Ruddlesden geotechnical

Phase 1: Preliminary Contamination Assessment Report

Former Linhay Building, Trelavour Dryers, Parkandillick, St Dennis, Cornwall

Cornish Lithium

February 2024

HS/SR/24123/PCAR/01

REPORT CONTROL SHEET

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Prepared by	Harry Spence
Signature	[redacted]
Position	Engineering Geologist
Qualifications	BSc (Hons). FGS.

Checked by	Simon Ruddlesden
Signature	[redacted]
Position	Director
Qualifications	BSc (Hons). MSc. DIC. CGeol. FGS. EurGeol.

Approved by	Simon Ruddlesden
Signature	[redacted]
Position	Director
Qualifications	BSc (Hons). MSc. DIC. CGeol. FGS. EurGeol.

Ruddlesden geotechnical
The Stables, 65 Langaton Lane,
Pinhoe, Exeter, EX1 3SP

01392 678082
mail@ruddlesden.co.uk
www.ruddlesden.co.uk

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

ACM	Asbestos-Containing Material
AOD	Above Ordnance Datum
BGL	Below Ground Level
BGS	British Geological Survey
BS	British Standard
CIEH	Chartered Institute of Environmental Health
CL:AIRE	Contaminated Land Applications in Real Environments
CLEA	Contaminated Land Exposure Assessment
CSM	Conceptual Site Model
EPH	Extractable Petroleum Hydrocarbon
km	Kilometre
LCRM	Land Contamination Risk Management
LQM	Land Quality Management
m	Metre
OS	Ordnance Survey
PAH	Polyaromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
S4UL	Suitable 4 Use Level
SOM	Soil Organic Matter
SPZ	Source Protection Zone
SWW	South West Water
UXO	Unexploded Ordnance

EXECUTIVE SUMMARY

Proposals	It is proposed to change the use of the former China Clay Linhay Building, at Trelavour Dryers, Parkandillick, St Dennis, Cornwall, to a laboratory, visitor centre and staff welfare units, associated with lithium-related developments.
Site History	The main part of site has generally been occupied by a large building used as a clay store/ kiln, within the Parkandillick China Clay Works, from first edition maps (1881) until recently. Railway lines formerly crossed the site, part of a building was present in the north and part of a settlement pond/ tank was present in the land to the southwest. From 1972, the building in the main part of the site was extended or replaced by a larger building, only one railway line was present, the building to the north was demolished and replaced, and the settlement pond/ tank to the southwest was replaced by four rectangular containers (bag fillers). From 2001, a large steel tank (butter tank) was present in the southwest of the site, used within the final settling process of the extracted China clay.
Site Geology	The British Geological Survey (BGS) map of the area indicates the site to be underlain by Trendrean Mudstone Formation (mudstones, siltstones and sandstones).
Previous Ground Investigations	The wider Parkandillick site, including the current site, has been the subject Phase 2 contamination investigation. The Phase 2 investigation comprised the formation of several boreholes with laboratory testing and gas monitoring. Ground conditions encountered in a borehole undertaken on this site comprised made ground to a depth of 0.40m, underlain by silty/ clayey gravel. Contamination laboratory testing, including from samples in the borehole within the site, recorded no significantly elevated levels of contamination, given the proposed commercial land use. Gas monitoring, including the monitoring of the borehole on-site, recorded no significantly elevated levels of ground gas (methane or carbon dioxide).
Preliminary Contamination Risk Assessment	The results of this preliminary contamination risk assessment indicate that, whilst elevated levels of contamination might be present as a result of past on- and/ or off-site land uses, the results of laboratory testing undertaken on samples from the previous investigation, including from beneath the site, indicated no significantly elevated levels of contamination to be present. Furthermore, the development proposals include for the site to be covered entirely by permanent (concrete) hardstanding, which will both provide a physical barrier

	between end users and potentially contaminated soils, and prevent the leaching/ mobilisation of potential contaminants by rainwater into the underlying groundwater. It is therefore concluded, based on the results of this desk study investigation, that the anticipated levels of contamination are unlikely to be harmful to human health given the proposed end use or to controlled waters. Therefore, no remedial measures or further action is currently considered to be necessary.
Radon/ Ground Gas	Full radon protective measures would be required for new buildings and extensions. However, radon protection measures need only be considered, and not necessarily installed, for extensions. Given that no significant levels of ground gas were recorded across the wider Parkandillick site during the previously undertaken gas monitoring, including beneath the site, and as the made ground was observed to be non-biogenic, no additional ground gas protection measures are considered to be necessary.

This executive summary is to be read in conjunction with, and not in isolation from, the full report text and appendices.

1 INTRODUCTION

1.1 General

It is proposed to change the use of the former China Clay Linhay Building, at Trelavour Dryers, Parkandillick, St Dennis, Cornwall, to a laboratory, visitor centre and staff welfare units, associated with lithium-related developments.

In order to gain background information to aid the design and construction of the new development, a Phase 1: Preliminary Contamination Assessment has been undertaken, which included the study of historical Ordnance Survey maps, environmental information, geological information, radon information and a walkover survey.

This assessment was undertaken in January 2024 and carried out by Ruddlesden geotechnical, on behalf of Cornish Lithium.

1.2 Development Proposals

It is proposed to change the use of the former China Clay Linhay Building, at Trelavour Dryers, Parkandillick, St Dennis, Cornwall, to a laboratory, visitor centre and staff welfare units associated with lithium-related developments.

The proposals are presented in Appendix C of this report.

1.3 Objectives

This investigation comprises a preliminary investigation, as defined by BS 10175 (2011 (+A2: 2017)): Investigation of Potentially Contaminated Sites – Code of Practice, with the following principal objectives:

- to provide information on past and current uses of the site and surrounding area and the nature of any hazards and physical constraints;
- to identify current and likely future receptors, potential sources of contamination and likely pathways and any features of immediate concern, including those that could be introduced in the future;
- to provide information on the geology, hydrogeology and hydrology of the site;
- to identify potentially different sub-areas (zones) of a site, based on differing ground conditions, potential contamination, and past, present and future uses;
- to produce an initial conceptual model for the site;
- to provide information for the preliminary contamination risk assessment; and
- to provide data to assist in the design of potential subsequent exploratory and main investigations and to give an early indication of possible remedial requirements.

1.4 Scope of Investigation

This assessment covers contamination aspects relating to the development. The scope of investigation comprised the following:

study historical, geological and environmental information;

undertake a walkover survey of the site;

produce a conceptual site model;

undertake a preliminary contamination risk assessment;

undertake a preliminary ground gas assessment; and

propose extent of intrusive investigation, if proven to be necessary.

1.5 Structure of Report

The report is presented as a description of the data obtained. This is followed by an interpretation and discussion of the results together with a conceptual site model and preliminary contamination risk assessment.

THE SITE

2.1 Site Location

The site is located at the former Linhay Building, Trelavour Dryers, Parkandillick, St Dennis, Cornwall (Dwg. Nos. 24123/01 and 24123/02, Appendix C). The British National Grid Reference of the site is 194764, 57095 and the nearest postcode is PL26 8DY.

The site is located within the former Trelavour Dryers, which is part of the wider Trelavour 'works' area, and is located approximately 650m to the southwest of St Dennis village centre. The site is situated near the base of a hill.

Access to the site is gained via an access track to the southwest.

2.2 Site Description

A walkover survey was carried out on 25 January 2024. Photographs of the site are presented in Appendix A and the existing layout is presented in Appendix C of this report.

The main part of the site (the former Linhay Building) is rectangular in shape, measuring approximately 60m x 20m, and is generally level at around 163mAOD.

The main part of the site comprises the former 'Linhay Building', which was historically used as a clay kiln. The building is of steel-frame construction, with blockwork and corrugated sheet metal sides and roof (Plates 1 and 2). The floor of the building is surfaced in concrete that is in a generally good state of repair.

At the time of the walkover survey, the building was being used to house temporary offices (portacabins), some of which were raised off the ground using scaffolding. Some vehicles and construction materials were also present within the building (Plates 2 and 4).

The southwest of the site comprises a gravel-surfaced access road (Plate 5), which connects to a bitmac-surfaced road.

The very north of the site is approximately 1.5m lower than the remainder of the site.

Attached to the north of the site is an additional warehouse, which also houses a railway line that runs approximately northeast to southwest.

The site is surrounded by light industrial warehouses and infrastructure associated with the former Trelavour Dryers. Just south of the site are large ditches, formerly used as a bag filling area.

The site's ground level is lower than the land to the south, but higher than the land to the north.

3 DESK STUDY

3.1 General

A desk study was undertaken, comprising the consultation of:

historical Ordnance Survey maps;

geological maps and information;

environmental information; and

radon information.

This information was used to produce a 'conceptual site model' (CSM).

3.2 Site History

A full set of historical Ordnance Survey (OS) maps of the site and recent aerial imagery was obtained as part of the desk study (Appendix B of this report). The salient points are presented in the table below:

Table 3.1: Site History Summary

	On-Site	Off-Site
1881	The main part of the site is occupied by a single large building and part of another building, with two railway lines running between the buildings, trending roughly northeast-southwest, all being are part of the wider 'Parkandillick China Clay Works'. Part of a settlement pond/ pit/ tank is present in the southwest of the site.	The site is surrounded to the northeast and south by buildings, ponds and tanks associated with the clay works. A bank is present just south of the site. Two clay pits, associated with 'Parkandillick Chine Clay Works' are mapped between 150m and 400m to the southeast of the site. Refuse/ spoil heaps and additional tanks are mapped approximately 120m to 200m to the south and southeast. A railway line is mapped approximately 50m to the northwest of the site.
1907	The site remains generally as 1881. 'Parkandillick China Clay Works' is now labelled as disused. Part of a spoil heap is present in the very southwest of the site.	A chimney is mapped just south of the site. An additional chimney associated with an engine house is mapped approximately 75m to the southeast. A spoil heap is mapped approximately 50m to the northeast, replacing the former buildings present there. The clay pits to the southeast are no longer labelled, or labelled as old. The nearest of these clay pits has also been extended to the

		south, where the previously mapped tanks (200m to the southeast) were formerly present. Numerous additional spoil heaps are mapped between the site's southern boundary and 250m to the south. A spoil/ refuse heap is mapped approximately 200m to the north.
1972	The larger building in the main part of the site has been extended or replaced by a larger building and is labelled as 'Trelavour Kiln', which extends to the west. The building the north is no longer mapped and only one railway line now crosses the site. The settlement pond/ pit/ tank in the southwest of the site and been replaced by four attached containers (possible bag fillers). The part of the spoil heap is no longer present in the very southwest, and has been replaced by part of a small building and access track.	A new building appears to be under construction just north of the site. The disused clay pits to the southeast are now labelled as a 'Water Pit'. The northern end of the former clay pit has been infilled and is now labelled as a tip. Additional tips are mapped to the south and northeast, where numerous spoil heaps were formerly present. The engine house is no longer mapped, though the associated chimney remains present. An additional chimney is mapped approximately 50m to the east of the site. Parkandillick Calciner (high temperature processing), including two large dryer buildings, several tanks, a chimney and a substation have been built to the west of the site.
1993-1995	The site remains generally as 1972.	A building is mapped bordering the site to the north. The railway line to the north of the site is now labelled as 'Mineral Railway'.
2001	Aerial imagery shows the site comprises a main building in the centre and east, with four attached steel containers (bag fillers) in the centre-southwest, part of a tank (butter tank) and an access road in the southwest.	The site is generally surrounded by buildings and tanks associated with the clay works. The former clay pits (water pit) is present to the south of the site. Large piles of spoil form the northern boundary of the pit.
2005	Two of the four steel containers in the centre-southwest are no longer present.	The site's surroundings generally remain as 2001. A workshop building is present just west of the site.

2017	All four of the steel containers are no longer present.	The site's surroundings generally remain as 2005.
2022	The tank in the southwest of the site has been removed.	Some buildings to the southeast of the site are no longer present. The site's surroundings remain generally as 2017.

Additional information obtained from https://jcstraveladventures.com/china-clay-processing-4_non_public/ indicates that Parkandillack China Clay and China-Stone Works was first recorded in 1834. In 1845/ 46, coal-fired pan kilns were installed to speed up the drying of the clay. In 1880s, the then owners (Charles Truscott) went bankrupt and the works, including all the machinery, steam engines, dryers and tanks were bought by the Mid-Cornwall China Clay and Stone Company Ltd. In 1911, the area re-opened before closing during WWII. The site reopened again in the 1950s, with the Buell dryer installed in 1974. Both the rotary dryer and the Buell dryer were then replaced in 2001 by a large band dryer, which was in operation until 2013.

In summary, the main part of site has generally been occupied by a large building used as a clay store/ kiln, within the Parkandillick China Clay Works, from first edition maps (1881) until recently. Railway lines formerly crossed the site, part of a building was present in the north and part of a settlement pond/ tank was present in the land to the southwest. From 1972, the building in the main part of the site was extended or replaced by a larger building, only one railway line was present, the building to the north was demolished and replaced, and the settlement pond/ tank to the southwest was replaced by four rectangular containers (bag fillers). From 2001, a large steel tank (butter tank) was present in the southwest of the site, used within the final settling process of the extracted China clay.

Anecdotally, decommissioning of the on-site china clay works started in June 2021.

3.3 Site Geology

The British Geological Survey (BGS) map of the area indicates the site to be underlain by the Trendrean Mudstone Formation of Devonian age, which is described as dark grey, locally black, cleaved mudstone with some laminae of siltstone and fine-grained dark grey sandstone.

Given the proximity of the site to the St Austell (microgranite) Intrusion, located to the southeast, it is likely the underlying bedrock geology has been baked and hardened to form hornfels.

The site lies within a Mineral Consultation Area for the extraction of china clay (as designated in the Cornwall County Council Minerals Local Plan, dated 1998).

China Clay (also known as kaolin) is a soft white or near white clayey powder formed from the hydrated aluminium silicate mineral (kaolinite) over millions of years by the hydrothermal decomposing of feldspar in granite rocks.

The key geological information contained within the Groundsure Enviro+Geo Insight report is listed below:

There are no records of artificial/ made ground on-site.

There are no recorded landslips within 500m of the site.

There are three recorded historical ground workings on-site:

- unspecified heaps; mapped in 1908;
- ponds; mapped in 1879 – 1908; and
- unspecified heaps; mapped in 1958.

The nearest recorded current ground working is 191m to the east of the site: Parkandillick; clay pit; commodity produced: China Clay.

There is one recorded historical underground working within 250m of the site:

- 175m to the south; unspecified disused shaft; mapped in 1977.

There are no published historical BGS borehole records within the vicinity of the site.

3.4 Environmental Information

The key environmental information contained within the Groundsure Enviro+Geo Insight report (Appendix B of this report) is listed below:

There are no registered nor historical landfill sites within 250m of the site.

There is one historical waste site recorded within 250m of the site:

- 84m to the northwest; Rostowrack Farm; energy from waste plant; historical planning application; 28 May 2013.

There are thirty records of potentially contaminative industrial land use within 250m of the site, with the closest and most significant being:

- Tank; on-site (numerous further tanks are recorded within the near vicinity of the site).
- Chimney; 77m to the east.
- Electricity sub-station; 98m to the southwest.
- Shaft; 180m to the south.
- Cornwall Energy Recovery Centre (ERC) – EfW Incineration (DECC); 226m to the west.

There are no records of petrol or fuel sites within 250m of the site.

There are two recorded licensed pollutants releases on-site:

- Goonvean Ltd; quarry processes; historical permit; no enforcements.
- Imerys Mineral Ltd; china processes; historical permit; no enforcements.

There is one record of a radioactive substance authorisation within 250m of the site:

- 169m to the southwest; Western Area Dryers & Calciners; Imerys Mineral Limited; effective from 01/04/2018; last date of update 01/01/2020.

There are two recorded pollution incidents within 250m of the site, with the nearest being:

- 10m to the north; inert materials and wastes; soil and clays; incident date: 15/12/2001; water impact significant; no impact to land and air.

The underlying bedrock strata are classified as a Secondary A Aquifer. These are 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.

There is one recorded groundwater abstraction point within 250m of the site:

- 230m to the east; Parkandillick Pit; groundwater − fresh; point; Imerys Mineral Ltd; start date 01/04/1973; active.

There are no recorded surface water nor potable water abstraction points within 250m of the site.

There are no recorded Source Protection Zones (SPZ) within 250m of the site.

The groundwater beneath the site has been classified as medium vulnerability, described as areas with a potential to transmit pollution to groundwater. These are characterised by soils with an intermediate leaching potential, and some low permeability superficial deposits.

The nearest surface water feature is 24m to the northeast of the site: unnamed inland river.

3.5 Radon

BRE Report BR 211 (2023): Radon: Guidance on Protective Measures for New Buildings (including Supplementary Advice for Extensions, Conversions and Refurbishment Projects) has been referred to assess the radon risks and level of radon protection required at the site.

Site-specific radon risk information, using data sourced from the British Geological Survey (BGS) and UK Health Security Agency (UKHSA), has been obtained as part of the Groundsure Insight report. This is presented in Appendix B of this report and indicates that the radon risk/ percentage of homes estimated to be affected by radon is greater than 30%, i.e. full protection measures are required in the construction of new properties and extensions.

3.6 Ruddlesden Geotechnical Ground Investigations

Ruddlesden geotechnical have previously undertaken a ground investigation encompassing the site and surrounding (Trelavour Dryers) Parkandillick Works. The investigation comprised

a Phase 1: Preliminary Contamination Assessment Report (Report Ref: CG/SR/22125/PCAR, dated March 2022), and

a subsequent Phase 2: Contamination Investigation and Assessment Report (Report Ref: CG/SR/22125/CIAR, dated October 2022).

The reader is referred to these reports for further information. However, for clarity, the salient points are provided below.

As part of the Phase 2 investigation, a borehole was undertaken within the on-site building (WS10), and encountered the following ground conditions:

Reinforced CONCRETE, to a depth of 0.31m, underlain by…

MADE GROUND, to a depth of 0.40m, underlain by…

Brown slightly sandy slightly clayey/ silty GRAVEL, to a depth of 1.00m, underlain by…

Greyish brown slightly sandy slightly cobbly slightly silty clayey GRAVEL, to the base of the borehole, to a depth of 2.00m.

No groundwater was encountered in WS10 during the investigation or subsequent groundwater monitoring (undertaken as part of ground gas monitoring).

Similar ground conditions were encountered in the other boreholes undertaken across the wider site.

Of the 36 No. soil samples and one silt/ sludge sample tested as part of the Phase 2 investigation, none of the Generic Assessment Criteria (GAC) were exceeded for a commercial land use. This included three samples taken from WS10 at depths of 0.50m, 0.80m and 1.50m.

Twelve ground gas monitoring wells were installed at the site during the ground investigation, including in WS10 (on-site). Six ground gas monitoring visits were subsequently undertaken.

The six monitoring visits recorded relatively low concentrations of ground gas over variable atmospheric pressure and environmental conditions, and the site was classified as CS1, i.e. no ground gas protection measures are required (other than those to protect against radon).

PRELIMINARY CONTAMINATION ASSESSMENT

4.1 General

It is proposed to redevelop the site for commercial purposes with the conversion of the existing Linhay Building to a laboratory, welfare facilities and a visitor centre. The proposals are presented in Appendix C of this report.

This preliminary contamination assessment has been carried out in accordance with the latest guidance using a source-pathway-receptor analysis method, to assess whether or not the anticipated levels of contamination are safe and suitable for use and to determine the extent of further assessment or remedial measures that might be necessary. In particular, reference has been made to the Environment Agency Land Contamination Risk Management (LCRM) web pages:

https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm

4.2 Conceptual Site Model

4.2.1 Source

On-Site

The site history information showed that the site has been developed since the mid-1800s, with buildings, tanks and railway lines, associated with the china clay works. Over the years, various changes to the site have been mapped, with buildings added, removed and extended. Decommissioning of the on-site china clay works started in June 2021.

The Department of the Environment (DoE) Industry Profile for ceramics, cement and asphalt manufacturing works (considered to best represent a china clay works) indicates that ground contamination will probably relate to kiln and other fuels, workshops and waste disposal facilities. Contamination could arise through leaks and spillages of oil and lubricants around storage areas, transfer of materials, or underground tanks and pipelines. Kiln ash and workshop waste may have been disposed of on-site. Potential contaminants are therefore likely to include heavy metals and metalloids, polyaromatic hydrocarbons (PAHs), sodium sulphates, volatile organic compounds (VOCs) and/ or semi-volatile organic compounds (SVOCs).

The on-site building has a concrete floor, which appeared to be in a good state of repair, this would reduce the likelihood of contamination into the underlying soils. However, the possibility of leaking drains etc. cannot be discounted.

A tank has historically been present on-site. As being part of a china clay works, the use of the tank was likely for settling, bleaching, storage or blending. Chemicals associated with china clay works include acids and flocculants, including caustic soda (sodium hydroxide), sulphuric acid, hydros (sodium hydrosulphite), TSPP (tetrasodium pyrophosphate), Jayfloc85 and Superfloc C-567 (polymeric quaternary amine). Aluminium sulphate (alum), ferric chloride and ferric sulphate are commonly used flocculants. It is noted that sodium, aluminium and iron are not normally harmful to human health or the environment.

A railway line was present running through the site. The DoE Industry Profile for Railway Land states that fuel oils, lubricating oils and greases may cause localised contamination of ballast and of areas where locomotives and multiple units may

have stood for significant periods of time, for example at terminal stations and in sidings. Whilst this is considered a potential source, as the area where the former railway was is now covered in concrete, there is no pathway between this potential source and end users (receptor).

The site is located in the southwest of England where elevated levels of arsenic and other metals and metalloids are a common natural occurrence. Therefore, elevated levels of heavy metals are anticipated, though these may not be harmful to human health. Bioaccessibility testing may be required to prove this.

Given that various buildings have previously been present at the site and localised cut-and-fill may have occurred to level areas of the site, made ground is anticipated, which may be generically contaminated. In particular, given that the site has been subject to past demolition and redevelopment, it is possible that some ACM may be present on and/ or within the soil at this site. However, as no elevated levels of contamination were recorded as part of the wider Phase 2 investigation, it is considered likely that the made ground present beneath the site (if any) will also likely have no significantly elevated levels of contamination (with respect to the proposed commercial land use).

Made ground is anticipated to be present beneath the site. If this contains significant volumes of biogenic material, this could be a source of ground gas. However, gas monitoring on- and off-site site has shown no significant biogenic material and no significantly elevated levels of ground gas to be present.

Notwithstanding any of the above, it is noted that no significantly elevated levels of contamination were recorded in the previous investigation that covered the wider site and included samples from the site.

Off-Site

There are several recorded potentially contaminative off-site land uses, almost all associated with the china clay industry and the surrounding china clay works, including a workshop, engine house, kilns, electricity substations, tanks and tips (waste material from the works and/ or surrounding clay pits). By the 1970s, a second china clay works was built to the west of the site.

Tanks used for fuel storage were historically present in the surrounding area around the site. Leakages and spillages from fuel or chemical storage tanks can be a significant source of contamination. Potential contaminants could include total petroleum hydrocarbons (TPH), PAH, VOCs and SVOCs. However, given the localised nature of potential contamination, and that no fuel tanks are recorded on-site, it is considered that no significant contamination of the ground beneath the site is likely to have occurred as a result.

A fitters workshop was present just west of the site. The main potential source of contamination is normally fuel storage tanks and leakages from them. In addition, whilst modern practices dictate that waste oil is now disposed of responsibly, in the past, waste oil may have been disposed of directly into the ground or down a drain, which may have leaked.

Depending on the repair activities at the fitters workshop, small-scale spillages, leakages and careless disposal of oils/ lubricants into the ground throughout the site's history are possible, though it is noted that contamination of the ground would be limited by the concrete floors/ surfacing across most of the site. Potential contaminants could include TPH, PAH and SVOCs/ VOCs. In addition, given the lower topographic level of the workshop compared to the site, it is unlikely that

Tips were historically mapped within 250m of the site. China clay waste generally consists of sands and grits, together with the micaceous material, mainly silt. However, it is possible that other waste materials and chemicals, used as part of the china clay processing, were incorporated into the tips. Depending on the amount of biogenic material present, the made ground/ fill materials could be a potential source of ground gas (i.e. methane and carbon dioxide). Though, given that no significant volumes of ground gas were encountered across the wider Parkandillick Works during previously undertaken gas monitoring, and as no significant depths of biogenic made ground was encountered, the off-site tips are not considered to be a potential source of contamination, including ground gas.

The Cornwall's Energy Recovery Centre (ERC) is located approximately 226m to the west of the site (operational from March 2017) and is a potentially contaminative land use. The Groundsure also recorded a historical waste site 84m to the northwest of the site: Rostowrack Farm; energy from waste plant (May 2013). However, given the distance and lower topographic elevation from the site, these are not considered likely to have caused significant contamination of the ground beneath the site.

There are numerous additional potentially contaminative land uses within 250m of the site, including further tanks, chemical stores, electricity sub-stations, chimneys and an engine house. These are all potential sources of generally heavy metals, PCBs and fuels/ oils contamination. However, given the localised nature of potential contamination, e.g. fuel leaks and/ or spillages, and the distance of these potential contamination sources from the site, it is considered that no significant contamination of the ground beneath the site is likely to have occurred as a result.

A radioactive substance authorisation is recorded at the adjacent china clay works. It is understood that some china clay processing activities can concentrate radioactive materials, though none are likely to have occurred on-site, given the known history of the site. As a precaution, all samples taken as part of the previous investigation were tested for radiation. No elevated levels of radiation were recorded.

4.2.2 Pathway

A commercial land use has been used for this risk assessment, with the following contamination migration pathways considered, and in accordance with the CLEA model:

- direct soil and indoor dust ingestion;
- skin contact with soils and indoor dust; and
- inhalation of indoor and outdoor dust and vapours.

If present, groundwater flow within the made ground (if present), weathered Trendrean Mudstone Formation/ igneous intrusions, or fractures within the underlying bedrock is considered to be the main migration pathway linking any contamination to the water environment.

Likewise, these are considered to be the most likely pathways for migrating ground gas.

4.2.3 Receptor

For the proposed development, end users are considered as the potential receptors of contamination, with a female adult aged sixteen to sixty-five years old being the critical human health receptor.

The nearest recorded surface water feature, located 24m to the northeast of the site (unnamed river), the nearest recorded abstraction point, located 230m to the east of the site, and groundwater beneath the site are considered to be the main potential controlled waters receptors.

4.3 Preliminary Ground Gas Assessment

The desk study information indicates that full radon protective measures would be required for new buildings and extensions, comprising a radon-proof barrier across the ground floor supplemented by the provision for subfloor depressurisation or ventilation (either a radon sump or a ventilated subfloor void). However, BRE 211 acknowledges that radon protection measures only need be considered, and not necessarily installed, for conversions, with each building considered on its own merits.

In order to assess the risks posed by ground gas, the principles outlined in BS 8485 (2015 (+A1: 2019)): Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings have been followed.

The breakdown of organic material in made ground can produce ground gas, though it may also be produced by other, natural, sources (e.g. coal, peat). The principal components of ground gas are methane (potentially explosive) and carbon dioxide (potential asphyxiant).

There are no recorded landfill sites within 250m of the site and only superficial depths of reworked locally-sourced natural soils are anticipated to be present. However, tips and deeper made ground are mapped/ have been observed within 250m of the site.

However, given that no significant levels of ground gas were recorded across the wider Parkandillick site during the previously undertaken gas monitoring, including beneath the site, and as the made ground was observed to be non-biogenic, there is not considered to be a credible source of ground gas at the site.

Therefore, no additional ground gas protection measures are considered to be necessary.

Based on the results of previous in-site testing and observations, it is currently considered unlikely that hydrocarbon contamination will be present. A hydrocarbon vapour membrane is therefore not considered to be necessary.

4.4 Discussion and Recommendations

In order for land affected by contamination to cause harm, there must be a source of contamination, a receptor that can be harmed and a pathway by which the receptor can be exposed to the contamination.

The results of this preliminary contamination risk assessment indicate that, whilst elevated levels of contamination might be present as a result of past on- and/ or off-site land uses, the results of laboratory testing undertaken on samples from the previous investigation, including from beneath the site, indicated no significantly elevated levels of contamination to be present.

Furthermore, the development proposals include for the site to be covered entirely by permanent (concrete) hardstanding, which will both provide a physical barrier between end users and potentially contaminated soils, and prevent the leaching/ mobilisation of potential contaminants by rainwater into the underlying groundwater.

It is therefore concluded, based on the results of this desk study investigation, that the anticipated levels of contamination are unlikely to be harmful to human health given the proposed end use or to controlled waters. Therefore, no remedial measures or further action is currently considered to be necessary.

However, should any signs of contamination (visual or odour) be noted during construction activities, Ruddlesden geotechnical should be contacted so that the soil can be sampled and tested, whereupon appropriate recommendations may be provided.

REFERENCES

British Standards Institution (2011 (+A2: 2017)): BS 10175: Investigation of Potentially Contaminated Sites – Code of Practice.

British Standards Institution (2015 (+A1: 2019)): BS 8485: Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings

Building Research Establishment (2023): BR Report 211: Radon: Guidance on Protective Measures for New Buildings (including Supplementary Advice for Extensions, Conversions and Refurbishment Projects).

Environment Agency (2024): Land Contamination Risk Management (LCRM) web pages. Accessed January 2024: https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm.

6 LIMITATIONS, TERMS AND CONDITIONS

1. All third-party data referred to in the report, e.g., environmental searches and geological information, has been obtained in good faith from bona-fide sources. Ruddlesden geotechnical ltd cannot be held liable for any incorrect information supplied to us.

2. The presence of asbestos-containing materials (ACM) within buildings and invasive plants are outside the scope of this report and should be addressed by respective suitably qualified experts, if necessary.

3. The copyright of this report is owned by Ruddlesden geotechnical ltd. With the exception of the named client, who may copy and distribute the report for purposes directly relating to its commission, this report may not be reproduced, published or adapted without written consent of Ruddlesden geotechnical ltd.

4. Assignment of this report to any third party is prohibited without the written consent of Ruddlesden geotechnical ltd.

5. New information and updated practices and legislation may necessitate an alteration to this report in whole or in part after its submission. Therefore, with any change in circumstances, including changes to site conditions, this report should be referred to Ruddlesden geotechnical ltd for reassessment and, if necessary, reappraisal.

6. Whilst Ruddlesden geotechnical ltd is confident in the findings of this report, the recommendations may not necessarily be accepted by other authorities without question. It is advisable that, where appropriate, the report be submitted to the relevant statutory authorities and approval obtained before detailed design, site works or other irrevocable action is undertaken.

APPENDICES

APPENDIX A

PHOTOGRAPHS

Plate 1

The eastern exterior of the site, viewed from the east.

Plate 2

The southern exterior of the site, viewed from the southeast.

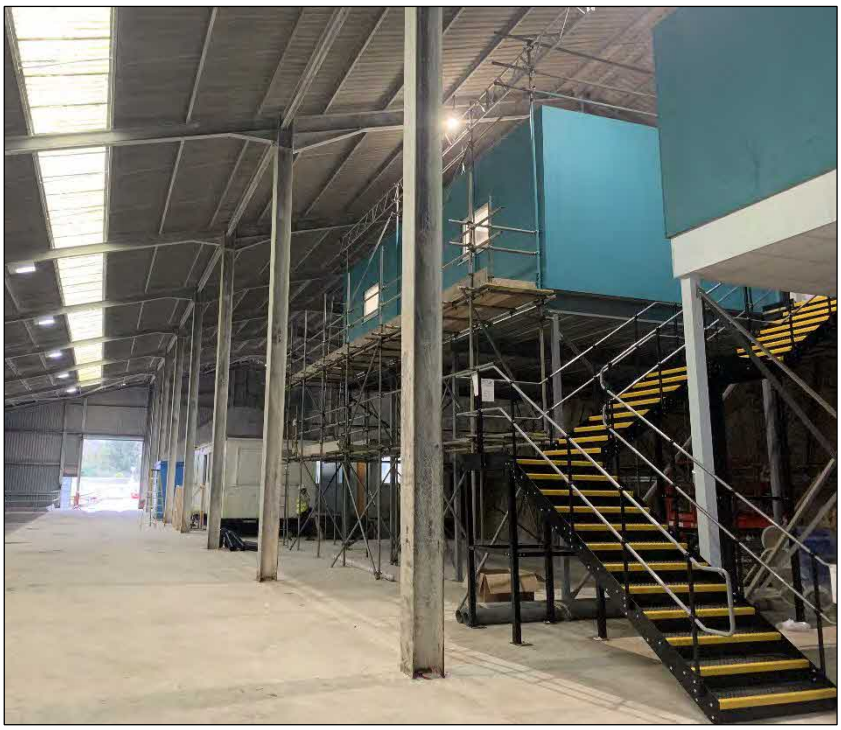


Plate 3

The site's interior, viewed from the west.

Plate 4

The site's interior, viewed from the east.

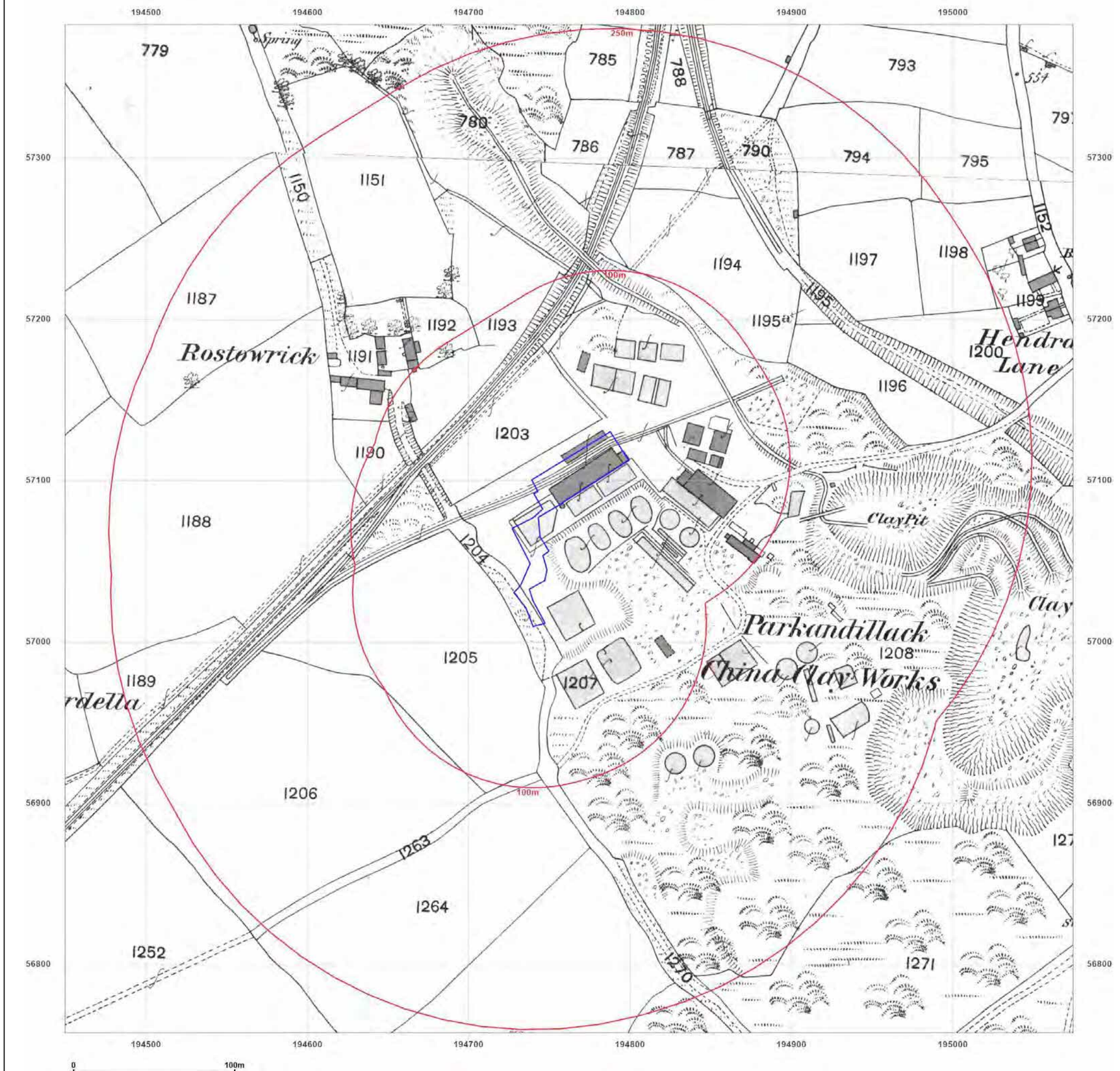
Plate 5

The gravel-surfaced access road in the southwest of the site.

APPENDIX B

DESK STUDY INFORMATION

HISTORICAL ORDNANCE SURVEY MAPS



Groundsure INSIGHTS

Site Details

FORMER LINHAY BUILDING,
TRELAVOUR DRYERS,
PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

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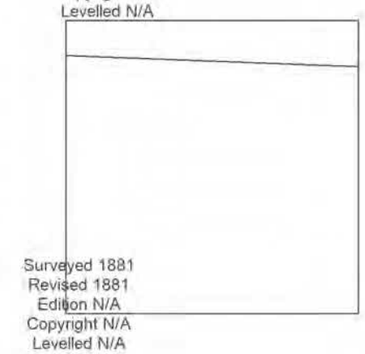

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Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
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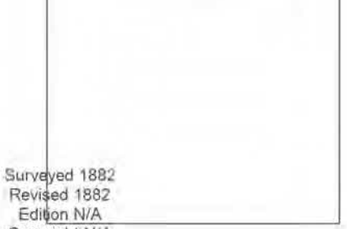

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PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: County Series

Map date: **1907**

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Printed at: 1:2,500

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Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

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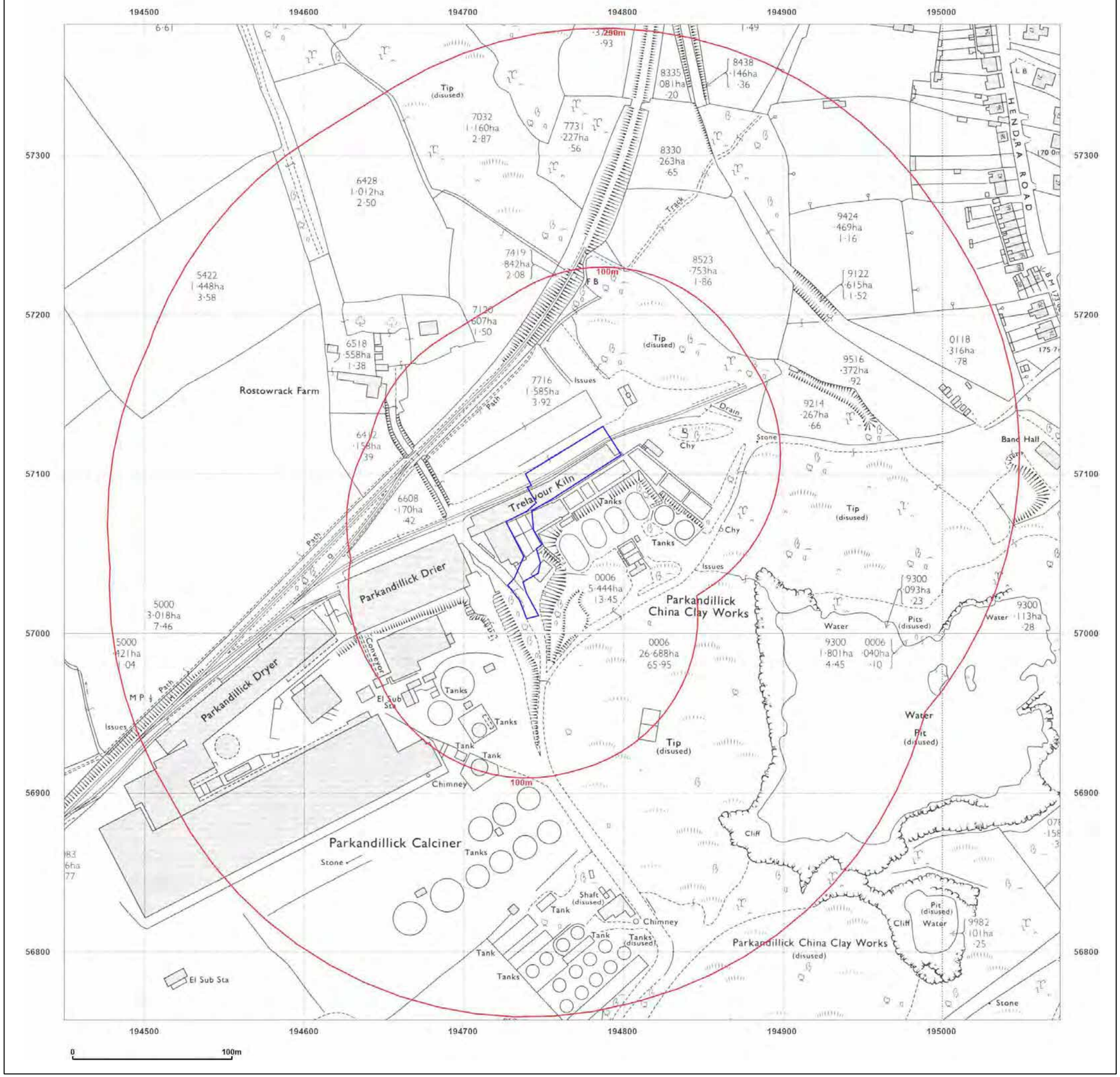

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Site Details

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PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **1972**

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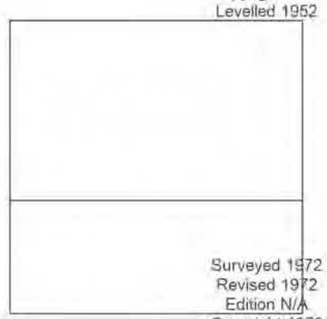
Revised 1972
Edition N/A
Copyright 1973
Levelled 1952



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Revised 1972
Edition N/A
Copyright 1973
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Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **1973**

Scale: 1:2,500

Printed at: 1:2,500

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

Surveyed N/A
Revised N/A
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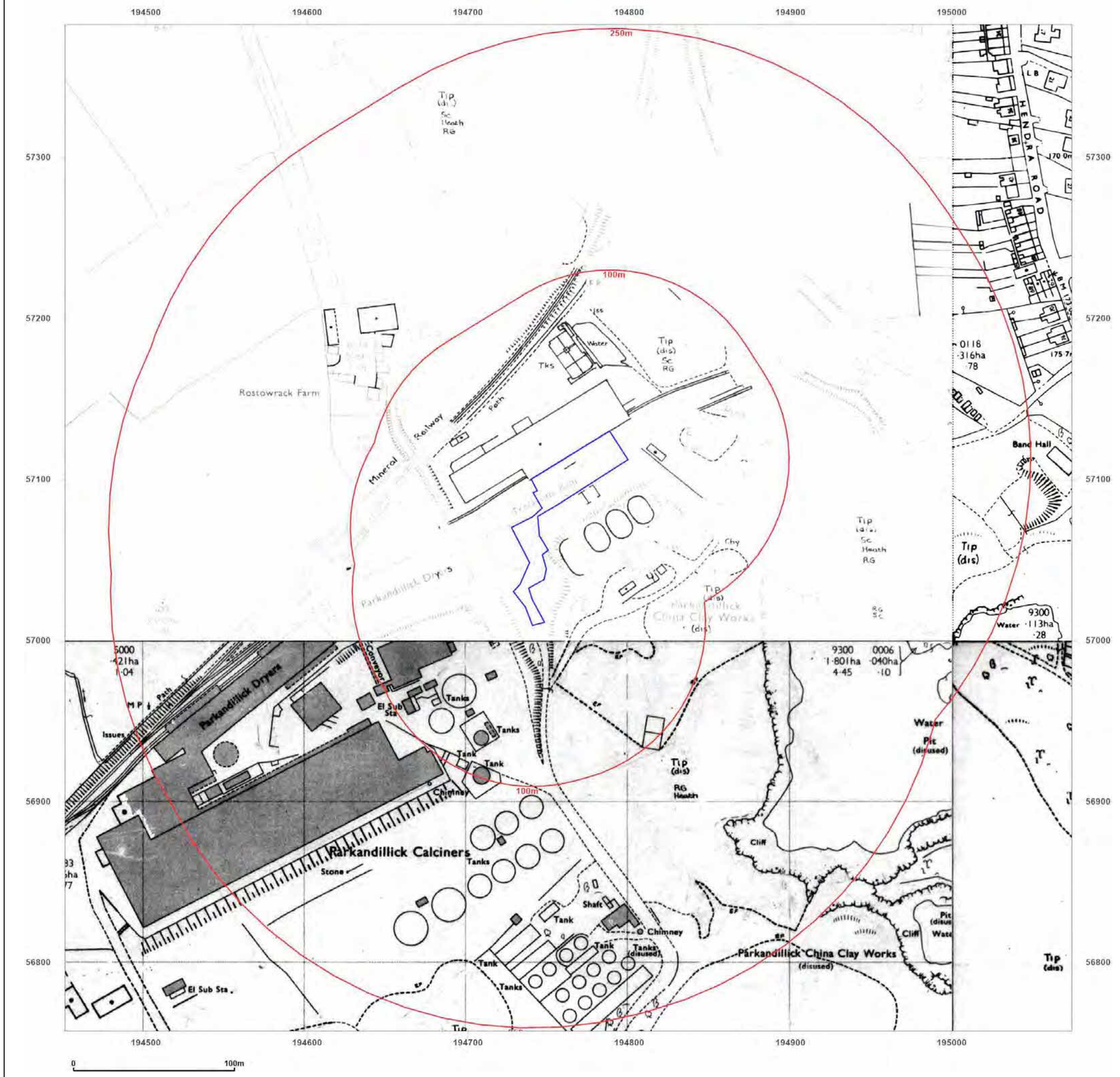

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Site Details

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PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **1988-1993**

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Revised N/A
Edition N/A
Copyright 1993
Levelled 1952

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Levelled N/A

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Revised 1992
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Copyright 1992
Levelled 1952

Surveyed 1952
Revised 1989
Edition N/A
Copyright 1989
Levelled 1952

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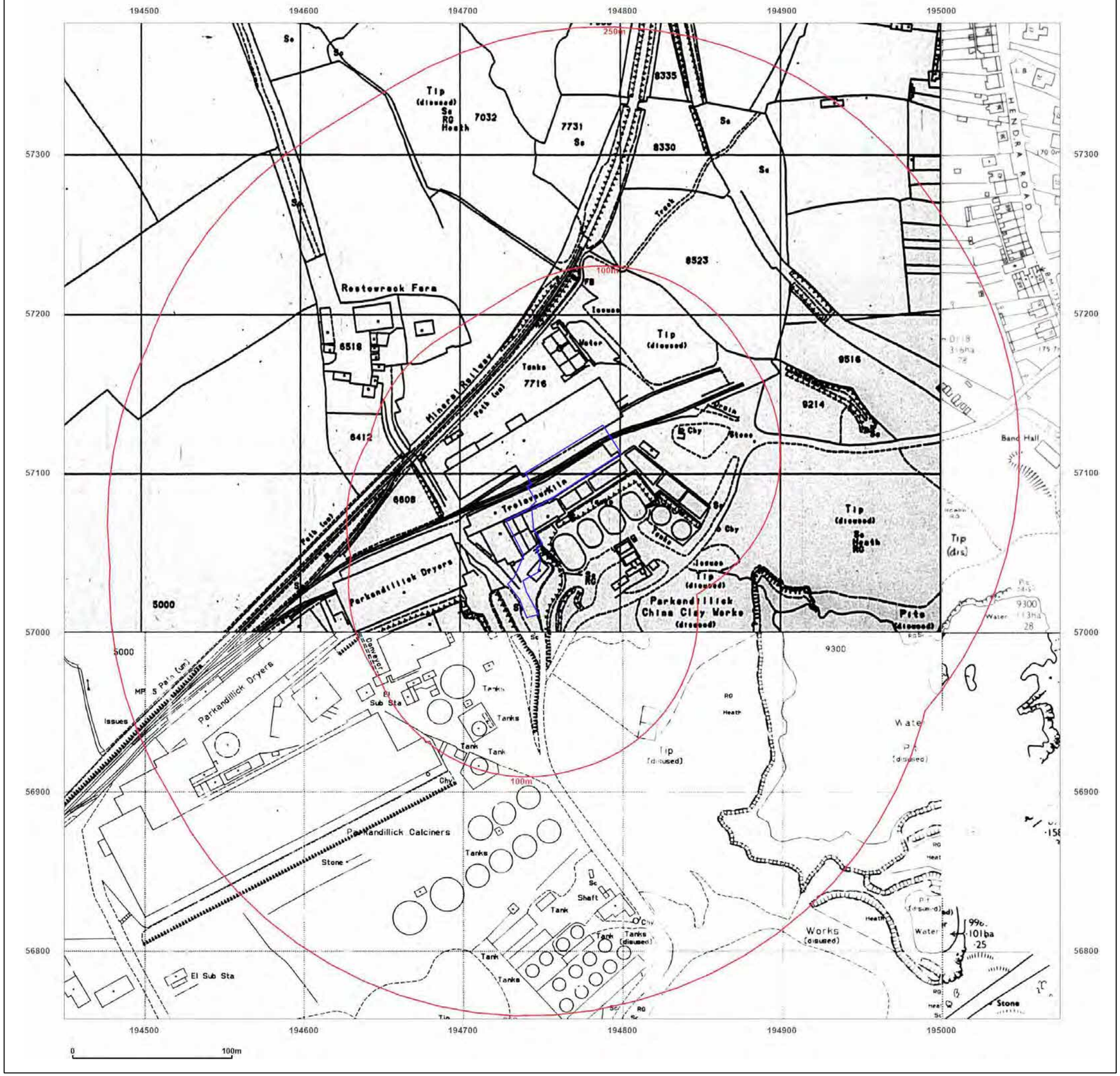

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PARKANDILLICK, ST DENNIS,
PL26 8DY

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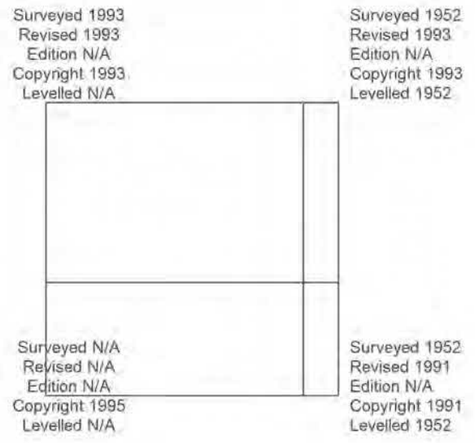

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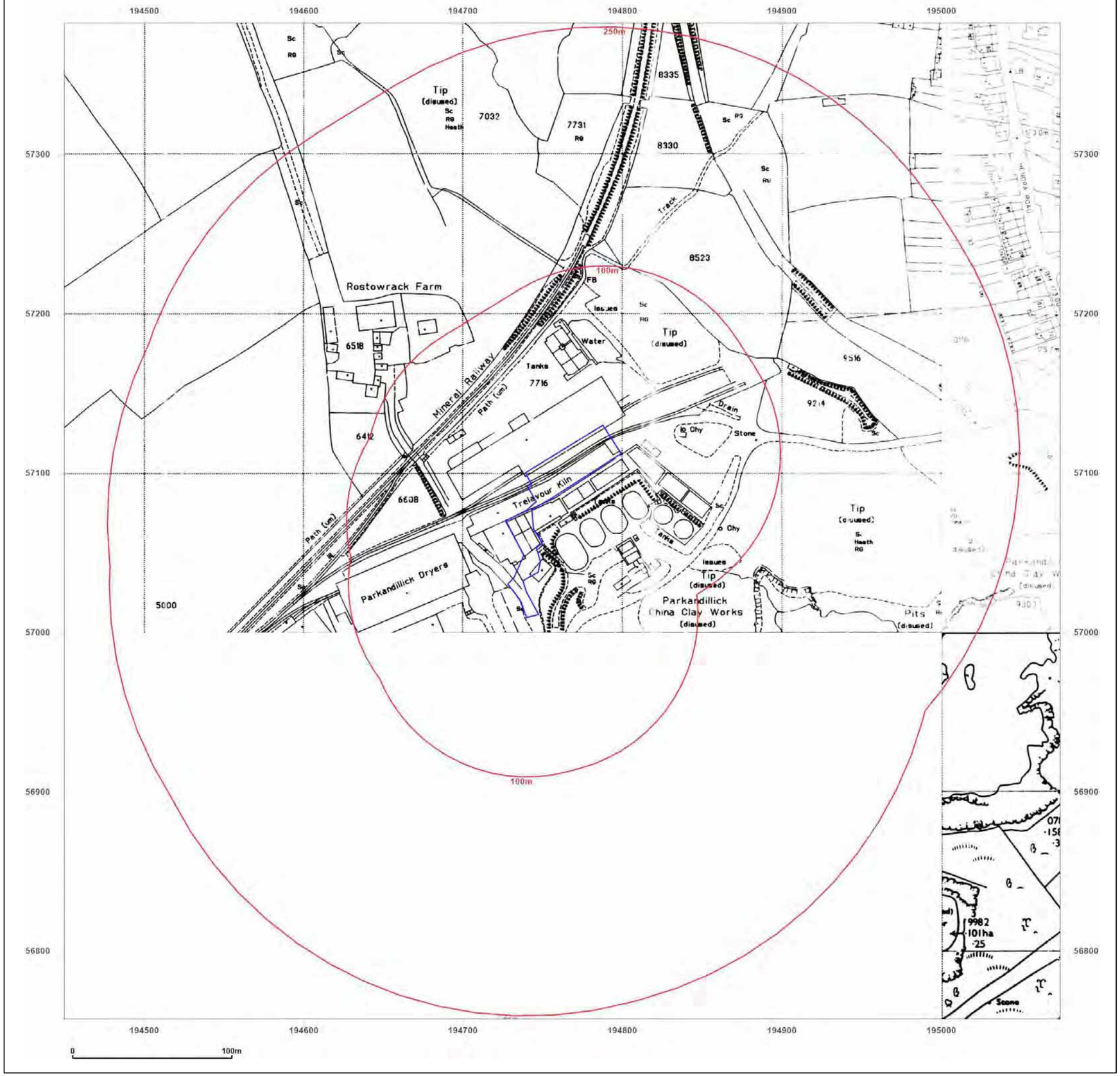

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PL26 8DY

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Grid Ref: 194762, 57070

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Revised N/A
Edition N/A
Copyright 1995
Levelled N/A

Surveyed 1995
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Edition N/A
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Levelled N/A

Surveyed 1952
Revised 1991
Edition N/A
Copyright 1991
Levelled 1952

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Grid Ref: 194762, 57070

Map Name: LandLine
Map date: **2003**
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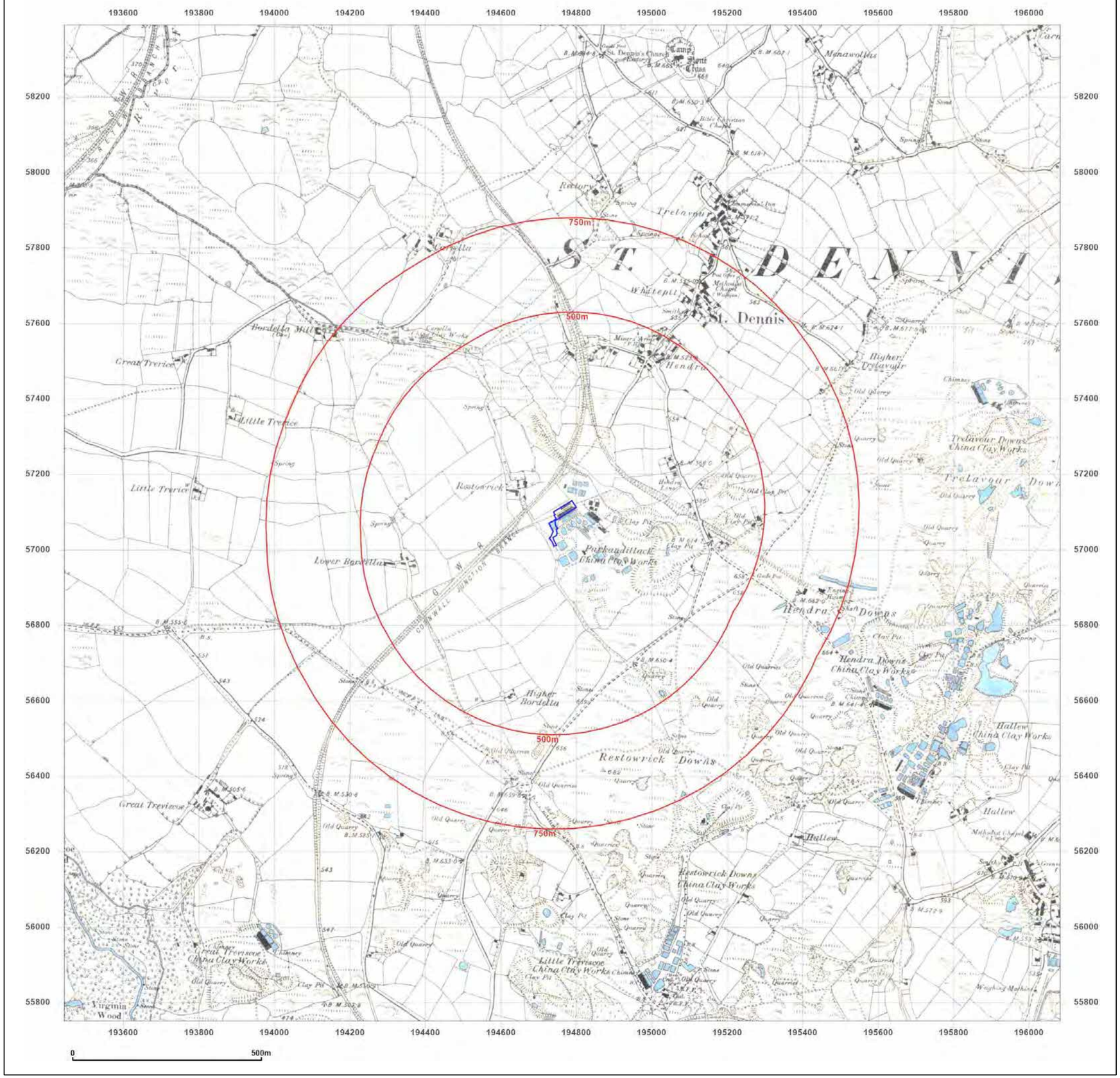

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PL26 8DY

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Report Ref: HMD-411-LDN-ZUO-JQO-IV6
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Map Name: County Series

Map date: **1888**

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Surveyed 1879
Revised N/A
Edition 1888
Copyright N/A
Levelled N/A

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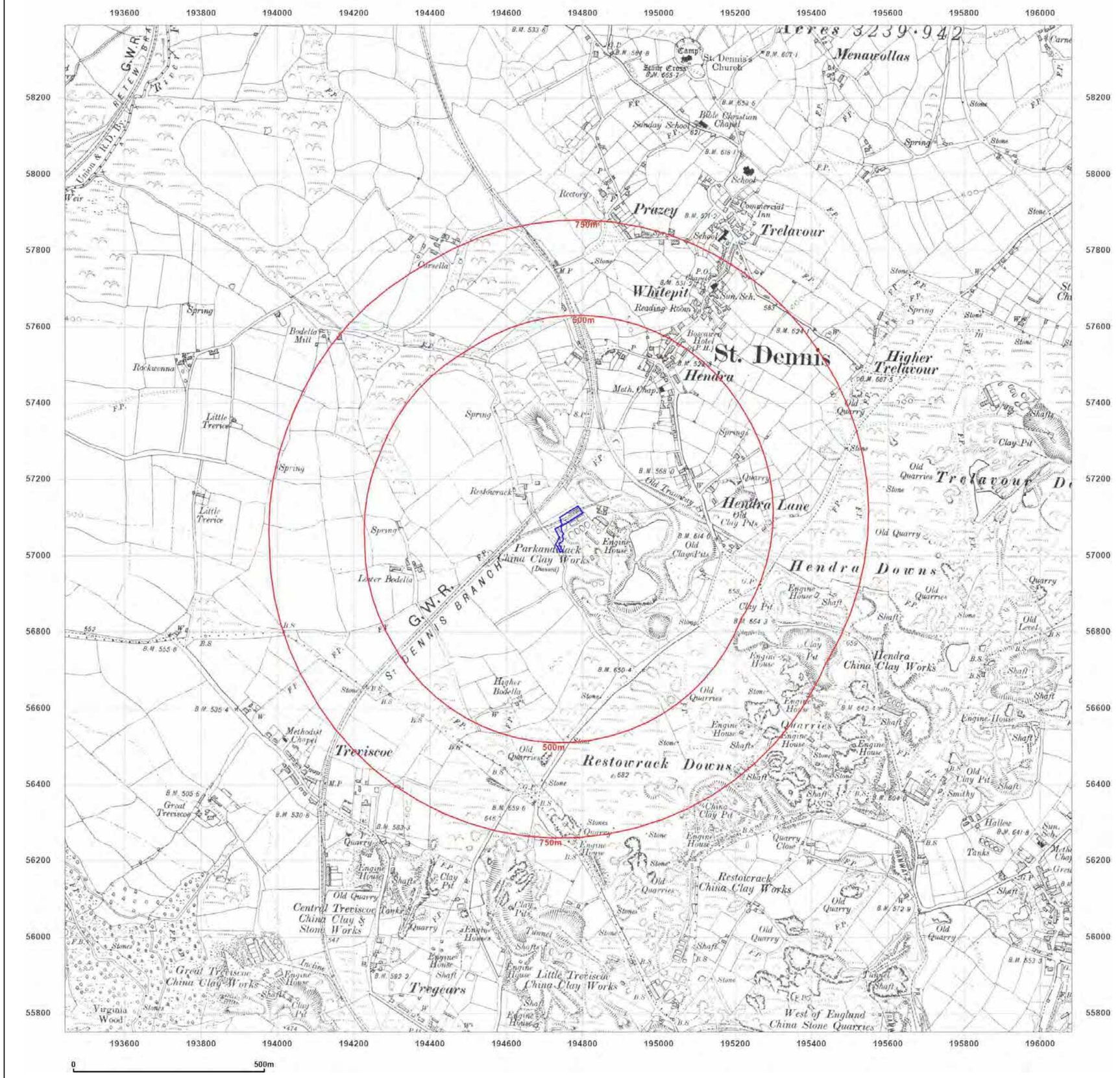

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PARKANDILLICK, ST DENNIS,
PL26 8DY

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Map Name: County Series

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Surveyed 1879
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

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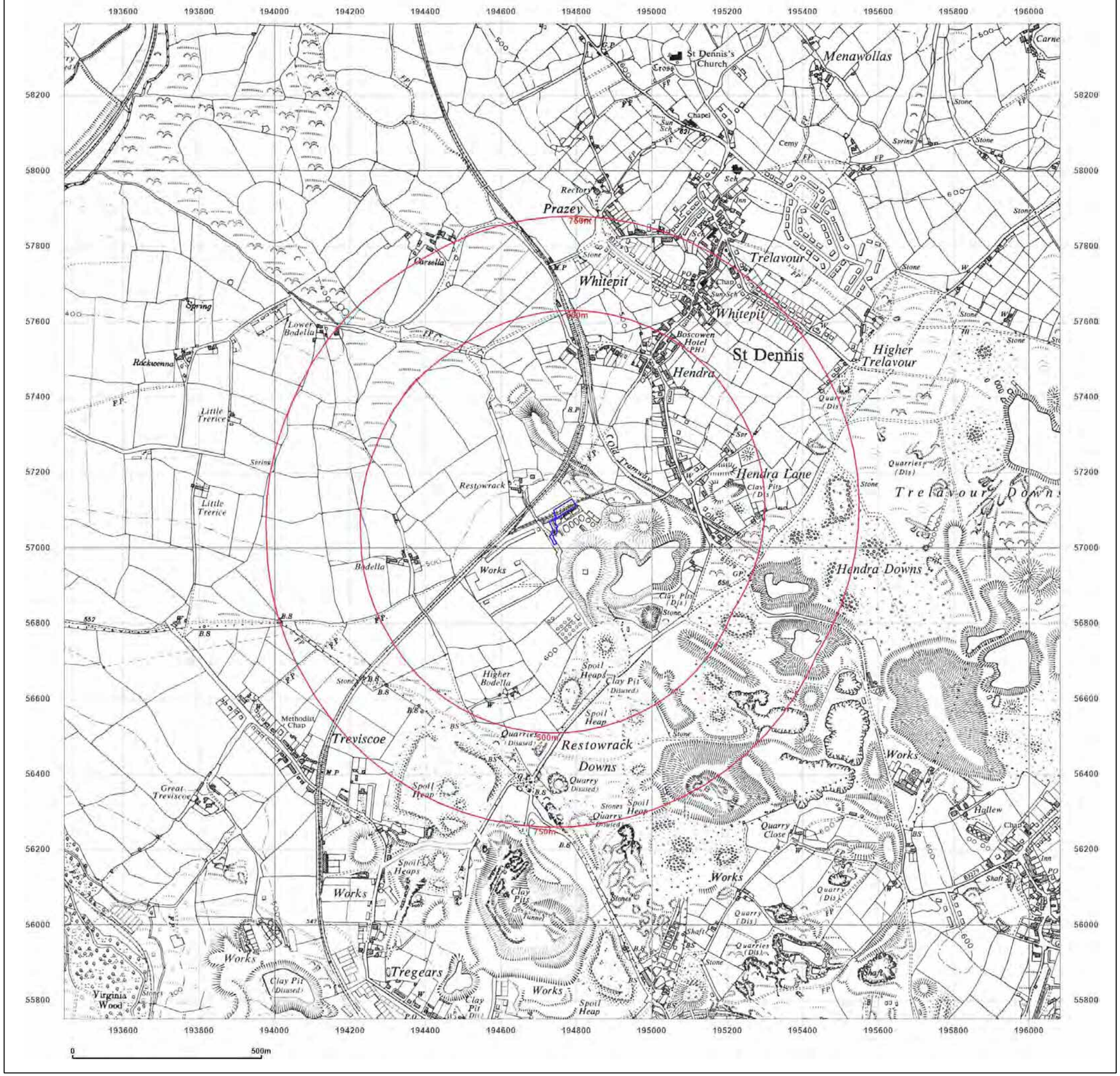

Groundsure INSIGHTS

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TRELAVOUR DRYERS,
PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
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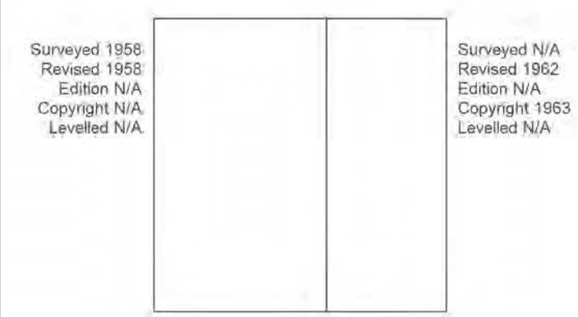

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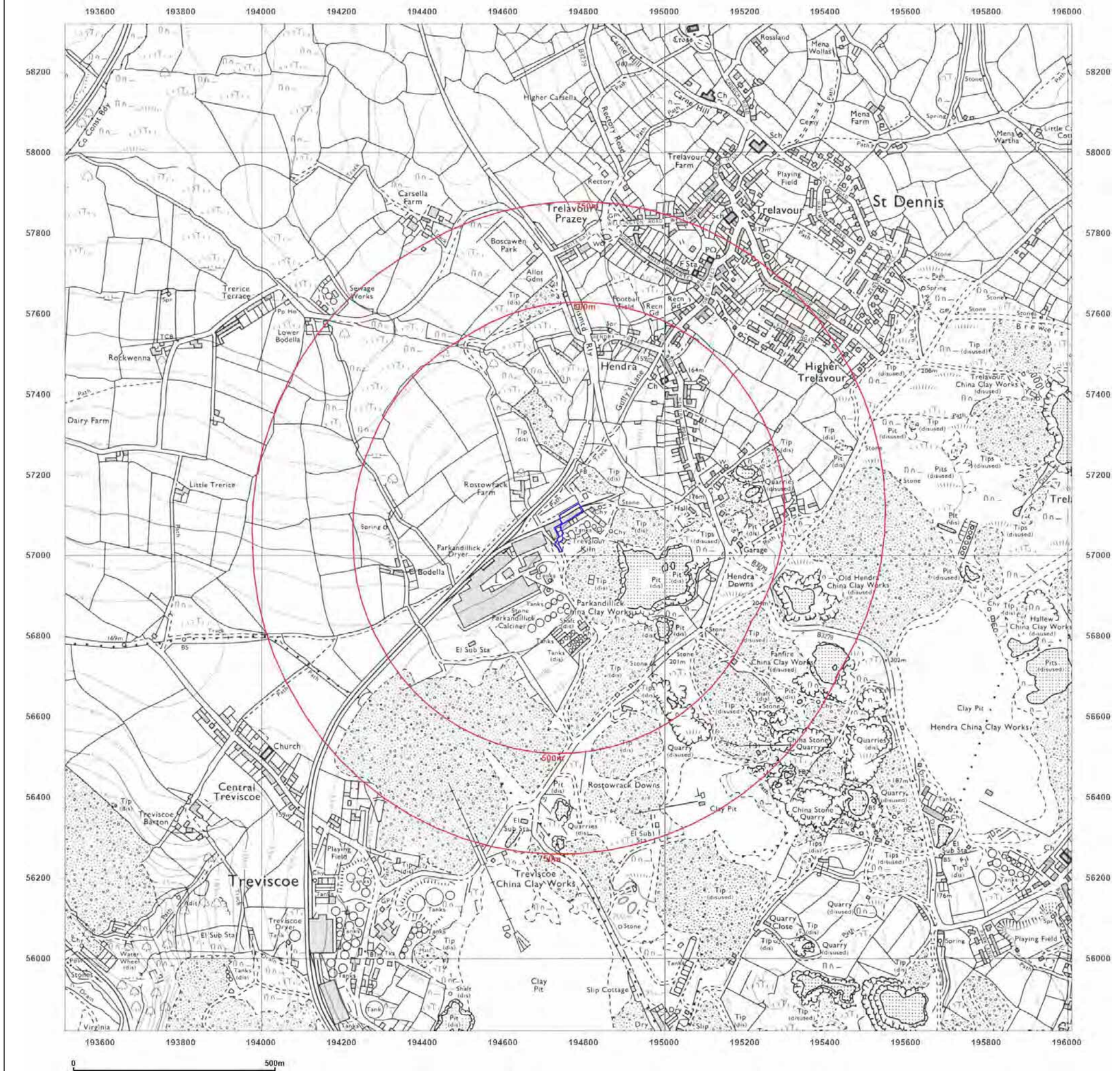

Groundsure INSIGHTS

Site Details

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PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **1979-1980**

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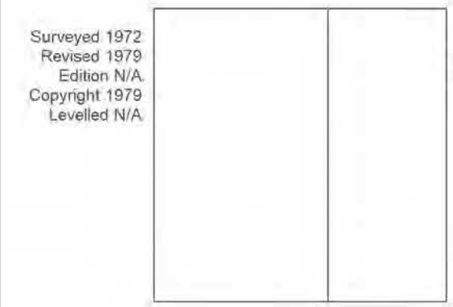

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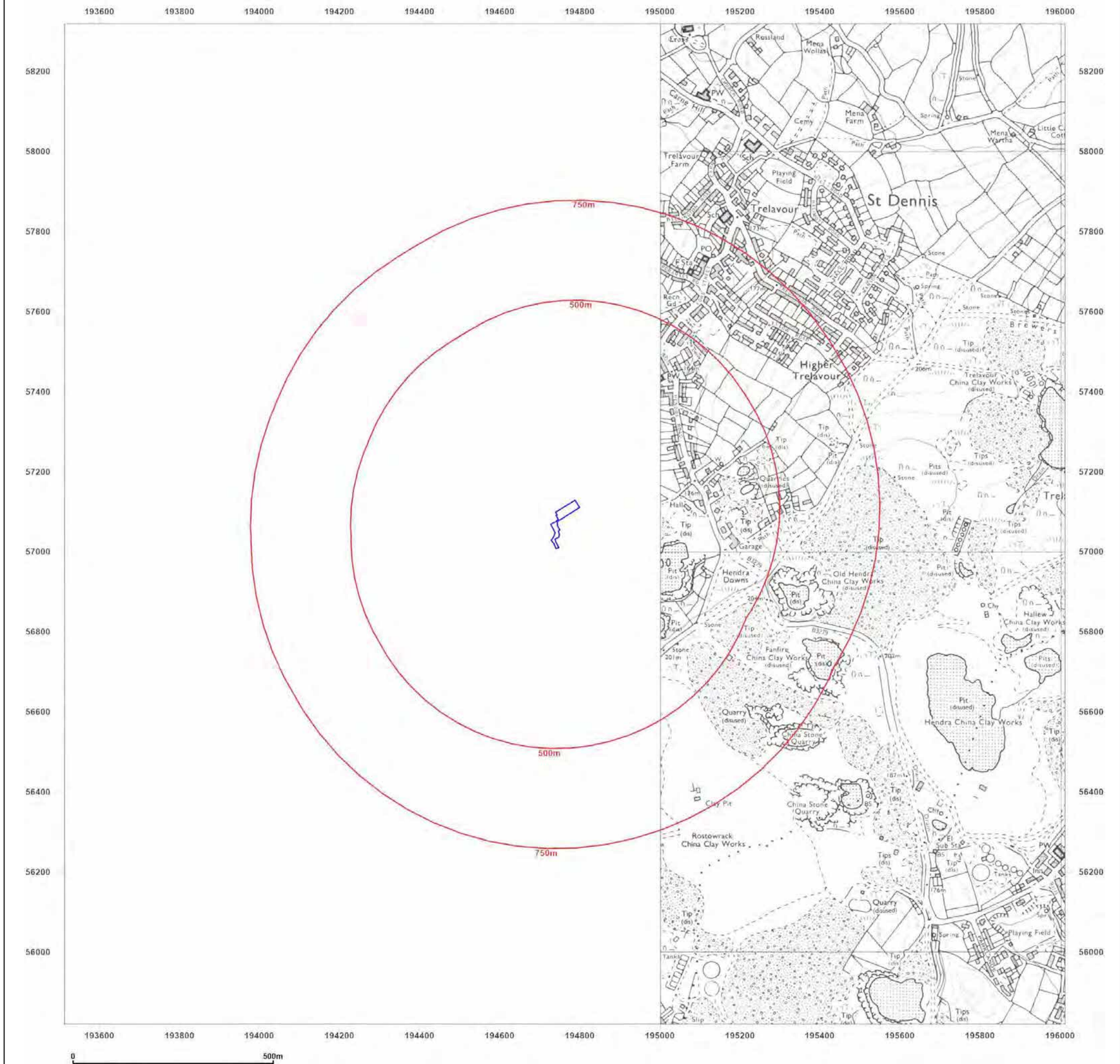

Groundsure INSIGHTS

Site Details

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TRELAVOUR DRYERS,
PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **1991**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1972
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A

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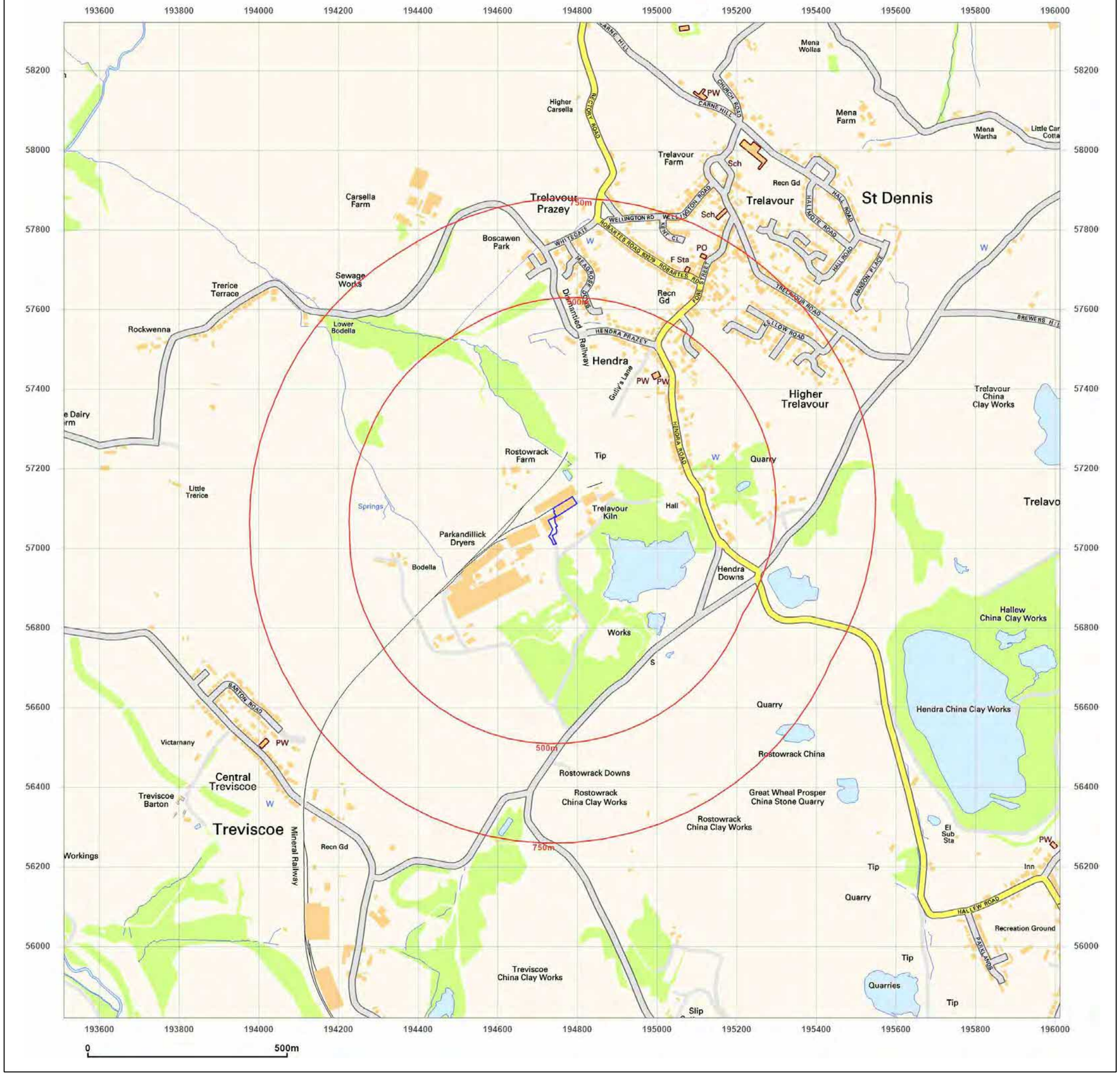

Groundsure INSIGHTS

Site Details

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PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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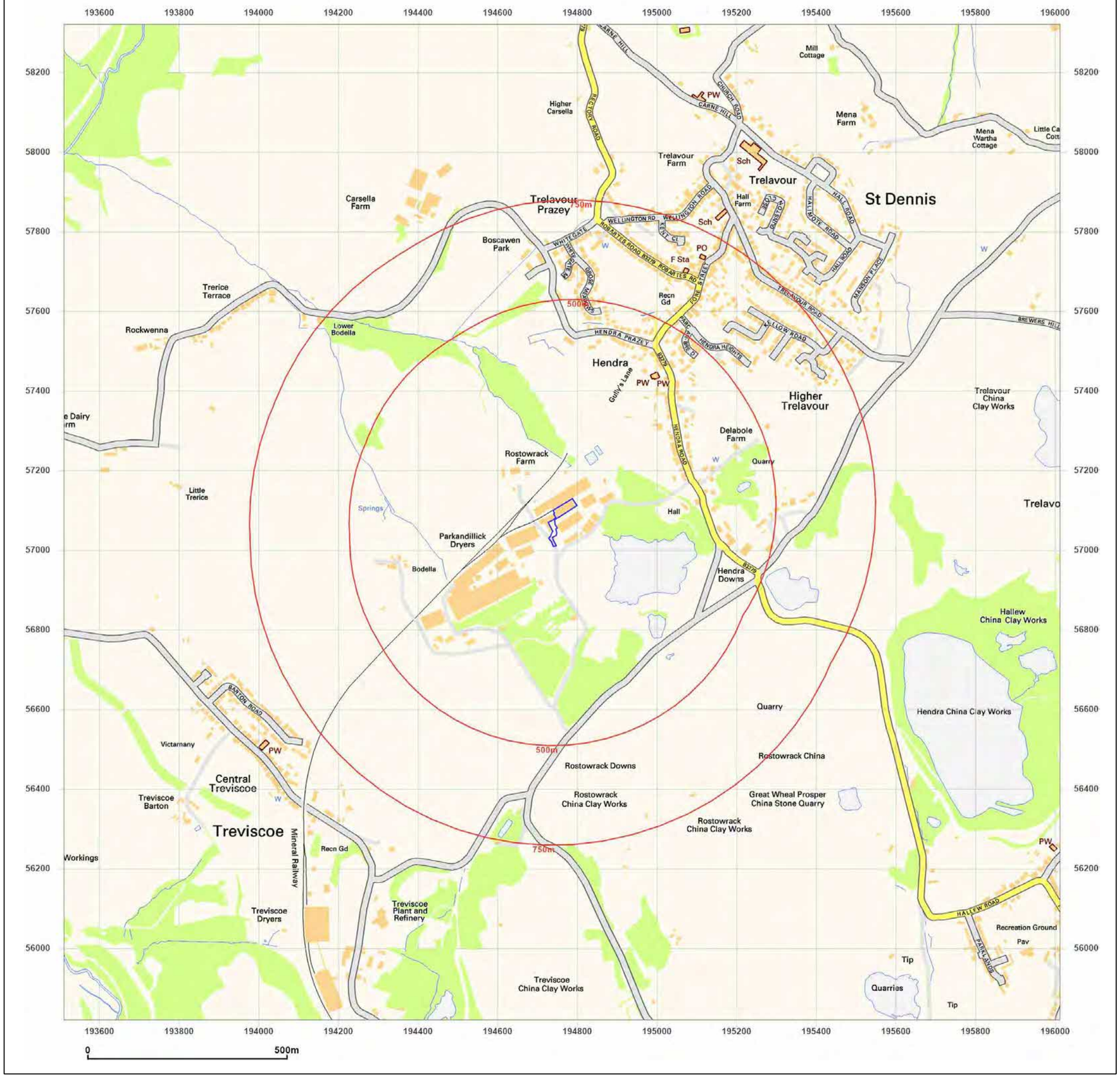

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Site Details

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PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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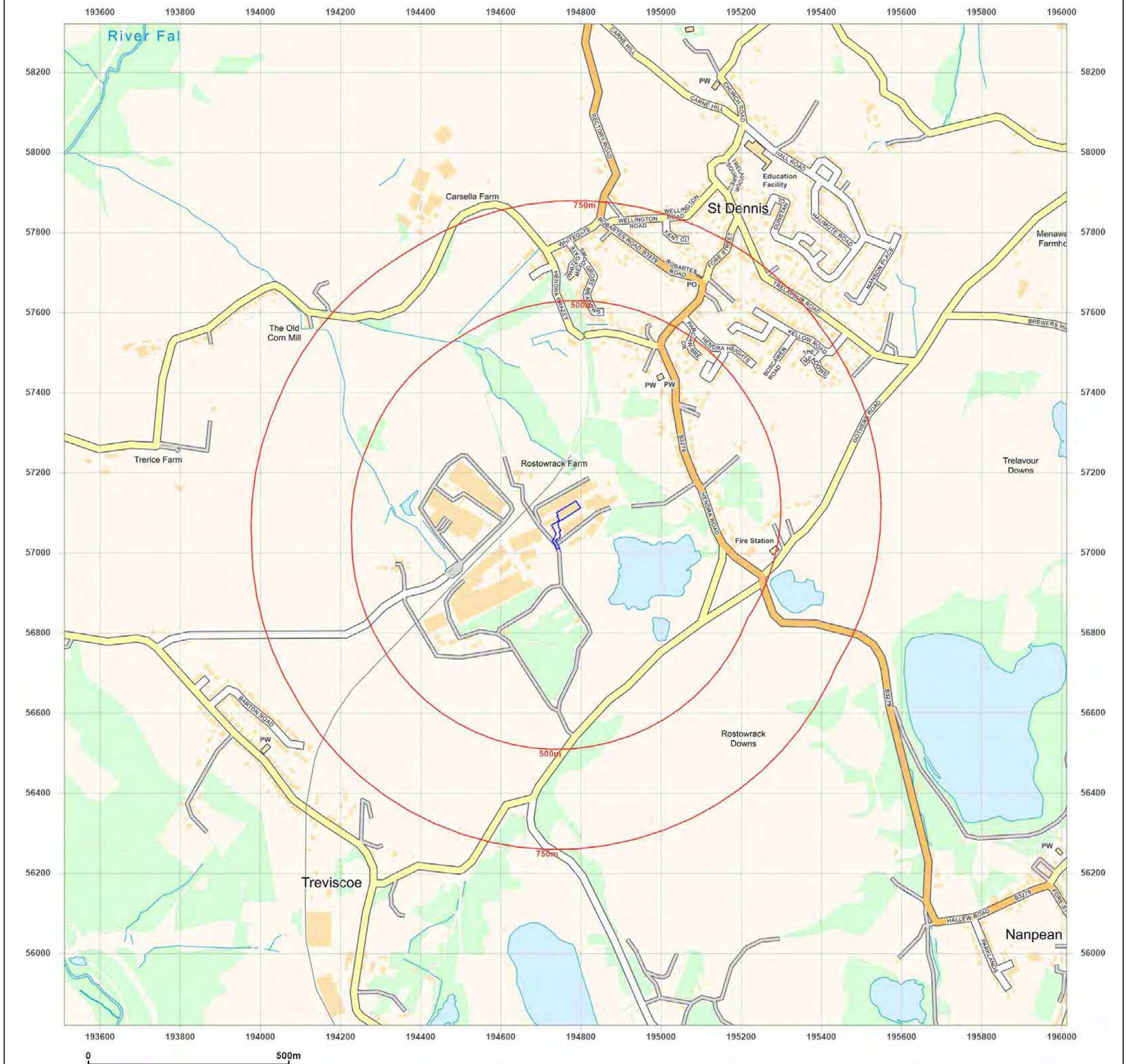

Groundsure INSIGHTS

Site Details

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TRELAVOUR DRYERS,
PARKANDILLICK, ST DENNIS,
PL26 8DY

Client Ref: 24123
Report Ref: HMD-411-LDN-ZUO-JQO-IV6
Grid Ref: 194762, 57070

Map Name: National Grid
Map date: **2024**
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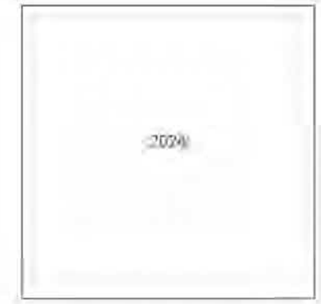

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ENVIRONMENTAL & GEOLOGICAL INFORMATION

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

FORMER LINHAY BUILDING, TRELAVOUR DRYERS, PARKANDILLICK, ST DENNIS, PL26 8DY

Order Details

Date: 26/01/2024

Your ref: 24123

Our Ref: HMD-411-5QH-WGZ-ME9-DVZ

Site Details

Location: 194757 057084

Area: 0.2 ha

Authority: Cornwall Council (Unitary) ↗

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

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	9	10	38	58	-
20 >	1.2 >	Historical tanks >	1	7	19	0	-
21 >	1.3 >	Historical energy features >	0	0	1	1	-
22	1.4	Historical petrol stations	0	0	0	0	-
22 >	1.5 >	Historical garages >	0	0	0	3	-
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 >	9	10	41	59	-
28 >	2.2 >	Historical tanks >	1	10	29	0	-
30 >	2.3 >	Historical energy features >	0	0	2	2	-
30	2.4	Historical petrol stations	0	0	0	0	-
30 >	2.5 >	Historical garages >	0	0	0	5	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
32	3.1	Active or recent landfill	0	0	0	0	-
32	3.2	Historical landfill (BGS records)	0	0	0	0	-
33	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
33	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
33 >	3.5 >	Historical waste sites >	0	0	1	0	-
34	3.6	Licensed waste sites	0	0	0	0	-
34 >	3.7 >	Waste exemptions >	0	0	3	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
35 >	4.1 >	Recent industrial land uses >	1	2	27	-	-
37 >	4.2 >	Current or recent petrol stations >	0	0	0	2	-
37	4.3	Electricity cables	0	0	0	0	-
37	4.4	Gas pipelines	0	0	0	0	-
37	4.5	Sites determined as Contaminated Land	0	0	0	0	-

38	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
38	4.7	Regulated explosive sites	0	0	0	0	-
38	4.8	Hazardous substance storage/usage	0	0	0	0	-
38	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
38 >	4.10 >	Licensed industrial activities (Part A(1)) >	0	0	5	3	-
40 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	2	0	2	1	-
41 >	4.12 >	Radioactive Substance Authorisations >	0	0	1	0	-
41 >	4.13 >	Licensed Discharges to controlled waters >	0	0	1	4	-
42	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
42	4.15	Pollutant release to public sewer	0	0	0	0	-
42	4.16	List 1 Dangerous Substances	0	0	0	0	-
43 >	4.17 >	List 2 Dangerous Substances >	0	1	0	0	-
43 >	4.18 >	Pollution Incidents (EA/NRW) >	0	1	1	3	-
44 >	4.19 >	Pollution inventory substances >	0	0	8	0	-
47 >	4.20 >	Pollution inventory waste transfers >	0	0	1	0	-
48	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
49 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
50 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
52 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
53	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
53	5.5	Groundwater vulnerability- local information	None (within 0m)				
54 >	5.6 >	Groundwater abstractions >	0	0	1	1	21
59 >	5.7 >	Surface water abstractions >	0	0	0	0	1
60	5.8	Potable abstractions	0	0	0	0	0
60	5.9	Source Protection Zones	0	0	0	0	-
60	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
61 >	6.1 >	Water Network (OS MasterMap) >	0	1	3	-	-

62 >	6.2 >	Surface water features >	0	0	3	-	-
62 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
63 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
63 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
64	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
64	7.2	Historical Flood Events	0	0	0	-	-
64	7.3	Flood Defences	0	0	0	-	-
65	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
65	7.5	Flood Storage Areas	0	0	0	-	-
66	7.6	Flood Zone 2	None (within 50m)				
66	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding >	
67 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)

Page	Section	Groundwater flooding >	
69 >	9.1 >	Groundwater flooding >	Negligible (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	1	0	7
71	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
71 >	10.3 >	Special Areas of Conservation (SAC) >	0	0	0	1	7
73	10.4	Special Protection Areas (SPA)	0	0	0	0	0
73 >	10.5 >	National Nature Reserves (NNR) >	0	0	0	0	8
73	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
74	10.7	Designated Ancient Woodland	0	0	0	0	0
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
75	10.12	Proposed Ramsar sites	0	0	0	0	0

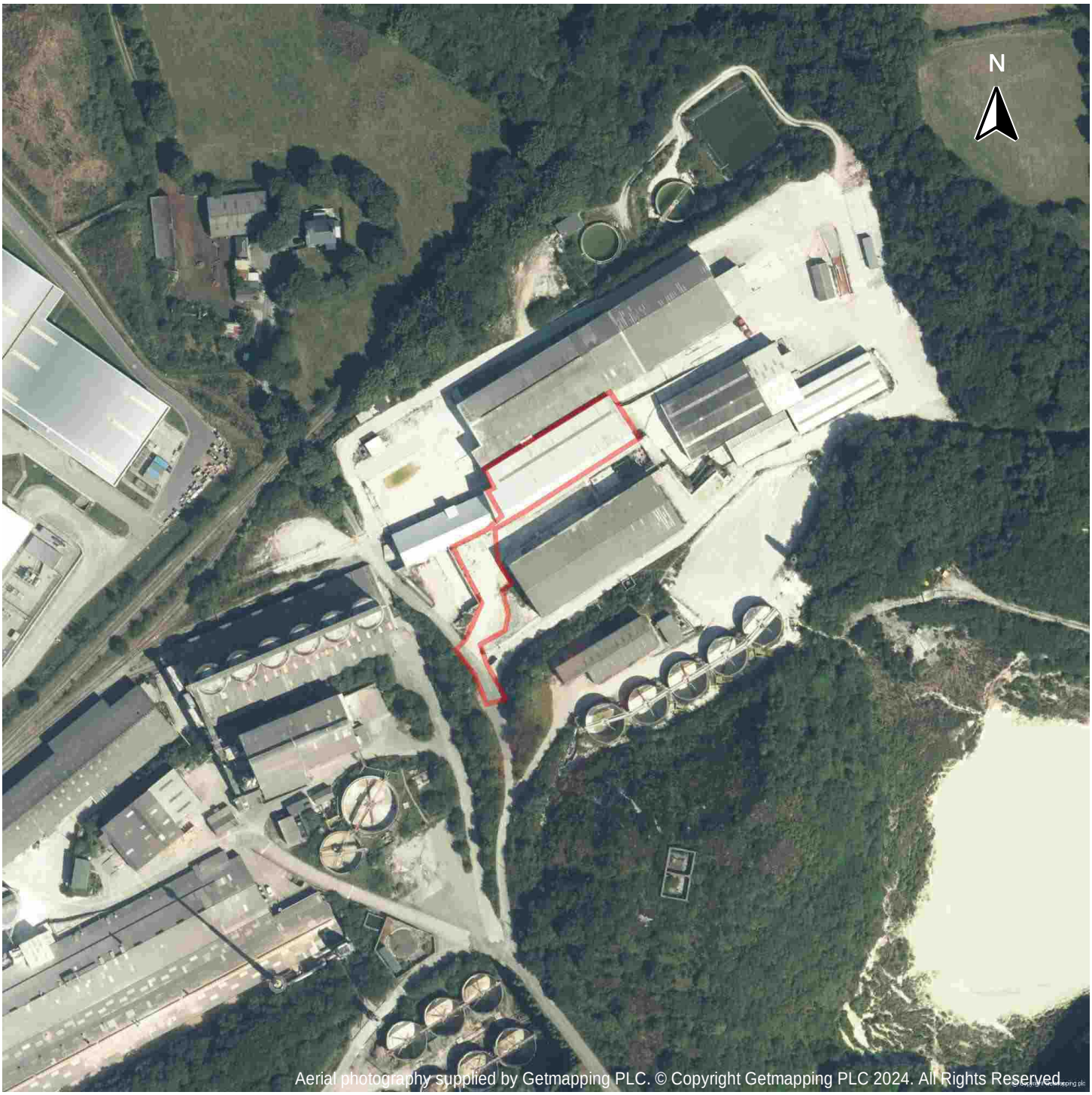
75	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
75	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
75	10.15	Nitrate Sensitive Areas	0	0	0	0	0
76 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	3
77 >	10.17 >	SSSI Impact Risk Zones >	2	-	-	-	-
79 >	10.18 >	SSSI Units >	0	0	1	0	14
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
90	11.1	World Heritage Sites	0	0	0	-	-
91	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
91	11.3	National Parks	0	0	0	-	-
91 >	11.4 >	Listed Buildings >	0	0	1	-	-
92	11.5	Conservation Areas	0	0	0	-	-
92	11.6	Scheduled Ancient Monuments	0	0	0	-	-
92	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	12.1 >	Agricultural Land Classification >	Grade 4 (within 250m)				
94 >	12.2 >	Open Access Land >	0	0	2	-	-
94 >	12.3 >	Tree Felling Licences >	0	0	1	-	-
95 >	12.4 >	Environmental Stewardship Schemes >	0	0	1	-	-
95	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
96 >	13.1 >	Priority Habitat Inventory >	0	0	13	-	-
97 >	13.2 >	Habitat Networks >	0	1	0	-	-
97 >	13.3 >	Open Mosaic Habitat >	0	1	0	-	-
98	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
99 >	14.1 >	10k Availability >	Identified (within 500m)				
100	14.2	Artificial and made ground (10k)	0	0	0	0	-
101	14.3	Superficial geology (10k)	0	0	0	0	-

101	14.4	Landslip (10k)	0	0	0	0	-
102	14.5	Bedrock geology (10k)	0	0	0	0	-
102	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
103 >	15.1 >	50k Availability >	Identified (within 500m)				
104	15.2	Artificial and made ground (50k)	0	0	0	0	-
104	15.3	Artificial ground permeability (50k)	0	0	-	-	-
105 >	15.4 >	Superficial geology (50k) >	0	0	0	1	-
106	15.5	Superficial permeability (50k)	None (within 50m)				
106	15.6	Landslip (50k)	0	0	0	0	-
106	15.7	Landslip permeability (50k)	None (within 50m)				
107 >	15.8 >	Bedrock geology (50k) >	1	1	3	1	-
108 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
108	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
109	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
110 >	17.1 >	Shrink swell clays >	Negligible (within 50m)				
111 >	17.2 >	Running sands >	Negligible (within 50m)				
112 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
113 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
114 >	17.5 >	Landslides >	Very low (within 50m)				
115 >	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
117 >	18.1 >	BritPits >	0	0	1	5	-
119 >	18.2 >	Surface ground workings >	4	8	29	-	-
120 >	18.3 >	Underground workings >	0	0	1	0	10
121	18.4	Underground mining extents	0	0	0	0	-
121 >	18.5 >	Historical Mineral Planning Areas >	0	0	0	2	-

122 >	18.6 >	Non-coal mining >	1	0	1	0	0
122	18.7	JPB mining areas	None (within 0m)				
122	18.8	The Coal Authority non-coal mining	0	0	0	0	-
123 >	18.9 >	Researched mining >	0	1	1	4	-
123	18.10	Mining record office plans	0	0	0	0	-
123	18.11	BGS mine plans	0	0	0	0	-
124	18.12	Coal mining	None (within 0m)				
124	18.13	Brine areas	None (within 0m)				
124	18.14	Gypsum areas	None (within 0m)				
124 >	18.15 >	Tin mining >	Identified (within 0m)				
124 >	18.16 >	Clay mining >	Identified (within 0m)				
Page	Section	Ground cavities and sinkholes >	On site	0-50m	50-250m	250-500m	500-2000m
126	19.1	Natural cavities	0	0	0	0	-
127 >	19.2 >	Mining cavities >	0	0	0	0	3
127	19.3	Reported recent incidents	0	0	0	0	-
127	19.4	Historical incidents	0	0	0	0	-
128	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
129 >	20.1 >	Radon >	Greater than 30% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
131 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	3	-	-	-
131	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
132	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
133	22.1	Underground railways (London)	0	0	0	-	-
133	22.2	Underground railways (Non-London)	0	0	0	-	-
134	22.3	Railway tunnels	0	0	0	-	-
134 >	22.4 >	Historical railway and tunnel features >	9	0	7	-	-
135	22.5	Royal Mail tunnels	0	0	0	-	-

135 >	22.6 >	Historical railways >	0	0	2	-	-
135 >	22.7 >	Railways >	0	1	13	-	-
136	22.8	Crossrail 1	0	0	0	0	-
136	22.9	Crossrail 2	0	0	0	0	-
136	22.10	HS2	0	0	0	0	-

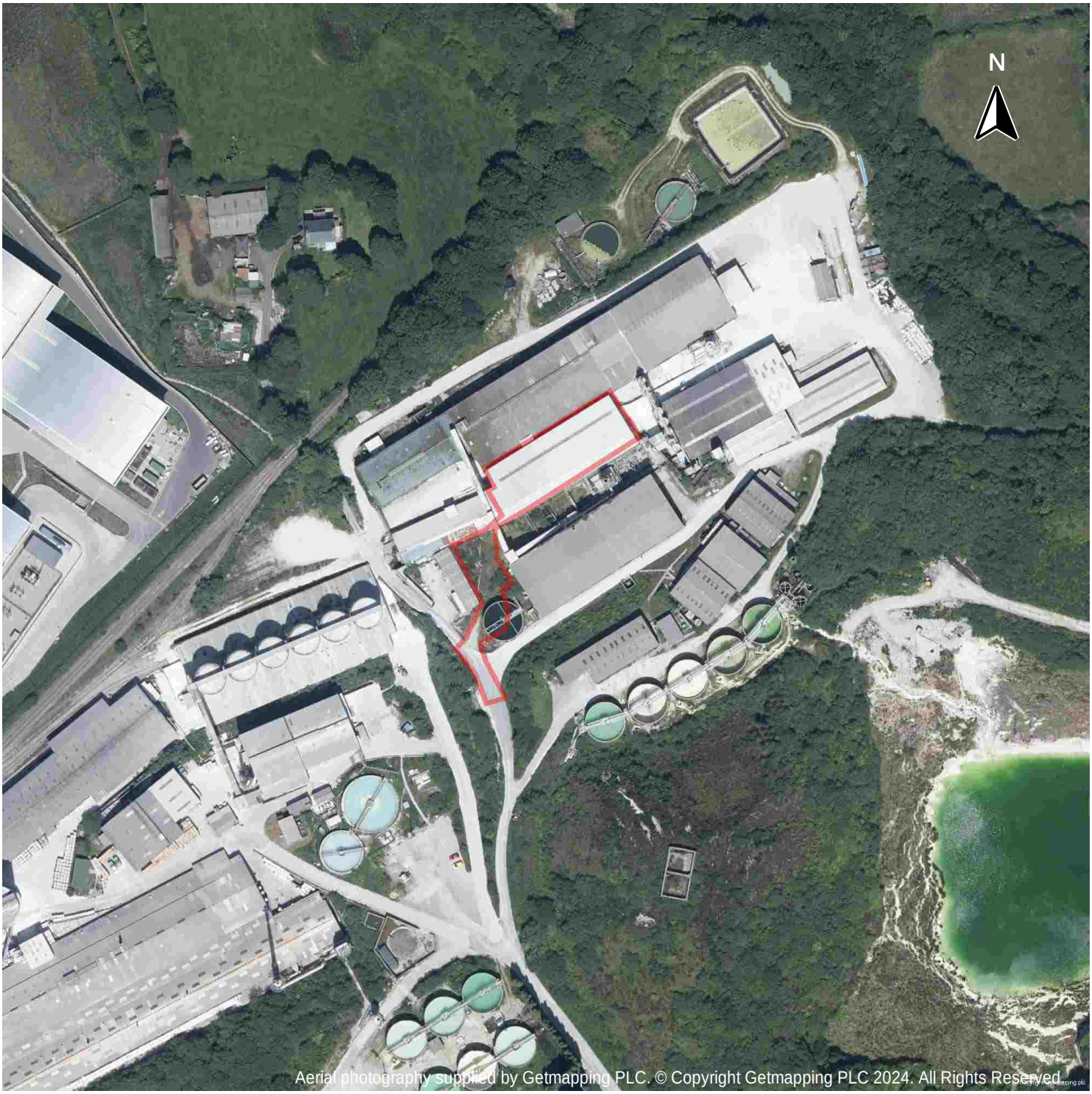
Recent aerial photograph



Capture Date: 06/08/2022

Site Area: 0.2ha

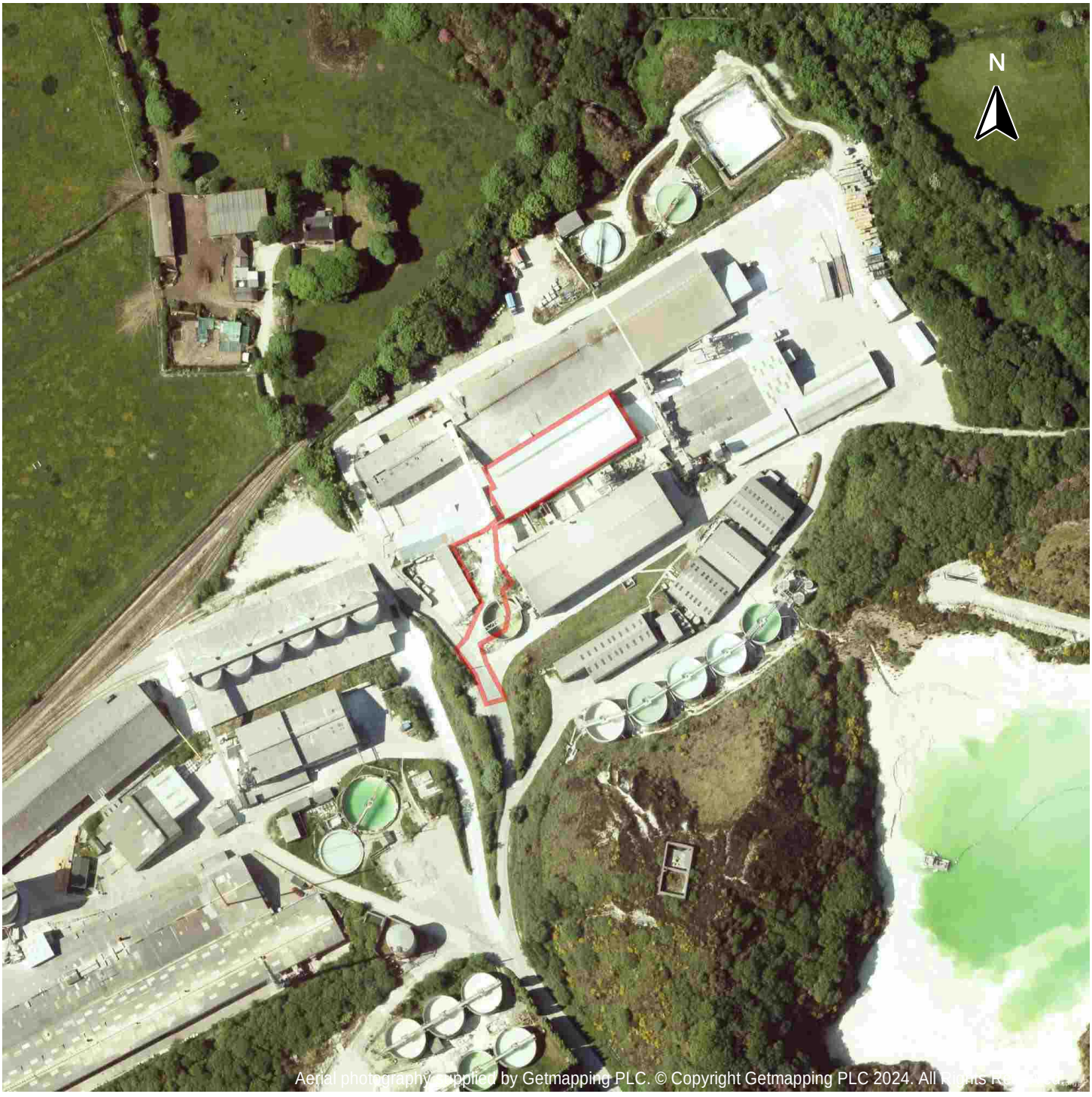
Recent site history - 2019 aerial photograph



Capture Date: 22/06/2019

Site Area: 0.2ha

Recent site history - 2013 aerial photograph



Capture Date: 08/06/2013

Site Area: 0.2ha

Recent site history - 2006 aerial photograph

Capture Date: 30/05/2006

Site Area: 0.2ha

Recent site history - 2001 aerial photograph

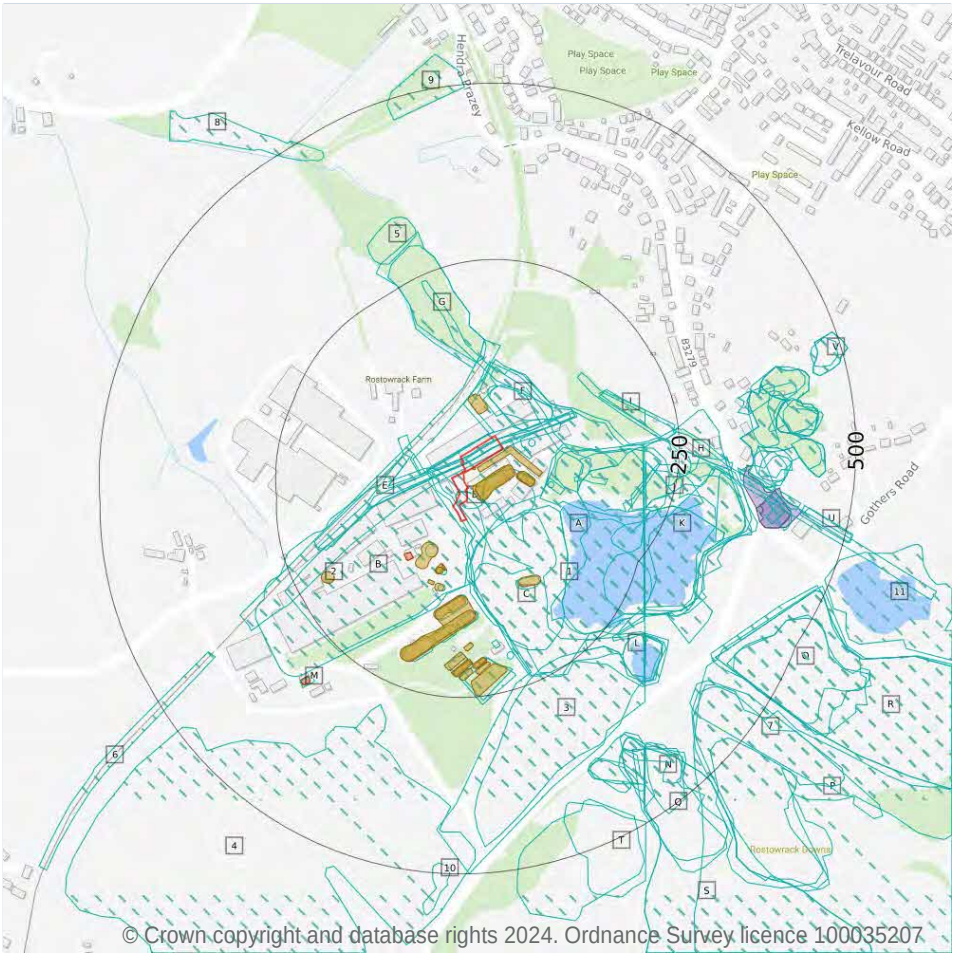
Capture Date: 07/05/2001

Site Area: 0.2ha

OS MasterMap site plan

Site Area: 0.2ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	115

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	On site	Clay Works	1879	19338

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Disused China Clay Works**	**1908**	**22484**
B	**On site**	**China Clay Works**	**1977**	**19358**
C	**On site**	**Unspecified Heaps**	**1908**	**31714**
D	**On site**	**Unspecified Heap**	**1958**	**35661**
D	**On site**	**Railway Sidings**	**1879**	**37857**
D	**On site**	**Railway Sidings**	**1958**	**56670**
E	**On site**	**Railway Sidings**	**1908**	**39934**
E	**On site**	**Railway Sidings**	**1977**	**44073**
B	6m S	Unspecified Works	1958	23454
D	21m S	Unspecified Kiln	1977	36852
F	28m NE	Unspecified Disused Tip	1977	22903
F	29m NE	Unspecified Ground Workings	1908	20709
F	31m NE	Unspecified Heap	1958	35663
1	34m S	Spoil Heaps	1958	29950
C	35m S	Unspecified Disused Tip	1977	22855
D	37m NE	Chimney	1977	25091
E	40m W	Cuttings	1879	22361
D	42m E	Unspecified Tanks	1977	27969
B	51m SW	Unspecified Tanks	1977	27970
E	71m W	Cuttings	1879	22362
B	71m S	Unspecified Tanks	1977	27973
D	76m E	Unspecified Disused Tip	1977	22856
D	77m E	Engine House	1908	31202
D	79m E	Refuse Heaps	1908	37086
D	81m E	Chimney	1977	25090
B	94m S	Unspecified Tanks	1977	27974
G	101m N	Unspecified Disused Tip	1977	22899
B	105m S	Unspecified Tanks	1977	27975

ID	Location	Land use	Dates present	Group ID
G	107m N	Unspecified Heap	1908 - 1958	51378
D	109m E	Clay Pit	1879	25239
C	112m S	Unspecified Tanks	1879	27971
A	119m SE	Unspecified Disused Pit	1977	32164
A	120m E	Clay Pits	1908	25339
B	128m S	Unspecified Tanks	1977	27972
H	143m NE	Cuttings	1879	45339
B	148m S	Unspecified Tanks	1977	27976
I	155m NE	Cuttings	1958	37424
I	157m NE	Cuttings	1908	38035
B	172m S	Unspecified Tanks	1977	27978
B	175m S	Unspecified Disused Shaft	1977	30660
B	188m S	Unspecified Tanks	1958 - 1977	52238
J	194m E	Railway Sidings	1879	36771
B	195m S	Unspecified Disused Tanks	1977	23561
B	197m S	Chimney	1977	25099
B	198m S	Unspecified Tanks	1958	27979
K	198m E	Disused Clay Pits	1958	36632
K	198m E	Clay Pit	1879	25240
J	203m E	Unspecified Disused Tip	1991	22854
J	203m E	Unspecified Disused Tips	1978	28215
K	224m E	Unspecified Disused Pit	1991	38310
K	224m E	Unspecified Disused Pit	1978	44013
J	232m E	Cuttings	1908 - 1958	56967
3	235m S	Unspecified Disused Tip	1977	22852
L	240m SE	Unspecified Disused Pit	1977	32161
K	241m E	Old Clay Pits	1908	32069
J	243m E	Unspecified Pit	1978	34185

ID	Location	Land use	Dates present	Group ID
4	284m S	Unspecified Disused Tip	1977	50084
5	286m NW	Unspecified Heap	1958	35664
L	287m SE	Unspecified Pit	1908	34183
L	299m SE	Disused Clay Pits	1958	36631
L	303m SE	Unspecified Disused Pit	1991	45271
L	303m SE	Unspecified Disused Pit	1978	57532
M	305m SW	Electricity Substation	1977	37180
H	309m E	Unspecified Pit	1958	34187
H	334m E	Cuttings	1908 - 1958	49961
H	337m E	Unspecified Old Quarry	1879	28923
H	337m E	Unspecified Disused Pit	1978	32173
H	337m E	Unspecified Disused Tip	1978	43743
H	337m E	Unspecified Disused Tip	1991	50755
H	338m E	Old Clay Pit	1879	25289
H	352m E	Unspecified Heaps	1958	31716
H	356m E	Refuse Heap	1958	21776
H	364m E	Unspecified Quarry	1991	20045
H	372m E	Unspecified Quarry	1908	20044
N	376m SE	Unspecified Old Quarries	1908	37243
N	376m SE	Unspecified Disused Tips	1977	28211
H	377m E	Unspecified Disused Quarries	1991	48598
H	377m E	Unspecified Disused Quarries	1978	60546
H	377m E	Old Clay Pit	1879	25291
H	379m E	Garage	1991	40054
N	384m SE	Unspecified Quarry	1879	50399
N	385m SE	Disused Clay Pit	1958	29110
H	387m E	Garage	1978	54187
N	389m S	Unspecified Heap	1879	35662

ID	Location	Land use	Dates present	Group ID
H	393m E	Disused Clay Pits	1958	36637
N	394m SE	Unspecified Quarry	1977	53748
O	395m SE	Refuse Heap	1958	59918
6	398m SW	Cuttings	1879	22360
P	399m SE	China Clay Works	1908	38620
H	399m E	Old Clay Pits	1908	32068
7	401m SE	Unspecified Heap	1958	35763
Q	402m SE	Unspecified Pit	1958	34267
R	403m SE	Disused China Clay Works	1991	42975
R	403m SE	Disused China Clay Works	1978	57024
Q	408m SE	Unspecified Disused Quarry	1978	19179
H	409m E	Refuse Heap	1958	21778
P	410m SE	Unspecified Disused Quarry	1991	19180
S	410m SE	Clay Pit	1991	47490
S	410m SE	China Clay Works	1991	60688
P	412m SE	Unspecified Disused Tip	1978	22851
O	422m SE	Unspecified Disused Tip	1978	39206
O	425m SE	Unspecified Disused Tip	1991	40564
T	426m S	Spoil Heaps	1958	29951
U	432m E	Cuttings	1958	56819
T	433m S	Unspecified Disused Tips	1977	28212
U	434m E	Cuttings	1908	55487
V	453m E	Unspecified Disused Tip	1991	38130
V	453m E	Unspecified Disused Tip	1978	46876
V	456m E	Unspecified Heap	1958	35755
8	462m NW	Clay Works	1879	19333
9	470m N	Unspecified Disused Tip	1977	22902
P	474m SE	Refuse Heaps	1958	37093

ID	Location	Land use	Dates present	Group ID
10	485m S	Unspecified Old Quarries	1879	39576
11	492m E	Disused Clay Pits	1958	36638

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	27

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

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

ID	Location	Land use	Dates present	Group ID
D	**On site**	**Unspecified Tank**	**1881**	**4017**
D	3m E	Tanks	1972	5102
D	6m S	Tanks	1993	5990
D	10m S	Tanks	1972	5971
D	37m N	Tanks	1993	6354
D	40m E	Tanks	1993	6413
D	41m E	Tanks	1972	5635
B	50m SW	Tanks	1972 - 1992	6846
B	66m S	Tanks	1972	5391
B	66m S	Tanks	1992	5602
B	72m S	Tanks	1972	6503
B	93m S	Unspecified Tank	1972 - 1992	5466
B	94m S	Unspecified Tank	1972 - 1992	5575
B	105m S	Tanks	1992	6460
B	106m S	Tanks	1972	6199
C	113m SE	Unspecified Tanks	1907	5921

ID	Location	Land use	Dates present	Group ID
B	127m S	Tanks	1992	6567
B	173m S	Unspecified Tank	1972 - 1992	6617
B	186m S	Unspecified Tank	1972 - 1992	6496
2	195m SW	Unspecified Tank	1972 - 1992	6554
B	195m S	Tanks	1972	5097
B	196m S	Tanks	1992	5096
B	196m S	Unspecified Tank	1992	4018
B	196m S	Unspecified Tank	1972	4020
B	203m S	Unspecified Tank	1972 - 1992	6096
B	207m S	Disused Tanks	1972 - 1992	5512
B	210m S	Tanks	1972 - 1992	6318

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	2

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

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

ID	Location	Land use	Dates present	Group ID
B	84m SW	Electricity Substation	1972 - 1992	2583
M	308m SW	Electricity Substation	1972 - 1992	1427

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	3

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

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

ID	Location	Land use	Dates present	Group ID
H	343m E	Garage	1972	464
H	369m E	Garage	1995 - 1996	733
H	373m E	Garage	1988 - 1993	847

This data is sourced from Ordnance Survey / Groundsure.

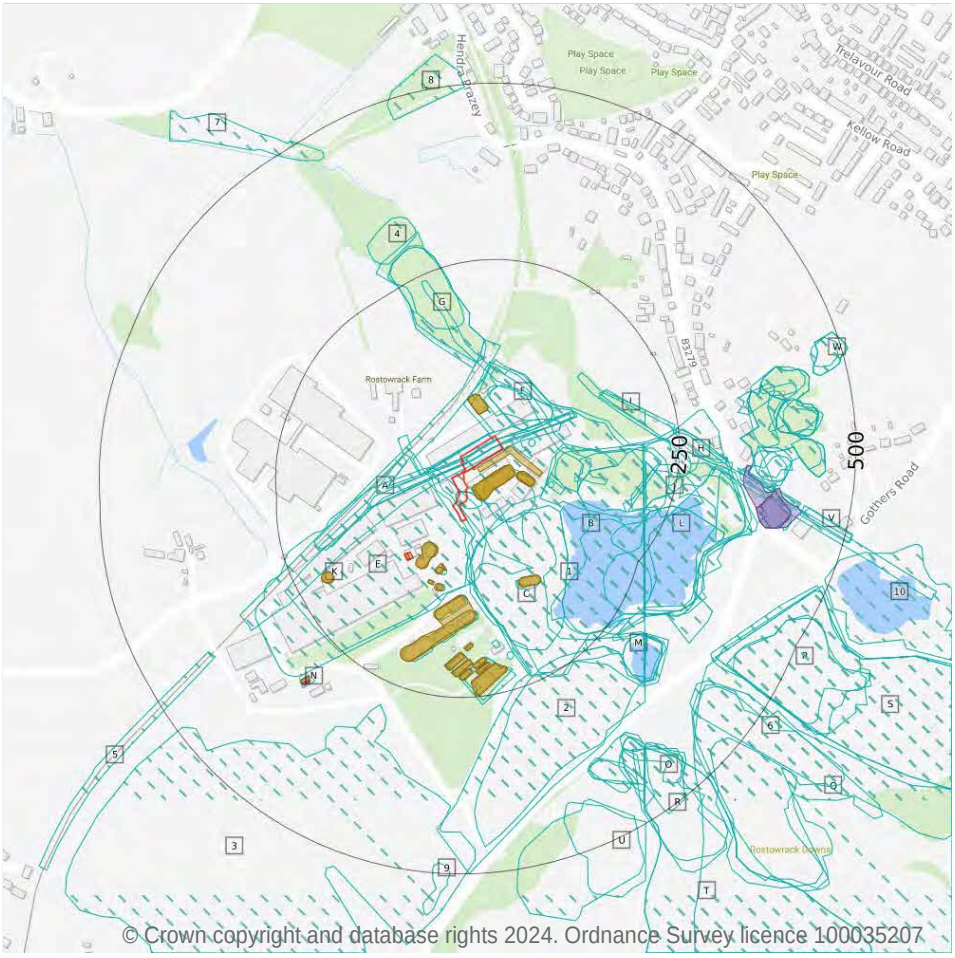
1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	119

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	On site	Railway Sidings	1908	39934
A	On site	Railway Sidings	1977	44073
B	On site	Disused China Clay Works	1908	22484

ID	Location	Land Use	Date	Group ID
B	**On site**	**Clay Works**	**1879**	**19338**
C	**On site**	**Unspecified Heaps**	**1908**	**31714**
D	**On site**	**Railway Sidings**	**1879**	**37857**
D	**On site**	**Railway Sidings**	**1958**	**56670**
D	**On site**	**Unspecified Heap**	**1958**	**35661**
E	**On site**	**China Clay Works**	**1977**	**19358**
E	6m S	Unspecified Works	1958	23454
D	21m S	Unspecified Kiln	1977	36852
F	28m NE	Unspecified Disused Tip	1977	22903
F	29m NE	Unspecified Ground Workings	1908	20709
F	31m NE	Unspecified Heap	1958	35663
1	34m S	Spoil Heaps	1958	29950
C	35m S	Unspecified Disused Tip	1977	22855
D	37m NE	Chimney	1977	25091
A	40m W	Cuttings	1879	22361
D	42m E	Unspecified Tanks	1977	27969
E	51m SW	Unspecified Tanks	1977	27970
A	71m W	Cuttings	1879	22362
E	71m S	Unspecified Tanks	1977	27973
D	76m E	Unspecified Disused Tip	1977	22856
D	77m E	Engine House	1908	31202
D	79m E	Refuse Heaps	1908	37086
D	81m E	Chimney	1977	25090
E	94m S	Unspecified Tanks	1977	27974
G	101m N	Unspecified Disused Tip	1977	22899
E	105m S	Unspecified Tanks	1977	27975
G	107m N	Unspecified Heap	1958	51378
D	109m E	Clay Pit	1879	25239

ID	Location	Land Use	Date	Group ID
C	112m S	Unspecified Tanks	1879	27971
B	119m SE	Unspecified Disused Pit	1977	32164
B	120m E	Clay Pits	1908	25339
E	128m S	Unspecified Tanks	1977	27972
H	143m NE	Cuttings	1879	45339
E	148m S	Unspecified Tanks	1977	27976
I	155m NE	Cuttings	1958	37424
I	157m NE	Cuttings	1908	38035
G	163m N	Unspecified Heap	1908	51378
E	172m S	Unspecified Tanks	1977	27978
E	175m S	Unspecified Disused Shaft	1977	30660
E	188m S	Unspecified Tanks	1977	52238
E	192m S	Unspecified Tanks	1958	52238
J	194m E	Railway Sidings	1879	36771
E	195m S	Unspecified Disused Tanks	1977	23561
E	197m S	Chimney	1977	25099
E	198m S	Unspecified Tanks	1958	27979
L	198m E	Disused Clay Pits	1958	36632
L	198m E	Clay Pit	1879	25240
J	203m E	Unspecified Disused Tip	1991	22854
J	203m E	Unspecified Disused Tips	1978	28215
L	224m E	Unspecified Disused Pit	1991	38310
L	224m E	Unspecified Disused Pit	1978	44013
J	232m E	Cuttings	1908	56967
2	235m S	Unspecified Disused Tip	1977	22852
M	240m SE	Unspecified Disused Pit	1977	32161
L	241m E	Old Clay Pits	1908	32069
J	242m E	Cuttings	1958	56967

ID	Location	Land Use	Date	Group ID
J	243m E	Unspecified Pit	1978	34185
3	284m S	Unspecified Disused Tip	1977	50084
4	286m NW	Unspecified Heap	1958	35664
M	287m SE	Unspecified Pit	1908	34183
M	299m SE	Disused Clay Pits	1958	36631
M	303m SE	Unspecified Disused Pit	1991	45271
M	303m SE	Unspecified Disused Pit	1978	57532
N	305m SW	Electricity Substation	1977	37180
H	309m E	Unspecified Pit	1958	34187
H	334m E	Cuttings	1958	49961
H	337m E	Unspecified Old Quarry	1879	28923
H	337m E	Unspecified Disused Tip	1991	50755
H	337m E	Unspecified Disused Pit	1978	32173
H	337m E	Unspecified Disused Tip	1978	43743
H	338m E	Old Clay Pit	1879	25289
H	343m E	Cuttings	1908	49961
H	352m E	Unspecified Heaps	1958	31716
H	356m E	Refuse Heap	1958	21776
H	364m E	Unspecified Quarry	1991	20045
H	372m E	Unspecified Quarry	1908	20044
O	376m SE	Unspecified Old Quarries	1908	37243
O	376m SE	Unspecified Disused Tips	1977	28211
H	377m E	Unspecified Disused Quarries	1991	48598
H	377m E	Unspecified Disused Quarries	1978	60546
H	377m E	Old Clay Pit	1879	25291
H	379m E	Garage	1991	40054
O	384m SE	Unspecified Quarry	1879	50399
O	385m SE	Disused Clay Pit	1958	29110

ID	Location	Land Use	Date	Group ID
H	387m E	Garage	1978	54187
O	389m S	Unspecified Heap	1879	35662
H	393m E	Disused Clay Pits	1958	36637
O	394m SE	Unspecified Quarry	1977	53748
P	395m SE	Refuse Heap	1958	59918
5	398m SW	Cuttings	1879	22360
Q	399m SE	China Clay Works	1908	38620
H	399m E	Old Clay Pits	1908	32068
6	401m SE	Unspecified Heap	1958	35763
R	402m SE	Unspecified Pit	1958	34267
S	403m SE	Disused China Clay Works	1991	42975
S	403m SE	Disused China Clay Works	1978	57024
R	408m SE	Unspecified Disused Quarry	1978	19179
H	409m E	Refuse Heap	1958	21778
Q	410m SE	Unspecified Disused Quarry	1991	19180
T	410m SE	Clay Pit	1991	47490
T	410m SE	China Clay Works	1991	60688
Q	412m SE	Unspecified Disused Tip	1978	22851
P	422m SE	Unspecified Disused Tip	1978	39206
P	425m SE	Unspecified Disused Tip	1991	40564
U	426m S	Spoil Heaps	1958	29951
V	432m E	Cuttings	1958	56819
U	433m S	Unspecified Disused Tips	1977	28212
V	434m E	Cuttings	1908	55487
W	453m E	Unspecified Disused Tip	1991	38130
W	453m E	Unspecified Disused Tip	1978	46876
W	456m E	Unspecified Heap	1958	35755
7	462m NW	Clay Works	1879	19333

ID	Location	Land Use	Date	Group ID
8	470m N	Unspecified Disused Tip	1977	22902
Q	474m SE	Refuse Heaps	1958	37093
9	485m S	Unspecified Old Quarries	1879	39576
10	492m E	Disused Clay Pits	1958	36638

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	40

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
D	**On site**	**Unspecified Tank**	**1881**	**4017**
D	3m E	Tanks	1972	5102
D	6m S	Tanks	1993	5990
D	6m S	Tanks	1993	5990
D	10m S	Tanks	1972	5971
D	37m N	Tanks	1993	6354
D	37m N	Tanks	1993	6354
D	40m E	Tanks	1993	6413
D	40m E	Tanks	1993	6413
D	41m E	Tanks	1972	5635
E	50m SW	Tanks	1972	6846
E	51m SW	Tanks	1992	6846
E	66m S	Tanks	1972	5391
E	66m S	Tanks	1992	5602
E	72m S	Tanks	1972	6503
E	93m S	Unspecified Tank	1992	5466

ID	Location	Land Use	Date	Group ID
E	94m S	Unspecified Tank	1972	5466
E	94m S	Unspecified Tank	1972	5575
E	94m S	Unspecified Tank	1992	5575
E	105m S	Tanks	1992	6460
E	106m S	Tanks	1972	6199
C	113m SE	Unspecified Tanks	1907	5921
C	113m SE	Unspecified Tanks	1907	5921
E	127m S	Tanks	1992	6567
E	173m S	Unspecified Tank	1992	6617
E	173m S	Unspecified Tank	1972	6617
E	186m S	Unspecified Tank	1992	6496
E	186m S	Unspecified Tank	1972	6496
K	195m SW	Unspecified Tank	1972	6554
E	195m S	Tanks	1972	5097
E	196m S	Tanks	1992	5096
E	196m S	Unspecified Tank	1992	4018
E	196m S	Unspecified Tank	1972	4020
K	197m SW	Unspecified Tank	1992	6554
E	203m S	Unspecified Tank	1992	6096
E	203m S	Unspecified Tank	1972	6096
E	207m S	Disused Tanks	1992	5512
E	207m S	Disused Tanks	1972	5512
E	210m S	Tanks	1972	6318
E	210m S	Tanks	1992	6318

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	4

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. 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
E	84m SW	Electricity Substation	1972	2583
E	89m SW	Electricity Substation	1992	2583
N	308m SW	Electricity Substation	1972	1427
N	312m SW	Electricity Substation	1992	1427

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	5

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

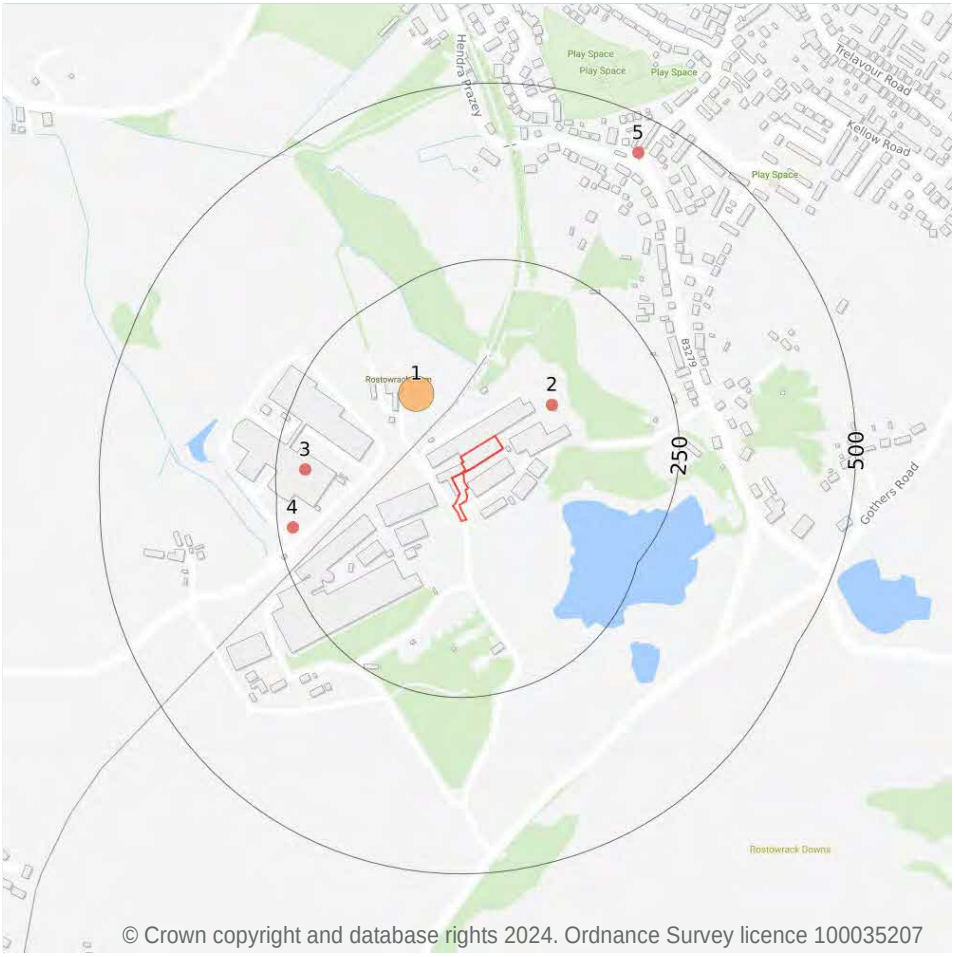
Features are displayed on the Past land use - un-grouped map on page 23 >

ID	Location	Land Use	Date	Group ID
H	343m E	Garage	1972	464
H	369m E	Garage	1996	733
H	369m E	Garage	1995	733
H	373m E	Garage	1993	847

ID	Location	Land Use	Date	Group ID
H	375m E	Garage	1988	847

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical 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 32 >

ID	Location	Address	Further Details	Date
1	84m NW	Site Address: Rostowrack Farm, St. Dennis, St. Austell, Cornwall, PL26 8DY	Type of Site: Energy From Waste Plant Planning application reference: PA13/04272 Description: Scheme comprises application for non material amendment to the appeal APP/D0840/A/09/2113075 decision in respect of the original application NR/08/00203/WAS - the construction of an energy from waste plant (known as the Cornwall Energy Recovery Centre (C ERC)) and ancillary development, including a bottom ash facility, bulking up facility, chimney stack, administrative and visitor facilities, gatehouse and weighbridge, vehicle refuelling area, cooling units, parking and circulation areas, security fencin g, drainage and landscape works, pipework for heat transfer to china clay dryers, and other ancillary works, together with a site access road, private haul road and bridged river crossing, junctions with the public highway, and diversion of footpath; nam ely amended earthworks profile to create landscape bunds. Data source: Historic Planning Application Data Type: Point	28/05/2013

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	4

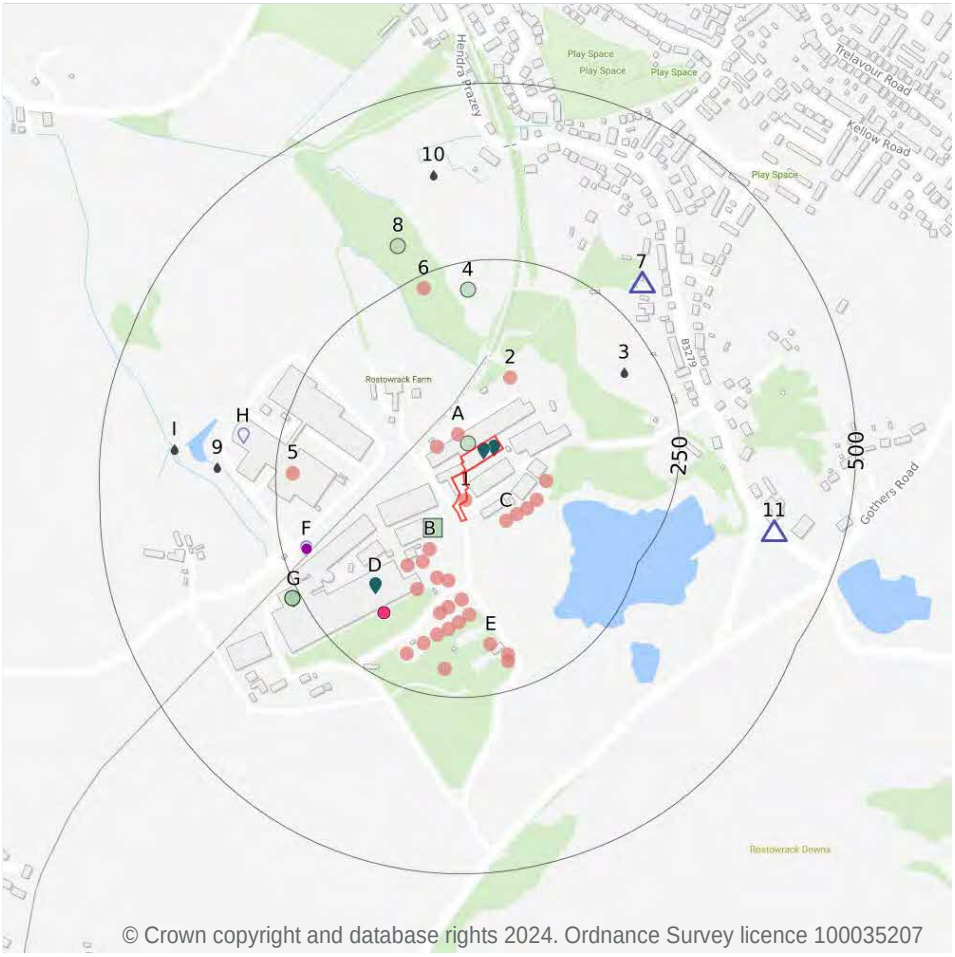
Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on page 32 >

ID	Location	Site	Reference	Category	Sub-Category	Description
2	91m NE	-	WEX358532	Using waste exemption	Not on a farm	Use of waste in construction
3	209m W	SITE OFFICE, ST. DENNIS, ST. AUSTELL, PL26 8DY	WEX022498	Using waste exemption	Not on a farm	Use of waste in construction
4	230m W	Rostowrack Farm ST. AUSTELL Cornwall PL26 8DY	EPR/WH0975GB/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction
5	449m NE	The Clays Practice Fore Street St. Austell Cornwall PL26 8AD	EPR/ME5841ZD/A001	Treating waste exemption	Non-Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

- Recent industrial land uses
- Current or recent petrol stations
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Radioactive Substance Authorisations
- Licensed Discharges to controlled waters
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)
- Pollution inventory substances
- Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m	30

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on page 35 >

ID	Location	Company	Address	Activity	Category
1	**On site**	**Tank**	**Cornwall, PL26**	**Tanks (Generic)**	**Industrial Features**
A	30m NW	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
A	36m NW	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
C	56m SE	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features

ID	Location	Company	Address	Activity	Category
B	60m SW	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
C	71m SE	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
C	77m E	Chimney	Cornwall, PL26	Chimneys	Industrial Features
B	80m SW	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
2	85m N	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
C	86m SE	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	87m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
C	87m SE	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	88m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	98m SW	Electricity Sub Station	Cornwall, PL26	Electrical Features	Infrastructure and Facilities
B	111m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	115m SW	Chimney	Cornwall, PL26	Chimneys	Industrial Features
B	123m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	133m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	134m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	144m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	154m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	164m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
E	180m S	Shaft	Cornwall, PL26	Unspecified Quarries Or Mines	Extractive Industries
B	182m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
E	200m S	Chimney	Cornwall, PL26	Chimneys	Industrial Features
B	203m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
E	209m S	Tank (Disused)	Cornwall, PL26	Tanks (Generic)	Industrial Features
B	211m S	Tank	Cornwall, PL26	Tanks (Generic)	Industrial Features
5	226m W	Cornwall ERC - EfW Incineration (BEIS)	Rostowrack Farm, St Dennis, -, Cornwall, PL26 8DY	Energy Production	Industrial Features

ID	Location	Company	Address	Activity	Category
6	232m N	Workings (Dis)	Cornwall, PL26	Unspecified Quarries Or Mines	Extractive Industries

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	2

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on page 35 >

ID	Location	Company	Address	LPG	Status
7	301m NE	OBSOLETE	Robates Road, St Dennis, St Austell, Cornwall, PL26 8DT	Not Applicable	Obsolete
11	401m E	GULF	Hendra Road, St Dennis, St Austell, Cornwall, PL26 8EQ	No	Open

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 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.

4.7 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.

4.8 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.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	8

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 35 >**

ID	Location	Details	
F	216m SW	Operator: SUEZ RECYCLING AND RECOVERY UK LTD Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: INCINERATION OF NON-HAZARDOUS WASTE 5.1 A(1) B) Permit Number: GP3433GH Original Permit Number: GP3433GH	EPR Reference: EPR/GP3433GH Issue Date: 15/03/2022 Effective Date: 15/03/2022 Last date noted as effective: 23/11/2023 Status: Effective
F	216m SW	Operator: SUEZ RECYCLING AND RECOVERY UK LTD Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: ASSOCIATED PROCESS Permit Number: GP3433GH Original Permit Number: GP3433GH	EPR Reference: EPR/GP3433GH Issue Date: 15/03/2022 Effective Date: 15/03/2022 Last date noted as effective: 23/11/2023 Status: Effective
F	216m SW	Operator: SUEZ RECYCLING AND RECOVERY UK LTD Installation Name: CORNWALL ENERGY RECOVERY CENTRE EPR/GP3433GH Process: ASSOCIATED PROCESS Permit Number: VP3835DH Original Permit Number: GP3433GH	EPR Reference: - Issue Date: 23/06/2016 Effective Date: 30/06/2016 Last date noted as effective: 28/09/2020 Status: EFFECTIVE
F	216m SW	Operator: SITA UK Limited Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: ASSOCIATED PROCESS Permit Number: JP3033VD Original Permit Number: GP3433GH	EPR Reference: - Issue Date: 12/02/2014 Effective Date: 12/02/2014 Last date noted as effective: 21/03/2023 Status: Superceded
F	216m SW	Operator: SITA UK Limited Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Permit Number: JP3033VD Original Permit Number: GP3433GH	EPR Reference: - Issue Date: 12/02/2014 Effective Date: 12/02/2014 Last date noted as effective: 21/03/2023 Status: Superceded
H	302m W	Operator: SUEZ Recycling and Recovery UK Ltd Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Permit Number: VP3835DH Original Permit Number: GP3433GH	EPR Reference: - Issue Date: 23/06/2016 Effective Date: 30/06/2016 Last date noted as effective: 21/03/2023 Status: Superceded

ID	Location	Details	
H	302m W	Operator: SITA UK Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: INCINERATION OF NON HAZARDOUS WASTE >1T/HR Permit Number: GP3433GH Original Permit Number: GP3433GH	EPR Reference: EA/EPR/GP3433GH/A001 Issue Date: 06/12/2010 Effective Date: 06/12/2010 Last date noted as effective: 21/03/2023 Status: Superceded
H	302m W	Operator: SITA UK Installation Name: Cornwall Energy Recovery Centre EPR/GP3433GH Process: INCINERATION OF NON HAZARDOUS WASTE >1T/HR Permit Number: GP3433GH Original Permit Number: GP3433GH	EPR Reference: EA/EPR/GP3433GH/A001 Issue Date: 06/12/2010 Effective Date: 06/12/2010 Last date noted as effective: 21/03/2023 Status: Superceded

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

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

Records within 500m **5**

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 35 >

ID	Location	Address	Details	
A	**On site**	**Goonvean Ltd, Trelavour Kilns, St Dennis, PL26 8DY**	**Process: Quarry Processes Status: Historical Permit Permit Type: Part B**	**Enforcement: No Enforcements Date of enforcement: No Enforcements Comment: No Enforcements**
A	**On site**	**Imerys Minerals Ltd., St. Dennis, Hendra, Cornwall, South West England, England, PL26 8EQ**	**Process: China Processes Status: Historic Permit Permit Type: Part B**	**Enforcement: No Enforcements Date of enforcement: No Enforcements Comment: No Enforcements**
D	153m SW	Imerys Minerals Ltd, Parkandillick Calciner, St Dennis, PL26 8DY	Process: Manufacture of Clay Status: Historic Permit Permit Type: Part A2	Enforcement: No Enforcements Date of enforcement: No Enforcements Comment: No Enforcements
D	153m SW	Imerys, Parkandillick Calciner, St Dennis, St. Austell, Cornwall, PL26 8DY	Process: China Processes Status: Current Permit Permit Type: Part A2	Enforcement: No Enforcements Date of enforcement: No Enforcements Comment: No Enforcements
G	261m SW	Ecci Parkandillick Calciner, St Dennis, St Austell	Process: Manufacture of Clay Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Date of enforcement: No Enforcements Comment: No Enforcements

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	1

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

Features are displayed on the Current industrial land use map on page 35 >

ID	Location	Address	Details	
D	169m SW	Western Area Dryers & Calciner, St Dennis, St Austell, PL26 8DY	Operator: Imerys Minerals Limited Type: - Permission number: JB3639DJ Date of approval: -	Effective from: 01/04/2018 Last date of update: 01/01/2020 Status: Issued

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

4.13 Licensed Discharges to controlled waters

Records within 500m	5

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 35 >

ID	Location	Address	Details	
3	202m NE	TRELAVOUR KILNS (C/P 7), ST DENNIS, CORNWALL	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: NRA-SW-6468 Permit Version: 1 Receiving Water: CARSELLA STREAM	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/03/1994 Effective Date: 11/03/1994 Revocation Date: -
9	332m W	CORNWALL ENERGY REC'Y CENTR, ST DENNIS, ST AUSTELL, CORNWALL, PL26 8DY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRBB3192AW Permit Version: 1 Receiving Water: BODELLA BROOK	Status: NEW ISSUED UNDER EPR 2010 Issue date: 26/09/2014 Effective Date: 26/09/2014 Revocation Date: -
10	379m N	ST DENNIS WASTEWATER TREATMENT WORK, ST DENNIS, ST AUSTELL, CORNWALL, PL26 8EG	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: NRA-SW-1544 Permit Version: 1 Receiving Water: TRIB OF RIVER FAL	Status: REVOKED - UNSPECIFIED Issue date: 30/10/1989 Effective Date: 30/10/1989 Revocation Date: 31/03/2001

ID	Location	Address	Details	
I	395m W	CORNWALL ENERGY REC'Y CENTR, ST DENNIS, ST AUSTELL, CORNWALL, PL26 8DY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRDB3893EE Permit Version: 1 Receiving Water: BODELLA BROOK	Status: NEW ISSUED UNDER EPR 2010 Issue date: 15/08/2016 Effective Date: 15/08/2016 Revocation Date: -
I	395m W	CORNWALL ENERGY REC'Y CENTR, ST DENNIS, ST AUSTELL, CORNWALL, PL26 8DY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRDB3893RM Permit Version: 1 Receiving Water: BODELLA BROOK	Status: NEW ISSUED UNDER EPR 2010 Issue date: 15/08/2016 Effective Date: 15/08/2016 Revocation Date: -

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

4.14 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.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 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.

4.17 List 2 Dangerous Substances

Records within 500m	1

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

Features are displayed on the Current industrial land use map on page 35 >

ID	Location	Name	Status	Receiving Water	Authorised Substances
B	41m SW	Trelavour Kilns 7	Active	St Dennis	Copper, pH, Zinc

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	5

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 35 >

ID	Location	Details	
A	10m N	Incident Date: 15/12/2001 Incident Identification: 48293 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4	210m N	Incident Date: 23/08/2022 Incident Identification: 2093411 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
G	262m SW	Incident Date: 08/01/2002 Incident Identification: 51092 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	262m SW	Incident Date: 28/09/2003 Incident Identification: 192938 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	302m N	Incident Date: 05/02/2002 Incident Identification: 56451 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	8

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

Features are displayed on the Current industrial land use map on page 35 >

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Chromium	10kg	35.79kg

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Carbon Dioxide From Qualifying Renewable Fuel Sources	0kg	101323000kg

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Nickel	10kg	22.95kg

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Chlorine and inorganic chlorine compounds - as HCl	10000kg	Below Reporting Threshold
Air	Fluorine and inorganic fluorine compounds - as HF	1000kg	Below Reporting Threshold
Air	Non-methane volatile organic compounds (NMVOCs)	10000kg	Below Reporting Threshold
Air	Benzo(k)fluoranthene	1kg	Below Reporting Threshold
Air	Dioxins and furans (PCDDs/PCDFs) - as ITEQ	1e-5kg	Below Reporting Threshold
Air	Polychlorinated biphenyls (PCBs) - as WHO TEQ	1e-5kg	Below Reporting Threshold
Air	Benzo(a)pyrene	1kg	Below Reporting Threshold
Air	Naphthalene	100kg	Below Reporting Threshold
Air	Particulate matter - total	10000kg	Below Reporting Threshold
Air	Benzo(b)fluoranthene	1kg	Below Reporting Threshold
Air	Dioxins and furans (PCDDs/PCDFs) - as WHO TEQ	1e-5kg	Below Reporting Threshold
Air	Sulphur oxides (SO2 and SO3) as SO2	100000kg	Below Reporting Threshold
Air	Ammonia	1000kg	Below Reporting Threshold
Air	Carbon monoxide	100000kg	Below Reporting Threshold
Air	Arsenic	1kg	Below Reporting Threshold
Air	Cadmium	1kg	Below Reporting Threshold
Air	Copper	10kg	Below Reporting Threshold
Air	Lead	100kg	Below Reporting Threshold

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Mercury	1kg	1.6kg

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Particulate matter - PM10	1000kg	1871kg
Air	Particulate matter - PM2.5	1000kg	1871kg

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Carbon dioxide	10000000kg	197025000kg

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector EfW, Sub-sector: EfW

Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	189100kg

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

4.20 Pollution inventory waste transfers

Records within 500m	1

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

Features are displayed on the Current industrial land use map on page 35 >

ID: F, Location: 217m SW, Permit: GP3433GH
Operator: Suez Recycling And Recovery Uk Ltd
Activity: THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.
Address: Cornwall Energy Recovery Centre St. Dennis Cornwall PL26 8DY
Sector: EfW, Sub-sector: EfW
Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R4	Recycling/reclamation of metals and metal compounds	4572	absolute value	19 01 02	ferrous materials removed from bottom ash	No
R5	Recycling/reclamation of other inorganic materials	180	absolute value	19 12 03	non-ferrous metal	No
R4	Recycling/reclamation of metals and metal compounds	4031	absolute value	19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	No
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage pending collection, on the site where it is produced)	11.34	absolute value	19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	No

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
R10	Land treatment resulting in benefit to agriculture or ecological improvement	47176	absolute value	19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	No
R4	Recycling/reclamation of metals and metal compounds	16.74	absolute value	20 01 40	metals	No
D5	Specially engineered landfill (eg placement into lined discrete cells which are capped and isolated from one another and the environment, etc)	5716	absolute value	19 01 07	solid wastes from gas treatment	Yes

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

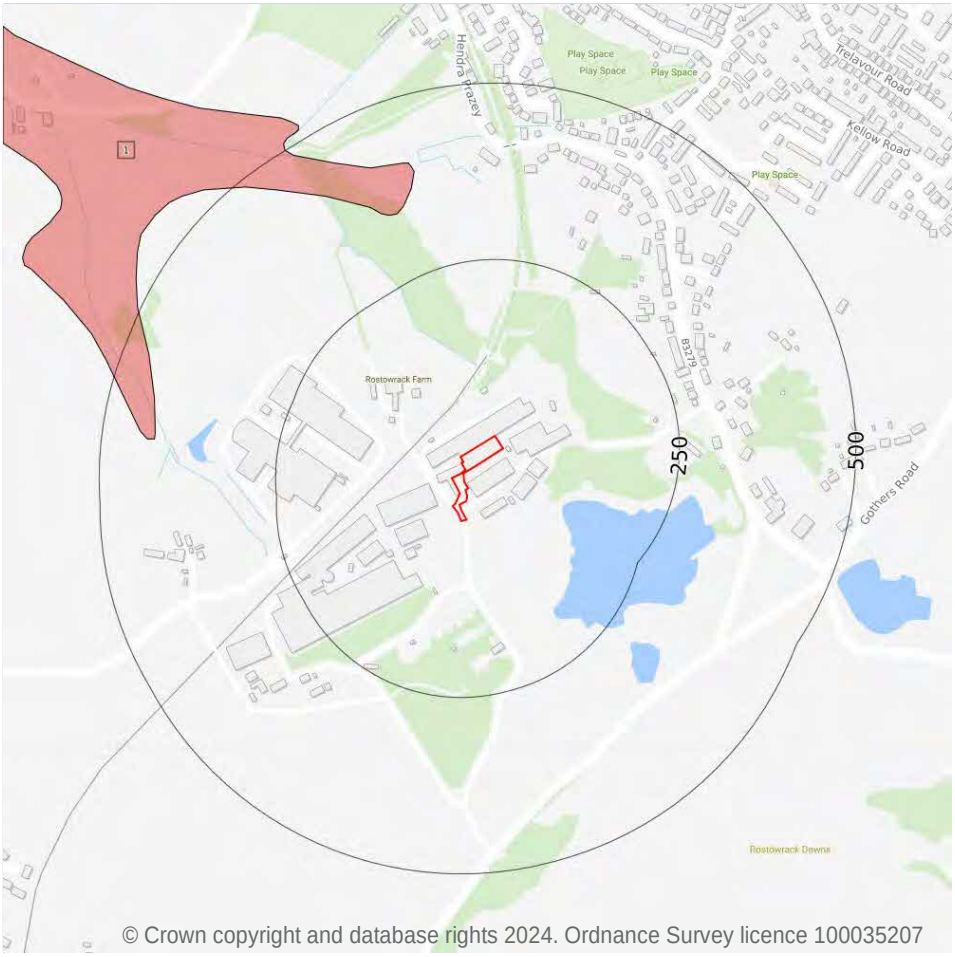
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	1

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 49 >

ID	Location	Designation	Description
1	344m 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.

Bedrock aquifer

Site Outline

Search buffers in metres (m)

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

5.2 Bedrock aquifer

Records within 500m	2

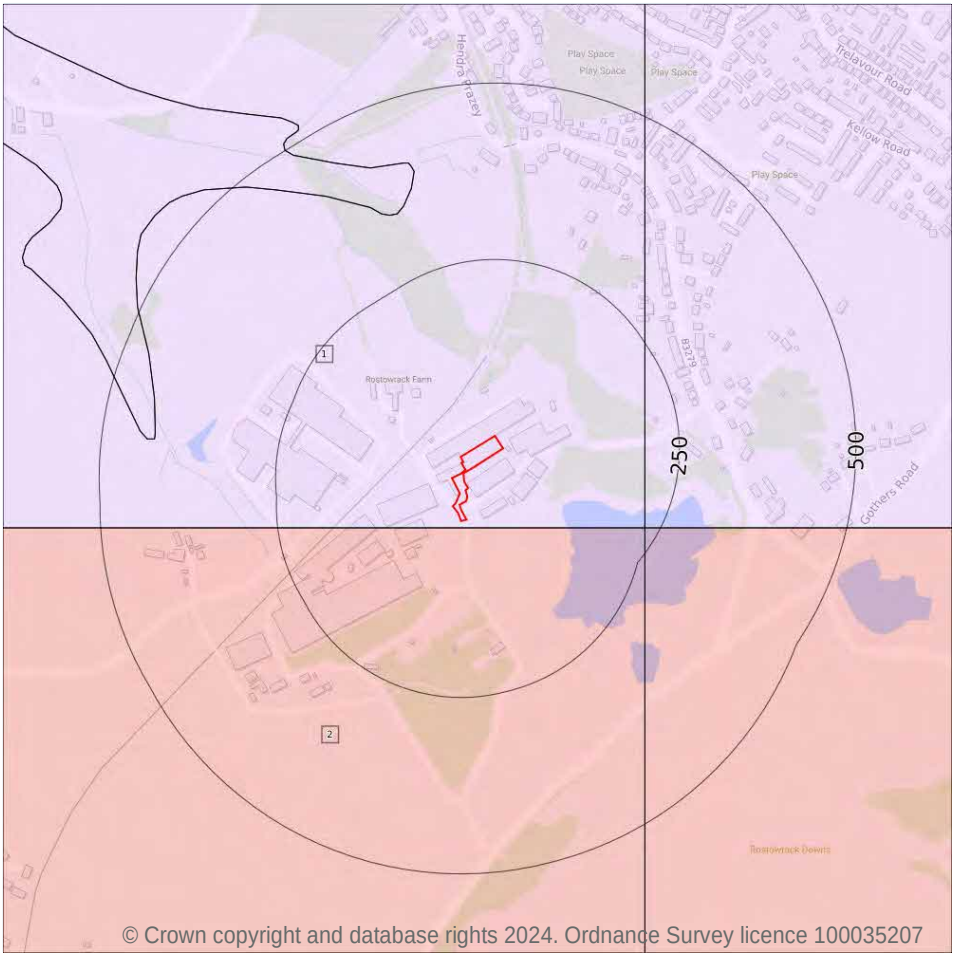
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 50 >

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	201m E	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 vulr
- 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	2

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 52 >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: Medium**	**Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures**
2	9m S	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: >550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary 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.

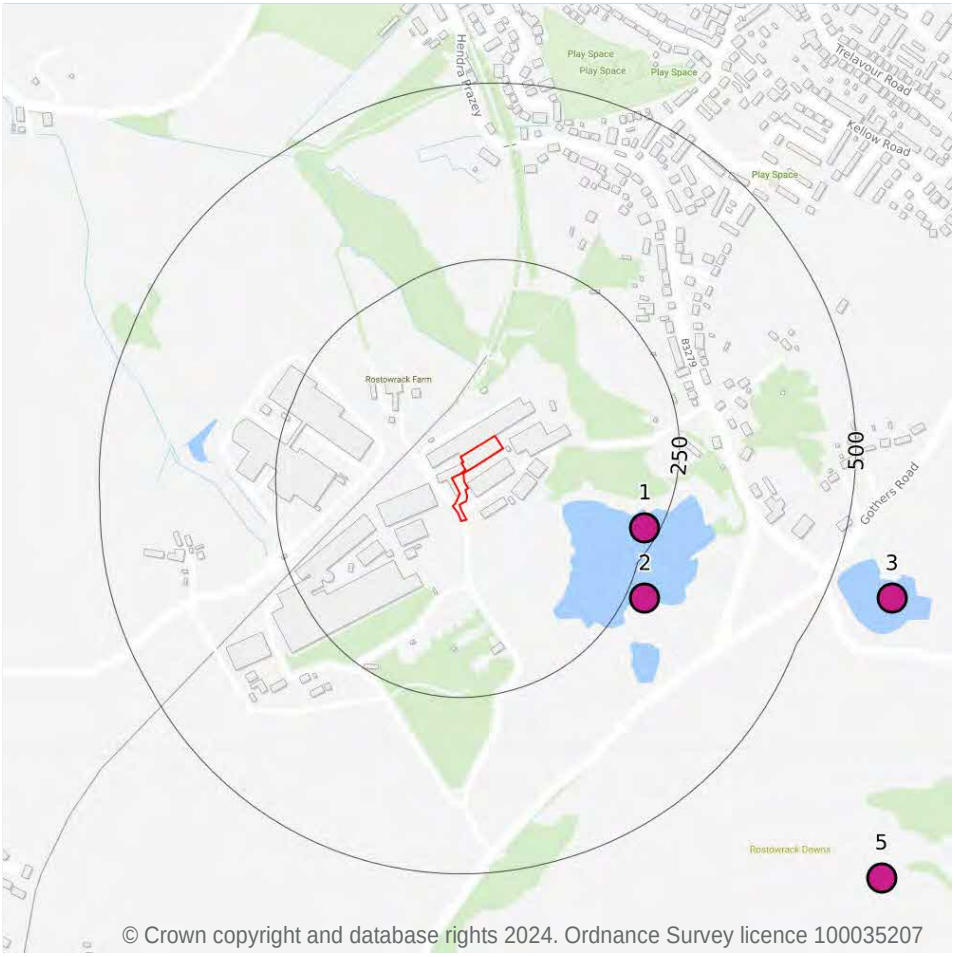
5.5 Groundwater vulnerability- local information

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
- 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	23

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	
1	230m E	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: PARKANDILLICK PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195000 Northing: 57000	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
2	276m SE	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: PARKANDILLICK PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195000 Northing: 56900	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 27/01/1967 Expiry Date: - Issue No: 102 Version Start Date: 24/02/2004 Version End Date: -
3	590m E	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: OLD HENDRA PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195350 Northing: 56900	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	767m E	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: HENDRA PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195500 Northing: 56800	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 27/01/1967 Expiry Date: - Issue No: 102 Version Start Date: 24/02/2004 Version End Date: -
5	776m SE	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: ROSTOWRACK PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195335 Northing: 56504	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -

ID	Location	Details	
-	1173m SE	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: HENDRA PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195760 Northing: 56420	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1190m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: CENTRAL BOTTOMS Data Type: Point Name: IMERYS Minerals Ltd Easting: 194470 Northing: 55850	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1204m E	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: TRELAVOUR PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 196000 Northing: 57200	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 01/04/1973 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2009 Version End Date: -
-	1205m E	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: TRELAVOUR PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 196000 Northing: 57210	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1283m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: TREVISCOE PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 194764 Northing: 55726	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -

ID	Location	Details	
-	1340m S	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: KERNICK DAM Data Type: Point Name: IMERYS Minerals Ltd Easting: 194280 Northing: 55750	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 01/04/1973 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2009 Version End Date: -
-	1401m SE	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: ALLENS QUARRY Data Type: Point Name: IMERYS Minerals Ltd Easting: 195600 Northing: 55900	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1410m S	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: TREVISCOE PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 194700 Northing: 55600	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 01/04/1973 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2009 Version End Date: -
-	1425m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: KERNICK DAM Data Type: Point Name: IMERYS Minerals Ltd Easting: 194190 Northing: 55695	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1450m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: SLIP PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195035 Northing: 55590	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -

ID	Location	Details	
-	1482m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: GOONAMARRIS PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195200 Northing: 55600	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1773m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: GOONVEAN PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 194627 Northing: 55240	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1804m SE	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: DRINNICK WELL Data Type: Point Name: IMERYS Minerals Ltd Easting: 196120 Northing: 55840	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1840m S	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: BLOOMDALE PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 195370 Northing: 55280	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1875m SW	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: VIRGINIA PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 193350 Northing: 55750	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -

ID	Location	Details	
-	1935m NE	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: WHEAL FREDERICK PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 196400 Northing: 58200	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 27/01/1967 Expiry Date: - Issue No: 102 Version Start Date: 24/02/2004 Version End Date: -
-	1954m NE	Status: Active Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: WHEAL FREDERICK PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 196428 Northing: 58192	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: NPS/WR/021054 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 104 Version Start Date: 28/04/2016 Version End Date: -
-	1960m NE	Status: Historical Licence No: 15/48/020/G/087 Details: Process Water Direct Source: Ground Water - Fresh Point: WHEAL FREDERICK PIT Data Type: Point Name: IMERYS Minerals Ltd Easting: 196430 Northing: 58200	Annual Volume (m^3): 428870 Max Daily Volume (m^3): 21965 Original Application No: - Original Start Date: 01/04/1973 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2009 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	1

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

Features are displayed on the Abstractions and Source Protection Zones map on page 54 >

ID	Location	Details	
-	1842m SE	Status: Historical Licence No: 15/48/020/S/019 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface Water - Fresh Point: GWINDRA RIVER Data Type: Point Name: IMERYS Minerals Ltd Easting: 195800 Northing: 55500	Annual Volume (m^3): 500068 Max Daily Volume (m^3): 2944.8 Original Application No: NPS/WR/001337 Original Start Date: 01/04/1973 Expiry Date: - Issue No: 103 Version Start Date: 19/06/2009 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0

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.

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

5.9 Source Protection Zones

Records within 500m	0

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

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

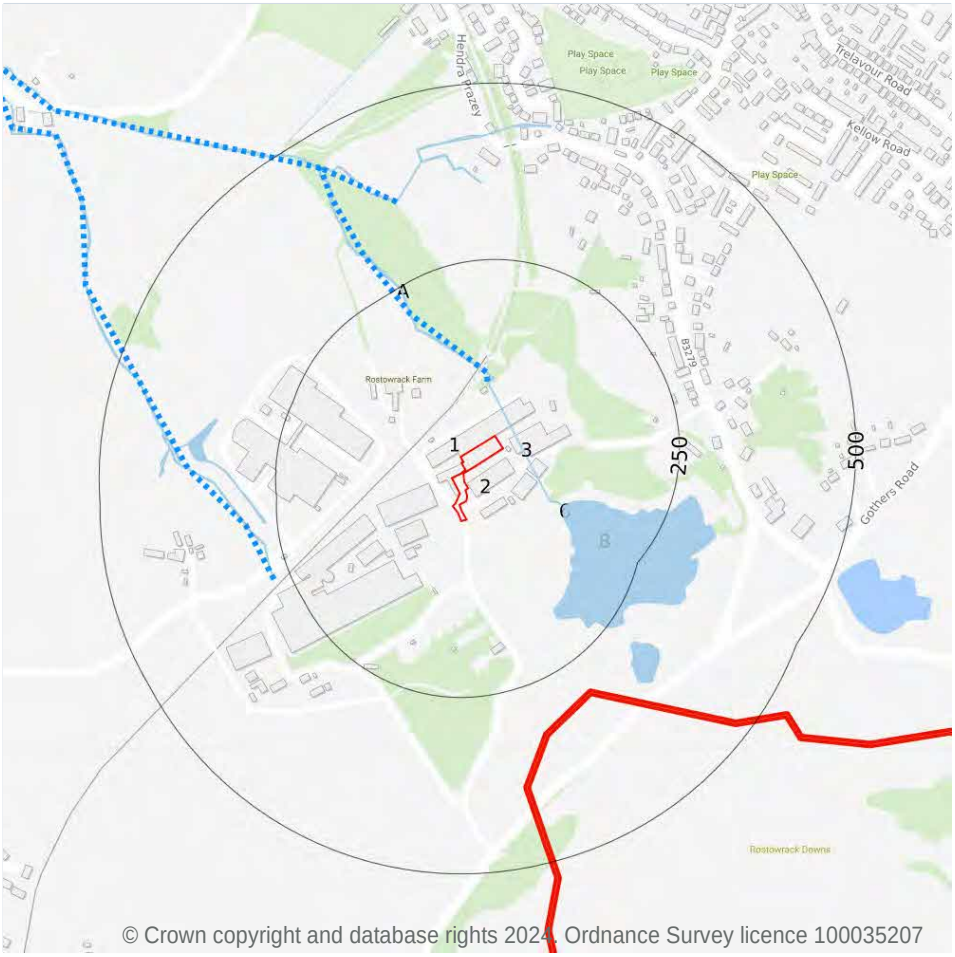
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	4

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 61 >

ID	Location	Type of water feature	Ground level	Permanence	Name
3	24m NE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
A	77m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	99m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	117m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	3

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

Features are displayed on the Hydrology map on page 61 >

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 61 >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Upper River Fal**	**GB108048001390**	**Fal**	**Cornwall West and the Fal**

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 61 >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
5	78m N	River	Upper River Fal	GB108048001390 ↗	Moderate	Fail	Good	2019

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

6.5 WFD Groundwater bodies

Records on site	1

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

Features are displayed on the Hydrology map on page 61 >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	**On site**	**South Cornwall**	GB40802G800200 ↗	**Poor**	**Poor**	**Good**	**2019**

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

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).

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

7.2 Historical Flood Events

Records within 250m	0

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.

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

7.6 Flood Zone 2

Records within 50m	0

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.

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

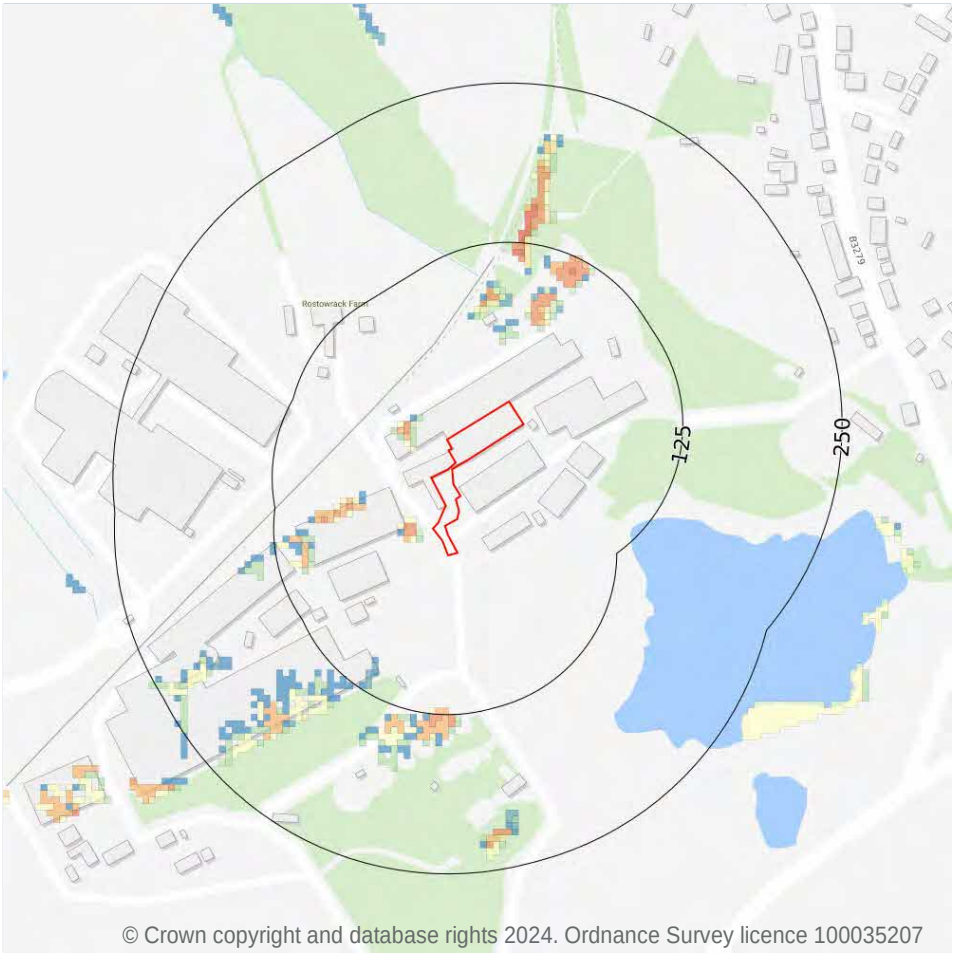
7.7 Flood Zone 3

Records within 50m	0

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.

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	Negligible
Highest risk within 50m	1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on page 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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding

Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

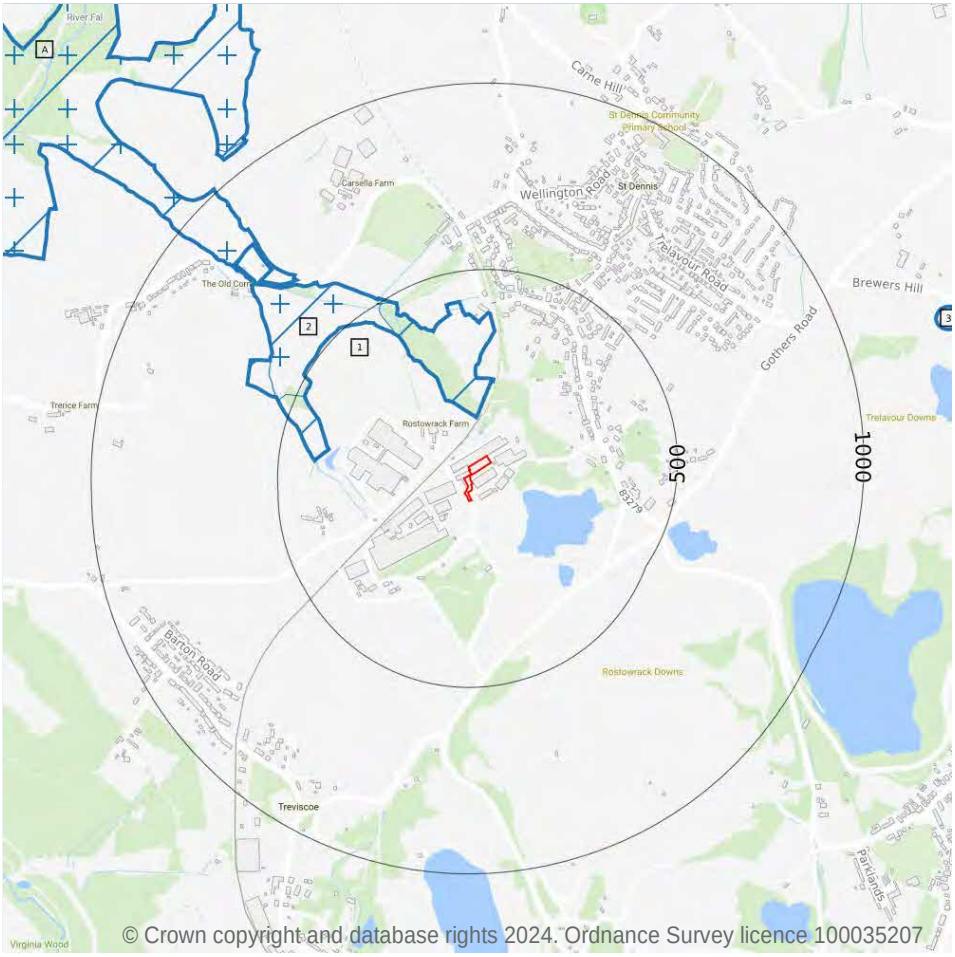
Highest risk on site	Negligible
Highest risk within 50m	Negligible

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 Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SS

Special Areas of Conservation (SAC)

National Nature Reserves (NNR)

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	8

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
1	107m N	Mid Cornwall Moors	Natural England

ID	Location	Name	Data source
A	681m NW	Mid Cornwall Moors	Natural England
3	1253m E	Trelavour Downs	Natural England
-	1562m N	Mid Cornwall Moors	Natural England
-	1683m N	Mid Cornwall Moors	Natural England
-	1727m NE	Mid Cornwall Moors	Natural England
-	1829m NW	Mid Cornwall Moors	Natural England
-	1871m S	St. Austell Clay Pits	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	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	8

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
2	402m NW	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	Natural England

ID	Location	Name	Features of interest	Habitat description	Data source
A	681m NW	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	Natural England
-	1649m N	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	Natural England
-	1664m N	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	Natural England
-	1736m N	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	Natural England
-	1829m NW	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	Natural England
-	1871m S	St Austell Clay Pits	Dry heaths; Western rustwort.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Heath, Scrub, Maquis and Garrigue, Phygrana	Natural England
-	1903m NW	Breney Common and Goss & Tregoss Moors	Wet heathland with cross-leaved heath; Dry heaths; Very wet mires often identified by an unstable `quaking` surface; Marsh fritillary butterfly.	Inland water bodies (Standing water, Running water); Heath, Scrub, Maquis and Garrigue, Phygrana; Broad-leaved deciduous woodland; Bogs, Marshes, Water fringed vegetation, Fens; Humid grassland, Mesophile grassland	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	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	8

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.

Features are displayed on the Environmental designations map on page 70 >

ID	Location	Name	Data source
-	1544m N	Goss Moor	Natural England
-	1649m N	Goss Moor	Natural England
-	1664m N	Goss Moor	Natural England
-	1736m N	Goss Moor	Natural England
-	1829m NW	Goss Moor	Natural England
-	1853m NW	Goss Moor	Natural England
-	1876m NW	Goss Moor	Natural England
-	1907m NW	Goss Moor	Natural England

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	0

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

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

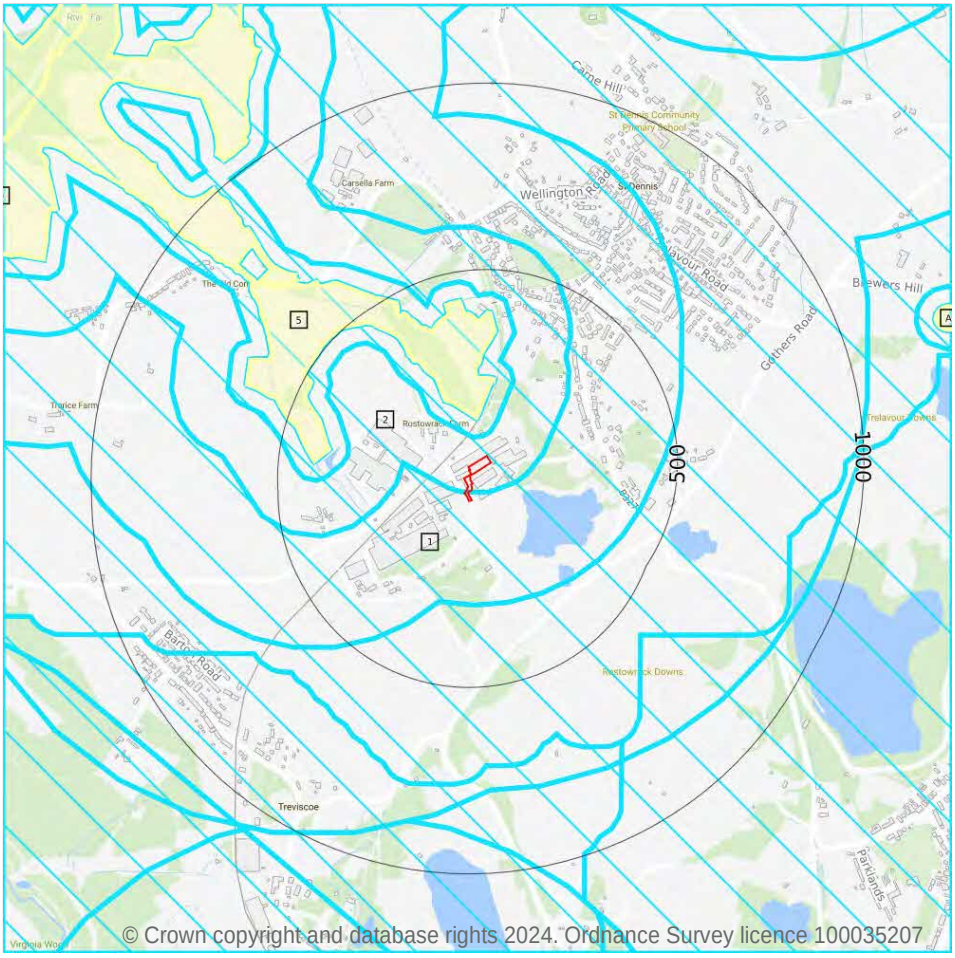
Records within 2000m	4

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	**Truro, Tresillian and Falmouth**	**Eutrophic Water**	**5**	**Existing**
635m W	Truro, Tresillian and Falmouth	Eutrophic Water	5	Existing
1028m S	Truro, Tresillian and Falmouth	Eutrophic Water	5	Existing
1215m SW	Truro, Tresillian and Falmouth	Eutrophic Water	5	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	Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 10 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .

ID	Location	Type of developments requiring consultation
2	On site	All applications - All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures. Infrastructure - Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 10 units or more. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any development that could cause AIR POLLUTION or DUST either in its construction or operation (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	15

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:	5
Location:	107m N
SSSI name:	Mid Cornwall Moors
Unit name:	Goss Moor- Carsella Farm
Broad habitat:	Broadleaved, Mixed And Yew Woodland - Lowland
Condition:	Unfavourable - Recovering

Reportable features:

Feature name	Feature condition	Date of assessment
H7140 Transition mires and quaking bogs	-	-
Lowland mire grassland and rush pasture	Unfavourable - Recovering	28/07/2022
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - No change	28/07/2022
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Favourable	29/03/2023
Wet woodland	-	-

ID: 9
Location: 681m NW
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Carsella Farm
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
H7140 Transition mires and quaking bogs	-	-
Lowland mire grassland and rush pasture	Unfavourable - Recovering	28/07/2022
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - No change	28/07/2022
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Favourable	29/03/2023
Wet woodland	-	-

ID: A
Location: 1253m E
SSSI name: Trelavour Downs
Unit name: 1
Broad habitat: Earth Heritage
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
FD - Mineralogy	Unfavourable - Recovering	24/01/2011
FM - Mineralogy	Unfavourable - Recovering	24/01/2011

ID: 19
Location: 1519m NW
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Gaverigan
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	-	-
Wet woodland	-	-

ID: -
Location: 1544m N
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Domelick
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
H4010 Northern Atlantic wet heaths with Erica tetralix	-	-
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Invert. assemblage F003 scrub-heath & moorland	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland wet heath	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of declining plant species and species at the edge of their range - Baldellia ranunculoides, Lesser Water-plantain	Unfavourable - Declining	23/01/2023
Population of declining plant species and species at the edge of their range - Chamaemelum nobile, Chamomile	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	Unfavourable - Recovering	27/01/2023
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Unfavourable - No change	23/01/2023
Wet woodland	-	-

ID: -
Location: 1562m N
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Domelick
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
H4010 Northern Atlantic wet heaths with Erica tetralix	-	-
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Invert. assemblage F003 scrub-heath & moorland	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland wet heath	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of declining plant species and species at the edge of their range - Baldellia ranunculoides, Lesser Water-plantain	Unfavourable - Declining	23/01/2023
Population of declining plant species and species at the edge of their range - Chamaemelum nobile, Chamomile	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	Unfavourable - Recovering	27/01/2023
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Unfavourable - No change	23/01/2023
Wet woodland	-	-

ID: -
Location: 1606m N
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Carsella Farm
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
H7140 Transition mires and quaking bogs	-	-
Lowland mire grassland and rush pasture	Unfavourable - Recovering	28/07/2022
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - No change	28/07/2022

Feature name	Feature condition	Date of assessment
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Favourable	29/03/2023
Wet woodland	-	-

ID: -
Location: 1727m NE
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Carsella Farm
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
H7140 Transition mires and quaking bogs	-	-
Lowland mire grassland and rush pasture	Unfavourable - Recovering	28/07/2022
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - No change	28/07/2022
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Favourable	29/03/2023
Wet woodland	-	-

ID: -
Location: 1736m N
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
Aggregations of breeding birds - Willow Tit, Poecile montanus	-	-
H4010 Northern Atlantic wet heaths with Erica tetralix	-	-
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Invert. assemblage F003 scrub-heath & moorland	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland mixed deciduous woodland	-	-
Lowland wet heath	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Nationally scarce plant - Illecebrum verticillatum, Coral Necklace	Unfavourable - No change	23/01/2023
Population of RDB beetle - Hydrochus nitidicollis, a water beetle	-	-
Population of declining plant species and species at the edge of their range - Centunculus minimus, Chaffweed	Unfavourable - Declining	23/01/2023
Population of declining plant species and species at the edge of their range - Chamaemelum nobile, Chamomile	Favourable	23/01/2023
Population of declining plant species and species at the edge of their range - Platanthera bifolia, Lesser Butterfly-orchid	Unfavourable - Recovering	23/01/2023
Population of declining plant species and species at the edge of their range - Radiola linoides, Allseed	Unfavourable - Recovering	23/01/2023
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	Unfavourable - Recovering	27/01/2023
Population of nationally scarce mollusc ï¿½ Omphiscola glabra, a mud snail	Favourable	31/01/2023
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Unfavourable - Declining	23/01/2023
Wet woodland	-	-

ID: -
Location: 1756m N
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Gaverigan
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland

Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	-	-
Wet woodland	-	-

ID: -
Location: 1818m N
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Carsella Farm
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
H7140 Transition mires and quaking bogs	-	-
Lowland mire grassland and rush pasture	Unfavourable - Recovering	28/07/2022
Lowland mixed deciduous woodland	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	Unfavourable - No change	28/07/2022
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	-	-
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Favourable	29/03/2023

Feature name	Feature condition	Date of assessment
Wet woodland	-	-

ID: -
Location: 1829m NW
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Domelick
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
H4010 Northern Atlantic wet heaths with Erica tetralix	-	-
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Invert. assemblage F003 scrub-heath & moorland	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland wet heath	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of declining plant species and species at the edge of their range - Baldellia ranunculoides, Lesser Water-plantain	Unfavourable - Declining	23/01/2023
Population of declining plant species and species at the edge of their range - Chamaemelum nobile, Chamomile	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	Unfavourable - Recovering	27/01/2023
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Unfavourable - No change	23/01/2023
Wet woodland	-	-

ID: -
Location: 1853m NW
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Domelick
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Unfavourable - Declining
Reportable features:

Feature name	Feature condition	Date of assessment
H4010 Northern Atlantic wet heaths with Erica tetralix	-	-
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Invert. assemblage F003 scrub-heath & moorland	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland wet heath	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of declining plant species and species at the edge of their range - Baldellia ranunculoides, Lesser Water-plantain	Unfavourable - Declining	23/01/2023
Population of declining plant species and species at the edge of their range - Chamaemelum nobile, Chamomile	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	Unfavourable - Recovering	27/01/2023
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Unfavourable - No change	23/01/2023
Wet woodland	-	-

ID: -
Location: 1868m NW
SSSI name: Mid Cornwall Moors
Unit name: Goss Moor- Domelick
Broad habitat: Fen, Marsh And Swamp - Lowland
Condition: Unfavourable - Declining
Reportable features:

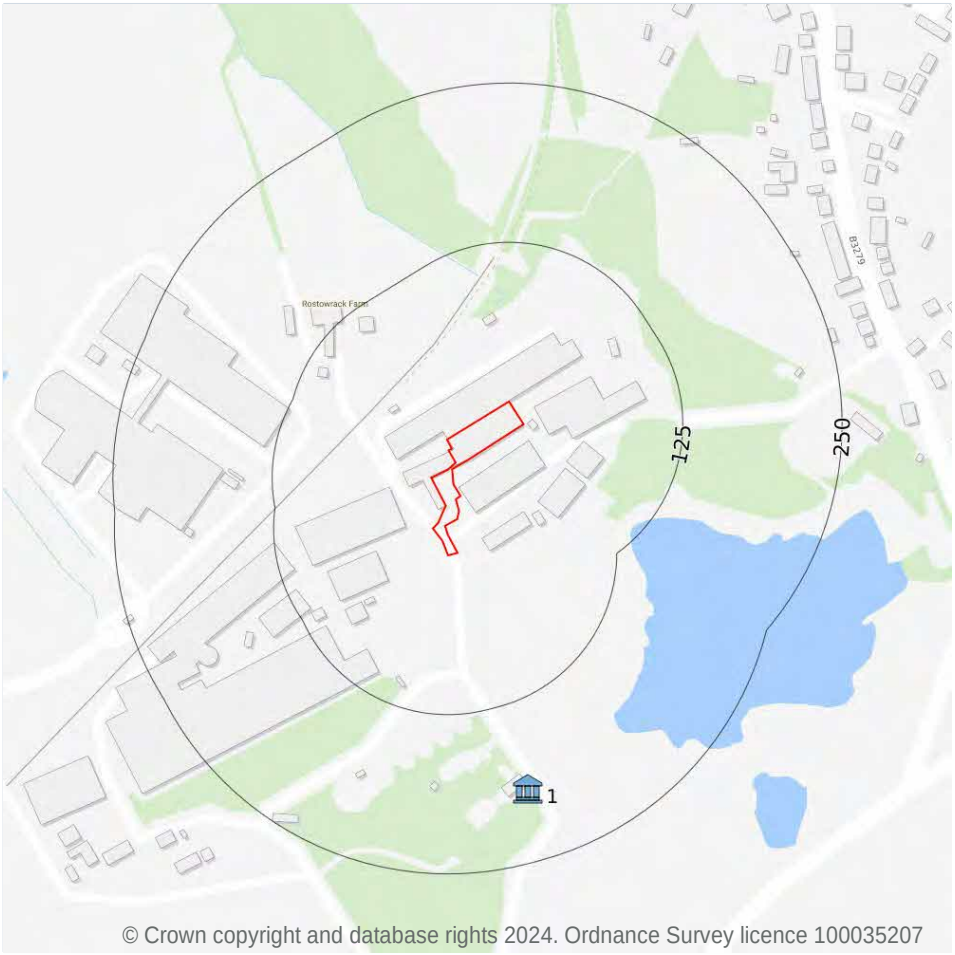
Feature name	Feature condition	Date of assessment
H4010 Northern Atlantic wet heaths with Erica tetralix	-	-
H4030 European dry heaths	-	-
H7140 Transition mires and quaking bogs	-	-
Invert. assemblage F003 scrub-heath & moorland	-	-
Lowland dry heath	-	-
Lowland mire grassland and rush pasture	-	-
Lowland wet heath	-	-
Lowland wetland including basin fen, valley fen, floodplain fen, waterfringe fen, spring/flush fen and raised bog lagg	-	-
Population of declining plant species and species at the edge of their range - Baldellia ranunculoides, Lesser Water-plantain	Unfavourable - Declining	23/01/2023
Population of declining plant species and species at the edge of their range - Chamaemelum nobile, Chamomile	-	-
Population of nationally scarce butterfly species - Eurodryas aurinia, Marsh Fritillary	Unfavourable - Recovering	27/01/2023
S1065 Marsh fritillary, Eurodryas aurinia	-	-
Vascular plant assemblage	Unfavourable - No change	23/01/2023
Wet woodland	-	-

ID: -
Location: 1871m S
SSSI name: St. Austell Clay Pits
Unit name: Trethosa
Broad habitat: Inland Rock
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 liverwort - Marsupella profunda, Western Rustwort	Unfavourable - Recovering	16/12/2010
S1390 Western rustwort, Marsupella profunda	Unfavourable - Recovering	16/12/2010

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 90 >

ID	Location	Name	Grade	Reference Number	Listed date
1	193m S	Parkandillick Engine House	II*	1138336	12/05/1988

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.

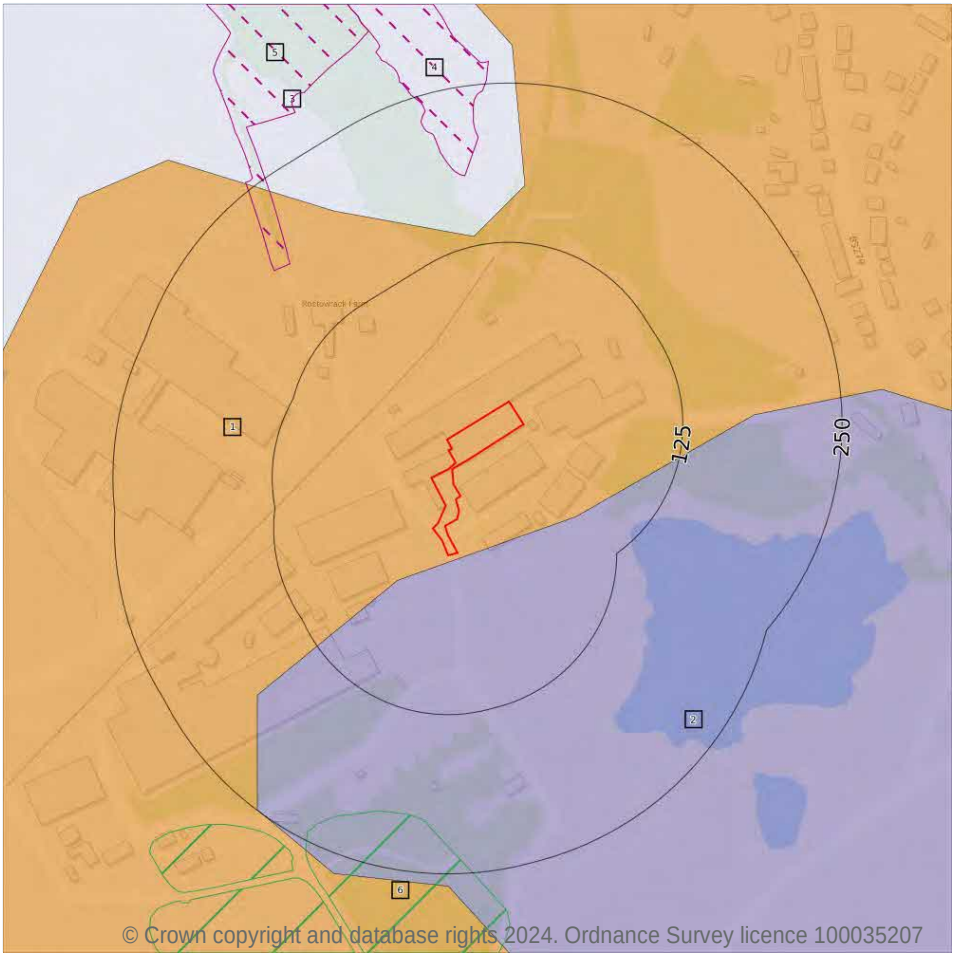
11.7 Registered Parks and Gardens

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	3

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 93 >

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

ID	Location	Classification	Description
2	5m S	Non Agricultural	-
3	133m N	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	2

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.

Features are displayed on the Agricultural designations map on page 93 >

ID	Location	Name	Classification	Other relevant legislation
4	181m N	-	Section 4 Conclusive Open Country	-
5	185m NW	-	Section 4 Conclusive Open Country	-

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

12.3 Tree Felling Licences

Records within 250m	1

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.

Features are displayed on the Agricultural designations map on page 93 >

ID	Location	Description	Reference	Application date
6	206m S	Selective Fell/Thin (Conditional)	018/75/05-06	18/08/2005

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	1

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.

Location	Reference	Scheme	Start Date	End date
63m NW	AG00379735	Entry Level plus Higher Level Stewardship	01/06/2012	31/05/2022

This data is sourced from Natural England.

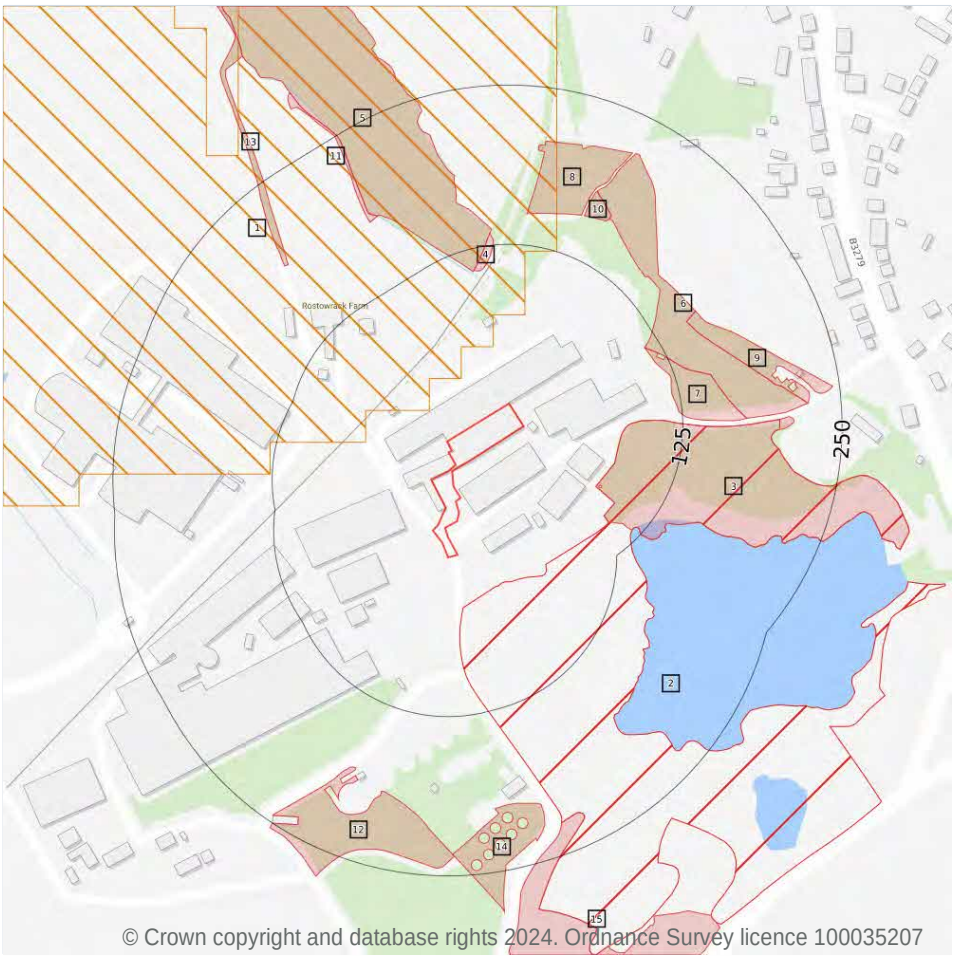
12.5 Countryside Stewardship Schemes

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	13

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

Features are displayed on the Habitat designations map on page 96 >

ID	Location	Main Habitat	Other habitats
3	74m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	107m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	107m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	113m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
7	113m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	150m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	152m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	159m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	178m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	180m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	187m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); Additional: PMGRP (FEP 50%)
14	200m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
15	223m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	1

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

Features are displayed on the Habitat designations map on page 96 >

ID	Location	Type	Habitat
1	28m NW	Network Enhancement Zone 1	Not specified

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 96 >

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
2	37m S	BRITPITS ref: 11734	Low	British Geological Survey BRITPITS database	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

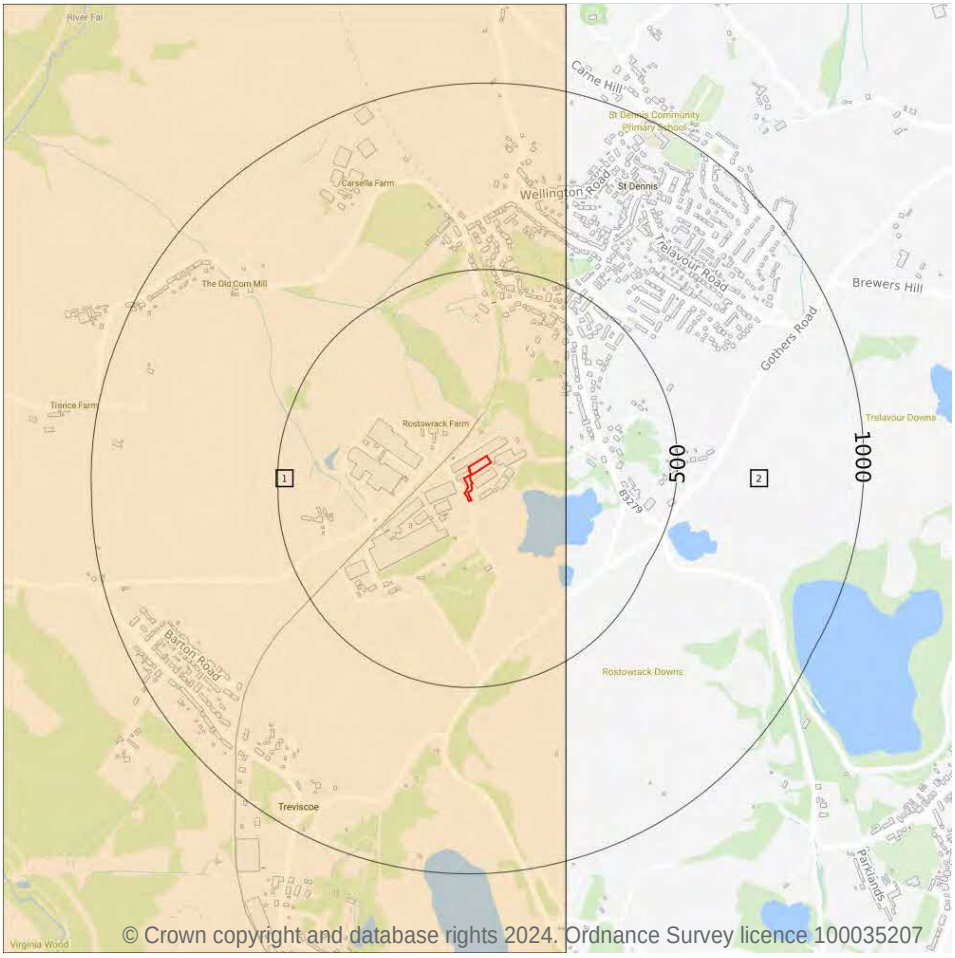
13.4 Limestone Pavement Orders

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	2

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 99 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Partial**	**Partial**	**No coverage**	**SW95NW**
2	201m E	No coverage	No coverage	No coverage	No coverage	NoCov

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

14.3 Superficial geology (10k)

Records within 500m	0

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.

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	0

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.

This data is sourced from the British Geological Survey.

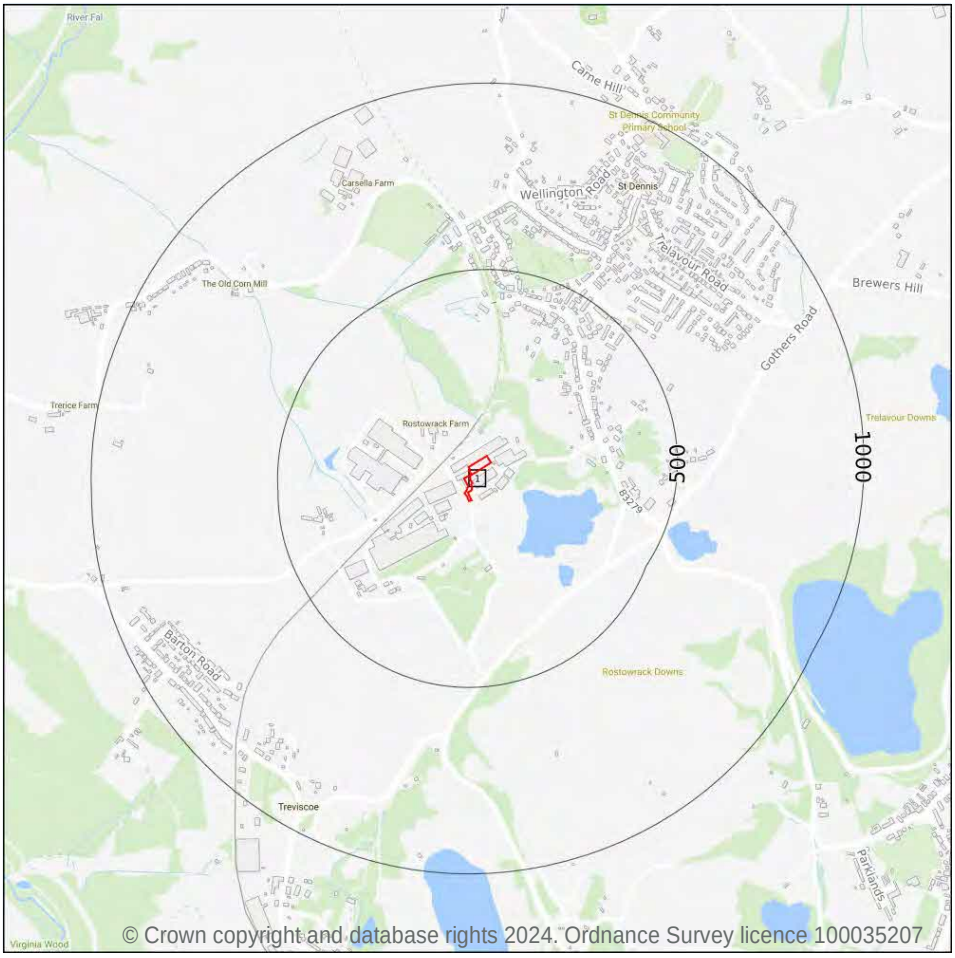
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 103 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW347_bodmin_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	1

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 105 >

ID	Location	LEX Code	Description	Rock description
1	344m N	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

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

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.

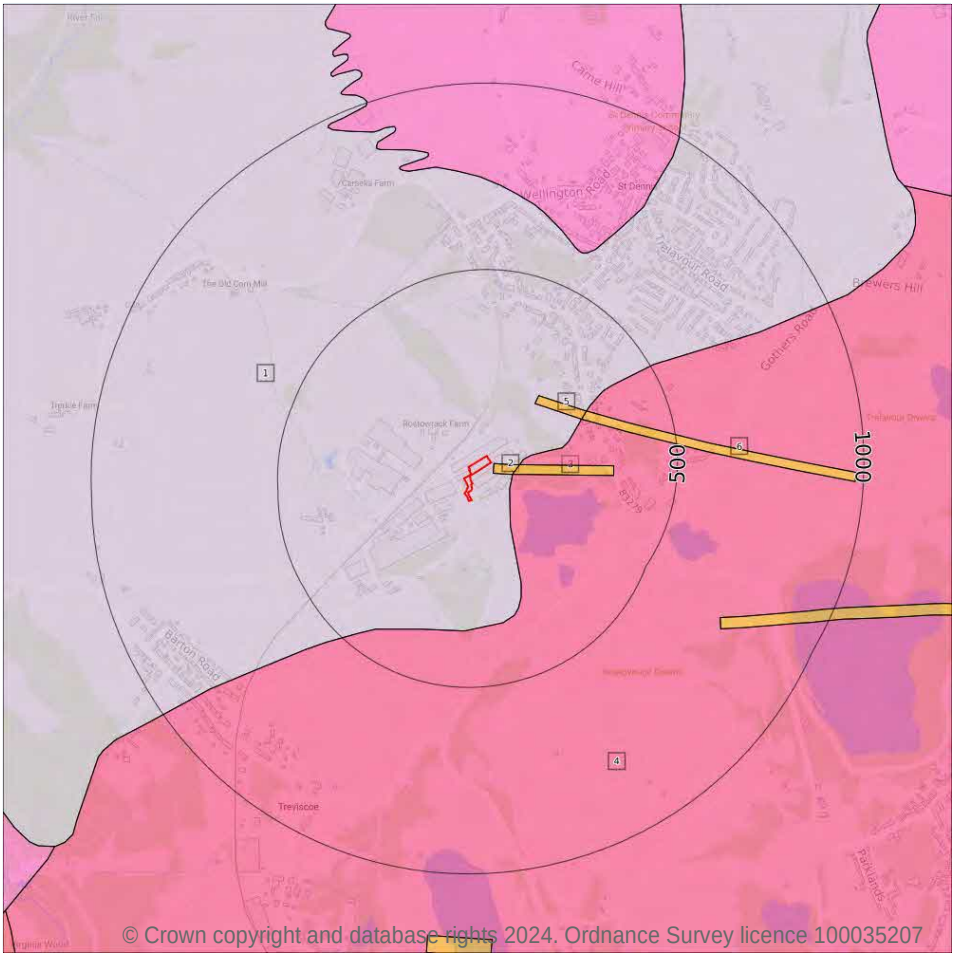
15.7 Landslip permeability (50k)

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	6

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 107 >

ID	Location	LEX Code	Description	Rock age
1	**On site**	**TRDN-HSSD**	**TRENDREAN MUDSTONE FORMATION - HORNFELSED SLATE AND HORNFELSED SANDSTONE**	**-**
2	8m NE	UDP-FELS	UNNAMED DYKE, PERMIAN - FELSITE	-
3	66m E	UDP-FELS	UNNAMED DYKE, PERMIAN - FELSITE	-

ID	Location	LEX Code	Description	Rock age
4	66m E	SAIN-M CGN	ST AUSTELL INTRUSION - MICROGRANITE	-
5	191m NE	UDP-FELS	UNNAMED DYKE, PERMIAN - FELSITE	-
6	270m NE	UDP-FELS	UNNAMED DYKE, PERMIAN - FELSITE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock 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 bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Low**	**Low**
8m NE	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

16 Boreholes

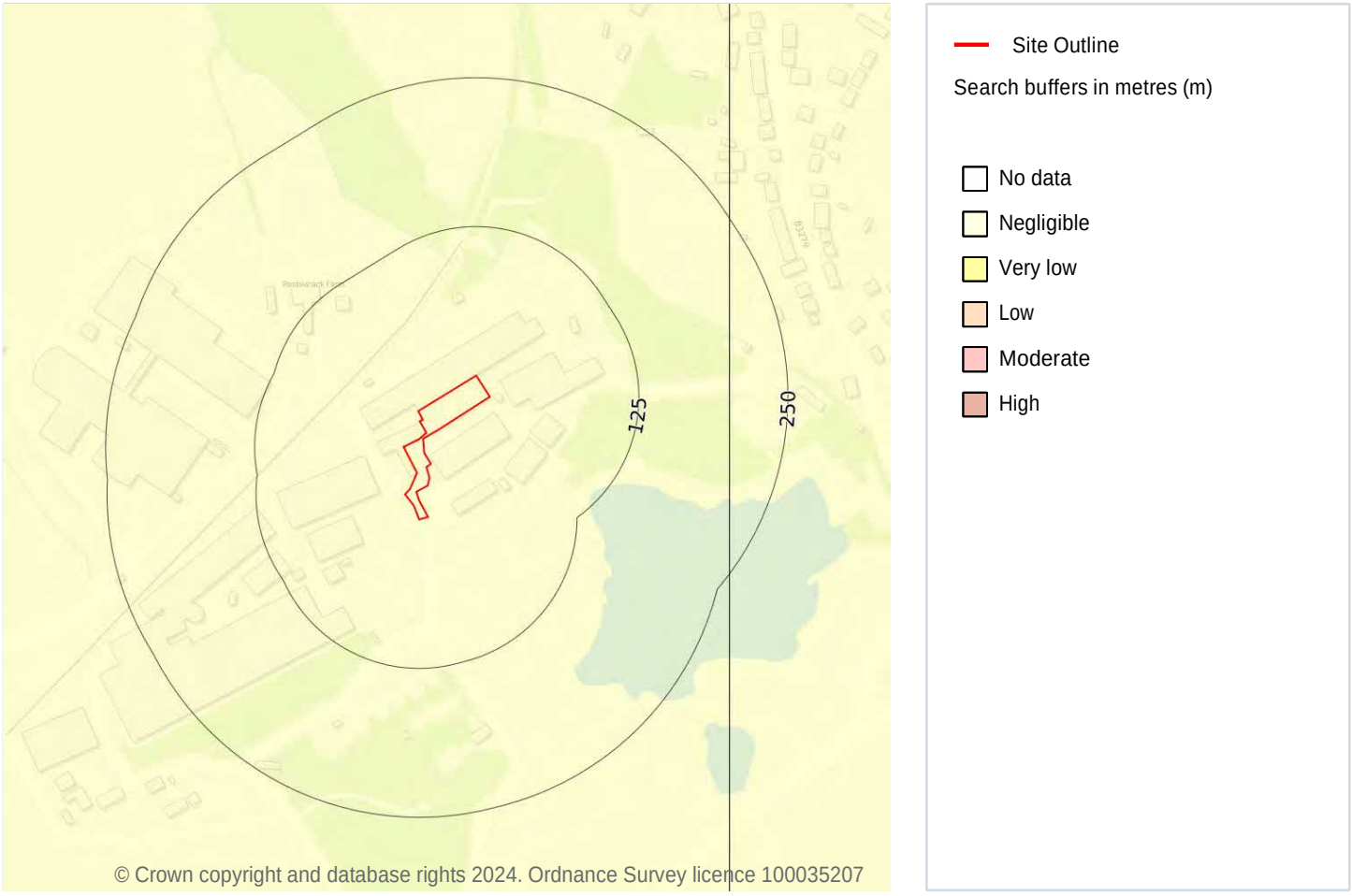
16.1 BGS Boreholes

Records within 250m	0

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.

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m	1

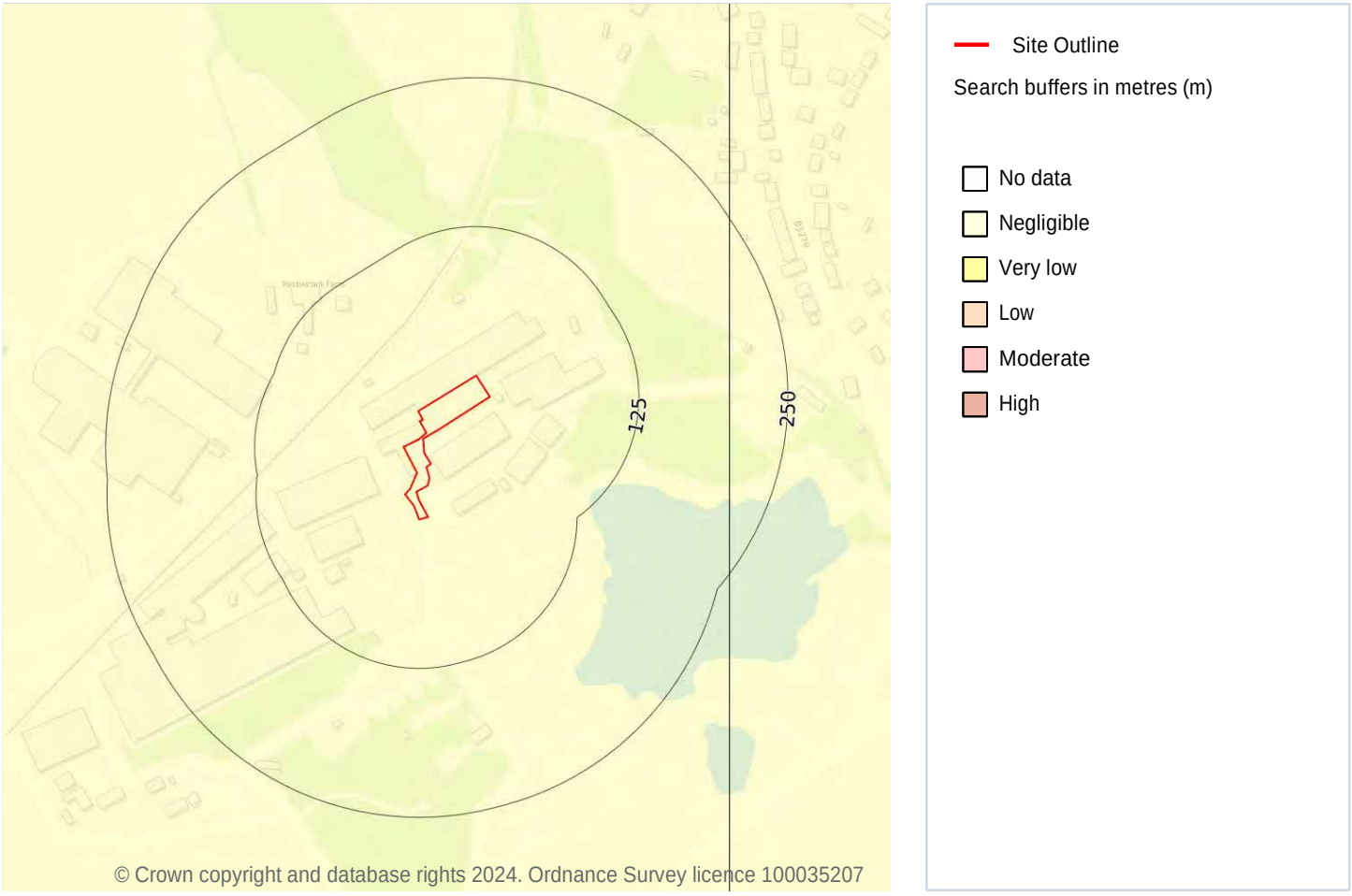
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 110 >

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m	1

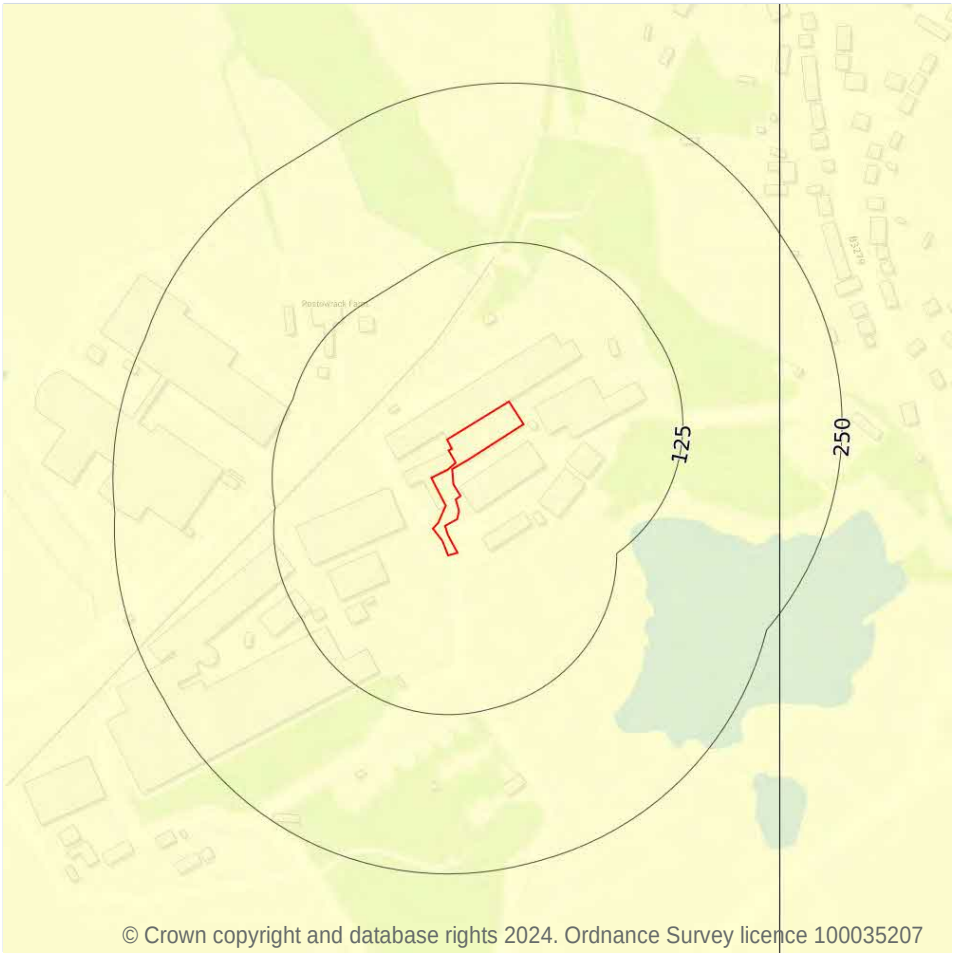
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on page 111 >

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.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

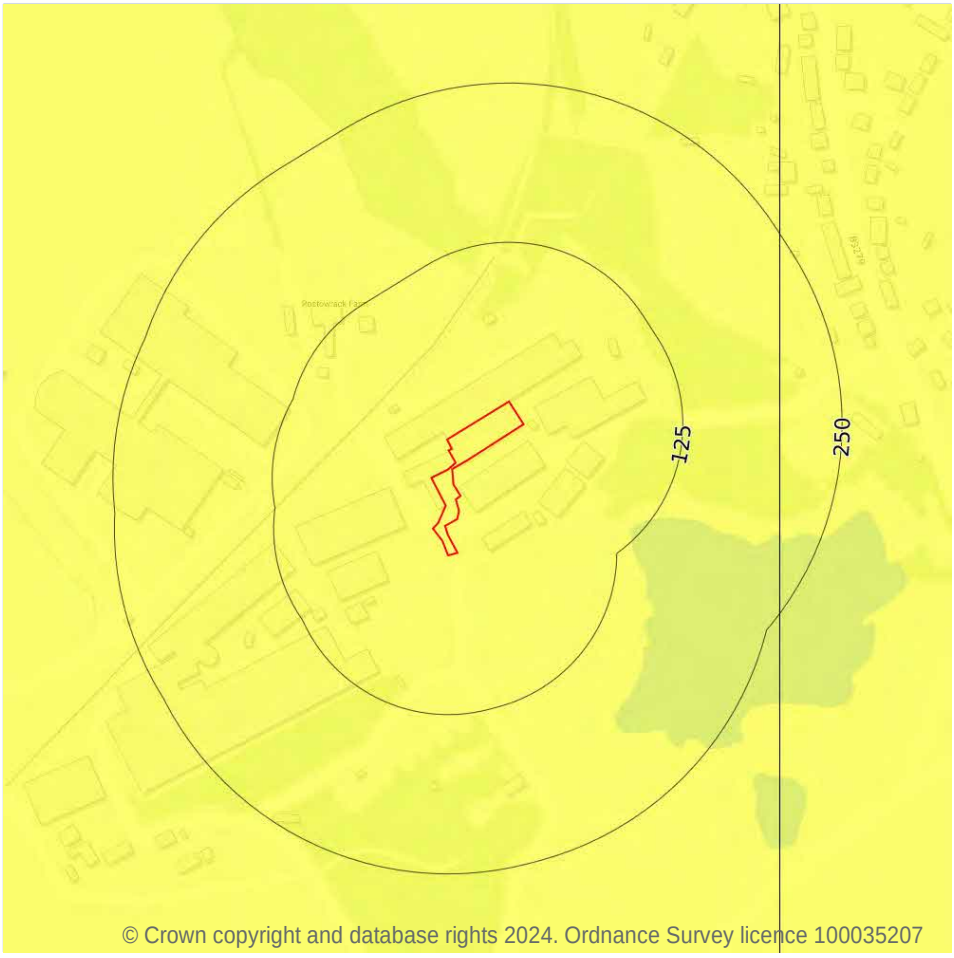
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 112 >

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	1

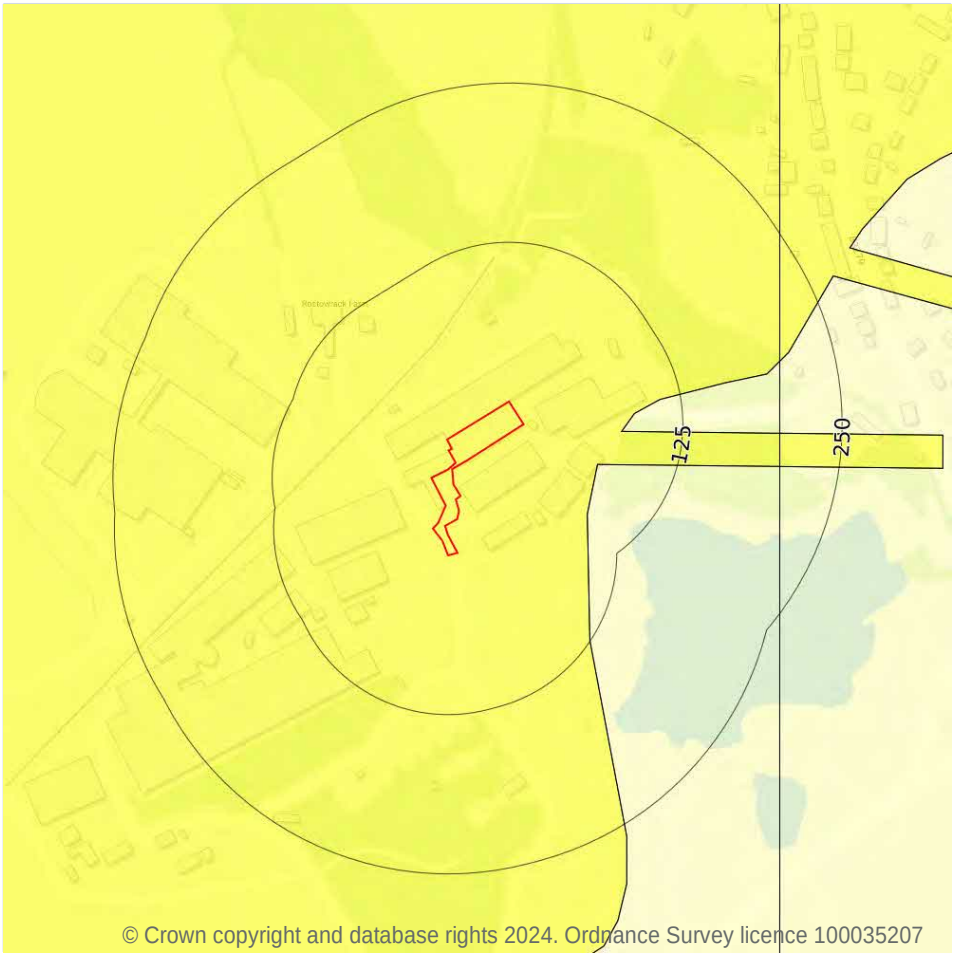
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 113 >

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

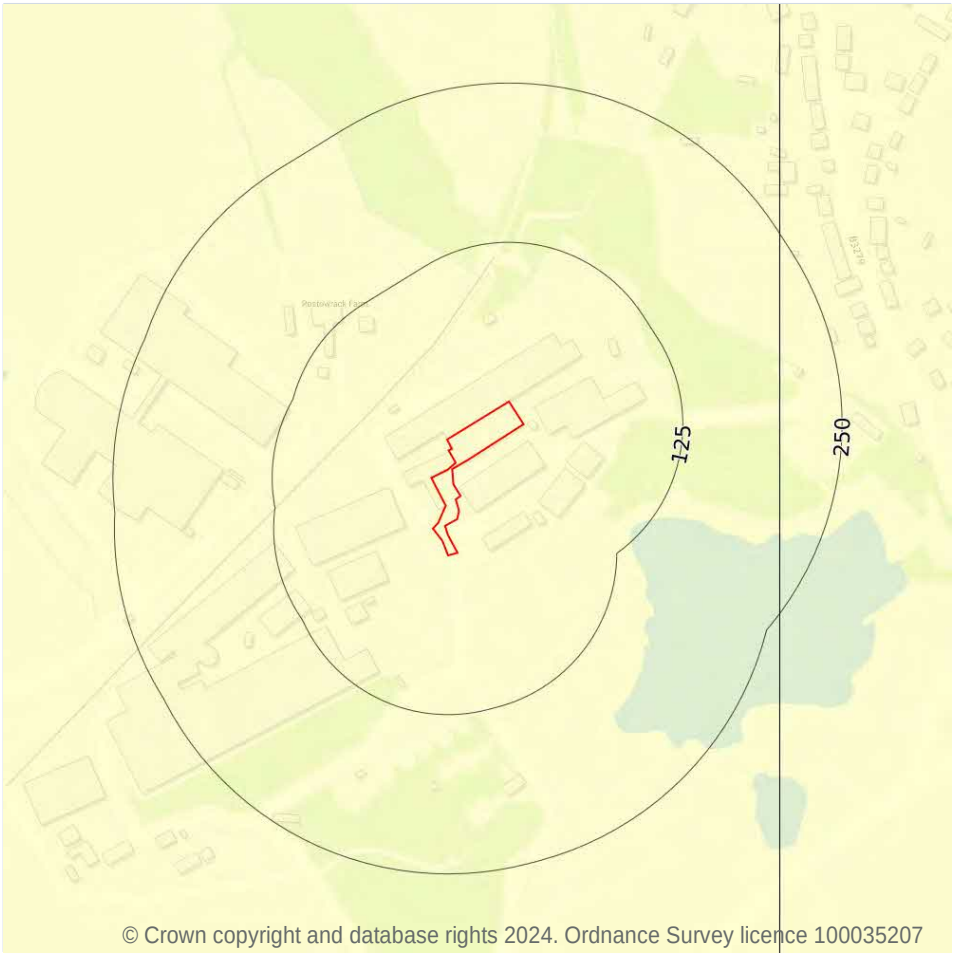
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on page 114 >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 115 >

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	6

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 117 >

ID	Location	Details	Description
E	191m E	Name: Parkandillick Address: St Dennis, ST AUSTELL, Cornwall Commodity: China Clay Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
J	283m E	Name: Parkandillack China Clay Works Address: St Dennis, ST AUSTELL, Cornwall Commodity: China Clay Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
H	366m E	Name: Parkandillack China Clay Works Address: St Dennis, ST AUSTELL, Cornwall Commodity: China Stone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
H	386m E	Name: Parkandillack China Clay Works Address: St Dennis, ST AUSTELL, Cornwall Commodity: China Clay Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
M	425m SE	Name: Hendra Down China Clay Works Address: St Dennis, ST AUSTELL, Cornwall Commodity: China Stone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
H	425m E	Name: Parkandillack China Clay Works Address: St Dennis, ST AUSTELL, Cornwall Commodity: China Clay Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	41

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 117 >

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Unspecified Heaps**	**1908**	**1:10560**
B	**On site**	**Ponds**	**1908**	**1:10560**
B	**On site**	**Ponds**	**1879**	**1:10560**
B	**On site**	**Unspecified Heap**	**1958**	**1:10560**
B	15m S	Ponds	1958	1:10560
C	19m NE	Ponds	1879	1:10560
C	28m NE	Unspecified Disused Tip	1977	1:10000
C	29m NE	Unspecified Ground Workings	1908	1:10560
C	31m NE	Unspecified Heap	1958	1:10560
2	34m S	Spoil Heaps	1958	1:10560
A	35m S	Unspecified Disused Tip	1977	1:10000
D	40m W	Cuttings	1879	1:10560
D	71m W	Cuttings	1879	1:10560
E	76m E	Unspecified Disused Tip	1977	1:10000
E	79m E	Refuse Heaps	1908	1:10560
F	101m N	Unspecified Disused Tip	1977	1:10000
F	107m N	Unspecified Heap	1958	1:10560
E	109m E	Clay Pit	1879	1:10560
G	119m SE	Unspecified Disused Pit	1977	1:10000
G	120m E	Clay Pits	1908	1:10560
G	135m E	Ponds	1908	1:10560
H	143m NE	Cuttings	1879	1:10560
I	155m NE	Cuttings	1958	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
I	157m NE	Cuttings	1908	1:10560
F	163m N	Unspecified Heap	1908	1:10560
G	172m SE	Pond	1958	1:10560
J	198m E	Disused Clay Pits	1958	1:10560
J	198m E	Clay Pit	1879	1:10560
E	203m E	Unspecified Disused Tip	1991	1:10000
E	203m E	Unspecified Disused Tips	1978	1:10000
J	224m E	Unspecified Disused Pit	1991	1:10000
J	224m E	Unspecified Disused Pit	1978	1:10000
J	232m E	Pond	1958	1:10560
E	232m E	Cuttings	1908	1:10560
J	233m E	Pond	1991	1:10000
J	233m E	Pond	1978	1:10000
5	235m S	Unspecified Disused Tip	1977	1:10000
K	240m SE	Unspecified Disused Pit	1977	1:10000
J	241m E	Old Clay Pits	1908	1:10560
E	242m E	Cuttings	1958	1:10560
E	243m E	Unspecified Pit	1978	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m **11**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining and ground workings map on page 117 >

ID	Location	Land Use	Year of mapping	Mapping scale
3	175m S	Unspecified Disused Shaft	1977	1:10000
AA	647m SE	Unspecified Disused Shaft	1978	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
-	677m E	Unspecified Shaft	1908	1:10560
AA	689m SE	Unspecified Shafts	1908	1:10560
AB	730m SE	Unspecified Shafts	1908	1:10560
-	752m E	Unspecified Shaft	1879	1:10560
AB	758m SE	Unspecified Shaft	1908	1:10560
-	877m E	Unspecified Shaft	1908	1:10560
-	938m SE	Unspecified Shaft	1908	1:10560
-	975m S	Tunnel	1958	1:10560
-	977m S	Tunnel	1908	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	2

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on page 117 >

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
P	410m SE	Blackpool	China clay	Surface mineral working	Valid	29/3/1965
L	424m SW	Treviscoe	China clay	Surface mineral working	Valid	16/12/1963

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	2

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining and ground workings map on page 117 >

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**South West England**	**Vein Mineral**	**C**	**Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.**
4	201m E	South West England	Vein Mineral	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	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	6

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
39m S	Metals
105m E	Stone
285m S	Metals
320m N	Metals
363m E	Stone
453m E	Metals

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	1

Generalised areas that may be affected by historical tin mining.

Location	Details
On site	**The site is within an area where tin mining is reported to have occurred. This does not mean that the site is definitely directly affected but further consideration of tin mining is advised. Further mining searches are available at Groundsure.**

This data is sourced from Groundsure.

18.16 Clay mining

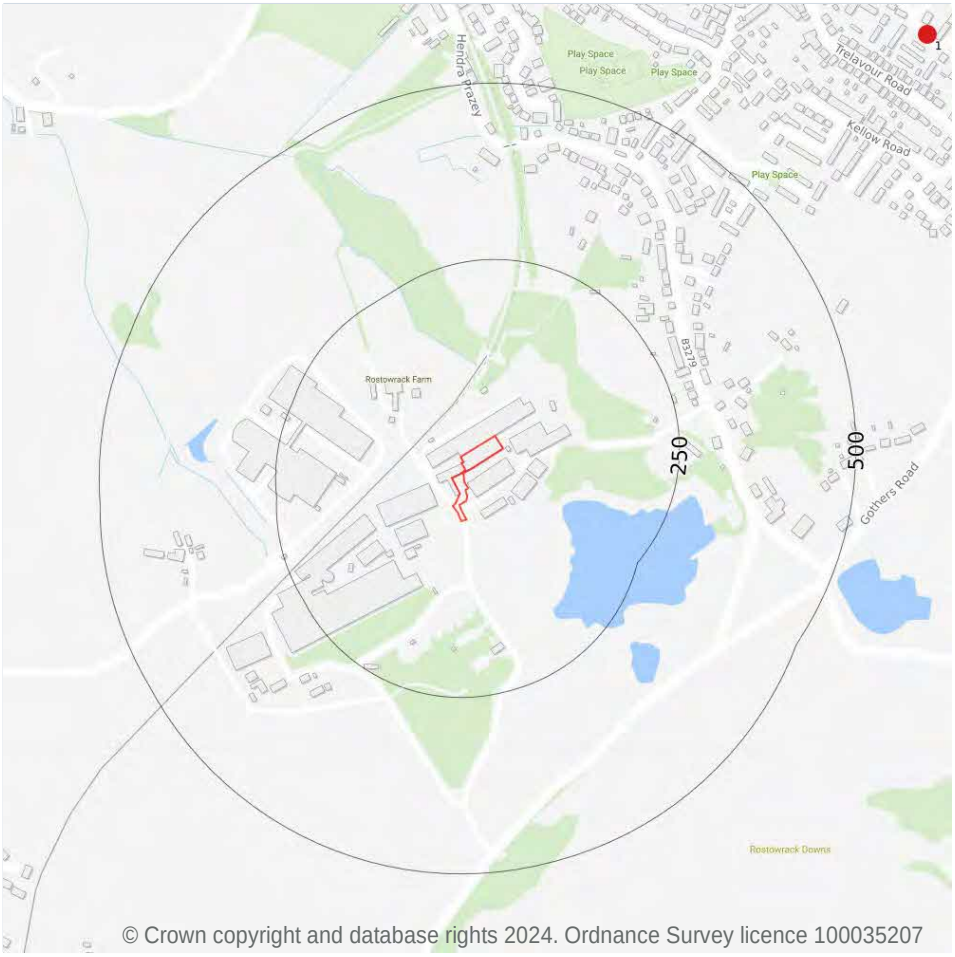
Records on site	1

Generalised areas that may be affected by kaolin and ball clay extraction.

Location	Details
On site	For further information regarding Clay Mining Groundsure recommends obtaining a Clay Mining report. This can be ordered at http://www.kabca.org/ ↗ or by writing to Kaolin and Ball Clay Association, Tehidy Centre, Burn Gallow Lane, High Street, St Austell, Cornwall, PL26 7TQ. Tel: 01726 811311

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- Mining cavities
- Reported recent incidents
- Historical incidents
- BGS karst database (Point)
- BGS karst database (Line)
- BGS karst database (Area)

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	3

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

Features are displayed on the Ground cavities and sinkholes map on page 126 >

ID	Location	Mine Address	Mineral	Data source	Publisher
-	801m NE	Mary, St Dennis, Cornwall	Cassiterite, Tin, Tinstone	CORNISH MINES (METALLIFEROUS AND ASSOCIATED MINERALS 1845-1913)	UNIVERSITY OF EXETER
-	801m NE	St Dennis Crown, St Dennis, Cornwall	Cassiterite, Tin, Tinstone	CORNISH MINES (METALLIFEROUS AND ASSOCIATED MINERALS 1845-1913)	UNIVERSITY OF EXETER
1	836m NE	St Dennis Consols, St Dennis, Cornwall	Cassiterite, Tin, Tinstone	CORNISH MINES (METALLIFEROUS AND ASSOCIATED MINERALS 1845-1913)	UNIVERSITY OF EXETER

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.

19.5 National karst database

Records within 500m	0

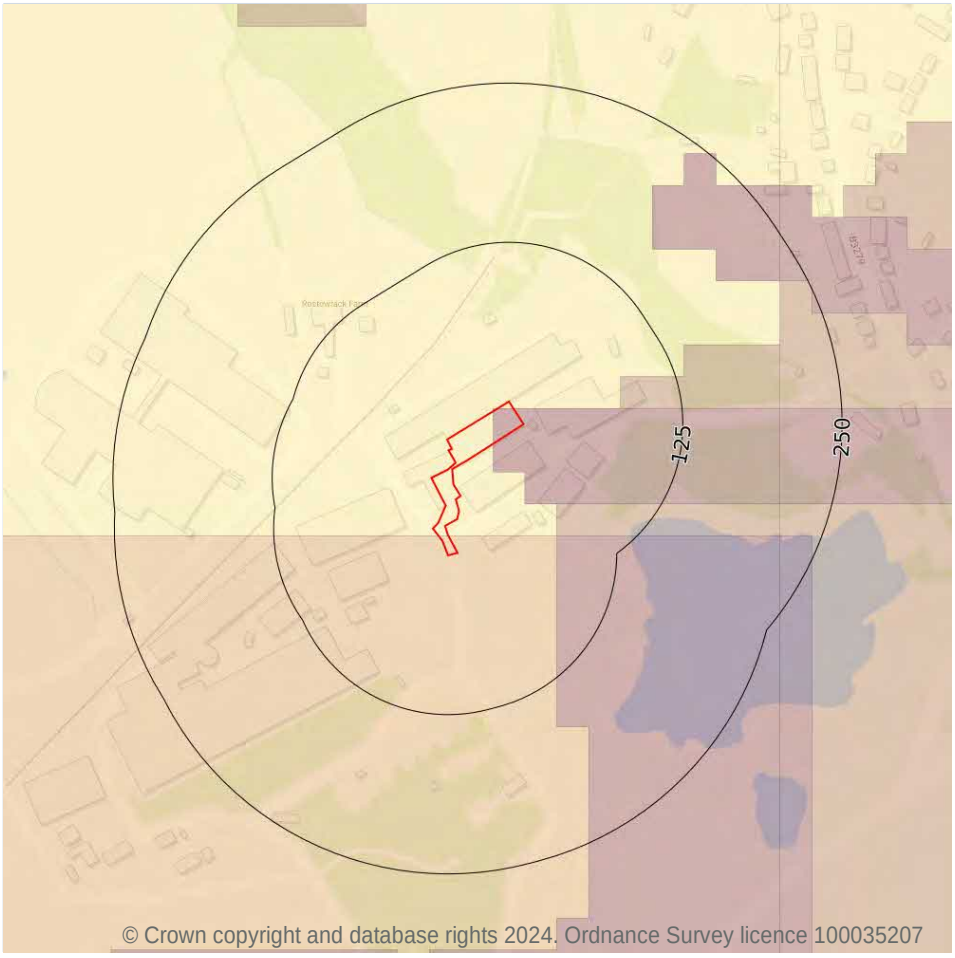
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

20.1 Radon

Records on site	3

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 129 >

Location	Estimated properties affected	Radon Protection Measures required
On site	Greater than 30%	Full

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 1% and 3%	None
On site	Between 5% and 10%	Basic

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	4

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**35 - 45 mg/kg**	**5 - 7 mg/kg**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
8m NE	35 - 45 mg/kg	5 - 7 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
10m S	25 - 35 mg/kg	4 - 5 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
10m S	25 - 35 mg/kg	4 - 5 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

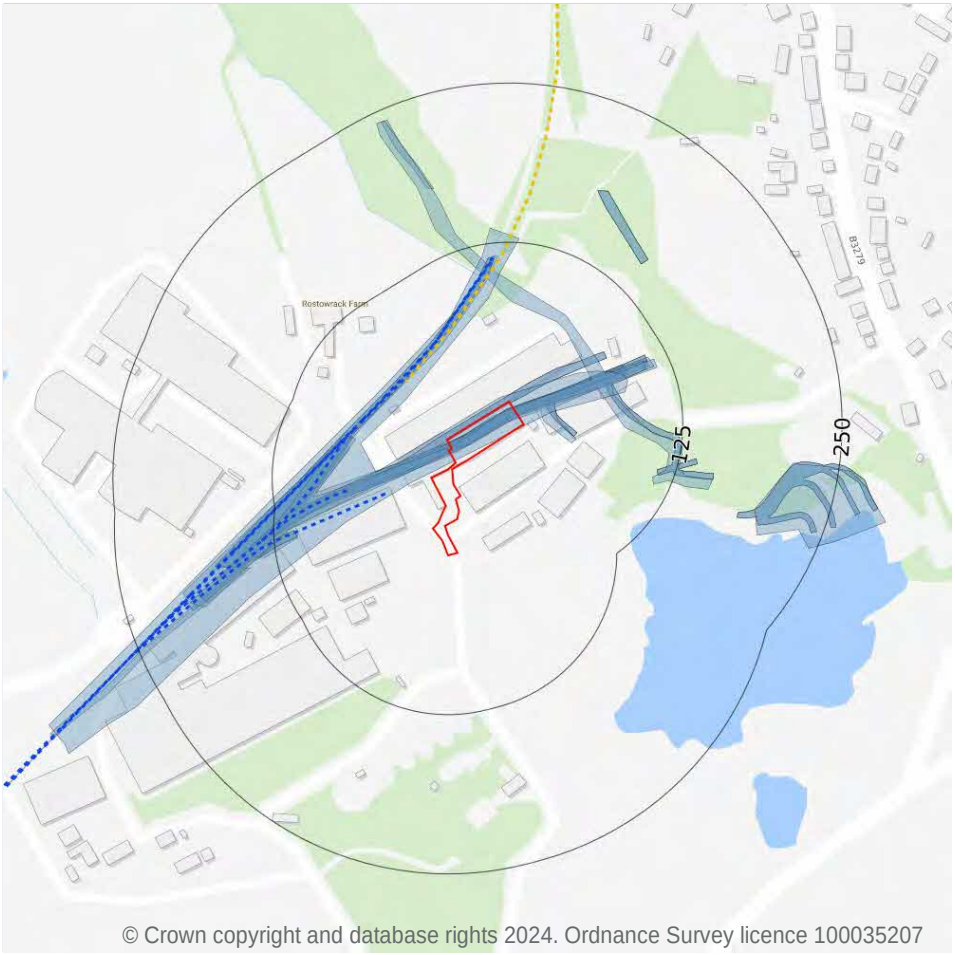
21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



Site Outline
Search buffers in metres (m)
Crossrail 1 Stations
Crossrail 1 Route
Crossrail 2 Stations
Crossrail 2 Route
Crossrail 2 Worksites
Crossrail 2 Safeguarding
Crossrail 2 Headhouses
Railway stations
Active railways
Active tunnels
Abandoned railways
Historic railways
Historic tunnels
Underground stations
Underground Lines
Royal Mail tunnels
HS2 optimised route
HS2 Stations
HS2 Depots
HS2 Surface Safeguarding
HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	16

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

Features are displayed on the Railway infrastructure and projects map on page 133 >

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1972**	**2500**
On site	**Railway Sidings**	**1882**	**2500**
On site	**Railway Sidings**	**1881**	**2500**
On site	**Railway Sidings**	**1907**	**2500**
On site	**Mineral Railway Sidings**	**1993**	**2500**
On site	**Railway Sidings**	**1958**	**10560**
On site	**Railway Sidings**	**1908**	**10560**
On site	**Railway Sidings**	**1879**	**10560**
On site	**Railway Sidings**	**1977**	**10000**
146m SW	Railway Sidings	1992	2500
150m NE	Railway Sidings	1882	2500
150m NE	Railway Sidings	1881	2500
177m N	Railway Sidings	1881	2500
182m E	Railway Sidings	1882	2500
182m E	Railway Sidings	1881	2500
194m E	Railway Sidings	1879	10560

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	2

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

Features are displayed on the Railway infrastructure and projects map on page 133 >

Location	Description
56m NW	Abandoned
56m NW	Historic

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	14

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

Features are displayed on the Railway infrastructure and projects map on page 133 >

Location	Name	Type
38m W		rail
57m NW	The Drinnick Mill Line	rail
59m NW	Not given	Single Track
60m NW	Not given	Single Track
67m W		rail
67m W	The Drinnick Mill Line	rail
68m W	Not given	Single Track

Location	Name	Type
69m N	Not given	Single Track
72m W	The Drinnick Mill Line	rail
74m W		rail
86m W	Not given	Single Track
158m W	Not given	Single Track
197m SW	Not given	Single Track
230m SW	Not given	Single Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 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.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

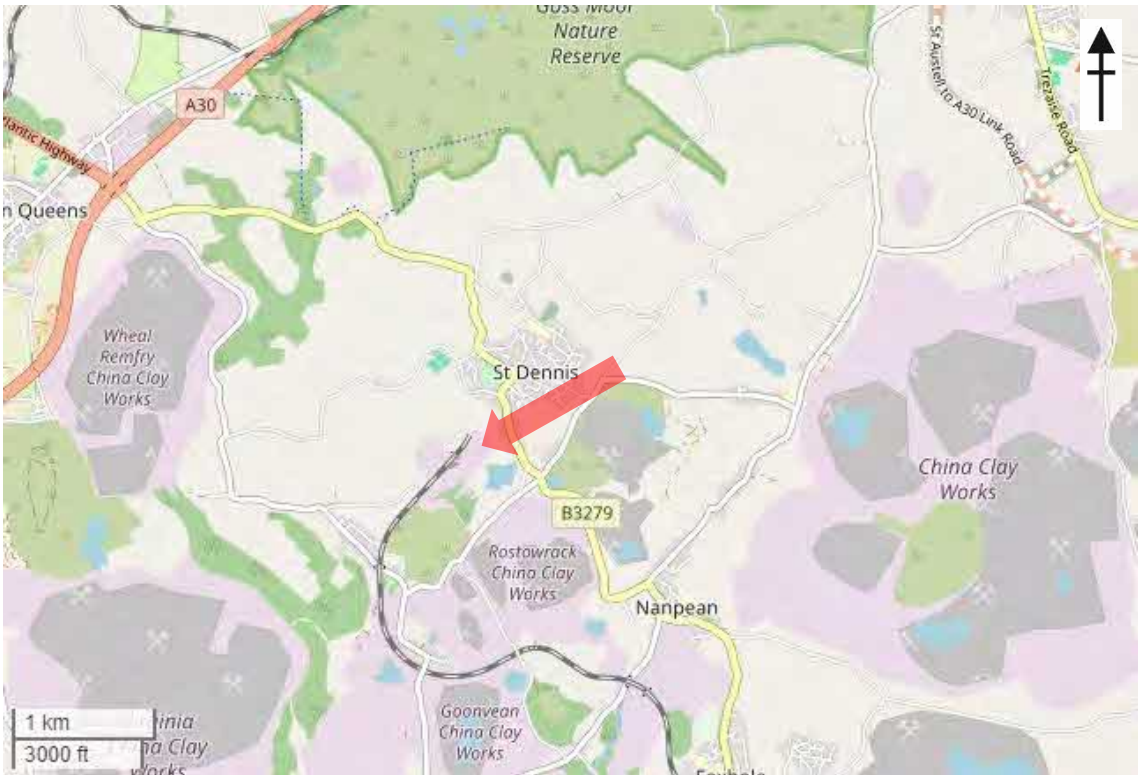
Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗ .

APPENDIX C

SITE PLANS

SITE LOCATION PLAN



Site Location Plan

© OpenStreetMap contributors

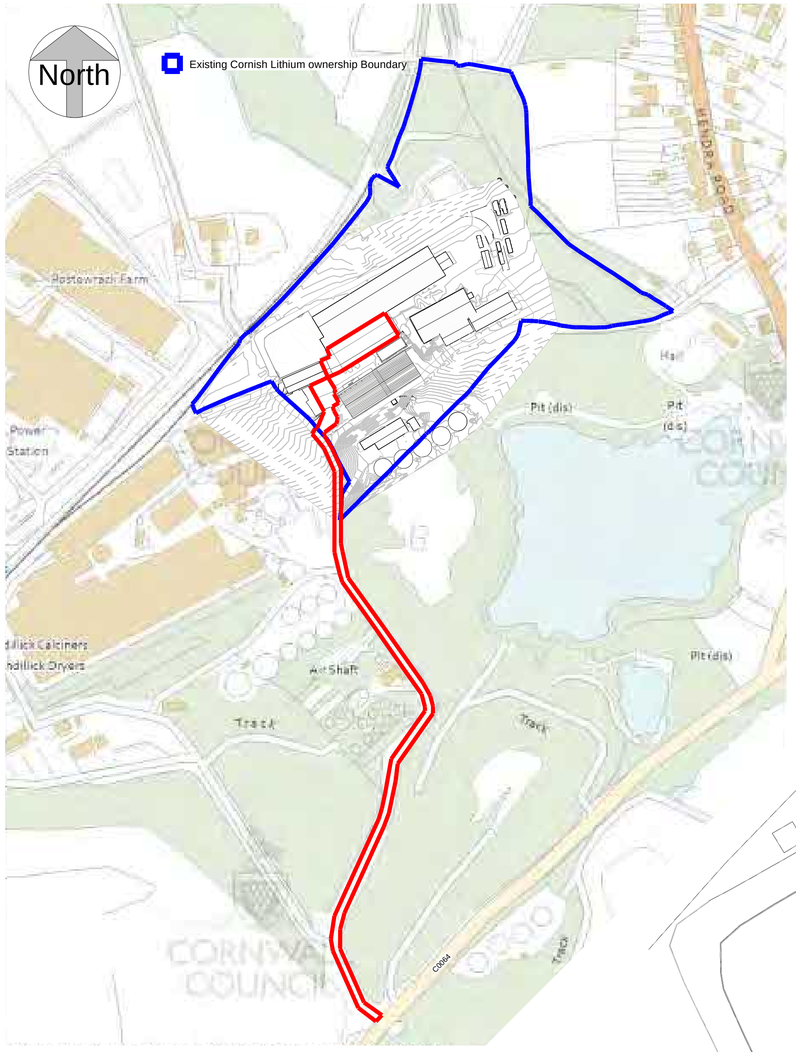
Dwg. No.
24123/01

AERIAL PHOTOGRAPH

	Aerial Photograph Sourced from Groundsure	Dwg. No. 24123/02

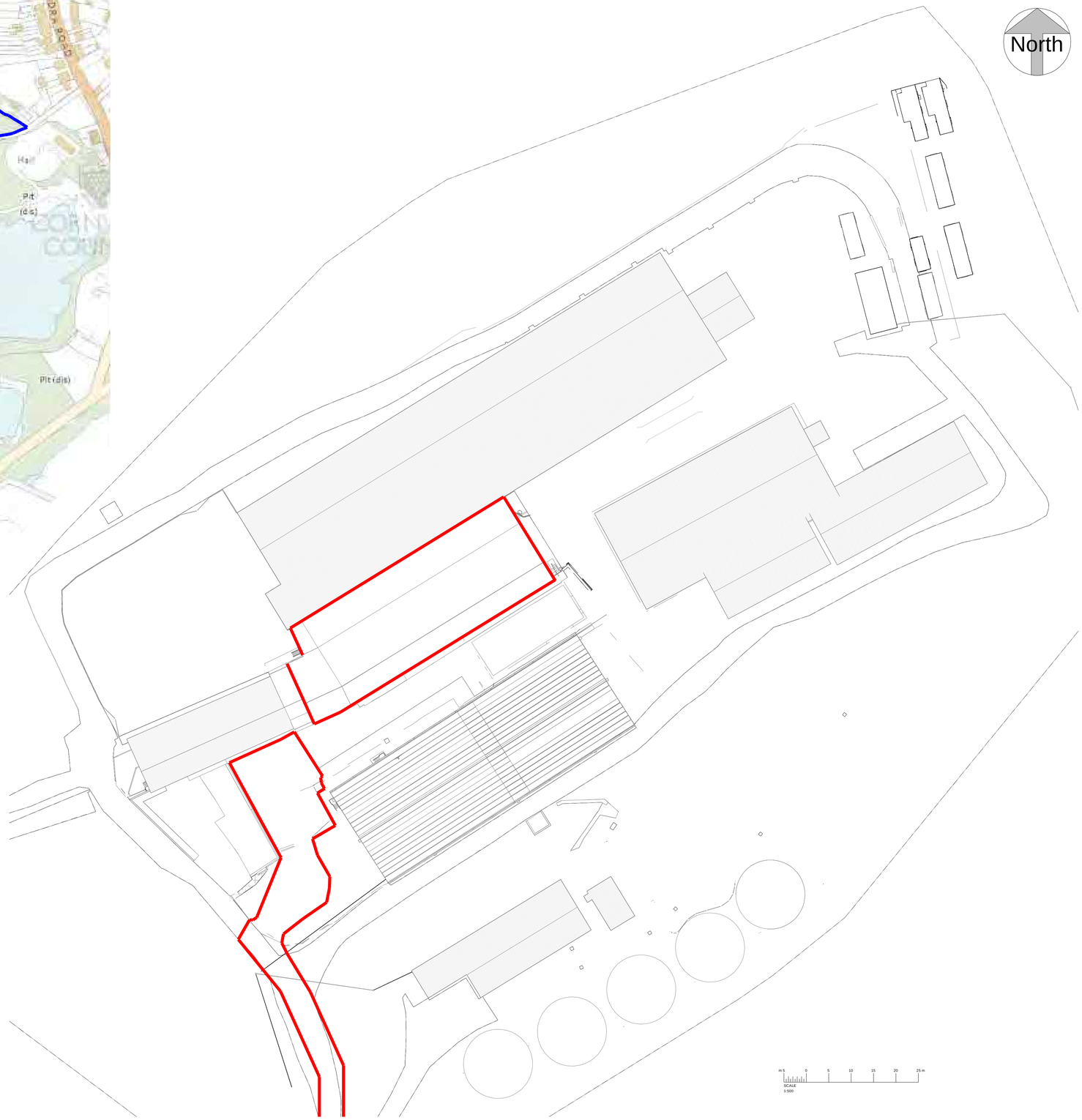
EXISTING SITE LAYOUT

ALL DIMENSIONS IN mm | IF IN DOUBT ASK | SCALE FOR GUIDANCE ONLY



Site Plan
1 : 2500

mm 2.5 0 2.5 5 7.5 10 12.5 mm
SCALE 1:2500



Location Plan
1 : 500

SAFE SITES

DESIGN, PROCESS & ENVIRONMENTAL RISK ASSESSMENT
GUIDANCE NOTES

General notes:

1. All dimensions are in milimetres unless otherwise stated.
2. All levels are in metres relative to ordanance datum Newlyn (mAOD) unless noted otherwise.
3. All coordinates are in metres relative to ordanance survey national grid.
4. All dimensions must be checked / verified on site. If in doubt ask.

Application Area

Number	Description	Date
P05	Access road boundary added	18.01.2024
P04	Notes amended	01.12.2023
P03	Proposed Office Area Amended	27.11.2023
P02	Proposed Office Area Amended	17.11.2023
P01	First Issue	04.09.2023

Revision Schedule

Cornish Lithium

GallifordTry

Client: Cornish Lithium Ltd

Project: Cornish Lithium Concentrator Demonstration Plant, Laboratories, Visitor Centre and Welfare Facilities

GT Project No.: 670056

Title: Proposed Office and Welfare Site Plan

Project Delivery Address: Trelavour Dryers, Parkandillick, St Dennis, Cornwall, PL26 8DY

Drawn	Checked	Approved	Date
A.Couldrey	T.Alford	E.Johns	18.01.2024

Scale: As indicated

Original Size: A1

Status Code: S4 SUITABLE FOR STAGE APPROVAL

Client Drawing No.:

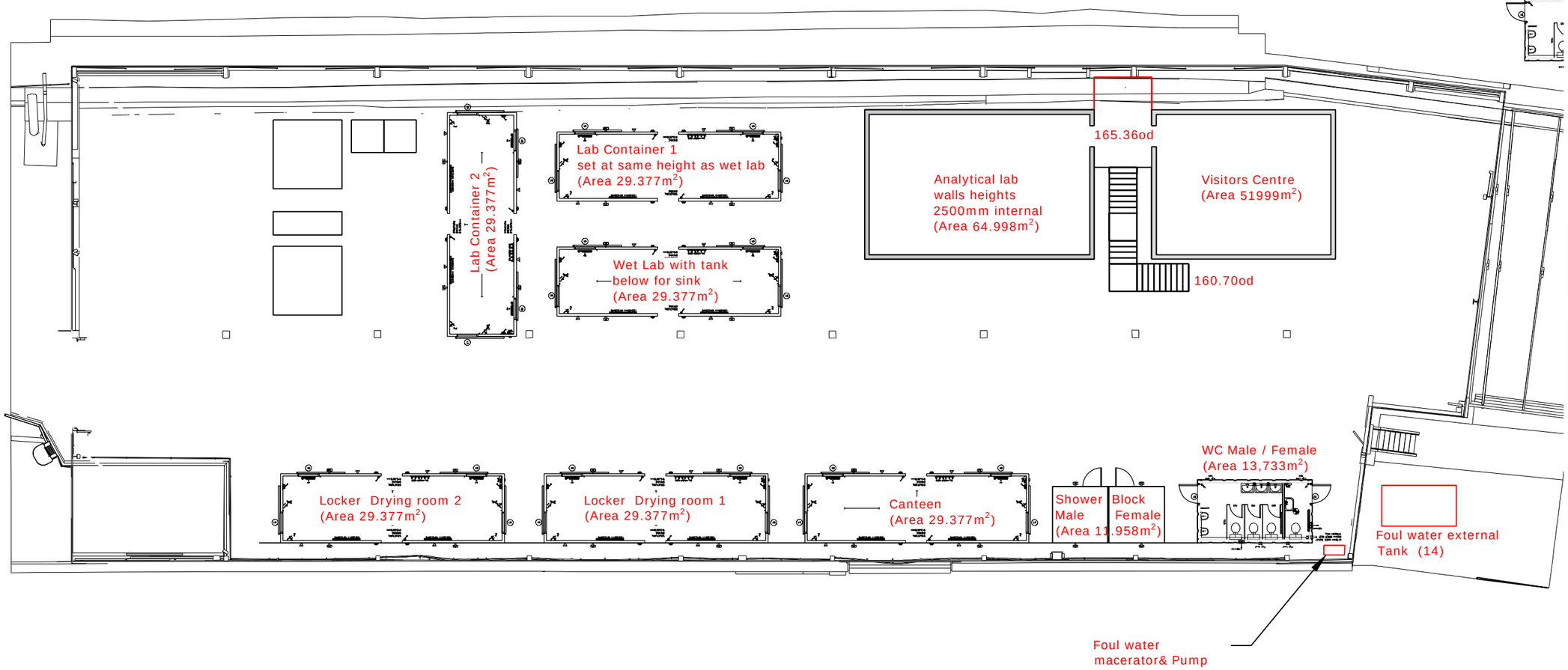
Client Scheme No.:

GT Drawing No.: 670056-GT-01-XX-DR-PL-0001

Revision: P05

PROPOSALS

ALL DIMENSIONS IN mm | IF IN DOUBT ASK | SCALE FOR GUIDANCE ONLY



SAFE SITES

DESIGN, PROCESS & ENVIRONMENTAL RISK ASSESSMENT GUIDANCE NOTES

General notes:

REFERENCE DOCUMENTS

Cornish Lithium

GallifordTry

Client: Cornish Lithium Ltd

Project: Cornish Lithium Concentrator Demonstration Plant, Laboratories, Visitor Centre and Welfare Facilities

GT Project No.: 670067

Title: Proposed Laboratories, Visitor Centre and Welfare Facilities in former Linhay Building - General Arrangement

Project Delivery Address: Trelavour Dryers, Parkandillick St Dennis, Cornwall, PL26 8DY

Drawn	Checked	Approved	Date
A.Couldrey	T.Alford	E.Johns	18/01/2023

Scale	Original Size
1:200	A3

Status Code: S3 — For Tender

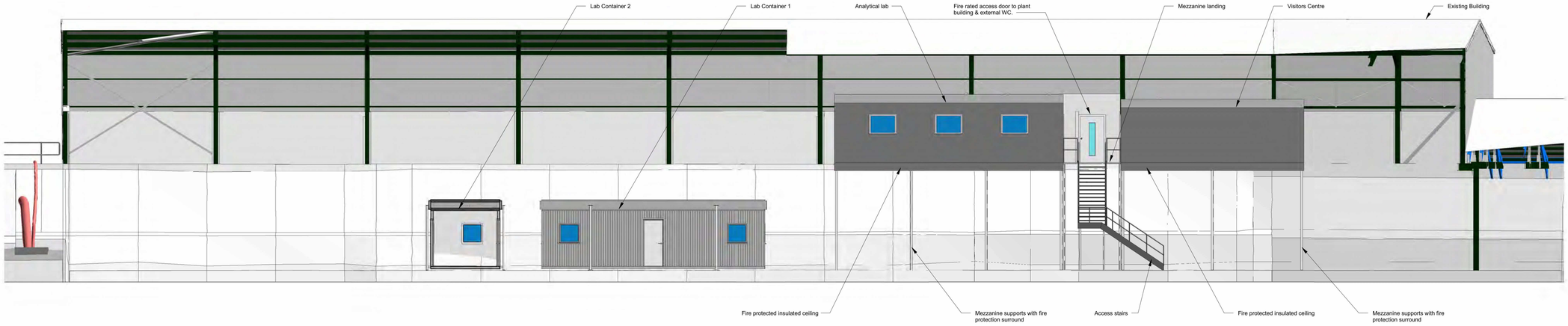
Client Drawing No.:

Client Scheme No.:

GT Drawing No.: 670056- GT- 04- XX- DR- S- 3000

Revision: P04

ALL DIMENSIONS IN mm | IF IN DOUBT ASK | SCALE FOR GUIDANCE ONLY



mm 1000 0 1000 2000 3000 4000 5000 mm
SCALE 1:100

SAFE SITES

DESIGN, PROCESS & ENVIRONMENTAL RISK ASSESSMENT
GUIDANCE NOTES

General notes:

1. All dimensions are in milimetres unless otherwise stated.
2. All levels are in metres relative to ordanance datum Newlyn (mAOD) unless noted otherwise.
3. All coordinates are in metres relative to ordanance survey national grid.
4. All dimensions must be checked / verified on site. If in doubt ask.

Number	Description	Date
P02	Scale bar added	18.01.2024
P01	First Issue	07.12.2023

Revision Schedule

Cornish Lithium

GallifordTry

Client: Cornish Lithium Ltd

Project: Cornish Lithium Concentrator Demonstration Plant, Laboratories, Visitor Centre and Welfare Facilities

GT Project No.: 670056

Title: Section Through Visitors Centre Showing Mezzanine Elevation

Project Delivery Address: Trelavour Dryers, Parkandillick, St Dennis, Cornwall, PL26 8DY

Drawn	Checked	Approved	Date
A.Couldrey	A.Couldrey	E.Johns	18.01.2024

Scale: 1 : 100

Original Size: A1

Status Code: S4 SUITABLE FOR STAGE APPROVAL

Client Drawing No.:

Client Scheme No.:

GT Drawing No.: 670056-GT-01-XX-DR-PL-0008

Revision: P02