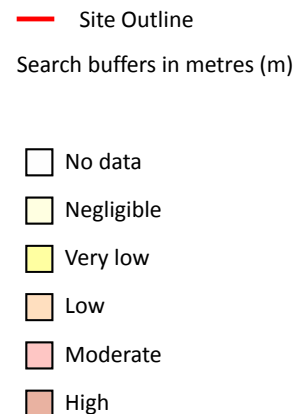
Features are displayed on the Natural ground subsidence - Landslides map on [page 106 >](#)

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

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 107](#) >

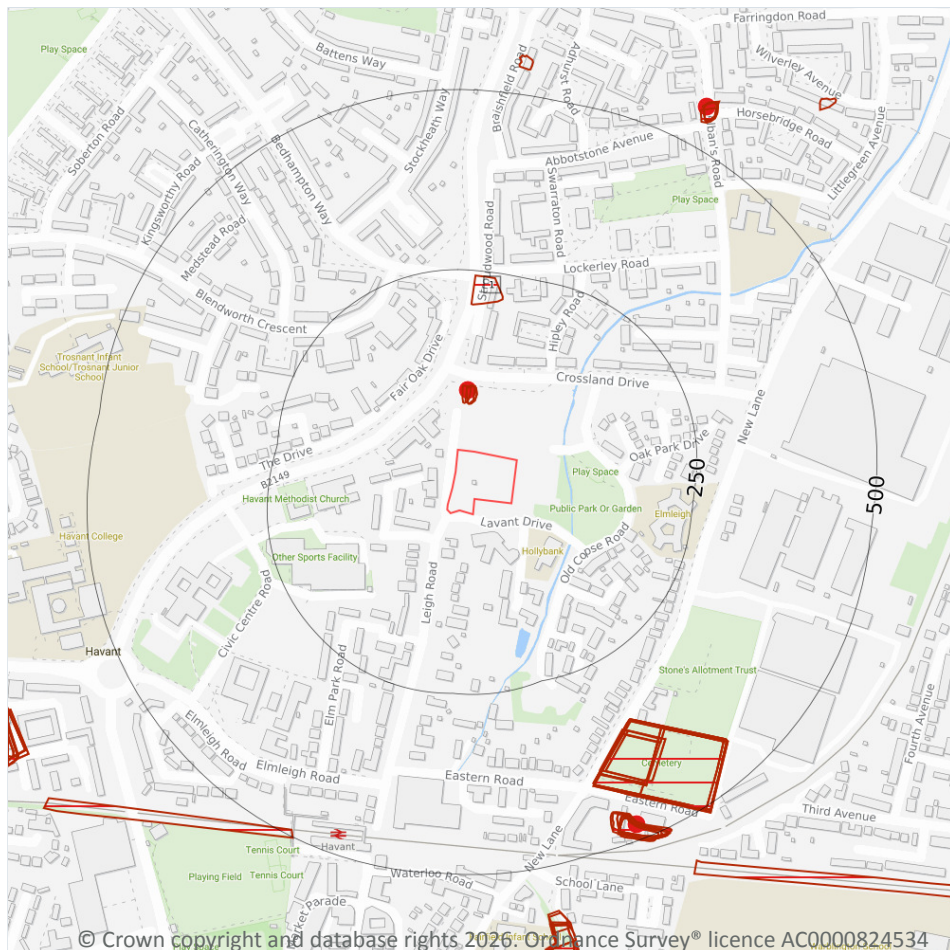
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- 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

2

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 109](#) >

ID	Location	Details	Description
A	84m N	Name: Havant Farm Gravel Pit Address: West Leigh, HAVANT, Hampshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
C	479m S	Name: Havant Park Gravel Pit Address: HAVANT, Hampshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

5

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 109 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	65m N	Old Gravel Pit	1898	1:10560
A	65m N	Old Gravel Pit	1898	1:10560
A	66m N	Old Gravel Pit	1896	1:10560
A	66m N	Old Gravel Pit	1895	1:10560
1	203m N	Gravel Pit	1866	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 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**0**

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).

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
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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

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

0

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.

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.

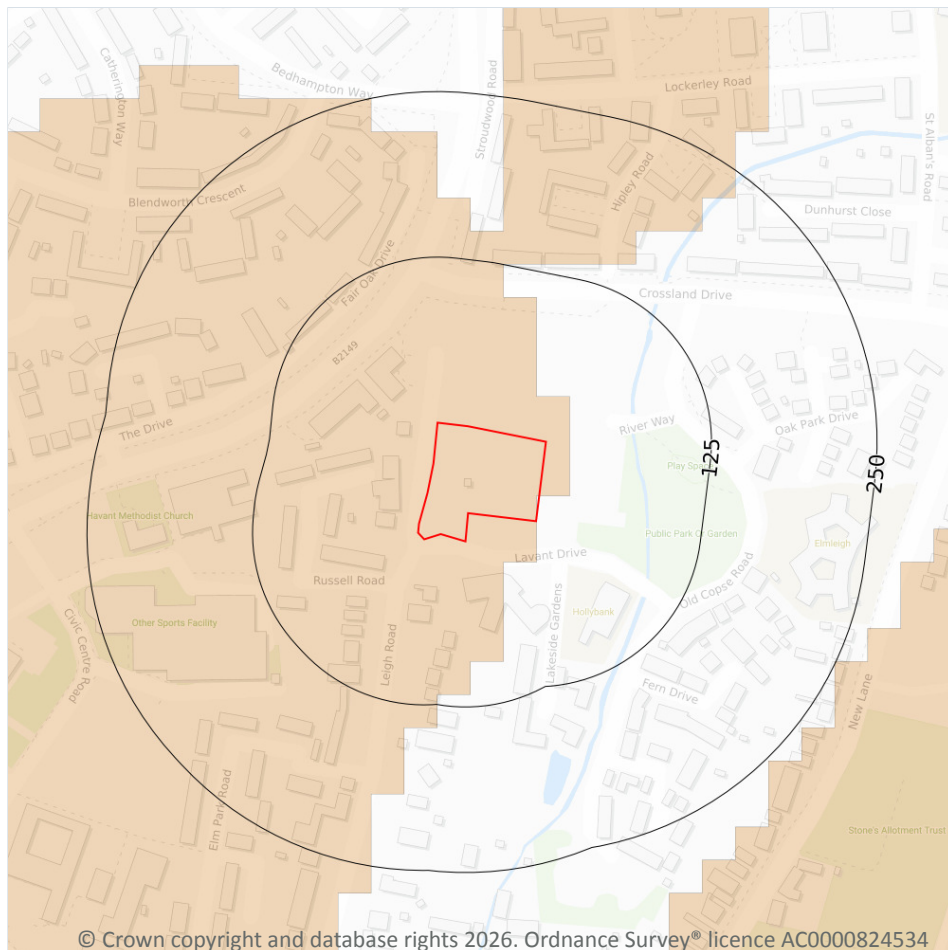
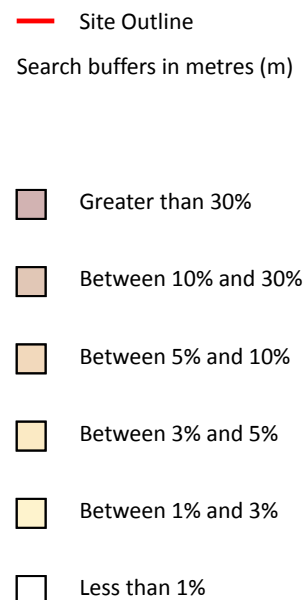
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

2

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 116 >](#)

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 5% and 10%	Basic



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

10

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 km². 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 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
41m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
41m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
50m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
50m SE	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.



21.2 BGS Estimated Urban Soil Chemistry

Records within 50m**0**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

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 km².

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m**0**

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m**0**

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m**0**

Railway tunnels taken from contemporary Ordnance Survey® mapping.

This data is sourced from the Ordnance Survey®.

22.4 Historical railway and tunnel features

Records within 250m**0**

Railways and tunnels digitised from historical Ordnance Survey® mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey®/Groundsure.

22.5 Royal Mail tunnels

Records within 250m**0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.



This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey® and OpenStreetMap.

22.8 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



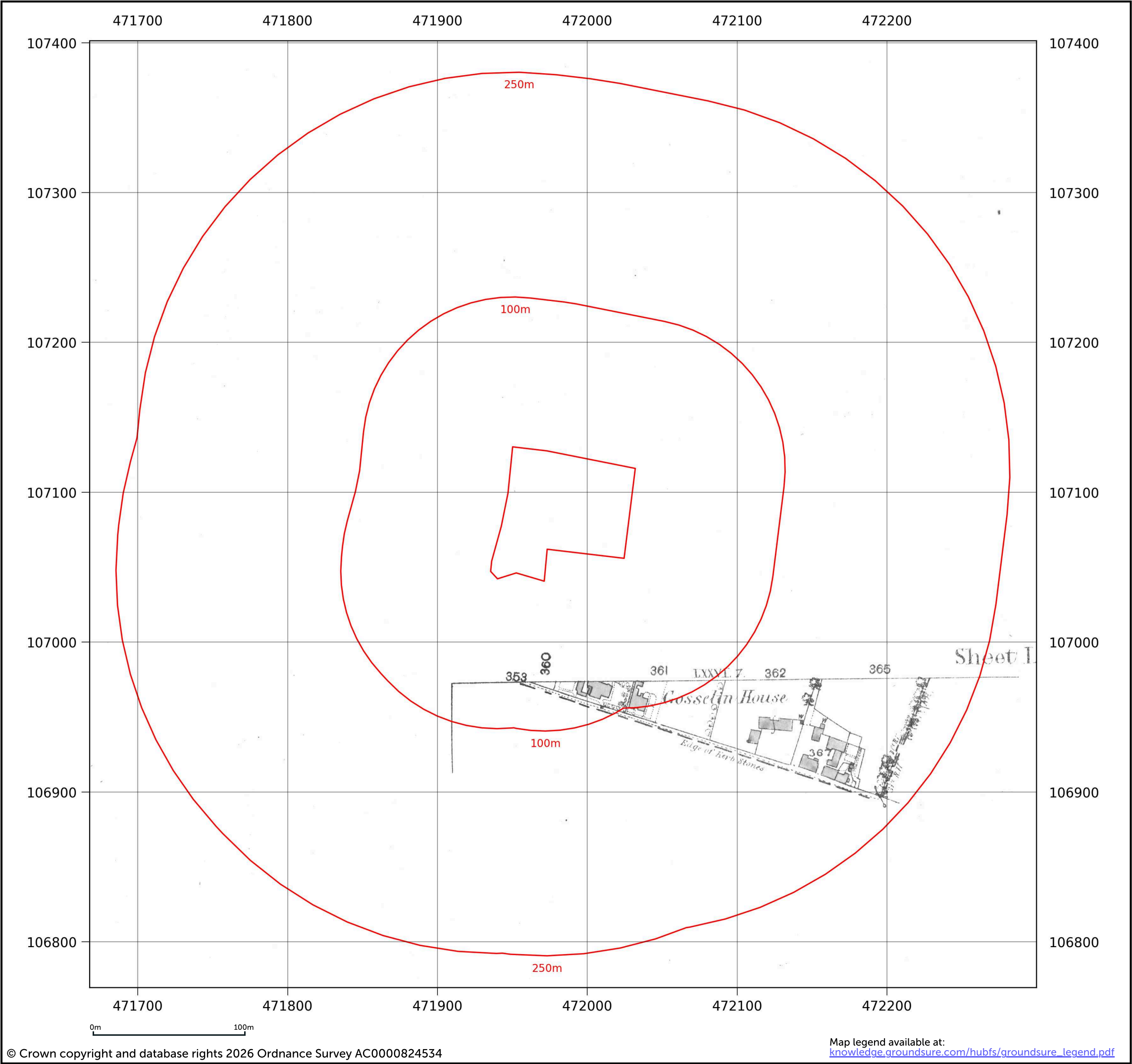
Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-conditions-april-2026/ ↗.





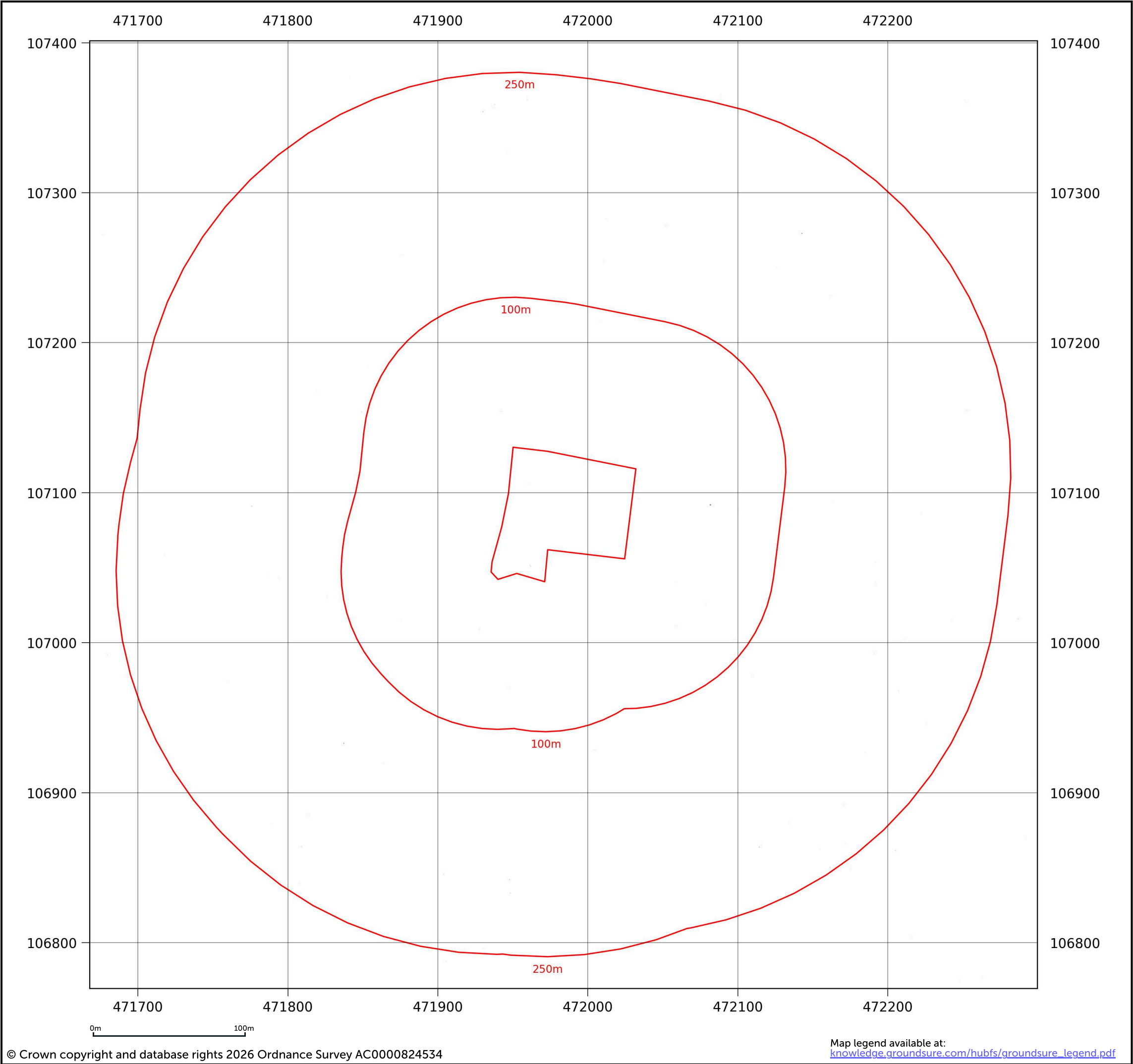
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Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	County Series
Map date:	1869
Scale:	1:2,500
Printed at:	1:2,500

Date: 1869
Surveyed: 1869
Revised: 1869



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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	County Series
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Printed at:	1:2,500



Date: 1869
Surveyed: 1869
Revised: 1869

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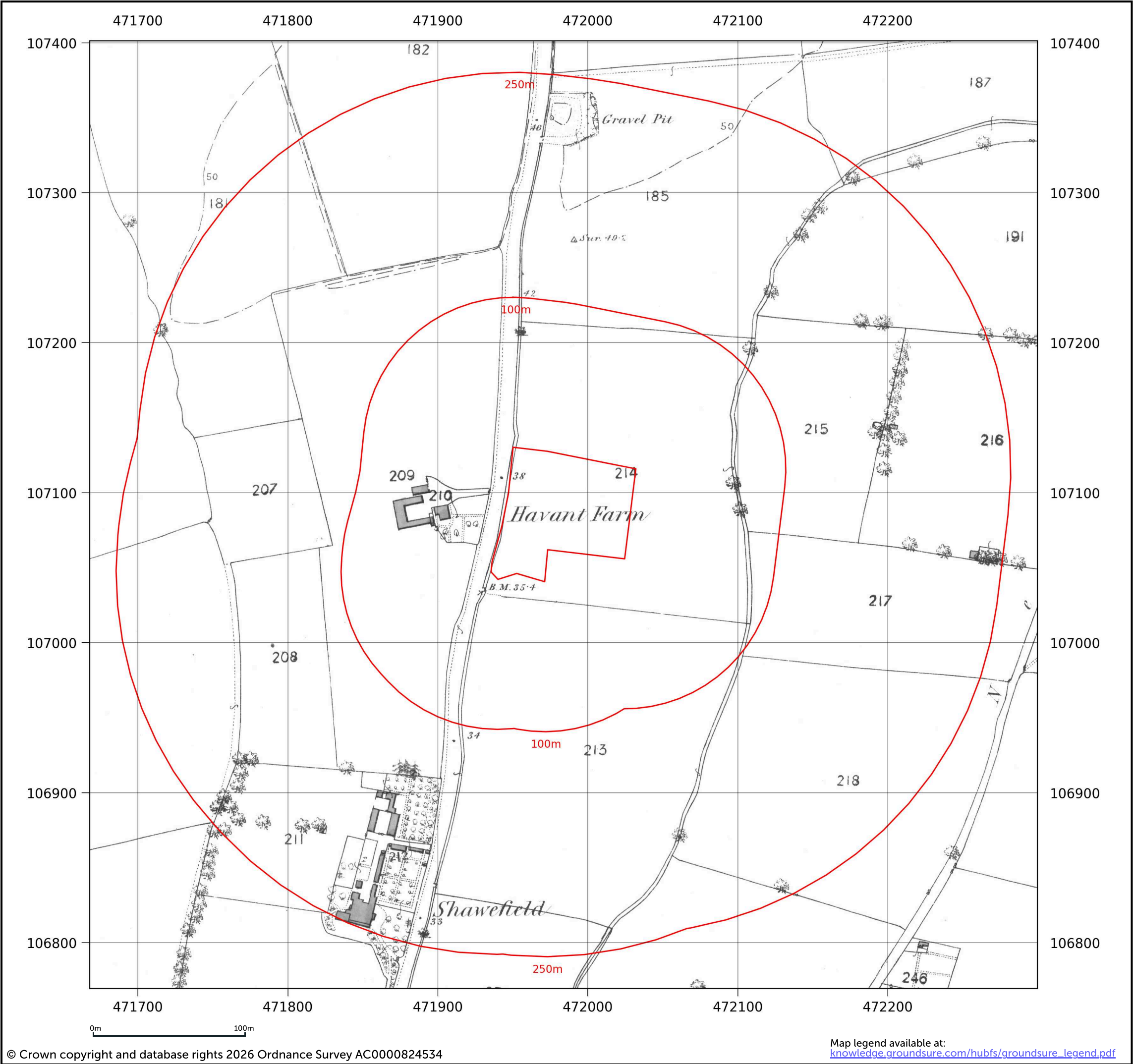
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Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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Scale:	1:2,500
Printed at:	1:2,500



Date: 1869
Surveyed: 1869
Revised: 1869

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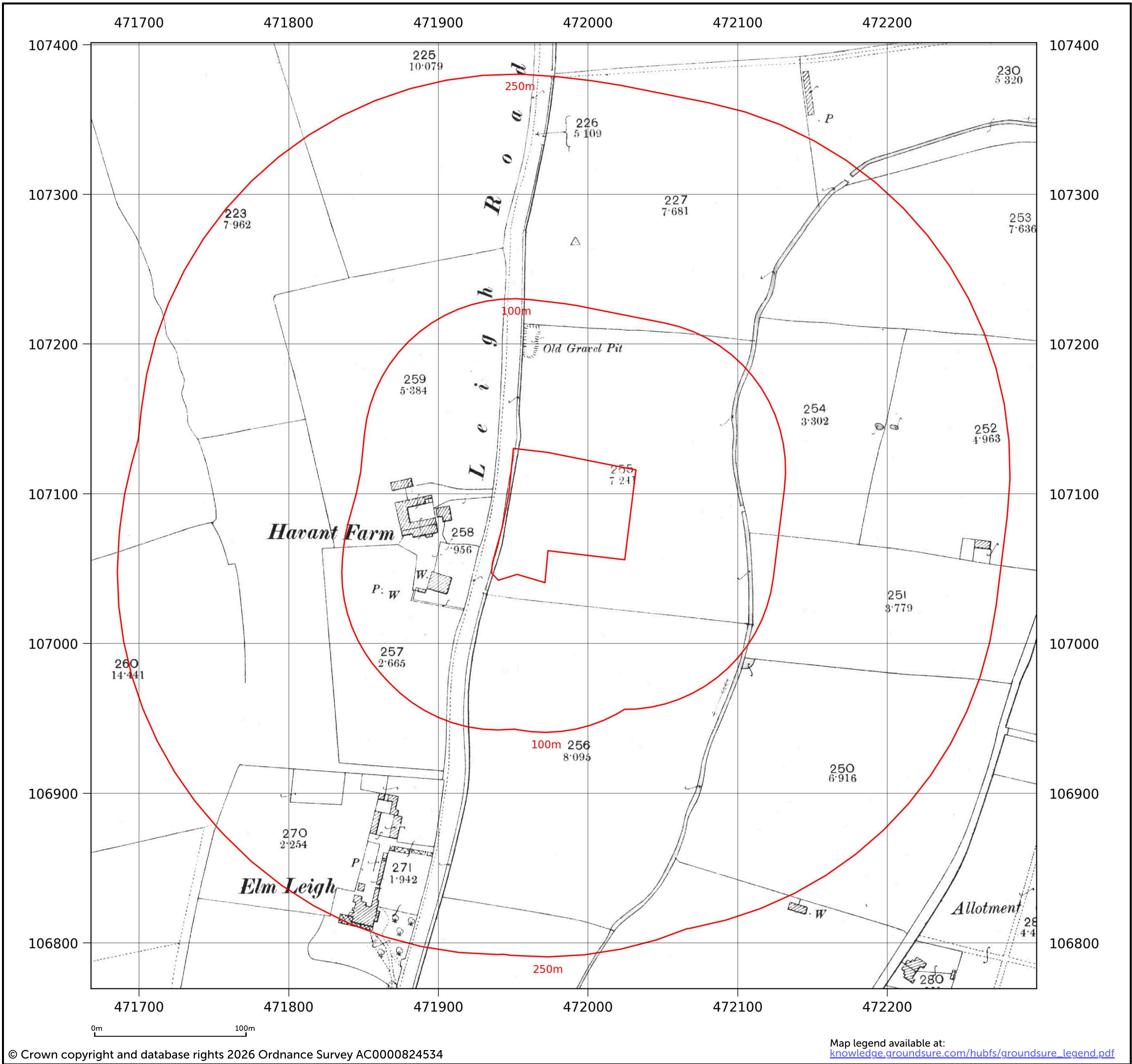
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Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



Date: 1897
Surveyed: 1897
Revised: 1897

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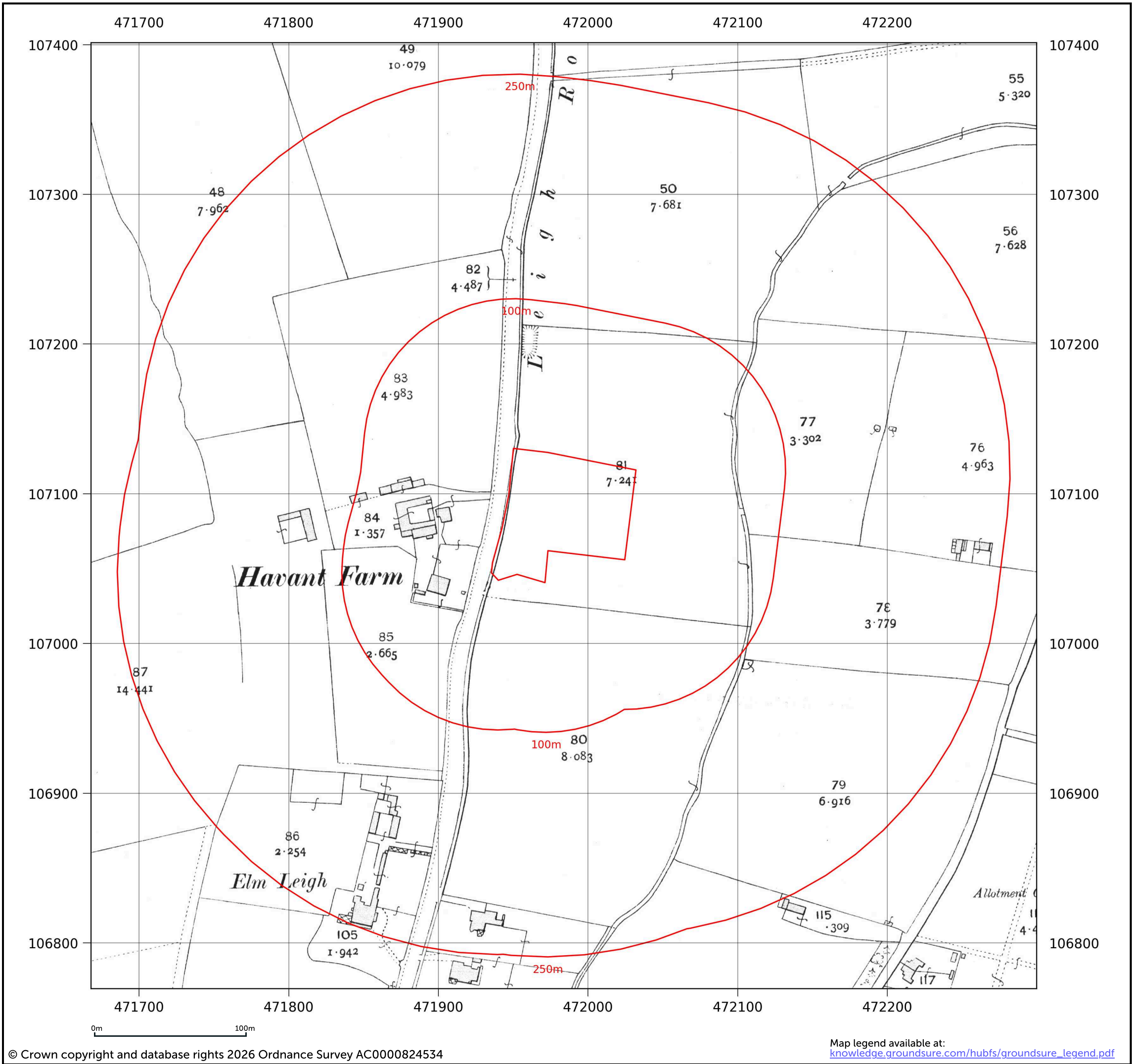
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Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



Date: 1909
Surveyed: 1909
Revised: 1909

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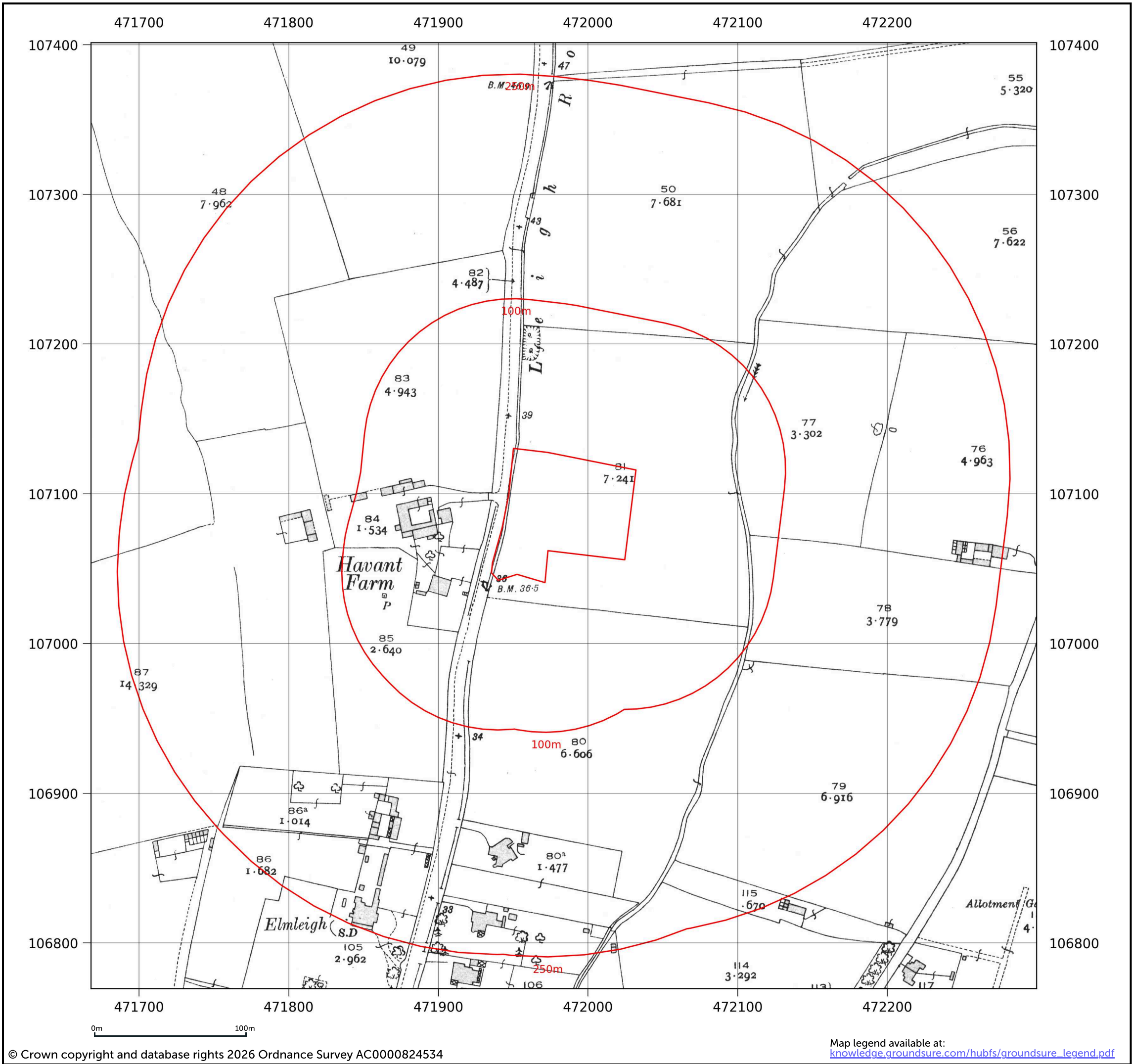
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Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



Date: 1932
Surveyed: 1932
Revised: 1932

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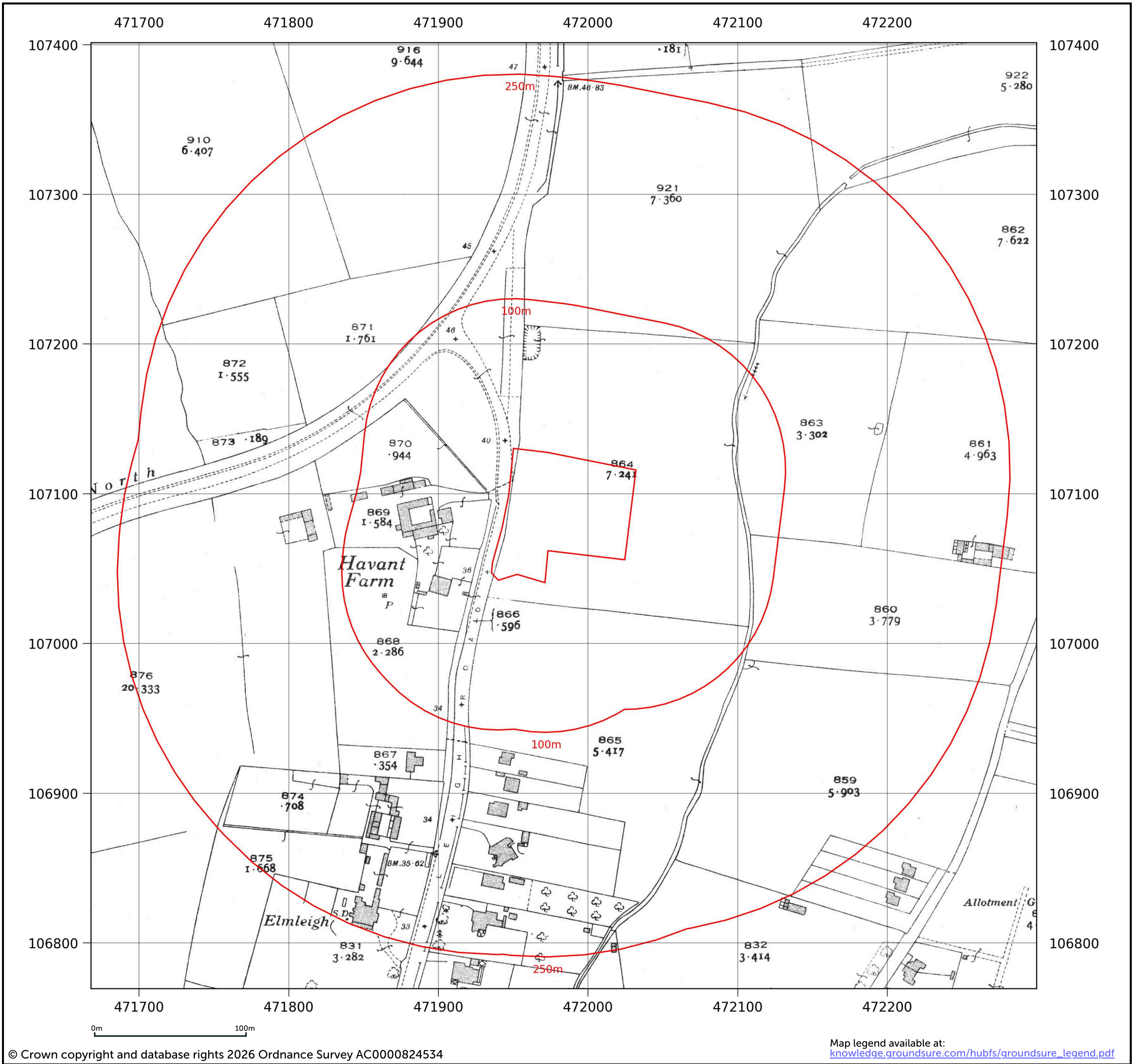
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Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	County Series
Map date:	1940
Scale:	1:2,500
Printed at:	1:2,500



Date: 1940
Surveyed: 1940
Revised: 1940

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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW

Client ref: 26-04-21

Report ref: GS-AZO-V3Y-BE1-1Z6

Grid ref: 471982.68, 107087.6

Production date: 11 May 2026

Map name: National Grid

Map date: 1951-1952

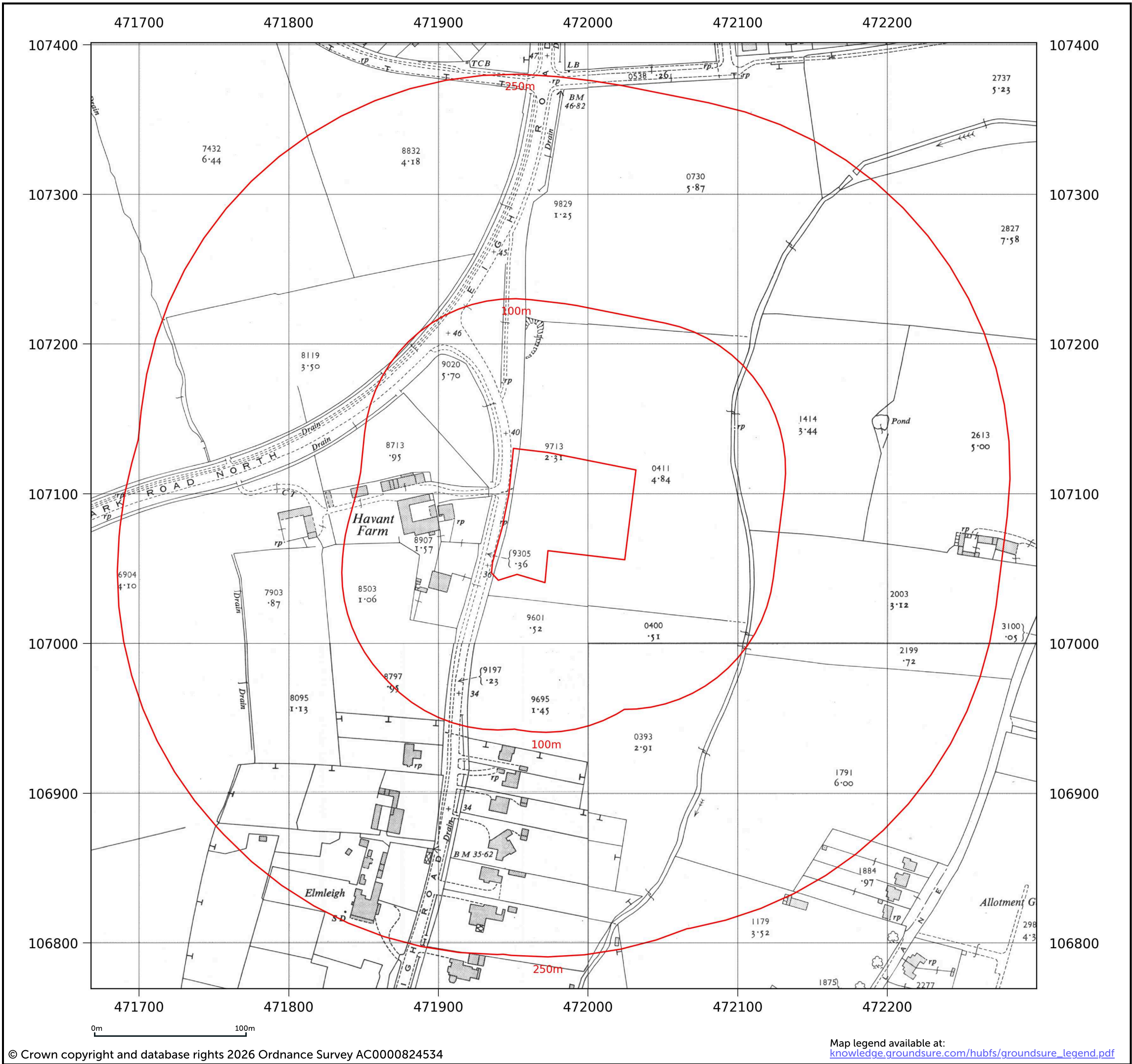
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Printed at: 1:2,500



Date: 1951 Surveyed: 1951 Revised: 1951 Levelled: 1942	Date: 1952 Surveyed: 1952 Revised: 1952 Levelled: 1942
Date: 1952 Surveyed: 1952 Revised: 1952 Levelled: 1946	Date: 1952 Surveyed: 1952 Revised: 1952 Levelled: 1942

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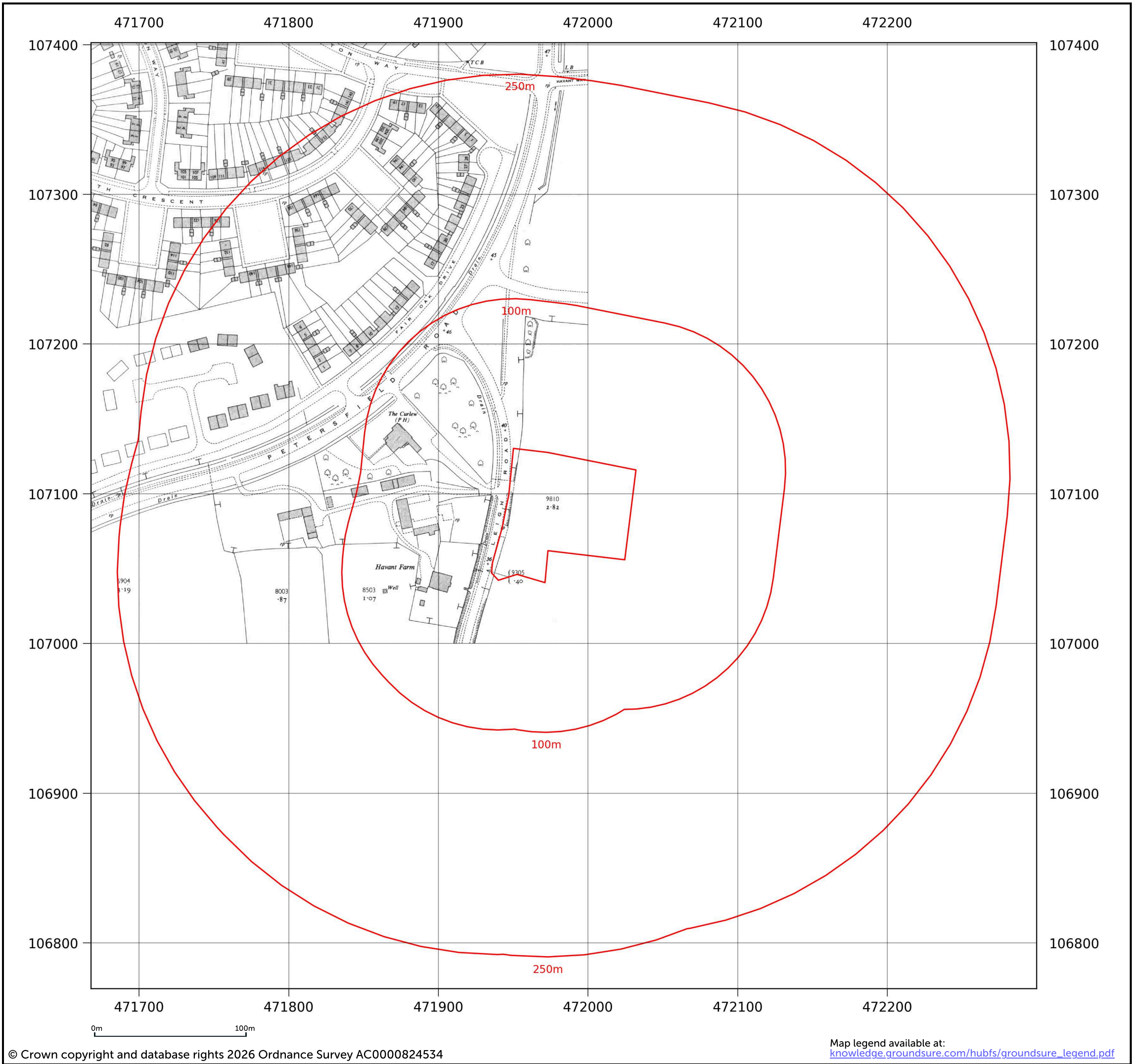
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Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



Date: 1955
Surveyed: 1955
Revised: 1955
Edition: 1942
Levelled: 1942

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

National Grid

Map date:

1956

Scale:

1:1,250

Printed at:

1:2,000

Date: 1956

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

National Grid

Map date:

1955-1960

Scale:

1:1,250

Printed at:

1:2,000

Date: 1955
Surveyed: 1955
Revised: 1955
Levelled: 1942

Date: 1960
Surveyed: 1959
Revised: 1959
Copyright: 1960
Levelled: 1957

Date: 1960
Surveyed: 1960
Revised: 1960
Copyright: 1960
Levelled: 1957

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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref: 26-04-21
Report ref: GS-AZO-V3Y-BE1-1Z6
Grid ref: 471982.68, 107087.6
Production date: 11 May 2026

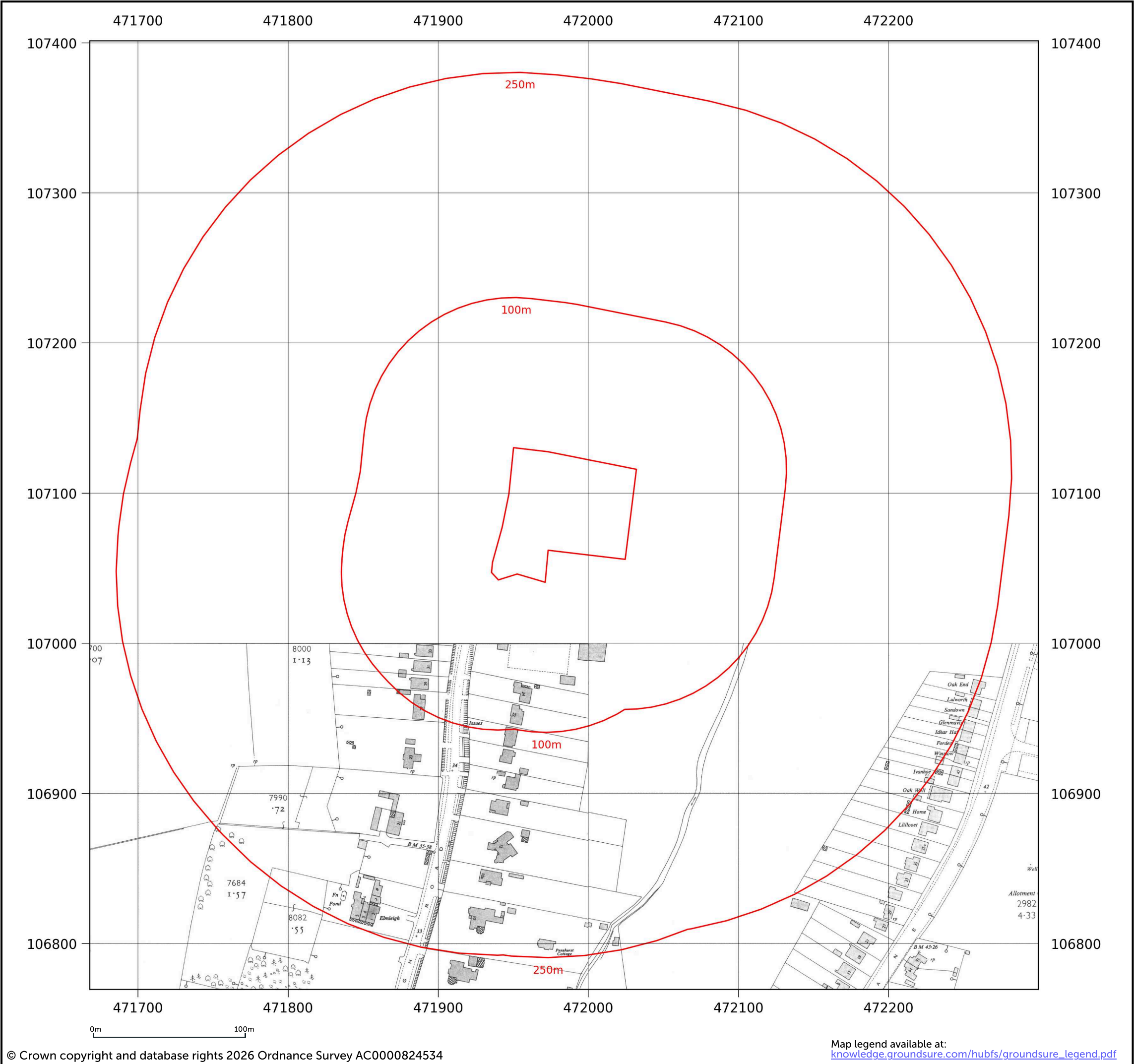
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Map date: 1961-1962
Scale: 1:1,250
Printed at: 1:2,000



Date: 1961 Surveyed: 1955 Revised: 1961 Copyright: 1961 Levelled: 1958	
	Date: 1962 Surveyed: 1962 Revised: 1962 Copyright: 1962 Levelled: 1957

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Map Insight

Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	National Grid
Map date:	1961-1964
Scale:	1:2,500
Printed at:	1:2,500



Date: 1961 Surveyed: 1960 Revised: 1960 Edition: 1961 Copyright: 1961 Levelled: 1957	Date: 1964 Surveyed: 1963 Revised: 1963 Edition: 1964 Copyright: 1964 Levelled: 1958
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Groundsure

LOCATION INTELLIGENCE



Ordnance Survey
Licensed Data

Site details: LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref: 26-04-21

Report ref: GS-AZO-V3Y-BE1-1Z6

Grid ref: 471982.68, 107087.6

Production date: 11 May 2026

Map name: National Grid

Map date: 1971-1972

Scale: 1:2,500

Printed at: 1:2,500



Date: 1971 Surveyed: 1956 Revised: 1969 Copyright: 1971 Levelled: 1958	Date: 1972 Surveyed: 1970 Revised: 1968 Copyright: 1972 Levelled: 1958
--	--

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Site details:

Client ref:

Report ref:

Grid ref:

Production date:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

26-04-21

GS-AZO-V3Y-BE1-1Z6

471982.68, 107087.6

11 May 2026

Map name:

Map date:

Scale:

Printed at:

National Grid

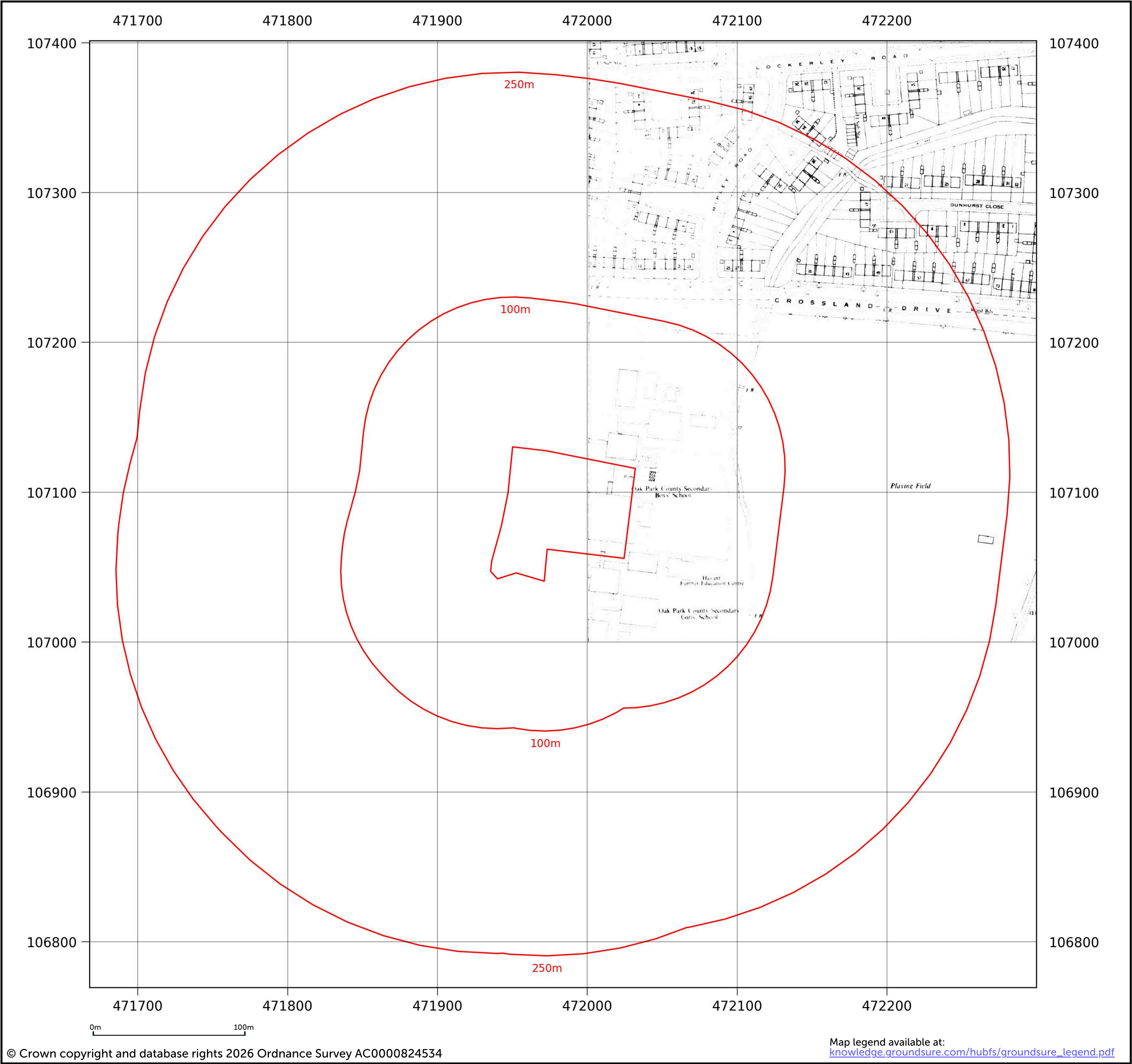
1972

1:2,500

1:2,500

Date: 1972

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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref: 26-04-21
Report ref: GS-AZO-V3Y-BE1-1Z6
Grid ref: 471982.68, 107087.6
Production date: 11 May 2026

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



Date: 1969	Date: 1969 Surveyed: 1959 Revised: 1968 Copyright: 1969 Levelled: 1968
Date: 1971 Surveyed: 1960 Revised: 1970 Copyright: 1971 Levelled: 1957	Date: 1973 Surveyed: 1962 Revised: 1972 Copyright: 1973 Levelled: 1957

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Site details:

Client ref:

Report ref:

Grid ref:

Production date:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

26-04-21

GS-AZO-V3Y-BE1-1Z6

471982.68, 107087.6

11 May 2026

Map name:

Map date:

Scale:

Printed at:

National Grid

1970-1973

1:1,250

1:2,000

Date: 1970
Surveyed: 1955
Revised: 1969
Copyright: 1970
Levelled: 1958

Date: 1973
Surveyed: 1960
Revised: 1972
Copyright: 1973
Levelled: 1957



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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

National Grid

Map date:

1978

Scale:

1:1,250

Printed at:

1:2,000

Date: 1978
Copyright: 1978
Levelled: 1957

N
W
E
S

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

National Grid

Map date:

1986

Scale:

1:1,250

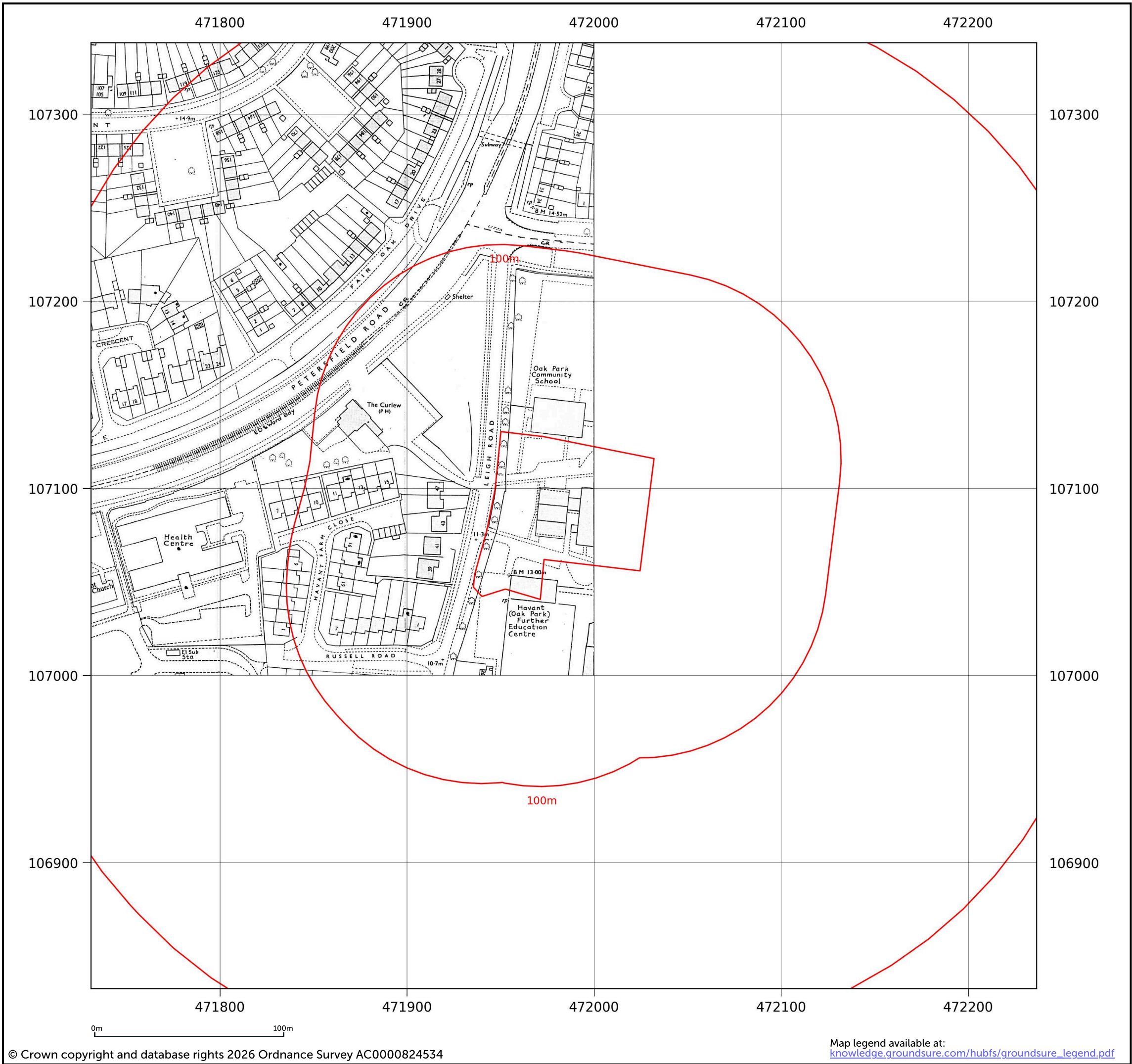
Printed at:

1:2,000

Date: 1986
Surveyed: 1958
Revised: 1986
Copyright: 1986
Levelled: 1958



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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

National Grid

Map date:

1993

Scale:

1:1,250

Printed at:

1:2,000

Date: 1993
Surveyed: 1993
Revised: 1993

Date: 1993
Surveyed: 1993
Copyright: 1993

Date: 1993
Surveyed: 1993
Revised: 1993

Date: 1993
Surveyed: 1993
Copyright: 1993

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	National Grid
Map date:	1995
Scale:	1:1,250
Printed at:	1:2,000



Date: 1995
Surveyed: 1995
Revised: 1995
Copyright: 1995

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	National Grid
Map date:	1995
Scale:	1:1,250
Printed at:	1:2,000



Date: 1995
Surveyed: 1995
Copyright: 1995

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



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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1866

Scale:

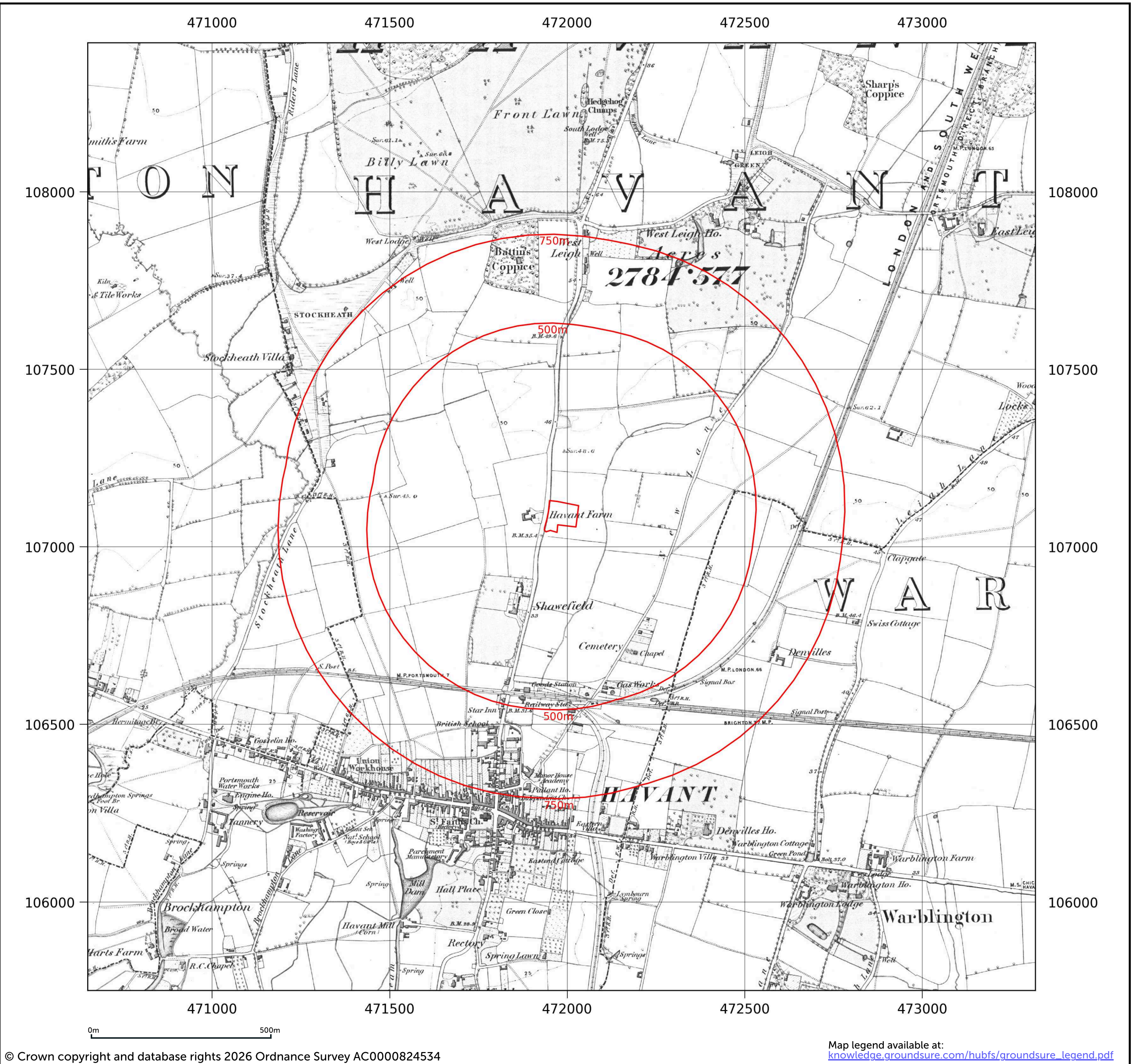
1:10,560

Printed at:

1:10,560

Date: 1866
Surveyed: 1866
Revised: 1866

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1873-1875

Scale:

1:10,560

Printed at:

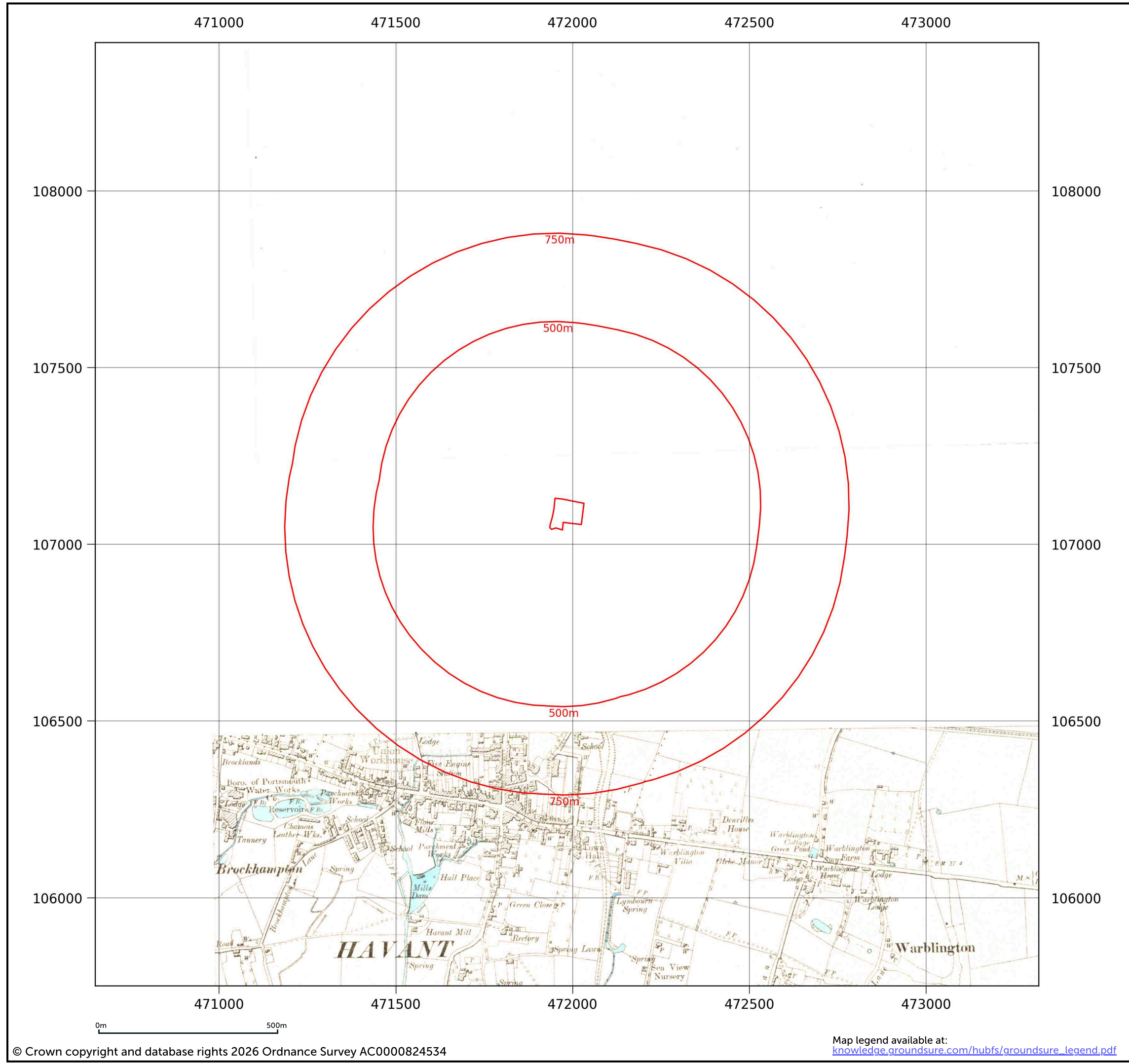
1:10,560



Date: 1875
Surveyed: 1875
Revised: 1875

Date: 1873
Surveyed: 1873

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Site details:

LAND AT LAVANT DRIVE,
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2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1895-1898

Scale:

1:10,560

Printed at:

1:10,560

Date: 1895
Surveyed: 1867
Revised: 1895

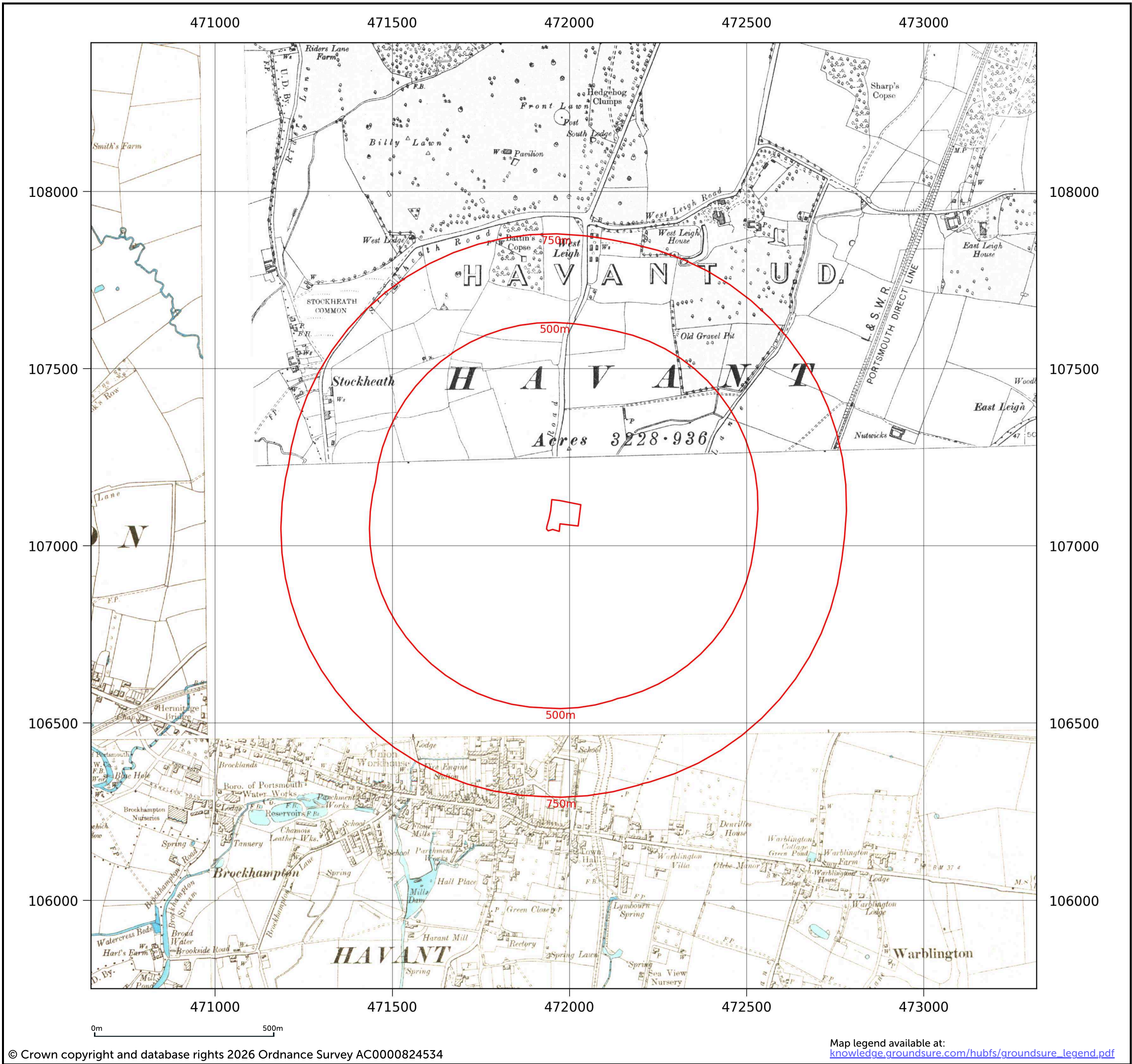
Date: 1898
Surveyed: 1868
Revised: 1895
Edition: 1898

Date: 1896
Surveyed: 1866
Revised: 1896

Date: 1895
Surveyed: 1873
Revised: 1895



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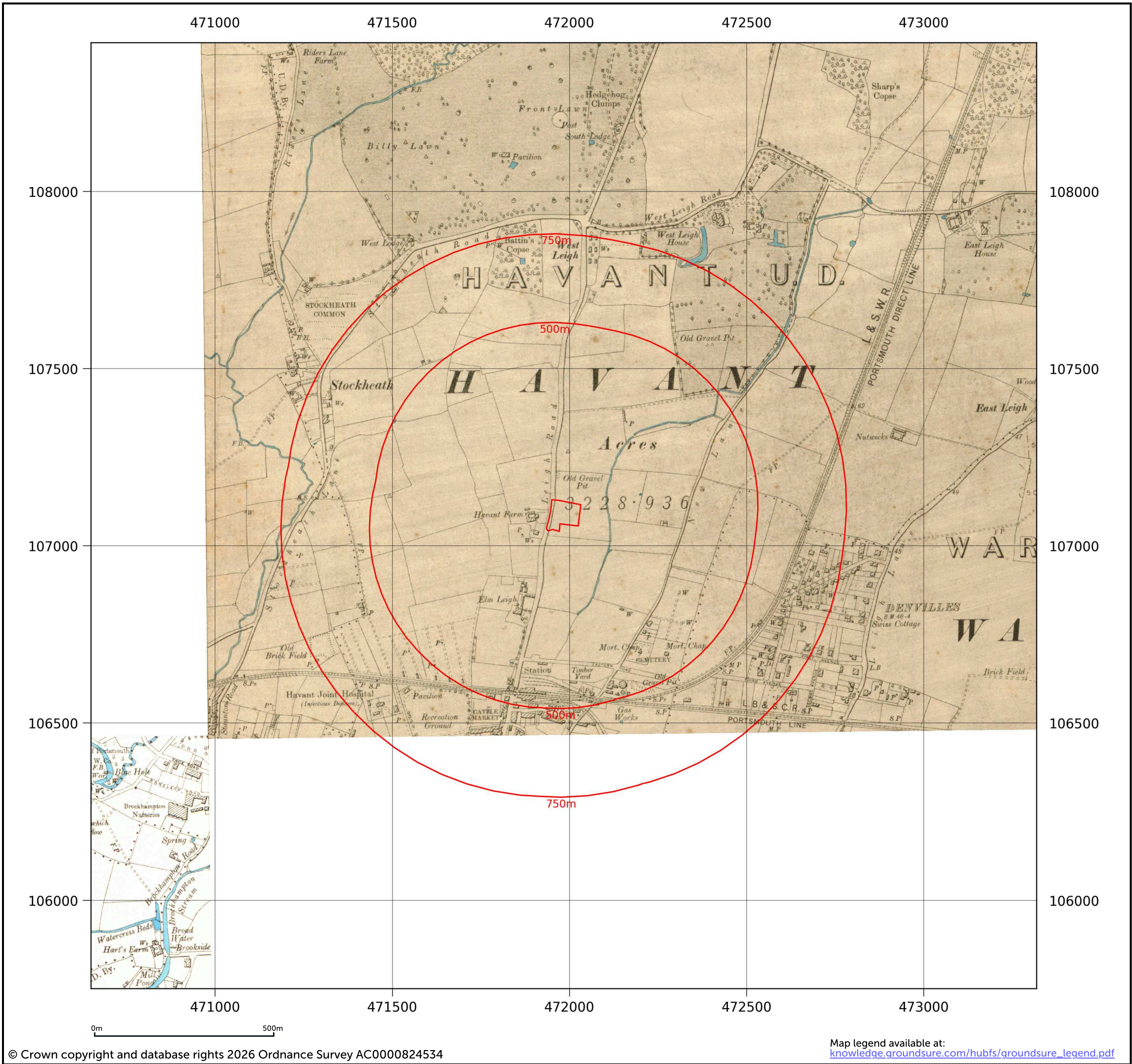
Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

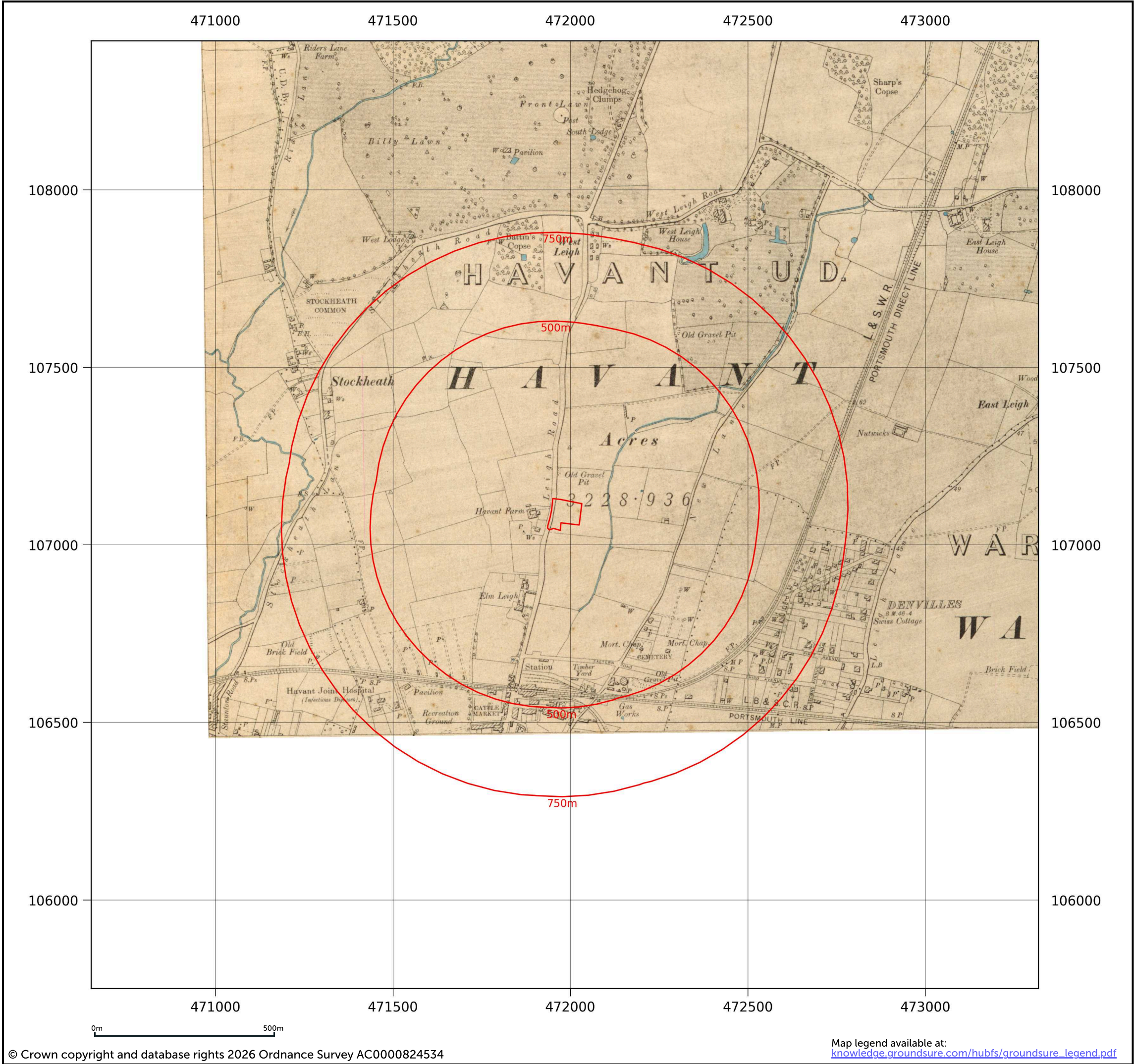
Map name:	County Series
Map date:	1895-1898
Scale:	1:10,560
Printed at:	1:10,560



Date: 1895 Surveyed: 1872 Revised: 1895
Date: 1898 Surveyed: 1868 Edition: 1898

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	County Series
Map date:	1898
Scale:	1:10,560
Printed at:	1:10,560

Date: 1898
Surveyed: 1873
Revised: 1895
Edition: 1898



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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1907

Scale:

1:10,560

Printed at:

1:10,560

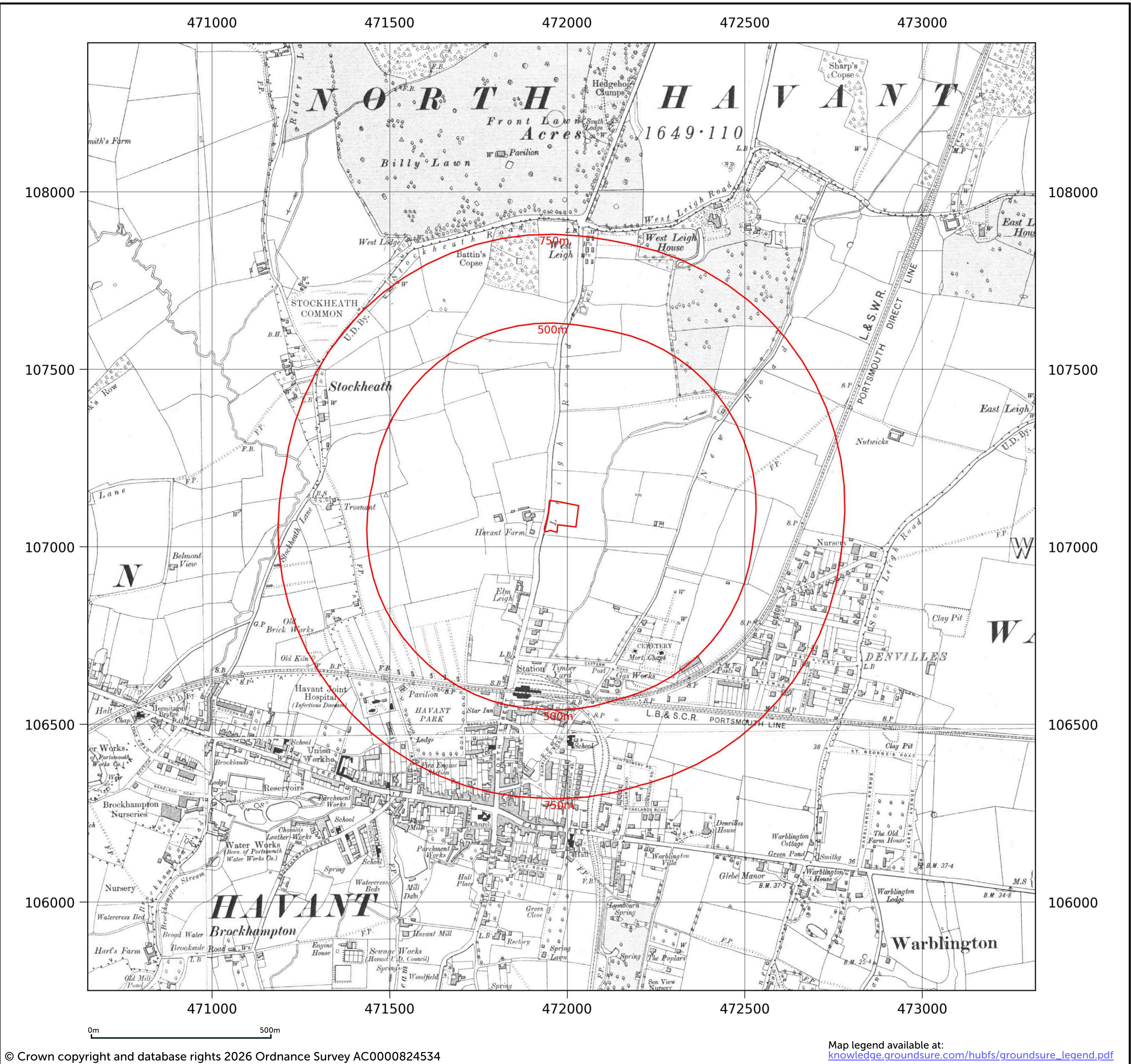
Date: 1907
Surveyed: 1859
Revised: 1907

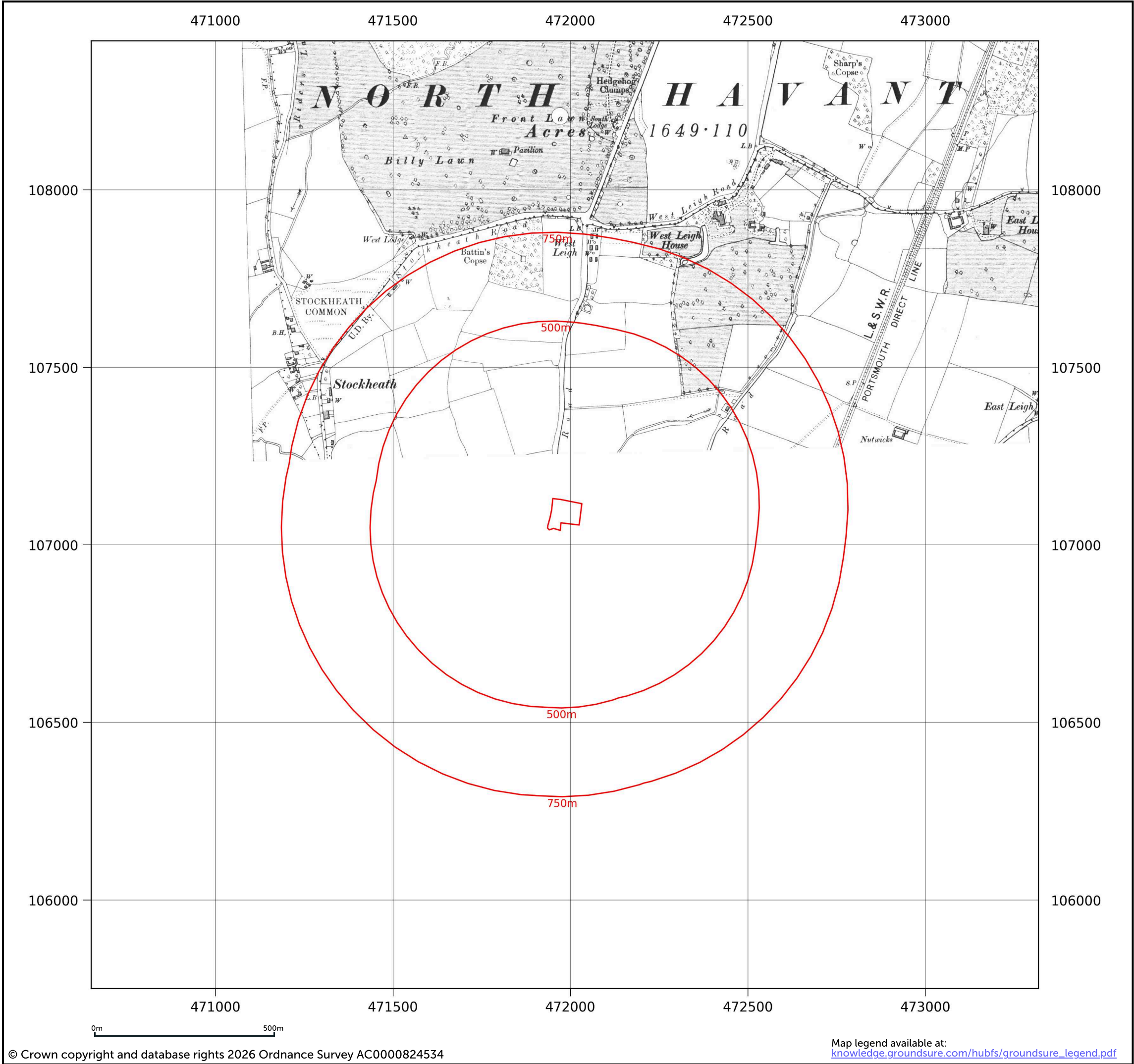
Date: 1907
Surveyed: 1865
Revised: 1907

Date: 1907
Surveyed: 1858
Revised: 1907

Date: 1907
Surveyed: 1865
Revised: 1907

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	County Series
Map date:	1910
Scale:	1:10,560
Printed at:	1:10,560

Date: 1910
Surveyed: 1873
Revised: 1910

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1910-1914

Scale:

1:10,560

Printed at:

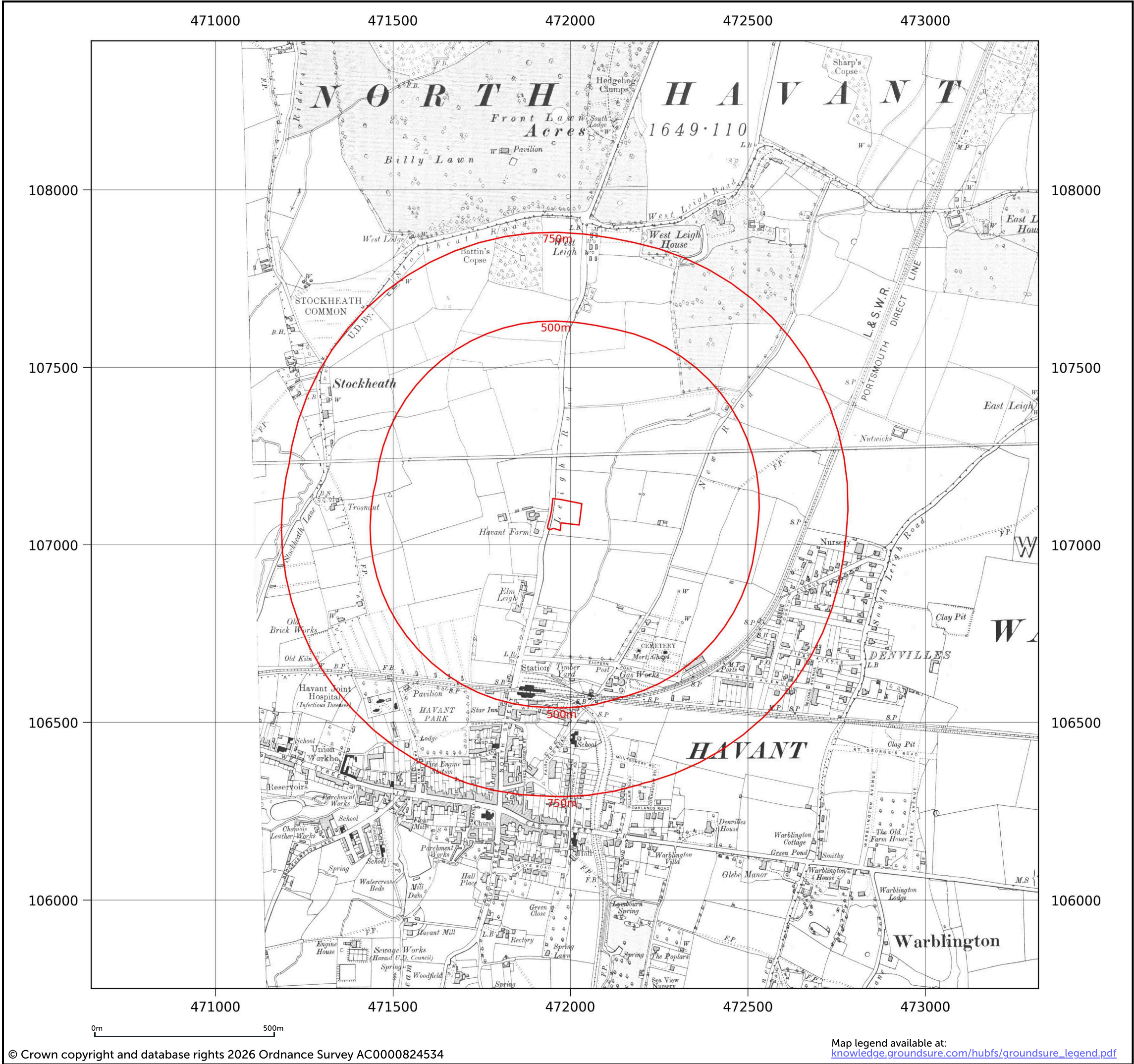
1:10,560

Date: 1910
Surveyed: 1873
Revised: 1910

Date: 1914
Surveyed: 1873
Revised: 1914



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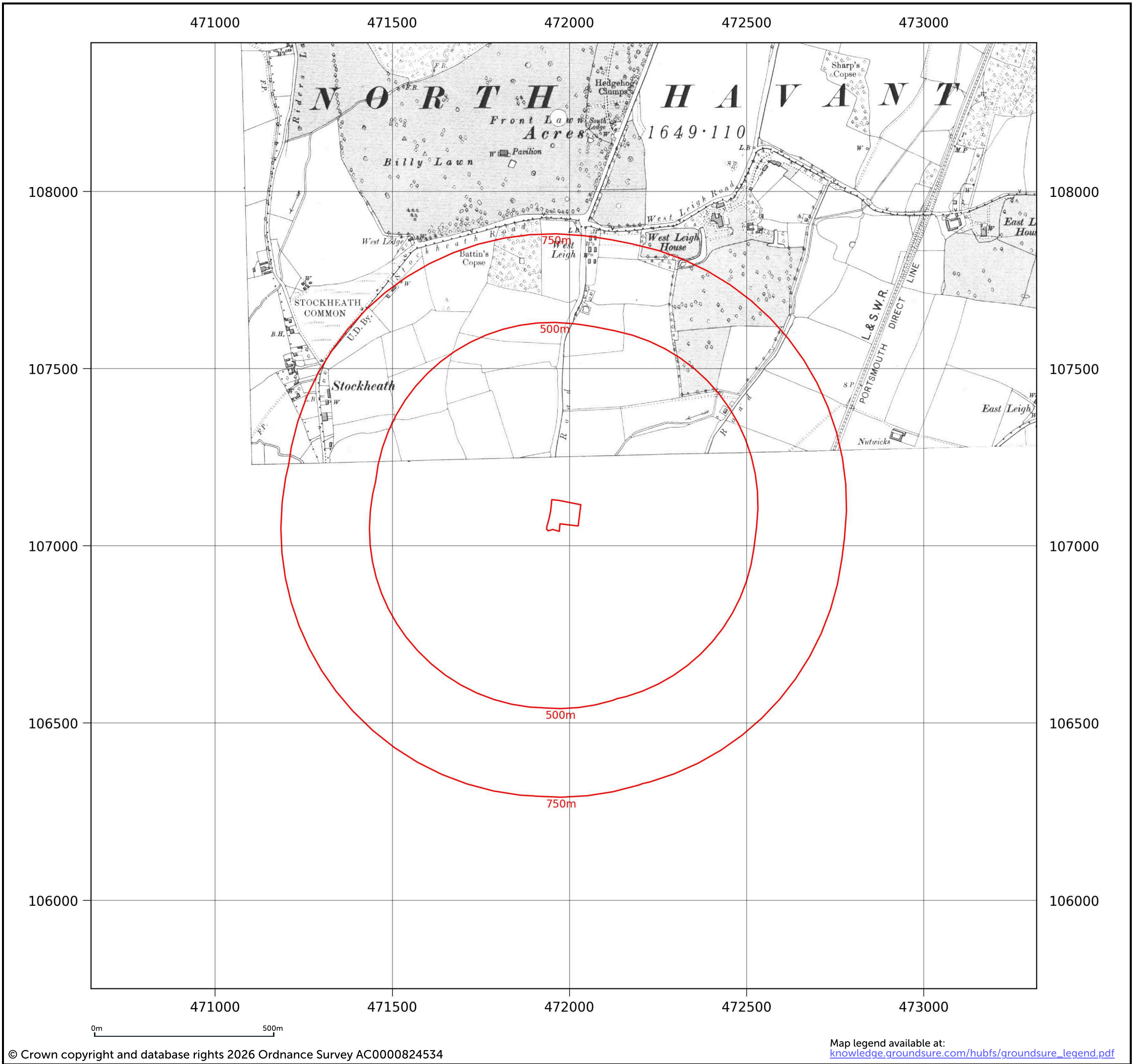
Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	County Series
Map date:	1914
Scale:	1:10,560
Printed at:	1:10,560



Date: 1914
Surveyed: 1873
Revised: 1914
Edition: 1914

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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW

Client ref: 26-04-21

Report ref: GS-AZO-V3Y-BE1-1Z6

Grid ref: 471982.68, 107087.6

Production date: 11 May 2026

Map name: County Series

Map date: 1930-1931

Scale: 1:10,560

Printed at: 1:10,560



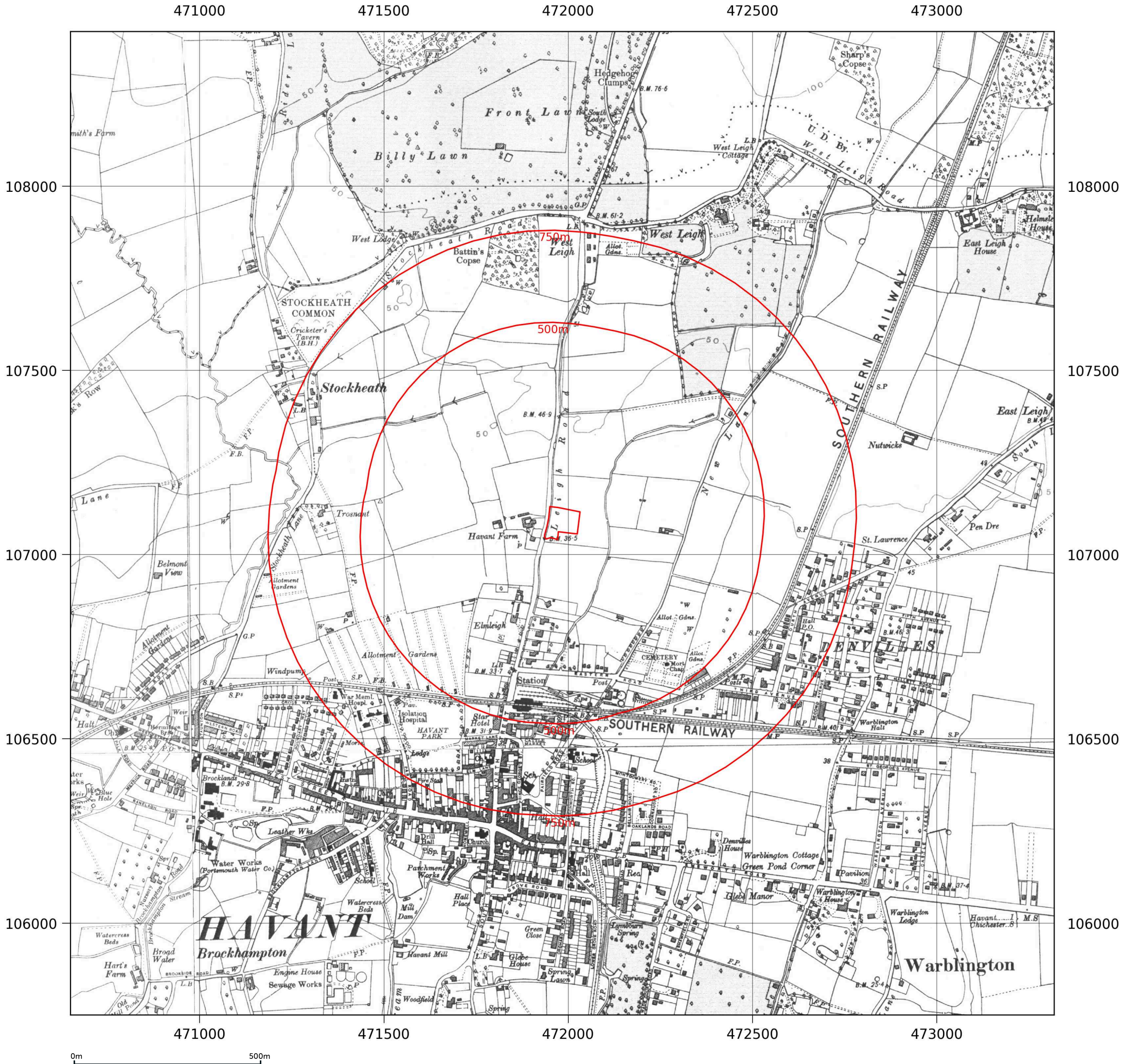
Date: 1930
Surveyed: 1859
Revised: 1930

Date: 1931
Surveyed: 1865
Revised: 1931

Date: 1931
Surveyed: 1858
Revised: 1931

Date: 1931
Surveyed: 1865
Revised: 1931

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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW

Client ref: 26-04-21

Report ref: GS-AZO-V3Y-BE1-1Z6

Grid ref: 471982.68, 107087.6

Production date: 11 May 2026

Map name: County Series

Map date: 1930-1931

Scale: 1:10,560

Printed at: 1:10,560



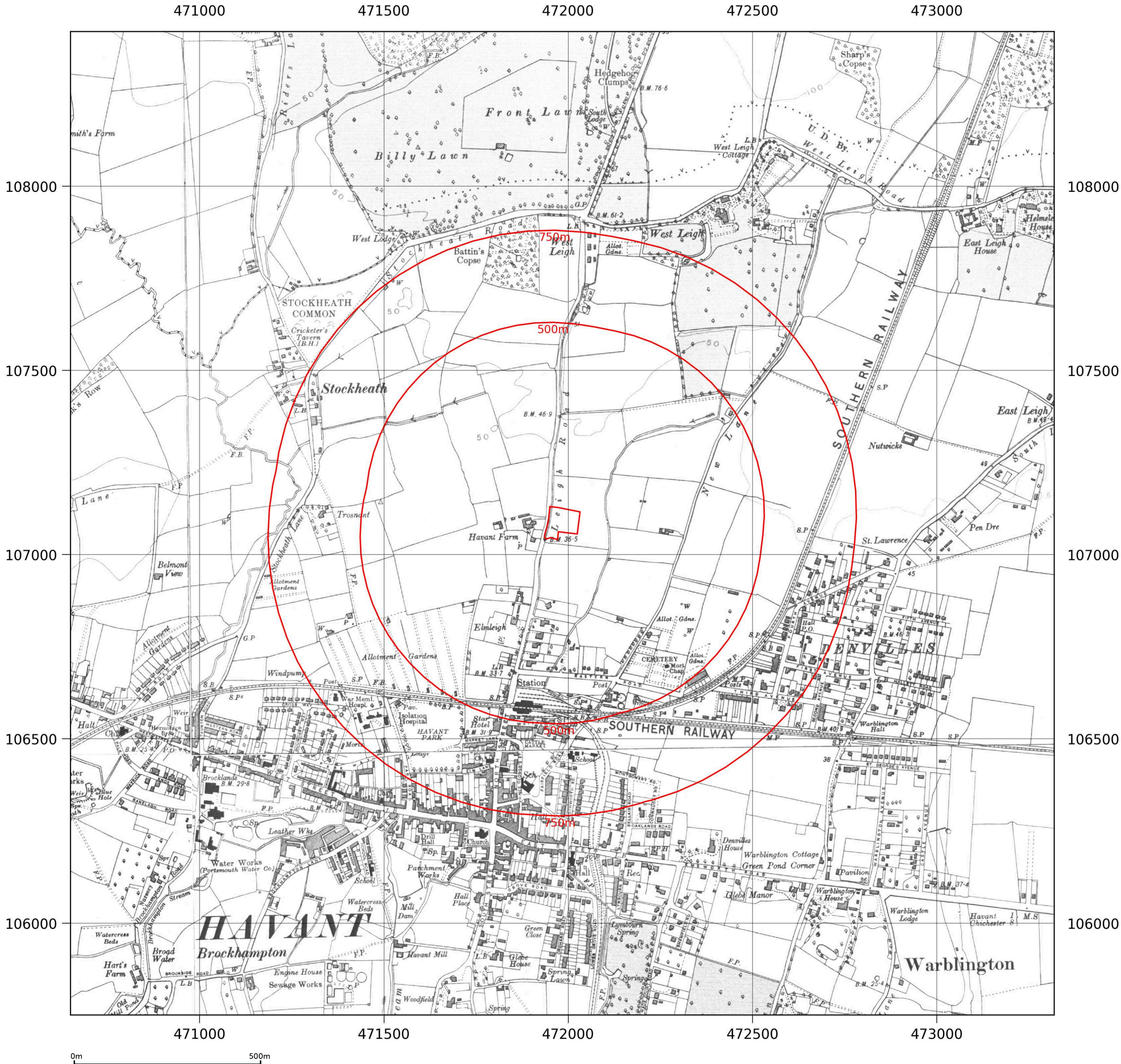
Date: 1930
Surveyed: 1859
Revised: 1930

Date: 1931
Surveyed: 1865
Revised: 1931

Date: 1931
Surveyed: 1858
Revised: 1931

Date: 1931
Surveyed: 1865
Revised: 1931

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1932

Scale:

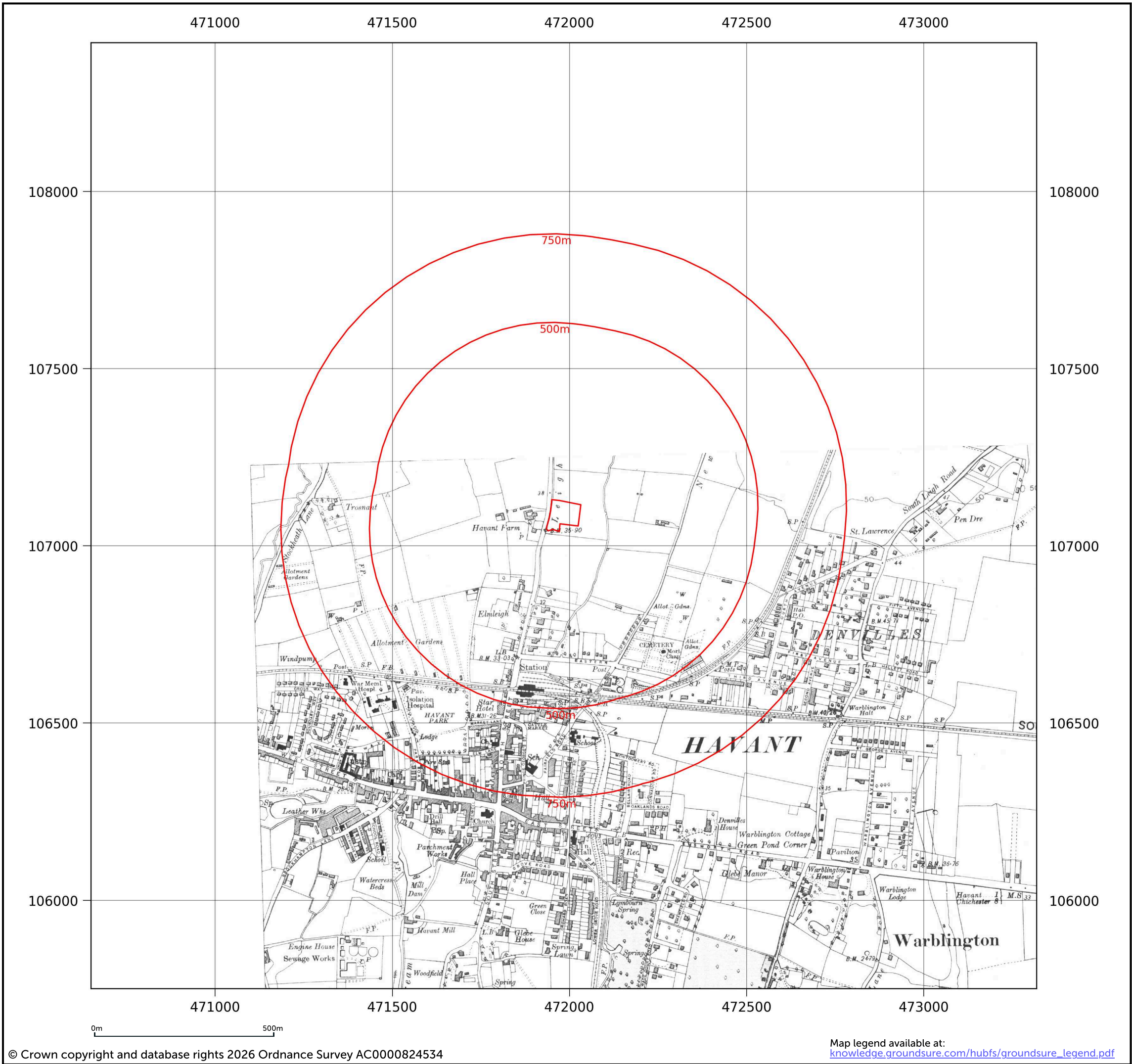
1:10,560

Printed at:

1:10,560

Date: 1932
Surveyed: 1873
Revised: 1932

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1932

Scale:

1:10,560

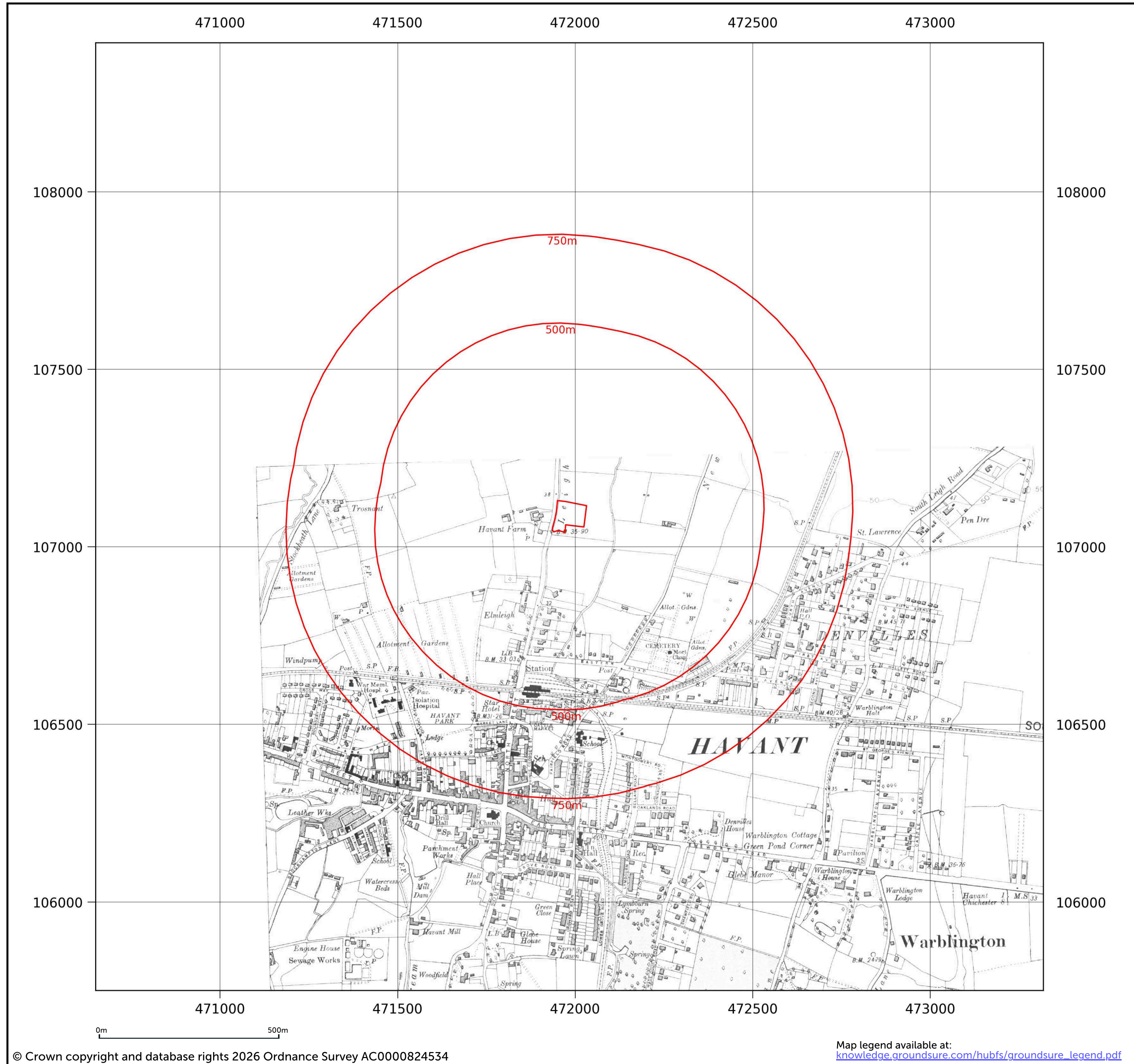
Printed at:

1:10,560



Date: 1932
Surveyed: 1873
Revised: 1932

Contact us with any questions at:
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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

County Series

Map date:

1932

Scale:

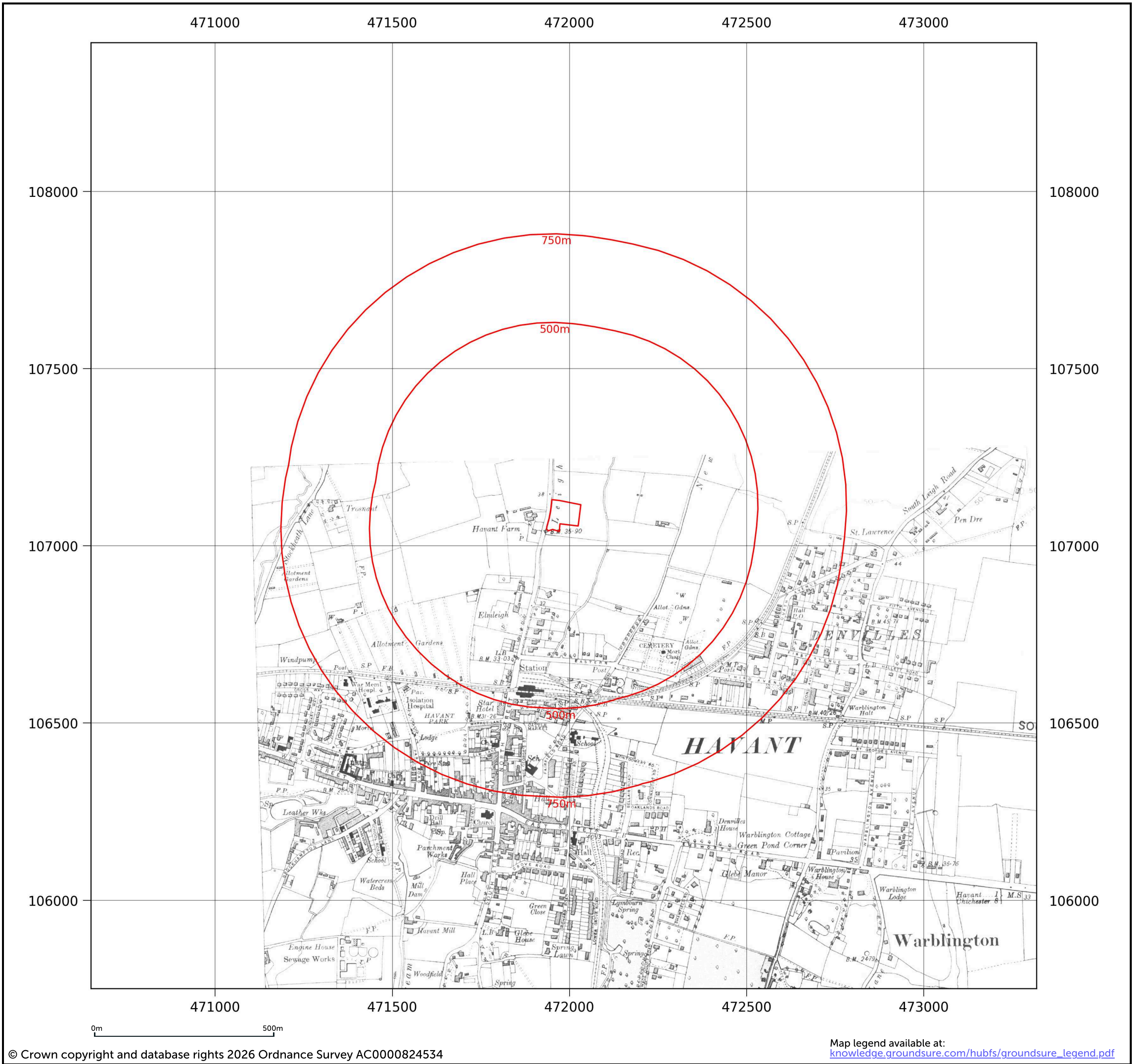
1:10,560

Printed at:

1:10,560

Date: 1932
Surveyed: 1873
Revised: 1932

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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW

Client ref: 26-04-21

Report ref: GS-AZO-V3Y-BE1-1Z6

Grid ref: 471982.68, 107087.6

Production date: 11 May 2026

Map name: County Series

Map date: 1938-1942

Scale: 1:10,560

Printed at: 1:10,560



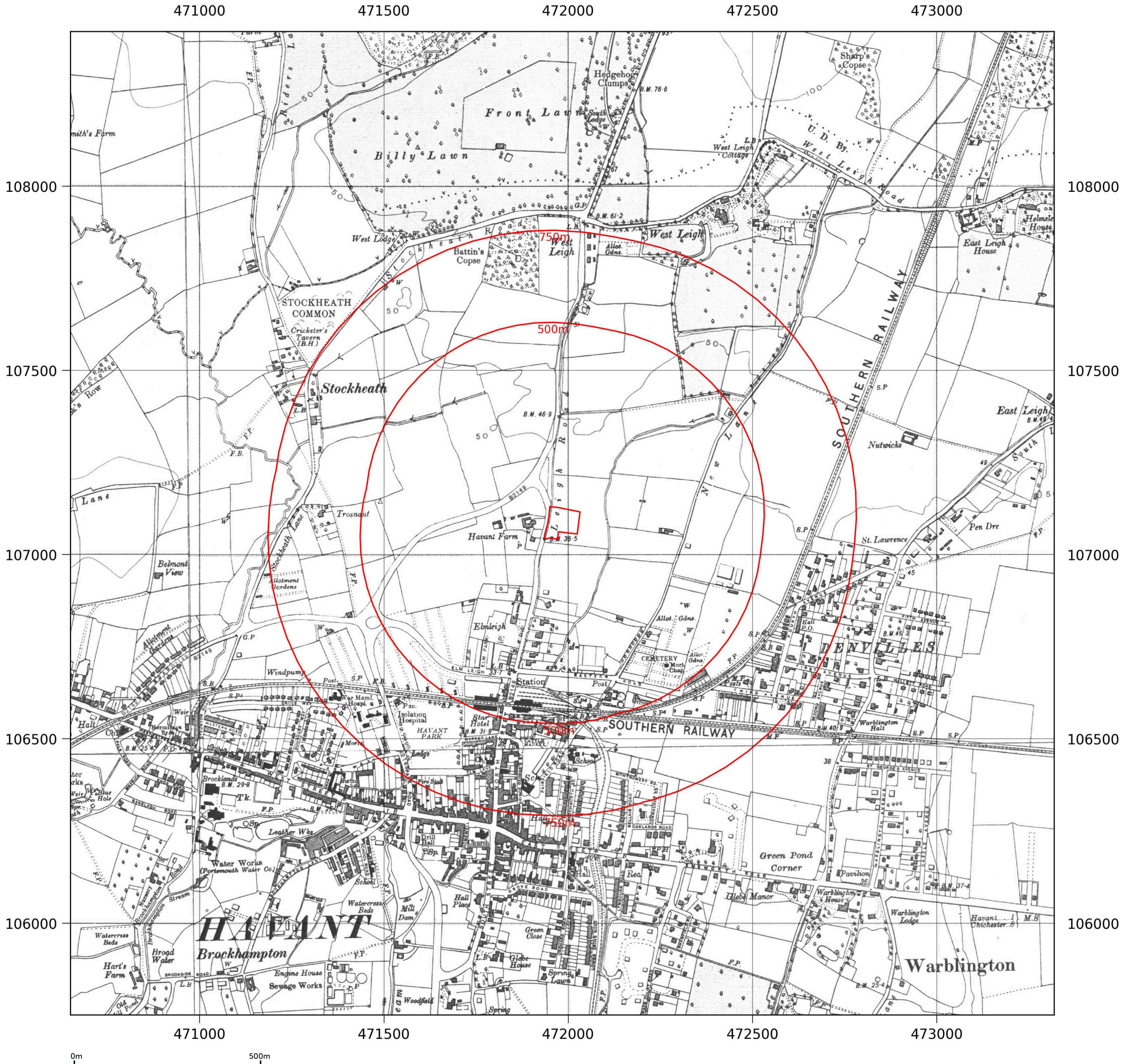
Date: 1938
Surveyed: 1859
Revised: 1938

Date: 1938
Surveyed: 1865
Revised: 1938

Date: 1938
Surveyed: 1858
Revised: 1938

Date: 1942
Surveyed: 1865
Revised: 1942

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

Provisional

Map date:

1963

Scale:

1:10,560

Printed at:

1:10,560

Date: 1963
Surveyed: 1873
Revised: 1957
Copyright: 1963

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Site details:

LAND AT LAVANT DRIVE,
HAVANT, HAMPSHIRE, PO9
2AW

Client ref:

26-04-21

Report ref:

GS-AZO-V3Y-BE1-1Z6

Grid ref:

471982.68, 107087.6

Production date:

11 May 2026

Map name:

Provisional

Map date:

1966

Scale:

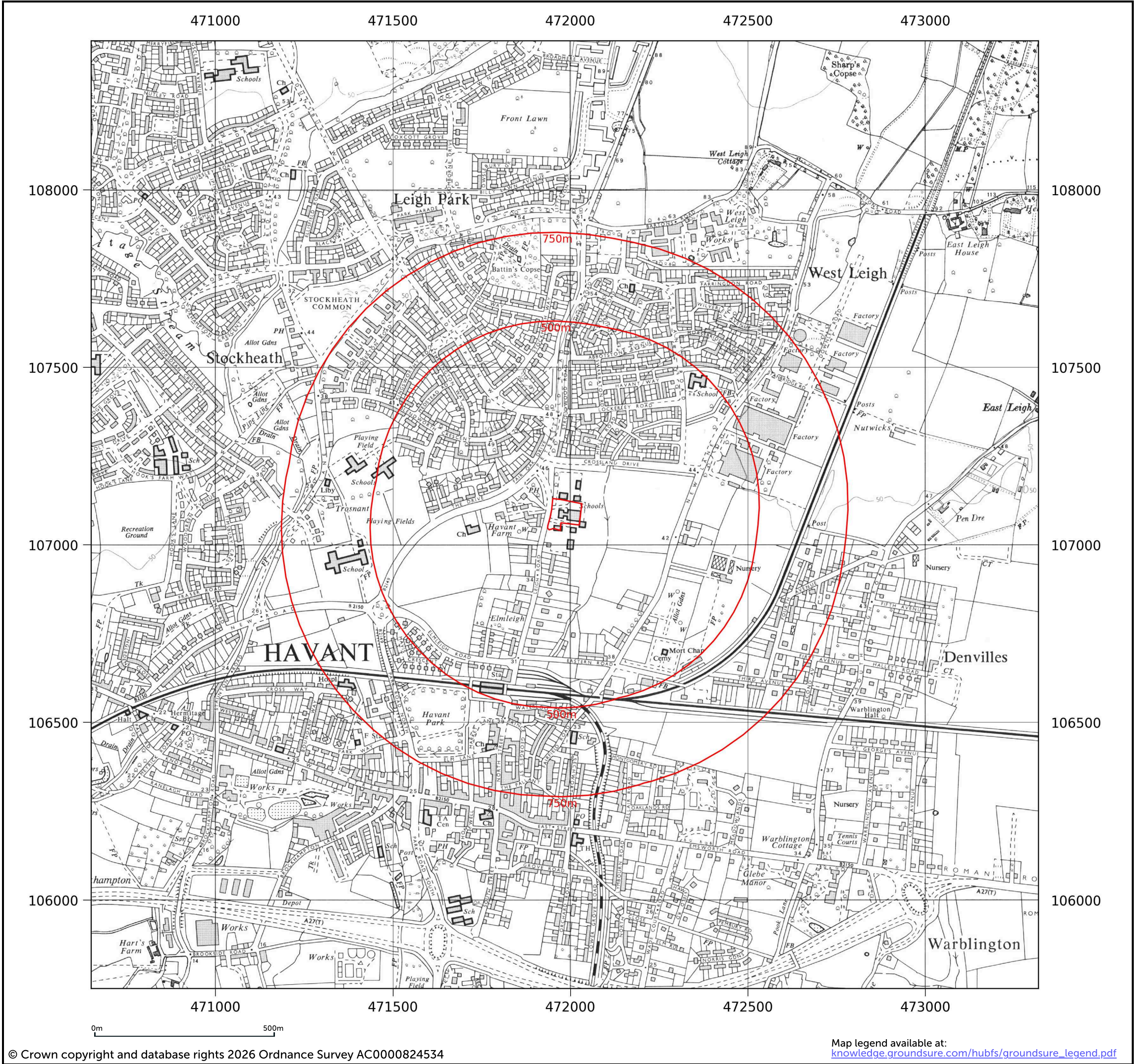
1:10,560

Printed at:

1:10,560

Date: 1966
Surveyed: 1873
Revised: 1966
Copyright: 1963

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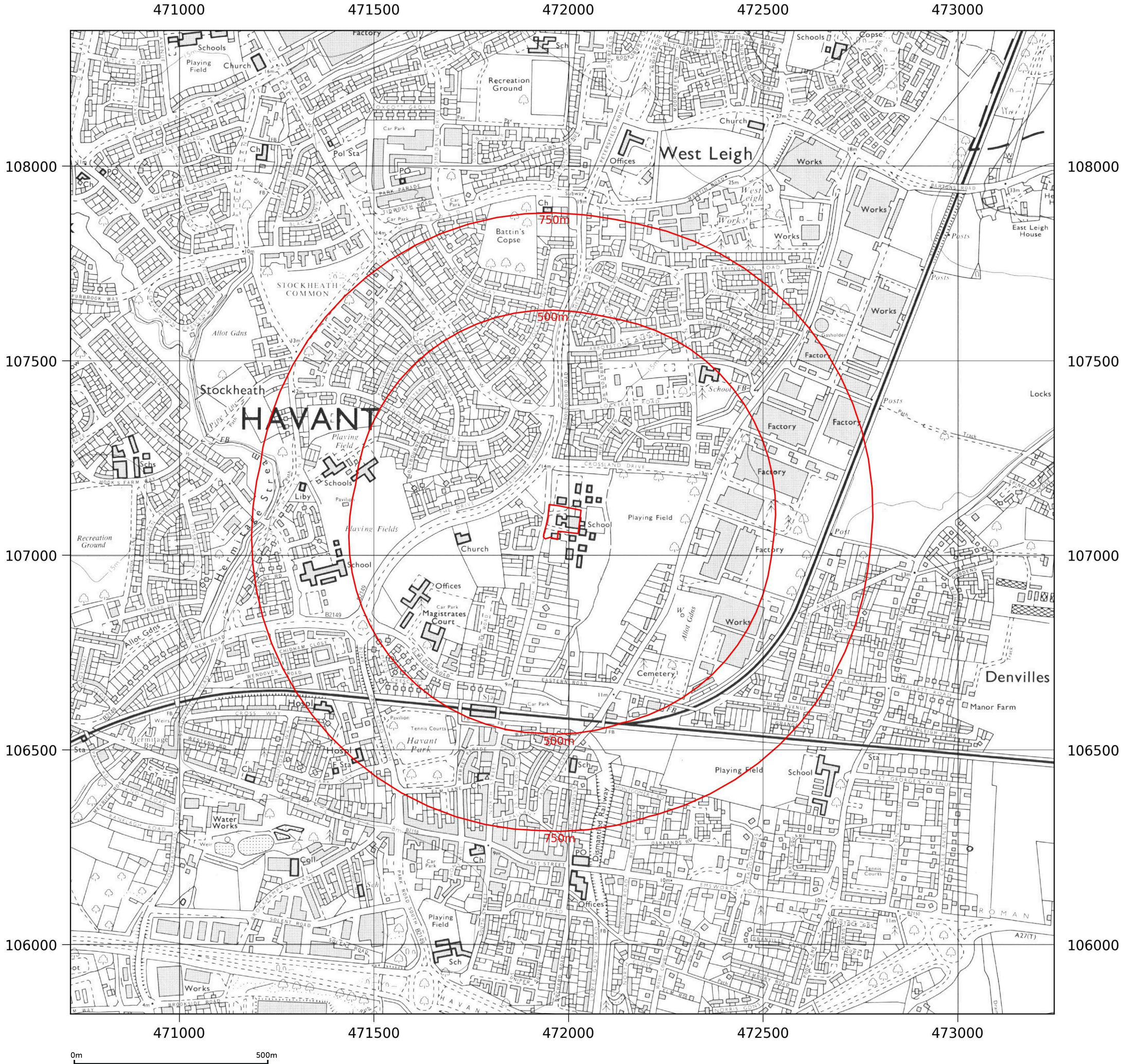
Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	National Grid
Map date:	1975
Scale:	1:10,000
Printed at:	1:10,000



Date: 1975
Surveyed: 1973
Revised: 1975
Copyright: 1975
Levelled: 1962

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

Map name:	National Grid
Map date:	1991
Scale:	1:10,000
Printed at:	1:10,000



Date: 1991 Surveyed: 1989 Revised: 1991

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



Date: 2001

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



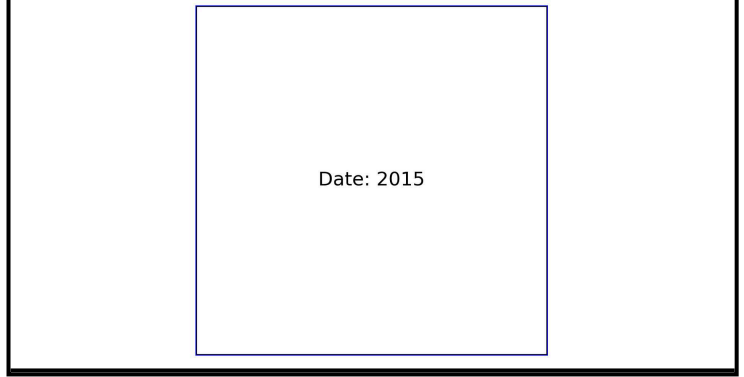
Date: 2010

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Site details:	LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref:	26-04-21
Report ref:	GS-AZO-V3Y-BE1-1Z6
Grid ref:	471982.68, 107087.6
Production date:	11 May 2026

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



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Site details: LAND AT LAVANT DRIVE, HAVANT, HAMPSHIRE, PO9 2AW
Client ref: 26-04-21
Report ref: GS-AZO-V3Y-BE1-1Z6
Grid ref: 471982.68, 107087.6
Production date: 11 May 2026

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



Date: 2025

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