



PHASE I – LAND CONTAMINATION DESK STUDY

Site: Land at First View, Lamorna, Penzance, Cornwall, TR19 6XQ

NGR: 144964 24190

Client: dRAW Architecture Ltd, 340 Old York Rd, London, SW18 1SS

Planning Ref: N/A

Date: 23 March 2022

Author: Mr D Ward, BSc (Hons) ACSM FGS

Our Ref: DW/SS/5345.b.DS



EXECUTIVE SUMMARY

Cornwall Consultants Ltd (CCL) has been commissioned by dRAW Architecture Ltd (the client) to undertake a Phase I Land Contamination Risk Assessment (Desk Study) at Land at First View, Lamorna, Penzance, Cornwall, TR19 6XQ (the 'site').

The client proposes to develop the site with a single residential dwelling and associated infrastructure.

This Phase I assessment has been requested by the client to accompany a planning application. This report has been verified by a 'Competent Person', as defined by the National Planning Policy Framework (2019).

A site walkover survey was carried out on 16th March 2022 to confirm the current use of the site, check for visible signs of contamination and provide context for potential pollutant linkages.

The desk study and site walkover findings have been considered, along with the sensitivity of the environment and end-users of the site, to construct an initial 'Conceptual Site Model' (CSM).

The following potential contaminant **sources** (hazards) have been identified:

- On site natural geology - radon and metallic elements including arsenic.
- Off site sewage discharges - various contaminants including organic wastes.

A preliminary risk assessment has been carried out where a pollutant linkage exists between these sources and the receptor. This determines the likelihood and severity of the potential for significant harm from contaminated land. The overall risk from exposure to potentially contaminated land at the site has been designated as **MODERATE**.

No further investigation, (i.e. a Phase II Investigation) however, full radon protection is likely to be required within the proposed dwelling.

Following your review of this document, we would recommend that a copy of the report should be submitted, as part of the planning application, to the Planning Department of Cornwall Council for comment and approval.

Contents

| | |
|--|-----------|
| 1.0 INTRODUCTION | 1 |
| 1.1 Rationale | 1 |
| 1.2 Objectives & Methodology | 1 |
| 1.3 Site Location | 1 |
| 1.4 Development Proposals | 2 |
| 2.0 WALKOVER SURVEY | 2 |
| 2.1 Site Observations | 2 |
| 2.2 Topography | 2 |
| 2.3 Surrounding Area | 3 |
| 3.0 HISTORICAL LAND USE | 3 |
| 3.1 Recorded Mining Activity | 3 |
| 3.2 Other Mineral Extraction | 3 |
| 3.3 Recorded Past Land Use | 3 |
| 3.4 Review of Historic Ordnance Survey Maps | 3 |
| 4.0 ENVIRONMENTAL SETTING | 4 |
| 4.1 Geology | 4 |
| 4.2 Geochemical Baseline of Metallic Elements | 4 |
| 4.3 Radon | 4 |
| 4.4 Hydrogeology | 5 |
| 4.5 Hydrology | 5 |
| 4.6 Environmental, Visual and Cultural Designations | 5 |
| 5.0 CONTEMPORARY LAND USE | 5 |
| 6.0 PRELIMINARY RISK ASSESSMENT | 6 |
| 6.1 Introduction | 6 |
| 6.2 Initial Conceptual Site Model & Pollutant Linkages | 6 |
| 6.3 Preliminary Risk Assessment | 9 |
| 7.0 CONCLUSIONS AND RECOMMENDATIONS | 9 |
| 6.0 LIMITATIONS | 10 |

Tables

| | |
|--|---|
| Table 1: Features within the Surrounding Area | 3 |
| Table 2: Pollutant Linkage Assessment | 8 |
| Table 3: Initial Conceptual Site Model & Preliminary Risk Assessment | 9 |

Appendices

- APPENDIX A: Site Location & Proposed Development Plan
- APPENDIX B: Site Walkover Photos
- APPENDIX C: Mining Search
- APPENDIX D: Environmental Report
- APPENDIX E: Historical Ordnance Survey Maps
- APPENDIX F: Risk Categorisation

1.0 INTRODUCTION

1.1 Rationale

Cornwall Consultants Ltd (CCL) has been commissioned by dRAW Architecture Ltd (the client) to undertake a Phase I Land Contamination Risk Assessment (Desk Study) at Land at First View, Lamorna, Penzance, Cornwall, TR19 6XQ (the 'site').

This Phase I assessment has been requested by the client to accompany a planning application. This report has been verified by a 'Competent Person', as defined by the National Planning Policy Framework (2019), in accordance with: British Standard (BS 10175:2011) 'Investigation of Potentially Contaminated Sites - Code of Practice' and Environment Agency 'Land Contamination Risk Management' (2020).

1.2 Objectives & Methodology

A Phase I Desk Study is the first stage of a tiered risk assessment process to determine if contaminated land is present and what level of risk it presents to end-users of the site and the environment, if any. The Phase I is a qualitative assessment. Subsequent stages (Phase II to IV) variously involving soil sampling, quantitative risk assessment, remediation and verification, may be required.

A Phase I assessment will develop an initial conceptual site model (CSM), to show the potential relationships between any contamination sources, exposure pathways and receptor(s) present. The relationship between any combination of Source-Pathway-Receptor (S-P-R) components is known as a pollutant 'linkage'.

A pollution linkage must exist for there to be a potential risk. Any linkages identified are used to determine if there is potential for any unacceptable risks. The level of risk to the critical receptors(s) is assessed in a qualitative (or preliminary) risk assessment. Recommendations are then made for any further quantitative risk assessment, as necessary.

To achieve the above, the Phase I assessment involves the following steps:

- Review of desk-based information and on-site observations to establish historical and contemporary sources of contamination and identify contaminant pathways and sensitive receptors;
- Identify S-P-R components from an understanding of the site and identify any pollutant linkages;
- Develop an initial CSM for all positive linkages and qualitatively assess the risks; and
- Determine if a Phase II intrusive investigation, involving the collection and analysis of soil samples, is required.

1.3 Site Location

The site is situated within the residential curtilage of the property known as First View, located in the village of Lamorna. The site covers an area of approximately 0.12 hectares (1200 m²) and lies at national grid reference (NGR) 144964 24190.

A site location and boundary plan is included within Appendix A.

1.4 Development Proposals

The client proposes to develop the site with a single residential dwelling and associated infrastructure. The proposed end-use will include a parking area and soft landscaping. A proposed development plan is included in Appendix A

Cornwall Consultants Ltd has been informed by the client that no previous Phase I or II assessment reports have been produced for the site.

2.0 WALKOVER SURVEY

2.1 Site Observations

A site walkover survey was carried out on 16th March 2022 to confirm the current use of the site, check for visible signs of contamination and provide context for potential pollutant linkages.

Photographs taken during the site visit are presented in Appendix B and the main findings are summarised here.

The site comprises a single car garage and a derelict shed located in the western corner of the property with the remainder comprising a steep vegetated bank spanning between an unnamed road and a stream.

Access was gained to the site from the unnamed road leading southeast through the village of Lamorna towards the seafront. Access was gained from a concrete surfaced parking area for one small vehicle.

The site is located within the residential curtilage of First View and is surrounded by woodland and vegetation to the northwest and south, an unnamed road to the southwest and a stream to the northeast. The majority of the site is covered in thick vegetation and woodland on a very steep bank to the northeast. This reduced access across part of the site but the unnamed road provided a good visual vantage point. No discernible odours or obvious signs of contamination were noted across the accessible portion of the site.

A poorly maintained single car garage is located in the western corner of the site with concrete block construction with a partly constructed roof. The garage was predominantly empty with some wood and PVC piping. A dark brown green stain was situated on the floor along the north-eastern side of the garage. This is likely to be a product of the partly constructed roof allowing rainwater to pool within the garage. A small derelict shed was located just northwest of the garage and had a concrete floor with rotting wooden double doors and rusting corrugated metal sheeting for walls and ceiling. PVC piping, glass, slate tiles, two electrical boxes and rusting metal bars were being stored in the shed.

The client is unsure of any previous land use.

2.2 Topography

The site is situated on a steeply sloping bank with a down gradient to the northeast towards the stream. From the unnamed road to the stream is an approximate elevation drop of 20 meters.

2.3 Surrounding Area

The site is situated in the village of Lamorna. The features within the surrounding area are detailed below in Table 1.

Table 1: Features within the Surrounding Area

| <i>Surrounding Land Use & Receptors</i> | <i>Distance from site</i> | <i>Direction</i> |
|---|---------------------------|------------------|
| Residence (Bal-Red) | Adjacent | SE |
| Woodland and Vegetation | Adjacent | S & NW |
| Road (Unnamed) | Adjacent | W & SW |
| Stream | Adjacent | E & NE |

3.0 HISTORICAL LAND USE

3.1 Recorded Mining Activity

A Mining Search (ref. MGM/CMS/135930) was undertaken by Cornwall Consultants Ltd in March 2022 and is included in Appendix C. The site is situated away from the principal metalliferous mining areas, but within an area where sporadic mining activity has taken place. There are no recorded or suspected shallow metalliferous mine workings, mineralised deposits or areas of mine waste beneath or within 100 metres of the site.

3.2 Other Mineral Extraction

There is no evidence of any non-metalliferous mineral extraction having taken place within the site boundaries.

3.3 Recorded Past Land Use

A Landmark Envirocheck Report was commissioned and is presented in Appendix D, with the past land use findings within 250 metres, summarised below.

| Past Land Use | | |
|----------------------------|------------------|--|
| <i>Distance</i> | <i>Direction</i> | <i>Details</i> |
| Mines and Quarries: | | |
| 195 m | NE | Lamorna Quarry of the Land's End Intrusion |

3.4 Review of Historic Ordnance Survey Maps

A review of historical Ordnance Survey (OS) maps, from our own documentary resources, provides an overview of the status of the site over time and provides the means to identify potential contamination hazards. Extracts of these maps are provided in Appendix E.

| <i>Date</i> | <i>Site</i> | <i>Surrounding area</i> |
|-------------|--|--|
| 1880 | Site located within part of a large field that extends to the northwest and south. A field boundary passes through the southern section of the property. | A river trends parallel to the northeast and eastern boundary. A track trends parallel to the southwestern boundary. A field is located to the northwest and south with some evidence of vegetation. |
| 1908 | Rough ground is indicated. | Rough ground is indicated to the south. |
| 1970 | Rough ground is not indicated and field boundary removed. | No change. |

4.0 ENVIRONMENTAL SETTING

4.1 Geology

British Geological Survey (BGS) open source (1:50k scale) digital data has been reviewed for the area. The site is underlain by the superficial deposits of alluvium comprising sand and gravels. The bedrock beneath the site is the Land's End Granite comprising granite. No linear geological structures are recorded by the BGS beneath the site.

4.2 Geochemical Baseline of Metallic Elements

The 'Tellus South West' project (containing British Geological Survey materials © NERC 2018) includes geochemical sampling of soils in the South West undertaken by the BGS. Soil samples were sampled at a density of 1 sample per 2km² to one per 5km² as part of a Geochemical Baseline Survey of the Environment and concentrations between these locations were extrapolated. According to the mapping information, an arsenic concentration of 21 mg/kg is inferred in the vicinity of the site.

4.3 Radon

The Landmark Report records the following findings

| Public Health England / UKradon | | |
|--|---------------|---|
| <i>Distance</i> | <i>Hazard</i> | <i>Details</i> |
| On site | Radon | Greater than 30% of homes are above the action level for radon. *Basic radon protective measures should be installed. |

*As described in the latest Building Research Establishment guidance on radon protective measures for new buildings. Landmark also advise to check compliance on radon protection with the developer for any new builds.

In addition, Cornwall Consultants Ltd checked the Ukradon maps with the findings below.

| Ukradon | | |
|-----------------|---------------|--|
| <i>Distance</i> | <i>Hazard</i> | <i>Details</i> |
| On site | Radon | Greater than 30% of homes are above the action level for radon. *Full radon protective measures should be installed. |

*As described in the latest Building Research Establishment guidance on radon protective measures for new buildings.

4.4 Hydrogeology

No detailed information regarding the depth to groundwater is available. The groundwater level is likely to be subject to seasonal variations.

The Environment Agency (EA) aquifer designation classifies the underlying rocks as a Secondary A (permeable) Aquifer. Groundwater vulnerability is assessed by how easily a pollutant discharged at ground level can reach the groundwater. High vulnerability areas mean that pollution can easily transmit to groundwater and likely to be characterised by high leaching soils. The Landmark report classifies the soils with high leaching potential.

The site is not within a Groundwater Source Protection Zone.

The nearest recorded historic groundwater abstraction license is 704 metres north of the site for use within Bosava Farm for general farming and domestic uses.

4.5 Hydrology

The nearest surface water feature is a stream along the north-eastern boundary of the site.

The site is located within 50 metres of an Environment Agency recorded Zone 2 and Zone 3 floodplain.

There are no recorded surface water abstraction licenses within 1 kilometre of the site.

4.6 Environmental, Visual and Cultural Designations

Based on the environmental data from the Landmark Report the following environmental, visual and/or cultural designations have been identified at the site.

| Visual and Cultural Designations | | |
|--|-----------|--|
| Distance | Direction | Details |
| Area of Outstanding Natural Beauty: | | |
| On site | - | Cornwall, 30 th November 1959 |

5.0 CONTEMPORARY LAND USE

The following contemporary land uses including current land use and waste / landfill sites recorded within 250 metres, are summarised from the Landmark report.

| Current Industrial Land Use | | |
|--|-----------|--|
| Distance | Direction | Details |
| Licensed Discharges to Controlled Waters: | | |
| 18 m, 23 m, 64 m, 68 m, 70 m, 112 m, 113 m & 224 m | SE & NW | Sewage discharges, 1987 - 2010 |
| Pollutant Release to Surface Waters (Red List): | | |
| 223 m | NW | The Cove Hotel breaching discharging sub-standard effluent (hearing date 1 st January 2010) |
| Pollution Incidents (EA/NRW): | | |
| 249 m | NW | Sewage treatment works, deliberate act, 13 th May 1993 |

6.0 PRELIMINARY RISK ASSESSMENT

6.1 Introduction

Part IIA of the Environmental Protection Act 1990 stipulates a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health and the environment. The Land Contamination Risk Management (LCRM) guidance provided by the Environment Agency specifies a staged approach to determine if there are any potentially unacceptable risks.

The first step to the preliminary risk assessment is to derive a conceptual site model (CSM). A CSM shows the possible relationships between any contaminant sources (hazards), pathways and receptors. Source, pathway and receptor (S-P-R) are defined by the LCRM guidance as:

- **Source** – a contaminant or pollutant that is in, on or under the land and that has the potential to cause harm or pollution, for example metallic elements (arsenic, lead, cadmium).
- **Pathway** – a route by which a receptor is or could be affected by a contaminant, for example ingestion of homegrown produce.
- **Receptor** – something that could be adversely affected by a contaminant, for example a person, controlled waters, an organism, an ecosystem, or Part IIA receptors such as buildings, crops or animals.

The CSM includes the concept of a ‘pollutant linkage’ between a contaminant source and a receptor by means of a pathway. A linkage must be present for a risk to exist, without a linkage, there is not a risk, even if a contaminant is present.

If any linkages are identified, the associated level of risk to receptors can be assessed. This is achieved by a preliminary risk assessment, predicting the likelihood of exposure to the hazard (contaminant source) and the severity of the potential consequence.

The initial CSM, together with the results of the preliminary risk assessment, are presented in the following sections.

6.2 Initial Conceptual Site Model & Pollutant Linkages

The desk study information, site walkover, environmental setting and potential on-site sources of contamination have been reviewed, with consideration to the development proposals, to construct an initial CSM.

The following potential contaminant **sources** (hazards) have been identified:

- On site natural geology - radon and metallic elements including arsenic.
- Off site sewage discharges - various contaminants including organic wastes.

Potential **receptors** relevant to the site based on the proposed end use include:

- Future site users: Human health and ecology
- Controlled waters: Underlying aquifer and nearby stream

- Built environment: Water pipes and buried concrete

Potential **pathways** relevant to the site based on the proposed end use include:

- Ingestion, dermal contact & inhalation
- Migration: laterally or vertically
- Surface water run off: leaching
- Direct contact

Pollutant linkages have been assessed in Table 2.

Table 2: Pollutant Linkage Assessment

| Potential Hazard | | Comments | Pollutant Linkage? |
|----------------------------|---|--|--------------------|
| Sources | Contaminants of Concern | | |
| On site: Natural Geology | Radon gas | Area where the radon action level may be exceeded, and harmful radon concentrations can accumulate in buildings | Yes |
| Off site sewage discharges | Various including: Organic waste | SE and NW sewage discharges from 1987 to 2010. The discharges to the SE are down stream of the site therefore no pollutant linkage. The discharges to the NW are far enough away from the site and old enough not to pose a risk of contaminants to the site, therefore, no pollutant linkage. | No |

6.3 Preliminary Risk Assessment

The identified pollutant linkages have been subject to a qualitative (preliminary) risk assessment to determine the likelihood and severity of the potential for significant harm from exposure to contaminated land. The risk assessment has been carried out in accordance with statutory guidance on contaminated land and in line with the National House Building Council (NHBC) risk categorisation methodology, presented in Appendix F.

The results of the preliminary risk assessment are summarised in Table 3.

Table 3: Initial Conceptual Site Model & Preliminary Risk Assessment

| Sources | Pathway | Receptor | Probability | Consequence | Risk |
|-----------|------------|-------------------|-------------|-------------|----------|
| Radon gas | Inhalation | Future site users | Likely | Medium | Moderate |

The overall risk from exposure to potentially contaminated land at the site has been designated as **MODERATE**.

7.0 CONCLUSIONS AND RECOMMENDATIONS

In summary, the desk study and preliminary risk assessment have identified the following potential Low / Moderate to Moderate risk of potential harm to end-users of the site, and any other receptors identified, arising from contaminated land:

- **Radon gas** – underlying geology – moderate risk
 - Full radon protective measures should be installed within the new dwelling to mitigate this risk.

No further investigation, (i.e. a Phase II Investigation) however, full radon protection is likely to be required within the proposed dwelling.

Water Pipes: Water suppliers sometimes request sampling and specific chemical analysis within the proposed trenched excavations of water pipes to identify the most appropriate pipe material. No sources of organic contaminants were identified and therefore any pipe material will be suitable for this site. Based on the findings of our desk study and the guidance provided by Water UK, (Contaminated Land Assessment Guidance) dated January 2014, no further assessment should be requested. We would recommend contacting your water supplier to confirm.

Waste: Any soil to be disposed off site may require chemical analysis prior to disposal. The proposed waste disposal facility should be contacted to confirm their requirements.

Unexploded Ordnance: A preliminary risk assessment has been undertaken by a third party with the following recommendation: A detailed desk study, whilst always prudent, is not considered essential in this instance.

If any potential signs of contamination are identified during the construction phase further work will be required to re-assess the risk.

Following your review of this document, we would recommend that a copy of the report should be submitted, as part of the planning application, to the Planning Department of Cornwall Council for comment and approval.

Yours faithfully

for **Cornwall Consultants Ltd**

Mr D Ward, BSc (Hons) ACSM FGS
Graduate Geologist

Mr T Green, BSc (Hons) MSc, FGS CGeol APMP
Principal Engineering Geologist

6.0 LIMITATIONS

This Phase I Desk Study undertaken on this site was in respect of contamination only and the observations reported do not purport to constitute a full survey of ground conditions and should not be used as a basis for foundation or other structural design. This report is not an assessment of mining subsidence or ground instability and provides no assurances against these risks if provided or implied. The site area is defined by the client and indicated in the plan supplied. It is the client's responsibility to divulge any previous environmental assessments for the subject site. No samples are collected in a Phase I Desk Study. This report is based specifically on information provided by the client at the time of the site visit. Any amendments to the development plan must be reported to us immediately for this may result in changes to the conclusions of the above report. This report may make reference to invasive species, flood risk and/or the presence of suspected asbestos containing materials (ACMs), however this report does not constitute an invasive species survey, flood risk assessment or asbestos survey. Cornwall Consultants Ltd are unable to provide asbestos survey, handling, testing or disposal related services. This report is confidential to the client and the client's solicitor and/or mortgage lender. It may not be reproduced or further distributed without the permission of Cornwall Consultants Ltd. We shall not be under any liability to any person who has not been party to the commissioning and fee paid for this report. The report may be reissued to a new client by ourselves, on payment of an appropriate fee, but will not be reissued within 28 days without approval from the current client.

APPENDIX A: Site Location & Proposed Development Plan



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PHASE 1 - Land Contamination Desk Study

Land at First View, Lamorna, Penzance, Cornwall
 TR19 6XQ

Reference: SS/5345

Date: 23/03/2022

Scale: Refer to Map

Proposed Development,
 Location and Site Plan

Drawn By: DW

APPENDIX B: Site Walkover Photos



Photograph 1: View from midway along the southwest boundary looking northwest towards the garage.



Photograph 2: View from the southwest corner of the property looking east downslope towards the bottom of the valley and the eastern boundary.



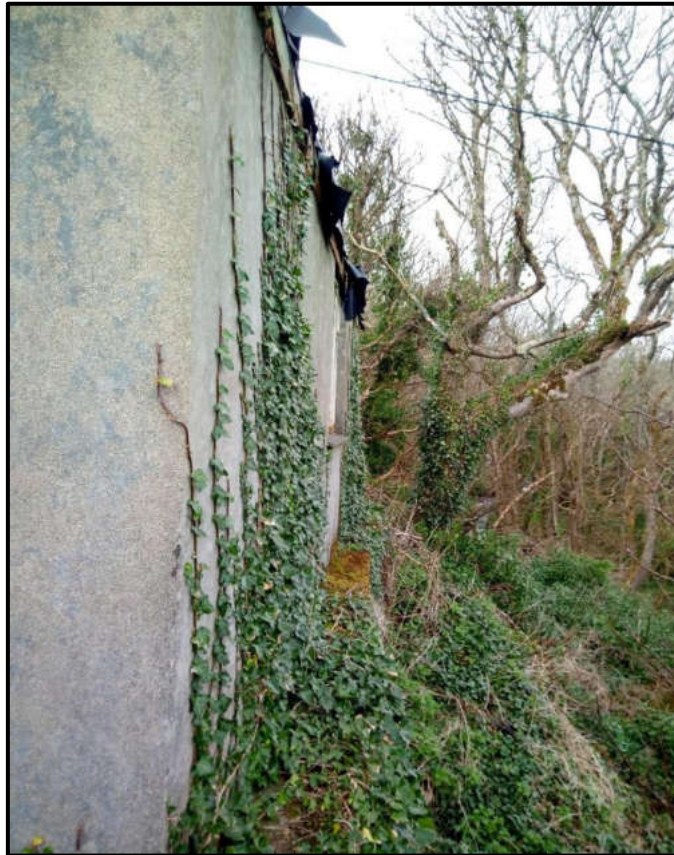
Photograph 3: View from the garage along the southwest boundary looking southeast towards the bottom of the valley and the southern boundary.



Photograph 4: View from the northwest corner of the property looking southeast towards the garage and shed.



Photograph 5: View from the northwest of the property looking northeast at the garage and shed.



Photograph 6: View from the eastern corner of the garage looking northwest.



Photograph 7: View looking northeast inside the shed.



Photograph 8: View looking northeast inside the garage.

APPENDIX C: Mining Search



Registered Office: Unit 3 East Pool, Tolvaaddon Business Park, Camborne TR14 0HX. Registered in England & Wales. Registered No: 04578850

| | | | |
|--------------------------------|--------------------------|-----------------|-----------------|
| Property Address | First View | | |
| | Lamorna | Penzance | TR19 6XQ |
| National Grid Reference | 144964 | | 24188 |
| Client & Client Ref | Draw Architecture | | SS5345 |
| Report Reference & Date | MGM/CMS/135930 | | 09 March 2022 |



- | | | | |
|--------------------------|--------------------------|----------------------------|------------------------|
| Property Boundary | Recorded Lode (Surface) | Recorded Shaft | Well/Spring |
| Land Registry Boundaries | Suspected Lode (Surface) | Suspected Shaft | Surface Workings |
| Building | Lode at Other Elevation | Indicated Shaft (Doubtful) | Mine Waste |
| Former Structure | Geological Fault | Subsidence | Alluvium/Tin Streaming |
| Elvan | Adit/Tunnel | Adit Portal | Quarry |

Risk Rating:

LOW - Passed

Next Steps:

Advisory for Development



PROFESSIONAL OPINION

We believe that the property is unlikely to be affected by subsidence related to historic metalliferous mining. Should any part of the property be developed in the future, it is recommended that a mining consultant inspects the foundation excavations to ensure the absence of potentially adverse ground conditions and to provide final assurances.

Mining Search: METALLIFEROUS MINERALS



This Mining Search provides an assessment of the subsidence risk presented to the property from historic metalliferous mining. The report findings are based on factual information from maps, plans and records in Cornwall Consultants Ltd private archive, the results of relevant on-site investigations, as well as commercially available datasets. This information has been interpreted by experts to reasonably predict the existence, location and likelihood of unrecorded mine workings.

The Findings

The property is situated away from the principal historic metalliferous mining areas, but within an area where sporadic mining activity has taken place.

The nearest recorded/suspected metalliferous mining related activity was tin streaming, which lies 460 metres northwest of the property. This activity is recorded in a mining history book.

Alluvium (river sediment) containing granular tin also extends beneath the property. We have no evidence that it has been exploited in the immediate vicinity; however, historic tin streaming results in disturbed sediments and buried infrastructure that can give rise to differential settlement unless accounted for in foundation design.

The property does not lie within a mineral planning permission area for the extraction of metalliferous minerals, or a Mineral Safeguarding/Consultation Area containing designated metalliferous mineral resources.

The Risk

Based on a detailed search and expert interpretation of our mining records archive we believe the risk to the property from subsidence relating to past extractive metalliferous mining is:

LOW - Passed

We believe that the property is unlikely to be affected by subsidence related to historic metalliferous mining.

The Next Steps

To further assess the risks to this property we recommend the following course of action:

Advisory for Development

Should any part of the property be developed in the future, it is recommended that a mining consultant inspects the foundation excavations to ensure the absence of potentially adverse ground conditions and to provide final assurances.

If further assessment has been recommended or you would just like to discuss the findings of this report, we would be happy to assist by phone on 01209 313511 or by email to mining@cornwallconsultants.co.uk or at a site meeting as required. Further explanation of the mining search process can be found on the attached information sheet and our website www.cornwallconsultants.co.uk.

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Mining Search: METALLIFEROUS MINERALS



Geology

Metallic mineralisation in the South West mainly occurs in lodes (veins), which are sheet-like structures occupying former fissures in the bedrock. Lodes are typically about 1 metre (m) wide but some reach 5m or more and are either vertical or inclined at steep angles. Mineral lodes containing tin, copper and other metalliferous minerals typically course in an east-northeast to west-southwest direction, while those containing lead and silver often course approximately north to south. Localised variations can occur, and lodes are also affected by other geological structures, such as crosscourses (geological faults) and elvan dykes (wide, planar igneous intrusions that are occasionally mineralised).

Mining Methods & History

The extraction of metalliferous minerals in the South West has taken place for thousands of years, throughout which shallow prospecting was widespread. This involved excavating costean (trial) pits in order to discover mineral lodes, often in areas where earlier tin-streaming had taken place. Once discovered, lodes were often mined by openworks (linear excavations) along the lode outcrop and later by means of shafts, adits (drainage tunnels) and levels (tunnels) driven away from the shafts. The ore was extracted from between the levels to leave stopes (narrow chasms). By the 19th century steam pumping engines enabled the workings to be deepened. During the tin and copper mining heyday, in the 18th and 19th centuries, the South West was one of the most productive mining regions in the world with over 2000 active mines. Thousands of shafts were sunk, and hundreds of miles of underground workings were driven along the lodes. However, by the end of the 19th century, the discovery of larger mineral deposits elsewhere led to the industrial decline in the South West and the closure of most mines. A lack of funds and regulations meant that mine workings were often left abandoned without being secured.

Mining Archive & Unrecorded Workings

The surviving officially deposited abandoned mine plans of most mines in the South West do not show the full extent of the underground workings, especially at shallow depth. It did not become a legal requirement for metal mines to keep comprehensive plans of the underground workings, and to deposit these upon abandonment until 1872. This law did not apply to mines that employed fewer than 12 people underground and neither did it require mines to survey any unused older workings. As a result, most of the old and shallow workings and smaller mines remain poorly recorded. We use a vast archive of other mining and geological records, maps, plans, books and datasets, along with our knowledge of the geology and mining methods to predict where workings could exist and might present a risk.

Subsidence Risks

Any near-surface mine working that has not been properly secured poses a potential subsidence risk at surface. Mine shafts present a high risk of localised subsidence. Often these features were capped with timber when mining ceased and all evidence of them became obliterated. Shallow adits can collapse or cause flooding and mine waste tips/dumps can cause differential settlement. However, one of the main causes of mining related subsidence is the collapse of near-surface mine workings on lode outcrops. These workings, in the form of small pits, openworks or shallow stopes, were often backfilled with unconsolidated waste rock and are not evident at surface until they collapse, thereby presenting a high risk of subsidence. There is no legal imperative to report subsidence to a central body and so no comprehensive database of historic subsidence events exists. Therefore, it is not possible to conclude comprehensively whether a property has previously been affected; but we include comment on subsidence at a property if we are aware of it.

Limitations of Mining Search

This Mining Search evaluates the subsidence risk from the extraction of metalliferous minerals only. It cannot be relied upon to indicate risk from clay, stone, coal, oil or other non-metalliferous extraction. It has been produced following a search and review of the extensive collection of abandoned mine plans, maps, records and archives in our possession and from this material we have endeavoured to provide as accurate a report as possible. However, considering that such records may not be wholly complete or accurate, we cannot accept liability for any inaccuracies or omissions with respect to those records. This Mining Search does not include an assessment of soil contamination risks. This report and any mining features described are applicable to the subject property only, the location or boundaries of which have been approved by the client in instructing and receiving this report. We cannot be liable for any erroneous or omitted information as portrayed on any plan supplied to us for this Mining Search. The report must not be relied upon for neighbouring properties, as any adjacent mining features may have been omitted for clarity. This report is confidential to the client, client's solicitor and/or mortgage lender or those acting through a conveyance service provider (as per the quoted reference number) and may not be reproduced or further distributed, re-sold or reassigned without our permission. We shall be under no liability whatsoever to any person who has not been party to the commissioning and fee paid for this report or any undisclosed third party. We have not visited the property.

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Mining Search: METALLIFEROUS MINERALS



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- Sets out minimum standards which firms compiling and selling search reports have to meet
- Promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals
- Enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

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- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

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Contact Cornwall Consultants Ltd if you would like a copy of the Search Code or our Complaints Procedure. We trust this report provides the information you require, however should you have any queries, please contact Cornwall Consultants Ltd at: enquiries@cornwallconsultants.co.uk

TPOs contact details

The Property Ombudsman scheme
Milford House, 43-55 Milford Street,
Salisbury, Wiltshire SP1 2BP
Tel: 01722 333306 Fax: 01722 332296
Email: admin@tpos.co.uk | Website: www.tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk or from our website at <https://cornwallconsultants.com/>

Complaints Procedure

Cornwall Consultants Ltd is registered with the Property Codes Compliance Board as a subscriber to the Search Code. A key commitment under the Code is that firms will handle any complaints both speedily and fairly.

If you want to make a complaint directly to Cornwall Consultants Ltd, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to:

The Property Ombudsman scheme (TPOs):
Tel: 01722 333306 E-mail: admin@tpos.co.uk
| Website: www.tpos.co.uk

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision.

Complaints should be sent to:

Dan Berriman
Cornwall Consultants Ltd
Unit 3 East Pool
Tolvaddon Business Park
Camborne
Cornwall
TR14 OHX

E: help@cornwallconsultants.co.uk

T: 01209 313511

You can also view our complaints procedure [here](#).

RESULT CLASSIFICATIONS FOR MORTGAGE

| | |
|-----------------------|---|
| PASSED | Typically, acceptable to mortgage lenders. |
| FURTHER ACTION | Value/enjoyment may be affected, and action should be satisfied before mortgage proceeds. |

APPENDIX D: Environmental Report

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

292196230_1_1

Customer Reference:

SS5345

National Grid Reference:

144960, 24190

Slice:

A

Site Area (Ha):

0.13

Search Buffer (m):

1000

Site Details:

Site at 144960, 24190

Client Details:

Mr T Green
Cornwall Consultants Ltd
Parc Vean House
Coach Lane
Redruth
Cornwall
TR15 2TT

| Report Section | Page Number |
|-----------------------|-------------|
| Summary | - |
| Agency & Hydrological | 1 |
| Waste | 21 |
| Hazardous Substances | - |
| Geological | 22 |
| Industrial Land Use | - |
| Sensitive Land Use | 25 |
| Data Currency | 26 |
| Data Suppliers | 30 |
| Useful Contacts | 31 |

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---|-------------|---------|-----------|-------------|-----------------------------|
| Agency & Hydrological | | | | | |
| BGS Groundwater Flooding Susceptibility | pg 1 | Yes | Yes | Yes | n/a |
| Contaminated Land Register Entries and Notices | | | | | |
| Discharge Consents | pg 1 | | 9 | 3 | 3 |
| Prosecutions Relating to Controlled Waters | | | n/a | n/a | n/a |
| Enforcement and Prohibition Notices | | | | | |
| Integrated Pollution Controls | | | | | |
| Integrated Pollution Prevention And Control | | | | | |
| Local Authority Integrated Pollution Prevention And Control | | | | | |
| Local Authority Pollution Prevention and Controls | | | | | |
| Local Authority Pollution Prevention and Control Enforcements | | | | | |
| Nearest Surface Water Feature | pg 5 | Yes | | | |
| Pollution Incidents to Controlled Waters | pg 5 | | 1 | 1 | 5 |
| Prosecutions Relating to Authorised Processes | | | | | |
| Registered Radioactive Substances | | | | | |
| River Quality | pg 6 | | 2 | 1 | 1 |
| River Quality Biology Sampling Points | | | | | |
| River Quality Chemistry Sampling Points | pg 7 | | 6 | | |
| Substantiated Pollution Incident Register | | | | | |
| Water Abstractions | pg 12 | | | | 3 (*7) |
| Water Industry Act Referrals | | | | | |
| Groundwater Vulnerability Map | pg 15 | Yes | n/a | n/a | n/a |
| Groundwater Vulnerability - Soluble Rock Risk | | | n/a | n/a | n/a |
| Bedrock Aquifer Designations | pg 15 | Yes | n/a | n/a | n/a |
| Superficial Aquifer Designations | pg 15 | Yes | n/a | n/a | n/a |
| Source Protection Zones | | | | | |
| Extreme Flooding from Rivers or Sea without Defences | pg 15 | Yes | Yes | n/a | n/a |
| Flooding from Rivers or Sea without Defences | pg 16 | Yes | Yes | n/a | n/a |
| Areas Benefiting from Flood Defences | | | | n/a | n/a |
| Flood Water Storage Areas | | | | n/a | n/a |
| Flood Defences | | | | n/a | n/a |
| OS Water Network Lines | pg 16 | | 3 | 8 | 18 |

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|---|-------------|---------|-----------|-------------|--------------------------------|
| Waste | | | | | |
| BGS Recorded Landfill Sites | | | | | |
| Historical Landfill Sites | | | | | |
| Integrated Pollution Control Registered Waste Sites | | | | | |
| Licensed Waste Management Facilities (Landfill Boundaries) | | | | | |
| Licensed Waste Management Facilities (Locations) | | | | | |
| Local Authority Landfill Coverage | pg 21 | 2 | n/a | n/a | n/a |
| Local Authority Recorded Landfill Sites | | | | | |
| Registered Landfill Sites | | | | | |
| Registered Waste Transfer Sites | | | | | |
| Registered Waste Treatment or Disposal Sites | | | | | |
| Hazardous Substances | | | | | |
| Control of Major Accident Hazards Sites (COMAH) | | | | | |
| Explosive Sites | | | | | |
| Notification of Installations Handling Hazardous Substances (NIHHS) | | | | | |
| Planning Hazardous Substance Consents | | | | | |
| Planning Hazardous Substance Enforcements | | | | | |
| Geological | | | | | |
| BGS 1:625,000 Solid Geology | pg 22 | Yes | n/a | n/a | n/a |
| BGS Recorded Mineral Sites | pg 22 | | 1 | 2 | |
| CBSCB Compensation District | | | n/a | n/a | n/a |
| Coal Mining Affected Areas | | | n/a | n/a | n/a |
| Mining Instability | | | n/a | n/a | n/a |
| Man-Made Mining Cavities | | | | | |
| Natural Cavities | | | | | |
| Non Coal Mining Areas of Great Britain | pg 22 | Yes | Yes | n/a | n/a |
| Potential for Collapsible Ground Stability Hazards | pg 22 | Yes | Yes | n/a | n/a |
| Potential for Compressible Ground Stability Hazards | pg 22 | Yes | Yes | n/a | n/a |
| Potential for Ground Dissolution Stability Hazards | | | | n/a | n/a |
| Potential for Landslide Ground Stability Hazards | pg 23 | Yes | Yes | n/a | n/a |
| Potential for Running Sand Ground Stability Hazards | pg 23 | Yes | Yes | n/a | n/a |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards | pg 24 | Yes | Yes | n/a | n/a |
| Radon Potential - Radon Affected Areas | pg 24 | Yes | n/a | n/a | n/a |
| Radon Potential - Radon Protection Measures | pg 24 | Yes | n/a | n/a | n/a |

| Data Type | Page Number | On Site | 0 to 250m | 251 to 500m | 501 to 1000m (*up to 2000m) |
|--------------------------------------|-------------|---------|-----------|-------------|--------------------------------|
| Industrial Land Use | | | | | |
| Contemporary Trade Directory Entries | | | | | |
| Fuel Station Entries | | | | | |
| Gas Pipelines | | | | | |
| Underground Electrical Cables | | | | | |
| Sensitive Land Use | | | | | |
| Ancient Woodland | | | | | |
| Areas of Adopted Green Belt | | | | | |
| Areas of Unadopted Green Belt | | | | | |
| Areas of Outstanding Natural Beauty | pg 25 | 1 | | | |
| Environmentally Sensitive Areas | | | | | |
| Forest Parks | | | | | |
| Local Nature Reserves | | | | | |
| Marine Nature Reserves | | | | | |
| National Nature Reserves | | | | | |
| National Parks | | | | | |
| Nitrate Sensitive Areas | | | | | |
| Nitrate Vulnerable Zones | pg 25 | 1 | | | |
| Ramsar Sites | | | | | |
| Sites of Special Scientific Interest | | | | | |
| Special Areas of Conservation | | | | | |
| Special Protection Areas | | | | | |
| World Heritage Sites | | | | | |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|--------------|
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13SE (E) | 0 | 1 | 144962 24186 |
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13SE (E) | 4 | 1 | 145000 24186 |
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13NW (N) | 90 | 1 | 144950 24300 |
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13SE (E) | 155 | 1 | 145150 24150 |
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level | A13NW (NW) | 277 | 1 | 144800 24450 |
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A13NW (NW) | 306 | 1 | 144750 24450 |
| | BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface | A12SE (SW) | 477 | 1 | 144600 23850 |
| 1 | Discharge Consents Operator: A J F Balsdon / J Daniels Property Type: Wooden Containers Location: Gilly Cottage, Lamorna Cove, PENZANCE, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 3052/4/28/1 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 15th October 1987 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Treated Effluent Discharge Environment: Coastal Receiving Water: Mounts Bay English Channel, Licence Status: Lapsed, Revoked Or Cancelled Status: Not Supplied Positional Accuracy: Located by supplier to within 100m | A13SE (SE) | 18 | 2 | 144990 24150 |
| 2 | Discharge Consents Operator: Mr R Stevenson Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Gilly Cottage, Lamorna Cove, Penzance, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 300309/Sw/01 Permit Version: 1 Effective Date: 18th July 1997 Issued Date: 18th July 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Controlled Sea Receiving Water: Mounts Bay English Channel Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m | A13SE (SE) | 23 | 2 | 144990 24145 |
| 2 | Discharge Consents Operator: Penwith District Council Property Type: Public Conveniences Location: Lamorna Cove Public Conveniences, Penzance, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 3052/4/27 Permit Version: 1 Effective Date: 15th October 1987 Issued Date: 15th October 1987 Revocation Date: 16th September 2005 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Controlled Sea Receiving Water: Mounts Bay English Channel Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m | A13SE (SE) | 64 | 2 | 145020 24110 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|--------------|
| 2 | <p>Discharge Consents</p> <p>Operator: Mrs G J Shaw Property Type: Public Conveniences Location: Lamorna Cove Public Conveniences, Penzance, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 3052/4/29 Permit Version: 1 Effective Date: 15th October 1987 Issued Date: 15th October 1987 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Controlled Sea Environment: Receiving Water: Mounts Bay English Channel Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 100m</p> | A13SE (SE) | 68 | 2 | 145020 24105 |
| 2 | <p>Discharge Consents</p> <p>Operator: Dr D W Breese Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: 1/2 Cove Cottages, Lamorna Cove, Penzance, Cornwall, Tr19 7xq Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 300297/Sw/01 Permit Version: 1 Effective Date: 31st July 1997 Issued Date: 31st July 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Controlled Sea Environment: Receiving Water: Mounts Bay English Channel Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A13SE (SE) | 70 | 2 | 145010 24100 |
| 2 | <p>Discharge Consents</p> <p>Operator: Dr D Breese & J R Collins Property Type: Wooden Containers Location: 1 & 2 Cove Cottages, Lamorna Cove, PENZANCE, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 3052/4/30/1 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 15th October 1987 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Treated Effluent Discharge: Coastal Environment: Receiving Water: Mounts Bay English Channel, Licence Status: Lapsed, Revoked Or Cancelled Status: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A13SE (SE) | 70 | 2 | 145010 24100 |
| 3 | <p>Discharge Consents</p> <p>Operator: Option Cask Limited Property Type: HOLIDAY ACCOM/CAMP SITE/CARAVAN SITE/HOTEL/HOSTEL Location: Lamorna Cove Hotel, Lamorna, Penzance, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: Nra-Sw-2523 Permit Version: 1 Effective Date: 23rd January 1991 Issued Date: 23rd January 1991 Revocation Date: 5th September 2002 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Lamorna Valley Stream Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m</p> | A13NW (NW) | 112 | 2 | 144860 24290 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|--------------|
| 3 | <p>Discharge Consents</p> <p>Operator: Elia Enterprises Limited Property Type: HOLIDAY ACCOM/CAMP SITE/CARAVAN SITE/HOTEL/HOSTEL Location: Lamorna Cove Hotel, Lamorna Cove, Penzance, Cornwall, Tr19 6xh Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Reference: 302499 Permit Version: 1 Effective Date: 5th September 2002 Issued Date: 5th September 2002 Revocation Date: Not Supplied Discharge Type: Sewage And Trade Combined - Unspecified Discharge: Freshwater Stream/River Environment: Receiving Water: Lamorna Stream Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A13NW (NW) | 113 | 2 | 144861 24291 |
| 4 | <p>Discharge Consents</p> <p>Operator: Roy Stevenson Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Nantarras Studio, Lamorna, Penzance, Cornwall, Tr19 6xh Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Reference: Npswqd009825 Permit Version: 1 Effective Date: 12th January 2010 Issued Date: 12th January 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Coastal Waters Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A13NW (NW) | 224 | 2 | 144782 24369 |
| 5 | <p>Discharge Consents</p> <p>Operator: Miss E Nuttall-Dormon Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: Kemyel Wartha Barn, Lamorna, Penzance, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Reference: 301204 Permit Version: 1 Effective Date: 20th April 2000 Issued Date: 2nd June 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Not Supplied Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A14NW (NE) | 385 | 2 | 145320 24380 |
| 6 | <p>Discharge Consents</p> <p>Operator: Paul Richard Hook & Amanda Anne Hook Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Dwelling At Kemyel Wartha Kemyel Wartha, Lamorna, Penzance, Cornwall, Tr19 6xg Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Reference: 301363 Permit Version: 1 Effective Date: 24th August 2000 Issued Date: 6th September 2000 Revocation Date: 10th May 2002 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A14NW (NE) | 464 | 2 | 145310 24520 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 6 | <p>Discharge Consents</p> <p>Operator: Mr & Mrs P Hook Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: Dwelling At Kemyel Wartha, Lamorna, Penzance, Cornwall Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 302392 Permit Version: 1 Effective Date: 10th May 2002 Issued Date: 21st May 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A14NW (NE) | 466 | 2 | 145311 24521 |
| 7 | <p>Discharge Consents</p> <p>Operator: Gordon Jeffrey Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Tregurnow, Lamorna, Penzance, Cornwall, Tr19 6bl Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 303517 Permit Version: 1 Effective Date: 1st September 2006 Issued Date: 11th July 2006 Revocation Date: 1st September 2018 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A12SE (W) | 609 | 2 | 144320 24140 |
| 7 | <p>Discharge Consents</p> <p>Operator: Gordon Jeffrey Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Tregurnow, Lamorna, Penzance, Cornwall, Tr19 6bl Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 303515 Permit Version: 1 Effective Date: 1st September 2006 Issued Date: 11th July 2006 Revocation Date: 1st September 2018 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A12SE (W) | 610 | 2 | 144320 24130 |
| 7 | <p>Discharge Consents</p> <p>Operator: Gordon Jeffrey Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Tregurnow, Lamorna, Penzance, Cornwall, Tr19 6bl Authority: Environment Agency, South West Region Catchment Area: South Coast Streams: Loe Bar To Mertherm Pt, Cornwall Reference: 303516 Permit Version: 1 Effective Date: 1st September 2006 Issued Date: 11th July 2006 Revocation Date: 1st September 2018 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Land/Soakaway Environment: Receiving Water: Soakaway Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p> | A12SE (W) | 610 | 2 | 144320 24130 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 8 | <p>Prosecutions Relating to Controlled Waters</p> <p>Location: Lamorna Stream, The Cove Hotel, Lamorna, Penzance Prosecution Text: Breaching discharge consent conditions by discharging sub-standard effluent into a watercourse Prosecution Act: Wra91 S86(6) Hearing Date: 1st January 2010 Verdict: Guilty Fine: 7000 Cost: 2338 Positional Accuracy: Manually positioned within the geographical locality</p> | A13NW (NW) | 223 | 2 | 144760 24345 |
| | <p>Nearest Surface Water Feature</p> | A13NE (NE) | 0 | - | 144968 24198 |
| 9 | <p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Private Sewage (Non-PLC): Sewage Treatment Works Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Sewage - Treated Effluent Note: Deliberate Act Incident Date: 13th May 1993 Incident Reference: 62003900 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Effluent Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p> | A13NW (NW) | 249 | 2 | 144700 24300 |
| 10 | <p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Private Sewage (Non-PLC): Sewage Treatment Works Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Sewage - Treated Effluent Note: Mechanical/Electrical Plant Failure Incident Date: 17th August 1993 Incident Reference: 62010558 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Effluent Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p> | A12NE (NW) | 446 | 2 | 144600 24500 |
| 11 | <p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Septic Tank Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Sewage - Treated Effluent Note: Inadequate Design/Capacity Incident Date: 21st May 1991 Incident Reference: 61001585 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Overflow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p> | A17SE (NW) | 596 | 2 | 144600 24700 |
| 12 | <p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Cattle (Dairy) Farming: Yards Location: Location Description Not Available Authority: Environment Agency, South West Region Pollutant: Animal Waste/Slurry Note: Poor Operational Practise Incident Date: 2nd June 1993 Incident Reference: 62003964 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Freshwater Stream/River Cause of Incident: Effluent Discharge Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p> | A12NE (W) | 627 | 2 | 144300 24200 |
| 13 | <p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Private Sewage (Non-PLC): Septic Tank/Cesspit Location: Hotel Lamorna-Lamorna, LAMORNA Authority: Environment Agency, South West Region Pollutant: Sewage - Septic Tank Effluent Note: Not Supplied Incident Date: 18th October 1996 Incident Reference: 18473 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Not Given Cause of Incident: Pollution Risk: Water Quality Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p> | A12SW (W) | 944 | 2 | 144005 23995 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| 13 | Pollution Incidents to Controlled Waters Property Type: Domestic/Residential Location: Lamorna-Mean High Water, LAMORNA Authority: Environment Agency, South West Region Pollutant: Sewage - Septic Tank Effluent Note: Not Supplied Incident Date: 21st August 1996 Incident Reference: 17540 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Not Given Cause of Incident: Pollution Risk: Water Quality Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m | A12SW (W) | 947 | 2 | 144000 24000 |
| 13 | Pollution Incidents to Controlled Waters Property Type: Private Sewage (Non-PLC): Sewage Treatment Works Location: Trewoofe-Lamorna Stream Confluence, LAMORNA Authority: Environment Agency, South West Region Pollutant: Sewage - Septic Tank Effluent Note: Not Supplied Incident Date: 7th September 1996 Incident Reference: 17834 Catchment Area: South Coast Streams: Loe Bar To Merthern Pt, Cornwall Receiving Water: Not Given Cause of Incident: Pollution Risk: Water Quality Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m | A12SW (W) | 948 | 2 | 144000 23995 |
| | River Quality Name: Lamorna Strm GQA Grade: River Quality A Reach: Hotel Lamorna-Lamorna Estimated Distance (km): .6 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000 | A13NE (NE) | 8 | 2 | 144988 24201 |
| | River Quality Name: Lamorna Strm GQA Grade: River Quality A Reach: Lamorna-Mean High Wtr Estimated Distance (km): .1 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000 | A13SE (SE) | 151 | 2 | 145091 24051 |
| | River Quality Name: Lamorna Strm GQA Grade: River Quality A Reach: Trewoofe-Hotel Lamorna Estimated Distance (km): 1 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000 | A18SW (NW) | 399 | 2 | 144784 24577 |
| | River Quality Name: Carn Euny Strm GQA Grade: River Quality A Reach: Trewoofe-Lamorna Strm Confluence Estimated Distance (km): .5 Flow Rate: Flow less than 0.62 cumecs Flow Type: River Year: 2000 | A17NE (NW) | 993 | 2 | 144368 25022 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| 14 | <p>River Quality Chemistry Sampling Points</p> <p>Name: Lamorna Stream Reach: Source To Trewoofe Estimated Distance: 4.50 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied</p> | A13SE (SE) | 23 | 2 | 145014 24155 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 14 | <p>River Quality Chemistry Sampling Points</p> <p>Name: Lamorna Stream Reach: Trewoofe To Hotel Lamorna Estimated Distance: 1.00 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied</p> | A13SE (SE) | 23 | 2 | 145014 24155 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| 14 | <p>River Quality Chemistry Sampling Points</p> <p>Name: Lamorna Stream Reach: Hotel Lamorna To Lamorna Estimated Distance: 0.60 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied</p> | A13SE (SE) | 23 | 2 | 145014 24155 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| 14 | <p>River Quality Chemistry Sampling Points</p> <p>Name: Lamorna Stream Reach: Lamorna To Mean High Water Estimated Distance: 0.00 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied</p> | A13SE (SE) | 23 | 2 | 145014 24155 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 14 | <p>River Quality Chemistry Sampling Points</p> <p>Name: Cam Euny Stream Reach: Source To Trewoofe Estimated Distance: 6.40 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied</p> | A13SE (SE) | 23 | 2 | 145014 24155 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| 14 | <p>River Quality Chemistry Sampling Points</p> <p>Name: Cam Euny Stream Reach: Trewoofe To Lamorna Stream Confluence Estimated Distance: 0.50 Objective: Not Supplied Positional Accuracy: Located by supplier to within 10m Year: 1990 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1993 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1994 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1995 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1996 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1997 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1998 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 1999 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2000 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2001 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2002 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2003 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2004 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2005 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2006 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2007 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2008 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied Year: 2009 GQA Grade: River Quality Chemistry GQA Grade A - Very Good Compliance: Not Supplied</p> | A13SE (SE) | 23 | 2 | 145014 24155 |
| 15 | <p>Water Abstractions</p> <p>Operator: Mr R H Nicholls Licence Number: 15/48/024/G/028 Permit Version: 100 Location: Bosava Farm, Lamorna - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Bossava Farm, Lamorna. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st December 1965 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A18NW (N) | 704 | 2 | 144800 24900 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 16 | <p>Water Abstractions</p> <p>Operator: Mr J J Trehwella Licence Number: 15/48/024/G/030 Permit Version: 100 Location: Higher Kemyal Farm, Paul - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Higher Kemyal Farm, Paul Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st July 1973 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A14NE (E) | 741 | 2 | 145700 24400 |
| 17 | <p>Water Abstractions</p> <p>Operator: MR L DELBRIDGE Licence Number: 1548024G027 Permit Version: Not Supplied Location: The Meadow, Castallack, Paul , PENZANCE Authority: Environment Agency, South West Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Well Daily Rate (m3): 2.30 Yearly Rate (m3): 827.00 Details: Expired 01/04/92; Depth 4M Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A18NE (N) | 905 | 2 | 145100 25100 |
| | <p>Water Abstractions</p> <p>Operator: Mr R L Giles Licence Number: 15/48/024/G/057 Permit Version: 100 Location: Kenyel Crease Farm, Paul - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Kemyall Crease Farm, Kemyell, Paul. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 19th September 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A19NE (NE) | 1082 | 2 | 145800 24900 |
| | <p>Water Abstractions</p> <p>Operator: HAS BEEN ALLOCATED FOR Licence Number: 1548024G029 Permit Version: Not Supplied Location: Middle Kemyal Farm , PAUL Authority: Environment Agency, South West Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Well Daily Rate (m3): 3.60 Yearly Rate (m3): 1327.00 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A19NE (NE) | 1159 | 2 | 145900 24900 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| | <p>Water Abstractions</p> <p>Operator: Mr B W B Sparrow Licence Number: 15/48/024/G/071 Permit Version: 100 Location: Trevelloe Farm, Paul - Borehole A Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Trevelloe Farm, Paul, Penzance. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A23NW (N) | 1596 | 2 | 144800 25800 |
| | <p>Water Abstractions</p> <p>Operator: Mr J D Phillips Licence Number: 15/48/024/G/044 Permit Version: 100 Location: Tregiffian Farm, St Buryan - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Tregiffian Farm, St Buryan. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 31st March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A6NW (W) | 1639 | 2 | 143400 23600 |
| | <p>Water Abstractions</p> <p>Operator: Mr J H E Thomas Licence Number: 15/48/024/G/133 Permit Version: 100 Location: Tregiffian Farm, St Buryan Cp - Well Authority: Environment Agency, South West Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Tregiffian Farm, St Buryan Cp Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 26th January 1988 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | A6SW (SW) | 1811 | 2 | 143300 23400 |
| | <p>Water Abstractions</p> <p>Operator: HAS BEEN ALLOCATED FOR Licence Number: 1548024G013 Permit Version: Not Supplied Location: Boscawen Rose Farm , ST BURYAN Authority: Environment Agency, South West Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Well Daily Rate (m3): 4.50 Yearly Rate (m3): 1659.00 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p> | (W) | 1869 | 2 | 143100 23800 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| | Water Abstractions Operator: HAS BEEN ALLOCATED FOR Licence Number: 1548024G013 Permit Version: Not Supplied Location: Boscawen Rose Farm , ST BURYAN Authority: Environment Agency, South West Region Abstraction: Private Water Supplies (Domestic) Abstraction Type: Not Supplied Source: Well Daily Rate (m3): 0.70 Yearly Rate (m3): 250.00 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m | (W) | 1870 | 2 | 143100 23795 |
| | Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data | A13SE (E) | 0 | 3 | 144962 24186 |
| | Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data | A13NE (NE) | 0 | 3 | 144975 24199 |
| | Groundwater Vulnerability - Soluble Rock Risk None | | | | |
| | Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A | A13SE (E) | 0 | 3 | 144962 24186 |
| | Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A | A13SE (E) | 0 | 3 | 144962 24186 |
| | Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated | A13NE (NE) | 0 | 3 | 144975 24199 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied | A13NE (NE) | 0 | 2 | 144965 24190 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied | A13SE (SE) | 71 | 2 | 145027 24104 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (SE) | 74 | 2 | 145050 24118 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|--------------|
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied | A13SE (SE) | 86 | 2 | 145026 24087 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (SE) | 89 | 2 | 145008 24080 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models and Tidal / Coastal Events Boundary Accuracy: As Supplied | A13SE (SE) | 140 | 2 | 145045 24038 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (S) | 168 | 2 | 145029 24004 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (S) | 235 | 2 | 145019 23935 |
| | Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (E) | 241 | 2 | 145227 24100 |
| | Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied | A13NE (NE) | 0 | 2 | 144965 24190 |
| | Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial/Tidal Models Boundary Accuracy: As Supplied | A13SE (SE) | 71 | 2 | 145027 24104 |
| | Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (SE) | 74 | 2 | 145050 24118 |
| | Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied | A13SE (SE) | 86 | 2 | 145026 24087 |
| | Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (SE) | 89 | 2 | 145008 24080 |
| | Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied | A13SE (E) | 241 | 2 | 145227 24100 |
| | Areas Benefiting from Flood Defences None | | | | |
| | Flood Water Storage Areas None | | | | |
| | Flood Defences None | | | | |
| 18 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 399.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A13NE (NE) | 1 | 4 | 144969 24199 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 19 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 59.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A13SE (SE) | 26 | 4 | 145007 24146 |
| 20 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 65.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A13SE (SE) | 26 | 4 | 145005 24145 |
| 21 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A13NW (NW) | 290 | 4 | 144755 24434 |
| 22 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 185.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A13NW (NW) | 291 | 4 | 144755 24436 |
| 23 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 540.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A18SW (NW) | 468 | 4 | 144666 24590 |
| 24 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 468 | 4 | 144666 24590 |
| 25 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 8.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 485 | 4 | 144660 24607 |
| 26 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 16.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 493 | 4 | 144653 24612 |
| 27 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 493 | 4 | 144653 24612 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 28 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 495 | 4 | 144658 24617 |
| 29 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 501 | 4 | 144669 24632 |
| 30 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 501 | 4 | 144669 24632 |
| 31 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 21.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 502 | 4 | 144667 24632 |
| 32 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 43.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 502 | 4 | 144671 24635 |
| 33 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 207.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A7NE (SW) | 519 | 4 | 144601 23793 |
| 34 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 46.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 541 | 4 | 144657 24671 |
| 35 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 97.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A8NW (SW) | 574 | 4 | 144643 23695 |
| 36 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 209.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A8NW (S) | 576 | 4 | 144735 23640 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 37 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 880.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18SW (NW) | 586 | 4 | 144625 24705 |
| 38 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 51.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18NE (N) | 904 | 4 | 145211 25072 |
| 39 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 48.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A18NE (N) | 904 | 4 | 145218 25070 |
| 40 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 2 | A18NE (N) | 904 | 4 | 145218 25070 |
| 41 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 459.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A18NE (N) | 904 | 4 | 145218 25070 |
| 42 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 21.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A18NE (N) | 915 | 4 | 145140 25103 |
| 43 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 26.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A18NE (N) | 922 | 4 | 145165 25103 |
| 44 | OS Water Network Lines Watercourse Form: Lake Watercourse Length: 13.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A18NE (N) | 922 | 4 | 145184 25099 |
| 45 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 453.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A17NW (NW) | 987 | 4 | 144285 24950 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|-----------------|
| 46 | OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 411.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Penwith Peninsula Primacy: 1 | A17NE (NW) | 989 | 4 | 144293 24959 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|-----------------|
| | Local Authority Landfill Coverage Name: Penwith District Council - Has supplied landfill data | | 0 | 5 | 144962 24186 |
| | Local Authority Landfill Coverage Name: Cornwall County Council - Had landfill data but passed it to the relevant environment agency | | 0 | 6 | 144962 24186 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|--------------|
| | BGS 1:625,000 Solid Geology Description: Unnamed Igneous Intrusion, Carboniferous To Permian | A13SE (E) | 0 | 1 | 144962 24186 |
| 47 | BGS Recorded Mineral Sites Site Name: Lamorna Quarry Location: Lamorna, Penzance, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 81091 Type: Opencast Status: Ceased Operator: John Freeman, Sons & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Land'S End Intrusion Commodity: Igneous and Metamorphic Rock Positional Accuracy: Located by supplier to within 10m | A13NE (NE) | 195 | 1 | 145149 24294 |
| 48 | BGS Recorded Mineral Sites Site Name: Lamorna Quarry Location: Lamorna, Penzance, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 8498 Type: Opencast Status: Ceased Operator: John Freeman, Sons & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous, Permian Geology: Land'S End Intrusion (Land'S End Granite) Commodity: Igneous and Metamorphic Rock Positional Accuracy: Located by supplier to within 10m | A13NE (N) | 257 | 1 | 145045 24445 |
| 49 | BGS Recorded Mineral Sites Site Name: Lamorna Quarry Location: Lamorna, Penzance, Cornwall Source: British Geological Survey, National Geoscience Information Service Reference: 81090 Type: Opencast Status: Ceased Operator: John Freeman, Sons & Co., Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Land'S End Intrusion Commodity: Igneous and Metamorphic Rock Positional Accuracy: Located by supplier to within 10m | A13NE (NE) | 258 | 1 | 145097 24421 |
| | Coal Mining Affected Areas In an area that might not be affected by coal mining | | | | |
| | Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24186 |
| | Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 0 | 1 | 144975 24199 |
| | Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24172 |
| | Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 6 | 1 | 145000 24186 |
| | Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SW (SW) | 11 | 1 | 144947 24168 |
| | Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 66 | 1 | 145000 24102 |
| | Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|--------------|
| | Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 0 | 1 | 144975 24199 |
| | Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24172 |
| | Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 6 | 1 | 145000 24186 |
| | Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SW (SW) | 11 | 1 | 144947 24168 |
| | Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 66 | 1 | 145000 24102 |
| | Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24186 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24186 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SW (SW) | 11 | 1 | 144947 24168 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service | A13NW (N) | 20 | 1 | 144952 24230 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 38 | 1 | 145019 24139 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SW (SW) | 39 | 1 | 144934 24143 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 45 | 1 | 145001 24233 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 47 | 1 | 145000 24234 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 66 | 1 | 145000 24102 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 87 | 1 | 145042 24095 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13NW (NW) | 147 | 1 | 144855 24331 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (S) | 176 | 1 | 145000 23991 |
| | Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13NE (E) | 200 | 1 | 145195 24188 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 0 | 1 | 144975 24199 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|---|--|------------------------------|---------|--------------|
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24172 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 6 | 1 | 145000 24186 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SW (SW) | 11 | 1 | 144947 24168 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 45 | 1 | 145001 24233 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 47 | 1 | 145000 24234 |
| | Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 66 | 1 | 145000 24102 |
| | Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 4 | 1 | 145000 24186 |
| | Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SW (SW) | 11 | 1 | 144947 24168 |
| | Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 45 | 1 | 145001 24233 |
| | Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13NE (NE) | 47 | 1 | 145000 24234 |
| | Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service | A13SE (SE) | 66 | 1 | 145000 24102 |
| | Radon Potential - Radon Affected Areas Affected Area: The property is in a Higher probability radon area (more than 30% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Radon Potential - Radon Affected Areas Affected Area: The property is in a Higher probability radon area (more than 30% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144995 24186 |
| | Radon Potential - Radon Protection Measures Protection Measure: Full radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144962 24186 |
| | Radon Potential - Radon Protection Measures Protection Measure: Full radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service | A13SE (E) | 0 | 1 | 144995 24186 |

| Map ID | Details | Quadrant Reference (Compass Direction) | Estimated Distance From Site | Contact | NGR |
|--------|--|--|------------------------------|---------|--------------|
| 50 | Areas of Outstanding Natural Beauty Name: Cornwall Multiple Areas: Y Total Area (m2): 964031731.7351665 Designation Date: 30th November 1959 Source: Natural England | A13SE (E) | 0 | 7 | 144962 24186 |
| 51 | Nitrate Vulnerable Zones Name: Penzance Description: Groundwater Source: Environment Agency, Head Office | A13SE (E) | 0 | 3 | 144962 24186 |




| Agency & Hydrological | Version | Update Cycle |
|--|--|--|
| Contaminated Land Register Entries and Notices Penwith District Council (now part of Cornwall Council) - Environmental Health Department Environment Agency - Head Office Cornwall Council - Environmental Health Department | December 2008 June 2020 October 2017 | Not Applicable Annually Annually |
| Discharge Consents Environment Agency - South West Region | January 2022 | Quarterly |
| Enforcement and Prohibition Notices Environment Agency - South West Region | March 2013 | |
| Integrated Pollution Controls Environment Agency - South West Region | January 2009 | |
| Integrated Pollution Prevention And Control Environment Agency - South West Region | January 2022 | Quarterly |
| Local Authority Integrated Pollution Prevention And Control Penwith District Council (now part of Cornwall Council) - Environmental Health Department Cornwall Council - Environmental Health Department | December 2008 September 2014 | Not Applicable Variable |
| Local Authority Pollution Prevention and Controls Penwith District Council (now part of Cornwall Council) - Environmental Health Department Cornwall Council - Environmental Health Department | December 2008 September 2014 | Not Applicable Annually |
| Local Authority Pollution Prevention and Control Enforcements Penwith District Council (now part of Cornwall Council) - Environmental Health Department Cornwall Council - Environmental Health Department | December 2008 September 2014 | Not Applicable Variable |
| Nearest Surface Water Feature Ordnance Survey | January 2022 | |
| Pollution Incidents to Controlled Waters Environment Agency - South West Region | September 1999 | |
| Prosecutions Relating to Authorised Processes Environment Agency - South West Region | July 2015 | |
| Prosecutions Relating to Controlled Waters Environment Agency - South West Region | March 2013 | |
| Registered Radioactive Substances Environment Agency - South West Region | June 2016 | As notified |
| River Quality Environment Agency - Head Office | November 2001 | Not Applicable |
| River Quality Biology Sampling Points Environment Agency - Head Office | April 2012 | |
| River Quality Chemistry Sampling Points Environment Agency - Head Office | April 2012 | |
| Substantiated Pollution Incident Register Environment Agency - South West Region - Cornwall Area Environment Agency - South West Region - Devon and Cornwall Area | January 2022 January 2022 | Quarterly Quarterly |
| Water Abstractions Environment Agency - South West Region | January 2022 | Quarterly |
| Water Industry Act Referrals Environment Agency - South West Region | October 2017 | |
| Groundwater Vulnerability Map Environment Agency - Head Office | June 2018 | As notified |
| Bedrock Aquifer Designations Environment Agency - Head Office | January 2018 | Annually |
| Superficial Aquifer Designations Environment Agency - Head Office | January 2018 | Annually |

| Agency & Hydrological | Version | Update Cycle |
|---|--------------------------------|----------------------------------|
| Source Protection Zones Environment Agency - Head Office | May 2021 | Bi-Annually |
| Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office | February 2022 | Quarterly |
| Flooding from Rivers or Sea without Defences Environment Agency - Head Office | February 2022 | Quarterly |
| Areas Benefiting from Flood Defences Environment Agency - Head Office | February 2022 | Quarterly |
| Flood Water Storage Areas Environment Agency - Head Office | February 2022 | Quarterly |
| Flood Defences Environment Agency - Head Office | February 2022 | Quarterly |
| OS Water Network Lines Ordnance Survey | January 2022 | Quarterly |
| BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service | May 2013 | As notified |
| Waste | Version | Update Cycle |
| BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service | November 2002 | As notified |
| Historical Landfill Sites Environment Agency - Head Office | January 2022 | Quarterly |
| Integrated Pollution Control Registered Waste Sites Environment Agency - South West Region | January 2009 | Not Applicable |
| Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - South West Region - Cornwall Area Environment Agency - South West Region - Devon and Cornwall Area | January 2022 January 2022 | Quarterly Quarterly |
| Licensed Waste Management Facilities (Locations) Environment Agency - South West Region - Cornwall Area Environment Agency - South West Region - Devon and Cornwall Area | January 2022 January 2022 | Quarterly Quarterly |
| Local Authority Landfill Coverage Cornwall County Council (now part of Cornwall Council) Penwith District Council (now part of Cornwall Council) | February 2003 February 2003 | Not Applicable Not Applicable |
| Local Authority Recorded Landfill Sites Cornwall County Council (now part of Cornwall Council) Penwith District Council (now part of Cornwall Council) | October 2018 October 2018 | |
| Registered Landfill Sites Environment Agency - South West Region - Cornwall Area Environment Agency - South West Region - Devon and Cornwall Area | March 2006 March 2006 | Not Applicable Not Applicable |
| Registered Waste Transfer Sites Environment Agency - South West Region - Cornwall Area Environment Agency - South West Region - Devon and Cornwall Area | April 2018 April 2018 | |
| Registered Waste Treatment or Disposal Sites Environment Agency - South West Region - Cornwall Area Environment Agency - South West Region - Devon and Cornwall Area | June 2015 June 2015 | |

| Hazardous Substances | Version | Update Cycle |
|---|--|---|
| Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive | January 2022 | Bi-Annually |
| Explosive Sites Health and Safety Executive | March 2017 | Annually |
| Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive | August 2001 | |
| Planning Hazardous Substance Enforcements Cornwall County Council (now part of Cornwall Council) Cornwall Council - Planning Department Penwith District Council (now part of Cornwall Council) | January 2009 May 2016 September 2008 | Annual Rolling Update Variable Not Applicable |
| Planning Hazardous Substance Consents Cornwall County Council (now part of Cornwall Council) Cornwall Council - Planning Department Penwith District Council (now part of Cornwall Council) | January 2009 May 2016 September 2008 | Annual Rolling Update Variable Not Applicable |
| Geological | Version | Update Cycle |
| BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service | January 2009 | As notified |
| BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service | November 2021 | Bi-Annually |
| CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB) | August 2011 November 2020 | As notified |
| Coal Mining Affected Areas The Coal Authority - Property Searches | March 2014 | Annual Rolling Update |
| Mining Instability Ove Arup & Partners | June 1998 | Not Applicable |
| Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service | May 2015 | Not Applicable |
| Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service | April 2020 | As notified |
| Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service | January 2019 | As notified |
| Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service | January 2019 | As notified |
| Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service | January 2019 | As notified |
| Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service | January 2019 | As notified |
| Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service | January 2019 | As notified |
| Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service | July 2011 | Annually |
| Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service | July 2011 | Annually |

| Industrial Land Use | Version | Update Cycle |
|---|------------------------------|------------------------|
| Contemporary Trade Directory Entries Thomson Directories | January 2022 | Quarterly |
| Fuel Station Entries Catalist Ltd - Experian | November 2021 | Quarterly |
| Gas Pipelines National Grid | October 2021 | Bi-Annually |
| Underground Electrical Cables National Grid | May 2021 | Bi-Annually |
| Sensitive Land Use | Version | Update Cycle |
| Ancient Woodland Natural England | February 2021 | Bi-Annually |
| Areas of Adopted Green Belt Cornwall Council - Planning Department Penwith District Council (now part of Cornwall Council) | October 2020 October 2020 | Quarterly Quarterly |
| Areas of Unadopted Green Belt Cornwall Council - Planning Department Penwith District Council (now part of Cornwall Council) | October 2020 October 2020 | Quarterly Quarterly |
| Areas of Outstanding Natural Beauty Natural England | January 2021 | Bi-Annually |
| Environmentally Sensitive Areas Natural England | January 2017 | |
| Forest Parks Forestry Commission | April 1997 | Not Applicable |
| Local Nature Reserves Natural England | February 2021 | Bi-Annually |
| Marine Nature Reserves Natural England | July 2019 | Bi-Annually |
| National Nature Reserves Natural England | January 2021 | Bi-Annually |
| National Parks Natural England | February 2018 | Bi-Annually |
| Nitrate Sensitive Areas Natural England | April 2016 | Not Applicable |
| Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office | April 2016 June 2017 | Bi-Annually |
| Ramsar Sites Natural England | August 2020 | Bi-Annually |
| Sites of Special Scientific Interest Natural England | February 2021 | Bi-Annually |
| Special Areas of Conservation Natural England | July 2020 | Bi-Annually |
| Special Protection Areas Natural England | February 2021 | Bi-Annually |

A selection of organisations who provide data within this report

| Data Supplier | Data Supplier Logo |
|--|--|
| Ordnance Survey |  |
| Environment Agency |  |
| Scottish Environment Protection Agency |  |
| The Coal Authority |  |
| British Geological Survey |  British Geological Survey <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small> |
| Centre for Ecology and Hydrology |  Centre for Ecology & Hydrology <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small> |
| Natural Resources Wales |  |
| Scottish Natural Heritage |  |
| Natural England |  |
| Public Health England |  |
| Ove Arup |  |
| Stantec UK Ltd |  |

| Contact | Name and Address | Contact Details |
|---------|---|---|
| 1 | British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG | Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk |
| 2 | Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY | Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk |
| 3 | Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD | Telephone: 01454 624400 Fax: 01454 624409 |
| 4 | Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS | Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk |
| 5 | Penwith District Council (now part of Cornwall Council) County Hall, Treyew Road, Truro, Cornwall, TR1 3AY | Telephone: 0300 1234 100 Email: enquiries@cornwall.gov.uk Website: www.cornwall.gov.uk |
| 6 | Cornwall County Council (now part of Cornwall Council) County Hall, Treyew Road, Truro, Cornwall, TR1 3AY | Telephone: 0300 1234 100 Email: enquiries@cornwall.gov.uk Website: www.cornwall.gov.uk |
| 7 | Natural England County Hall, Spetchley Road, Worcester, WR5 2NP | Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk |
| - | Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ | Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org |
| - | Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD | Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk |

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Client Details

Mr T Green, Cornwall Consultants Ltd, Parc Vean House, Coach Lane, Redruth, Cornwall, TR15 2TT

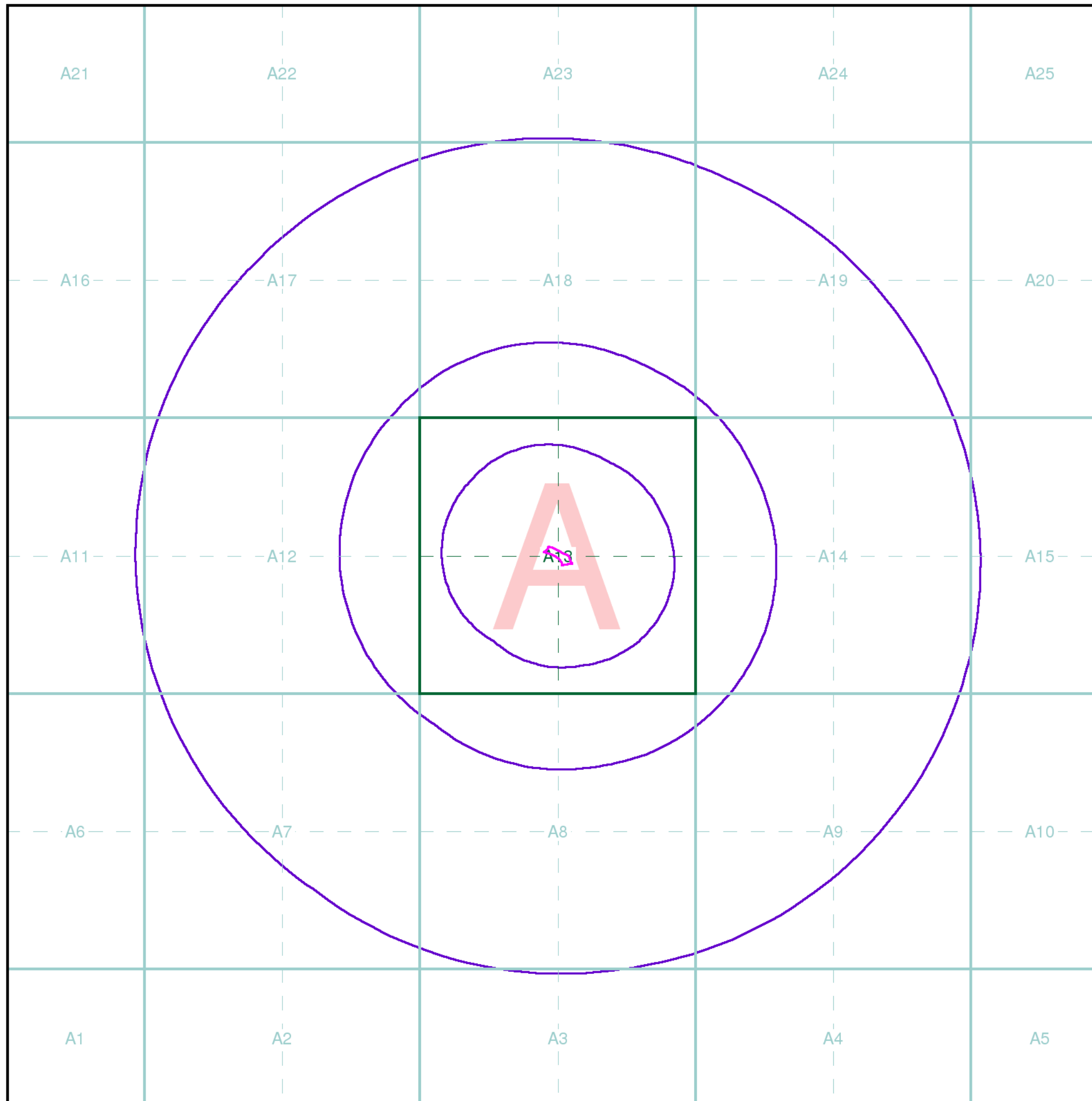
Order Details

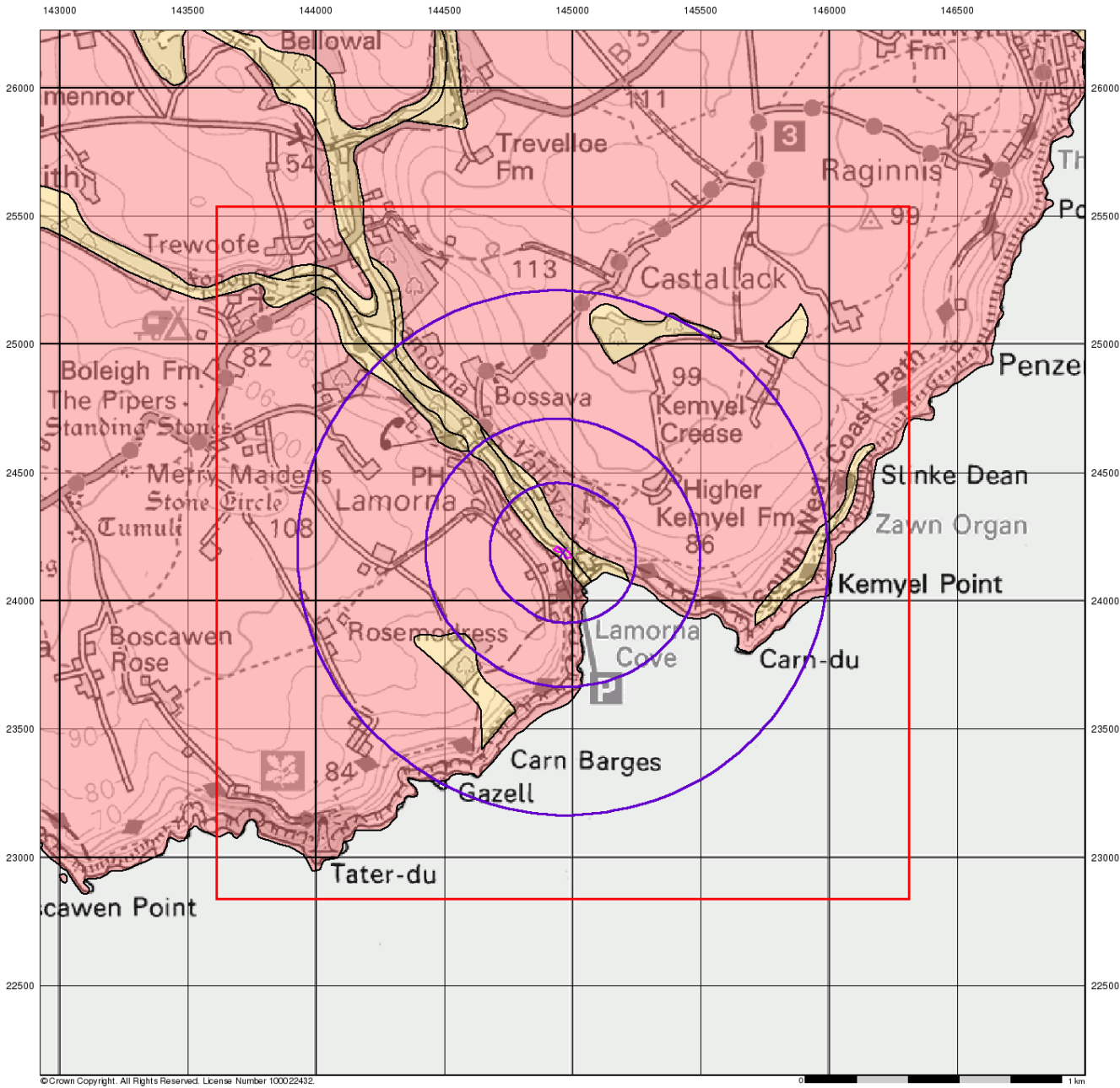
Order Number: 292196230_1_1
Customer Ref: SS5345
National Grid Reference: 144960, 24190
Site Area (Ha): 0.13
Search Buffer (m): 1000

Site Details

Site at 144960, 24190

Full Terms and Conditions can be found on the following link:
<http://www.landmarkinfo.co.uk/Terms/Show/515>





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0 1 km

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Groundwater Vulnerability

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Bedrock Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

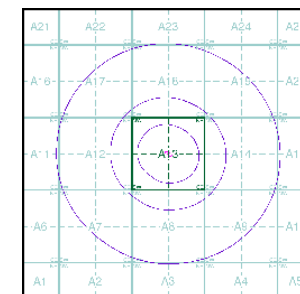
Superficial Aquifers

- High Vulnerability, Principal Aquifer
- High Vulnerability, Secondary Aquifer
- Medium Vulnerability, Principal Aquifer
- Medium Vulnerability, Secondary Aquifer
- Low Vulnerability, Principal Aquifer
- Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

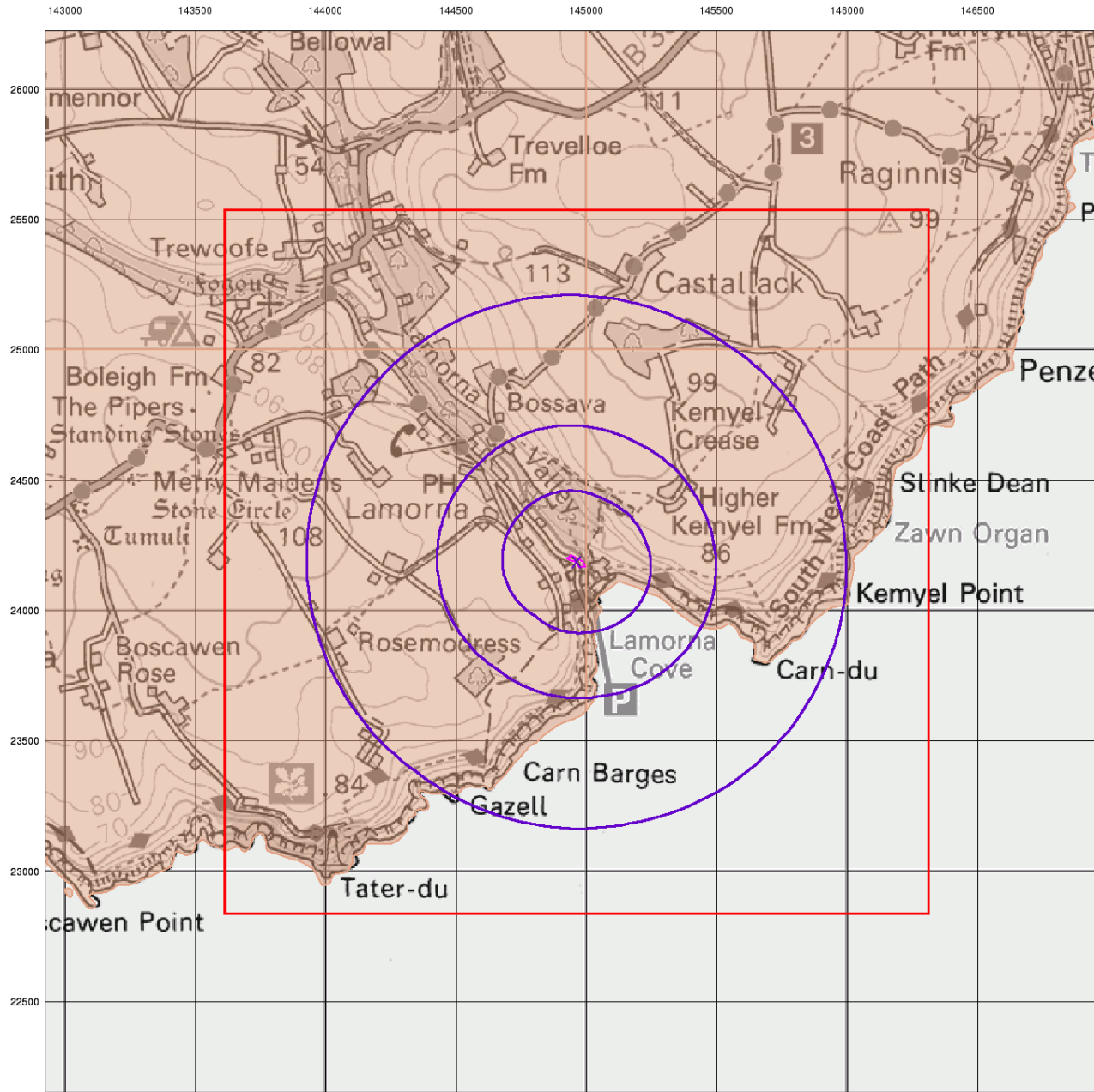
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 Customer Ref: SS5345
 National Grid Reference: 144960, 24190
 Slice: A
 Site Area (Ha): 0.13
 Search Buffer (m): 1000

Site Details

Site at 144960, 24190

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0 1 km

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Bedrock Aquifer Designation

General

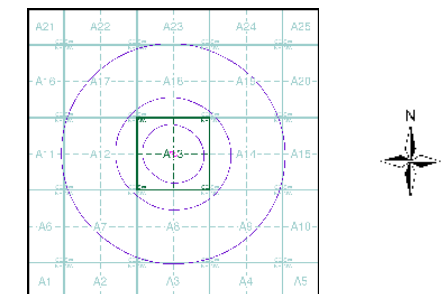
- ◆ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- B Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

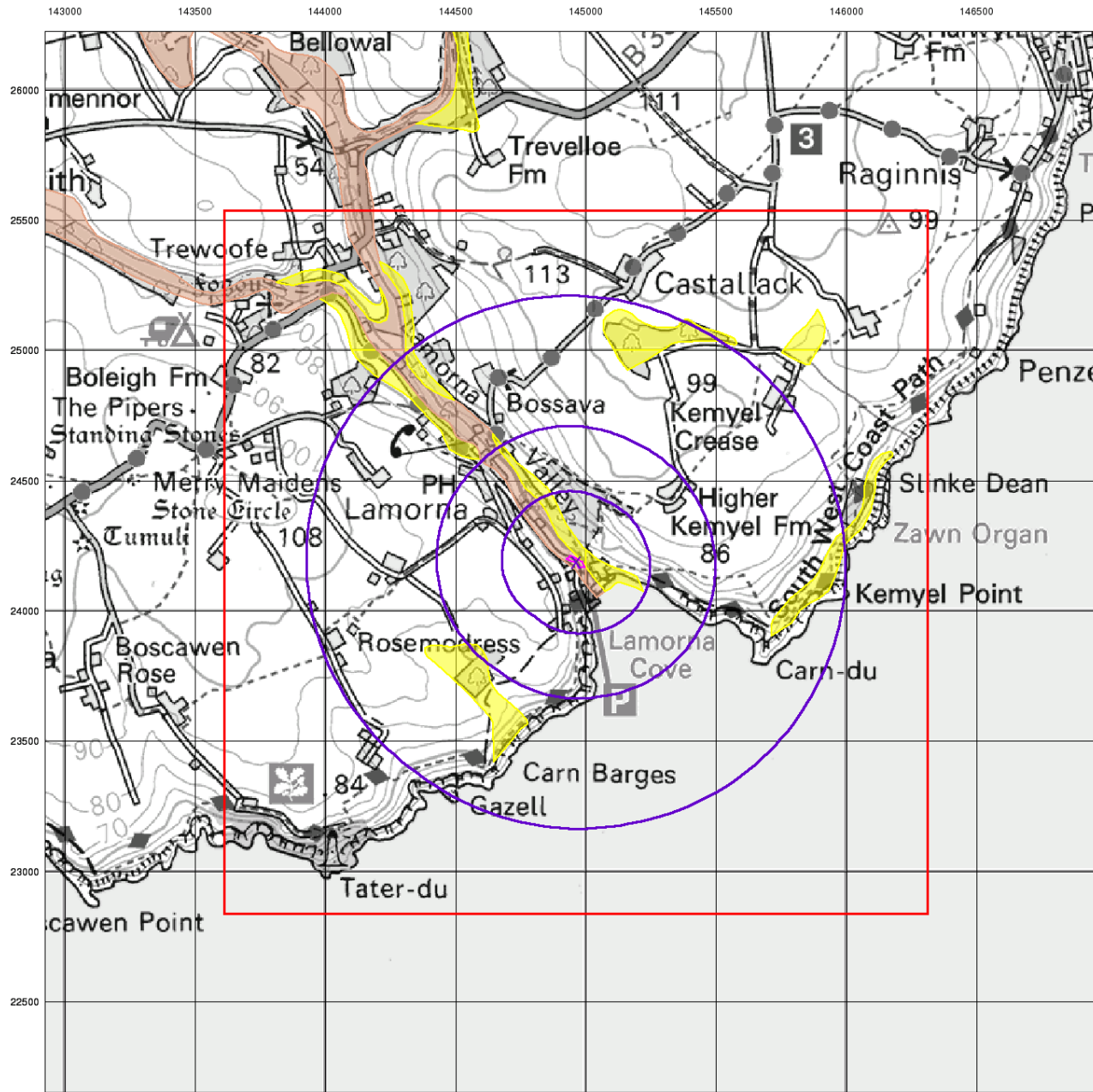
Order Number: 292196230_1_1
 Customer Ref: SS5345
 National Grid Reference: 144960, 24190
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 Site Area (Ha): 0.13
 Search Buffer (m): 1000

Site Details

Site at 144960, 24190

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Superficial Aquifer Designation

General

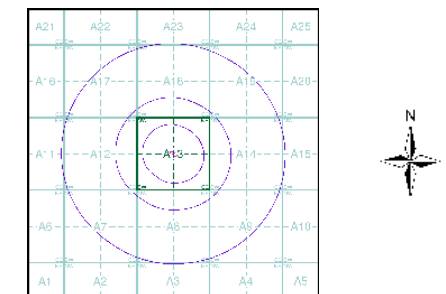
- ◆ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point
- Slice
- B Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

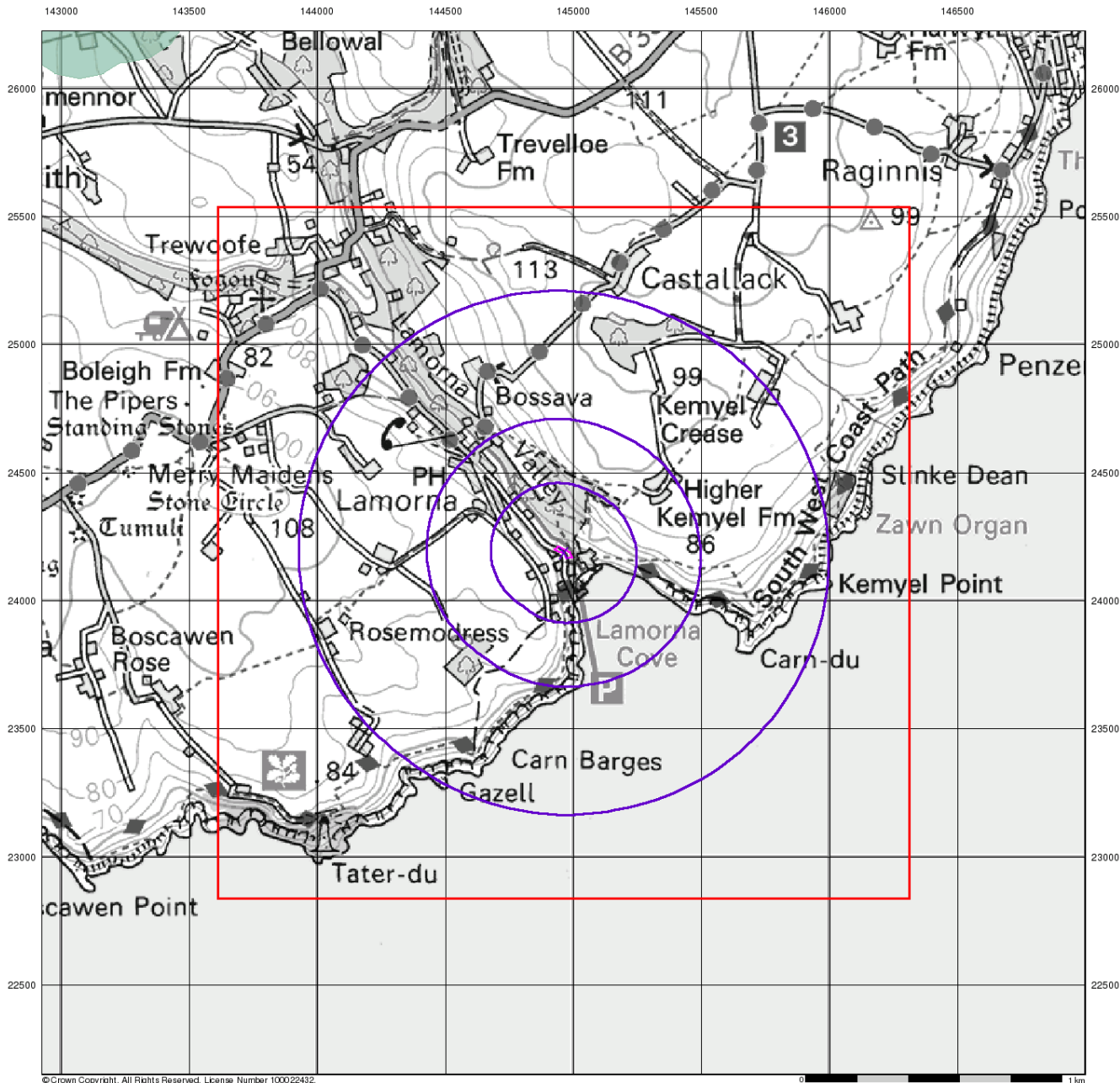
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 Search Buffer (m): 1000

Site Details

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0 1 km

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Source Protection Zones

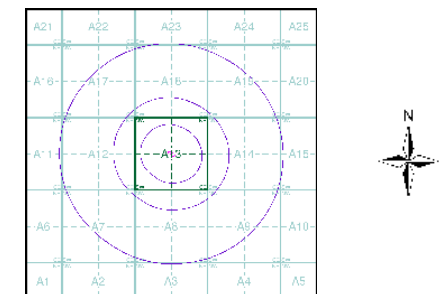
General

- ◆ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point
- Slice
- B Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

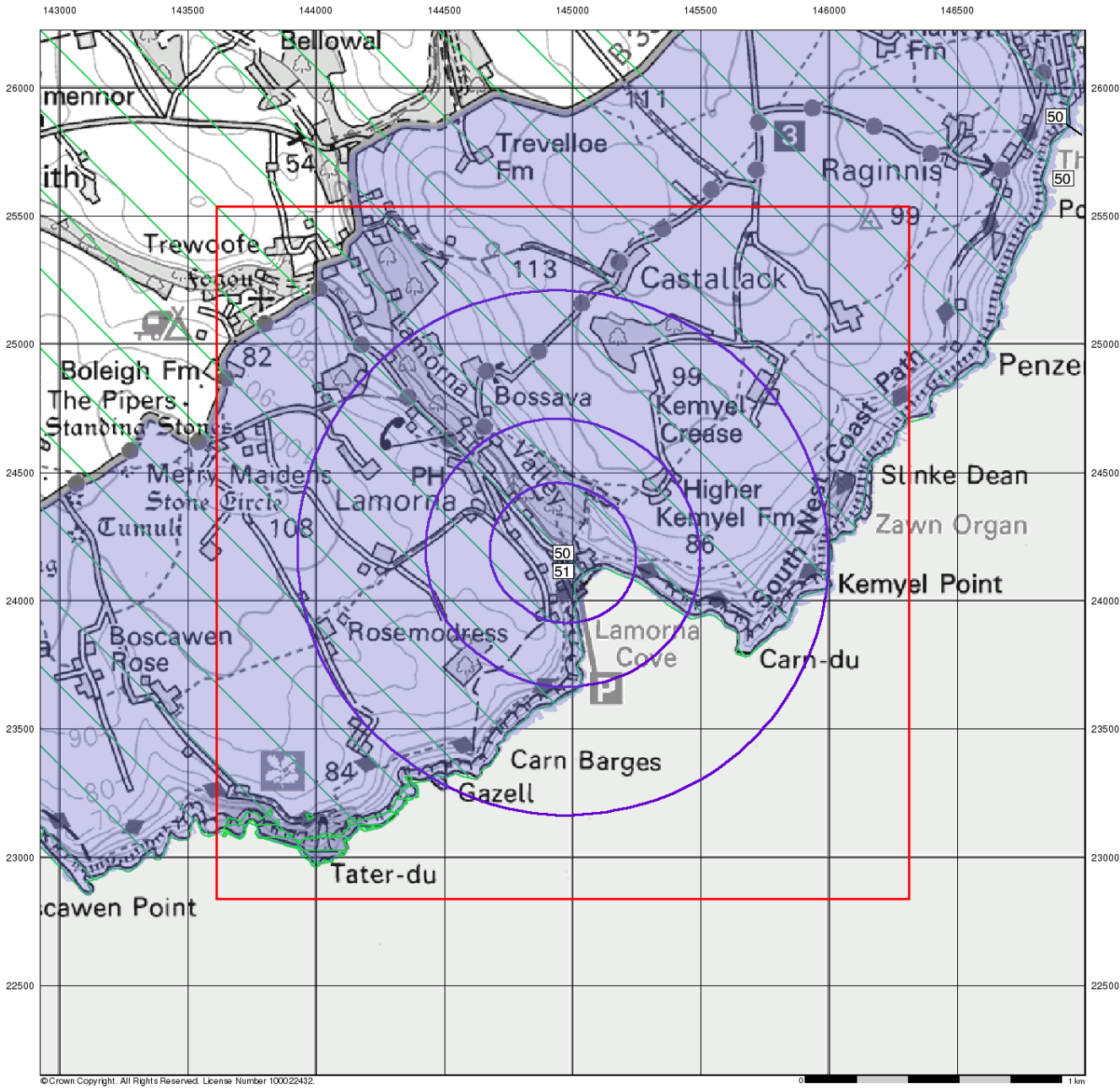
Order Number: 292196230_1_1
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 Search Buffer (m): 1000

Site Details

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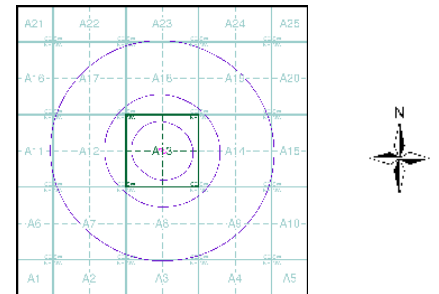
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Sensitive Land Uses

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Slice
 - Map ID

- Sensitive Land Uses**
- Ancient Woodland
 - Area of Adopted Green Belt
 - Area of Unadopted Green Belt
 - Area of Outstanding Natural Beauty
 - Environmentally Sensitive Area
 - Forest Park
 - Local Nature Reserve
 - Marine Nature Reserve
 - National Nature Reserve
 - National Park
 - Nitrate Sensitive Area
 - Nitrate Vulnerable Zone
 - Ramsar Site
 - Site of Special Scientific Interest
 - Special Area of Conservation
 - Special Protection Area
 - World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

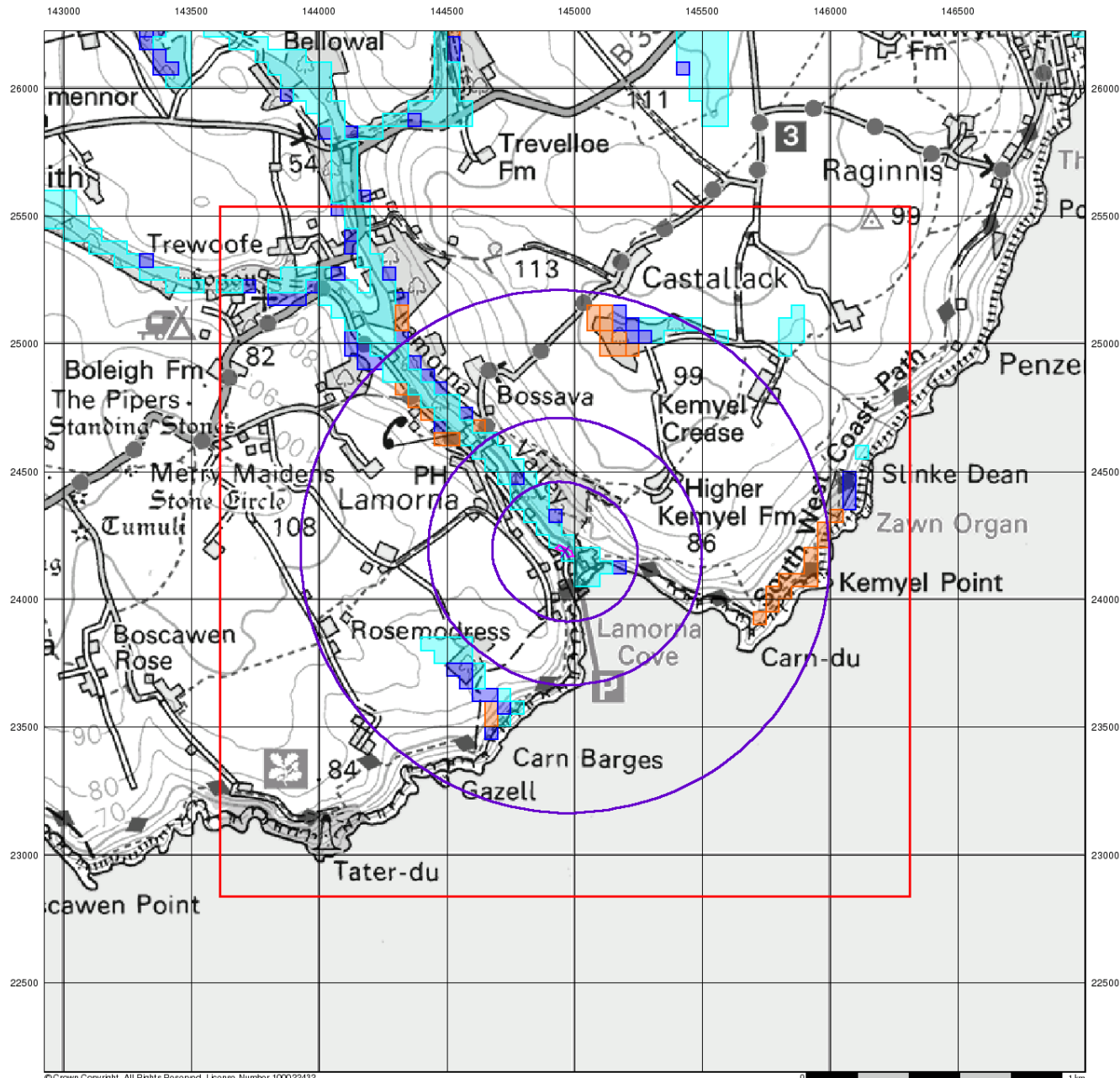
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 Customer Ref: SS5345
 National Grid Reference: 144960, 24190
 Slice: A
 Site Area (Ha): 0.13
 Search Buffer (m): 1000

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0 1 km

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BGS Flood GFS Data

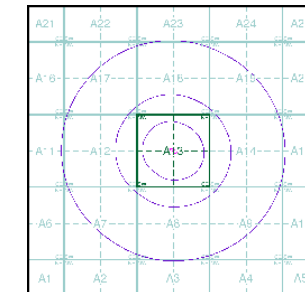
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 292196230_1_1
 Customer Ref: SS5345
 National Grid Reference: 144960, 24190
 Slice: A
 Site Area (Ha): 0.13
 Search Buffer (m): 1000

Site Details

Site at 144960, 24190

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Geological

- BGS Recorded Mineral Site

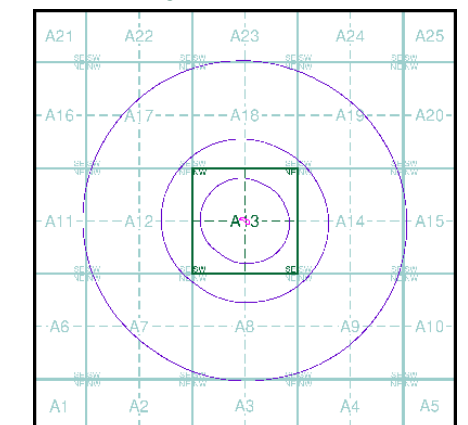
Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Site Sensitivity Map - Slice A

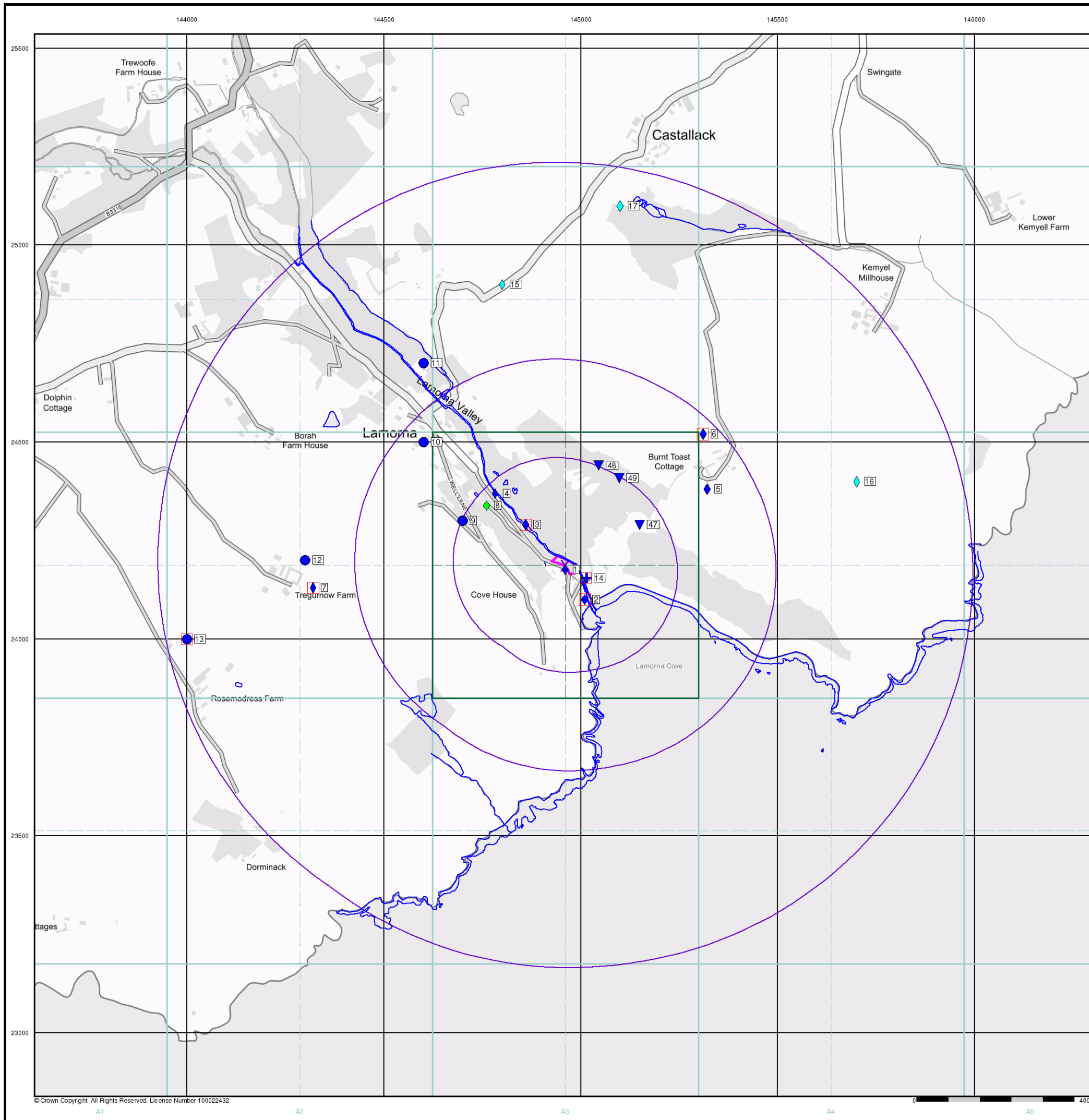


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Site Details

Site at 144960, 24190







Industrial Land Use Map

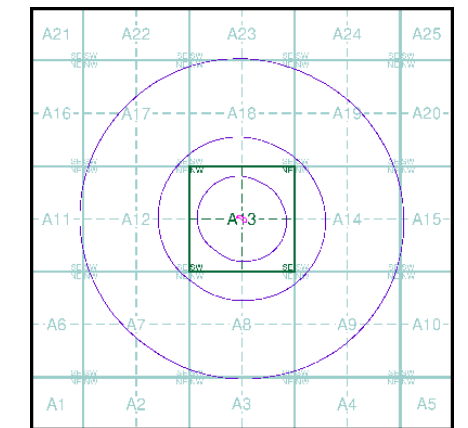
General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point
-  Slice
-  Map ID

Industrial Land Use

-  Contemporary Trade Directory Entry
-  Fuel Station Entry
-  Gas Pipeline
-  Underground Electrical Cables

Industrial Land Use Map - Slice A

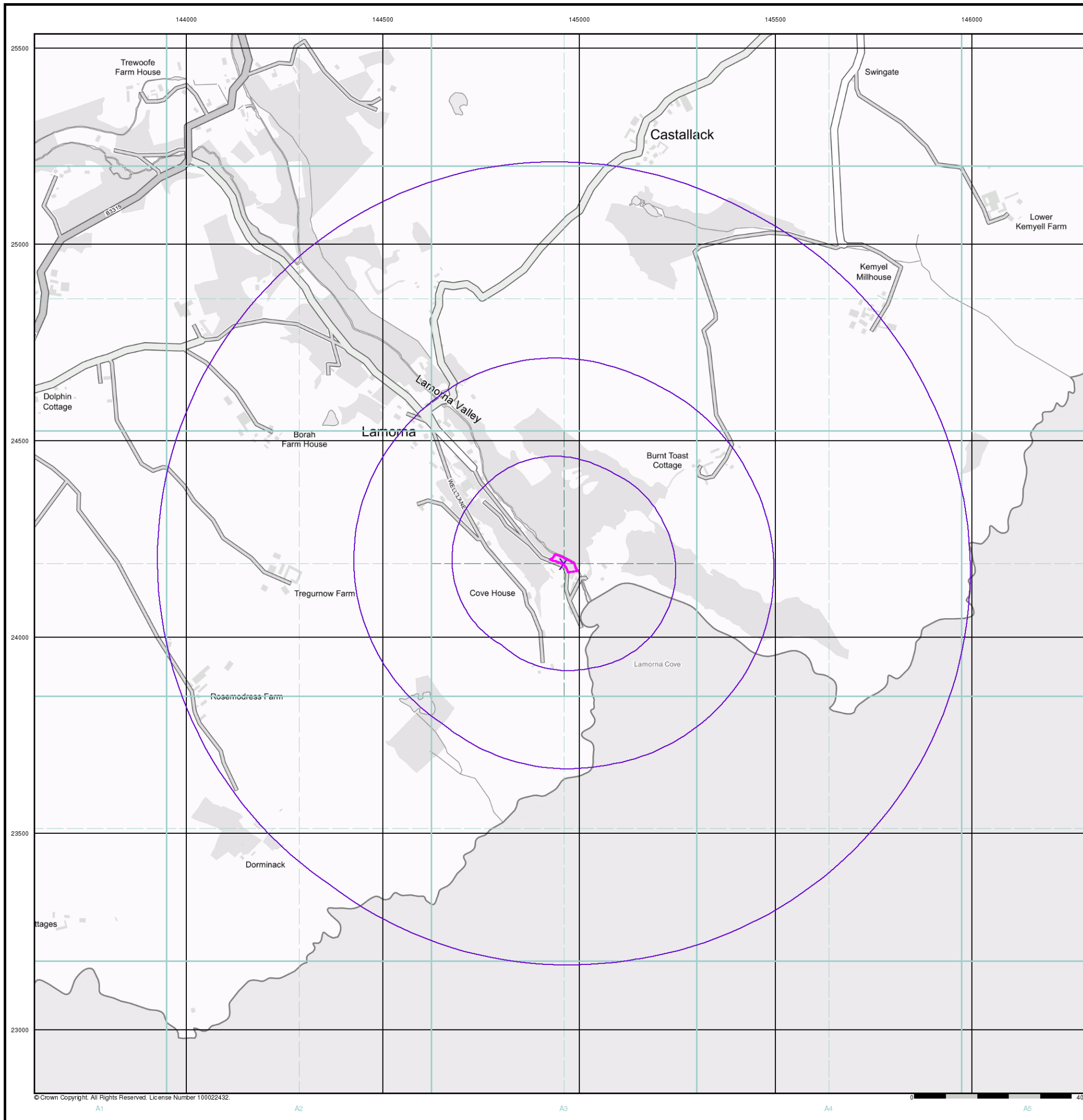


Order Details

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 Search Buffer (m): 1000

Site Details






Site at 144960, 24190



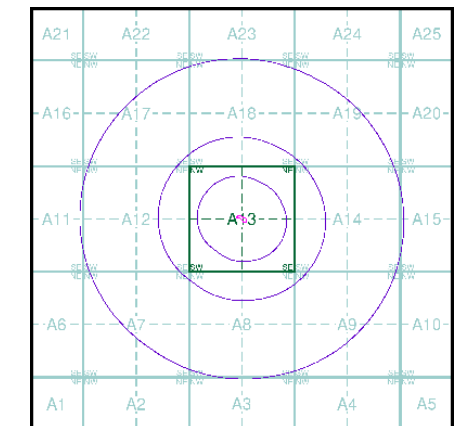
General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point

Agency and Hydrological (Flood)

-  Extreme Flooding from Rivers or Sea without Defences (Zone 2)
-  Flooding from Rivers or Sea without Defences (Zone 3)
-  Area Benefiting from Flood Defence
-  Flood Water Storage Areas
-  Flood Defence

Flood Map - Slice A

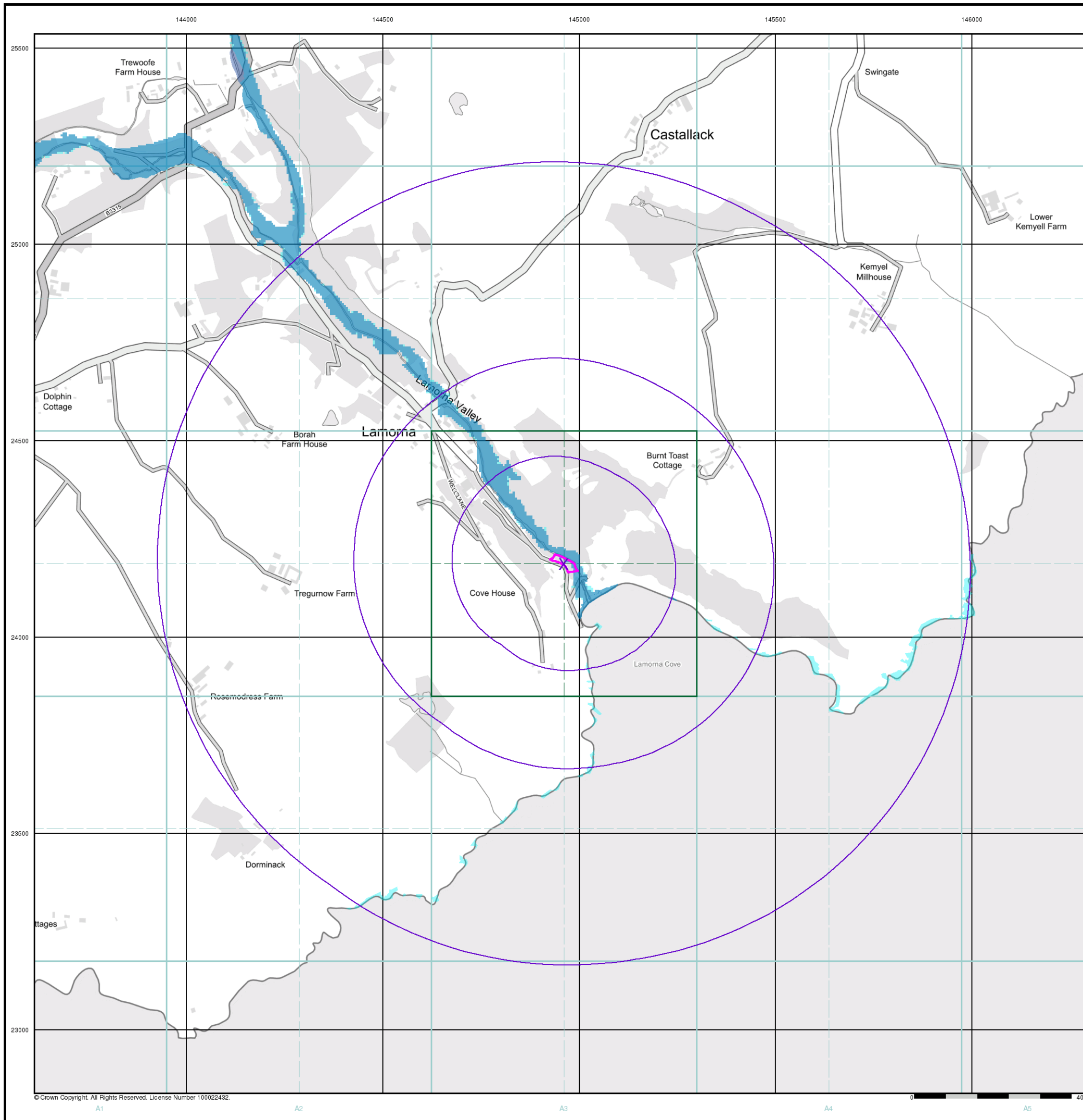


Order Details






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 Customer Ref: SS5345
 National Grid Reference: 144960, 24190
 Slice: A
 Site Area (Ha): 0.13
 Search Buffer (m): 1000

Site Details






Site at 144960, 24190



General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point
-  Map ID
-  Several of Type at Location

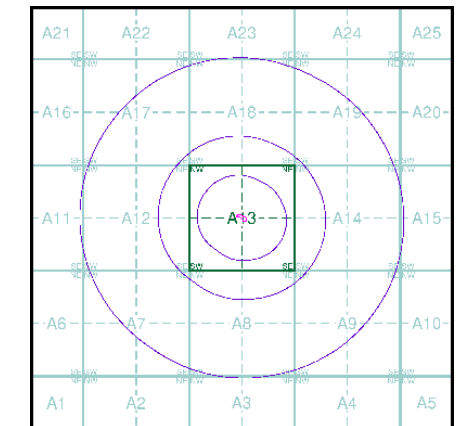
Agency and Hydrological (Boreholes)

-  BGS Borehole Depth 0 - 10m
-  BGS Borehole Depth 10 - 30m
-  BGS Borehole Depth 30m +
-  Confidential
-  Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A

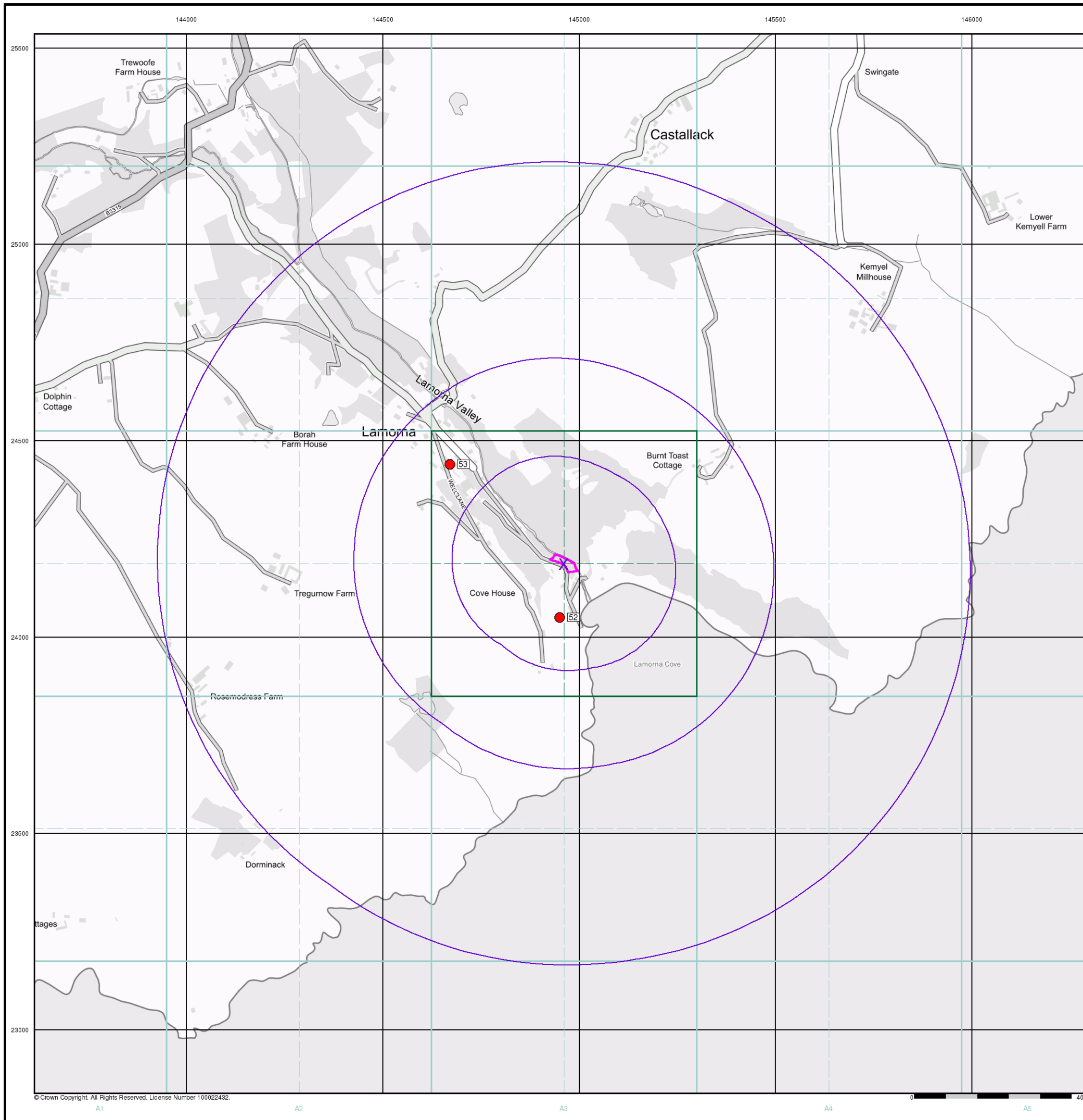


Order Details




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 Customer Ref: SS5345
 National Grid Reference: 144960, 24190
 Slice: A
 Site Area (Ha): 0.13
 Search Buffer (m): 1000

Site Details

Site at 144960, 24190



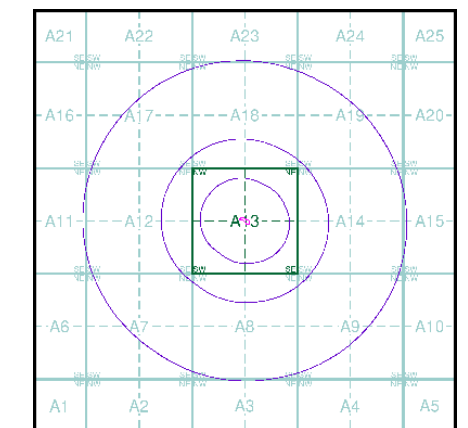
General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point

OS Water Network Data

- | | |
|--|---|
|  Canal |  Drain |
|  Reservoir |  Other |
|  Foreshore |  Lake |
|  Marsh |  Transfer |
|  Tidal River |  Lock Or Flight Of Locks |
|  Inland River |  Sea |

OS Water Network Map - Slice A

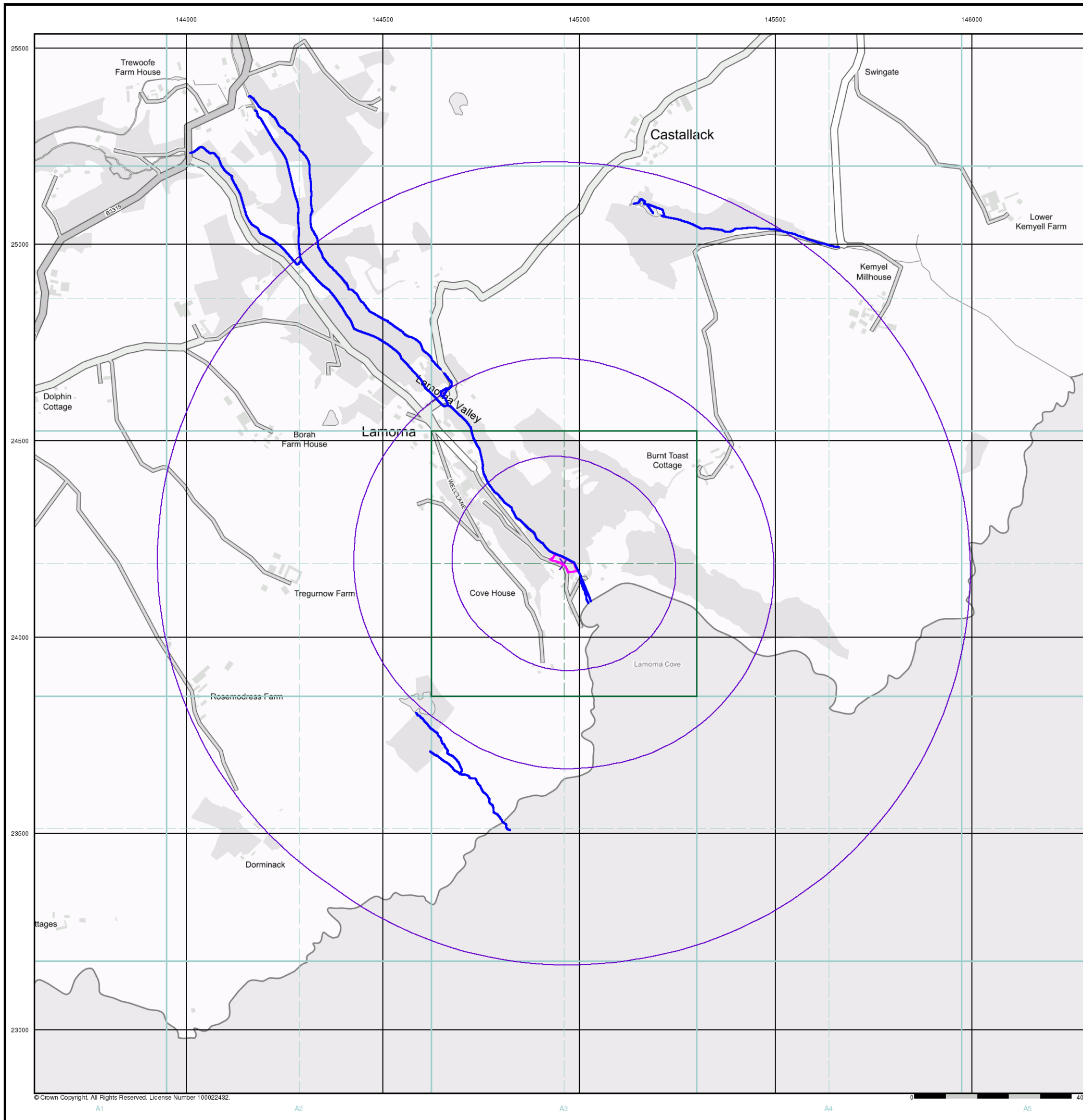


Order Details

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Site Details

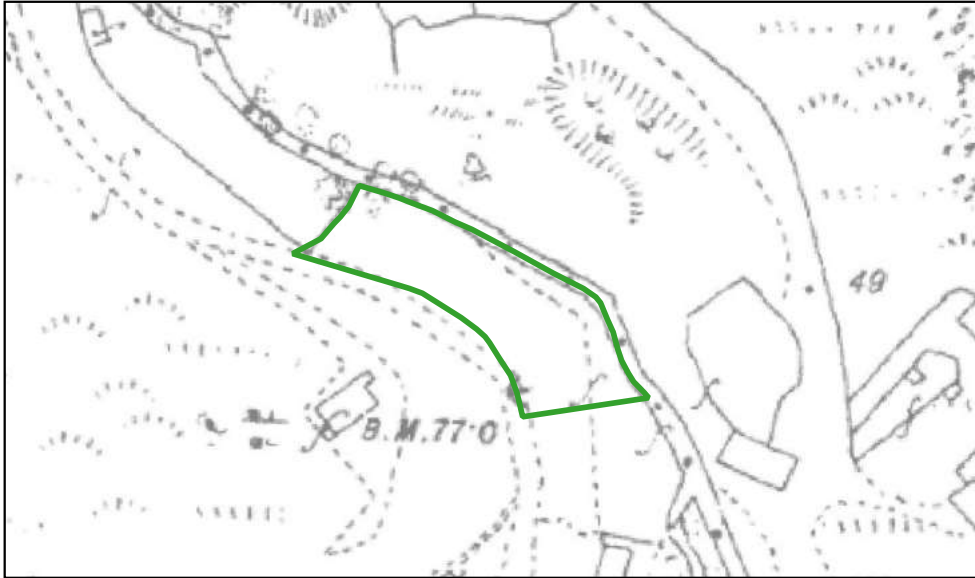
Site at 144960, 24190



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APPENDIX E: Historical Ordnance Survey Maps

Ordnance Survey map dated 1880



Ordnance Survey map dated 1908



Ordnance Survey map dated 1970



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CORNWALL CONSULTANTS LTD
Helping protect property from the ground up

PHASE I - Land Contamination Desk Study

Reference: SS5345

ADDRESS: Land at First View, Lamorna,
Penzance, Cornwall, TR19 6XQ

Date: March 2022

Scale: 1:1,500

APPENDIX F: Risk Categorisation

[NHBC - Guidance for the Safe Development of Housing on Land Affected by Contamination \(2008\)](#)

Chapter 1.7

Risk assessment is the process of collating known information on a hazard or set of hazards in order to estimate actual or potential risks to receptors. The guiding principle behind this approach is an attempt to establish connecting links between a hazardous source, via an exposure pathway to a potential receptor, referred to as a 'pollutant linkage'. The objective of a Preliminary Risk Assessment is to identify the nature and magnitude of the potential risks. This involves consideration of:

- each potential pollutant linkage (contaminant source – pathway – receptor);
- current status of the site, construction activity, proposed new use etc.;
- short-term (acute) and long-term (chronic) risks; and
- uncertainty (does enough data exist to provide confidence in the assessment?).

This approach is in accordance with the Statutory Guidance on Contaminated Land (Defra 2006a, WAG 2006a and Scottish Executive 2006a) and the Model Procedures (Defra/Environment Agency 2004a).

Risk is based on a consideration of both:

- **the likelihood of an event** (probability) [takes into account both the presence of the hazard and receptor and the integrity of the pathway];
- and **the severity of the potential consequence** [takes into account both the potential severity of the hazard and the sensitivity of the receptor].

A pollutant linkage must first be established before tests for probability and consequence are applied. If there is no pollutant linkage then there is no potential risk.

There is a need for a logical, transparent and repeatable system in defining the categories of severity of consequence and likelihood as well as for the risk itself.

Severity (consequence) can be defined as the adverse effects (or harm) arising from a defined hazard, which impairs the quality of human health or the environment in the short or longer term. For example a consequence defined as "Severe" could be defined as "Highly elevated concentrations likely to result in 'significant harm' to human health as defined by the EPA 1990, Part 2A, if exposure occurs". The type and form of the contaminant needs to be known in order to understand the effect on humans and therefore severity of potential harm. For instance different forms of cyanide behave differently. Complex cyanide ("blue billy") is relatively "non toxic" whereas free cyanide is "highly toxic" (Environment Agency 2002b).

Probability can be defined as the chance of a particular event occurring in a given period of time. For example, a "High Likelihood" could be defined as "where an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution".

Risk classification

Once the consequence and probability have been classified for a pollutant linkage they can be compared to produce a risk category from “very high risk” to “very low risk”. It is not possible to identify a risk rating of “no risk” as the acceptability of risk may depend on the viewpoint of the stakeholder concerned. It may be necessary to deal with a risk even if it is “very low” although this action may not be urgent. The following classification of risk has been developed to assist in qualitative assessment of potentially unacceptable risks:

| RISK CATEGORISATION | | | | | |
|-----------------------------|-------------------|----------------|-------------------|-------------------|---------------|
| PROBABILITY (LIKELIHOOD) | | CONSEQUENCE | | | |
| | | Severe | Medium | Mild | Minor |
| | High Likelihood | Very High Risk | High Risk | Moderate Risk | Low Risk |
| | Likely | High Risk | Moderate Risk | Moderate/Low Risk | Low Risk |
| | Low Likelihood | Moderate Risk | Moderate/Low Risk | Low Risk | Very Low Risk |
| Unlikely | Moderate/Low Risk | Low Risk | Very Low Risk | Very Low Risk | |

| DESCRIPTION OF RISK | |
|---------------------|--|
| Very High Risk | There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without appropriate remediation action. |
| High Risk | Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remediation action. |
| Moderate Risk | It is possible that without appropriate remediation action harm could arise to a designated receptor. It is relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely that such harm would be relatively mild. |
| Low Risk | It is possible that harm could arise to a designated receptor from an identified hazard. It is likely that, at worst if any harm was realised any effects would be mild. |
| Very Low Risk | The presence of an identified hazard does not give rise to the potential to cause harm to a designated receptor. |