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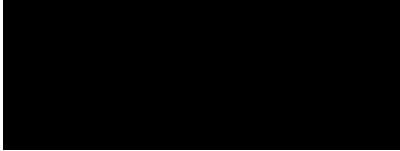
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PROJECT: 1A RIVIERE TOWANS, HAYLE, CORNWALL

REPORT TITLE: PHASE 1 DESK STUDY

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SUMMARY

Your Environmental Solutions (YES) has been commissioned by Toms Holidays to undertake a Phase 1 Desk Study at a site known as 1a Riviere Towans, Hayle in Cornwall. This report has been commissioned to fulfil the contamination planning requirements for the proposed development.

It is proposed to construct a new restaurant, laundry storeroom, parking area and soft landscaped amenity space.

The site comprises a grassed area surrounded by hedging with a gravelled parking area.

The site is recorded to be overlain by superficial deposits of blown sand. The site is recorded to be underlain by the Porthtowan Formation - graded beds of mudstones and sandstones.

The site is situated within a mineralised area. The closest recorded mineralised structure (lode) contains tin and is approximately 400 metres to the north-north-west of the site. Topsoil arsenic concentrations in the area of the site are recorded to range between 96mg/kg and 146mg/kg.

The site is recorded to be underlain by a secondary aquifer (A). There are no surface water features within 250m of the site. The site is not recorded to be within a water source protection zone.

Due to the local mineralogy, the site's former use as part of a miniature railway and the site's current use for vehicle parking, a potential for heavy metals and/or hydrocarbons to be present in the site's soils has been identified. The preliminary contamination risk assessment concludes a moderate risk to human health and building materials in line with its proposed development. A Phase 2 Site Investigation with soil sampling and chemical analyses should be carried out to quantify the true risks.

The risk to controlled waters is considered to be low with no further action required.

The risk to flora, fauna and ecosystems is considered to be low with no further action required.

The site is in a radon affected area. As such radon protection measures should be installed in all buildings in line with building regulations.

In accordance with the mining report, the site appears to be at low risk from past mining activity with no recommendations made.

1.0 INTRODUCTION

1.1 Background

Your Environmental Solutions (YES) has been commissioned by Toms Holidays to undertake a Phase 1 Desk Study at a site known as 1a Riviere Towans, Hayle in Cornwall. This report has been commissioned to fulfil the contamination planning requirements for the proposed development.

1.2 Objectives

The objectives of this report were as follows:

- Summarise the site setting.
- Carry out a walkover survey of the site.
- Review of historical mapping for the site area.
- Review of geological and soil mapping of the site area.
- Review of a mining report for the site area.
- Produce a conceptual model of sources, pathways and receptors of contamination.
- Undertake a preliminary contamination risk assessment.
- Provide recommendations for phase 2 intrusive works, if any.

1.3 Sources of Information

The following sources of information have been used:

- Walkover and Photographic Survey of the Site (Appendix A).
- British Geological Survey Online 3D Map of Britain.
- DEFRA Online Magic Maps.
- UK Soil Observatory Online Mapping.
- British Geological Survey 1:50,000 Solid and Drift Geological Mapsheet 351 & 358 'Penzance'
- UK Health Security Agency Online UKradon mapping.
- Environmental Report & Historical Mapping (Appendix B).
- Mining Report (Appendix C).

1.4 Site Details and Development Proposals

The site location plan is shown on Figure 1. The site boundary and proposed development layout are shown on Figure 2.

The site is located at coordinates: 155770 38360, postcode: TR27 5AF.

The site comprises a grassed area surrounded by hedging with a gravelled parking area.

It is proposed to construct a new restaurant, laundry storeroom, parking area and soft landscaped amenity space.

2.0 SITE WALKOVER SURVEY

An Environmental Scientist from YES undertook the site walkover survey on the 14th February 2024 to assess the site for visual evidence of contamination.

Photographs taken during the walkover survey can be found within Appendix A.

The site is accessed from a road known as Riviere Towans. The site is accessed through metal gates on the site northern boundary.

The site is surrounded by a holiday park and farmland.

The site comprises open spaces, no structures are present. A gravelled parking/turning area is present in the northeastern corner of the site. The rest of the site is surfaced by herbaceous vegetation and surrounded by hedging of scrub and tree species. Three wheely bins containing bin bags were present.

Two large sets of overhead powerlines cross the centre of the site in a west-east orientation.

The topography of the site and surrounding area is generally flat

There were no visual signs of any contamination noted during the walkover survey.

3.0 ENVIRONMENTAL SETTING

3.1 Recorded Geology

Reference has been made to the British Geological Survey 1:50,000 Solid and Drift Geological Mapsheet 351 & 358 'Penzance' and mapping from the UK Soil Observatory.

3.1.1 Artificial Ground

The site is not recorded to be underlain by artificial ground.

3.1.2 Superficial Geology

The site is recorded to be overlain by superficial deposits of blown sand.

3.1.3 Solid Geology

The site is recorded to be underlain by the Porthtowan Formation formed in the Devonian Period. These are graded beds of mudstones and sandstones formed in a marine environment.

3.1.4 Mineralisation

The site is situated within a mineralised area. The closest recorded mineralised structure (lode) contains tin and is approximately 400 metres to the north-north-west of the site.

Topsoil arsenic concentrations in the area of the site are recorded to range between 96mg/kg and 146mg/kg.

3.1.5 Radon

In line with the UK Health Security Agency online UKradon mapping, the site is located in an area where greater than 30% of homes have elevated (>200 Bq per m³) radon concentrations within indoor air.

3.1.6 Hydrogeological and Hydrological Setting

The site is recorded to be underlain by a secondary aquifer (A). These aquifers are formed of moderately permeable layers capable of supporting water supplies at a local scale, and in some cases forming an important source of base flow to rivers.

There are no surface water features within 250m of the site.

The site is not recorded to be within a water source protection zone.

3.2 Environmental Report Findings

The environmental report for the site is presented in Appendix B. Using the report, the following data has been investigated for the site:

- Contaminated Land Register Entries and Notices.
- BGS, Registered, Local Authority, Historical Landfill and Other Waste Sites.
- Local Authority Pollution Prevention and Control Permits.
- Registered Radioactive, Explosive and Hazardous Substances Sites.
- Environmental Enforcement, Prohibition Notices and Prosecutions.
- Discharge Consents to Controlled Waters.
- Environmental Pollution Incidents.
- Contemporary Trade Directory and Fuel Station Entries.
- Potentially Contaminative Historical Land Uses and Features.
- Environmentally Sensitive Sites.

The following potentially contaminative features and/or land uses are recorded within 250m of the site:

- Potentially Infilled Land (pit, quarry etc): 195m, 216m.
- Potentially Contaminative Historical Land Uses and Features:
 - Mining and quarrying: 195m, 216m.

There are no environmentally sensitive sites recorded within 250m of the site.

The pertinent contamination risks from the environmental report are discussed in Chapter 4.

3.3 Historical Land Use

The historical maps for the site and surrounding area are presented in Appendix B. The findings from a review of the maps are outlined below.

1878: The site lies within the wider field boundary of some rough grassland. The site is clear of any structures and the surrounding area is composed entirely of rough grassland/farmland. There is a chimney in the distance to the north of the site.

1908: The site remains unchanged. A road has been constructed the runs along the sites northeastern boundary.

1936: Minor development in the form of Hayle Towans has taken place in the surrounding area. The site remains unchanged and free of any structures. It is not certain what the use of the local development but it is considered likely that these are small holiday premises.

1964 - 1965: The site and the surrounding area appear mostly unchanged from the last mapping period with no new potentially contaminative features identified.

1987: The site is now shown to be half of a 'miniature railway'. This was a 10¼" gauge 'Hymek' train that travelled around the Riviera Chalet Holiday Park. The surrounding area has witnessed further development in the form of Holiday Park chalets and amenity buildings.

1995: The site and the surrounding area appear mostly unchanged from the last mapping period with no new potentially contaminative features identified.

2024: The site is shown to be a grassed field with a small gravelled parking area and is free of any structures. The surrounding area appear mostly unchanged from the last mapping period with no new potentially contaminative features identified.

3.4 Mining Report

The mining report for the site is presented in Appendix C. The findings of the mining report are detailed as follows.

The site is located on the northern edge of the Wheal Alfred mining district and lies close to the former lease or sett boundaries of a small tin mine known as Wheal Lucy.

The workings of Wheal Lucy lie over 300m to the north of the site. The nearest shaft lies over 190m to the north-north-east of the site. The suspected surface outcrop of a lode (mineralised structure) following a north-east to south-west strike lies over 400m to the north-north-west of the site. Whilst some surface working had taken place along the lode outcrops, underground workings were of limited extent. The workings of Lelant Wheal Towans Mine lie over 1km to the southwest of the site.

There is no evidence of clay workings or other mineral workings in the immediate vicinity of the site.

A former sand pit, latterly used as the site of the Hayle power station, lies over 550m to the southwest of the site.

There is no evidence of any water supply wells (which can pose a subsidence risk) within the boundaries of the site.

Based on the information reviewed, the site appears to be at low risk from past mining activity with no recommendations made.

4.0 PRELIMINARY CONTAMINATION RISK ASSESSMENT

4.1 Introduction

The contaminated land risk assessment has been undertaken in line with the conceptual site model (Figure 4) and the information collected from the desk study and site walkover survey.

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 to establish connecting links between a hazardous source, via an exposure pathway to a potential receptor, referred to as a 'pollutant linkage'.

The conceptual model is a representation of the potential relationships between contaminant sources, pathways and receptors developed on the basis of hazard identification.

The objective of a preliminary contamination risk assessment is to identify the nature and magnitude of the potential risks through the consideration of likelihood (probability) and severity (consequence) of the hazard(s) to the receptor(s). The risk assessment has been carried out using the risk tables within Contaminated Land Risk Assessment. A guide to good practice (C552) (CIRIA, 2001), enclosed within Appendix D.

4.2 Preliminary Contamination Risk Assessment In Line with the Conceptual Site Model

The following table contains the sources, pathways and receptors, as identified in the conceptual model (Figure 4) and supporting table, compared to an appropriate level of risk.

Table 4.1: Preliminary Contamination Risk Assessment				
Sources	Receptors and Pathways	Categorisation of Risk		
		Probability	Consequence	Risk
Radon: Natural Mineralogy	Human Health: Inhalation of gas	Likely	Medium	Moderate
Heavy Metals: Natural Mineralogy Historical Miniature Railway Vehicle Parking & Movements	Human Health: Direct soil and dust ingestion Consumption of vegetation Dermal contact with soils Inhalation of dust	Likely	Medium	Moderate
	Controlled Waters: Migration into groundwater Migration through soil Surface water runoff Deposition onto surface water	Unlikely	Medium	Low
	Flora/Fauna and Ecosystems: Plant uptake and accumulation	Likely	Mild	Low
	Building Materials: Direct contact with soils	Likely	Medium	Moderate
Hydrocarbons & Volatile Organic Compounds: Vehicle Parking Historical Miniature Railway	Human Health: Direct soil and dust ingestion Consumption of vegetation Dermal contact with soils Inhalation of dust & vapours	Likely	Medium	Moderate
	Controlled Waters: Migration into groundwater Migration through soil Surface water runoff Deposition onto surface water	Unlikely	Medium	Low
	Flora/Fauna and Ecosystems:	Likely	Mild	Low

Table 4.1: Preliminary Contamination Risk Assessment

Sources	Receptors and Pathways	Categorisation of Risk		
		Probability	Consequence	Risk
	Plant uptake and accumulation			
	Building Materials: Direct contact with soils	Likely	Medium	Moderate

Due to the local mineralogy, the site's former use as part of a miniature railway and the site's current use for vehicle parking, a potential for heavy metals and/or hydrocarbons to be present in the site's soils has been identified. The preliminary contamination risk assessment concluded a moderate risk to human health in line with its proposed use for a restaurant, laundry store, parking area and soft landscaped amenity space. A Phase 2 Site Investigation with soil sampling and chemical analyses should therefore be carried out to quantify the true risks.

The risk to controlled waters is considered to be low. The site is underlain by a minor aquifer and it is considered unlikely that the proposed development will encounter or penetrate the underlying groundwater body. The site is not within a water source protection zone and there are no surface water features within 250m. It is considered that any contamination of the site's soils will be localised at surface and will not have the potential to be transmissible to offsite receptors at distance.

The risks to building materials are considered to be moderate. Due to the local mineralogy, and location of the site adjacent to potentially contaminative land uses. Soil sampling and chemical analyses should be undertaken for water soluble sulphate, volatile organic compounds and hydrocarbons to determine the appropriate grade of concrete to be used.

The risk to water supply pipework is considered to be moderate. There are potential sources of hydrocarbons on site which could penetrate standard pipework. Soil sampling and appropriate chemical analyses should be carried out to quantify the risks and determine a suitable pipework material to be used. If an existing water supply is to be used as part of the proposed development, this should be sampled.

The risk to flora, fauna and ecosystems is considered to be low. The site is not within an environmentally designated area and contamination with the potential to impact on local species or habitats has not been identified at the site.

The risk from the inhalation of radon is considered to be moderate; however, full radon protection measures should be installed within all buildings, which would mitigate this risk.

The risks to construction workers have not been included in this risk assessment. The risks to construction workers should be assessed independently in line with current health and safety legislation and regulations.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Due to the local mineralogy, the site's former use as part of a miniature railway and the site's current use for vehicle parking, a potential for heavy metals and/or hydrocarbons to be present in the site's soils has been identified. The preliminary contamination risk assessment concludes a moderate risk to human health and building materials in line with its proposed development. A Phase 2 Site Investigation with soil sampling and chemical analyses should be carried out to quantify the true risks.

The risk to controlled waters is considered to be low with no further action required.

The risk to flora, fauna and ecosystems is considered to be low with no further action required.

The site is in a radon affected area. As such radon protection measures should be installed in all buildings in line with building regulations.

In accordance with the mining report, the site appears to be at low risk from past mining activity with no further action required.

6.0 LIMITATIONS

The work undertaken to provide the basis of this report includes a study of the readily available documented information from a variety of sources. The information reviewed should not be considered exhaustive and has been accepted in good faith by YES, as providing a true indication of the site conditions. However, no liability can be accepted for the detailed accuracy or otherwise of any of the reports or documents prepared by others for the Client or for third parties, or for any associated errors or omissions.

It should be noted that the environment and contaminated land guidance and legislation are constantly under review, with authoritative guidance documents subject to change. The conclusions presented herein are based on guidance and legislation available at the time of issuing this report, and no liability can be accepted for the retrospective effects of any changes or amendments to such guidance and/or legislation.

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7.0 BIBLIOGRAPHY

Applied Environmental Research (1994). Contaminated Land Research Report (CLR) 2: Guidance on Preliminary Site Inspection of Contaminated Land (Volumes 1 & 2). London, Department of the Environment

Aspinwall and Company (1994). Contaminated Land Research Report (CLR) 1: A Framework For Assessing The Impact Of Contaminated Land On Groundwater And Surface Water (Volumes 1 & 2). London, Department of the Environment

Building Research Establishment (BRE), Environment Agency (1991). Protective Measures for Housing on Gas Contaminated Land (BR414). London, BRE Publications

Building Research Establishment (BRE) (1991). Soakaway Design (Digest 365). London, BRE Publications

Building Research Establishment (BRE) (2004). Report 465: Cover Systems For Land Regeneration: Thickness of Cover Systems for Contaminated Land, London, BRE Publications

Building Research Establishment (BRE) (2005). Concrete in aggressive ground (Special Digest 1) – Part C: Assessment of the Chemical Aggressiveness of the Ground. London, BRE Publications

Building Research Establishment (BRE) (2007). Report 211: Radon: Guidance for protective measures for new buildings (including supplementary advice for extensions, conversions and refurbishment). London, BRE Publications

Card G, Haines S Wilson S (2004). Gas Protection – a Common Sense Approach. Contaminated Land – Achievements and Aspirations. London, Epp Publications Ltd

Card G, Wilson S (1999). Reliability and Risk in Gas Protection Design: Ground Engineering. London, EMAP

Chartered Institute of Environmental Health (CIEH) (2008). The Local Authority Guide to Ground Gas. London, CIEH

Construction Industry Research and Information Association (CIRIA) (2001). Remedial Processes for contaminated land: Principles and Practices (C549). London, CIRIA

Construction Industry Research and Information Association (CIRIA) (2004). Selection of Remedial treatments for contaminated land: a guide to good practice (C622). London, CIRIA

Construction Industry Research and Information Association (CIRIA) (2007). Assessing Risks Posed by Hazardous Ground Gases to Buildings (C665). London, CIRIA

Contaminated Land: Applications in Real Environments (CL:AIRE) et al (2008). Guidance on Comparing Soil Contamination Data with a Critical Concentration. London, Chartered Institute of Environmental Health (CIEH)

Contaminated Land: Applications In Real Environments (CL:AIRE) (2008). The Definition of Waste: Development Industry Code of Practice. London, CL:AIRE

Contaminated Land: Applications In Real Environments (CL:AIRE) (2012). A Pragmatic Approach to Ground Gas Risk Assessment. Online. CL:AIRE

Contaminated Land: Applications In Real Environments (CL:AIRE) (2020). Professional Guidance: Comparing Soil Contamination Data with a Critical Concentration. Haddenham, CL:AIRE

Public Health England (2017). Contaminated land information sheet: risk assessment approaches for polycyclic aromatic hydrocarbons (PAHs)*. London, PHE publications

CIEH (Chartered Institute of Environmental Health), Environment Agency, NHBC (National House-Building Council) (2008). Guidance for the Safe Development of Housing on Land Affected by Contamination: R&D Publication 66: 2008 (Volume 1) Bristol, Environment Agency, NHBC

Department of the Environment (DoE) (1995). Industry Profile: Airports. London, DoE

England & Wales. Department of the Environment (DoE) (1995). Industry Profile: Animal & Animal Product Processing Works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Asbestos Manufacturing Works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: coatings (paints and printing inks manufacturing works). London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: cosmetics and toiletries manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: disinfectants manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: explosives, propellants and pyrotechnics manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: organic chemicals manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: pesticides manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: pharmaceuticals manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: rubber processing works (including works manufacturing tyres or other rubber products). London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Chemical Works: soap and detergent manufacturing works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Dockyards and Dockland. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Gas works, coke works and other coal carbonisation plants. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Oil Refineries and Bulk Storage of Crude Oil and Petroleum Products. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Power stations (excluding nuclear power stations). London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Railway Land. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Sewage works and sewage farms. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Timber products manufacturing works. London, DoE

England & Wales. Department of the Environment (DoE) (1995). Industry Profile: Timber treatment works. London, DoE

Department of the Environment (DoE) (1995). Industry Profile: Waste Recycling, Treatment and Disposal Sites: metal recycling sites. London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Chemical Works: fertilisers manufacturing works. London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Chemical Works: inorganic chemicals manufacturing works. London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Pulp and Paper Manufacturing Works. London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Road Vehicle Fuelling, service and repair (garages and filling stations). London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Road Vehicle Fuelling, service and repair (transport and haulage centres). London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Textile Works and Dye Works. London, DoE

Department of the Environment (DoE) (1996). Industry Profile: Waste recycling and disposal sites (hazardous waste treatment plants). London, DoE

Department of the Environment (DoE) (1996). Profile of Miscellaneous industries, incorporating: charcoal works, dry-cleaners, fibreglass resins manufacturing works, glass manufacturing works, photographic processing industry, printing and bookbinding works. London, DoE

Department of the Environment (DoE) & Welsh Office (WO) (1990). Planning Policy Guidance (PPG) 14: Development on Unstable Land. London DoE/WO

Environment Agency (1999). Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources (R&D Publication 20). Bristol, Environment Agency

Environment Agency (2000). Assessing the Wider Environmental Value of Remediating Land Contamination: A Review - R&D Technical Report P238. Bristol, Environment Agency

Environment Agency (2000). Guidance on the Assessment and Monitoring of Natural Attenuation of Contaminants in Groundwater (R&D Publication 95). Bristol, Environment Agency

Environment Agency (2000). Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination (R&D Technical Report P5-066/TR). Bristol, Environment Agency

Environment Agency (2000). Technical Aspects of Site Investigation (Volume I of II) (Technical Report P5-065/TR). Bristol, Environment Agency

Environment Agency (2000). Technical Aspects of Site Investigation (Volume II of II) (Technical Report P5-065/TR). Bristol, Environment Agency

Environment Agency (2001). Assessment and Management of Risks to Buildings, Building Materials and Services from Land Contamination – R&D Technical Report P5-035/TR/01. Bristol, Environment Agency

Environment Agency (2001). Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention. Bristol, Environment Agency

Environment Agency (2002). Information on Land Quality in England: Sources of Information (including background contaminants) - R&D Technical Report P291. Bristol, Environment Agency

Environment Agency (2002). Landfill Directive: Regulatory Guidance Note 2 (Version 4.0): Interim Waste Acceptance Criteria and Procedures. Bristol, Environment Agency

Environment Agency (2003). Review of the Fate and Transport of Selected Contaminants in the Soil Environment - P5-079/TR1. Bristol, Environment Agency

Environment Agency (2004). Integrated Pollution Prevention and Control (IPPC). Guidance on the Protection of Land Under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme (Technical Guidance Note IPPC H7). Bristol, Environment Agency

Environment Agency (2004). Mobilising nature's armoury: Monitored Natural Attenuation – dealing with pollution using natural processes. Bristol, Environment Agency

Environment Agency (2004). 10-Annex G Environmental Quality Standards (EQS) List Bristol, Environment Agency

Environment Agency (2005). Environment Agency Guidance on Requirements for Land Contamination Reports. Bristol, Environment Agency

Environment Agency (2005). Principles for Evaluating the Human Health Risks from Petroleum Hydrocarbons in Soils: (A Consultation Paper R&D Technical Report P5-080/TR1). Bristol, Environment Agency

Environment Agency (2005). Review and Summary of Existing Environment Agency Guidance on the Regulation of the Remediation of Contaminated Soils. Shrewsbury, Entec UK Limited

Environment Agency (2005). The UK Approach for Evaluating Human Health Risks from Petroleum Hydrocarbons in Soils (Science Report P5-080/TR3). Bristol, Environment Agency

Environment Agency (2006). Guidance for waste destined for disposal in landfills (Version 2): Interpretation of the Waste Acceptance Requirements of the Landfill (England and Wales) Regulations 2002 (as amended). Bristol, Environment Agency

Environment Agency (2006). RCLEA: Using RCLEA - The Radioactivity Contaminated Land Exposure Assessment Methodology (CLR 13). Bristol, Environment Agency

Environment Agency (2006). Remedial Targets Methodology: Hydrological Risk Assessment for Land Contamination. Bristol, Environment Agency

Environment Agency (2006). Remedial Targets Worksheet v3.1: Users Manual. Bristol, Environment Agency

Environment Agency (2007). Inter-laboratory comparison of in vitro bioaccessibility measurements for arsenic, lead and nickel in soil - SC040060/SR2. Bristol, Environment Agency

Environment Agency (2008). An Ecological Risk Assessment Framework for Contaminants in Soil: Science Report - SC070009/SR1. Bristol, Environment Agency

Environment Agency (2008). Human health toxicological assessment of contaminants in soil: science report – SC050021/SR2. Bristol, Environment Agency

Environment Agency (2008). Updated technical background to the CLEA model: science report – SC050021/SR3. Bristol, Environment Agency

Environment Agency (2008). Compilation of data for priority organic pollutants for derivation of Soil Guideline Values - SC050021/SR7. Bristol, Environment Agency.

Environment Agency (2020). Land contamination risk management (LCRM). Bristol, Environment Agency.

Health Protection Agency, British Geological Society (2007). HPA-RPD-033 - Indicative Atlas of Radon in England and Wales. Didcot, Health Protection Agency

Parliament (2004). Planning Policy Statement 23: Planning and Pollution Control. London, Stationary Office

Parliament (2005). The Landfill (England and Wales) (Amendment) Regulations. London, Queen's Printer of Acts of Parliament

Planning Policy Statement 10: Planning for Sustainable Waste Management. London, The Stationary Office

Parliament (2007). The Water Supply (Water Quality) Regulations 2000 (Amendment) Regulations 2007. London, Queen's Printer of Acts of Parliament

England. Parliament (2006). The Contaminated Land (England) Regulations. London, Queen's Printer of Acts of Parliament

Environmental Industries Commission (1997). Contaminated Land Research Report (CLR) 12: A Quality Approach For Contaminated Land Consultancy. London, Department of the Environment

Great Britain & European Union. Parliament (2002). Geotechnical investigation and testing. Identification and classification of soil. Identification and description (BS EN ISO 14688-1:2002). London, BSI

Great Britain & European Union. Parliament (2004). Geotechnical investigation and testing. Identification and classification of rock. Identification and description (BS EN ISO 14689-1:2003). London, BSI

Great Britain & European Union. Parliament (2006). Geotechnical investigation and testing. Field testing. Dynamic probing (BS EN ISO 22476-2:2005). London, BSI

Great Britain & European Union. Parliament (2006). Geotechnical investigation and testing. Identification and classification of soil. Principles for a classification (BS EN ISO 14688-2:2004). London, BSI

Great Britain & European Union. Parliament (2006). Geotechnical investigation and testing. Sampling methods and groundwater measurements. Technical principles for execution (BS EN ISO 22475-1:2006). London, BSI

Great Britain & European Union. Parliament (2006). Geotechnical investigation and testing. Field testing. Standard penetration test (BS EN ISO 22476-3:2005). London, BSI

Great Britain & European Union. Parliament (2007). Eurocode 7. Geotechnical design. Ground investigation and testing (BS EN 1997-2:2007). London, BSI

Great Britain. Parliament (1986). British Standard Code of Practice for Foundations (BS 8004:1986). London, BSI

Great Britain. Parliament (1999). Code of practice for site investigations (BS 5930:1999). London, BSI

Great Britain. Parliament (2001) Investigation of potentially contaminated sites. Code of practice (BS 10175:2001). London, BSI

Great Britain. Parliament (2006). Code of practice for the characterization and remediation from ground gas in affected developments (BS 8485:2007). London, BSI

Great Britain. Parliament (2006). The Building Regulations (2000) Site Preparation and Resistance to Contaminants and Moisture (C1/C2). London, The Stationary Office

Haines S, Wilson S (2005). Land Contamination and Reclamation: Site Investigation and Monitoring for Ground Gas Assessment – Back to Basics (Volume 13, No. 3). London, Epp Publications Ltd

LQM/CIEH (2015). The LQM/CIEH S4ULs for Human Health Risk Assessment. 2nd Edition. Nottingham, Land Quality Press

Meta_Generics Ltd (1994). Contaminated Land Research Report (CLR) 5: Information Systems For Land Contamination. London, Department of the Environment

M J Carter Associates (1995). Contaminated Land Research Report (CLR) 6: Prioritisation And Categorisation Procedure For Sites Which May Be Contaminated. London, Department of the Environment

RPS Consultants Ltd (1994). Contaminated Land Research Report (CLR) 3: Documentary Research on Industrial Sites. London, Department of the Environment

The Centre for Research into the Built Environment (1994). Contaminated Land Research Report (CLR) 4: Sampling Strategies for Contaminated Land. London, Department of the Environment

Total Petroleum Working Group (TPWG) (1997). Volume 3: Selection of Representative TPH Fractions Based on Fate and Transport Considerations. Massachusetts, USA, Amherst Scientific Publishers

Total Petroleum Working Group (TPWG) (1997). Volume 4: Development of Fraction Specific Reference Doses (RfDs) and Reference Concentration (RfCs) for Total Petroleum Hydrocarbons (TPH). Massachusetts, USA, Amherst Scientific Publishers

Total Petroleum Working Group (TPWG) (1998). Volume 1: Analysis of Petroleum Hydrocarbons in Environmental Media. Massachusetts, USA, Amherst Scientific Publishers

Total Petroleum Working Group (TPWG) (1998). Volume 2: Composition of Petroleum Mixtures. Massachusetts, USA, Amherst Scientific Publishers

United Kingdom. Department of Environment/Department of Transport (1989). Waste Management Paper No. 27: Landfill Gas. London, Department of Environment

United Kingdom. Environment Agency (2005). The UK Approach for Evaluating Human Health Risks from Petroleum Hydrocarbons in Soils (Science Report P5-080/TR3). Bristol, Environment Agency

United Kingdom. Ministry of Agriculture Fisheries and Food (MAFF) (1998). Code of Good Agricultural Practice for the Protection of Soil. London, Department for Environment Food and Agriculture (DEFRA)

United Kingdom. UK Water Industry Research (UK WIR) (2010). Guidance for the selection of Water Supply Pipes to be used in Brownfield Sites (10/WM/03/21). London, UK WIR

Wilson S (2008). Modular Approach to analysing vapour migration into buildings in the UK. London, EPP Publications Ltd

FIGURES



Drawing Notes:

Legend:

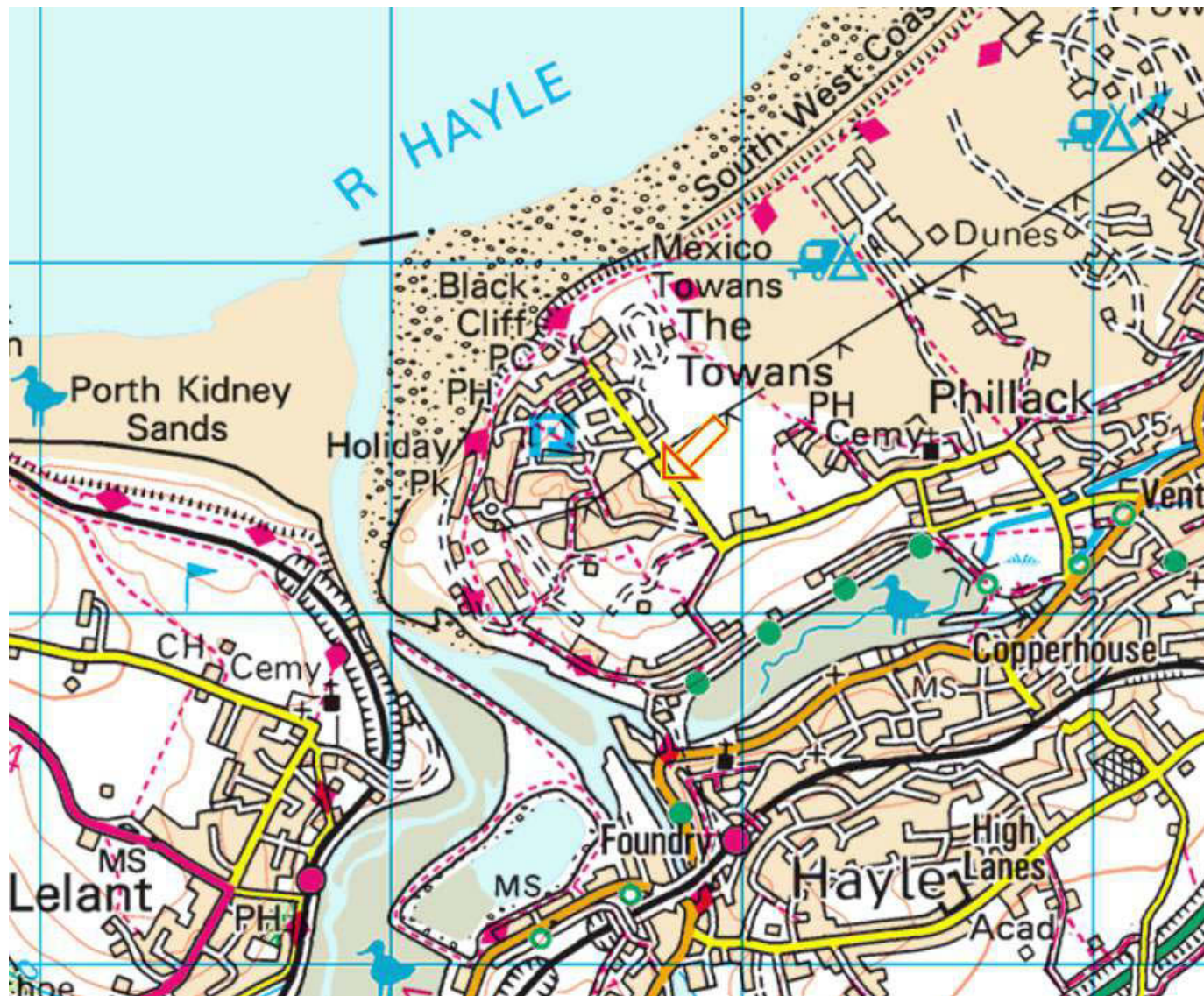
Client:

Toms Holidays

Figure 1:

Site Location Plan

1a Riviere Towans, Hayle, Cornwall



Project Ref: YES 2147a	Drawing Ref: YES 2147a
Drawn By: ID	Date: 21/02/24
Checked By: AW	Date: 21/02/24
Grid Ref: 155770 38360	Not To Scale

yes
YOUR ENVIRONMENTAL
SOLUTIONS LTD



Woodcocks Roost,
Fore Street, Barrigger,
Camborne, Cornwall TR14 0QR
M. 07766 850351
E. info@urenvironmentalsolutions.com
W. www.urenvironmentalsolutions.com



Drawing Notes:

Legend:

- █ Ownership Boundary
- █ Site Boundary

Client:

Toms Holidays

Figure 2:

Site Boundary and Proposed Development Layout Plan

1a Riviere Towans, Hayle, Cornwall

Project Ref: YES 2147a	Drawing Ref: YES 2147a
Drawn By: ID	Date: 21/02/24
Checked By: AW	Date: 21/02/24
Grid Ref: 155770 38360	Not To Scale



Woodcocks Roost,
Fore Street, Barrigger,
Camborne, Cornwall TR14 0QR
M. 07766 850351
E. info@urenvironmentalsolutions.com
W. www.urenvironmentalsolutions.com

FIGURE 4

CONCEPTUAL SITE MODEL – SITE SPECIFIC PLAUSIBLE POLLUTANT LINKAGES

Contaminant	Hazards	Pathways
Arsenic & Other Heavy Metals	Toxic by ingestion, skin contact and inhalation. Water pollutant. May reduce plant growth.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 & 16
Radon	Toxic at elevated levels by inhalation.	5
Polycyclic Aromatic Hydrocarbons & Total Petroleum Hydrocarbons	Toxic by ingestion, skin contact and inhalation. Water pollutant. May reduce plant growth. Detrimental to buildings and water supply pipes.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 & 16
Volatile Organic Compounds	Toxic by ingestion, skin contact and inhalation. Water pollutant. May reduce	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,



Contaminant	Hazards	Pathways
(VOCs)	plant growth.	12, 13, 14, 15 & 16

APPENDIX A

SITE WALKOVER PHOTOGRAPHS

SITE WALKOVER PHOTOGRAPHS



PHOTOGRAPH 1: SITE ACCESS ROAD



PHOTOGRAPH 2: SITE ACCESS



PHOTOGRAPH 3: SITE ACCESS



PHOTOGRAPH 4: WESTERN SITE BOUNDARY



PHOTOGRAPH 5: VIEW OF SITE



PHOTOGRAPH 6: SOUTHERN SECTION OF SITE



PHOTOGRAPH 7: SOUTHERN SITE BOUNDARY



PHOTOGRAPH 8: VIEW OF SITE



PHOTOGRAPH 9: PARKING AREA IN EASTEREN SECTION OF SITE



PHOTOGRAPH 10: POWERLINES ABOVE SITE



PHOTOGRAPH 11: EASTERN SITE BOUNDARY



PHOTOGRAPH 12: VIEW OF SITE



PHOTOGRAPH 13: PARKING AREA ON SITE

APPENDIX B

ENVIRONMENTAL REPORT

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit, Sand Pit, Other Pits, Quarry, Shingle, Orchard, Osiers, Reeds, Marsh, Mixed Wood, Deciduous, Brushwood, Fir, Furze, Rough Pasture, Arrow denotes flow of water, Trigonometrical Station, Site of Antiquities, Bench Mark, Pump, Guide Post, Signal Post, Well, Spring, Boundary Post, **•285** Surface Level, Sketched Contour, Instrumental Contour, Main Roads (Fenced/Un-Fenced), Minor Roads (Fenced/Un-Fenced), Sunken Road, Raised Road, Road over Railway, Railway over River, Railway over Road, Level Crossing, Road over River or Canal, Road over Stream, Road over Stream, County Boundary (Geographical), County & Civil Parish Boundary, Administrative County & Civil Parish Boundary, County Borough Boundary (England), County Burgh Boundary (Scotland), Rural District Boundary, Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry, Gravel Pit, Sand Pit, Disused Pit or Quarry, Refuse or Slag Heap, Lake, Loch or Pond, Dunes, Boulders, Coniferous Trees, Non-Coniferous Trees, Orchard, Scrub, Coppice, Bracken, Heath, Rough Grassland, Marsh, Reeds, Saltings, Building, Glasshouse, Sloping Masonry, Pylon, Electricity Transmission Line, Pole, Cutting, Embankment, Standard Gauge Multiple Track, Standard Gauge Single Track, Siding, Tramway or Mineral Line, Narrow Gauge, Geographical County, Administrative County, County Borough or County of City, Municipal Borough, Urban or Rural District, Burgh or District Council, Borough, Burgh or County Constituency (Shown only when not coincident with other boundaries), Civil Parish (Shown alternately when coincidence of boundaries occurs), BP, BS Boundary Post or Stone, Ch Church, CH Club House, F E Sta Fire Engine Station, FB Foot Bridge, Fn Fountain, GP Guide Post, MP Mile Post, MS Mile Stone, Pol Sta Police Station, PO Post Office, PC Public Convenience, PH Public House, SB Signal Box, Spr Spring, TCB Telephone Call Box, TCP Telephone Call Post, W Well

1:10,000 Raster Mapping

Gravel Pit, Refuse tip or slag heap, Rock, Rock (scattered), Boulders, Boulders (scattered), Shingle, Mud, Sand, Sand Pit, Slopes, Top of cliff, General detail, Underground detail, Overhead detail, Narrow gauge railway, Multi-track railway, Single track railway, County boundary (England only), District, Unitary, Metropolitan, London Borough boundary, Civil, parish or community boundary, Constituency boundary, Area of wooded vegetation, Non-coniferous trees, Non-coniferous trees (scattered), Coniferous trees, Coniferous trees (scattered), Positioned tree, Orchard, Coppice or Osiers, Rough Grassland, Heath, Scrub, Marsh, Salt Marsh or Reeds, Water feature, Flow arrows, MHW(S) Mean high water (springs), MLW(S) Mean low water (springs), Telephone line (where shown), Electricity transmission line (with poles), Bench mark (where shown), Triangulation station, Point feature (e.g. Guide Post or Mile Stone), Pylon, flare stack or lighting tower, Site of (antiquity), Glasshouse, General Building, Important Building

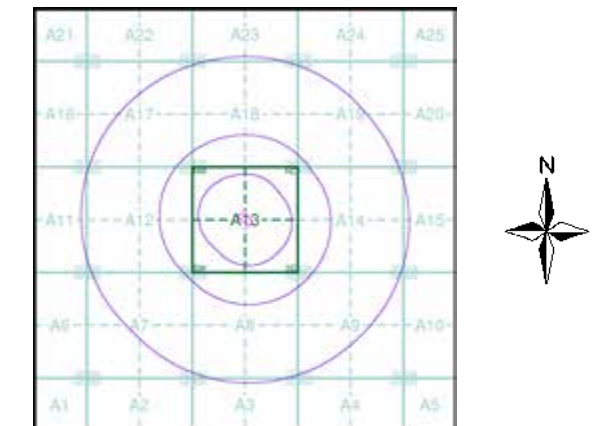
Envirocheck

LANDMARK INFORMATION GROUP

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cornwall & Isles Of Scilly	1:10,560	1887 - 1888	2
Cornwall & Isles Of Scilly	1:10,560	1908	3
Cornwall & Isles Of Scilly	1:10,560	1938	4
Ordnance Survey Plan	1:10,000	1963	5
Ordnance Survey Plan	1:10,000	1979	6
Ordnance Survey Plan	1:10,000	1987 - 1989	7
10K Raster Mapping	1:10,000	2000	8
Street View	Variable		9

Historical Map - Slice A



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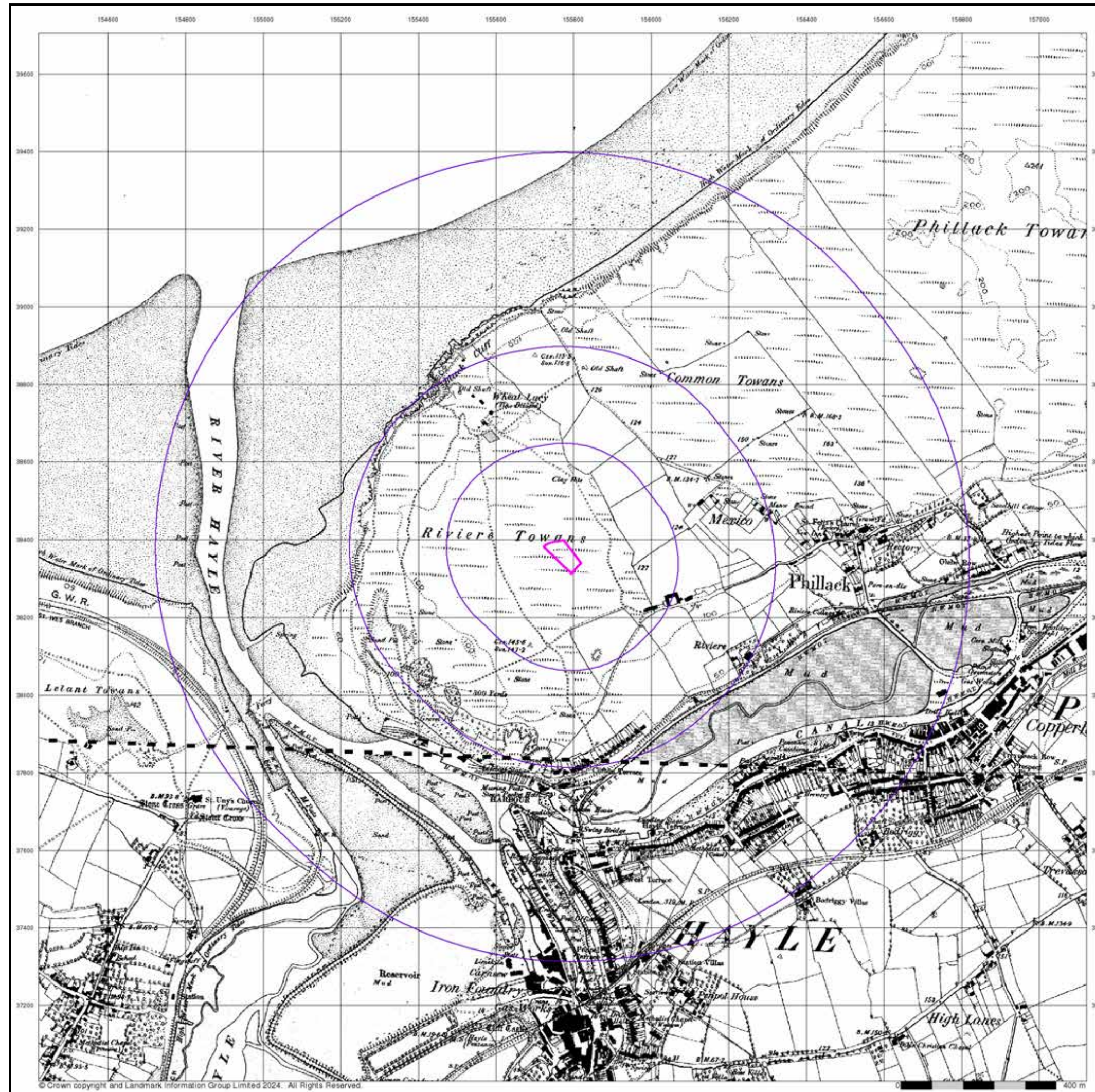
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 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towans, Riviere Towans, PHILLACK, TR27 5AF

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



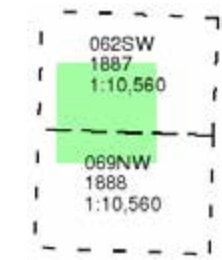
Cornwall & Isles Of Scilly

Published 1887 - 1888

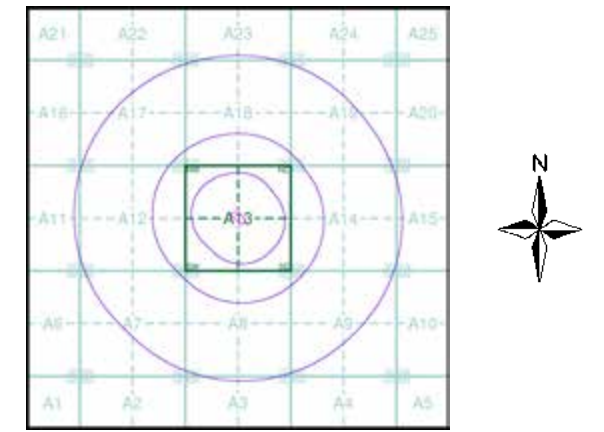
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towans, Riviere Towans, PHILLACK, TR27 5AF



Cornwall & Isles Of Scilly

Published 1908

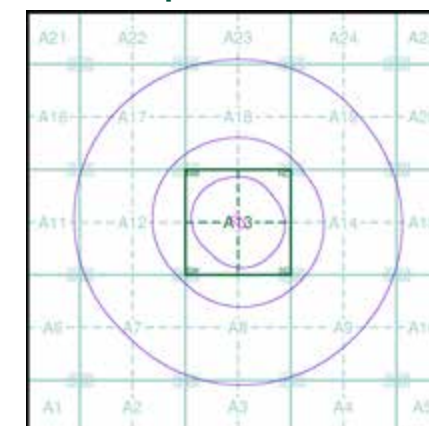
Source map scale - 1:10,560

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Map Name(s) and Date(s)

062SW	1908	1:10,560
069NW	1908	1:10,560

Historical Map - Slice A



Order Details

Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF

Cornwall & Isles Of Scilly

Published 1938

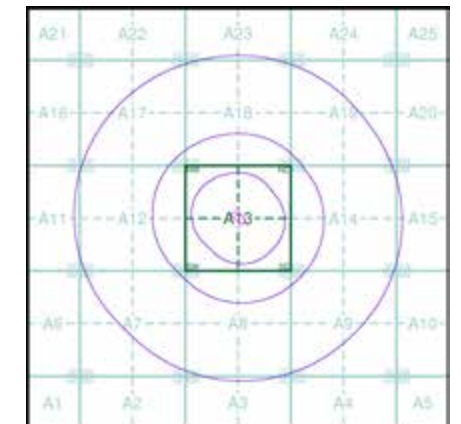
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

062SW	1938	1:10,560
069NW	1938	1:10,560

Historical Map - Slice A

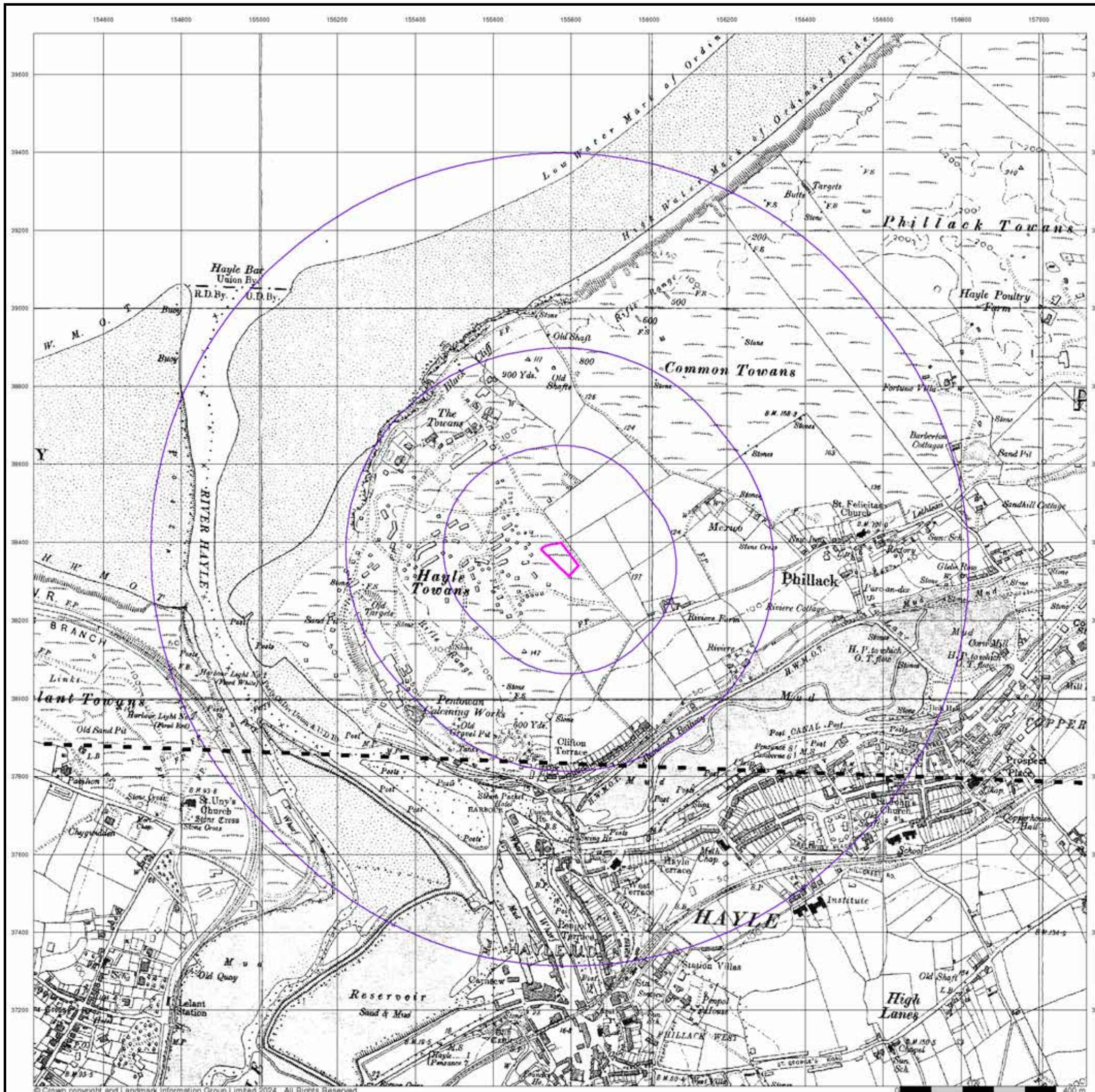


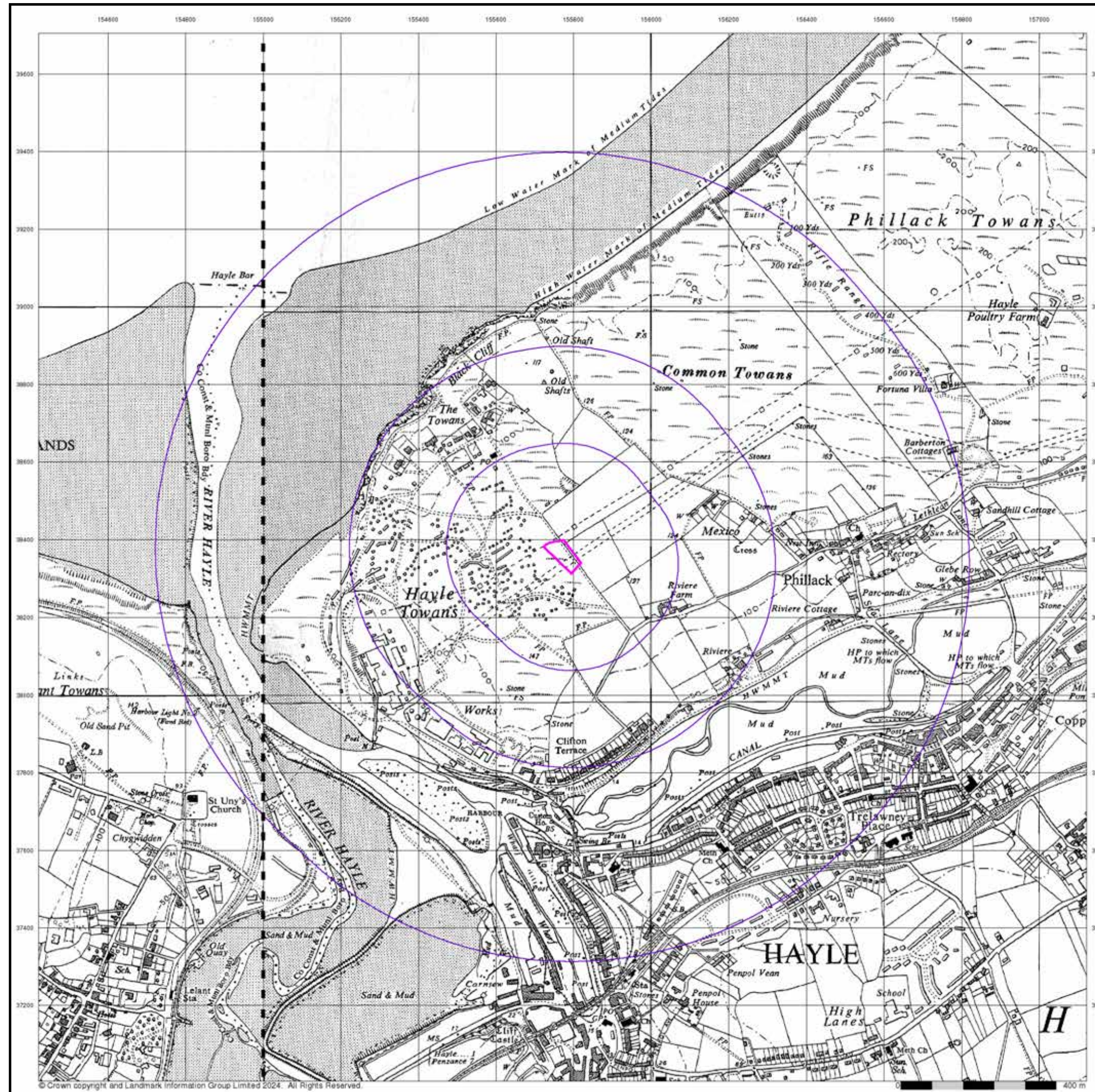
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 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details

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 Riviere Towns, PHILLACK, TR27 5AF





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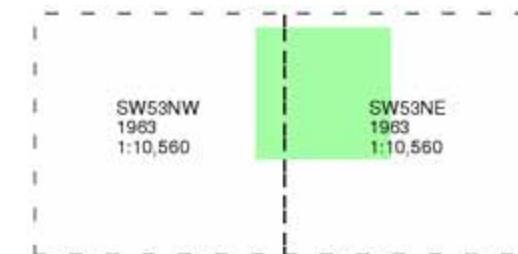
Ordnance Survey Plan

Published 1963

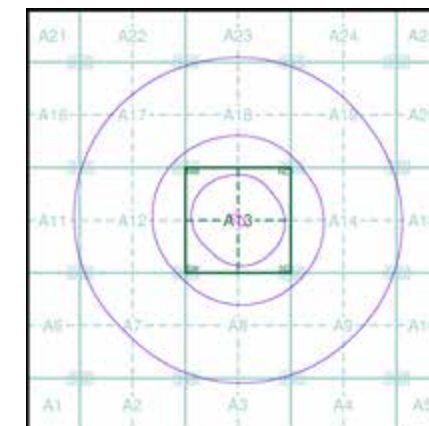
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towns,
 Riviere Towns, PHILLACK, TR27 5AF

Ordnance Survey Plan

Published 1979

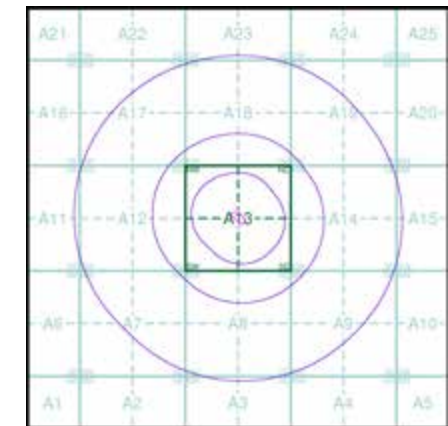
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

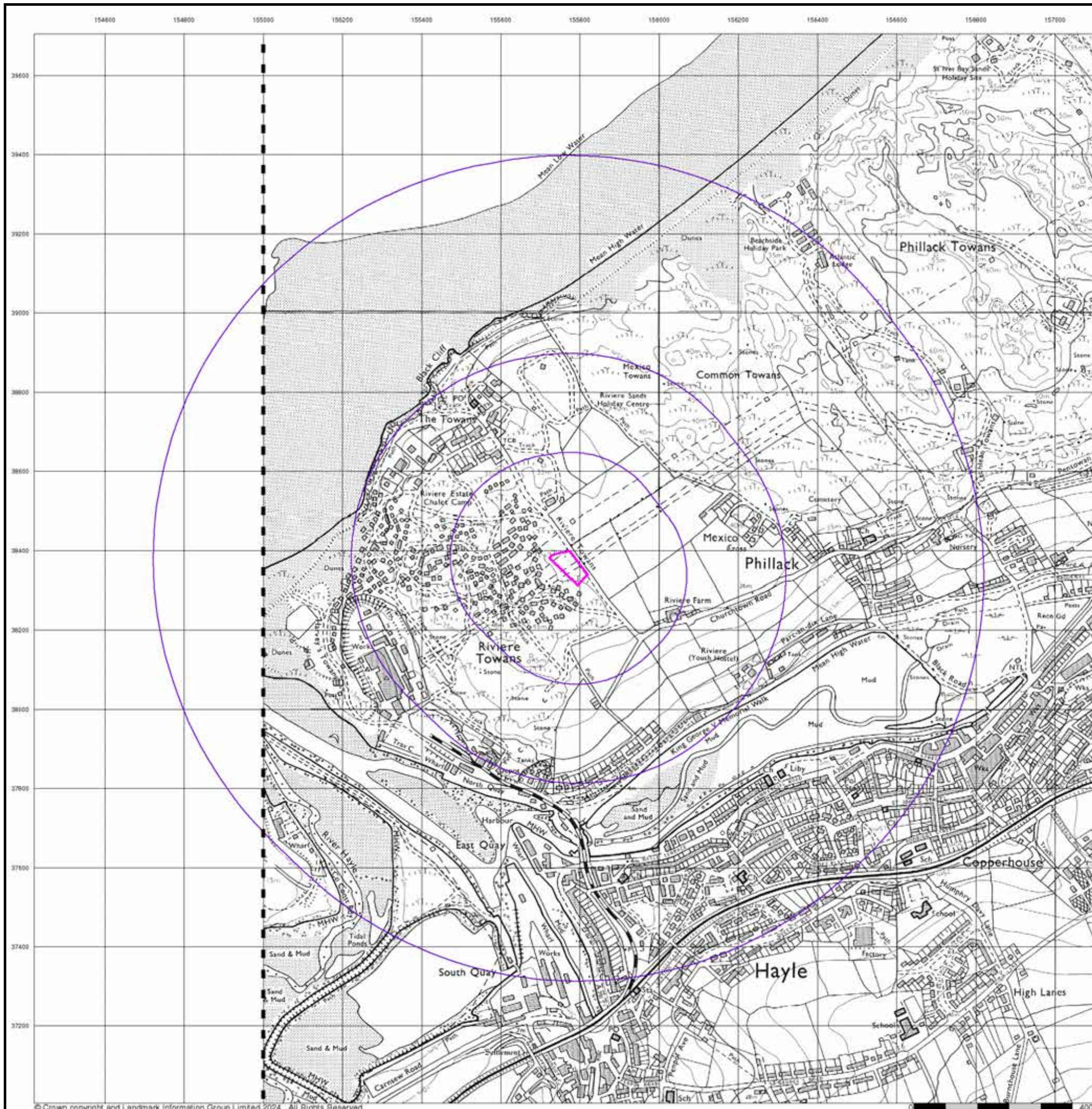


Order Details

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Customer Ref: 2147
National Grid Reference: 155770, 38360
Slice: A
Site Area (Ha): 0.39
Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
Riviere Towans, PHILLACK, TR27 5AF



Ordnance Survey Plan

Published 1987 - 1989

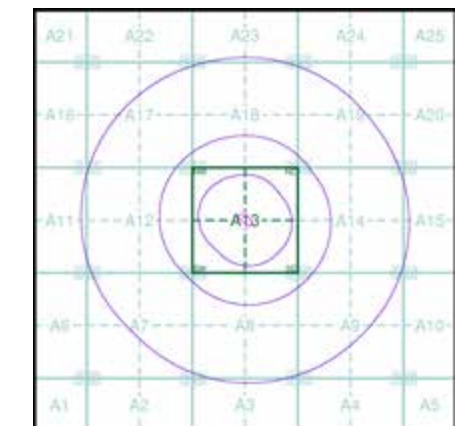
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Map Name(s) and Date(s)



Historical Map - Slice A

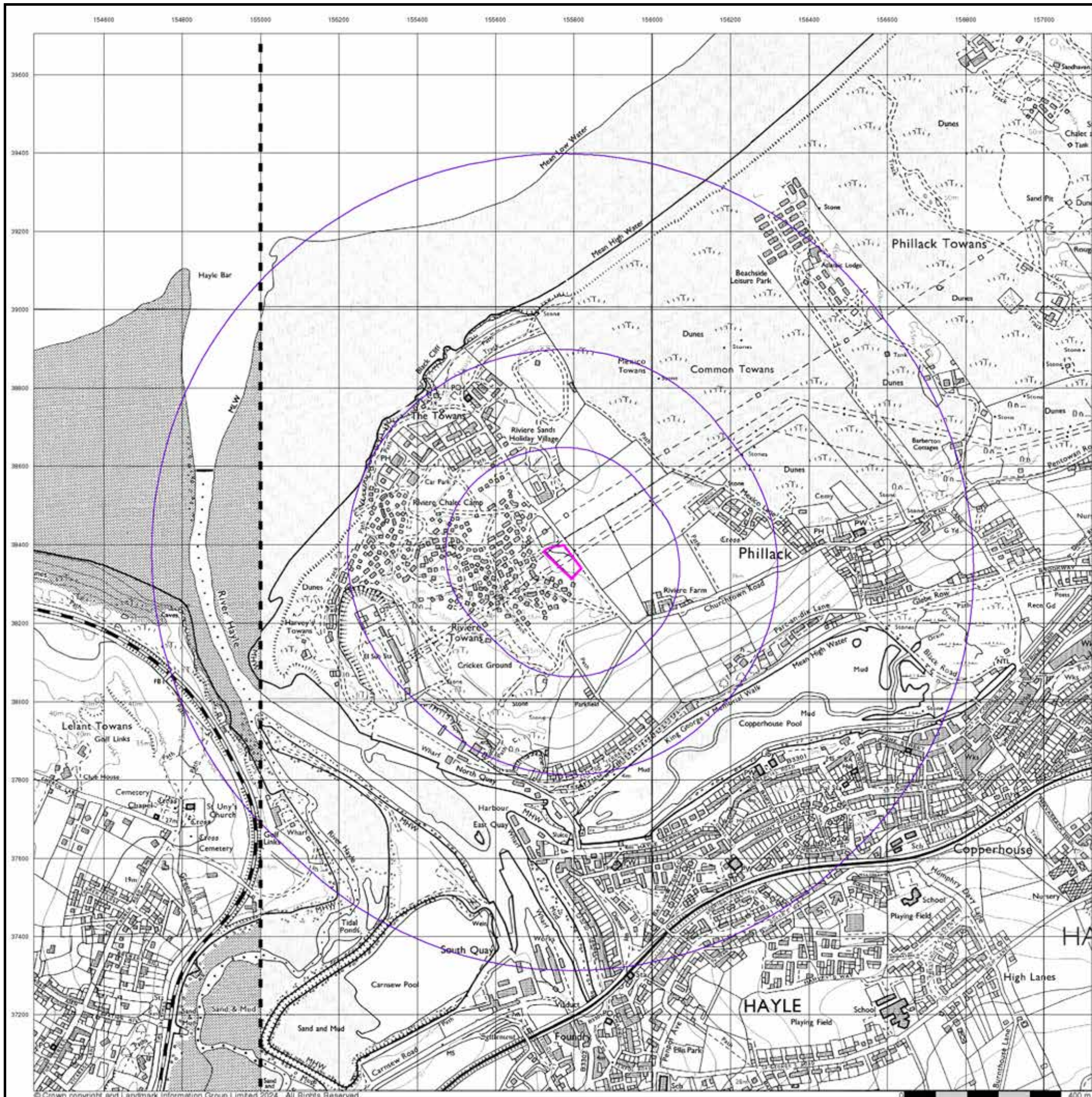


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 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF





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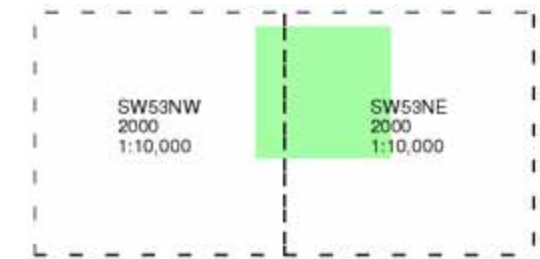
10k Raster Mapping

Published 2000

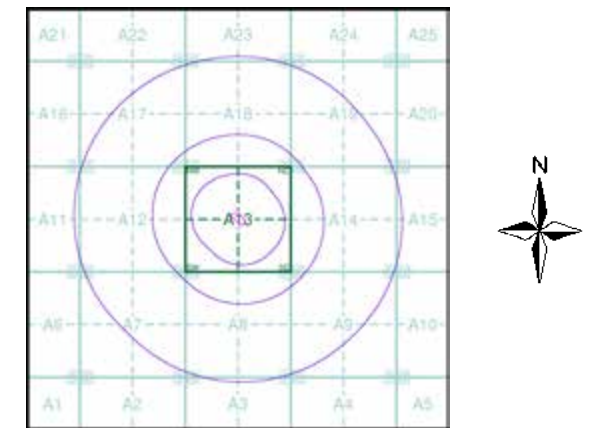
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A

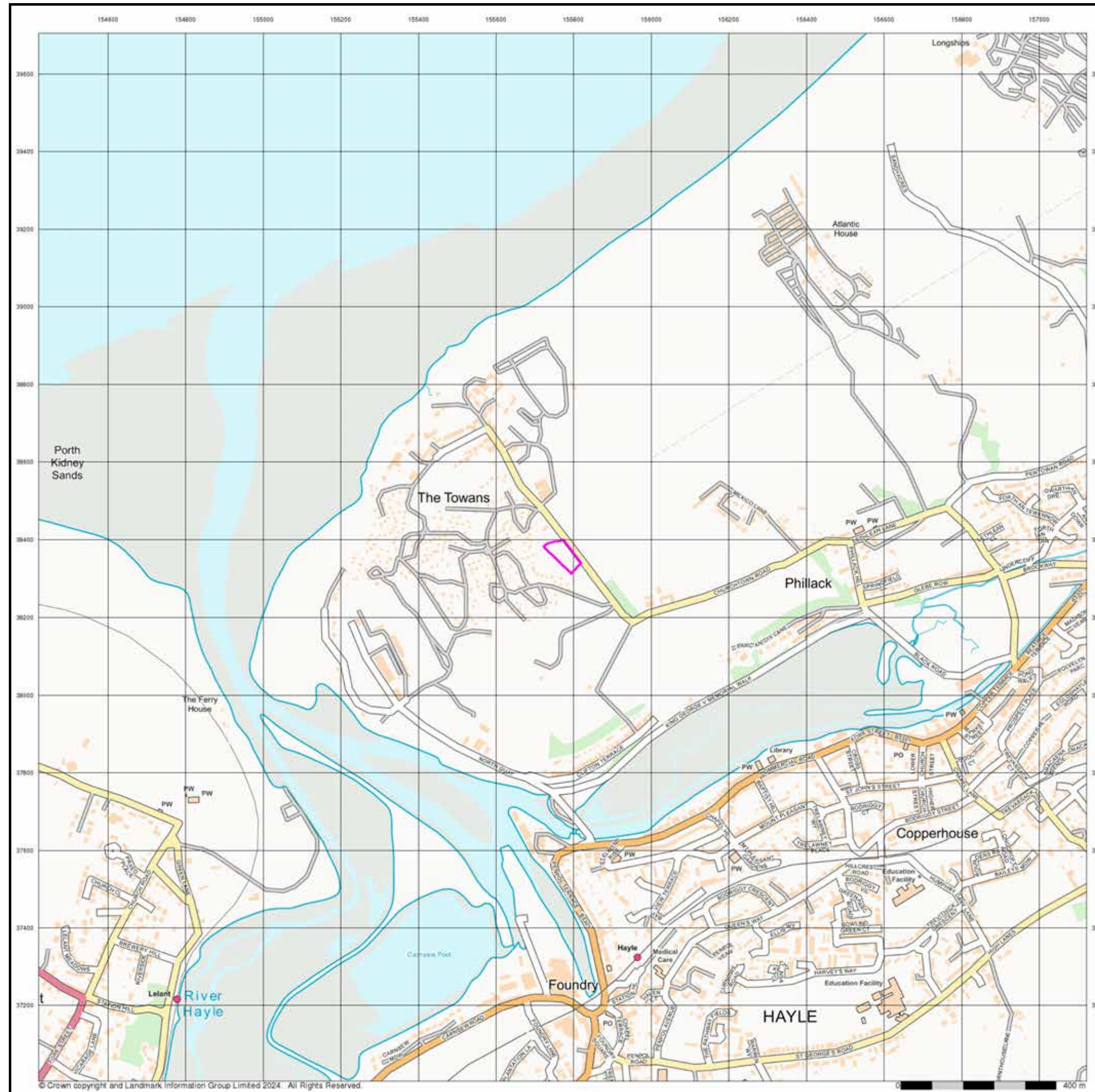


Order Details

Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
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 Search Buffer (m): 1000

Site Details

1a, Road Between Churchtown Road and Riviere Towans, Riviere Towans, PHILLACK, TR27 5AF



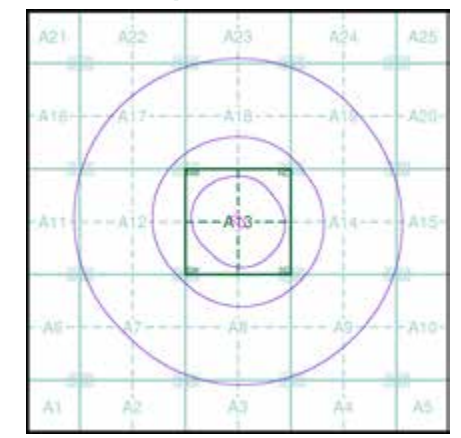
Street View
Published 2024
Source map scale - 1:10,000

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

Map Name(s) and Date(s)



Street View Map - Slice A



Order Details
 Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 1000

Site Details
 1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF

Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500

Quarry **Gravel Pit** **Sand Pit**
Clay Pit **Shingle** **Refuse Heap**
Sloping Masonry **Flat Rock**
Marsh **Reeds** **Osiers**
Rough Pasture **Furze** **Wood**
Mixed Wood **Brushwood** **Orchard**
Fir **Ford** **Stepping Stones**
Ferry **Waterfall** **Lock**
Trig. Station **Altitude at Trig. Station**
B.M. 325-9 **Bench Mark** **Surface Level**
Arrow denotes flow of water **Antiquities (site of)**
Cutting **Embankment**
Railway crossing Road **Level Crossing** **Road crossing Railway**
Railway crossing River or Canal **Road over single stream** **Road over River or Canal**
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
County Borough Boundary (England)
County Burgh Boundary (Scotland)
Boundary Post or Stone **Police Call Box**
B.R. Bridle Road **P. Pump**
E.P. Electricity Pylon **S.P. Signal Post**
F.B. Foot Bridge **Sl. Sluice**
F.P. Foot Path **Sp. Spring**
G.P. Guide Post or Board **T.C.B. Telephone Call Box**
M.S. Mile Stone **Tr. Trough**
M.P. M.R. Mooring Post or Ring **W. Well**

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250

Inactive Quarry, Chalk Pit or Clay Pit **Active Quarry, Chalk Pit or Clay Pit**
Rock **Boulders**
Cliff **Slopes** **Top**
Roofed Building **Glazed Roof Building**
Sloping Masonry **Archway**
Non-Coniferous Tree (surveyed) **Coniferous Tree (surveyed)**
Non-Coniferous Trees (not surveyed) **Coniferous Trees (not surveyed)**
Orchard Tree **Scrub** **Bracken**
Coppice, Osier **Reeds** **Marsh, Saltings**
Rough Grassland **Heath** **Culvert**
Direction of water flow **Bench Mark** **Antiquity (site of)**
Cave Entrance **Triangulation Station** **Electricity Pylon**
Electricity Transmission Line
County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
London Borough Boundary
Symbol marking point where boundary mereing changes
BH Beer House **P. Pillar, Pole or Post**
BP, BS Boundary Post or Stone **PO Post Office**
Cn, C Capstan, Crane **PC Public Convenience**
Chy Chimney **PH Public House**
D Fn Drinking Fountain **Pp Pump**
EI P Electricity Pillar or Post **SB, S Br Signal Box or Bridge**
FAP Fire Alarm Pillar **SP, SL Signal Post or Light**
FB Foot Bridge **Spr Spring**
GP Guide Post **Tk Tank or Track**
H Hydrant or Hydraulic **TCB Telephone Call Box**
LC Level Crossing **TCP Telephone Call Post**
MH Manhole **Tr Trough**
MP Mile Post or Mooring Post **Wr Pt, Wr T Water Point, Water Tap**
MS Mile Stone **W Well**
NTL Normal Tidal Limit **Wd Pp Wind Pump**

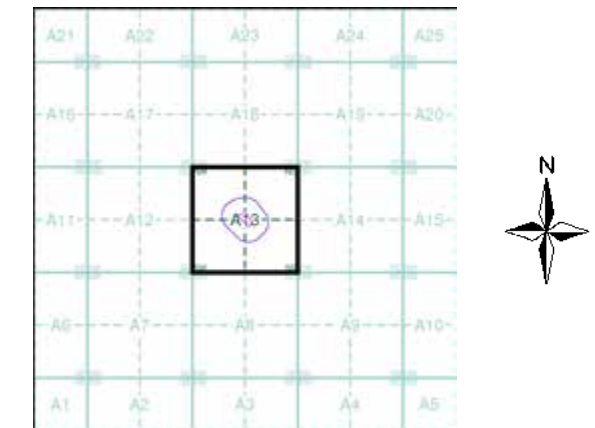
Large-Scale National Grid Data 1:2,500 and 1:1,250

Cliff **Slopes** **Top**
Rock **Rock (scattered)**
Boulders **Boulders (scattered)**
Positioned Boulder **Scree**
Non-Coniferous Tree (surveyed) **Coniferous Tree (surveyed)**
Non-Coniferous Trees (not surveyed) **Coniferous Trees (not surveyed)**
Orchard Tree **Scrub** **Bracken**
Coppice, Osier **Reeds** **Marsh, Saltings**
Rough Grassland **Heath** **Culvert**
Direction of water flow **Triangulation Station** **Antiquity (site of)**
Electricity Transmission Line **Electricity Pylon**
Bench Mark **Buildings with Building Seed**
Roofed Building **Glazed Roof Building**
Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)
Bks Barracks **P. Pillar, Pole or Post**
Bty Battery **PO Post Office**
Cemy Cemetery **PC Public Convenience**
Chy Chimney **Pp Pump**
Cis Cistern **Ppg Sta Pumping Station**
Dismtd Rly Dismantled Railway **PW Place of Worship**
EI Gen Sta Electricity Generating Station **Sewage Ppg Sta Sewage Pumping Station**
EI P Electricity Pole, Pillar **SB, S Br Signal Box or Bridge**
EI Sub Sta Electricity Sub Station **SP, SL Signal Post or Light**
FB Filter Bed **Spr Spring**
Fn / D Fn Fountain / Drinking Ftn. **Tk Tank or Track**
Gas Gov Gas Valve Compound **Tr Trough**
GVC Gas Governor **Wd Pp Wind Pump**
GP Guide Post **Wr Pt, Wr T Water Point, Water Tap**
MH Manhole **Wks Works (building or area)**
MP, MS Mile Post or Mile Stone **W Well**

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cornwall & Isles Of Scilly	1:2,500	1878	2
Cornwall & Isles Of Scilly	1:2,500	1908	3
Cornwall & Isles Of Scilly	1:2,500	1936	4
Ordnance Survey Plan	1:2,500	1964 - 1965	5
Ordnance Survey Plan	1:2,500	1970	6
Additional SIMs	1:2,500	1987	7
Ordnance Survey Plan	1:2,500	1989	8
Additional SIMs	1:2,500	1994	9
Large-Scale National Grid Data	1:2,500	1995	10
Large-Scale National Grid Data	1:2,500	1995	11

Historical Map - Segment A13



Order Details

Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF

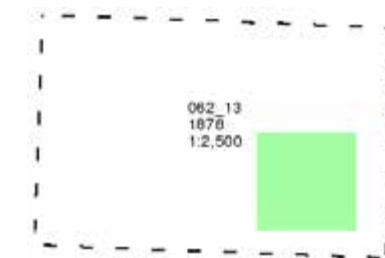
Cornwall & Isles Of Scilly

Published 1878

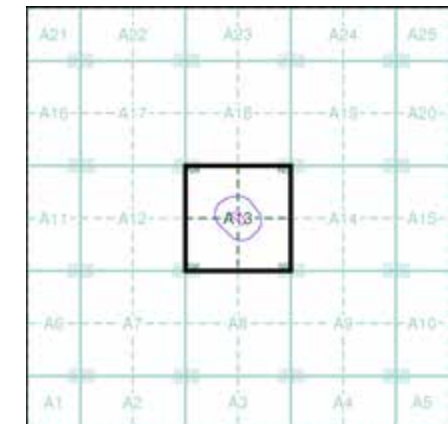
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

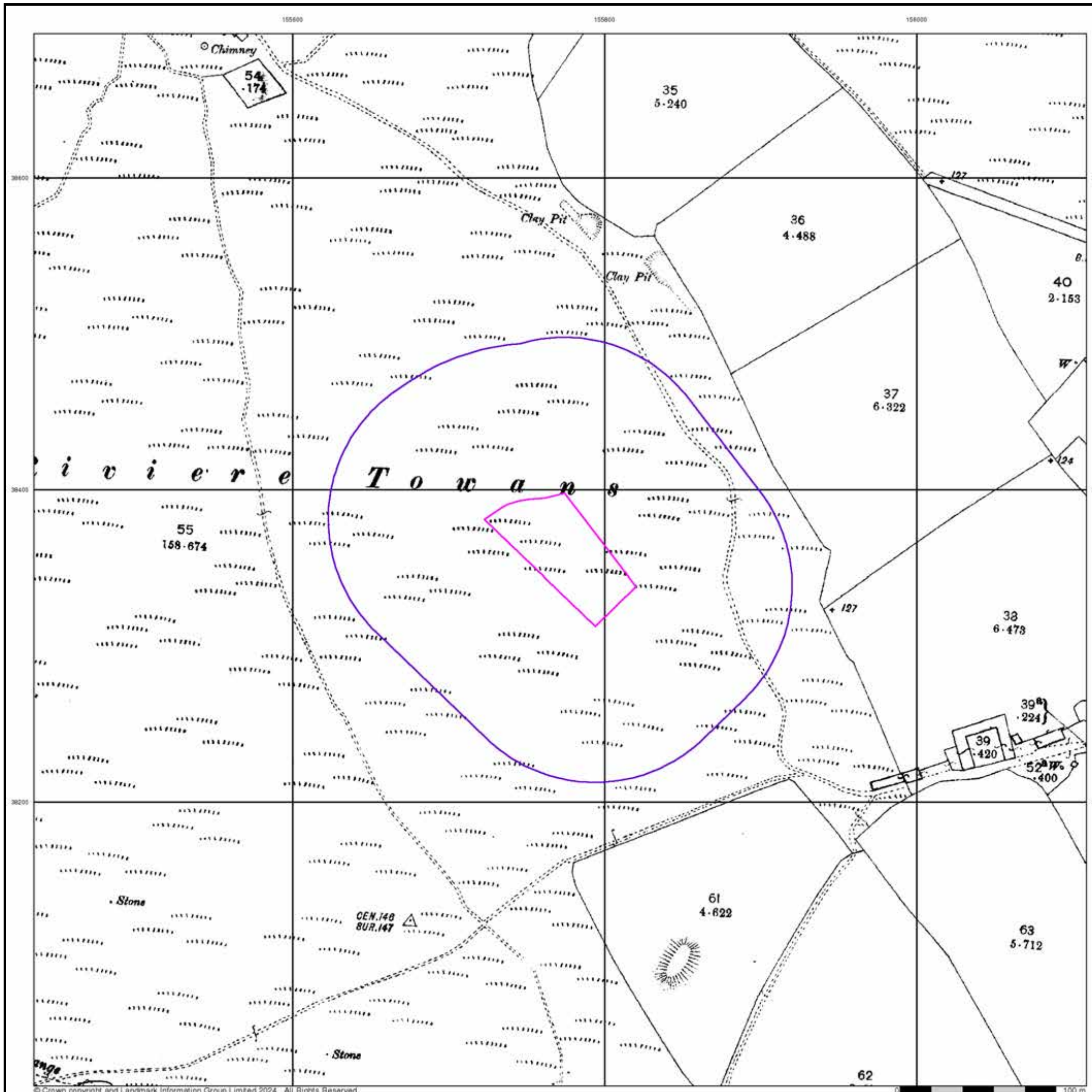


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Order Number: 335530256_1_1
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Site Details

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Riviere Towans, PHILLACK, TR27 5AF



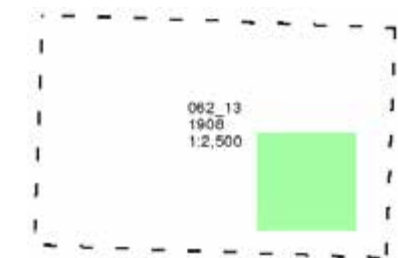
Cornwall & Isles Of Scilly

Published 1908

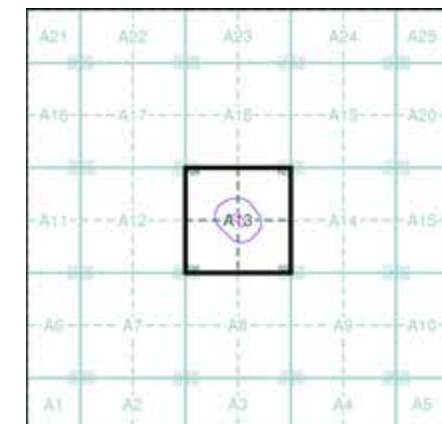
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

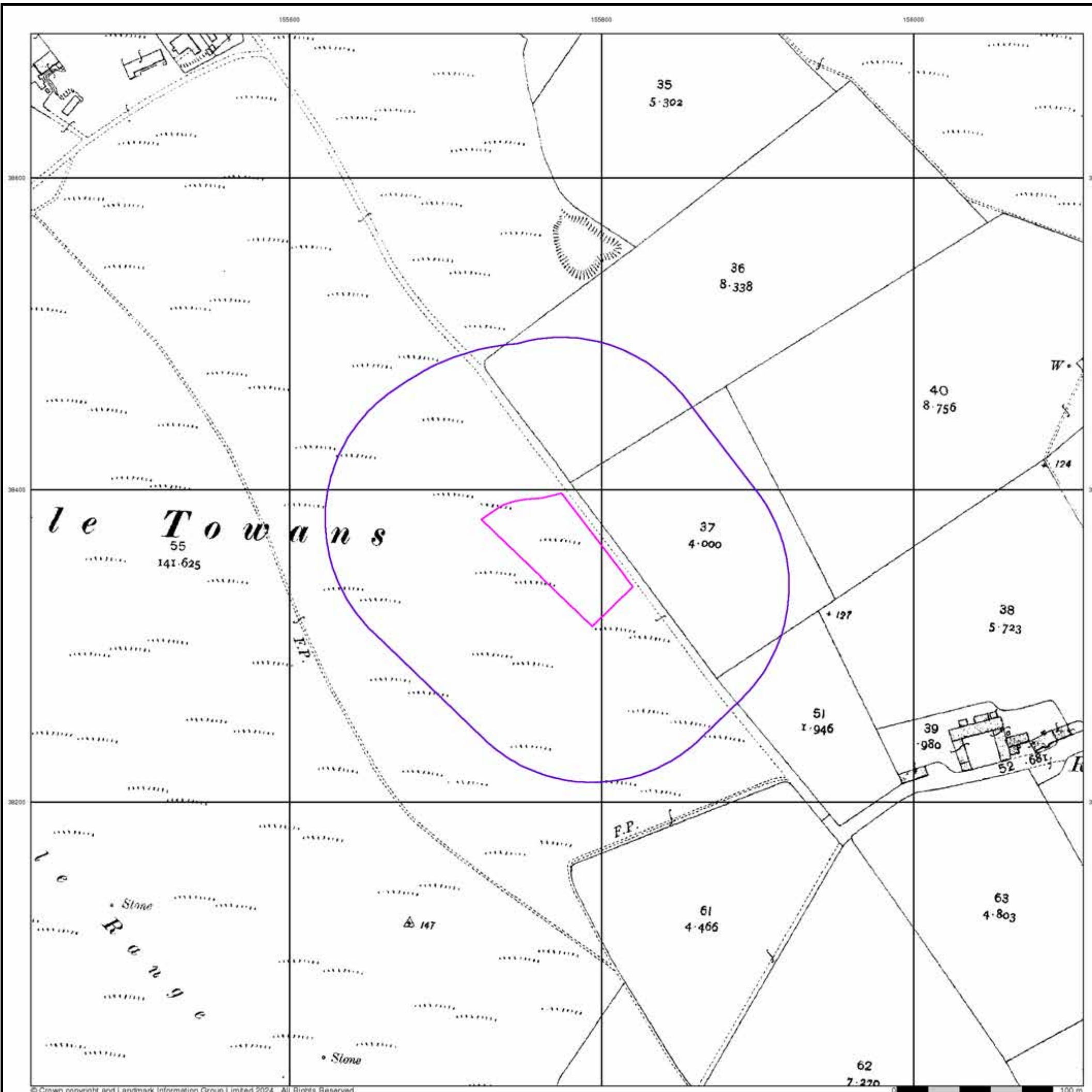


Order Details

Order Number: 335530256_1_1
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Riviere Towans, PHILLACK, TR27 5AF



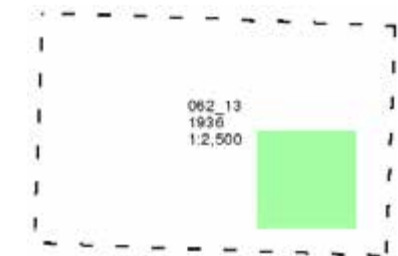
Cornwall & Isles Of Scilly

Published 1936

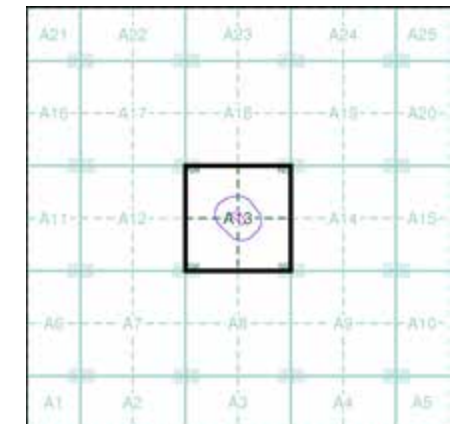
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

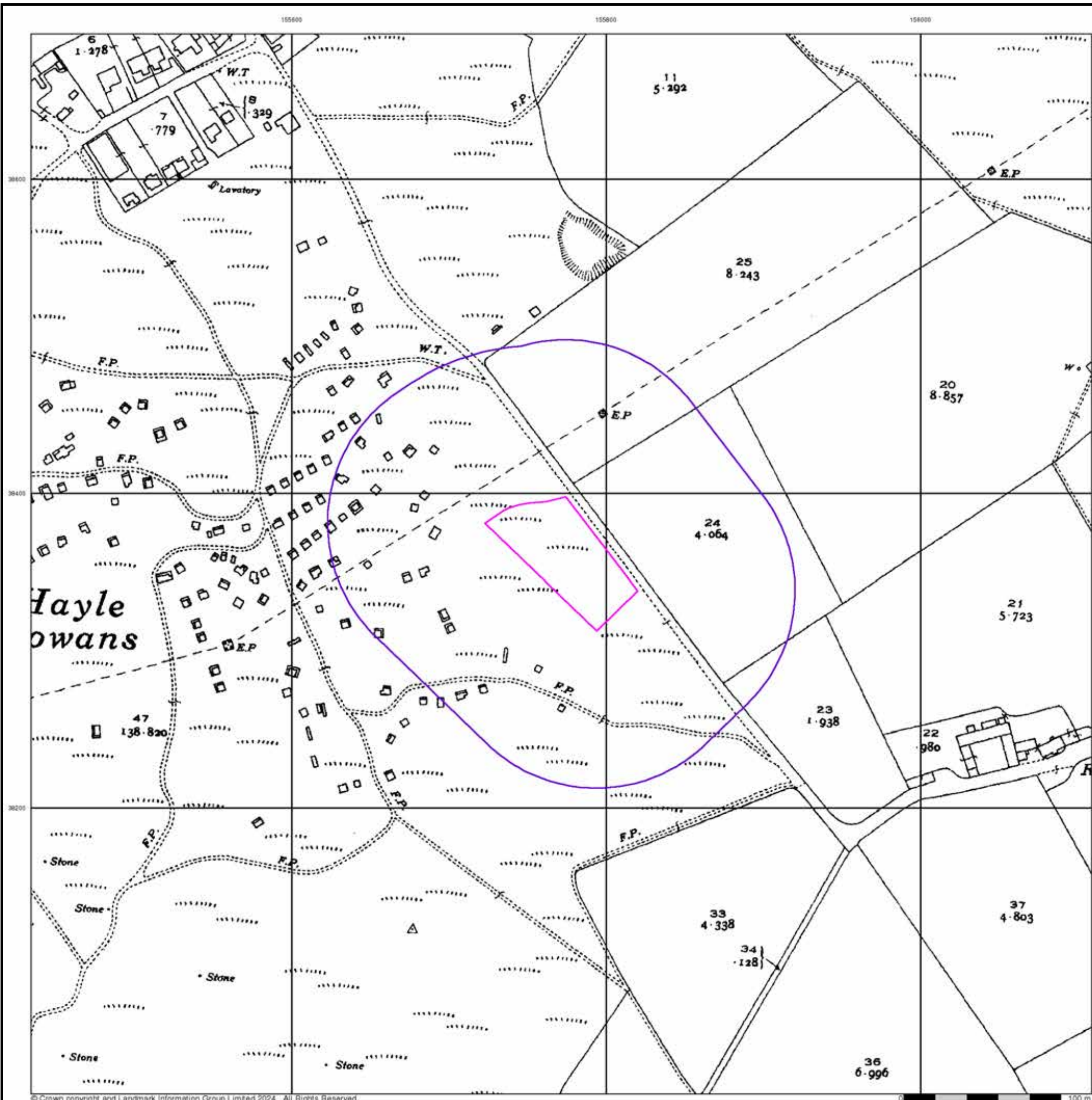


Order Details

Order Number: 335530256_1_1
Customer Ref: 2147
National Grid Reference: 155770, 38360
Slice: A
Site Area (Ha): 0.39
Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
Riviere Towans, PHILLACK, TR27 5AF



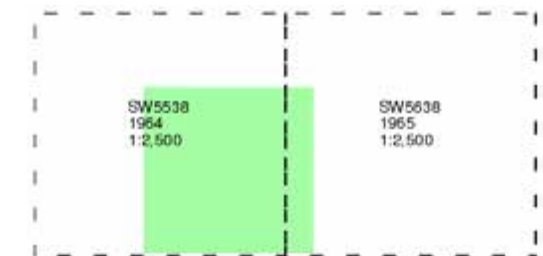
Ordnance Survey Plan

Published 1964 - 1965

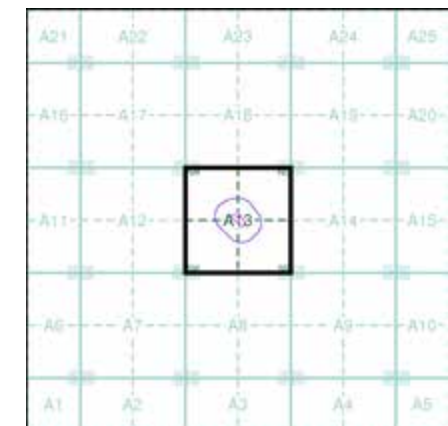
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

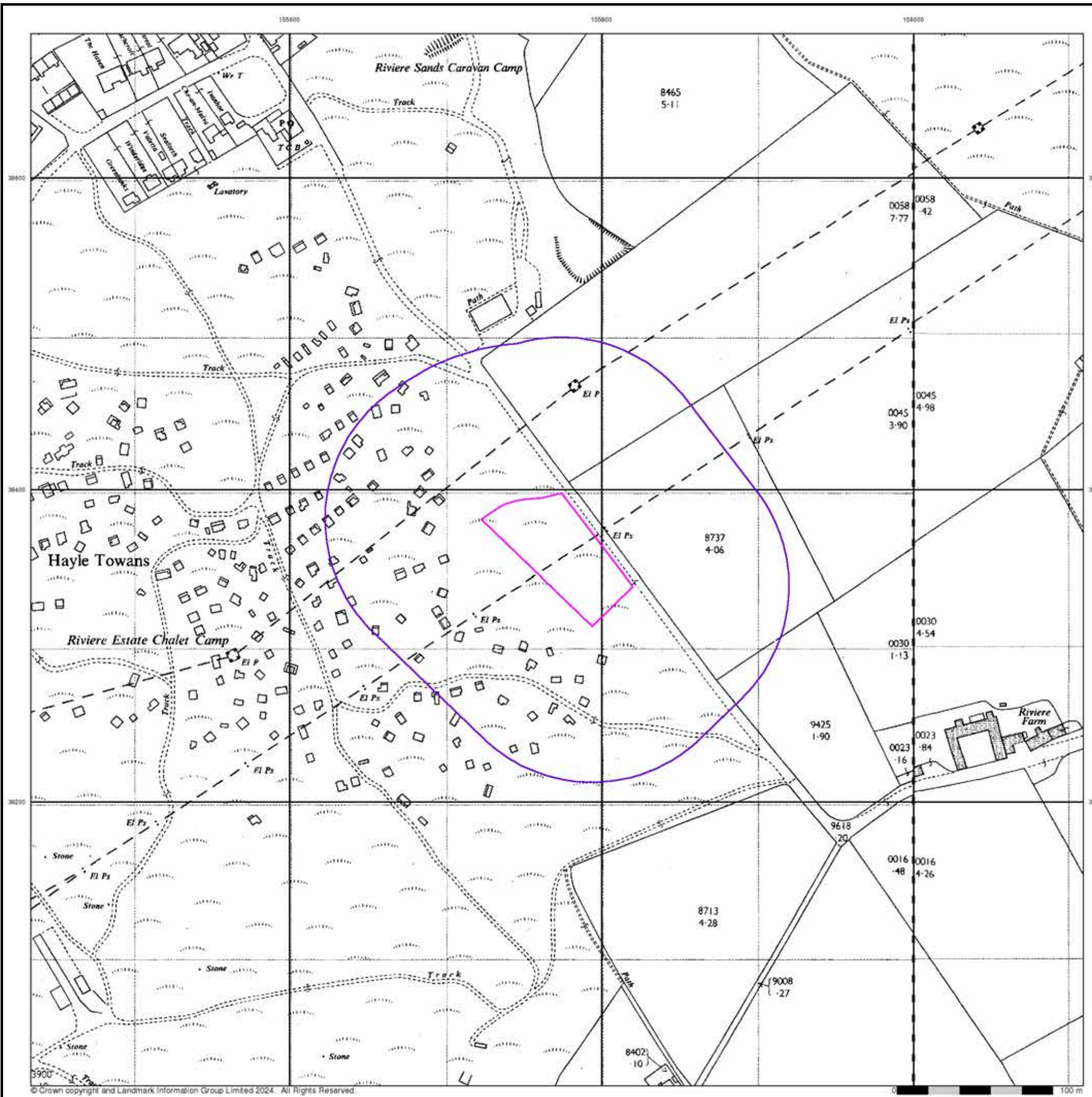


Order Details

Order Number: 335530256_1_1
Customer Ref: 2147
National Grid Reference: 155770, 38360
Slice: A
Site Area (Ha): 0.39
Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
Riviere Towans, PHILLACK, TR27 5AF



Ordnance Survey Plan

Published 1970

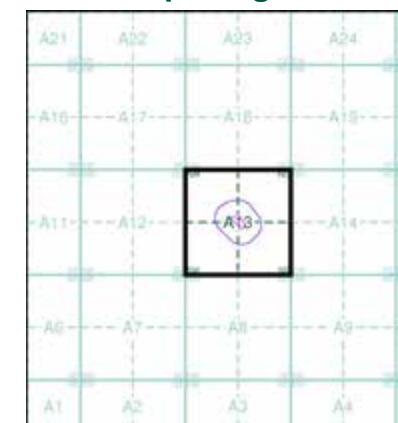
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Map Name(s) and Date(s)



Historical Map - Segment A13

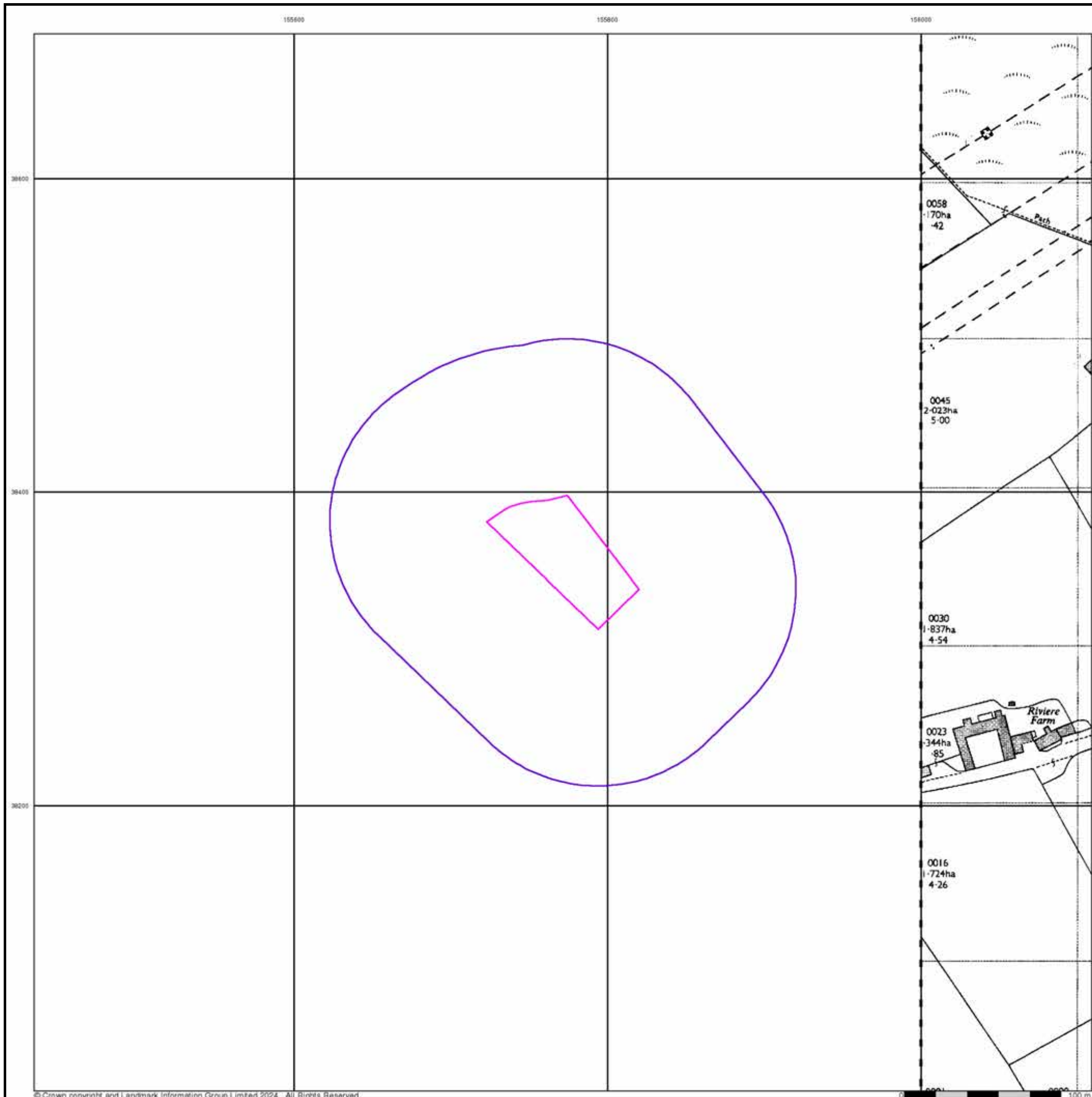


Order Details

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Customer Ref: 2147
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Site Area (Ha): 0.39
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Site Details

1a, Road Between Churchtown Road and Riviere Towans,
Riviere Towans, PHILLACK, TR27 5AF



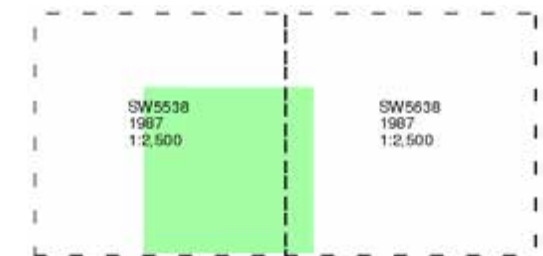
Additional SIMs

Published 1987

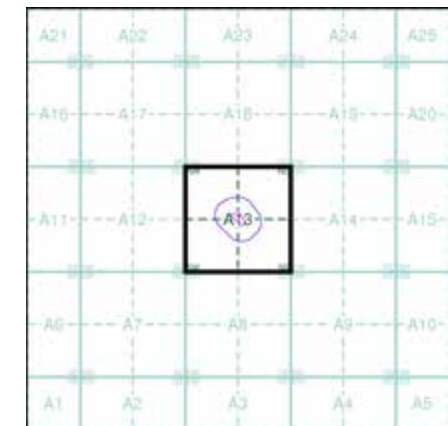
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

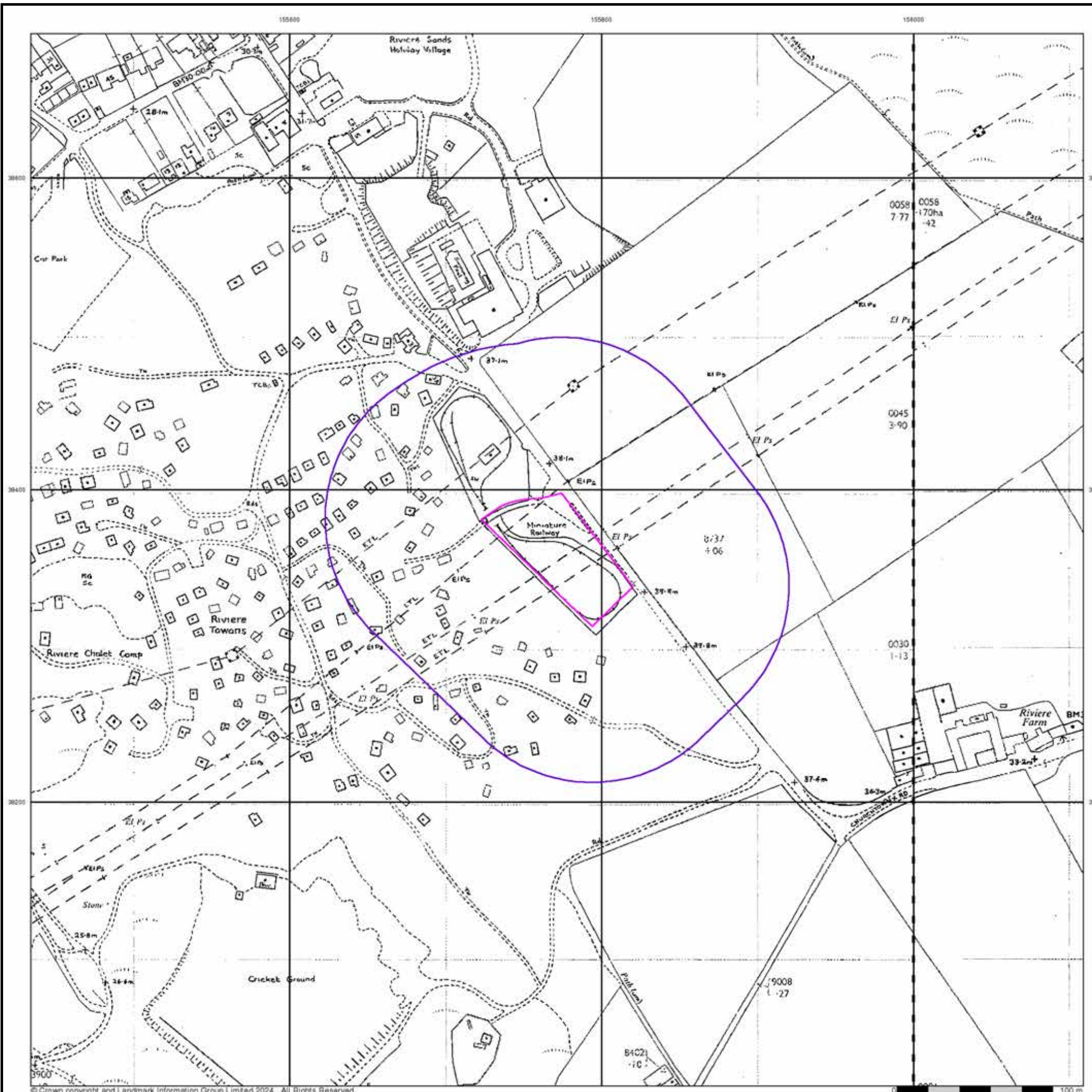


Order Details

Order Number: 335530256_1_1
Customer Ref: 2147
National Grid Reference: 155770, 38360
Slice: A
Site Area (Ha): 0.39
Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
Riviere Towans, PHILLACK, TR27 5AF



Ordnance Survey Plan

Published 1989

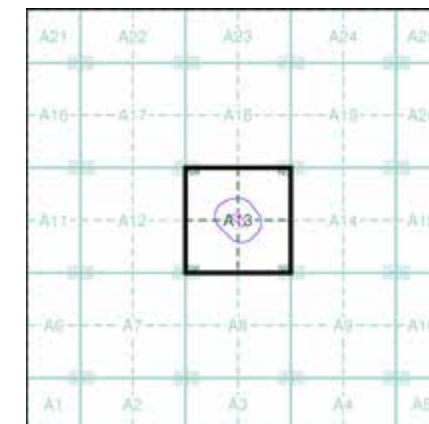
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13

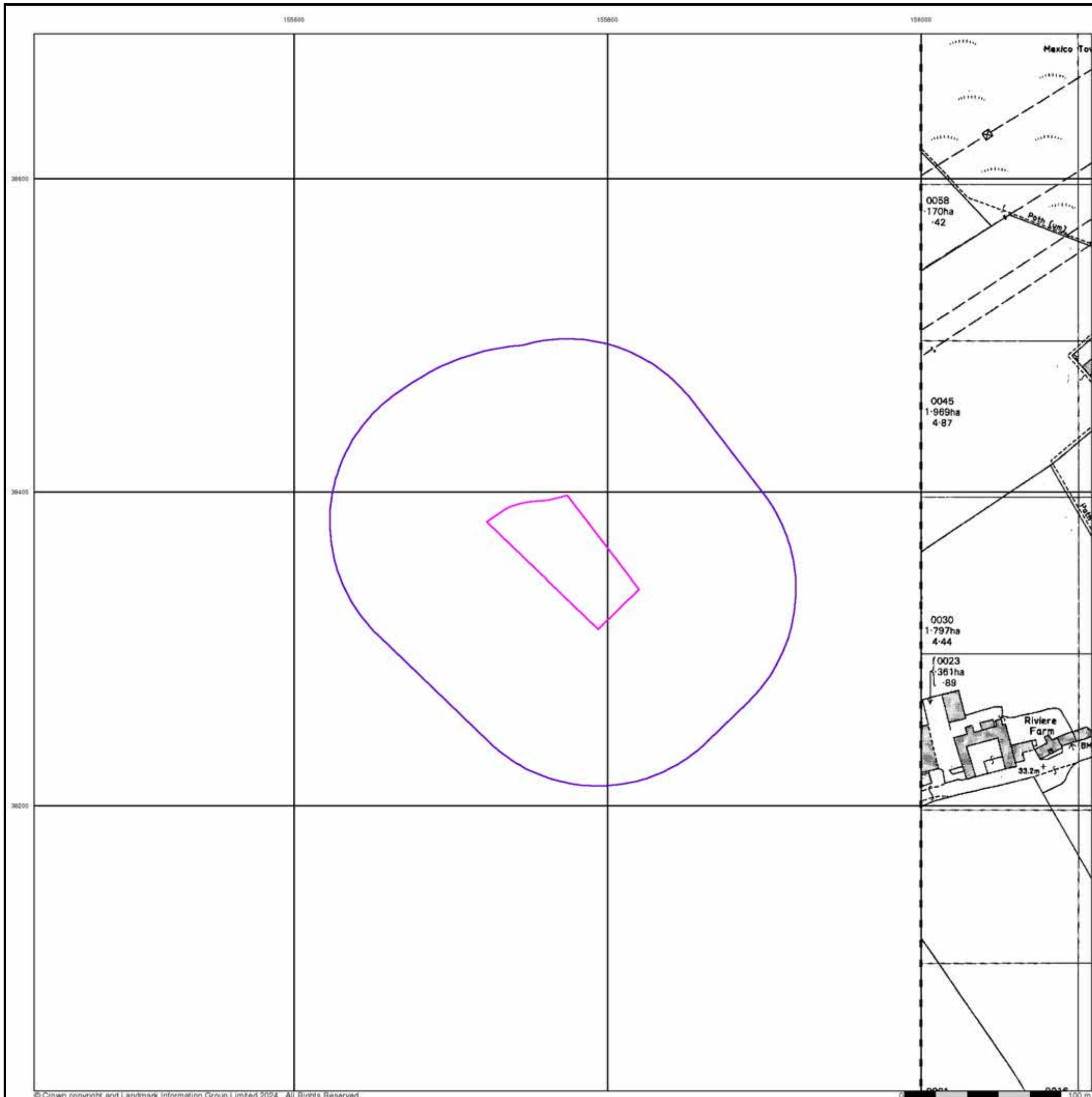


Order Details

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Site Details

1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF



Additional SIMs

Published 1994

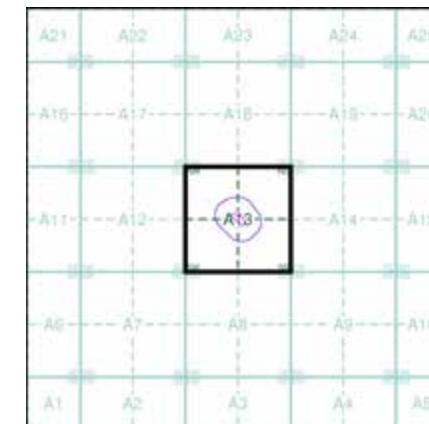
Source map scale - 1:2,500

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Historical Map - Segment A13

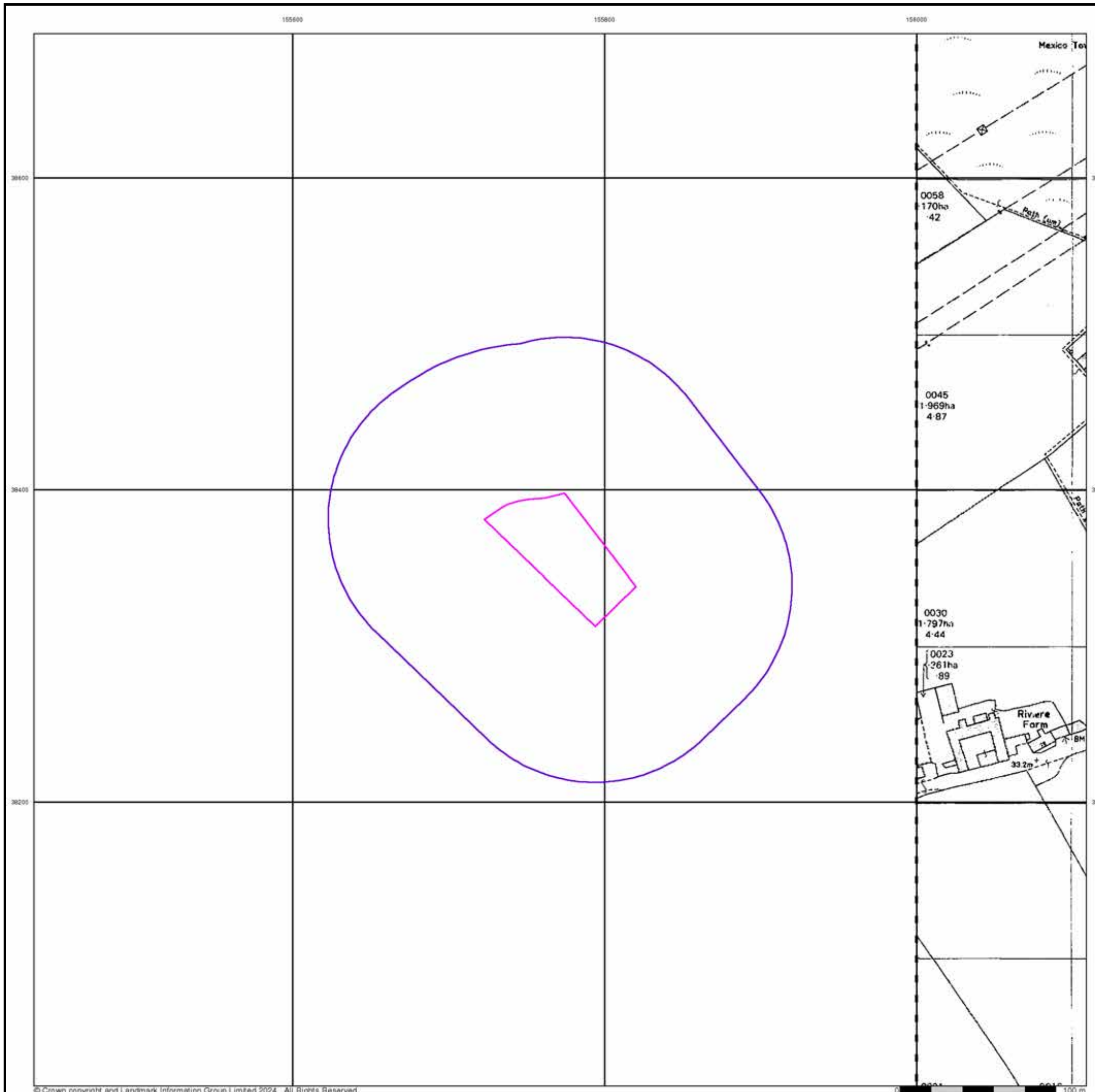


Order Details

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 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF



Large-Scale National Grid Data

Published 1995

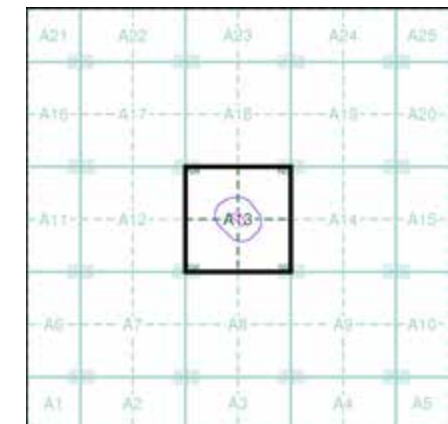
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

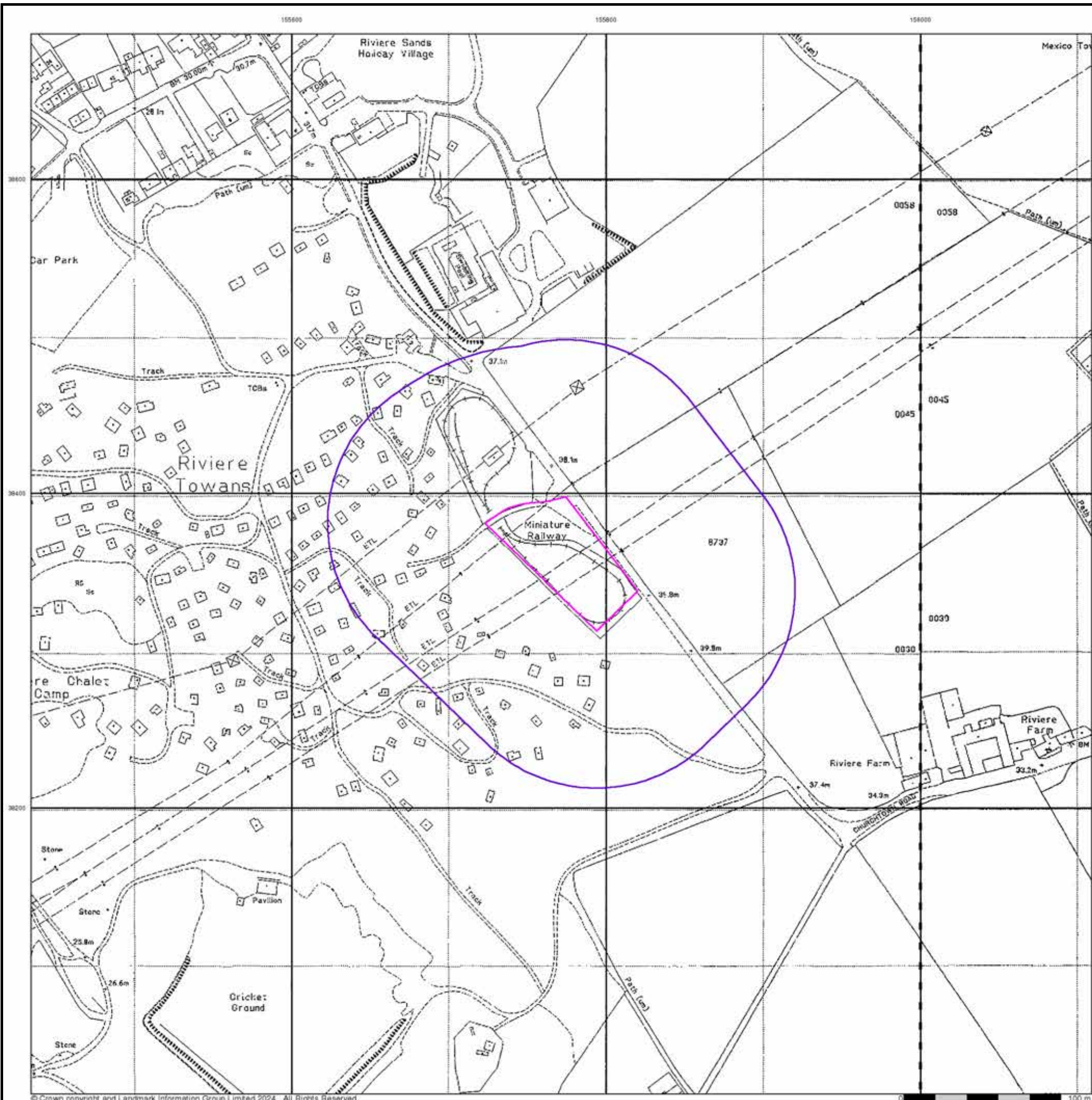


Order Details

Order Number: 335530256_1_1
 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans, Riviere Towans, PHILLACK, TR27 5AF



Large-Scale National Grid Data

Published 1995

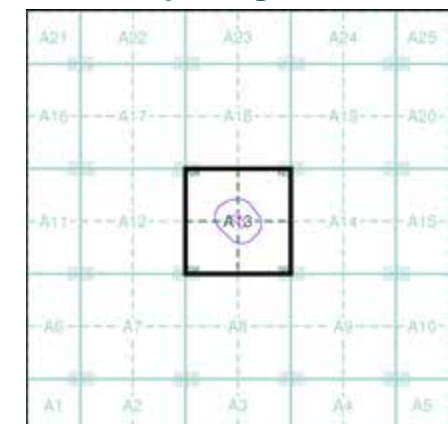
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13

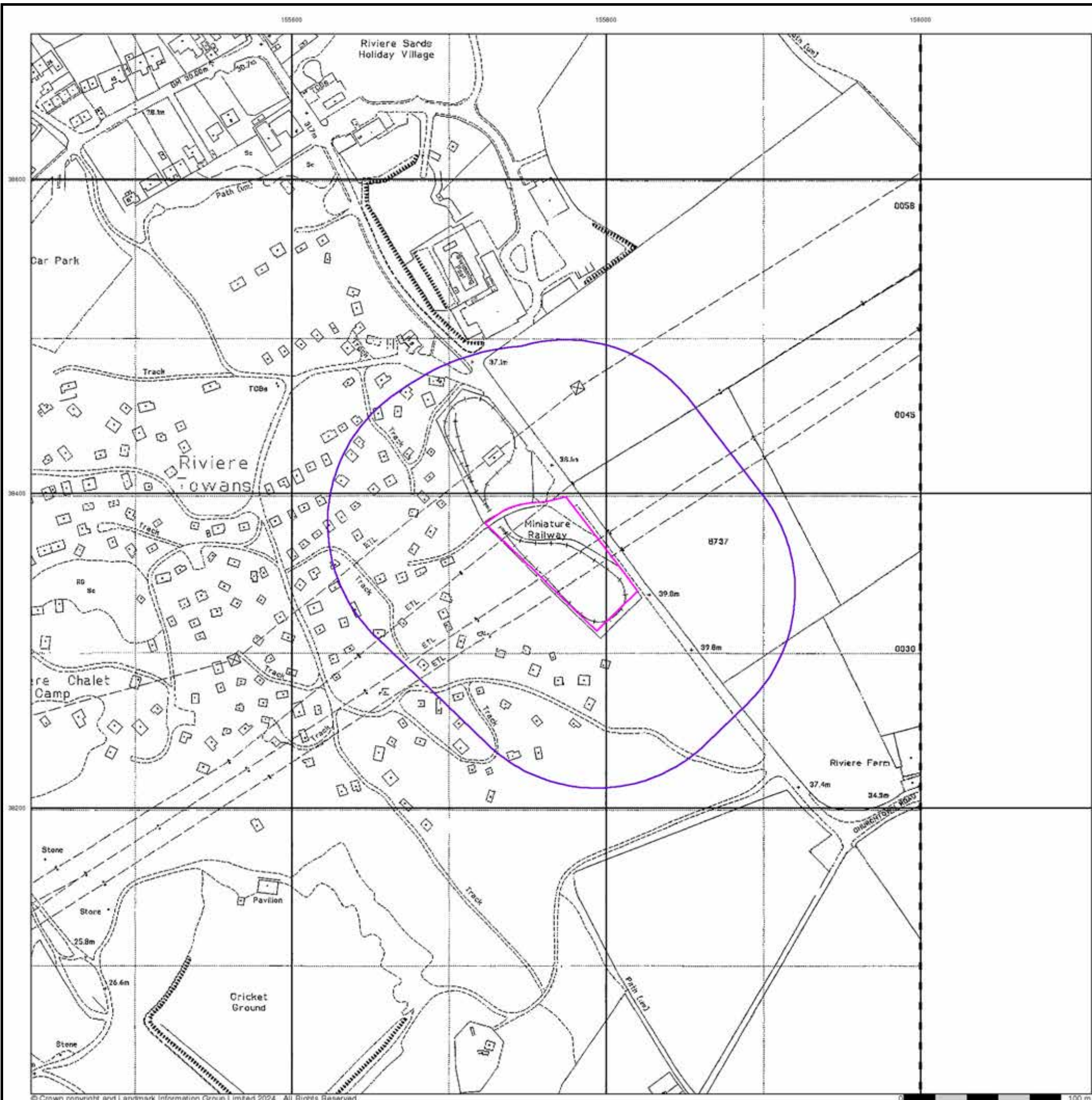


Order Details

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 Customer Ref: 2147
 National Grid Reference: 155770, 38360
 Slice: A
 Site Area (Ha): 0.39
 Search Buffer (m): 100

Site Details

1a, Road Between Churchtown Road and Riviere Towans,
 Riviere Towans, PHILLACK, TR27 5AF



Homecheck Environmental



Contamination Risk **PASSED**

Professional Opinion

Argyll Environmental Consultants have passed this report in accordance with the definition of contaminated land within Part 2A of the Environmental Protection Act 1990. Please refer to the Professional Opinion page and Section 1 for further information.



Flood Risk: None Identified

Refer to Section 2 for further information

Conveyancer Guidance

While this report may have identified areas at risk of flooding within 250m of the search centre, we consider there to be no significant risk of flooding to the property. Please refer to Section 2 for further information.



Radon: IDENTIFIED

Refer to Section 3 for further information



Ground Stability: None Identified

Refer to Section 4 for further information



Other Influential Factors:

Refer to Section 5 for further information

Environmental Constraints: None Identified

See Section 5a

Report issued for the property at
**1a
Road Between Churchtown Road
and Riviere Towans
Riviere Towans
PHILLACK
TR27 5AF**

Report Reference
335529244_1_1

National Grid Reference
155770 38360

Customer Reference
2147_HCP

Report Date
15 February 2024

Contact Details

If you require assistance please contact your Search Provider or phone Customer Services on 0844 844 9966 or email helpdesk@homecheck.co.uk

Landmark Contribution

By purchasing this report, the recipient may be eligible for Remediation Contribution of up to £100,000 if served with a Remediation Notice by the Local Authority. Such a notice may require the homeowner to pay for all, or contribute to, the remediation of the property. For more information see Landmark's Terms and Conditions.

Homecheck Environmental



Professional Opinion

Contamination Risk

PASSED

In the professional opinion of Argyll Environmental Consultants, the level of contamination risk associated with the information disclosed in the Homecheck Professional report dated 15th February 2024 and reference 335529244_1_1, 2147_HCP for

1a
Road Between Churchtown Road and Riviere Towans
Riviere Towans
PHILLACK
TR27 5AF

1) is unlikely that the property would be designated "contaminated land" within the meaning of Part 2A of the Environmental Protection Act 1990.

2) is unlikely to have an adverse effect on the security of the property for normal lending purposes.

The professional opinion refers to Section 1 of this report and should always be read in conjunction with the full text of that report. No physical site inspection or survey has been carried out or is proposed.

Approved by

Argyll Environmental Ltd



Contents and Summary of Findings



Site Location



Section 1: Contamination Risk Findings

Contamination Risk	0-25m	25-250m	250-500m	See Section
Designated Contaminated Land	No	No	No	1a
Landfill and Waste	No	No	Yes	1b
Potentially Contaminative Activities	No	No	No	1c
Known Pollution Incidents	No	No	No	1d
Other Potential Contaminative Land Uses	No	Yes	n/a	1e



Section 2: Flood Findings

Flood	0-25m	25-250m	See Section
River Flooding	No	No	2a
Coastal Flooding	No	No	2b
Surface Water Flooding	No	Yes	2c



Section 3: Radon Findings

Radon	Result	See Section
Radon Affected Property	Yes	3



Section 4: Ground Stability Findings

Ground Stability	Result	See Section
Man-Made Factors	No	4a
Natural Factors	No	4b



Section 5: Other Influential Factors

Other Influential Factors	Result	See Section
Environmental Constraints	No	5a



Site Location



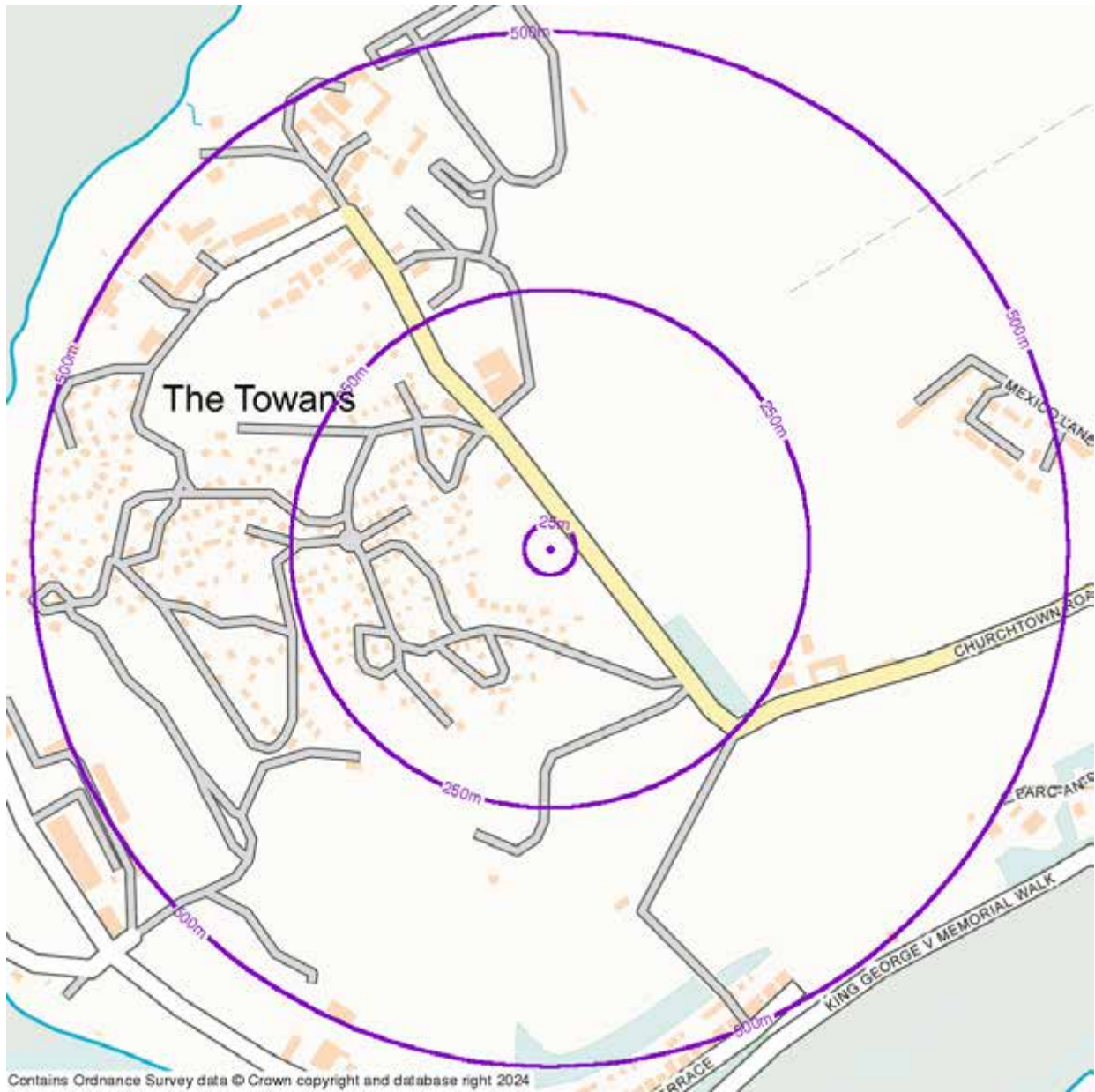
Aerial Photograph

The photograph below shows the location of the site to which this report relates.



Location Map

The map below shows the location of the site to which this report relates.



Homecheck® Report

1a
Road Between Churchtown Road and Riviere Towans
Riviere Towans
PHILLACK, TR27 5AF

Report Reference 335529244_1_1

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Date 15 February 2024
Page 3 of 21



Section 1: Contamination Risk Findings

The whole of section 1 deals with potential sources of contamination and provides the information by which this report has either been passed or referred for assessment.



Section 1a and 1b: Information Map

The map detailed below shows the location of the Designated Contaminated Land and Landfill and Waste features highlighted within sections 1a and 1b of this report.



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Section 1a

- Contaminated Land Registry Entries and Notices

Section 1b

- Registered Landfill Sites
- Registered Landfills (Potential Buffer)
- BGS Recorded Landfill Sites
- Local Authority Recorded Landfill Sites
- Historical Landfill Sites
- Permitted Waste Sites - Authorised Landfill Site Boundaries
- Environmental Permitting Regulations - Waste
- Integrated Pollution Control Registered Waste Sites
- Registered Waste Treatment or Disposal Sites
- Registered Waste Transfer Sites

Section 1a: Designated Contaminated Land

The data within this section tells you whether your property or surrounding area has been identified by the Local Authority as "Contaminated Land" under the Environmental Protection Act 1990. Should there be an indication of contamination, it is not necessarily a cause for concern. Your report will be assessed by our professional environmental consultants who will advise you what, if any, considerations need to be made should you proceed with the property purchase.

Enquiry	Result
Has any contaminated land been identified within 500m of the property?	No

Map ID	Reference	Location	Details	Distance	Contact
--------	-----------	----------	---------	----------	---------

Contaminated Land Register Entries and Notices

No factors identified for this property

Section 1b: Landfill and Waste

The information in this section is telling you about active and historic landfill and waste sites within 500 metres of the property. Having a landfill or waste site near your property does not necessarily mean that you or the property will be affected. However, it is something you need to be aware of, because landfill and waste can have a detrimental effect on the surrounding environment, house value and health. A closed landfill/waste site should be given equal consideration to an active site, because of landfill by-products. For instance, landfill with lots of organic material can continue to produce odours and gas for many years.

Enquiry	Result
Have any landfill and waste sites been identified within 500m of the property?	Yes

Map ID	Reference	Location	Details	Distance	Contact
--------	-----------	----------	---------	----------	---------

Registered Landfill Sites

No factors identified for this property

BGS Recorded Landfill Sites

No factors identified for this property

Local Authority Recorded Landfill Sites

No factors identified for this property

Local Authority Recorded Landfill Coverage

The following list details the Local Authorities that cover the search area who have made landfill data available:

Penwith District Council	- Has supplied landfill data	3
Cornwall County Council	- Had landfill data but passed it to the relevant environment agency	4

For further information regarding the availability of Local Authority Recorded Landfill data you may wish to forward enquiries to one or more of the contacts indicated above.

Historical Landfill Sites

1	Name: Hayle Power Station Reference: EAHLD32189	Hayle, Cornwall	Specified Waste Type: Deposited Waste included Inert and Industrial Waste Date of Issue: Not Supplied First Input Date: 31st December 1939 Last Input Date: Not Supplied Boundary Quality: As Supplied Positional Accuracy: Positioned by the supplier	432m	1
---	--	-----------------	---	------	---

Permitted Waste Sites - Authorised Landfill Site Boundaries

No factors identified for this property

Environmental Permitting Regulations - Waste

No factors identified for this property

Integrated Pollution Control Registered Waste Sites

No factors identified for this property

Registered Waste Treatment or Disposal Sites

No factors identified for this property

Registered Waste Transfer Sites

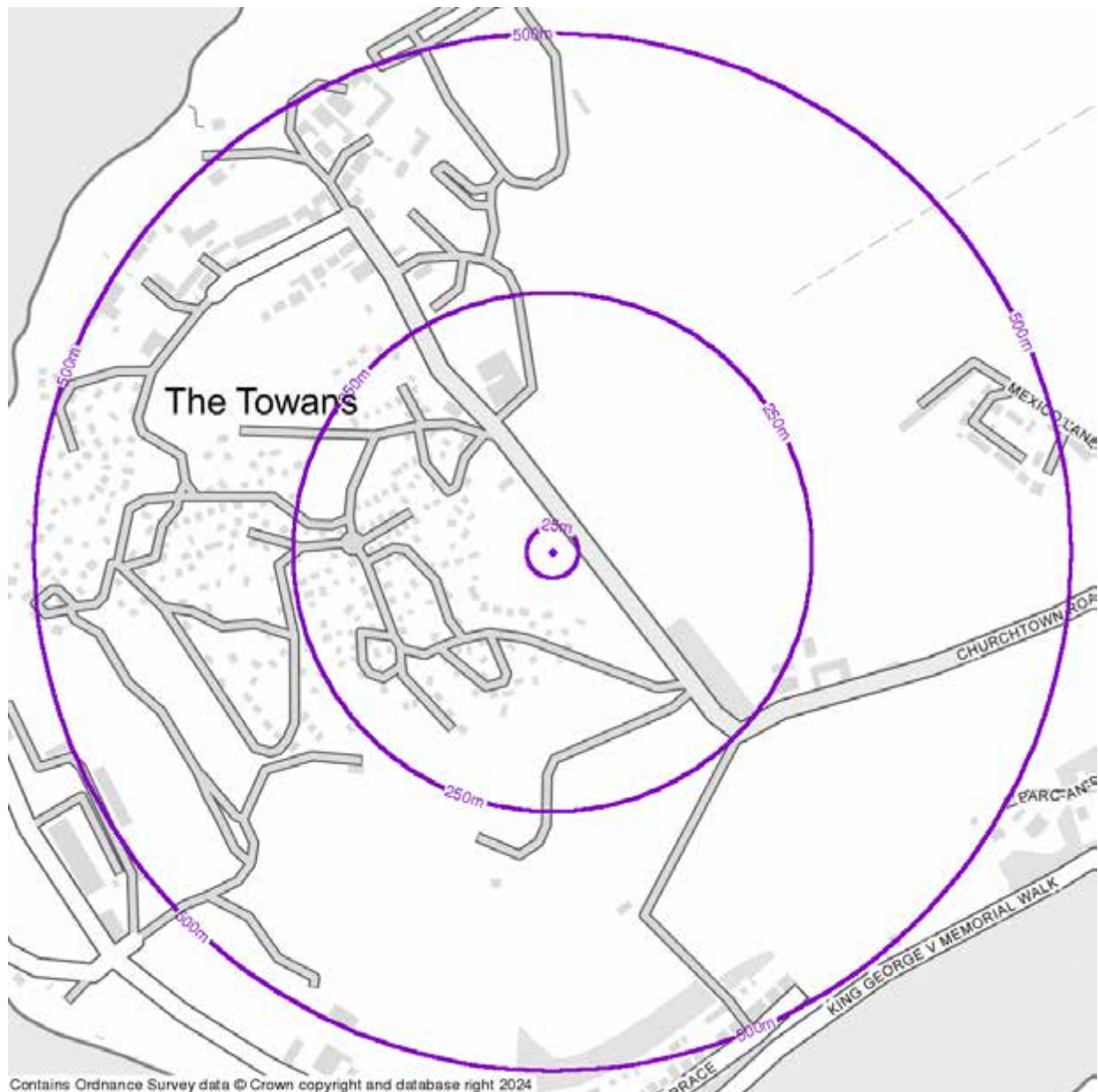
No factors identified for this property

Next Steps

If you would like any further information in respect of the above findings we recommend that you get in touch with those listed in the 'Useful Contacts' section. Each contact reference shown in the above table relates to detailed contact information contained near the back of this report. Further information is also available in the 'Useful Information' section.

Section 1c and 1d: Information Map






The map detailed below shows the location of the Potentially Contaminative Activities and Known Pollution Incidents features highlighted within sections 1c and 1d of this report.




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Section 1c

-  Local Authority Pollution Prevention and Controls
-  Local Authority Integrated Pollution Prevention and Control
-  Integrated Pollution Controls
-  Environmental Permitting Regulations - Industry
-  Consent to Discharge to Controlled Waters

-  Radioactive Substances Register
-  Planning Hazardous Substance Consents
-  Control of Major Accident Hazards Sites (COMAH)
-  Notification of Installations Handling Hazardous Substances (NIHHS)
-  Explosive Sites

Section 1d

-  Local Authority Pollution Prevention and Control Enforcements
-  Enforcement and Prohibition Notices
-  Planning Hazardous Substance Enforcements
-  Prosecutions Relating to Authorised Processes
-  Environmental Pollution Incidents
-  Prosecutions Relating to Controlled Waters

Section 1c: Potentially Contaminative Activities

This section describes current and historic licensed activities within 500 metres of the property, which have the potential to cause contamination or have an impact on the environment. The licensed activities could range from pollution to air, land or water; storage or disposal of radioactive substances; or storage of hazardous or explosive materials. Licences may no longer be active, but the nature of the past activity means it could still have an impact.

Enquiry	Result
Have any potentially contaminative activities been identified within 500m of the property?	No

Map ID	Reference	Location	Details	Distance	Contact
--------	-----------	----------	---------	----------	---------

Local Authority Pollution Prevention and Controls

No factors identified for this property

Local Authority Integrated Pollution Prevention And Control

No factors identified for this property

Integrated Pollution Controls

No factors identified for this property

Environmental Permitting Regulations - Industry

No factors identified for this property

Consent to Discharge to Controlled Waters

No factors identified for this property

Radioactive Substances Register

No factors identified for this property

Planning Hazardous Substance Consents

No factors identified for this property

Control of Major Accident Hazards Sites (COMAH)

No factors identified for this property

Notification of Installations Handling Hazardous Substances (NIHHS)

No factors identified for this property

Explosive Sites

No factors identified for this property

Section 1d: Known Pollution Incidents

The data within this section describes unpermitted activity in your area (e.g. polluting incidents, or exceedance of permitted allowance) where the activity led to a prosecution or enforcement of regulations. Whilst all of these records are historic, the nature of the incident may have long term effects.

Enquiry	Result
Have any known pollution incidents been identified within 500m of the property?	No

Local Authority Pollution Prevention and Control Enforcements

No factors identified for this property

Enforcement and Prohibition Notices

No factors identified for this property

Planning Hazardous Substance Enforcements

No factors identified for this property

Prosecutions Relating to Authorised Processes

No factors identified for this property

Environmental Pollution Incidents

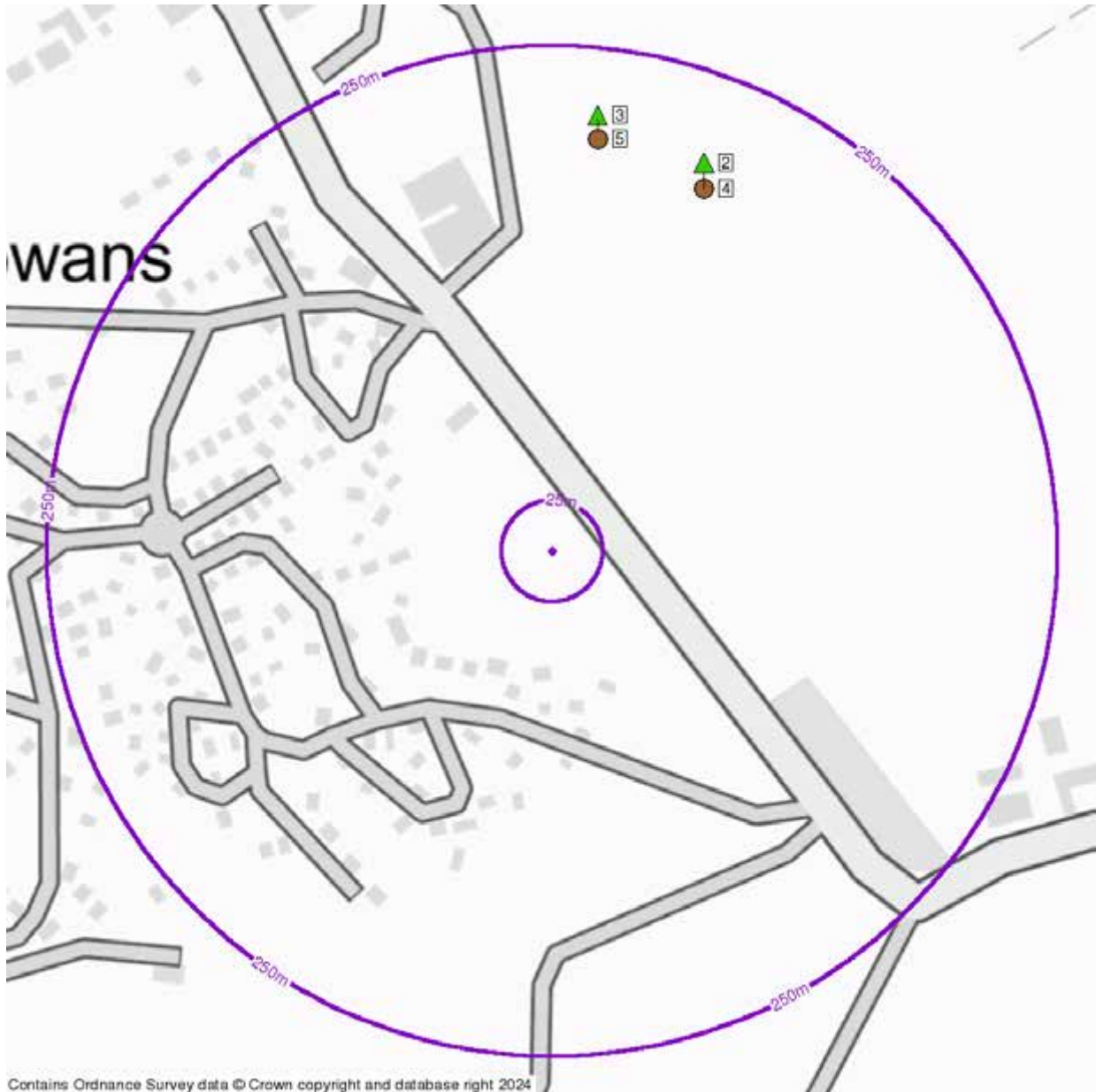
No factors identified for this property

Prosecutions Relating to Controlled Waters

No factors identified for this property

i Section 1e: Information Map

The map detailed below shows the location of the Other Potential Contaminative Land Uses features highlighted within section 1e of this report.



- | | |
|--|---|
| ✘ Fuel Station Entries | ☑ ▲ ● Potentially Infilled Land (Non-Water) |
| ★ Contemporary Trade Directories | ☑ ▲ ● Potentially Infilled Land (Water) |
| ⊕ Former Marshes | ☑ ▲ ● Potentially Contaminative Industrial Uses (Past Land Use) |
| ▼ Historical Tanks and Energy Facilities | |

Section 1e: Other Potential Contaminative Land Uses

This section describes either current or historic activity, which could be considered to be contaminative. This section makes no statement about whether the activity requires a licence; however our environmental experts deem that the activities described in this section could lead to potential contamination. The information is taken from a variety of sources including trade directories, Landmark's extensive historical map collection and analysis of historic activity. Records are highlighted due to the potential for contamination to exist.

Enquiry	Result
Have any other potential sources of contamination been identified within 250m of the property?	Yes

Map ID	Reference	Location	Details	Distance	Contact
--------	-----------	----------	---------	----------	---------

Fuel Station Entries

No factors identified for this property

Contemporary Trade Directory Entries

No factors identified for this property

Former Marshes

No factors identified for this property

Potentially Infilled Land (Non-Water)

2	Not Supplied	Not Supplied	Unknown Filled Ground (Pit, quarry etc) Map Published Date: 1989	195m	-
3	Not Supplied	Not Supplied	Unknown Filled Ground (Pit, quarry etc) Map Published Date: 1989	216m	-

Potentially Infilled Land (Water)

No factors identified for this property

Potentially Contaminative Industrial Uses (Past Land Use)

4	Not Supplied	Not Supplied	Class: Quarrying of sand & clay, operation of sand & gravel pits Map Published Date: 1888	195m	-
5	Not Supplied	Not Supplied	Class: Quarrying of sand & clay, operation of sand & gravel pits Map Published Date: 1888	216m	-

Historical Tanks And Energy Facilities

No factors identified for this property

Next Steps

If you would like any further information in respect of the above findings we recommend that you contact our Customer Services Team, whose details can be found in the 'Useful Contacts' section of this report. Further Information is also available in the 'Useful Information' section.



Section 2: Flood Findings

The whole of this section deals with potential sources of flooding that may impact the property.



Section 2a and 2b: River and Coastal Flood Map

The map detailed below shows the location of potential river and coastal flood risk. The potential risk has been modelled on the basis of an event occurring on average every 75, 200 or 1000 years.



River Flooding



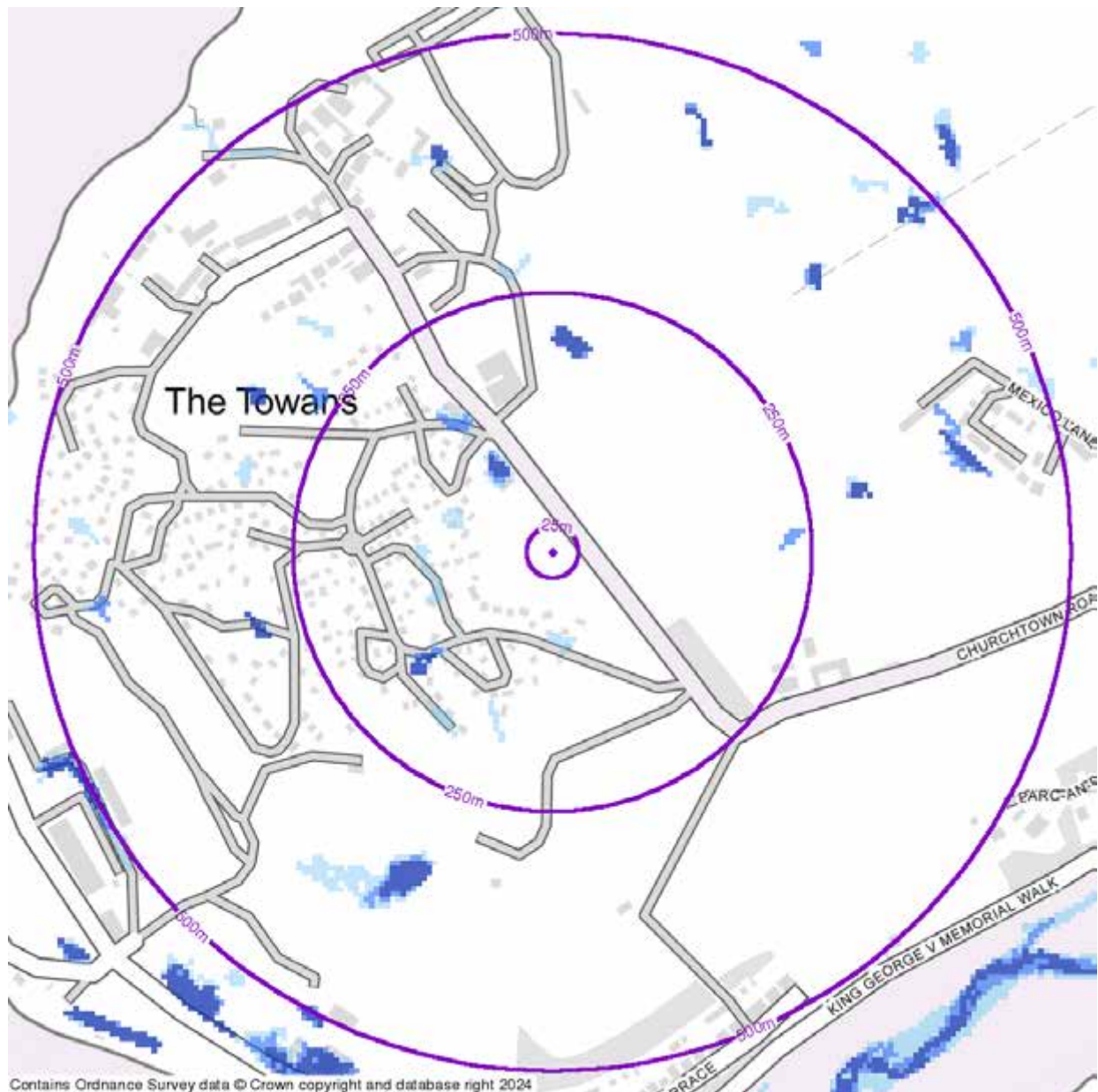
Coastal Flooding





Section 2c: Surface Water Flood Map

The map detailed below shows the location of potential surface water flood risk. The potential risk has been modelled on the basis of an event occurring on average every 75, 200 or 1000 years.



Contains Ordnance Survey data © Crown copyright and database right 2024

Surface Water Flooding



Section 2a: River Flooding

River flooding mainly happens when the river catchment (that is the area of land that feeds water into the river and the streams that flow into the main river) receives greater than usual amounts of water (for example through rainfall or melting of snow). The amount of runoff depends on the soil type, catchment steepness, drainage characteristics, agriculture and urbanisation as well as the saturation of the catchment. The extra water causes the level of the water in the river to rise above its banks or retaining structures.

Enquiry	Result	Contact
Is there a potential risk of river flooding within 250m of the property?	No	-

Section 2b: Coastal Flooding

Coastal flooding is the inundation of land areas along the coast caused by sea water rising above normal tidal conditions. Coastal flooding can arise from a combination of high tides, wind induced tidal surge, storm surge created by low pressure and wave action.

Enquiry	Result	Contact
Is there a potential risk of coastal flooding within 250m of the property?	No	-

Section 2c: Surface Water Flooding

Surface water flooding results from rainfall running over ground before entering a watercourse or sewer. It is usually associated with high intensity rainfall events (typically greater than 30mm per hour) but can also occur with lower intensity rainfall or melting snow where the ground is already saturated, frozen, developed (for example in an urban setting) or otherwise has low permeability.

Enquiry	Result	Contact
Is there a potential risk of surface water flooding within 250m of the property?	Yes	-

Next Steps

In order to gain more detailed information on the type and likelihood of your property being impacted by a flood event, and the potential impact on insurance, we recommend that you purchase our Landmark Flood Report.

If you would like more information please contact your Search Provider or our Customer Services Team on **0844 844 9966** or email helpdesk@homecheck.co.uk.

Flood data provided by JBA Risk Management Limited. © Copyright JBA Risk Management Limited 2008-2024



Section 3: Radon Findings

The information within this section tells you whether the property is located in a radon affected area. Radon is a radioactive gas which occurs naturally in rocks and soils. You cannot see, hear, feel or taste it. Exposure to particularly high levels of radon may increase the risk of developing lung cancer, and is therefore something you need to be aware of or should consider.

Enquiry	Result	Contact
Is the property in a radon affected area?	The property is in a radon affected area, as between 5 and 10% of homes are above the action level	2
What level of radon protection measures for new dwellings or extensions to existing ones is required for the property?	Basic radon protective measures are necessary in the construction of new dwellings or extensions	2

Next Steps

The level of radon concentration can only be established by having the building tested. Action should be taken if the indoor radon level is measured and found to be above 200 becquerel's per cubic meter. If you would like any further information we recommend you contact Public Health England whose details can be found in the 'Useful Contacts' section of this report.

Further Action

Airtech Environmental Systems can advise on radon testing kits, which cost £39.36 including VAT and can run from 7 days to 3 months. They also have a team of surveyors on hand to provide recommendations and advice for any properties above the target level of 100 becquerel's per cubic meter or action level of 200 becquerel's per cubic meter. Airtech Environmental Systems can provide a report, recommendations and a quotation for any recommended works. For more detailed information please call their free-phone number 0800 378017.



Section 4: Ground Stability Findings

This section provides summary information on factors that could affect the ground stability of the property. It considers both man-made factors (e.g. mining activity) and natural hazards (e.g. geological stability).

Section 4a: Man-Made Factors

Enquiry	Result	Contact
Is the property within 25m of a Coal Mining Affected Area?	No	-

Section 4b: Natural Factors

Enquiry	Result	Contact
What is the potential for natural ground instability in the area within 50m of the property?	Low	-

Comment: The British Geological Survey has assessed the area of search as having low potential for natural ground instability. This does not necessarily mean there is cause for concern in terms of the property's stability. Active subsidence will be dependent on local conditions, such as the proximity of trees or areas where trees have been removed, which require an inspection of the site to identify the nature of the ground on which the property is built. A house buyers survey is advised to look for signs of property damage that may indicate poor natural ground conditions.



Section 5: Other Influential Factors

The following section provides information on a variety of factors which may have an influence on the property or surrounding area.



Section 5a: Environmental Constraints

Enquiry	Result
Is the property within 250m of an area likely to be impacted by Environmental Constraints?	No

Map ID	Reference	Location	Details	Distance	Contact
--------	-----------	----------	---------	----------	---------

Areas of Outstanding Natural Beauty

No factors identified for this property

Local Nature Reserves

No factors identified for this property

National Nature Reserves

No factors identified for this property

National Parks

No factors identified for this property

Ramsar Sites

No factors identified for this property

Sites of Special Scientific Interest

No factors identified for this property

Special Areas of Conservation

No factors identified for this property

Special Protection Areas

No factors identified for this property

Useful Contacts

Contact 1 - Environment Agency - National Customer Contact Centre (NCCC)

PO Box 544 Templeborough Rotherham S60 1BY	Tel: 03708 506 506	enquiries@environment-agency.gov.uk
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Contact 2 - Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards

Chilton Didcot Oxfordshire OX11 0RQ	Tel: 01235 822622 Fax: 01235 833891	radon@phe.gov.uk www.ukradon.org
--	--	--

Contact 3 - Penwith District Council (now part of Cornwall Council)

County Hall Treyew Road Truro Cornwall TR1 3AY	Tel: 0300 1234 100	enquiries@cornwall.gov.uk www.cornwall.gov.uk
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Contact 4 - Cornwall County Council (now part of Cornwall Council)

County Hall Treyew Road Truro Cornwall TR1 3AY	Tel: 0300 1234 100	enquiries@cornwall.gov.uk www.cornwall.gov.uk
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Landmark Information Group Limited

Legal and Financial Imperium Reading Berkshire RG2 0TD	Tel: 0844 844 9966 Fax: 0844 844 9980	helpdesk@homecheck.co.uk www.landmarkinfo.co.uk
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The Landmark website contains links to many of our data suppliers which may prove useful.

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

Landmark works in association with:



Report Version: HCP v1.0.4.5

Useful Information

The following explanatory notes may be of assistance to users of the Homecheck Professional report. Practitioners are reminded that full guidance notes are contained in the Practitioners Guide.

Professional Opinion

A Professional Opinion in relation to Part 2A of the Environmental Protection Act 1990 is provided by Argyll Environmental Consultants. In many cases the report will be PASSED without referral. However, in some cases, entries that may be of concern are revealed by the search, in which case the report is REFERRED free of charge for more detailed consideration, although this will not include a physical site inspection. After such referral the report may be PASSED or suggestions made of some FURTHER ACTION that could be taken, in the form of questions to ask of the appropriate authorities. When responses to these questions are received it is the responsibility of the client and their professional advisors to decide if they are happy to proceed.

Flood Risk

A limited flood risk screening exercise is included in this report designed to satisfy basic flood risk screening due diligence including consideration of river, coastal and surface water flooding. Where a potential flood risk is "Identified" you may wish to consider commissioning a more detailed flood risk screening report. When there is "None Identified" this does not indicate that there is not risk of flooding at the property, but that the risk of flooding from the sources screened (river, coastal and surface water) within the vicinity of the property is such that the risk may not be considered significant.

Location Map

The Ordnance Survey location map may show features which are not necessarily otherwise included in this report. You are advised to supplement the information contained in the report with the descriptive text shown on the map.

Positional Accuracy

We locate data in a variety of ways according to information provided to us and subsequent in-house research. If data is provided as a point on the ground, we provide a "positional accuracy" which tells you how confident we are of the actual location.

Section 1b: Landfill and Waste

At present no complete national data set exists for landfill site boundaries, therefore, a point grid reference, provided by the data supplier, is used for some landfill sites. In certain cases the point grid references supplied provide only an approximate position, and can vary from the site entrance to the centre of the site. Where the exact position of the site is unclear for Registered Landfill data, Landmark construct either a 100 metre or 250 metre "buffer" around the point to warn of the possible presence of landfill. The size of this "buffer" relates to the positional accuracy that can be attributed to the site. The "buffer" is shown on the map as a red hatched area. For further information regarding landfill sites identified in the report, please contact the relevant environment agency or authority referenced in the Useful Contacts section.

The BGS holds records of over 3,000 landfill sites that accepted waste prior to the Control of Pollution Act (COPA) 1974. These were not subject to any strict regulation or monitoring.

Permitted Waste Sites and Environmental Permitting Regulations - Waste cover current or recently current consents issued for landfill sites, waste transfer, treatment or disposal sites by the Environment Agency/Natural Resources Wales, under Section 64 of the Environmental Protection Act 1990 (Part 2) and prescribed by regulation 10 of SI No. 1056 of the Waste Management Licensing Regulations 1994.

Section 1c: Potentially Contaminative Activities

Identified discharge consents could be for storm water discharges, soakaways or septic tanks.

If a radioactive substance licence has been identified the consent band will be given under enquiries and replies. Consents fall into one of four bands: Band 1 and 2 Nuclear licensed sites authorised by the Nuclear Installations Inspectorate e.g. nuclear power stations Band 3 Site registered/authorised to accumulate and dispose of radioactive materials, only non-nuclear operations are carried out on site e.g. hospitals Band 4 Sites registered to keep and use radioactive material e.g. laboratories, universities, commercial premises using appliances such as monitoring equipment, alarm systems, tritium lighting etc.

Data supplied for Explosive Sites, Control of Major Accident Hazards Sites (COMAH) and Notification of Installations Handling Hazardous Substances (NIHHS) contains public sector information published by the Health and Safety Executive and licensed under the Open Government Licence.

Section 1e: Other Potential Contaminative Land Uses

This section relates to categories of potentially contaminative land uses that have been identified by the analysis of selected Ordnance Survey historical mapping. The published date (range of dates) of the map (s) and the distance from the centre of search to the nearest point of the feature is given. Further details of the extent of the site or its activities are not available. Should you wish to examine the Ordnance Survey maps these are normally available for public inspection at the local archive or local major library. Alternatively, extracts of editions of Ordnance Survey maps are available on www.old-maps.co.uk

Potentially infilled land has been identified when a 'cavity' (a hole made by an extractive industry or natural occurrence e.g. pond) was indicated on a historic map but there was no evidence of its existence in the last available map for the area. No details of what may have been used to fill the cavity or exactly when or if it was filled are available from the mapping.

The point locations of historical tanks and energy facilities are identified from the text on Ordnance Survey 1:1250 and 1:2500 scale mapping published between 1943 and 1996, based upon a predetermined list of abbreviations, e.g. El Sub (Electricity Sub-station) and F Stn (Filling Station). The position of the point has been located at the centre of the identified text so that it would be within approximately 30 meters of the feature it was describing. The features themselves are related to energy and petroleum storage and cover the following: tanks, petrol storage, potential tanks (at depots etc.), electricity sub stations and related features, gas and gas monitoring related features, oil related features and miscellaneous power features. NB: It should be noted that the Ordnance Survey abbreviation for tank (tk) is the same as that for tracks. Therefore some of the captured text may relate to tracks and not tanks when the exact nature of the feature is not clear from the mapping.

Section 2: Flood Findings

Sections 2a, b and c of the report provide data on modelled extents of river, coastal and surface water flooding generated by JBA Risk Management, a market leader in flood risk assessment commonly engaged by insurers to assess flood risk. The data has been modelled for several perils or return periods: 1 in 75, 1 in 200 or 1 in 1000 which relate to areas with a 1.3%, 0.5% and 0.1% annual probability of flooding in any one year respectively. Properties at risk of flooding during a 1 in 75 year event are typically considered to be at a high risk of flooding. The data has been generated to provide a UK wide screening tool and as a result may have inherent limitations. In addition, there may be areas of the country which are modelled to varying degrees of accuracy based on currently available topographical information.

Section 3: Radon Findings

Due to the nature of way the information is gathered, your property/site may have more than one probability of radon attributed to it. We report the worst case scenario on the property/site you have provided. This information is an estimate of the probability that a property /site in Great Britain is at or above the "Action Level" for radon (the level at which Public Health England recommends that radon levels should be reduced, those with an average of 200 Bq m⁻³ or more). This information satisfies CON29 Standard Enquiry of Local Authority; 3.13 Radon Gas: Location of the Property in a Radon Affected Area. Where the property/site is a new build, this information provides information on the level of protection required for new buildings under BR211 (Scivyer, 2007) Radon: Guidance on protective measures for new buildings.

Disclaimer: "Some of the responses contained in this section are based on data and information provided by the Natural Environment Research Council (NERC) or its component bodies the British Geological Survey (BGS). Your use of any information contained in this report which is derived from or based upon such data and information is at your own risk. Neither NERC, BGS nor Public Health England where applicable, gives any warranty, condition or representation as to the quality, accuracy or completeness of such information and all liability (including liability for negligence) arising from its use is excluded to the fullest extent permitted by law."

Section 5a: Environmental Constraints

The Local Nature Reserves national dataset is "indicative" not "definitive". Definitive information can only be provided by individual local authorities and you should refer directly to their information for all purposes that require the most up to date and complete dataset.

General

If after reading the details in this report regarding the sites identified, you still require further information, please contact the relevant environment agency or authority indicated in the Useful Contacts section quoting the corresponding reference given in the text of the report.

The contacts in the Useful Contacts section may be able to provide further information relating to items identified in the report, however they are not in a position to advise how these might affect the value of a property. The findings of the report should be discussed with your professional advisor.

The Purpose and Scope of the Report

The report is designed to satisfy the concerns raised by the Law Society warning card and has been prepared to assist conveyancing professionals who may be advising clients when they sell or buy a property, obtain a mortgage, seek further mortgage advice, or commence any building works. It is designed to bring information to their attention and help them decide whether they need to seek any further specialist advice. As the report is so detailed, this information can cause concern, but professional advisors will see that further action is suggested on all issues that have been identified.

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This report has been published by Landmark Information Group Limited ("Landmark") and is supplied subject to our Terms and Conditions of Business, which can be found at <http://www.landmarkinfo.co.uk/Terms/Show/534>. It has been prepared on the understanding that it is to be used for an individual residential property transaction and should not be used or relied upon in a commercial property transaction. This report is neither a guarantee of the physical condition of the subject property nor a substitute for any physical investigation or inspection. The information in Homecheck Professional is derived from a number of statutory and non-statutory sources (see The Practitioner Guide for details). Whilst every effort is made to ensure the details in the report are correct, Landmark cannot guarantee the accuracy or completeness of such information or data, nor identify all the factors that may be relevant. If you are a private individual using this report Landmark recommends that you discuss its contents in full with your professional advisor. The methodology for risk assessment and the conclusions drawn therefrom are the responsibility of Argyll Environmental Consultants.

Insurance

Houses registered between 1st April 1999 and 31st December 2002 and covered by the NHBC Buildmark scheme probably have insurance against certain costs if contamination occurs within ten years of their construction. From 1st January 2003, NHBC will only provide this cover if building control has been carried out by NHBC Building Control Services Limited.

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If you experience difficulties accessing our Terms and Conditions, please copy and paste the link directly into your browser, you will then be able to access our Terms and Conditions from there. Should you still experience difficulties, please telephone our Customer Service Team on 0844 844 9966.

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This search has been produced by Landmark Information Group Ltd, Imperium, Imperial Way, Reading, Berkshire, RG2 0TD

Tel: 0844 844 9966

Fax: 0844 844 9980

Email: helpdesk@landmark.co.uk

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- Conveyancing Information Executive Members shall act in a professional and honest manner at all times in line with the Conveyancing Information Executive Standards and carry out the delivery of the Search with integrity and due care and skill.
- Compliance with the Conveyancing Information Executive Standards will be a condition within the Conveyancing Information Executive Member's Terms and Conditions.
- Conveyancing Information Executive Members will promote the benefits of and deliver the Search to the agreed standards and in the best interests of the customer and associated parties.
- The standards can be seen here: <http://www.conveyinfoexec.com>

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Standards.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPO.

TPOs Contact Details:

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP

Tel: 01722 333306

Fax: 01722 332296

Website: www.tpos.co.uk

Email: admin@tpos.co.uk

Landmark Complaints Procedure

If you want to make a complaint to Landmark, 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

Complaints should be sent to:

Customer Relationships Manager
Landmark Information
Imperium
Imperial Way
Reading
RG2 0TD

Tel: 0844 844 9966

Email: helpdesk@landmark.co.uk

Fax: 0844 844 9980

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

Email: admin@tpos.co.uk

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

APPENDIX C

MINING REPORT



Wheal Jane Consultancy
Old Mine Offices
Wheal Jane
Baldhu, Truro
Cornwall, TR3 6EE



Archival (Desktop) Mining Search

Mining Risk: Low

Address: 1a Riviere Towans
Hayle
Cornwall
TR27 5AF

Client: Your Environmental Solutions Ltd
Woodcocks Roost
Fore Street
Barripper
Camborne
TR14 0QR

Your Ref:

Our Ref.: MS44974

Date: 22 February 2024

01872 560 200
consultancy@wheal-jane.co.uk



Low Risk

Dear Sirs,

Re: 1a Riviere Towans, Hayle, Cornwall, TR27 5AF

We thank you for your recent request.

As instructed, we have carried out a mining search in respect of the above property, as delineated on the plan supplied for the purpose of requesting this search (a copy of which is included with this report).

The purpose of this mine search is to examine and interpret the plans and records in our possession relating to metalliferous mining activity and based upon this information, give a professional opinion in respect of potential risk to the property from such historical mining activity and, if required, make recommendations as may be deemed appropriate.

Where other workings relating to clay, stone or other minerals are noted to be in close proximity to the property mention will be made of them.

This report is of a format suitable for conveyancing and other purposes in connection with the property.

Mining Activity

The property is located on the northern edge of the Wheal Alfred mining district.

It lies close to the former lease or sett boundaries of a small tin mine known as Wheal Lucy Mine.

The plans and records that are currently held in our possession at the time of compiling this report, relating to this district, do not indicate the presence of any old shallow/surface metal mine workings or shafts within the boundaries of the property.

The workings of Wheal Lucy Mine lie over 300 metres to the north of the property.

The nearest shaft lies over 190 metres to the north-north-east of the property.

The suspected surface outcrop of a lode (mineralised structure) following a north-east to south-west strike lie over 400 metres to the north-north-west of the property.

Whilst it is noted some surface working had taken place along the lode outcrops, underground workings were of limited extent.

The workings of Lelant Wheal Towans Mine lie over 1 km to the south-west of the property.

We have found no evidence of clay workings or other mineral workings in the immediate vicinity of the property.

A former sand pit, latterly used as the site of the Hayle power station, lies over 550 metres to the south-west of the property.

We have found no evidence of clay workings or other mineral workings in the immediate vicinity of the property.

Low Risk

Based upon the historic mapping sources we have reviewed we have found no evidence of any water supply wells within the boundaries of the property.

Conclusions

We know of no plans to exploit metallic minerals in the locality, nor do we consider this a likely event.

Based upon the information that is held in our possession, at the time of writing this report, we are satisfied that the property appears to be at low risk from past mining activity.

Recommendations

We have no recommendations to make in respect of this property.

Low Risk

Scope of Search & Limitations

This search has been carried out with reference to the extensive collection of plans, records and archives that are held in our possession at the time of writing this report and from this material we have endeavoured to give as accurate a report as possible in respect of the property as delineated in the initial request.

However, taking into account that such records may not be wholly complete or accurate, that records may exist of which we do not hold copies, or records exist that are held in private sources which are not available to us and that in Cornwall, Devon and Somerset many ancient shallow workings and shafts exist of which there are no records, we cannot accept liability for any inaccuracies there may be.

This report is concerned solely with the property searched and should not be used in connection with adjacent properties as only relevant mining features have been mentioned and any known features that would not have a direct influence upon the target property may have been omitted for clarity.

The report is based upon the property boundaries as shown on the supplied request plan.

We cannot accept liability for any inaccuracies if the property boundaries, as supplied to us by the client or the client's agent, are subsequently shown to be incorrect, incomplete or if no such request plan has been supplied when the search has been requested.

We accept no liability if any part of the property address / postcode, as supplied to us by the client or the client's agent, is incorrect.

This report is confidential to the client and the client's legal advisor and the client's mortgage lender and as such may be used by them for conveyancing or related purposes.

We have no liability toward any person or organisation not party to commissioning this report.

This report or any part of it, is not permitted to be reproduced, copied, altered or in any other way distributed by any other person or organisation.

Unless otherwise expressly stated, nothing in this report shall create or confer any rights or other benefits pursuant to the Contracts (Rights of Third Parties) Act 1999 in favour of any person or organisation other than the person/organisation commissioning this report.

This report is not a contaminated land, environmental, geotechnical or archaeological survey and should not be interpreted as such.

No site visit has been made.

We trust that this report is to your satisfaction and will be happy to answer any queries with respect to it.

Yours faithfully,

[Redacted signature]

Wheal Jane Consultancy

[Redacted contact information]

Low Risk

Mining Glossary

Adit	Horizontal mine drainage tunnel driven from low ground into mine workings. The adit tunnel is the shallowest level shown on mine plans and usually represents the earliest period of workings recorded. Adits have ventilation shafts at regular intervals, which are mostly unrecorded.
Alluvium	Clay, sand and debris deposited by a river. Often streambed for tin.
Burrow	A mine waste tip.
Caunter lode	A lode which runs in a different direction to the general trend of lodes in the district.
Coffin/Koffen	Trench-like openwork at surface.
Costean Pit	A small surface pit excavated to locate and/or sample a lode.
Crosscourse	Geological features which run at right-angles to the principal lodes of a district, and are vertical or sub-vertical faults. Mostly barren of payable minerals, but can carry values of iron ore, cobalt and other metallic minerals. Also known as 'guides' or 'trawns' in the St Just and St Ives mining districts respectively.
Crosscut	Tunnel driven underground, usually at right-angles to the lodes.
Dip of Lode	Angle of inclination of a lode from the horizontal.
Drive	Tunnel driven along the course of a lode.
Elvan	Igneous rock (quartz-porphry) occurring as a vein or dyke. Can be extremely hard. Exploited by quarrying.
Granite	Igneous rock. Crystalline mixture of quartz, feldspar and mica.
Greenstone	Igneous rock also called 'blue elvan'. Generally extremely hard.
Gunnis	Open stope at surface or underground.
Kaolinisation	Alterations or weathering of granite to clay and sand from solid rock.
Killas	Generic term given to sedimentary rock in Cornwall.
Leat	A man-made watercourse.
Level	Horizon underground where ore movement and communications are maintained. Levels consist of lode drives and crosscut tunnels: i.e. 12 fathom level; the system of tunnels driven at 12 fathoms below adit horizon.
Lode	A mineralised structure or vein. Most lodes run from surface vertically or sub-vertically, and can vary from a few inches to several metres in width.
Mundic	Iron pyrite, arsenic and sulphur - arsenopyrite.
Openwork	A surface working, which has usually left a pit or backfilled excavation.
Outcrop	The part of the lode which breaks surface. Worked-out voids and backfilled areas are outcrop features.
Rab	Weathered zone of mixed rock and soil (natural profile)
Sett	An area of land leased for mining.
Shaft	Holes in the ground, which can vary from 0.5m x 1m up to shafts 7m across. Engine shafts tends to be large (typically 3m x 2m) and adit shafts are smaller (typically 1.2m x 1.8m). Depths vary down to 700m.
Stockwork	Mass of narrow veins or lodes running parallel and sub-parallel.
Stope	Ground where lode has been removed leaving void. Sometimes open to surface.
Tailings	Residual sands and slimes from ore dressing. Usually heavily contaminated.

Low Risk

Mining References (generic listing)

H G Dines - The Metalliferous Mining Region of South West England (2 Vols)
A K Hamilton Jenkin - Mines & Miners of Cornwall (16 Vols)
A K Hamilton Jenkin - Mines of Devon (2 Vols)
A K Hamilton Jenkin - Wendron
Thomas Spargo - Tin Mines of Cornwall (6 Vols)
J H Collins - Observations of West of England Mining Region
Sellwood, Durrance & Bristow - Geology of Cornwall
Durrance & Laming - Geology of Devon
Burt, Waite & Burnley - Cornish Mines
MRO Plans (CRO)
MRO Copies (SC Archive)
MRO Microfiche (SC)
South Crofty Archive
Tehidy Minerals Archive
JMS/JAB/JHB Archive
Wheal Jane Collection
Wheal Pendarves Collection
Geevor Collection
Thyssen Review & Plans
A K H Jenkin, Annotated 6" Plans
Geological 6" Plans
Richard Thomas Plans
Robert & Brenton Symons Plans
Nicholas Whitley Plans
K Bennet Annotated Plans
R Lyon Annotated Plans
Ordnance Survey 1880, 1906, etc Maps
H G Dines Composites

Low Risk

Search Request Plan

Copy of the request plan(s) provided to Wheal Jane Consultancy to identify the property for search purposes:



Please note that request plans do not automatically follow the convention for north to be oriented 'up' the page, however, all directional references made in this report are based upon correctly oriented mapping resources that are held by Wheal Jane Consultancy.

APPENDIX D

**TABLES 6.3 – 6.6 ‘CONTAMINATED LAND RISK
ASSESSMENT, A GUIDE TO GOOD PRACTICE’.
CIRIA REPORT C552. PUBLISHED 2001**

Table 6.3 *Classification of consequence*

Classification	Definition	Examples
Severe	Short-term (acute) risk to human health likely to result in “significant harm” as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organism forming part of such ecosystem (note: the definitions of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium	Chronic damage to Human Health (“significant harm” as defined in DETR, 2000). Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem. (note: the definitions of ecological systems within Draft Circular on Contaminated Land, DETR, 2000).	Concentrations of a contaminant from site exceed the generic, or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of a species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services (“significant harm” as defined in the <i>Draft Circular on Contaminated Land</i> , DETR, 2000). Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (eg foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discoloration of concrete.

Table 6.4 *Classification of probability*

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it improbable that an event would occur even in the very long term.

Table 6.5 Comparison of consequence against probability

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High likelihood	Very high risk	High risk	Moderate risk	Moderate/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

Table 6.6 Description of the classified risks and likely action required

Very high risk	<p>There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening.</p> <p>This risk, if realised, is likely to result in a substantial liability.</p> <p>Urgent investigation (if not undertaken already) and remediation are likely to be required.</p>
High risk	<p>Harm is likely to arise to a designated receptor from an identified hazard.</p> <p>Realisation of the risk is likely to present a substantial liability.</p> <p>Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.</p>
Moderate risk	<p>It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild.</p> <p>Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.</p>
Low risk	<p>It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.</p>
Very low risk	<p>There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.</p>

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