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Drawings

Drawing 65200861-CAWDOR_LQ_Stg1_LQA_01

Drawing 65200861-CAWDOR_LQ_Stg1_LQA_02

Drawing 65200861-CAWDOR_LQ_Stg1_LQA_03

Drawing 65201348-CAWDOR_LQ_Stg1_LQA_04

Site Layout Plan

Areas of Potential Contamination

Conceptual Site Model (North-South)

Conceptual Site Model (West- East)

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Appendix I Risk Assessment Table and Methodology



Land Quality Statement

Sweco UK Limited (Sweco) was commissioned by the Ministry of Defence (MOD) to undertake a Phase 1 Land Quality Assessment (LQA) at Cawdor Barracks.

The MOD are considering the development of a Deep Space Advanced Radar Capability (DARC) facility at Cawdor Barracks. This study was required to determine the environmental quality of the ground conditions of the Site and to assess the potential for related human health and environmental risks associated with the current use (anticipated to generally reflect the proposed future use).

Cawdor Barracks is currently the Head Quarters of the 14th Signals Regiment and comprises three general areas: an airfield; Technical Area and Barracks (including a small number of married quarters). The airfield is currently used for training (small arms, physical and electronic warfare). A compound within the Technical Area is currently being used by the US Military.

The Site was established as a satellite station for the nearby Royal Air Force base, RAF St David's, in 1944 before being occupied by the Fleet Air Arm of the Royal Navy in January 1946 and renamed HMS Goldcrest in 1952.

In February 1974 the RAF returned, with D Flight of 22 Squadron taking up residence. The RAF withdrew in the early 1990s and the Royal Signals Regiment took over the Site. The Site was named Cawdor Barracks.

An offsite US Naval Facility was set up approximately 100 m west of the Site circa 1946 (but detailed to have been built in 1957). A United States Naval Facilities Engineering Systems Command (NAVFAC) bulk fuel installation (BFI) was established on site (to the east of the runways) and connected to the off-site facility via a 2 km pipeline. The off-site facility is likely to have been decommissioned in 1997.

To evaluate the significance of the findings, a risk assessment was undertaken in line with the best practice adopting the source – pathway – receptor model.

Certain activities and features at the Site have been identified, both historical and current, which may give rise to sources of contamination which may be of importance for future operation of the Site or introduce constraints during any proposed development. These include:

- Source 1: Former Bulk Fuel Installations (Old BFI, BFI 1, BFI 2, and NAVFAC BFI);
- Source 2: Former Fire Training Area (FTA);
- Source 3: Former Fuel Bowser Parking:
- Source 4: Former tip/burning area;
- Source 5: NAVFAC BFI Pipeline;
- Source 6: Current BFI/POL Point;
- Source 7: Historical POL points and former above and below ground fuel storage tanks, and small former fire training area located within the technical area/barracks area;
- Source 8: Known asbestos contaminated area;
- Source 9: Infilled guarries/gravel pits, and linear mound, and;
- Source 10: Offsite former Brawdy Farm sand pit.

Receptors considered to be sensitive to potential contamination at the Site include current and future site users (including onsite workers and residents, and offsite residents and amenity users) and controlled waters, in particular unnamed water courses and springs around the periphery of the Site, the superficial Secondary A Aquifer (Glaciofluvial Deposits) and Secondary B Aquifer within the Lingula Flags, Triffleton Group, and Ramsey Sound Group solid geology.

Sweco UK Limited



Based upon information obtained and reviewed as part of this LQA it is considered that widespread contamination across the site is *unlikely* as a result of the historical use of the Site as an airfield or the current use of the Site as the garrison Head Quarters for the 14 Signal Regiment (Electronic Warfare). However, previous intrusive investigations at the Site have identified sources of localised contamination in a limited number of areas on the site predominantly associated with hydrocarbon and asbestos. The risk posed to all identified human health receptors under current site conditions is considered to be **moderate/low** at the most. It is considered likely that the proposed future use of an area of the Site as a radar facility will present a continuation of the current type of site use (commercial and residential land use). The risk posed to controlled waters receptors under current and future land use is considered to be **moderate** at the most.

Potential risks presented to human receptors by identified sources of contamination under a future land use scenario could be mitigated through consideration of sustainable design, good construction practices and effective environmental management systems. However, it is noted that this would not mitigate risks to controlled water receptors.



1 Introduction

1.1 Involved Parties

Sweco UK Limited (Sweco) was commissioned by the Ministry of Defence to undertake a Phase 1 Land Quality Assessment (LQA) at Cawdor Barracks (the Site).

1.2 Site Identification

The Site is located in Penycwm, Pembrokeshire, Wales (postcode SA62 6NN) and is centred at National Grid Reference (NGR) 184837 224687. The site location is shown on Figure 1 and the site boundary is shown on Drawing 65200861-CAWDOR_LQ_Stg1_LQA_01. The Site covers an area of approximately 310 hectares (ha).

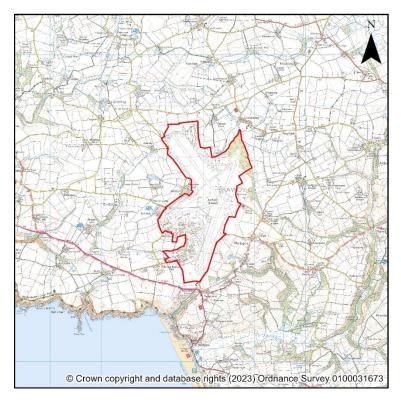


Figure 1 – Site Location Plan (not to scale)

1.3 Objectives

The purpose of this Phase 1 LQA has been to determine the environmental quality of the ground conditions at the Site and to assess the potential for human health and environmental risks. It is understood that the Site has been identified for the potential development of a radar facility as part of Project DARC. Continuation of the current commercial land use scenario has been considered in this Phase 1 LQA.

1.4 Project Background

The Site has been subject to a Phase 1 LQA completed by Entec UK ltd in 2011 and two phases of intrusive investigation undertaken in 2012 (AMEC UK Ltd, formerly Entec UK ltd) and 2015 (Amec Foster Wheeler UK Ltd). The above reports were reviewed as part of this Phase 1 LQA.



1.5 Project Scope

A summary of the methodology and approach adopted for completion of this Phase 1 LQA is presented in Appendix A.

1.6 Limitations

The study has been completed taking into consideration any operational and access restrictions. The report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by Sweco for the use of any part of this report in any other context.

The findings of Sweco's study are based upon the results of a desk based study and visual inspection of the Site and we rely upon professional judgement in its interpretation. This report presents the information obtained during the study and our opinion is based on the information made available to us during the given time period. Sweco has identified requested information that has not been provided to date. Sweco has exercised reasonable skill, care and diligence to assess information acquired during the preparation of this report but make no guarantee or warranties as to the accuracy or completeness of information provided by third parties.

1.7 Reliance

This report is prepared solely for the use of the Ministry of Defence (Client). No responsibility will be accepted where this report, either in its entirety or in part, is used by any other third party and no reliance shall be placed on the findings contained therein without prior written agreement from the Client and Sweco.



2 Site Description

2.1 Site Description and Adjacent Land Use

Table 2.1 provides a summary of principal site features and adjacent land use. The site layout is presented as Drawing 65200861-CAWDOR_LQ_Stg1_LQA_01.

Due to the variation in land uses, the Site is split into three discrete areas; the technical area/barracks area (with a combined area of 64 ha), and airfield (308 ha).

These areas are shown in detail on Drawing 65200861-CAWDOR_LQ_Stg1_LQA_01.

The Site (Cawdor Barracks) lies within Penycwm, Pembrokeshire. The Site is the current garrison Head Quarters for the 14th Signal Regiment and can be split into three main areas: airfield; Technical Area, and Barracks. Cawdor Barracks also has a sewage treatment works, but this falls outside the boundaries of the Phase 1 area.

The airfield comprises three redundant runways and associated infrastructure including dispersals, and a redundant Explosives Storage Area (ESA). A ground to air beacon is located centrally within the airfield. Former infrastructure in the airfield includes bulk fuel installations (BFIs), oil-water interceptors (OWI) and aircraft hangars. Such features have largely been demolished. Additionally, a spoil heap, tip/burning area, and former fire training area have been identified in the airfield. The airfield is now used by the army for training. A sports field and assault course has been established in the southwestern area of the airfield and a cross country running course has been set up in the northern area. Arms training is undertaken in the ESA in the north of the airfield. Dummy/blanks are fired alongside smoke grenades, blank trip flares, and training grenades. Due to the remote nature and spatial extent of the airfield, the 14th Signal Regiment use this area for specialist electronic warfare training exercises.

Site Description, Topography and Features

Two clay pigeon shooting ranges are present within the airfield. Live ammunition is deployed at these locations.

A rally track has been set up ,as demarked by old tyres, in the northeastern part of the airfield. The airfield is also used by radio-controlled airplane club. Access by the public is limited at these events to members. Grassed areas on the airfield are mown under licence by three local farmers but there are also areas of dense scrub vegetation. A number of infilled quarries have been recorded within the airfield.

The Technical Area and Barracks area are located within a secured compound. The technical area features a range of ancillary buildings and structures, including a secure compound used by the United States military. An operational BFI and paints, oils, and lubricants (POL) points are also located within the Technical Area. There is one vehicle washdown area currently in use. The Technical Area also features a 25m live firing range. The footprints of three demolished hangars are also visible in aerial imagery.

The Barracks area consists of a series of accommodation blocks, mess halls and married quarters.

The Site is positioned on a fairly flat plateau at an elevation of between 105 m Above Ordnance Datum (AOD) and 110 m AOD.

Ground Cover and Permeability

Type of Ground Cover	Area (% estimate)
Vegetation- grass meadow and scrub: high permeability	70%
Buildings, macadam/concrete runway, associated infrastructure (including roadways, pavements, and footprints of former hangars) and ESA; low permeability	30%

	Boundary	Length (m)	Current Status	Adjacent Land Use
Boundary	North	2000	vhere accessible, the perimeter of the airfield was observed to be delineated	Adjacent land uses typically agricultural fields and scrub vegetation. Trefaner Farm and hamlet of Llandeloy beyond.
Conditions and Adjoining Land Uses	East	2860	warning signage. The condition of the fence was observed to be variable although the entire perimeter of the site was not	Adjacent land uses typically comprise agricultural fields and scrub vegetation. Newdale Lodge B&B and bunkhouse adjacent to the east. Hillcroft Escapes and Brawdy Farm retreats glamping sites within 550 m east.
	South	950		Agricultural fields adjacent to the south. Village of Penycwm and the A487 beyond.



	West	4000		Adjacent land uses typical agricultural fields, Rickeston Hall, and an unnamed rural access road with agricultural fields, and Park Hall Village Camp site beyond. A notable land use within the general vicinity of the western site boundary is the Brawdy Business Park which was the former NAVFAC compound.
	North 1000 Chain linked fence topped with harbed wire. Observed	Chain linked fence topped with barbed wire. Observed	Airfield	
	East	850	repair.	Airfield
Technical Area/Barracks-	South	360		Airfield, agricultural field
internal compound	West	1800		Agricultural fields, undeveloped area of the airfield consisting of scrub vegetation currently used to graze wild ponies. Park Hall Village campsite. A residential property is present adjacent to the south-western extent of the Site.

Table 2.1 – Site Description and Adjacent Land Use



3 Site History

3.1 Historical Ordnance Survey Maps

A summary of the development history of the Site and surroundings is presented in Table 3.1, together with an assessment of the potential for the historical use to have impacted the Site.

Assessment of the likelihood that the historical activities documented have led to the generation of contamination is based on an evaluation of the typical raw materials/chemicals used, by-products and wastes generated by the basic operational processes associated with the broad land use description given.

Our assessment also takes into account the significance of ancillary operations that may typically be associated with the main activities anticipated to have been undertaken.

It should be noted that in addition to the above, site specific operations may have been undertaken with potential to generate contamination. The presence of such operations may not be directly obvious based on the generic descriptions given on historical maps.

For security reasons, publicly available mapping data does not always reflect actual land use layouts of sensitive and strategic assets and hence the historical maps may not record the site for this reason.

The summary of site historical development presented in Table 3.1 is based on interpretation of historical Ordnance Survey maps and aerial photography obtained from Landmark Information Group (report 305022956_1_1) contained in Appendix B, and review of Previous Phase 1 LQA reports.

Date	Historical Activity	Potential Contaminants	Potential for Impact on Site?
1887	Site is undeveloped. Land use typically agricultural with small tracks and homestead present within the footprint of the Site. Areas of marshland and natural springs are also illustrated within the footprint of the Site.	No significant potential for contaminants identified.	No
1906- 1908	No significant changes and the Site continues to be characterised by agricultural use. A small quarry is located within the eastern boundary of the Site.	No significant potential for contaminants identified.	No
1944 1946-	The base (RAF Brawdy) opened as a satellite station for the nearby RAF St Davids. Airfield The aerial photograph shows the airfield largely in its present configuration, however the northern extent of the NE-SW trending runway is shorter and the current dispersals are not present. The dispersals at that time were triangular and were located off the internal airfield perimeter road at several locations. An old explosives storage area (ESA) (five buildings) located to the northwest of the current ESA. The aerial photograph shows hutted buildings constructed to the south of the tip area. The 'old BFI' and NAVFAC BFI are identifiable in the photograph. The facility was used to store furnace fuel oil for heating an offsite US Naval Facility. The NAVFAC BFI was connected to the US Naval Facility by a 4" (100 mm) diameter pipeline over a distance of 1.5 km to 2 km. Technical Area During this time development within the technical area included three main hangars, and ancillary buildings.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	Yes, potential for localised impact
1946- 1952	The Site was passed to the Fleet Air Arm of the Royal Navy in 1946 and renamed 'HMS Goldcrest' in 1952. Mapping from 1948 shows a sewage treatment works has been constructed.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of	Yes, potential for localised impact



Date	Historical Activity	Potential Contaminants	Potential for Impact on Site?
		unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	
1964	Airfield Aerial photographs dated 1964 indicate that the NE-SW trending runway was expended northwards at this time. The original triangular dispersals are in various states of repair. The explosives storage area in the north of the airfield was constructed. The old ESA buildings have been demolished. Hangars 3, 6, 7, 8, 9, 10, and 11 were constructed in the western area of the airfield. Technical Area Despite site establishment in the 1940s, the majority of buildings within the technical area were constructed in the 1960s.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	Yes, potential for localised impact
1974	The Royal Air Force returned with D Flight of 22 Squadron taking residence. Caravan Park (Park Hall Village) established to the west of the Site.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	Yes, potential for localised impact
1978	Sewage treatment works (off site) expanded to current configuration.	No significant potential for contaminants identified.	No
1983	Airfield The ground to air beacon is shown in its present configuration. The square structure at the former FTA is identifiable in the photograph. Infrastructure associated with BFI2 identifiable within the photograph. The fuel bowser parking area is identifiable on the aerial image.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	Yes, potential for localised impact
1992	The RAF withdrew from the Site in the early 1990s. Rounded dispersals and Oil Water Interceptor (OWI 2 of 3) shown in their current configuration. Evidence of stockpiled materials at the site of the 'spoil heap' in the vicinity of BFI2.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	Yes, potential for localised impact
1995- Present	The Site is referred to as Cawdor Barracks and is the garrison headquarters for the 14 th Signal Regiment. The technical and domestic was secured by an internal security fence to delineate it from the redundant airfield. The airfield continues to be used for personnel training. There have been small scale demolitions of buildings between 1995 to present.	The site has the potential for storage of fuel oils / hydrocarbons from on-site operations and repair works. Presence of made ground of unknown origin. Metals, PAHs associated with ash deposits. Possible ACM and unexploded ordnance.	Yes, potential for localised impact
2000	The former US Naval Facility located offsite is shown to be used as a business park (Brawdy Business Park).	There is potential for the storage of fuels and chemicals at the business park.	No



Table 3.1 - Summary of Historical Development

3.2 Historical Site Plans and Records

No historical plans provided during the site walkover. The Previous Phase 1 LQA includes information provided part of the previous heritage archive search.

3.3 Dstl Radiological Search

Defence Science and Technology Laboratory (Dstl) completed a radiological records search for the Site in July 2020 (Appendix C).

The MOD Radioactive Holdings Database stated the 14th Signals Regiment held radioactive materials at the Site. These sources were tritium (H-3), also referred to as gaseous tritium light sources (sight unit small arms (SUSTA) rifle scopes). The unit previously held equipment containing nickel-63, chlorine-36, and Strontium-90.

Brawdy Dental Centre was located on the Site, however the dental centre did not hold any radioactive material (X-ray only).

Records suggest that a number of radionuclides were held as part of military equipment and legacy items when the site was operated as RAF Brawdy. These nuclides include chlorine-36, strontium-90, promethium-147, radium-226, natural uranium and americium-241.

Dstl reviewed their archive information as part of the radiological records search. A previous desk study for Cawdor Barracks was undertaken by Dstl in November 2010 which concluded that the likelihood of radiological contamination issues at Cawdor Barracks is deemed low. Prior to 2010, a DRPS desk study was undertaken in 1997 which also stated that it was unlikely that there is any significant radiological contamination at RAF Brawdy.

Dstl could not find any published information (held on the MOD intranet/public internet sources) regarding radiological contamination at the Site and there were no records of any radiological contamination surveys identified. No contamination issues were flagged in previous radiation protection advisory visit reports for the 14th Signal Regiment.

After reviewing desk study information, Dstl concluded (to the best of their knowledge) that they were not aware of any radiological contamination at Cawdor Barracks.

3.4 Unexploded Ordnance

A summary of UXO Estate Intelligence for the Site was completed by DIO in July 2019 (Appendix D). The summary identifies potential sources of UXO contamination as follows:

- Two former ESAs located on site. The Previous Phase 1 LQA records that small arms ammunition (SAA)and pyrotechnics are now stored in the armoury and that SAA is also held forward in the guardroom for use by security personnel;
- The Previous Phase 1 LQA states that there was a .22 calibre small bore range on the Site, although the location is not confirmed. The LQA also contains a Site Plan which showsAircraft shooting in butts located on site (Grid Reference SM 847 254). A machine gun and cannon range was originally located at Grid Reference SM 848 244, and this was converted to a small arms range before being demolished and replaced by the current 25 m Small Arms Range located at Grid Reference SM 848 243;
- Parts of the former airfield are currently used as a training area (dry training). Spent small arms cartridges were observed within the former ESA area during the site inspection;
- There are no indications of a practice bombing range on site;
- No WWII anti-invasion defences (demolition and depth charges, minefields, and pipemines) were recorded on site;
- There are no records of abandoned bombs on the site;



- No information is held relating to enemy bombing;
- No RAF WWII Chemical Weapons (CW) were recorded as being used at the site. RAF
 Command Scientific Support Branch (CSSB) WWII CW Legacy report dated March 1999
 assesses the site as Cat 5 suggesting it is very low risk where some ground training occurred
 using live agent, and;
- The previous Phase 1 LQA contains a 'Certificate of Search for Clearance of Explosive Materials and Other Dangerous Goods' which was issued in October 1995 prior to site handover from the RAF. The search was largely visual and likely completed by the station and not Explosive Ordnance Disposal personnel.

3.5 Historical Air Photographs

Historical aerial photographs are provided by the Welsh Government's Aerial Photos Unit online map. The Welsh Government's Aerial Photography Unit (APU) map viewer provides two historical aerial photographs of the Site. The aerial photograph dated 1969 shows the airfield in current configuration, hangars and buildings within the technical area and accommodation areas. Triangular dispersals shown to be on site which are later replaced by the current configuration in 1992. The aerial photograph dated 2013 provided on the APU map viewer shows there has been demolition of hangars on the Site.

Additional historical aerial photographs have been provided in the previous Phase 1 LQA (summarised in Table 3.3). All photographs reviewed indicate the presence of the RAF airfield and infrastructure and are provided in Appendix E.

Date	Ref.	Description of Key Points/Observed Land Use
1946		Aerial photograph shows airfield runways, dispersals and buildings in the current technical area.
	National Manuscrate Decord	Evidence of former ESA in the north of the airfield.
1964	National Monuments Record (provided with previous Phase 1 LQA)	Aerial photograph shows there have been expansions to the northeast- southwest trending runway. ESA shown in current configuration.
		Additional hangars constructed. Removal of some dispersal areas.
		Nemoval of Some dispersal areas.
1969	Welsh Government's APU map viewer	No significant changes noted in the aerial photograph.
1983		No significant changes noted in the aerial photograph.
1992	National Monuments Record	Current dispersal layout identified within aerial photograph. Additional buildings have been constructed within the Technical Area.
2000	(provided with previous Phase 1 LQA)	No significant changes noted in the aerial photograph.
2006		Demolition of some of the hangars. No further significant changes noted in the aerial photograph.
2013	Welsh Government's APU map viewer	Hangars demolished. Demolition of eastern extent of one of the runways.

Table 3.2 - Historical Air Photographs

3.6 Previous Investigations and Reports

Previous reports listed in the references (section 9) have been reviewed by Sweco. Table 3.4 provides a summary of the scope of each of the previous reports.



Report Title	Date/Author	Summary of Scope
Hardened Aircraft Shelters, March 1987. Internal Military Works	Internal Military Works Force March 1987	(Summary provided in Entec Phase 1 LQA (dated 2011)). Intrusive investigation (12 trial pits and nine boreholes) to identify potential sites of nine hardened aircraft shelters.
Force Report	March 1967	Follow-up radiological investigation undertaken by Dstl
RAF Brawdy (FTA) Phase		(Summary provided in Entec Phase 1 LQA (dated 2011)).
1 and Phase 2 Combined Report	Entec UK, 1998	Intrusive investigation of the FTA comprising three rotary boreholes to a depth of 10 mbgl and ten trial pits progressed to a maximum depth of 3.7 mbgl.
		(Summary provided in Entec Phase 1 LQA (dated 2011)).
RAF Brawdy (BFI 1) Phase 1 and Phase 2 Reports	Entec UK 1995 and 1998	Investigation of soil and groundwater contamination at the BFI 1. A total of four rotary boreholes were progressed to a maximum depth 10 mbgl and 20 No. trial pits were excavated to a maximum depth of 4 mbgl.
RAF Brawdy (Cawdor		(Summary provided in Entec Phase 1 LQA (dated 2011)).
Barracks) Groundwater Monitoring Interpretative Report	Entec UK 2001	Groundwater monitoring of boreholes at the FTA and BFI 1. Monitoring was undertaken on four occasions at 3-monthly intervals between September 1999 and 2000.
Cawdor Barracks- Groundwater Monitoring Letter Reports	Entec 2009 and 2010	Two rounds of groundwater monitoring of functional boreholes located at the FTA and BFI 1.
Phase 1 LQA	February 2011	Entec UK Ltd completed a site-wide Phase 1 LQA of the Site and identified a number of potential contamination sources related to historical and current land uses.
That I Lat	Entec UK Ltd	The Phase 1 LQA also includes reference to the sewage treatment works that forms part of the Site but is excluded from this current Phase 1 LQA.
		Amec completed a Phase 2 LQA, targeting the following sources of contamination:
		Former BFIs (including BFI1, Old BFI, BFI2 and the NAVFAC BFI
		NAVFAC BFI Pipeline
		Former fire training areas
	February 2012	 Former fuel storage facilities Workshops including POL Point, POL store and waste oil
Phase 2 LQA	Amec Environment & Infrastructure UK Itd	Fuel bowser parking and inspection areas, and
	(Amec)	Former site tip/burning area
		Former ESAs and historic 25 m firing range
		Known asbestos contaminated land area
		Demolished buildings
		The Phase 2 investigation also included radiological survey of the tip/burning area and fire training area. Route tracing of the NAVFAC buried pipeline was also undertaken.
Cawdor Barracks-		This Phase 2 LQA focussed on three areas within the airfield:
Targeted Groundwater	July 2015	The fire training area
and Vapour Assessment LQA Report	Amec Foster Wheeler	The old BFI DEL4
<u>'</u>		• BFI 1

Table 3.3 – Summary of Previous Reports

Relevant information is provided below and information relating to ground conditions is provided in Section 6.



Phase 1 LQA, Entec UK 2011

The Phase 1 LQA lists the following potential historical sources of contamination:

- Motor transport (including aircraft) maintenance;
- Aircraft operations including historic aircraft parking of the Vulcan Bombers and their nuclear munitions. The Vulcan Bombers were parked on the airfield or local dispersal and not stored in hangars or disarmed in any way. The Vulcan Bombers were vulnerable to fuel leakage but there was evidence to suggest significant, local refuelling was concentrated around the aircraft dispersals. There is little to no potential for radioactive contamination to be present on site as a result of this activity;
- Explosive storage and use of small arms munition;
- · Waste disposal and burning of waste;
- Former waste transfer/storage area;
- Former distribution substations;
- · Former engine test house;
- Former standby generator houses;
- Hangars;
- · Workshop facilities;
- Disused OWI;
- Made ground embankments across the site including near sports pitches;
- Bulk fuel and oil storage with associated handling operations and dispensing;
- Movement of fuel oil via below ground pipeline from NAVFAC BFI to off-site US Naval Facility;
- Lower volume fuel and chemical storage and dispensing (POL Points and workshops);
- Firing ranges;
- Fire training areas;
- Building demolition;
- Former buildings containing asbestos including hutted buildings to north and west of Building 468 and church;
- Area of known asbestos contamination near the Quarter Masters Stores, and;
- Aircraft parking, airfield use and crashes.

Previous reports are also summarised within the Phase 1 LQA. The following salient points are provided in relation to the previous reports:

- The Hardened Aircraft Shelter investigation (1987) identified the former tip area/ burning site in the northern extent of the airfield. Anecdotal evidence at the time suggested an unspecified quantity of radioactive valves may have been disposed of in the tip. A non-intrusive radiological investigation was undertaken by Dstl subsequent following the intrusive investigation. No elevated readings were reported though no sub-surface investigation was undertaken;
- The Phase 1 and Phase 2 combined report by Entec UK (1998) reported weathered fuel-based hydrocarbons at low levels within soils across the FTA. Locally elevated levels of kerosene type banded hydrocarbons were encountered within the groundwater at this location. The highest concentrations were recorded near the OWI in the vicinity of the FTA. Recommendations were made to clean the interceptor and establish a monitoring programme to assess the potential for natural attenuation;



- The Phase 1 and 2 Reports of intrusive investigation at the BFI 1 (Entec UK 1995 and 1998) cites anecdotal evidence of complaints made in 1969 relating to oil migration from BFI 1 into the adjacent property of Rickeston Hall (basement and pond). In response to the complaints the Defence Lands staff took steps to investigate a large circular tank by having it emptied and inspected for leaks. Additionally, a trench was excavated between the tank and the boundary fence to identify oil seepage. Improvements to an OWI were also undertaken. Results of the tank and trench investigation revealed 'virtually no oil seepage at all' and no further correspondence reports were provided. An updated intrusive investigation of BFI 1 was undertaken by Entec UK during which weathered kerosene diesel and carboxylic acids were present at low concentrations in the soil and locally elevated concentrations of gasoline and kerosene banded hydrocarbons were found within the groundwater, and;
- Supplementary groundwater monitoring of boreholes at the FTA and BFI 1 was undertaken between September 1999 and June 2000, and in 2009 and 2010. The later monitoring suggested there was still a source of free phase or residual hydrocarbons present in the BFI 1 area. A source of free phase and/or residual hydrocarbons was present in the FTA, but predominantly down slope of the elevated 'fire pit'. The data suggested that active degradation was still occurring at that location.

The Phase 1 LQA assessed the following sources as having a significance of moderate or higher:

- BFI 1 constructed in the 1950s and 60s and stored AVTUR F34 FSii in 10 No. 54,500 litre above ground tanks mounted on a concrete plinth and bunded within a 1.9 m high firewall.
 Drainage within the bunded area was routed to a buried oil interceptor tank (demolished). One semi buried circular tank with a capacity of 772,000 litres was also located at the site of the BFI 1. The tanks were removed and the circular tank was partially demolished and completely filled in;
- Old BFI fewer details are available regarding this installation but it is understood to have potentially comprised 6 No. semi-buried tanks of an unspecified capacity. The tanks were filled with concrete when the facility was decommissioned in 1993;
- BFI 2 comprised two semi-buried tanks with combined capacity of 1.5 million litres (storing AVTUR F34 FSii), one above ground Plant Dieso (diesel) tank with a capacity of 8,000 litres and one slops tank with a capacity of 5,500 litres (containing AVTUR F34 FSii). The facility was believed to have been decommissioned in 1997 but verification data relating to the decommissioning is not available;
- NAVFAC BFI and associated NAVFAC BFI pipeline there were 6 No. of diesel oil tanks with a combined capacity of 330,000 litres. The facility is thought to have been decommissioned in 1997 but the quality of decommissioning cannot be verified. Considering the dimensions, approximately 15,700 litres of heating fuel oil may have remained within the NAVFAC BFI pipeline which connected the BFI with the NAVFAC using a 4 km long 4" diameter pipeline. Anecdotal information reviewed at the time of the report suggested that a contractor cut into the pipeline believing it to be a water pipe and heating fuel oil leaked out to the ground. The route of the pipeline was traced as part of the scope of works:
- FTA Flammable materials such as kerosene were floated on water retained within the brick
 and concrete 'tank-like' structure. The flammable materials were ignited and extinguished
 during training exercises. The residual mixture of water, part burnt and residual flammable
 liquids was drained to a series of six oil interceptors, eventually discharging to ground via a
 soakaway;
- Former fuel storage facilities including NAVFAC and Building 5 POL points;
- Furnace fuel oil installation north of Hangar 7 Two bulk tanks of unsubstantiated capacity contained 3/50 FFO (DIESO) used to fuel space heating within the main hangars. The tanks were located on hardstand within a concrete bund. The condition of the tanks and bunds at the time of decommissioning was not known;



- Site boiler house heating oil tanks two bulk storage tanks with an estimated capacity of 50,000 litres which contained 3/50 FFO (Dieso) were decommissioned and removed circa 1992. They appeared to have been located on hardstand within a brick/concrete bund but this was not confirmed;
- Former standby generator and two standby generators Former site standby generator House (building 231) had two above ground fuel tanks with individual capacities of 20,000 litres (Dieso). Discussion on site suggested that the tanks were located below ground and filled with foam as part of their decommissioning;
- Former engine (Ardour) test house One associated above ground fuel storage tank with a volume of 23,000 litres of AVTUR F34 FSii. The condition of this tank and associated infrastructure prior to removal was not known;
- Former cinema 45,000 litre below ground tank that may have contained fuel oil for heating purposes. In 1981 it was noted to be water filled and unserviceable;
- Workshops including current POL Point, POL store and waste oil;
- Fuel bowser parking and inspection areas in the vicinity of former Hangar 11 11 No. fuel bowsers with a combined capacity of approximately 115,000 litres. No records of spillages or leaks in this area are kept, and;
- Former site tip/burning area.

The following sources were also investigated as they were thought to present a potential liability should there be a change in site use:

- Former ESAs and historical 25 m firing range;
- Known asbestos contaminated land area, and;
- Demolished buildings (historical- 3 infilled guarries/gravel pits).

Phase 2 LQA. Amec UK 2012

A phase 2 LQA investigation was undertaken targeting pollutant linkages previously assessed as having a significance of "moderate" or higher within the previous Phase 1 LQA (Entec UK, 2011).

The ground investigation was undertaken between 25 July and 12 August 2011 and comprised 23 rotary boreholes, 38 window sample holes, 14 hand dug pits, 8 surface samples (within the ESA), and 24 machine excavated trial pits.

In addition to the intrusive investigation, a specialist service utility tracing contractor was commissioned to locate the route of the NAVFAC pipeline.

Entec concluded that the majority of the areas investigated were suitable for the current use without the need for significant mitigation or remedial measures to protect site users.

Contamination of the groundwater and soils at discrete locations of the site was unlikely to present a significant pollutant linkage. The potential for cross boundary migration of hydrocarbons in groundwaters and vapours in the vicinity of the adjacent Rickeston Hall was not ruled out.

With regard to the suitability of the Site for redevelopment and commercial/industrial end use, Entec UK suggested there was a low to moderate/low risk to future site users and a moderate risk is assessed relating to the potential for exposure to explosive ordnance in the former ESA and firing range (referred to in the report as 'Zone 5'). Entec UK stated that the recorded presence of asbestos within soils and potentially within buildings may need to be addressed and recommended further assessment to quantify the risk associated with groundwater contamination and vapour.

In addition to the intrusive investigation, a radiological walkover survey was also completed covering the former site tip/burning area and the FTA. Radiological activity was greatest within the FTA, although readings were not significantly in excess of background levels and remained below levels for 'waste exempt from requiring a permit' (805.54 counts per second).



<u>Cawdor Barracks - Targeted Groundwater and Vapour Assessment LQA Report, Amec Foster Wheeler, 2015</u>

The intrusive investigation targeted the Old BFI, BFI 1 and FTA due to the previous assessed moderate risks to controlled waters and potentially unacceptable risk to neighbouring residents (Rickeston Hall) from hydrocarbon vapours.

The following conclusions were reported:

- The interceptor at BFI 1 was noted to be well maintained;
- The location of the Old BFI was identified and trial pitting confirmed the presence of six sand filled tanks. The sand was observed to be stained and had a slight hydrocarbon odour. Water was noted within one of the tanks potentially indicating the integrity of this tank has been maintained;
- Groundwater was encountered within the Secondary B mudstone aquifer. Measurable free
 product was only identified on one occasion during the site investigation and three subsequent
 monitoring rounds. Olfactory evidence of hydrocarbons was identified at some locations in the
 FTA, BFI 1 and Old BFI. Hydrocarbons reported were of generally low solubility and mobility;
- The vapour monitoring and assessment on the eastern boundary of BFI 1 has indicated that vapour is unlikely to lead to unacceptable concentrations of hydrocarbons in Rickeston Hall. Risks to neighbouring site users from vapours in groundwater were assessed as low;
- Risks to groundwater are assessed as moderate/low, risks to surface water assessed as moderate/low to low, and;
- Free product (light non-aqueous phase liquid) has occasionally been identified on groundwater at BFI 1, the Old BFI and at the FTA but monitoring over several years indicates that the thickness is low and unlikely to be present in sufficient quantity to be recoverable and the potential for significant lateral migration of free product is limited in the fractured mudstone bedrock.

3.7 Discussions with MOD Representatives

The following information relating to historical site activities was provided by site personnel during the Site reconnaissance. The Site does not currently hold any documentation relating to activities undertaken when the Site was operated as RAF Brawdy:

- There have been no warnings, prosecutions or enforcement actions served against the Site by any Government entity relating to pollution of soil, surface water or groundwater;
- There are no known areas of waste burning or tipping in addition to those identified in the Phase 1 LQA dated 2011;
- No remedial activities (soil and groundwater) have been undertaken at the Site;
- There was an anecdotal verbal suggestion of a historical 'aviation spill' at the site. No further
 corporate knowledge is available to confirm whether this occurred. Previous Phase 1 LQA
 report and subsequent Phase 2 LQA reporting does not reference make reference to an
 'aviation spill';
- There are no pending environmental enforcement actions against the site, and;
- There are no notices, or claims for the cost of remedying any hazardous substance allegedly released at, or from, the Site.

Site History Summary

 The Site was established as a satellite station for the nearby RAF St David's in 1944 before being occupied by the Fleet Air Arm of the Royal Navy in January 1946 and named HMS Goldcrest in 1952.



- In February 1974 the Royal Air Force returned with D Flight of 22 Squadron taking up residence. The RAF withdrew in the early 1990s and the Royal Signals Regiment took over the Site. The Site was named Cawdor Barracks.
- Surrounding land use typically comprised agricultural land use, however a US Naval Facility
 was set up off-site circa 1946 (but detailed to have been built in 1957). A NAVFAC BFI was
 established on site and connected to the off-site facility via a 2 km pipeline. The off-site facility
 is likely to have been decommissioned in 1997.
- Several historical sources of contamination have been identified within the airfield, technical area, and barracks area. These sources are largely historical bulk fuel storage tanks, areas of tipping and burning, a fire training area and asbestos contaminated soil.



4 **Regulatory Records**

Information held on public registers and by third parties¹ has been reviewed and a summary is presented in Table 4.1. Distances are taken from the site boundary to the centre point of the potential source. Comment is given regarding the potential for any such process / activity to affect the Site.

Type of Record [No. recorded within 500 m]	Details	Potential for Impact on Site?
Recorded pollution incidents to controlled waters [13]	13 pollution incidents recorded within 500 m radius of the Site. The nearest, a Category 2 – Significant incident, recorded 39 m west relating to the accidental spillage of crude sewage released to an unnamed receiving water in 1991. A further Category 2 incident was recorded on the same day 40 m to the north east relating to oil/diesel spillage. Numerous pollution incidents occurred within 500 m of the Site in 1996, the closest (67 m west) relating to the discharge of crude sewage and diesel from a leaking tank resulting in Category 3 – Minor incidents. No pollution incidents have been recorded post-1996.	No potential
Discharge Consents [3]	Three discharge consents within 500 m radius of the Site. The closest discharge consent permits the release of final, treated effluent into land 197 m west of the Site (Park Hill Caravan Park). The remaining discharge consents relate to the release of storm overflow into unnamed tributaries of the River Solfach(192 m north) and Cwm Mawr Stream (273 m south). Ancala Water Services (Estates Ltd) hold two consents (Permit references BP0239501 and BP0269801) to discharge final treated effluent from Cawdor Barracks sewage treatment works into Brawdy Stream (approximately 800 m west of the Site). The Site holds an Ancala Water Services Consent to Discharge vehicle washdown effluent to the foul sewer (Reference AWSTE TE001XA038)(Appendix F).	Limited potential for impact.
BGS Recorded Mineral Sites [8]	There are three recorded mineral sites on site; Rickeston and Tre-Gynnydd (sand and gravels), and Croes-Wen (sandstone). There are a further five mineral sites recorded within 500 m of the Site and 12 located between 500 m and 1 km of the Site. None of these records are active. Brawdy Farm sandpit is located adjacent to the east of the Site. Although not an active extractive site, it is protected by a Mineral and Quarry Site Buffer which extends to within the southern extent of the airfield. Although mapped as present beneath the Site, superficial deposits have not been safeguarded by the Local Authority.	Potential for contamination depending on fill materials used (current plans would suggest these sites have all been infilled).

Table 4.1 – Public Registers Review

¹ Records reviewed included waste sites (current and historical landfill sites and licenced waste management facilities including waste transfer sites and waste treatment or disposal sites), hazardous substances (Control of Major Accident Hazards Sites, explosive sites, Notification of Installations Handling Hazardous Substances, Planning Hazardous Substance Consents, Planning Hazardous Substance Enforcements), Geological (BGS recorded Mineral sites) and Agency (Discharge consents, pollution incidents to controlled waters, substantiated pollution incident register, registered radioactive substances, Integrated Pollution Controls, Integrated Pollution Prevention and Control, Local Authority Pollution Prevention and Controls and Local Authority Integrated Pollution Prevention and Controls).



Summary

- Ancala Water Services (Estates Ltd) hold two consents (Permit reference BP0239501 and BP0269801) to discharge final treated effluent from Cawdor Barracks sewage treatment works into Brawdy Stream.
- The Site has not been attributable for any substantiated pollution incidents.
- There are three ceased BGS recorded mineral sites within the boundaries of the Site. Former
 Brawdy Farm sandpit located adjacent to the east of the Site is protected by a Mineral and Quarry
 Site Buffer which extends to within the southern extent of the airfield. Where present, superficial
 deposits beneath the Site are not safeguarded by the Local Authority.
- Current surrounding land uses have limited potential to generate contamination that would cause impact to the Site.
- Former mineral extraction sites on and within the vicinity of the Site are assumed to be infilled. There is potential for contamination and ground gas derived from the fill materials.



5 Site Reconnaissance

An inspection of the site area and neighbouring land use was undertaken on 22 and 23 November 2022 by Sweco. Permission was gained through the MoD to visit the Site. A summary of site activities observed during the site reconnaissance is provided below. Photographs taken during the site visit are included in Appendix G.

Topic	Description	Notes & Comments
Visual / Olfactory Evidence of Contamination	No evidence of visual or olfactory contamination was noted during the site walkover. Localised spillages of fuel occur at the operational BFI/ POL points but no substantial spillages have been reported. Oil/waste oil is stored within a secured hard stand compound. Diesel tank within this compound featured integral bunding and anticollision barrier. Jerry cans were observed to be unbunded but the storage compound features sealed drainage which lowers the risk of associated with accidental spillages or leakage. Spill kits were present within the compound at the sites of the operational BFI and POL points.	The Site has an emergency spill response plan and spill response drills are undertaken annually. All waste oils were stored in a secured hardstand compound. Crash protection in place for integrally bunded diesel tank.
Explosive Ordnance and Radiological Materials	Evidence of spent dummy/blank ammunition recorded during the inspection of the ESA within the airfield. Evidence of spent live ammunition in the vicinity of the Clay Pigeon shooting ranges. Explosive ordnance is stored in the armoury with the Technical Area, with small quantities held at the main gate and guardroom. The Site has facilities to store radioactive material (sealed source only) within the armoury Building 242. Sources of radiation are sight unit small arms (SUSAT) rifle scopes containing tritium (gaseous tritium light sources, GTLS) and X-ray materials held at the barracks dentist. There is no corporate knowledge relating to known burning of radiological materials on Site. Minor breakages of equipment containing radiological materials are controlled locally and then disposed offsite via the Dstl. Radiation orders are held on site and the unit has a radiation offer (Technical Quartermaster).	No EA authorisation for storage of GTLS is required. Restricted access only.
Environmental Permit Regime	Site personnel have confirmed that that Site is not subject to processes or activities requiring an environmental permit	Limited potential for site activities to result in contamination. Good environmental management systems in practice. Storage of potentially contaminative materials in secured compounds or within storage buildings. Adequate provision of spills kits observed.
Site utilities	The site is occupied by 14 th Signal Regiment. Gas, electricity, water, telecommunication utilities were observed on the Site. Sweco have been provided with a service drawing dated July 2010 (Appendix H). The plan indicates that services within the airfield include gas, low voltage electrical cable, and high voltage electrical cable.	Live utilities exist on site.



Topic	Description	Notes & Comments
Site Drainage and Waste Water	The site uses separate drainage systems for surface water and foul water. Sewerage produced is treated at the off-site sewage treatment works (part of Cawdor Barracks but not included within the current study area as outside the wire). A series of redundant OWIs were observed during the reconnaissance of the airfield. No obvious signs of sheen or odours were noted. Surface water drainage present in the airfield (adjacent to runways). Surface water from the current BFI/POL points is drained to three OWIs. OWIs are emptied and waste (including built up oils and greases) is disposed of by ANCALA under contract. A plan showing the locations of the OWIs is presented in Figure 2a Site Layout within the previous Phase 1 LQA Report (Entec 2011).	Ancala Water Services hold a consent to discharge treated effluent from Cawdor Barracks Sewage Treatment works, only.
Trade effluent	The Site currently holds an Ancala Water Services trade effluent discharge consent for vehicle washdown effluent (reference AWSTE TE001XA038. The effluent is discharged to the foul sewer.	The authorisation is aligned with the Environment Agency consent held by Ancala Water Services.
Storage Tanks (fuel, chemicals and storage of hazardous substances)	Ground maintenance store located in Building 239 (equipment, fuels and chemicals) (former explosives store). Bulk fuel installation within the Technical area (Building 666). Secured compound containing used oils, diesel, kerosene and lubricants. Wastes stored in jerry cans, IBCs and an integrally bunded diesel tank. No significant bunding of this compound, however wastes are stood on hardstand, there is crash protection around the diesel tank and spill kits located within the compound. Surface water falling within the compound drains to an interceptor. Operational POL- Tank 1 (capacity 19,775 litres), Tank 2 (27,422 litres). Operational BFI- underground storage tank with a capacity of 7,000 litres. Building 695 (guardroom locked store) has one waste oil tank (2,275 litres) and one waste coolant tank (1,500 litres).	The operational below ground POL tanks will be replaced by one above ground diesel storage tank. The capacity of the tank will be 25,000 litres and it will be double skin and positioned in a bunded area. Inspection and maintenance will be six monthly under VIVO contract.
Waste Management	Waste management at the Site is contacted to Veolia. There are numerous waste storage points (general waste and recyclable waste) across the Technical Area. Cawdor Barracks is registered as a Hazardous Waste Producer (Registration number CAA422). Waste oil was stored in drums in the oil storage compound within the technical area.	Environmental management of waste materials was observed to be good. Excessive waste material is avoided. Wastes are sorted and recycled where appropriate. Historically waste practices were not subjected to legislation. There is a former tipping area on the airfield and evidence suggests burning of waste may have occurred in this area. No evidence of this was recorded during the reconnaissance.
Asbestos Containing Materials (ACMs)	A number of buildings have been identified as containing Asbestos Containing Materials (ACMs). An asbestos register and management plan has been produced for the Site and is updated on an annual basis. The Register is held as a hard copy on site, only.	An asbestos register is maintained on site. The register is updated annually following inspection.



Topic	Description	Notes & Comments
	An asbestos contaminated area (buried at depth) has been identified immediately to southeast of the former hangar or shelter to the south of Hangar 18. This area forms a raised area of landscaped ground with slopes comprising mown grass. The elevated surface of this area was concrete and housed three metal storage containers. Warning signage was noted at this location during the site visit.	
PCBs, electrical equipment and transformers	A number of electrical substations are present within barracks area. The previous Phase 1 LQA states that during the site upgrades prior to the arrival of 14 Signals Regiment, the existing high voltage (HV) network was modified. The project removed and disposed of the transformers and the oils that they contained. No waste transfer notes are held and no further information was provided as part of the current site reconnaissance.	Potential for limited hydrocarbon/ PCB contamination on site associated with former use but likely to be very localised.
Incinerators / Burning Grounds	Site personnel confirmed that no burning of waste is undertaken on the site. No evidence of recent burning was recorded during the site walkover, including in the former tip/burning area. Square brick and concrete structure evident at the location of the Former Fire Training Area. This structure featured a gravel fill (including waste materials such as concrete, metal, glass, and bituminous materials). Some relict charred wood identified but no evidence of widespread burning.	Potential for historic burning activities in the airfield. No evidence of burning recorded in the former tip/burning area during the walkover.
Landscaped Areas	A linear landscape feature (vegetated mound) was observed running north-south at the southern extent of the airfield. A landscaped area exists to the southeast of a former hangar/shelter to the south of hangar 18. This forms the asbestos contaminated area. Additionally, there is a landscaped area around the perimeter of an area of carparking in the vicinity of the entrance into the airfield, sports pitches in the technical and Barracks areas, and an assault course in the airfield. Grassed areas around the runways are used for farmers (under licence) for grass cutting (production of silage). Localised areas of infilling noted within the airfield. Made ground is likely to exist in these areas.	Made ground of unknown origin. Potential to contain PAH, ACM metals.

Table 5.1 - Summary of Site Reconnaissance

Summary

- Review of available documentation, authorisations and consents indicated no breaches in regulatory compliance.
- The site was operational well managed facility.
- Storage of chemicals and ordnance were observed to be generally appropriate with chemicals and ordnance well documented. All COSHH storage was located on hardstanding.



Visual and olfactory observations did not reveal any evidence for the presence of widespread or significant contamination arising from current site practices.

6 **Environmental Setting**

An evaluation of the environmental setting of the Site and surroundings has been determined by Sweco from a study of the relevant geological map BGS 1:50,000 Sheet 209 (St Davids), BGS digital geological map data (DigiMapGB-50) and environmental data supplied in the Landmark report (ref. 305022956 1 1 see Appendix B).

6.1 **Geology and Hydrogeology**

Based on available data taken from the BGS and the previous Phase 2 LQA undertaken by Amec Environment & Infrastructure Limited between July and August 2011 which largely included exploratory locations in the airfield and technical area. The following geological conditions and groundwater sensitivities have been determined:

Geology	Aquifer Status & Groundwater Abstractions	Potential for Baseflow	Sensitivity Assessment
Made Ground	N/A	Moderate— Due to the topography of the site, there is potential for made ground to be in hydraulic continuity with the unnamed streams adjacent to the boundaries of the Site.	N/A
Superficial geology Largely absent across the site. Localised superficial deposits: Glaciofluvial Deposits (Devensian)/ Glacial Till (Mid Pleistocene)	Glaciofluvial Deposits: Secondary A Aquifer Glacial Till: Secondary Undifferentiated. Site not located in a source protection zone. No groundwater abstractions within 1 km of the Site	Moderate- The Glaciofluvial deposits are classified as a Secondary A Aquifer. A Low potential for baseflow is anticipated for the Glacial Till as this stratum is considered to be of relatively low permeability.	Low-Moderate / Low based upon the aquifer designations and absence of groundwater abstraction licences held within 1 km of the Site.
Solid geology Central area— Lingula Flags Formation (Cambrian): sandstone and mudstone Northern set extent- Triffleton Group (Ordovician): sandstone Southern extent- Ramsey Sound Group (Ediacaran): Tuff Two unnamed igneous intrusions (central)	Bedrock is classified as a Secondary B aquifer Site not located in a source protection zone No groundwater abstractions within 1 km of the site	High – The mudstone bedrock was recorded relatively close to the existing ground level during previous intrusive investigations at the Site (from depths of 0.4 mbgl in the airfield to 8.2 bmgl mbgl in the Technical Area). As the Site forms a natural plateau, groundwater flow is shown to be radial from the centre of the Site. There are a number of springs on the western and eastern site boundaries that feed unnamed surface water courses.	Low based upon the designation of both the overlying superficial deposits and the solid geology and absence of groundwater abstraction licences held within 1 km of the Site.

Table 6.1 - Geology & Hydrogeology

Ground conditions were reported by site area within the Amec 2012 Phase 2 LQA, and are summarised as follows:

Airfield (excluding tip area)

Surface cover largely comprised long grass or brambles over a topsoil with frequent rootlets. Localised hardstand (macadam, gravel sub-base of concrete and bituminous materials) was reported at one location. Evidence of spent ammunitions cartridges was recorded within the ESA.



Made ground was encountered in the majority of exploratory hole locations in the airfield and was typically recorded between 0.2 mbgl and 1.2 mbgl and to a maximum depth of 2.6 mbgl. Made ground comprised sandy gravelly clay, clayey gravelly sand and silt with occasional cobble content of brick, concrete, mudstone, sandstone and igneous rock. Anthropogenic gravel constituents included brick, concrete, metal fragments, clinker, bitumen, tile, and ceramics. Thicker deposits of made ground were recorded in the old BFI and BFI 2 (maximum depth of 2.6 mbgl) and NAVFAC BFI (potential foundations up to 2 mbgl). Reinforced concrete was recorded between 0.4 mbgl and 0.8 mbgl in the NAVFAC BFI.

Within the airfield, superficial deposits were recorded as sand and gravel drift, firm gravelly clay with cobbles of mudstone identified as Glacial Till and weathered mudstone. These superficial deposits were encountered between the existing ground level and 3.3 mbgl and had a thickness ranging between 0.15 m and 3.2 m. Mudstone bedrock was typically recorded from 0.4 mbgl to 3.3 mbgl to a maximum unproven depth of 15 mbgl.

Former Tip Area

With the former tip area, surface cover comprised a gravel of pulverised rubble with a depth of between 0.3 mbgl and 0.55 mbgl. Vegetated areas were recorded as long grass over gravelly sand or clayey topsoil.

General made ground in the former tip area had a general thickness of between 0.5 m and 3.6 m and comprised silty sandy gravel, gravelly sand and gravelly clay. Gravels included concrete, brick, macadam, mudstone, and sandstone. Exploratory logs recorded low to moderate cobble and boulder content of concrete, brick, and occasional re-bar, plastic, fibre glass, redundant cabling, various metals, ceramics, glass, wood and macadam. No demolished structures were observed.

Natural strata at the location of the former tip area was recorded as sandy gravelly clays, gravelly sands and gravelly clayey silt (weathered mudstone) with a thickness of between 0.2 m and 2.6 m and a maximum depth of 4.3 mbgl. Mudstone bedrock was encountered at depths of 2.2 mbgl, 3.6 mbgl and 4.3 mbgl with a maximum unproven depth of 10 mbgl.

Technical Area

Within the main site area the majority of surface cover comprised concrete hardstanding. Exploratory locations were largely positioned over grass covered soft standing, although two locations featured macadam surface cover with a sub-base of brick fragments and concrete gravel.

Within the technical area, made ground was encountered in the majority of exploratory holes and was typically recorded to depths of between 0.1 mbgl and 1.6 mbgl with made ground occasional identified to 2.8 mbgl. Made ground largely comprised gravelly clay, silty gravelly sand and gravelly silt. Gravel (including a variable cobble content) consisted of mudstone, sandstone, brick, wood, plastic, rare ceramics, glass, clinker, metal fragments, bitumen, tile, and concrete.

Natural strata within the Technical Area comprised sand and gravel drift, Glacial Till consisting of firm gravelly clays with cobble of mudstone, and silty gravel or gravelly clay identified as weathered mudstone. The superficial deposits were encountered generally between the existing ground level and 6 mbgl and ranged in thickness between 0.2 m and 5 m. Drift deposits in the western most side of the Technical Area (Motor Transport (MT) area) comprised Glacial Till at 0.7 mbgl underlain by sandy gravel to a depth of 8.2 mbgl which ties into BGS geological mapping. Mudstone and sandstone bedrock was encountered from 0.4 mbgl to 8.2 mbgl.

NAVFAC pipeline

Surface cover comprised grass. Made ground was recorded to depths of between 0.7 mbgl and 1 mbgl in five exploratory holes along the NAVFAC pipeline route. This material was consistent with the surrounding natural strata so was previously considered to be reworked natural as no anthropogenic constituents were recorded.

Drift deposits were encountered at three locations across the pipeline and comprised variable sands, gravels and clays.

Groundwater



The previous Phase 2 LQA encountered groundwater within the drift deposits in the Technical Area and north of the Technical Area. Drift deposits were recorded to be dry within the airfield. Groundwater was present within all monitoring standpipes installed within the mudstone bedrock.

The Technical area slopes downhill in a south westerly direction. Perched groundwater within perched deposits range between 109.43 m AOD and 92.2 m AOD and the indicative flow direction is considered to be influenced locally by topography and is generally in a southerly direction.

Groundwater levels in the mudstone bedrock were consistent over the monitoring rounds and levels ranged between 106.44 m AOD and 92.65 m AOD across the site, with an indicative general groundwater flow direction to the east.

Groundwater flow across the Technical Area trends in a south easterly direction.

The 2015 Amec Foster Wheeler targeted groundwater and vapour assessment and recorded groundwater strikes at between 5 mbgl and 6.5 mbgl, with groundwater rising to between 4.2 mbgl and 5.3 mbgl after 20 minutes.

Groundwater levels recorded during the monitoring exercise following the GI were consistent with the previous site investigations and ranged between 97.89 m AOD and 105.45 m AOD.

Ground Hazards

The Site is not located in an area requiring a mining search (information obtained from the Coal Authority online Interactive Map²).

The Envirocheck Report identified 'no hazard' across the Site in respect of compressible and ground dissolution. Risks associated with landslide, running sand, shrinking or swelling clay, and collapsible ground were identified as 'very low' with areas of the site featuring 'No hazard'.

The Site is in an area of elevated radon potential with 10-30% of properties above the action level for which installation of basic radon protection measures is recommended in dwellings across parts of the Site.

6.2 Hydrology

Table 6.2 provides a summary of surface water features in the vicinity of the Site.

Water courses Distance / Direction from site	River Quality	Surface Water Abstractions	Potential for Baseflow	Potential to Receive Runoff	Sensitivity Assessment
The Site is constructed on a topographical high within the local area. A number of springs are located around the periphery of the Site, which feed unnamed streams flowing away from each of the site boundaries.	An unnamed stream forms a tributary of the Brandy Brook at a distance of 1.8 km southeast of the Site. The Water Framework Directive River Basin Management Plan records the current chemical status of the Brandy Brook as good and the ecological potential as moderate (overall status moderate). Two springs adjacent to the western site boundary form surface water courses that converge and eventually discharge into St Brides Bay approximately 4 km southwest of the Site. These unnamed	2 within 1 km, closest 428 m to the west	High – The surface water courses are likely to be in hydraulic continuity with groundwater beneath the Site. Groundwater was observed to be high during previous ground investigations and the groundwater flow was assessed to be flowing outwards from the centre of the Site owing to its position on an elevated plateau.	Low- Predominance of soft surface cover in the airfield will promote water infiltration. Surface water within the technical area likely to be captured within existing site drainage system or will infiltrate through areas of soft landscaping.	High- Springs and unnamed surface water steams present in close proximity to the boundaries of the Site. Two surface water abstractions within 1 km of the Site have the potential to be in hydraulic continuity with groundwater beneath the Site.

² https://mapapps2.bgs.ac.uk/coalauthority/home.html



watercourses are not assessed under the Water Framework Directive.			
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Table 6.2 - Hydrology

6.3 Flood Risk

Table 6.3 provides a review of data from the Envirocheck Report and the Natural Resources Wales (NRW) Flood Map for Planning and the NRW Flood Risk Assessment Map.

Flood Risk Zone	Flood Defence/ Alleviations	Flood Risk Assessment	Control of Run off	Sensitivity Assessment
The greater majority of the Site lies within Flood Zone 1, indicating a very low risk of flooding from rivers (including small watercourses) of 0.1% annual probability (1 in 1000 year event). There are smaller areas that fall within Flood Zone 2 (0.1% to 1% annual probability), and flood Zone 3 (>1% annual probability). These areas are associated with existing water courses and field drains.	None	None required	Incidental rainfall / drainage from the site will be directed to the ground. The surrounding topography is not steep. Surface water falling on the runways appears to drain towards the north-eastern end of the runway trending northeast-southwest.	Low
Areas of the Site are indicated to have potential for groundwater flooding. There is potential for groundwater flooding to occur to property below ground level in the southern area of the airfield and the central area of the Technical Area. The western extent of the Technical Area and parts of the southern area and north-eastern area of the airfield have limited potential for groundwater flooding to occur. There are small areas within the Technical Area and the southern and north-eastern area of the airfield that may be at risk of groundwater flooding at the surface.	None	None required	Incidental rainfall / drainage from the site will be directed to the ground. The surrounding topography is not steep. Surface water falling on the runways appears to drain towards the north-eastern end of the runway trending northeast-southwest.	Low

Table 6.3 – Flood Risk

The Sweco site reconnaissance was undertaken during a period of very wet weather. Heavy rainfall occurred during the reconnaissance and likely during the preceding several days. Sweco observed areas of ground adjacent to the runways to be saturated with water and surface water was seen to be collecting at the northern end of the longest runway. Undeveloped ground to the north appeared to be saturated, with surface water pooling evident.

6.4 Ecology & Sensitive Land Use

Table 6.4 provides a summary of ecology and sensitive land uses based on a review of designated habitats or sensitive ecological features recorded within 1 km of the Site.

Ecological Site / Sensitive Land Use

Sensitivity Assessment



Ecological Receptors	High The Site is located approximately 650 m northeast of the St David's Peninsula Coast Site of Special Scientific Interest (SSSI), the Ramsey and St David's Peninsula Coast Special Protection Area (SPA) and St David's Special Area of Conservation (SAC). The Site is approximately 750 m northeast of the Pembrokeshire Marine SAC and West Wales Marine Protected Area (MPA)/SAC. The Site is located within the Pembrokeshire Coast National Park. The Site can potentially support a number of protected species of flora and fauna. A population of skylarks are present on site which has been considered the largest in Wales. National Trust manage wild ponies that are left to graze on the undeveloped western areas of the Site.
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Table 6.4 - Ecology & Sensitive Land Use

6.5 Archaeological Sensitivity

Table 6.5 provides a review of data from the Historic Wales portal for historic environment information. The assessment of sensitivity in Table 6.5 is specifically with respect to impacts from potential contamination at the Site.

Archaeological Site	Sensitivity Assessment	
Brawdy Airfield is included in the National Monuments Record of Wales.		
The National Monuments Record of Wales includes the following within the Site:	Madagata Madagata astantial for demonstrate analysis alle	
•De Havilland Sea Vampire (Air crash site)	Moderate Moderate potential for damage to archaeologically significant artefacts on the development site. The presence of	
Medieval fishpond site- Rickeston Manor (in the location of the former Old OWI (1 of 3).	artifacts on site cannot be discounted.	
Post-medieval agricultural fields associated with the farm Ty llwyd.		
The Welsh Archaeological Trust lists a number of features located within the Site.		
Former location of standing stones:		
Parc Y Garreg Wen (bronze age standing stone)		
Parc Carreg (bronze age standing stone)		
Stone (unnamed)		
Sites of post-Medieval and Medieval buildings:	Moderate – Moderate potential for damage to archaeologically	
Rickeston Mediaeval Manor House	significant artefacts on the development site. The presence of	
Broadway (post-medieval cottage)	artifacts on site cannot be discounted.	
Mutton Hill (post-medieval mansion)		
Rhwle (Post-medieval cottage)		
Cross Wen (post-medieval cottage)		
Court Fach medieval settlement/post-medieval settlement		
Clawdd Bwi (Post-Medieval cottage)		

Table 6.5 - Archaeological Setting

Summary

In respect of potential impact from possible sources of contamination (if proven to be present), the Site is considered to be located in a *High* sensitivity setting with respect to surface water and *Low-Moderate* sensitivity setting with respect to groundwater.



- The Site is in **Low** sensitivity setting with respect to flooding.
- The Site is in a *High* sensitivity area with respect to potential impacts on ecological receptors from contamination.
- The Site is in a *Moderate* sensitivity areas with respect to potential impacts on archaeological receptors.



7 Environmental Risk Assessment

7.1 Introduction

Risk assessment is a process by which the actual or potential risks posed by identified hazards to specific receptors is estimated. In the context of this study, hazards relate to sources, or potential sources of contamination capable of causing harm. Receptors are the entity, which may be at risk of adverse effects from the hazard and include human health, surface waters, groundwater, ecological systems, buildings and services. In order for a hazard to present a risk to a receptor they must be linked by an exposure pathway.

This source-pathway-receptor model is considered best practice methodology to evaluate environmental risks arising from potential land contamination, according to DEFRA³ and Environment Agency⁴ guidance documentation (adopted by Natural Resources Wales in February 2021). Details of the methodology adopted for determining the site specific risks is presented in Appendix I.

In accordance with the adopted methodology, the classification terms of potential risk are used to reflect both the probability of an event occurring and the magnitude of possible effects. The definitions of 'potential consequence' and 'likelihood' are also given in Appendix I.

7.2 Conceptual Site Model

A conceptual 'source-pathway-receptor' model has been developed for the Site based upon evaluation of information described in the preceding chapters. The conceptual model is presented diagrammatically in Drawings 65200861-CAWDOR_LQ_Stg1_LQA_03 and 65201348-CAWDOR_LQ_Stg1_LQA_04 and described below. It has been generated on the proposed new development on site, which is considered as a continuation of the current designation of commercial land use.

7.2.1 Potential Contaminant Sources

Based on the information obtained in this Phase 1 LQA, the following potential contaminant sources have been identified:

Potential Source	Associated Feature	Potential Contaminants
On Site		
Source 1- Old BFI, BFI 1, BFI 2 and NAVFAC BFI (airfield)	Old BFI Former bulk fuel storage in six tanks with unspecified capacities. Installation decommissioned in 1993. BFI 1 Former bulk fuel storage across the Site in ten 54,500 litre above ground tanks and one circular tank (772,000 litres). Tanks removed. BFI 2 Former bulk fuel storage in two semi-buried tanks with a combined volume of 1.5 million litres. One above ground Plant Dieso tank (8,000 litre), one Slops tank (5,5000 litres) Facility decommissioned in 1997 NAVFAC BFI Former bulk fuel storage in six underground tanks (330,000 litre combined capacity). Facility decommissioned in 1997	Hydrocarbons Likely aviation turbine fuel (AVTUR including AVTUR F34 FSii) but may have stored aviation gasoline (AVGAS) containing more volatile hydrocarbons and tetraethyl lead/ tetramethyl lead

³ DEFRA Guidelines for Environmental Risk Assessment and Management, Revised Departmental Guidance, November 2011.

⁴ EA, Land Contamination Risk Management (LCRM), How to Manage the Risks from Land Contamination, October 2020



Potential Source	Associated Feature	Potential Contaminants
Source 2- Former FTA	Brick and concrete 'tank-like' structure. Some associated infrastructure present on site.	Hydrocarbons (fuels and oils), PAHs and perfluoroalkyl and polyfluoroalkyl substances (PFASs)

Potential Source	Associated Feature	Potential Contaminants
On Site		
Source 3- Former Fuel Bowser parking	Eleven fuel bowsers historically parked in this area with a combined capacity of 115,000 litres.	Hydrocarbons AVTUR F34 FSii AVGAS DIESO MT CIVGAS F50
Source 4- Former tip/burning area	Tipping of various inert wastes. Potential burning of wastes may have occurred in this area.	Metals, hydrocarbons, solvents, asbestos, PCBs
Source 5- NAVFAC BFI pipeline	Former fuel pipeline connecting onsite NAVFAC BFI with off-site NAVFAC facility. Potential for 15,700 litres of diesel oil to be retained within the pipeline.	Hydrocarbons Diesel oil
Source 6- Current BFI/ POL Point	Bulk fuel storage and storage of paints, oils and lubricants.	Hydrocarbons Diesel oil solvents
Source 7- Historical POL points and former above and below ground fuel storage tanks, and small former fire training area located within the technical area/barracks area	Historical POL points (two Historic NAVFAC (US) POL points, Former building 27/28 POL point, Former POL Point south of Building 5). Former above and below ground storage tanks Storage of fuel, including at the former cinema, former engine (ardour house), site boiler house	Hydrocarbons
Source 8- Known asbestos contaminated area	Areas of known asbestos contamination.	Asbestos
Source 9- Former electricity distribution substations	Former electricity substations within the Technical Area/Barracks and airfield.	Hydrocarbons PCBs
Source 10- Redundant OWIs	Former OWIs in the airfield.	Hydrocarbons Diesel oil
Source 11- Aircraft parking, airfield use and crashes	Historical use of the airfield and associated infrastructure.	Hydrocarbons Aviation fuel Solvents
Source 12- Infilled quarries/gravel pits, linear mound at the end of the runway trending SSW to NNE.	Former quarries and pits within the airfield	Metals, hydrocarbons, asbestos and ground gas
Off Site		



Potential Source	Associated Feature	Potential Contaminants
Sourced 13- Former Brawdy Farm sand pit	Former sand pit.	Ground gases

Table.1 - Potential Contaminant Sources

The areas of potential contamination are shown on Drawing 65200861-CAWDOR LQ Stg1 LQA 02.

A number of current explosive and ammunition stores are present on site. Since these materials are stored and managed appropriately, they are not considered to present a source that requires further consideration in this risk assessment.

A number of COSHH stores are present on site. Since these materials are stored in small quantities and well managed appropriately, they are not considered to present a source that requires further consideration in this risk assessment.

Given the size and complexity of the Site, a number of individual sources have been combined (e.g. former BFI within the airfield, and current and former above and below ground fuel storage tanks). In these cases, the likelihood and consequence of exposure are considered to be generally the same resulting in the same potential risks from all sources grouped together.

7.2.2 Potential Pathways

The principal exposure pathways pertinent to the Site are described below:

- diffusion through drinking water pipes;
- direct contact with or ingestion of contaminated soil, soil derived dust or groundwater;
- inhalation of potentially contaminated soil derived dust;
- inhalation of soil and groundwater vapours and ground gases indoors and outdoors;
- inhalation of asbestos fibres;
- leaching and vertical migration of contaminants from the unsaturated made ground to the underlying glaciofluvial deposits (Secondar A Aquifer) and solid geology of the Lingula Flags, Triffleton Group Sandstone and Ramsey Sound Group (Secondary B Aquifer);
- migration of NAPL or contaminated groundwater;
- migration via site drainage;
- migration via surface run-off;
- direct contact of buildings and services with potentially contaminated soil, and;
- build up of potentially hazardous ground gas in confined spaces and explosion;

7.2.3 Potential Receptors

Receptors may include humans, animal or plant population, or natural or economic resources within the range of the contaminant source which are connected to the source by a known pathway, as discussed below.

Receptor	Description
Onsite personnel	Operational staff
Onsite residents (with gardens)	Married quarters used by site personnel and their families.



Onsite (and offsite) farmers	Farmers access the airfield to cut the grass to produce silage for livestock. This silage is stored on the airfield. The Site is in a predominantly agricultural setting and therefore surrounding land use can include agricultural fields.
Offsite commercial workers	Workers at the Brawdy Business Park.
Offsite residents	Residents living at the adjacent Rickeston Hall
Offsite amenity users	Offsite users of the adjacent Newgale Lodge holiday lets and Park Hall Village camp site.
Glaciofluvial Deposits: Secondary A Aquifer Lingula Flags, Triffleton Group Sandstone and Ramsey Sound Group solid geology: Secondary B Aquifer	Groundwater within the glaciofluvial deposits and solid geology which underlies the Site.
Surface Water (unamed surface water courses adjacent to the Site)	A series of unnamed water courses are located within close proximity to the boundaries of the Site.
On site flora and fauna	Protected species have been identified on the Site.
Buildings and buried services	In addition, sensitive heritage assets have been identified which have the potential to be impacted by contamination.

Table 7.2 - Receptor Description

Construction workers during redevelopment and future maintenance activities have not been considered as a receptor in this risk assessment. It is assumed that any redevelopment works undertaken on the Site will be subject to appropriate risk assessments and use of PPE, therefore potential risks will be mitigated.

7.3 Risk Estimation

The most significant potential environmental risks identified (classified as moderate/low or greater) based on historical use and current site conditions are summarised in Table 7.3. A full assessment of all environmental risk scenarios is presented in Appendix I.

Potential Source	Receptors (Potential) / Consequence of hazard-receptor linkage	Pathways (Potential) / Likelihood of hazard- receptor linkage	Risk Level
Source 1 Old BFI and former BFI 1, BFI 2, and NAVFAC BFI Source 2 Former FTA	Humans (onsite personnel) – Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Humans (Onsite farmers)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Humans (offsite residents) - Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Humans (off site amenity users) - Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors. Inhalation of vapours migrating in groundwater and accumulating indoors - Low likelihood	Moderate / Low
	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater - Likely	Moderate



Potential Source	Receptors (Potential) / Consequence of hazard-receptor linkage	Pathways (Potential) / Likelihood of hazard- receptor linkage	Risk Level
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Likely	Moderate
	Flora and fauna- Medium	Uptake by plant roots and direct contact, ingestion and inhalation of contaminated soil/dust/contaminated waters by invertebrates, birds, mammals, reptiles, and amphibians- Low likelihood	Moderate / Low
Source 3 Former fuel bowser parking	Humans (onsite personnel) – Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Humans (Onsite farmers)-Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Humans (offsite residents)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Humans (offsite amenity users)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater - Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low
	Flora and fauna- Medium	Uptake by plant roots and direct contact, ingestion and inhalation of contaminated soil/dust/contaminated waters by invertebrates, birds, mammals, reptiles, and amphibians- Low likelihood	Moderate / Low
Source 4 Former tip/burning area	Humans (Onsite personnel)-Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Humans (Onsite farmers)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Humans (Offsite amenity users)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and via accumulation indoors	Moderate / Low
	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology)- Medium	Leaching/ migration via groundwater- Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow- Low likelihood	Moderate / Low



Potential Source	Receptors (Potential) / Consequence of hazard-receptor linkage	Pathways (Potential) / Likelihood of hazard- receptor linkage	Risk Level
	Flora and Fauna	Uptake by plant roots and direct contact, ingestion and inhalation of contaminated soil/dust/contaminated waters by invertebrates, birds, mammals, reptiles, and amphibians- Low likelihood	Moderate / Low
Source 5 NAVFAC BFI pipeline	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater- Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low
Source 6 Current BFI/ POL Point (technical area)	Humans (Onsite personnel)-Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Humans (offsite residents)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Humans (Offsite amenity users)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and via accumulation indoors	Moderate / Low
	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater - Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low
Source 7 Historical POL Points and former above and below ground tanks, and small former fire training area (technical area/ barracks)	Humans (onsite personnel) – Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Humans (onsite residents with gardens)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater - Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low
Source 10 Redundant OWIs	Humans (onsite personnel) – Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Humans (offsite residents)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low

OFFICIAL



Potential Source	Receptors (Potential) / Consequence of hazard-receptor linkage	Pathways (Potential) / Likelihood of hazard- receptor linkage	Risk Level
	Humans (Offsite amenity users)- Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors and through accumulation indoors - Low likelihood	Moderate / Low
	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater - Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low
	Flora and Fauna- Medium	Uptake by plant roots and direct contact, ingestion and inhalation of contaminated soil/dust/contaminated waters by invertebrates, birds, mammals, reptiles, and amphibians- Low likelihood	Moderate / Low
	Human (onsite personnel)-Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
Source 11 Aircraft parking,	Humans (onsite farmers)-Medium	Ingestion, dermal contact, inhalation of soil derived dust and vapours outdoors - Low likelihood	Moderate / Low
airfield use and crashes	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology)-Medium	Leaching / migration via groundwater - Low likelihood	Moderate / Low
	Surface water (Unnamed surface water streams)-Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low
Source 12 Infilled quarries/	Groundwater (Superficial Secondary A Aquifer and Secondary B Aquifer within solid geology) – Medium	Leaching / migration via groundwater - Low likelihood	Moderate / Low
gravel pits	Surface water (Unnamed surface water streams) - Medium	Via site drainage and baseflow – Low likelihood	Moderate / Low

Table 7.3 – Summary of Risk Assessment – Current and continuation of Commercial Land Use



8 Overall Land Quality & Suitability for Use

The overall land quality assessment based on the available information is summarised below.

Based upon information obtained and reviewed as part of this LQA, it is considered that widespread significant contamination across the Site is *Unlikely* to have occurred as a result of historical land use activities undertaken across the wider site area. Localised sources of potential soil and groundwater contamination have been identified to be present which include former bulk fuel installations, former fire training areas, former fuel storage tanks, former burning area and tip, ESA, infilled quarries, a former fuel bowser parking area, and an asbestos contaminated area. Additionally, areas of made ground (including mounds potentially containing demolition materials) are present across the Site. Contaminants of concern include metals, hydrocarbons, inorganic and organic compounds, PCBs, explosive residues, PFASs, and asbestos containing materials (ACM)s.

In view of the above, the risk to current and future site users (assuming continuation of the current commercial land use) and other identified off-site human health receptors under current site conditions from potential ground contamination in respect of all of the identified potential sources of contamination has been assessed as **moderate/low** at the highest.

The risk to groundwater and surface water under current and future site conditions (assuming continuation of the current commercial land use) in respect of all the identified potential sources of contamination has been assessed as *moderate* at the highest. This reflects the previous targeted groundwater investigation and risk assessment undertaken at the site.

For any redevelopment scenario, disturbance of shallow soils is likely to occur. Soil disturbance may increase risks to human health from exposure to potential contaminated made ground material, including possible hydrocarbons, metals, explosive residues, paints, lubricants and oils, radiological materials and ACMs at the Site. During demolition and construction phases of any redevelopment control measures such as undertaking and adhering to site specific risk assessments and method statements and wearing appropriate PPE will need to be implemented to mitigate the risk to site workers.

Whilst not a contaminated land consideration, part of the southern area of the airfield falls within a Mineral and Quarry Sites Buffer (Brawdy Farm sandpit) which may place restrictions on development within this area and further consultation with the Local Planning Authority is recommended.



9 References

Historical Reports:

- 1. Entec. February 2011. Cawdor Barracks, Pembrokeshire. Land Quality Assessment. Phase 1: Desk Study Report.
- 2. Amec. February 2012. Cawdor Barracks, Pembrokeshire. Phase 2: Intrusive Survey Report.
- 3. Amec Foster Wheeler. July 2015. Cawdor Barracks- Targeted Groundwater and Vapour Assessment LQA Report.

Reference Text:

Guidance documents

- CIRIA. 2001. C552 Contaminated Land Risk Assessment, A Guide to Good Practice.
- Environment Agency. October 2020. Land contamination risk management (LCRM)
- DEFRA. April 2012. Contaminated Land Environmental Protection Act 1990, Part IIA, Contaminated Land Statutory Guidance

Site Setting Information:

- BGS Onshore Geoindex (https://mapapps2.bgs.ac.uk/geoindex/home/html) Accessed January 2023
- BGS Map Sheet 209- St David's
- MAGIC Mapping (https://magic.defra.gov.uk/magicmap.aspx) Accessed January 2023
- Lle A Geo-Portal for Wales (https://lle.gov.wales/home) Accessed January 2023
- Natural Resources Wales. Flood Map for Planning (https://flood-map-for-planning.naturalresources.wales/). Accessed January 2023.
- Natural Resources Wales. Flood Risk Management Map (https://naturalresources.wales/flooding/check-your-flood-risk-on-a-map-flood-risk-assessment-wales-map/?lang=en). Accessed January 2023.
- Welsh Government Historic Aerial Photography Unit (http://aerialphotos.wales.gov.uk/).
 Accessed January 2023.
- PCC, 2013. Pembrokeshire County Council Local Development Plan

Site Information Sources:

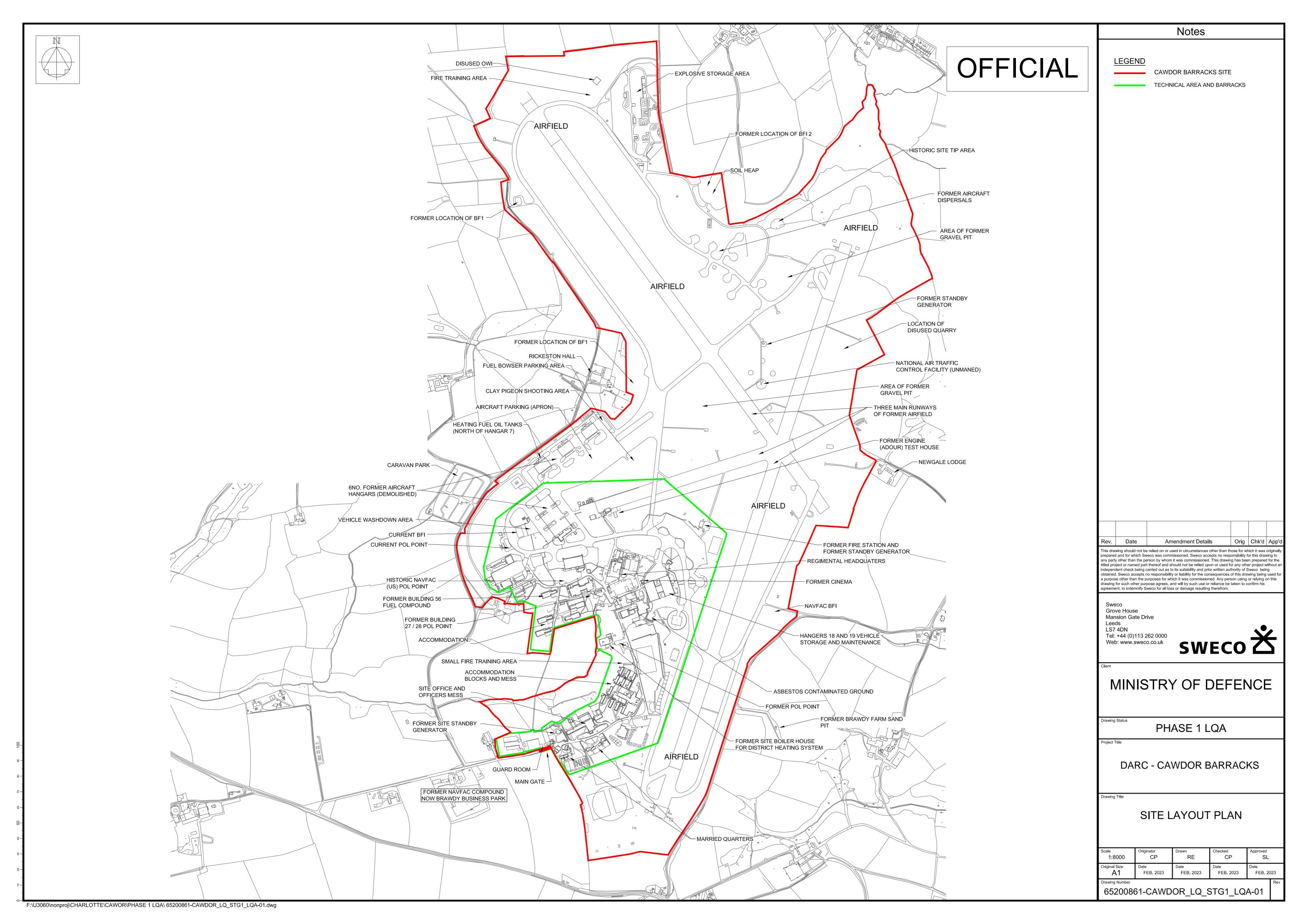
- Major LG Tosh (Quartermaster 14 Signal Regiment), Sgt J Godden
- Summary of UXO Estate Intelligence. July 2019.
- Dstl. July 2020. Radiological Records Search: Cawdor Barracks, Pembrokeshire.

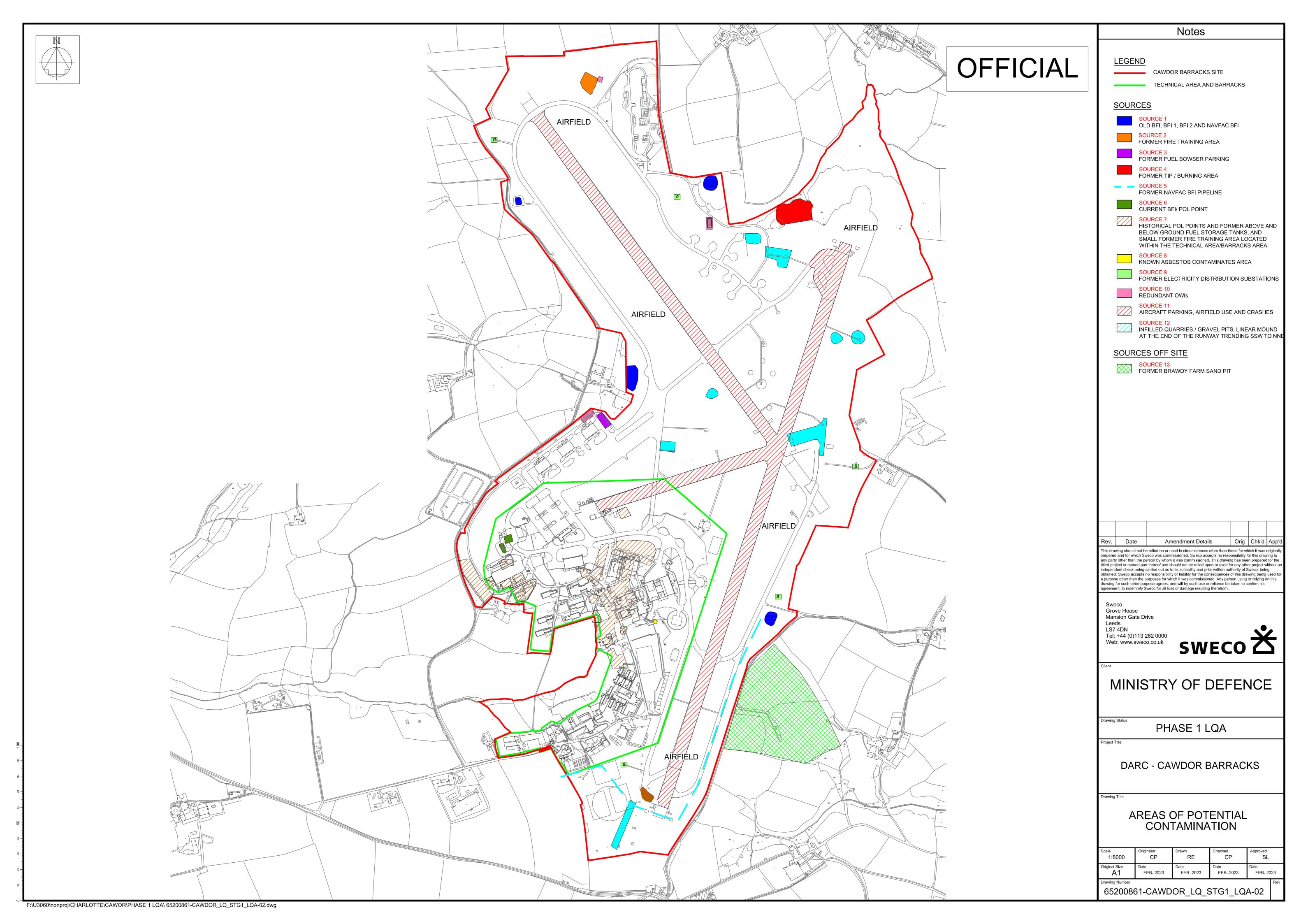
Historical OS Maps and Environmental Information:

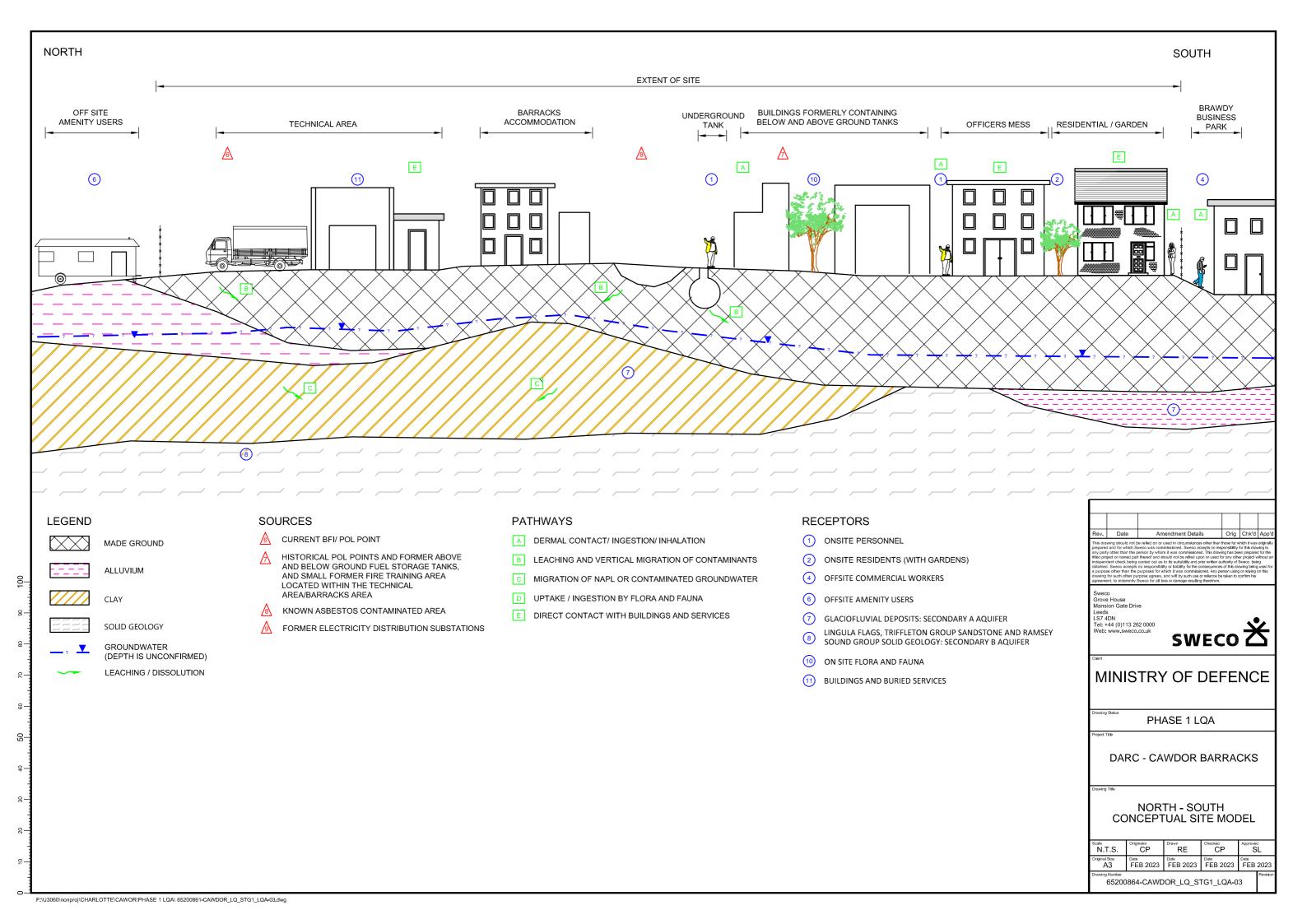
Landmark Envirocheck Report (Reference 305022956 1 1)

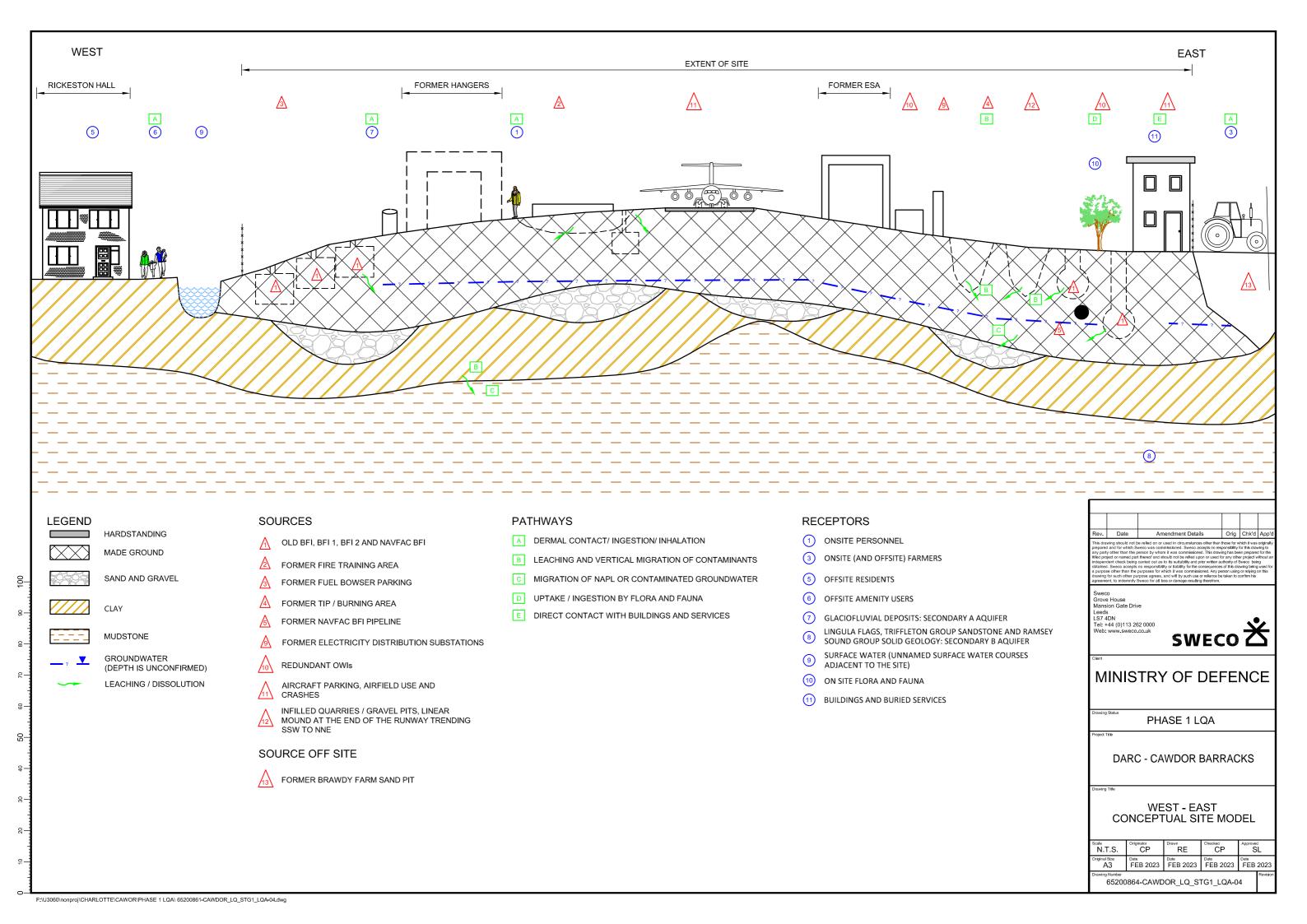


Drawings











Appendix A – Phase 1LQA Methodology

APPENDIX A - METHODOLOGY AND APPROACH

1.1 Methodology

PHASE 1 LAND QUALITY ASSESSMENT

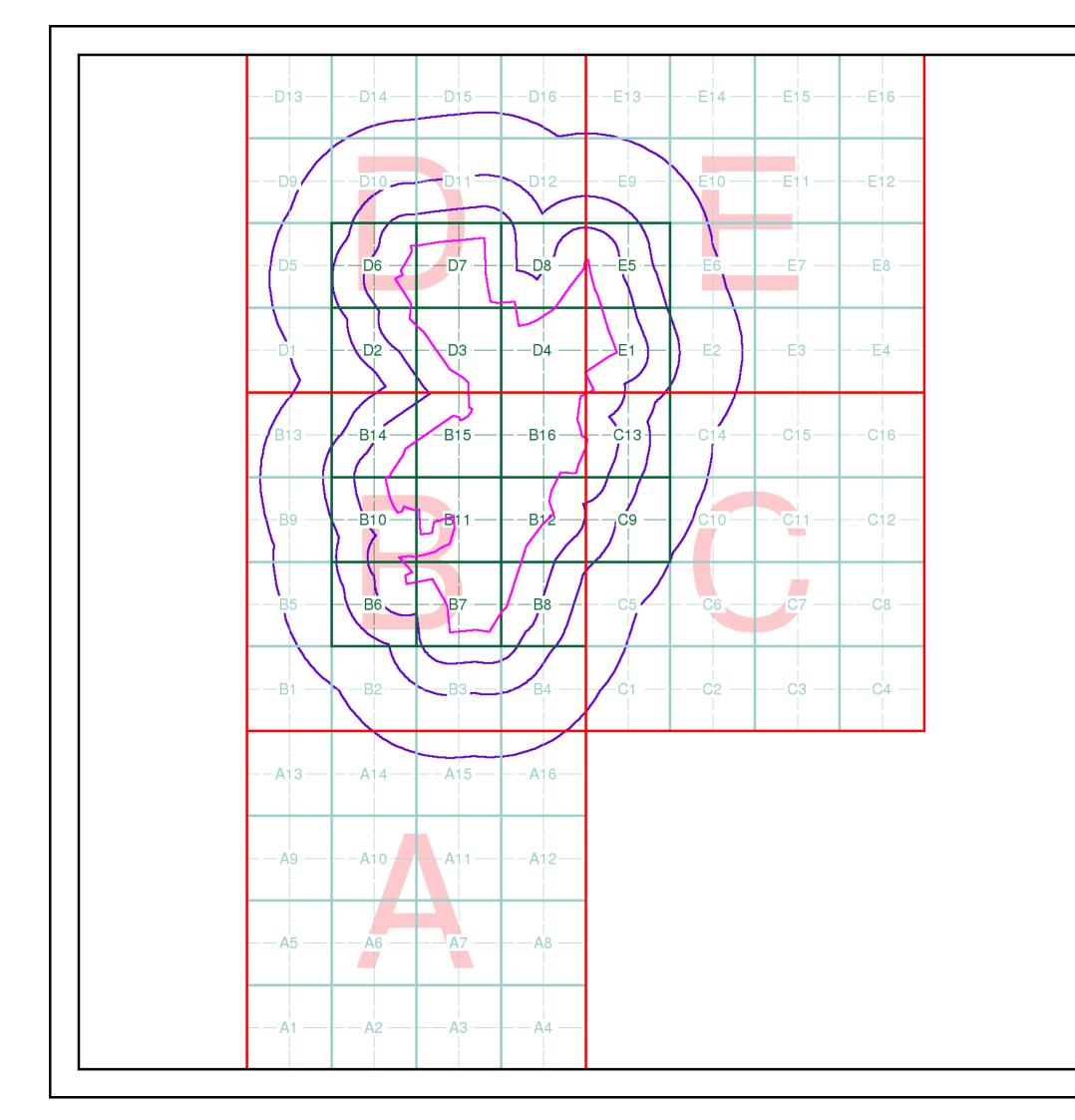
In order to achieve the objectives of the study the following tasks have been completed as summarised below:

- Information requests to *facility representatives* identified as being available personnel most familiar with current/former site operations, in order to obtain background information;
- Undertaking a site reconnaissance encompassing adjoining and nearby properties;
- Researching *local geological records* (soil conditions), and available hydrogeological studies from published sources;
- Obtaining available environmental data from environmental regulators via third party data providers;
- Obtaining relevant information from MOD's Defence Science Technical Laboratories
 (DSTL) regarding any radiological materials held at the site;
- Reviewing the history of site use to identify possible previous activities/site layouts that might have led to the presence of contamination;
- Preparing LQA reports summarising our observations and relating to the apparent environmental conditions at the site;
- Producing a Conceptual Site Model (CSM) describing potential sources, pathways and receptors relevant to the site and
- Completing a *qualitative risk assessment* to determine the potential land quality risks associated with the identified pollutant linkages.





Appendix B – Landmark Envirocheck Report



SWECO 🕇

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

Slice

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

Seament

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

Quadrant

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

A selection of organisations who provide data within this report:







Envirocheck reports are compiled from 136 different sources of data.

Client Details

Ms C Bithell, Sweco Services UK Ltd, Grove House, Mansion Gate Drive, Leeds, LS7 4DN

Order Details

Order Number: 305022956_1_1
Customer Ref: 65208061
National Grid Reference: 184960, 225220
Site Area (Ha): 308.46

Search Buffer (m): 1000

Site Details

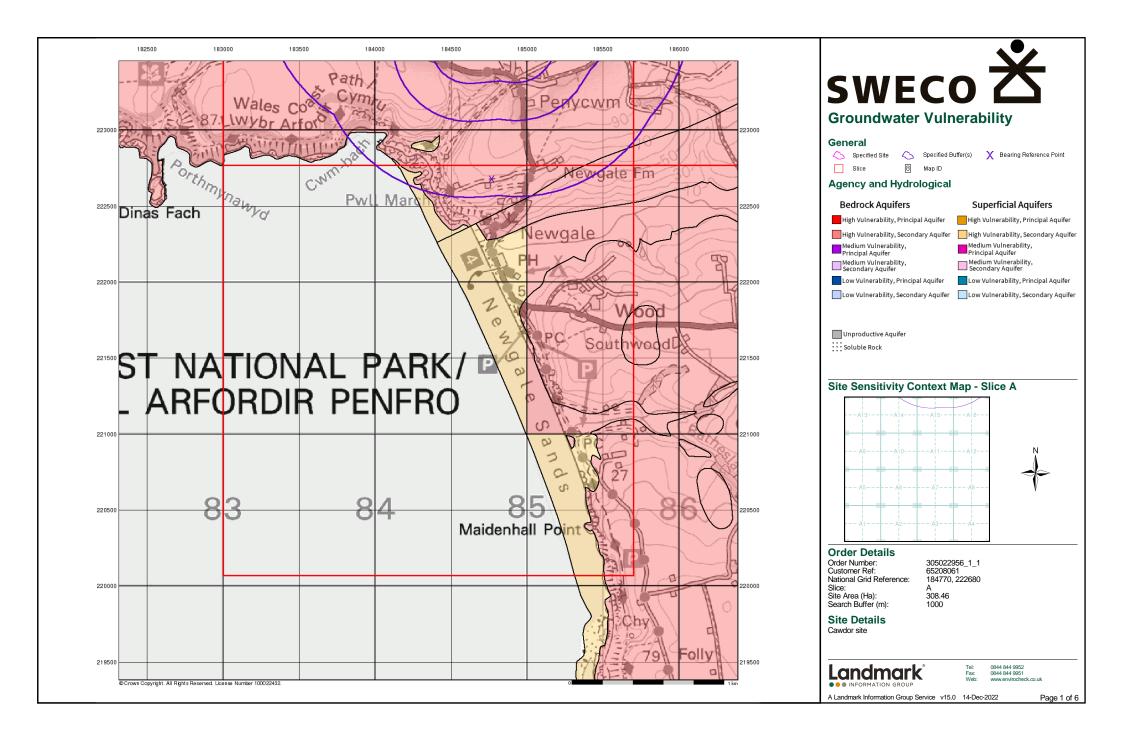
Cawdor site

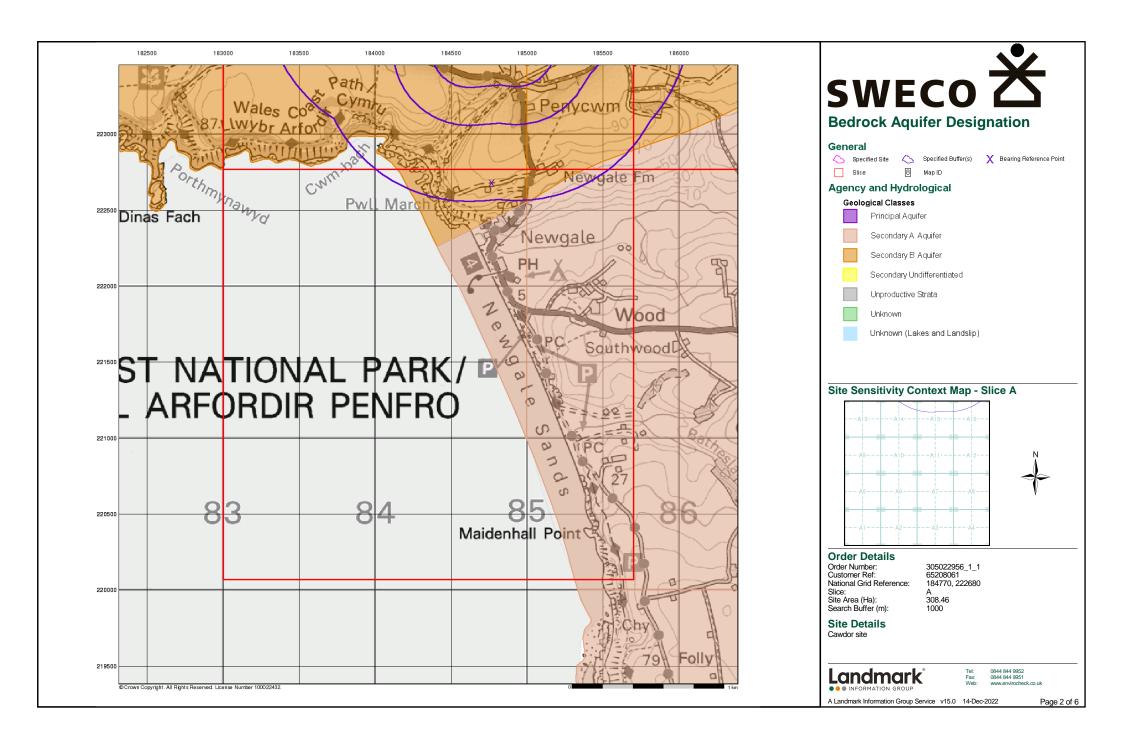
Full Terms and Conditions can be found on the following link: http://www.landmarkinfo.co.uk/Terms/Show/515

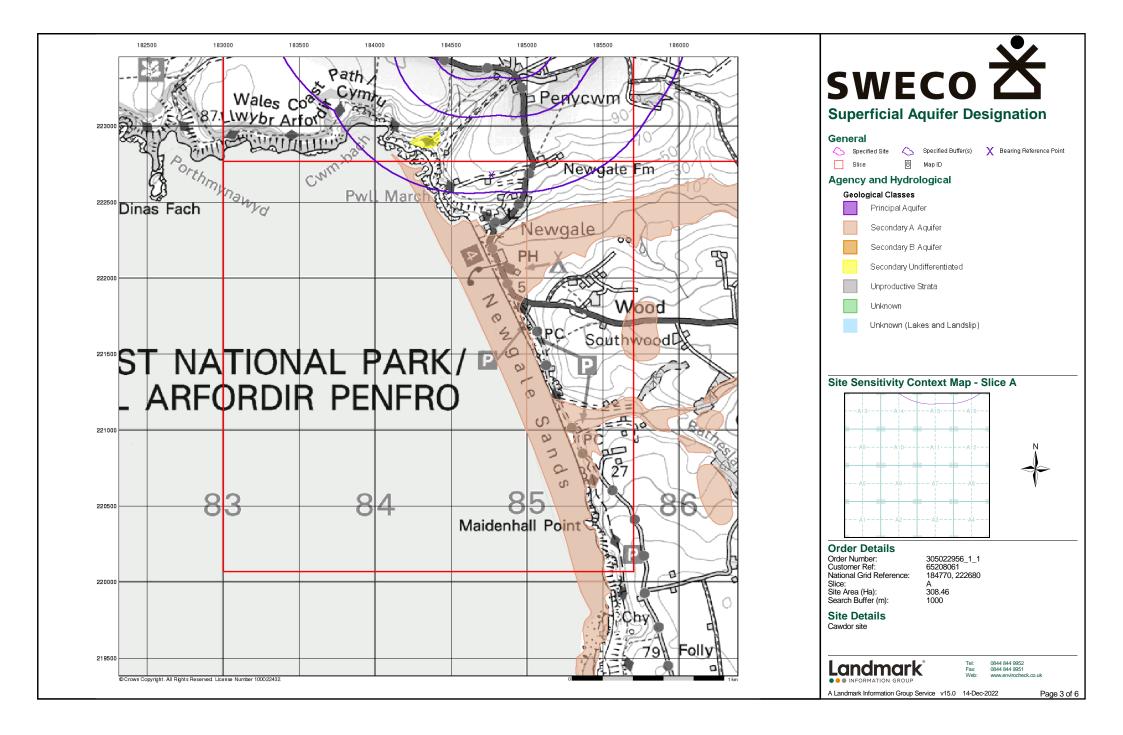


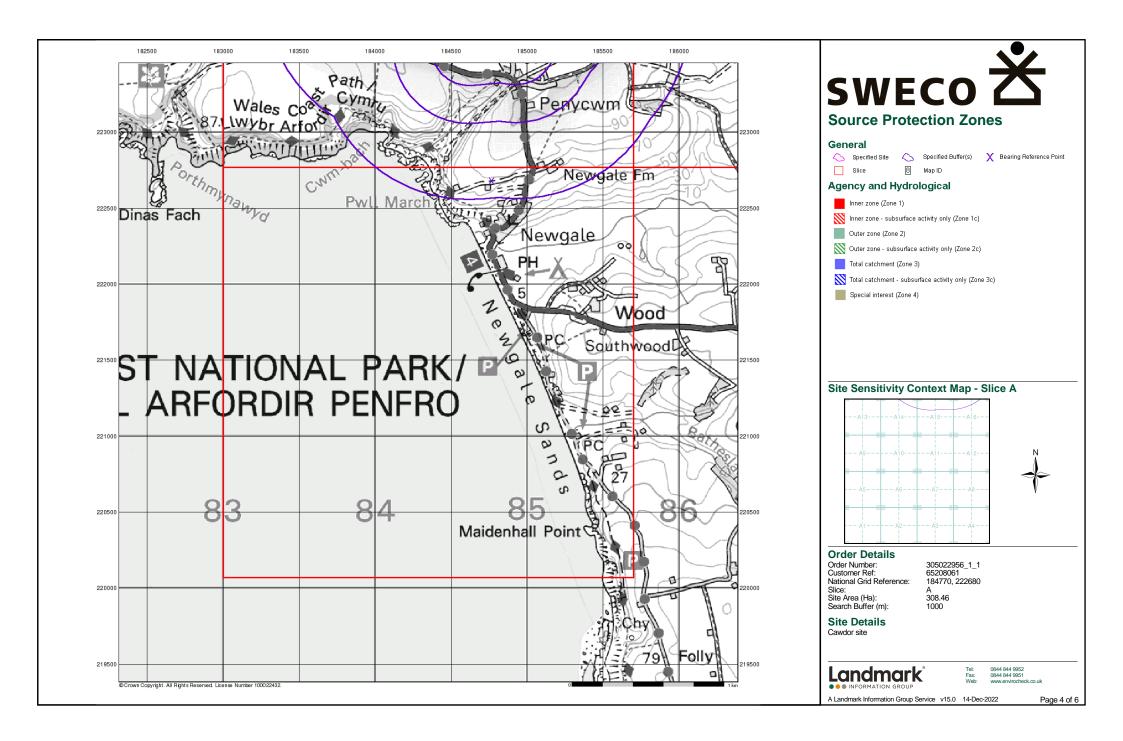
Tel: 0844 844 9952 Fax: 0844 844 9951 Web: www.envirocheck.co.uk

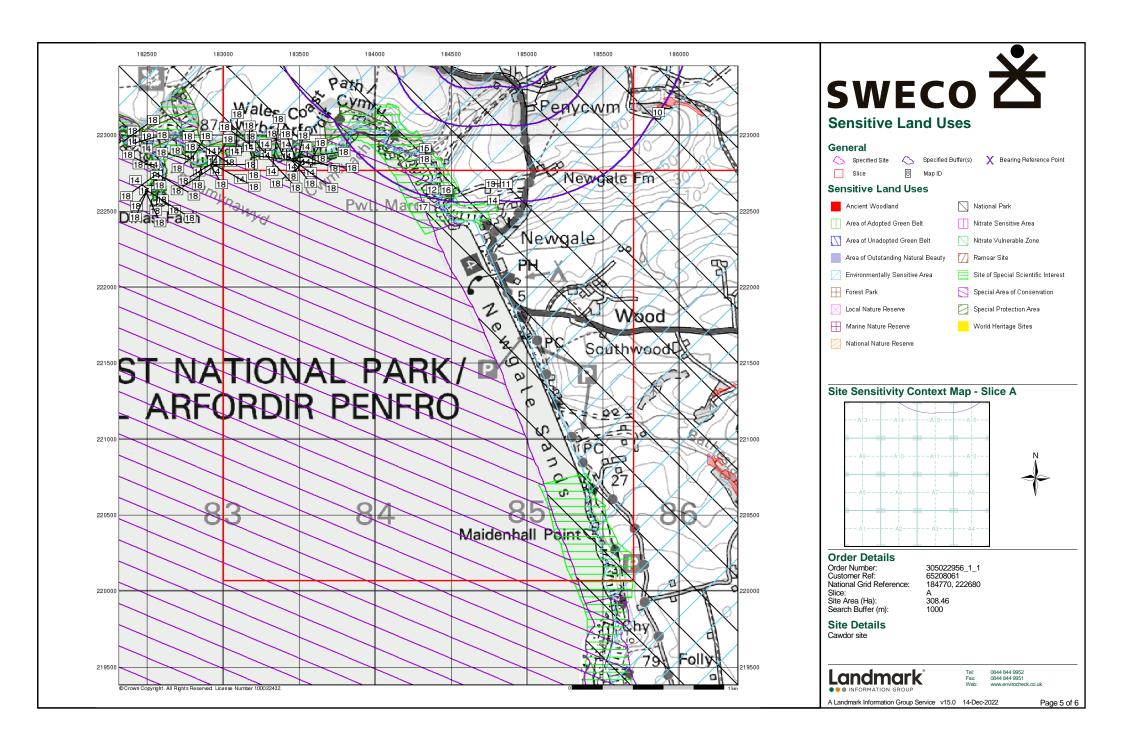
A Landmark Information Group Service v50.0 14-Dec-2022 Page 1 of 1

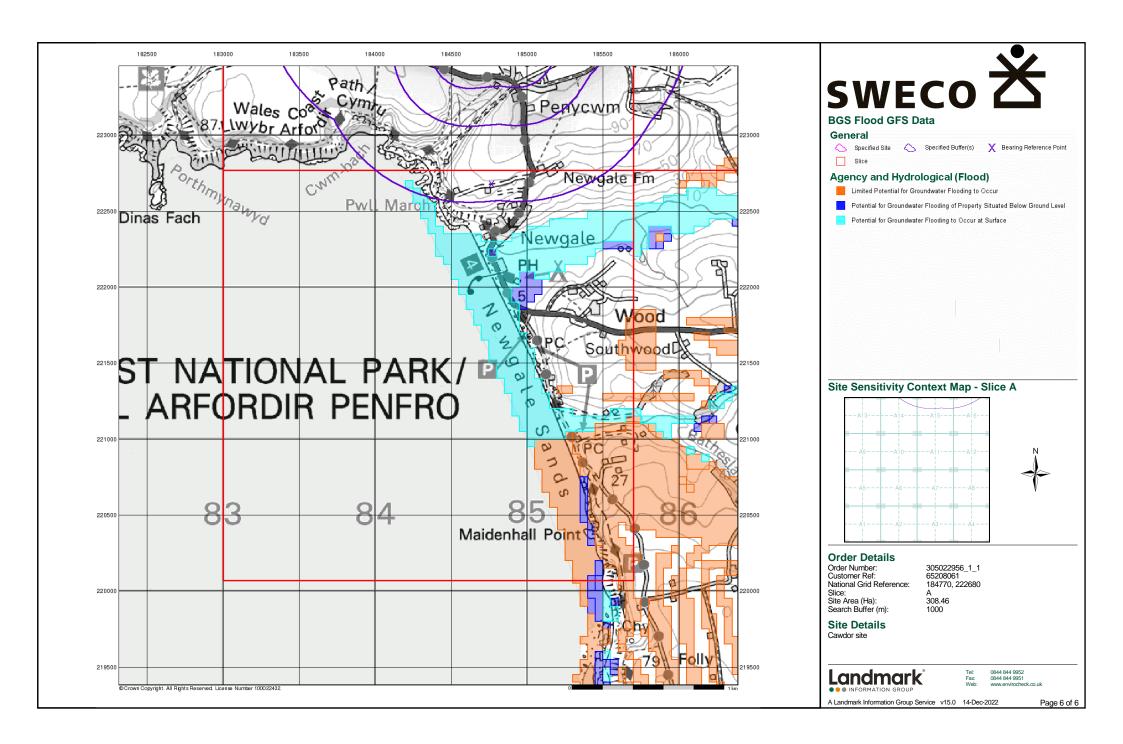














Envirocheck® Report:

Datasheet

Order Details:

Order Number:

305022956_1_1

Customer Reference:

65208061

National Grid Reference:

184770, 222680

Slice:

Α

Site Area (Ha):

308.46

Search Buffer (m):

1000

Site Details:

Cawdor site

Client Details:

Ms C Bithell Sweco Services UK Ltd Grove House Mansion Gate Drive Leeds LS7 4DN





Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	5
Hazardous Substances	-
Geological	6
Industrial Land Use	-
Sensitive Land Use	8
Data Currency	9
Data Suppliers	13
Useful Contacts	14

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

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

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Report Version v53.0





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





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 5	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 6	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 6				1
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 6	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 6	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 6	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards				n/a	n/a
Radon Potential - Radon Affected Areas	pg 6	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries					
Fuel Station Entries					
Gas Pipelines					
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland	pg 8				1
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas	pg 8	1			1
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks	pg 8		1		
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest	pg 8				1
Special Areas of Conservation	pg 8				3
Special Protection Areas	pg 8				1
World Heritage Sites					

Order Number: 305022956_1_1 Date: 14-Dec-2022 rpr_ec_datasheet v53.0 A Landr



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent		4.515			405000
1	-	The Occupier Undefined Or Other Chalet Frena Newgale Hill Hfdwest, Newgale Hill, Haverfordwest Natural Resources Wales Not Supplied Bn0005901 1 18th October 1967 18th October 1967 2nd July 1994 Unspecified Not Supplied Underground Strata Consent expired Located by supplier to within 100m	A15NE (E)	967	2	185000 222600
	Nearest Surface Wa	ter reature	A15NW (W)	771	-	184405 222737
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr & Mrs P Gwyther 22/61/2/0060 100 Crow Cwm Stream At Lower Llethr, Penycwm Natural Resources Wales General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied Not Supplied Not Supplied 101 April 31 October 31st March 2005 Not Supplied Located by supplier to within 10m	(E)	1843	2	186590 222720
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	P.T & M Gwyther 22/61/2/0060 Not Supplied Location Description Not Available Environment Agency, Welsh Region General Agriculture: Spray Irrigation - Storage Not Supplied Surface Not Supplied 12000 Crow Cwm Stream At Lower Llethr; Penycwm Not Supplied Located by supplier to within 100m	(E)	1843	3	186590 222720
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr & Mrs P.T & M Gwyther 22/61/2/0060 Not Supplied Land At Brawdy Farm Natural Resources Wales General Agriculture: Spray Irrigation - Storage Water may be abstracted from any point within an area Surface Not Supplied Located by supplier to within 10m	(E)	1843	2	186590 222720



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority:	Mr & Mrs P.T & M Gwyther 22/61/2/0060 Not Supplied Land At Brawdy Farm Natural Resources Wales	(E)	1843	2	186590 222720
	Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start:	Mineral Products: General use relating to Secondary Category (High Loss) Water may be abstracted from any point within an area Surface Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied				
	Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Not Supplied Not Supplied Not Supplied Located by supplier to within 10m				
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy: Water Abstractions	Mr & Mrs P Gwyther 22/61/2/0060 100 Crow Cwm Stream At Lower Llethr, Penycwm Natural Resources Wales General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied Licenced from 01-Apr to 31-Oct 04 January 10 July 31st March 2005 Not Supplied Approximate location provided by supplier	(E)	1845	2	186590 222715
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3):	Mr & Mrs P Gwyther 22/61/2/0060 100 Crow Cwm Stream At Lower Llethr, Penycwm Natural Resources Wales Mineral Products: General Use(High Loss) Water may be abstracted from a single point Surface Not Supplied Not Supplied	(E)	1850	2	186595 222715
	Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Licenced from 01-Apr to 31-Oct 01 April 31 October 31st March 2005 Not Supplied Approximate location provided by supplier				
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Mr G D Lovegrove 22/61/2/0036 Not Supplied Location Description Not Available Environment Agency, Welsh Region Spray Irrigation Not Supplied Surface 100 7201 Brandy Brook Not Supplied	(E)	1869	3	186400 222410



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map					
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability High	(N)	0	2	184767 223000
	Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index:	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year <40%				
	Superficial Patchiness: Superficial	<90% <3m				
	Thickness: Superficial Recharge:	No Data				
	Groundwater Vulne	rability Map				
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability High	(NE)	0	2	185000 223000
	Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution:	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness: Superficial	<40% <90% <3m				
	Thickness: Superficial Recharge:	No Data				
	Bedrock Aquifer De Aquifer Designation:	signations Secondary Aquifer - B	A15NE (E)	0	2	185000 222680
	Bedrock Aquifer De Aquifer Designation:	signations Secondary Aquifer - B	A15NE (W)	0	2	184767 222680
	Superficial Aquifer No Data Available	Designations				
	Extreme Flooding for None	rom Rivers or Sea without Defences				
	None	rs or Sea without Defences				
	Areas Benefiting fro					
	None	e Areas				
	None OS Water Network	linac				
2	Water Network I Watercourse Form: Watercourse Length Watercourse Level: Permanent: Watercourse Name: Catchment Name: Primacy:	Inland river : 134.0 On ground surface True	(E)	773	4	185313 222822
3	OS Water Network Watercourse Form: Watercourse Length Watercourse Level: Permanent: Watercourse Name: Catchment Name: Primacy:	Inland river : 280.4 On ground surface True	A16NW (E)	853	4	185089 222723



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.4 Watercourse Level: Underground True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	A16NW (E)	894	4	185329 222764
5	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 63.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	A16NW (E)	896	4	185329 222762
6	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 19.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	A16NE (E)	959	4	185367 222711
7	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 227.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	A16NW (E)	960	4	185166 222633
8	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 113.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	A16NW (E)	978	4	185320 222657





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR	
	Local Authority La	ndfill Coverage					
	Name:	Pembrokeshire County Council - Has supplied landfill data		0	5	184767 222680	





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Soli		4.0	_	_	
	Description:	Lower Cambrian Rocks (Undifferentiated)	(N)	0	1	184683 222891
9	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Penduffryn Newgale, St Davids, Pembrokeshire British Geological Survey, National Geoscience Information Service 188810 Opencast Ceased Unknown Operator Not Supplied Cambrian Menevian Group Common Clay and Shale Located by supplier to within 10m	A15NE (E)	863	1	184935 222701
	Coal Mining Affecte	d Areas not be affected by coal mining				
	Non Coal Mining Ar	· · · · · · · · · · · · · · · · · · ·				
	Risk: Source:	Highly Unlikely British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	185000 222680
	Non Coal Mining Ar Risk: Source:	eas of Great Britain Highly Unlikely British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	185000 222680
	Potential for Compi Hazard Potential: Source:	essible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Hazard Potential: Source:	essible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	185000 222680
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	185000 222680
	Potential for Lands Hazard Potential: Source:	ide Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Potential for Runnii Hazard Potential: Source:	ng Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	185000 222680
	Potential for Runnii Hazard Potential: Source:	ng Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Potential for Shrink Hazard Potential: Source:	ing or Swelling Clay Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A15NE (W)	0	1	184767 222680
	Radon Potential - R Affected Area: Source:	adon Affected Areas The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	184850 222680
	Radon Potential - R Affected Area: Source:	adon Affected Areas The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	185000 222680
		adon Protection Measures No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	A15NE (E)	0	1	184850 222680



Geological

ı	Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
		Radon Potential - R	adon Protection Measures				
			No radon protective measures are necessary in the construction of new dwellings or extensions	A15NE (E)	0	1	185000 222680
		Source:	British Geological Survey, National Geoscience Information Service				



Sensitive Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	Ancient Woodland Name: Reference: Area(m²): Type:	Not Supplied 4710 8906.03 Ancient and Semi-Natural Woodland	(NE)	967	2	185866 223151
11	Environmentally Se Name: Multiple Areas: Total Area (m2): Source:	Preseli (decommissioned) Y 1187932672 The National Assembly for Wales, GI Services (Department of Planning & Countryside)	A15NE (W)	0	7	184767 222680
12	Environmentally Se Name: Multiple Areas: Total Area (m2): Source:	Preseli (decommissioned) Y 484.375 The National Assembly for Wales, GI Services (Department of Planning & Countryside)	A15NW (W)	931	7	184381 222643
13	National Parks Name: Multiple Area: Area (m2): Source: Status: Designation Date:	Pembrokeshire Coast Y 187013417.05 Natural Resources Wales Fully Designated - designated as a National Park 31st December 1951	A15NE (W)	140	2	184767 222680
14	Sites of Special Sci Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Details: Designation Date: Date Type:	entific Interest St. Davids Peninsula Coast Y 6858510.94 Natural Resources Wales 108832wtj Mixed Biological And Geological 1st January 1954 Notified	A15NE (S)	597	2	184780 222569
15	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	St Davids / Ty Ddewi Y 9398841.84 Natural Resources Wales UK0013045 Designated	(NW)	674	2	184332 222914
16	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	Pembrokeshire Marine / Sir Benfro Forol Y 1380663657.51 Natural Resources Wales Uk0013116 Designated	A15NW (W)	746	2	184473 222637
17	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	West Wales Marine / Gorllewin Cymru Forol Y 7377173853.81 Natural Resources Wales UK0030397 Designated	A14NE (W)	832	2	184322 222527
18	Special Protection A Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Areas Ramsey And St Davids Peninsula Coast Y 8462392.96 Natural Resources Wales Uk9014062 24th July 1996	(NW)	674	2	184332 222914



Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Natural Resources Wales	June 2020	Annually
Pembrokeshire County Council - Public Protection Division	September 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - Welsh Region	August 2014	Quarterly
Natural Resources Wales	October 2022	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Welsh Region	March 2013	
ntegrated Pollution Controls		
Environment Agency - Welsh Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - Welsh Region	January 2021	Quarterly
Natural Resources Wales	October 2022	Quarterly
	October 2022	Quarterly
Local Authority Integrated Pollution Prevention And Control	Navarah ar 2045	Mariable
Pembrokeshire County Council - Environmental Health Department	November 2015	Variable
Local Authority Pollution Prevention and Controls		
Pembrokeshire County Council - Environmental Health Department	November 2015	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Pembrokeshire County Council - Environmental Health Department	November 2015	Variable
Nearest Surface Water Feature		
Ordnance Survey	October 2022	
Pollution Incidents to Controlled Waters		
Environment Agency - Welsh Region	December 1998	
Prosecutions Relating to Authorised Processes		
Environment Agency - Welsh Region	July 2015	
Natural Resources Wales	July 2015	
	54.9 20.0	
Prosecutions Relating to Controlled Waters Environment Agency - Welsh Region	March 2013	
Natural Resources Wales	March 2013	
	Walch 2013	
Registered Radioactive Substances		
Natural Resources Wales	January 2015	A
Environment Agency - Welsh Region	June 2016	As notified
Substantiated Pollution Incident Register		
Environment Agency Wales - South West Area	January 2021	Quarterly
Natural Resources Wales	October 2022	Quarterly
Water Abstractions		
Environment Agency - Welsh Region	October 2022	Quarterly
Natural Resources Wales	October 2022	Quarterly
Water Industry Act Referrals		
Environment Agency - Welsh Region	October 2017	
Natural Resources Wales	October 2022	Quarterly
Groundwater Vulnerability Map		
Natural Resources Wales	June 2018	As notified
Bedrock Aquifer Designations	1 1 1 2 2 1 2	
Natural Resources Wales	January 2018	Annually
	January 2010	Ailliually
Superficial Aquifer Designations		
Natural Resources Wales	January 2018	Annually
Source Protection Zones		
Natural Resources Wales	July 2022	Annual Rolling Update
Extreme Flooding from Rivers or Sea without Defences		
Natural Resources Wales	September 2020	



Agency & Hydrological	Version	Update Cycle
Flooding from Rivers or Sea without Defences Natural Resources Wales	September 2020	
Areas Benefiting from Flood Defences		
Natural Resources Wales	November 2019	Quarterly
Flood Water Storage Areas Natural Resources Wales	August 2019	Quarterly
Flood Defences Natural Resources Wales	November 2019	Quarterly
OS Water Network Lines Ordnance Survey	October 2022	Quarterly
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified
Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites Natural Resources Wales	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Welsh Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)	Garidary 2000	Trot / tppiloabio
Natural Resources Wales	October 2021	Quarterly
Environment Agency Wales - South West Area	October 2022	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency Wales - South West Area	July 2021	Quarterly
Natural Resources Wales	July 2022	Quarterly
Local Authority Landfill Coverage Pembrokeshire County Council - Environmental Health Department	February 2003	Not Applicable
Local Authority Recorded Landfill Sites Pembrokeshire County Council - Environmental Health Department	October 2018	
Registered Landfill Sites		
Environment Agency Wales - South West Area	March 2006	Not Applicable
Registered Waste Transfer Sites Environment Agency Wales - South West Area	April 2018	
Registered Waste Treatment or Disposal Sites Environment Agency Wales - South West Area	June 2015	
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	January 2022	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Pembrokeshire Coast National Park Authority - Development Control	February 2016	Variable
Pembrokeshire County Council - Planning Department	October 2015	Variable
Planning Hazardous Substance Consents Pembrokeshire Coast National Park Authority - Development Control Pembrokeshire County Council - Planning Department	February 2016 October 2015	Variable
Pembrokeshire County Council - Planning Department	October 2015	Variable



Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	November 2022	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	
Cheshire Brine Subsidence Compensation Board (CBSCB)	November 2020	As notified
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	September 2022	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	September 2022	Annually
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	October 2022	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	August 2022	Quarterly
Gas Pipelines		
National Grid	October 2021	Bi-Annually
Underground Electrical Cables		
National Grid	May 2021	Bi-Annually



Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural Resources Wales	September 2018	Bi-Annually
Areas of Adopted Green Belt		
Pembrokeshire Coast National Park Authority - Development Control	July 2022	Quarterly
Pembrokeshire County Council	July 2022	Quarterly
Areas of Unadopted Green Belt		
Pembrokeshire Coast National Park Authority - Development Control	July 2022	Quarterly
Pembrokeshire County Council	July 2022	Quarterly
Areas of Outstanding Natural Beauty		
Natural Resources Wales	August 2022	Bi-Annually
Environmentally Sensitive Areas		
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Pembrokeshire County Council	August 2018	Bi-Annually
Marine Nature Reserves		
Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves		
Natural Resources Wales	February 2022	Bi-Annually
National Parks		
Natural Resources Wales	February 2018	Annually
Nitrate Vulnerable Zones		
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	April 2016	
Natural Resources Wales	July 2019	Bi-Annually
Ramsar Sites		
Natural Resources Wales	July 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural Resources Wales	March 2020	Bi-Annually
Special Areas of Conservation		
Natural Resources Wales	August 2020	Bi-Annually
Special Protection Areas		
Natural Resources Wales	August 2018	Bi-Annually





A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo		
Ordnance Survey	Map data		
Environment Agency	Environment Agency		
Scottish Environment Protection Agency	SEP Scottish Environment Protection Agency		
The Coal Authority	The Coal Authority		
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL		
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL		
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales		
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE		
Natural England	NATURAL ENGLAND		
Public Health England	Public Health England		
Ove Arup	ARUP		
Stantec UK Ltd	Stantec		



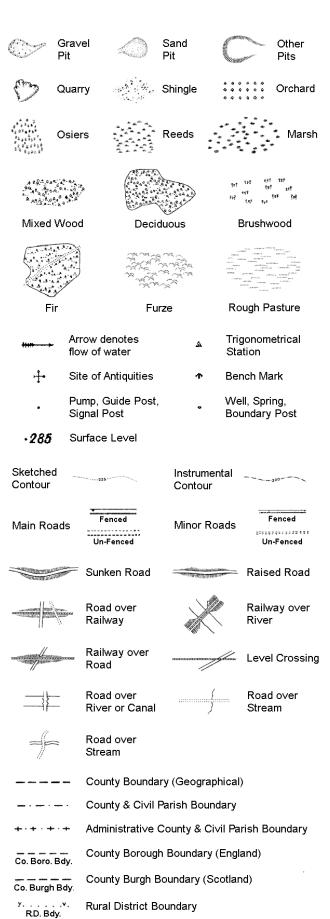
Useful Contacts

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Environment Agency - National Customer Contact Centre (NCCC)	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
	PO Box 544, Templeborough, Rotherham, S60 1BY	
4	Ordnance Survey	Telephone: 03456 05 05 05
	Adanac Drive, Southampton, Hampshire, SO16 0AS	Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Pembrokeshire County Council - Environmental Health Department	Telephone: 01437 764551 Fax: 01437 775838 Website: www.pembrokeshire.gov.uk
	Public Protection Division, Pembrokeshire County Council, County Hall, Haverfordwest, Pembrokeshire, SA61 1TP	·
6	The Coal Authority - Property Searches	Telephone: 0345 762 6848
	200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	The National Assembly for Wales - GI Services (Department of Planning & Countryside)	Telephone: 02920 825111 Website: www.wales.gov.uk
	Yr Hen Ysgol Gymraeg, Alexandria Road, Aberystwyth, Ceredigion, SY23 1LD	
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk
	Chilton, Didcot, Oxfordshire, OX11 0RQ	Website: www.ukradon.org
-	Landmark Information Group Limited	Telephone: 0844 844 9952
	Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Historical Mapping Legends

Ordnance Survey County Series 1:10,560



····· Civil Parish Boundary

Ordnance Survey Plan 1:10,000

		halk Pit, Clay Pit r Quarry	0000000	Gravel Pit
	s s	and Pit	(、 Disused Pit ✓ or Quarry
Ì	1101	efuse or lag Heap	((()	Lake, Loch or Pond
	D	unes		Boulders
	W 1. \(\bar{V} \)	oniferous rees	$\varphi \varphi \varphi$	Non-Coniferous Trees
	ф ф Oral	nard no s	Scrub	∖Yn/ Coppice
	ក្រា Brad	ken www.h	Heath '	、 , , , , Rough Grassland
	— <u>ب</u> د Mar	sh wY//, F	Reeds	<u>⊶್</u> Saltings
	Build		on of Flow of	Shingle
	∰ Glas	shouse	·	Sand
	Slop	ing Masonry -	Pylon Pole • -	ElectricityTransmissionLine
	Cutting	Road Level	Foot	
	Under ————	Over Crossin	g Bridge	Siding, Tramway or Mineral Line
				→ Narrow Gauge
3		Geographical Cour	nty	
		Administrative Cou or County of City	ınty, County I	Borough
		Municipal Borough Burgh or District C		ural District,
		Borough, Burgh or Shown only when not		
		Civil Parish Shown alternately who	en coincidence	of boundaries occurs
	Ch Churc CH Club I F E Sta Fire E	louse ngine Station	PO PC PH	Police Station Post Office Public Convenience Public House
	FB Foot E Fn Fount	_		Signal Box Spring
			•	- -

GP

MP

Guide Post

Mile Post

TCB

TCP

Telephone Call Box

Telephone Call Post

1:10,000 Raster Mapping

(EB)	Gravel Pit		Refuse tip or slag heap
	Rock	3 3	Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle	Mud	Mud
Sand	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,	• • • • • •	Ci∨il, parish or community boundary
	Metropolitan, London Borough boundary		Constituency boundary
۵ ⁰	Area of wooded vegetation	۵ ^۵	Non-coniferous trees
<i>۵</i>	Non-coniferous trees (scattered)	**	Coniferous trees
*	Coniferous trees (scattered)	Ö	Positioned tree
ф ф ф ф	Orchard	* *	Coppice or Osiers
aTr,	Rough Grassland	www.	Heath
On_	Scrub	7 <u>₩</u> ۲	Marsh, Salt Marsh or Reeds
6	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)
← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)	\boxtimes	Pylon, flare stac or lighting tower
+	Site of (antiquity)		Glasshouse
	General Building		Important

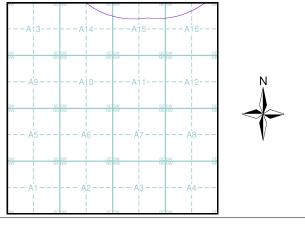
General Building

Building

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:10,560	1888	2
Pembrokeshire	1:10,560	1908	3
Pembrokeshire	1:10,560	1953	4
Ordnance Survey Plan	1:10,000	1964	5
Ordnance Survey Plan	1:10,000	1979	6
10K Raster Mapping	1:10,000	2000	7
Street View	Variable		8

Historical Map - Slice A



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184770, 222680 Slice: 308.46

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Search Buffer (m): 1000

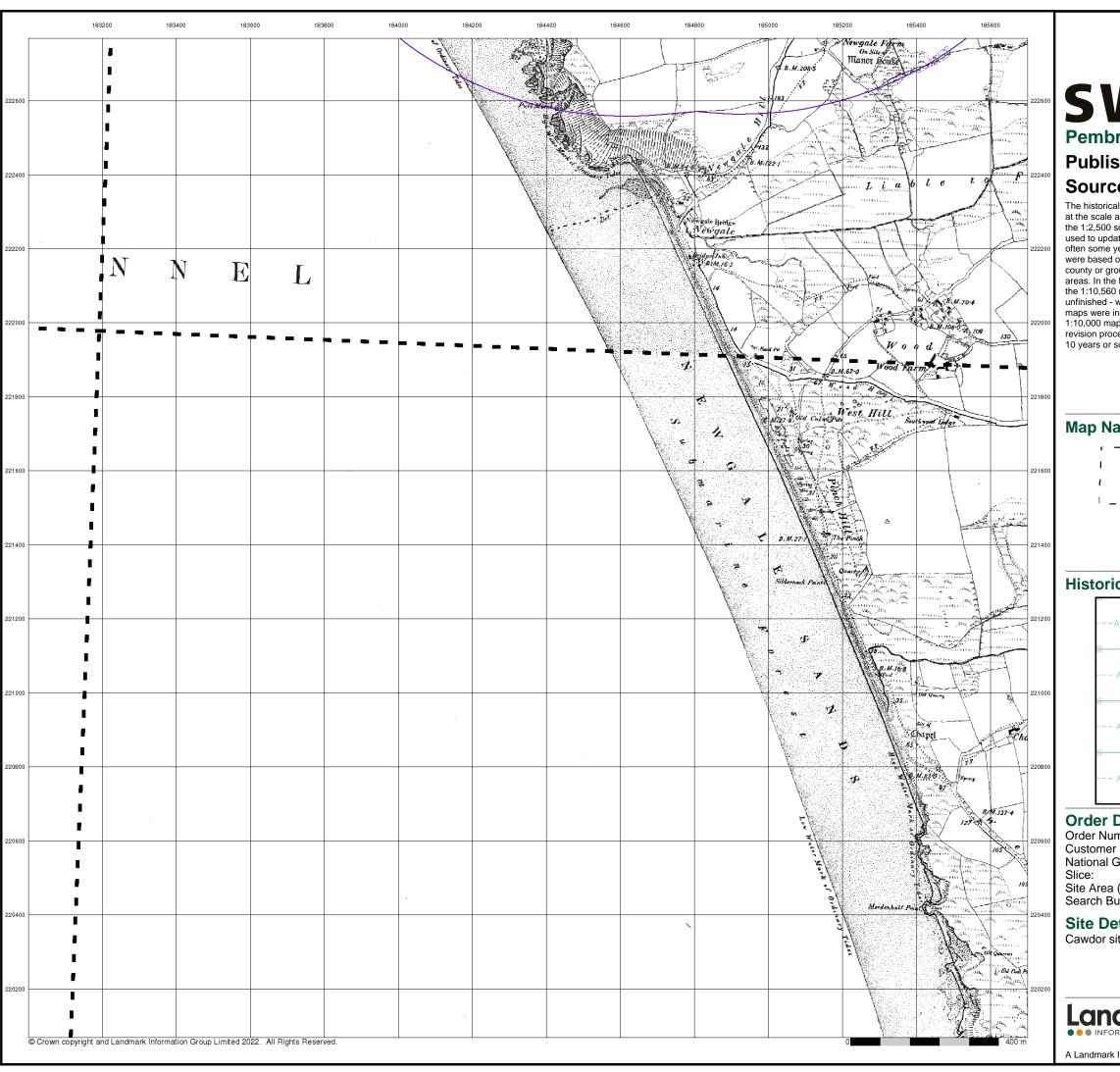
Site Details

Cawdor site



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A Landmark Information Group Service v50.0 14-Dec-2022 Page 1 of 8



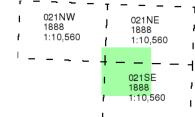
SWECO Z

Published 1888

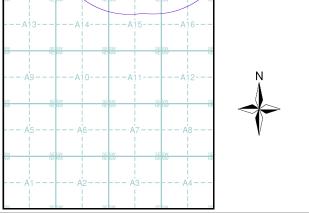
Source map scale - 1:10,560

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)



Historical Map - Slice A



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184770, 222680

Site Area (Ha): Search Buffer (m): 308.46 1000

Site Details

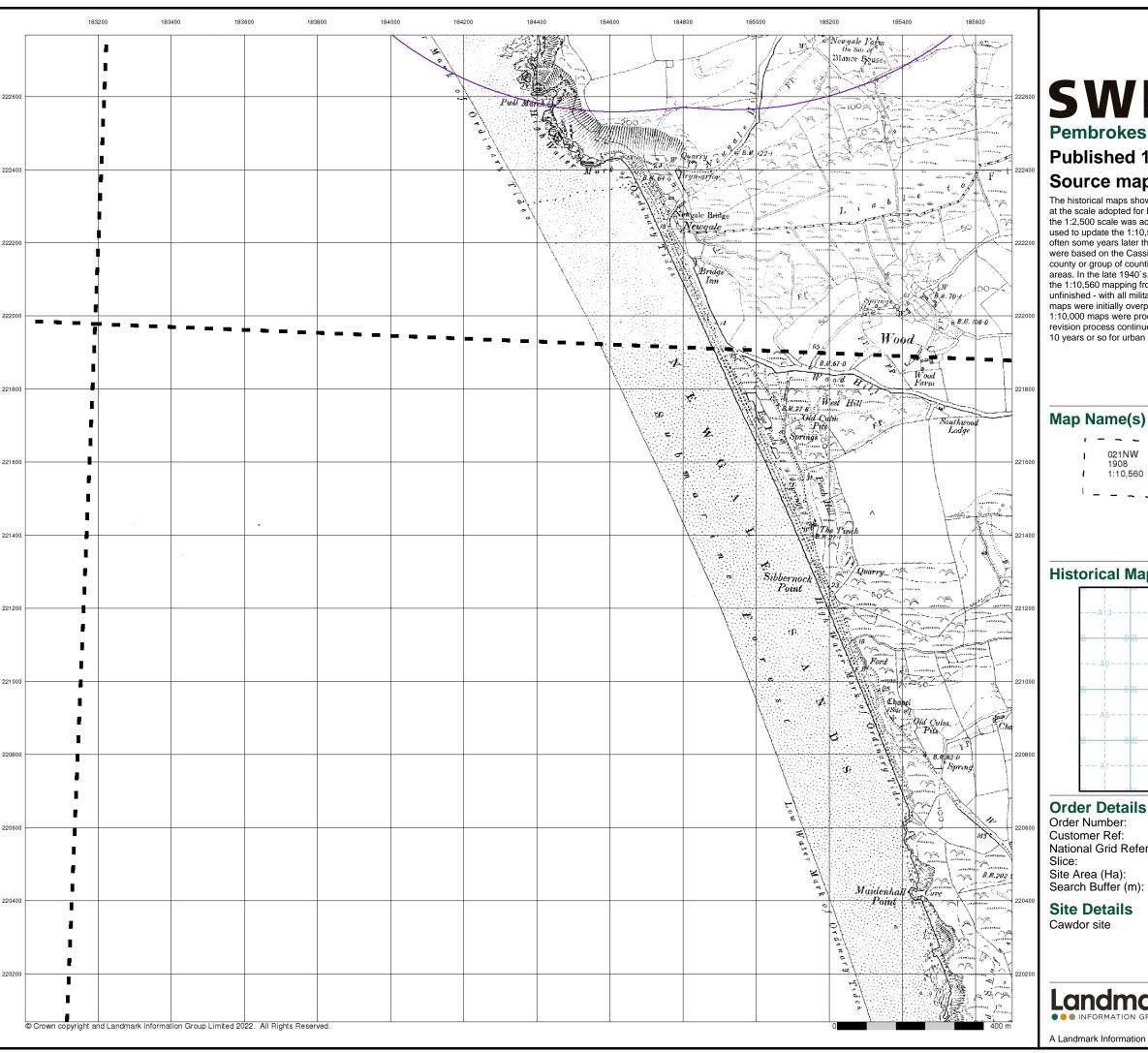
Cawdor site

Landmark

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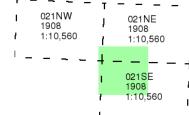
Pembrokeshire

Published 1908

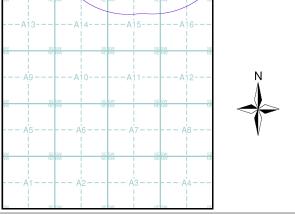
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. 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



305022956_1_1 65208061 National Grid Reference: 184770, 222680

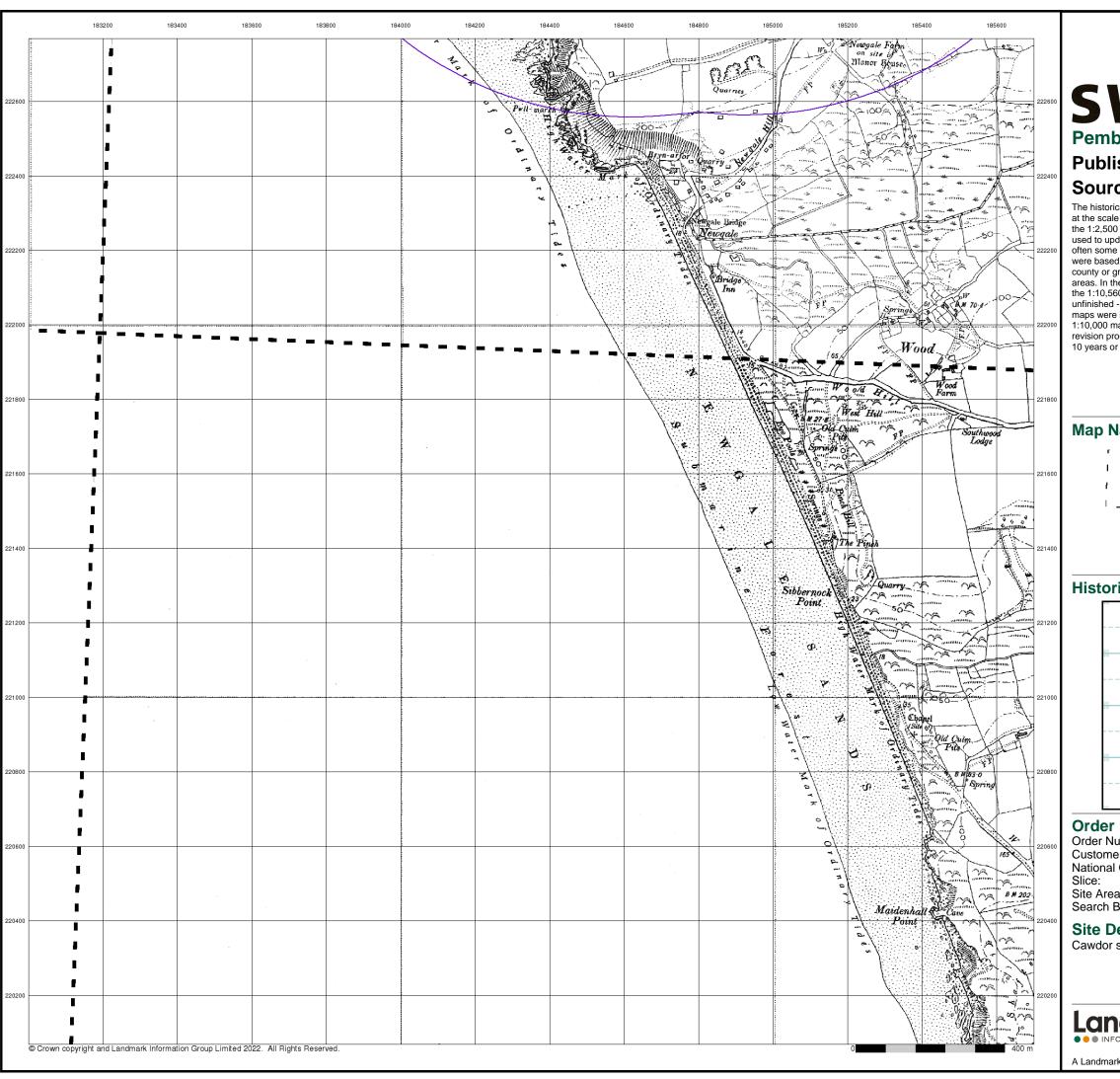
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Landmark

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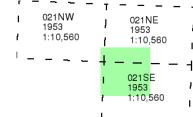
Pembrokeshire

Published 1953

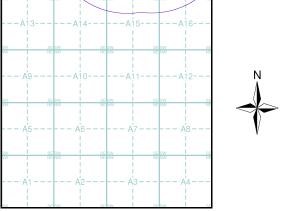
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. 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: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184770, 222680

Site Area (Ha): 308.46 Search Buffer (m): 1000

Site Details

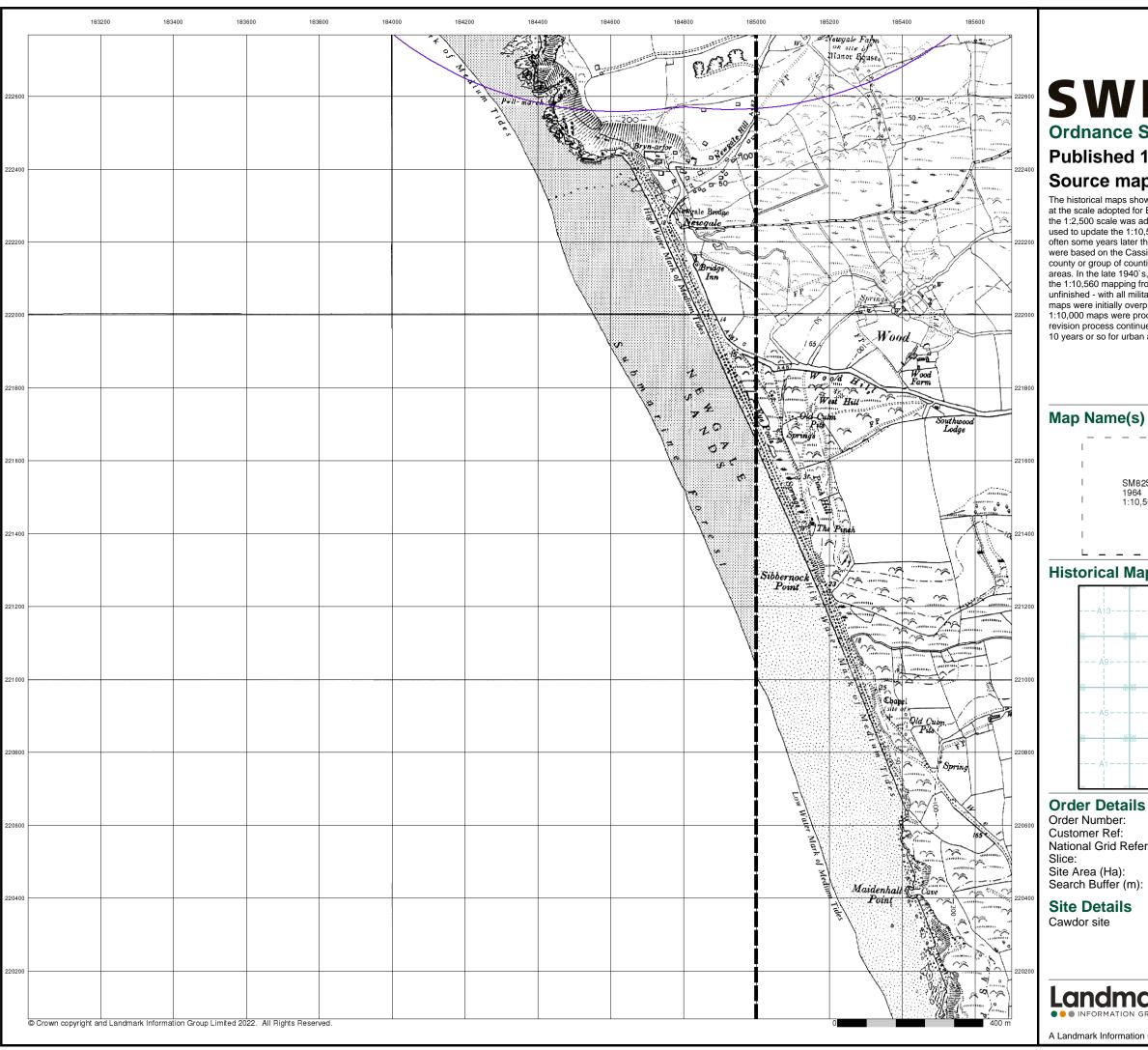
Cawdor site



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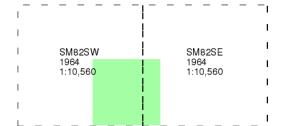
Ordnance Survey Plan

Published 1964

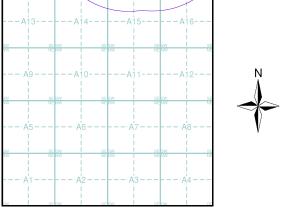
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184770, 222680

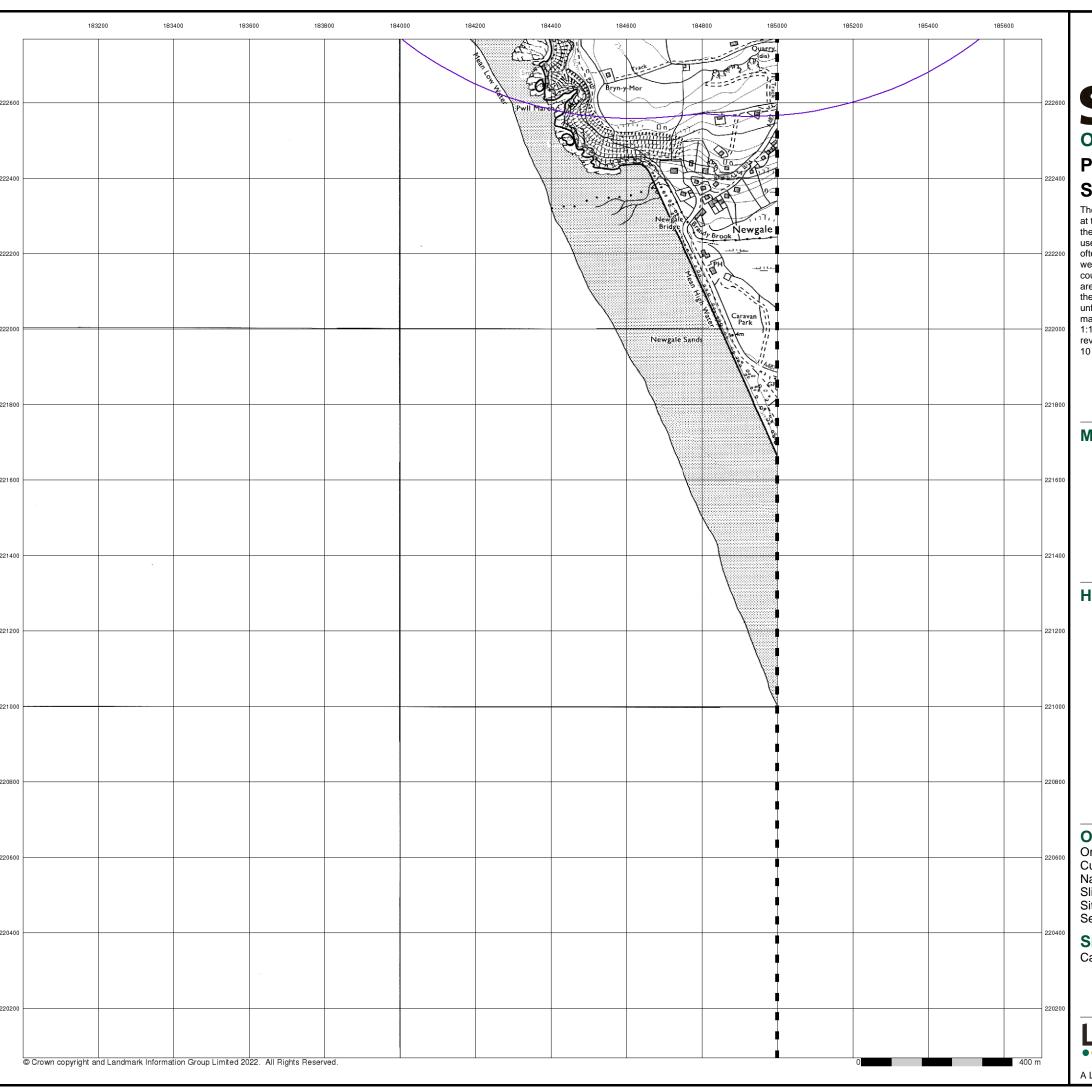
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Site Details

Landmark

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SWECO Survey Plan Ordnance Survey Plan

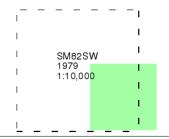


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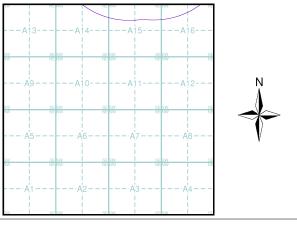
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184770, 222680 Slice:

Site Area (Ha): Search Buffer (m): 308.46

Site Details

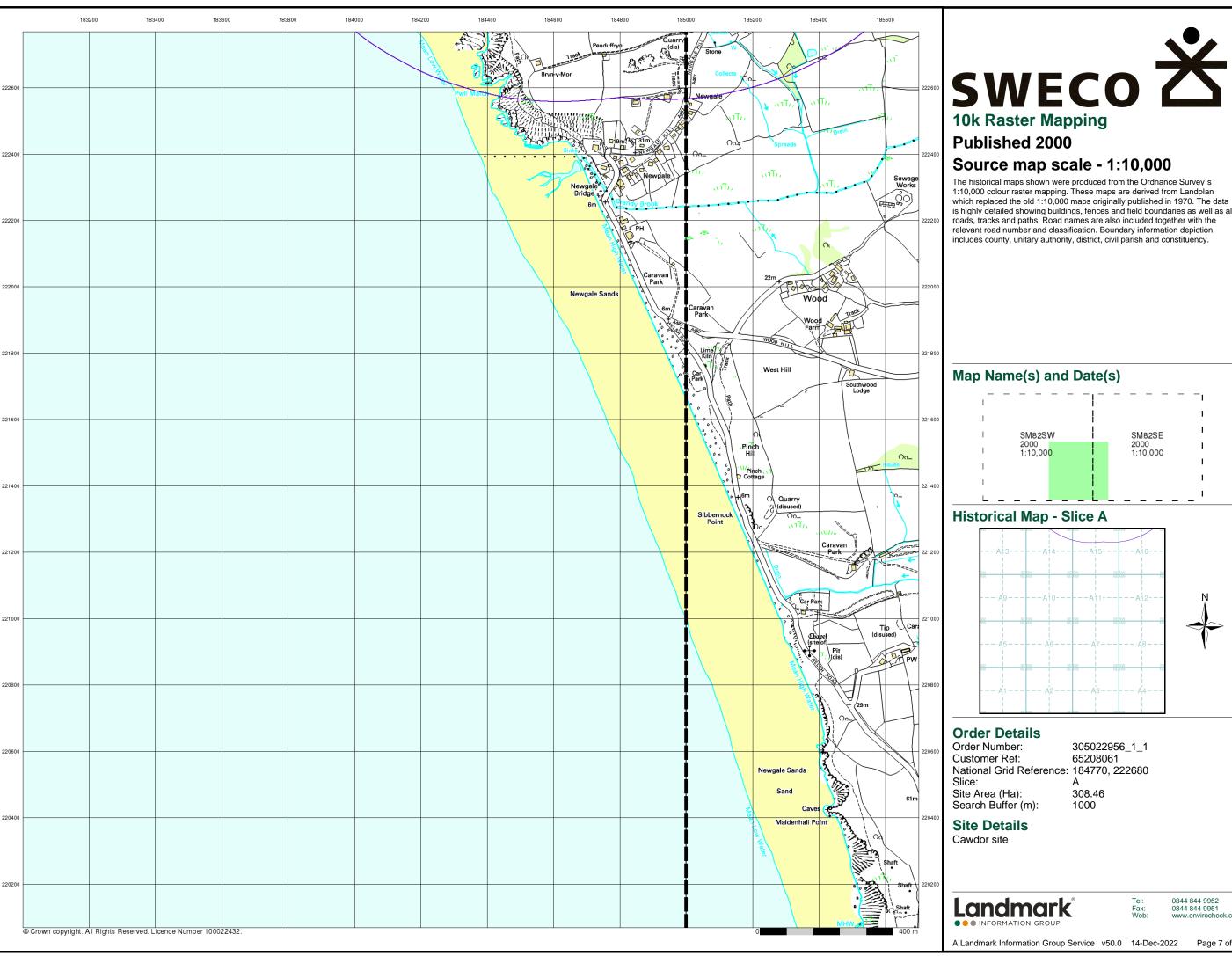
Cawdor site



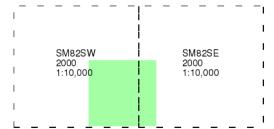
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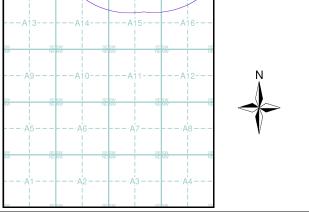
A Landmark Information Group Service v50.0 14-Dec-2022

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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.

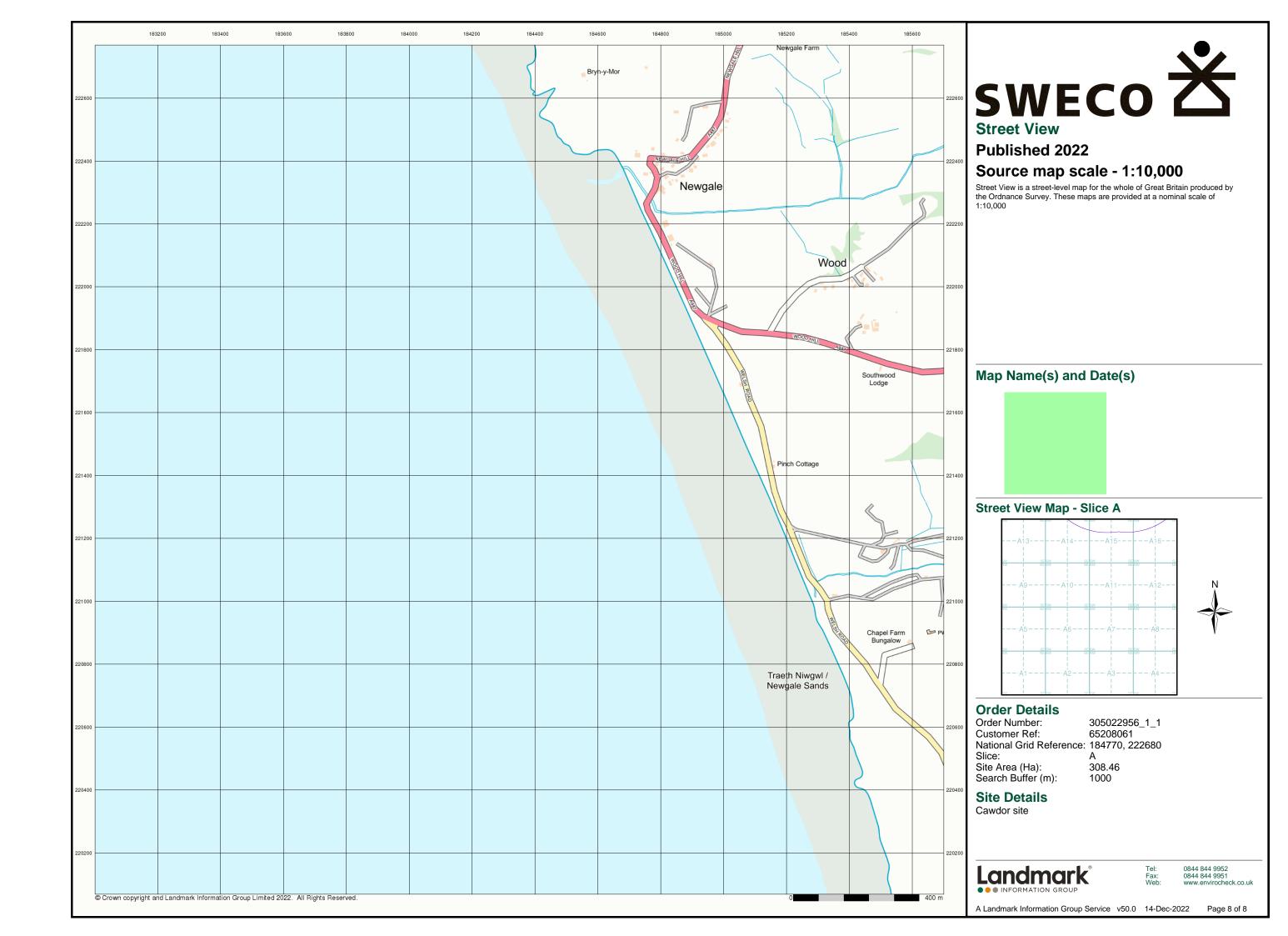


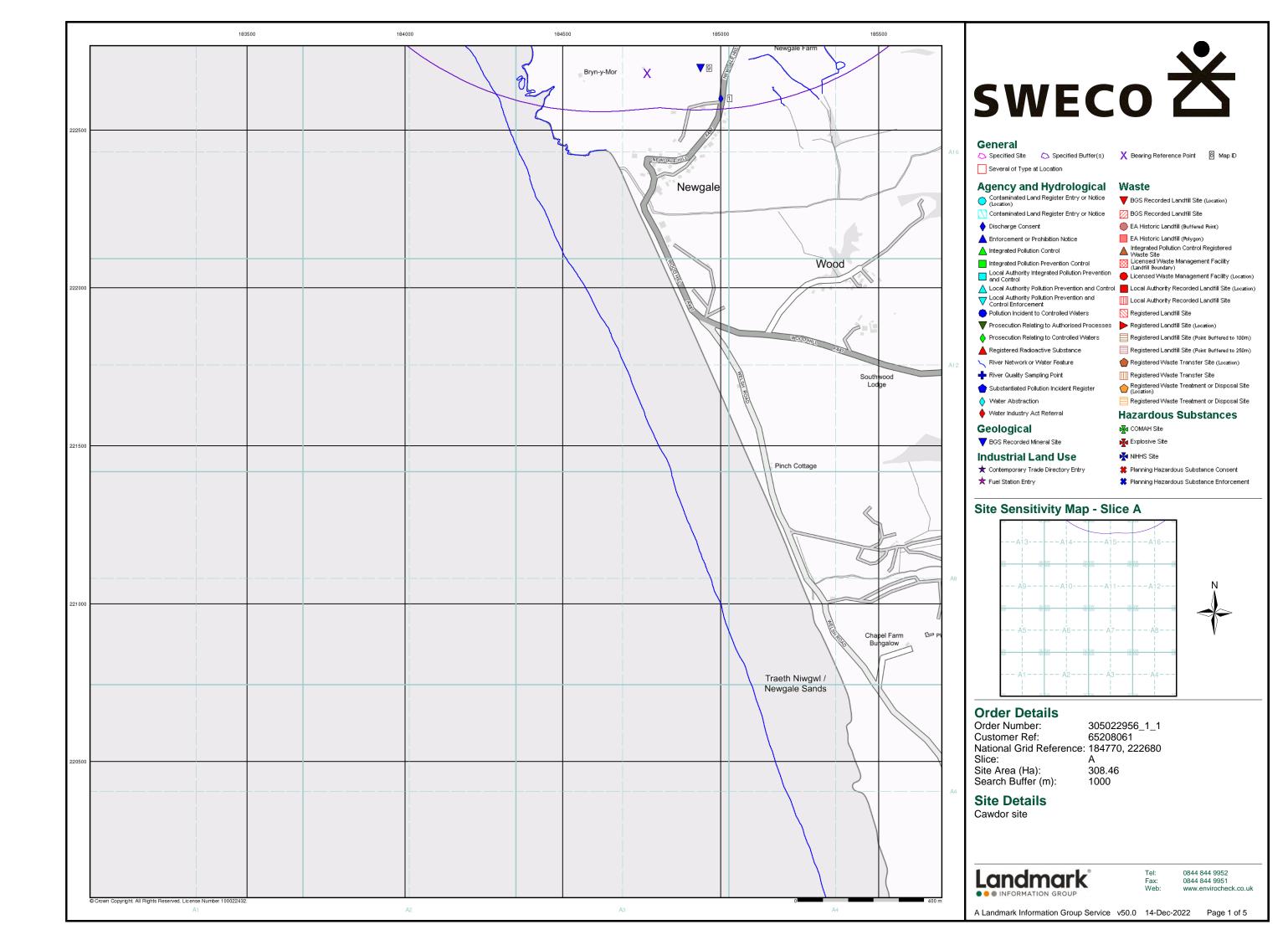


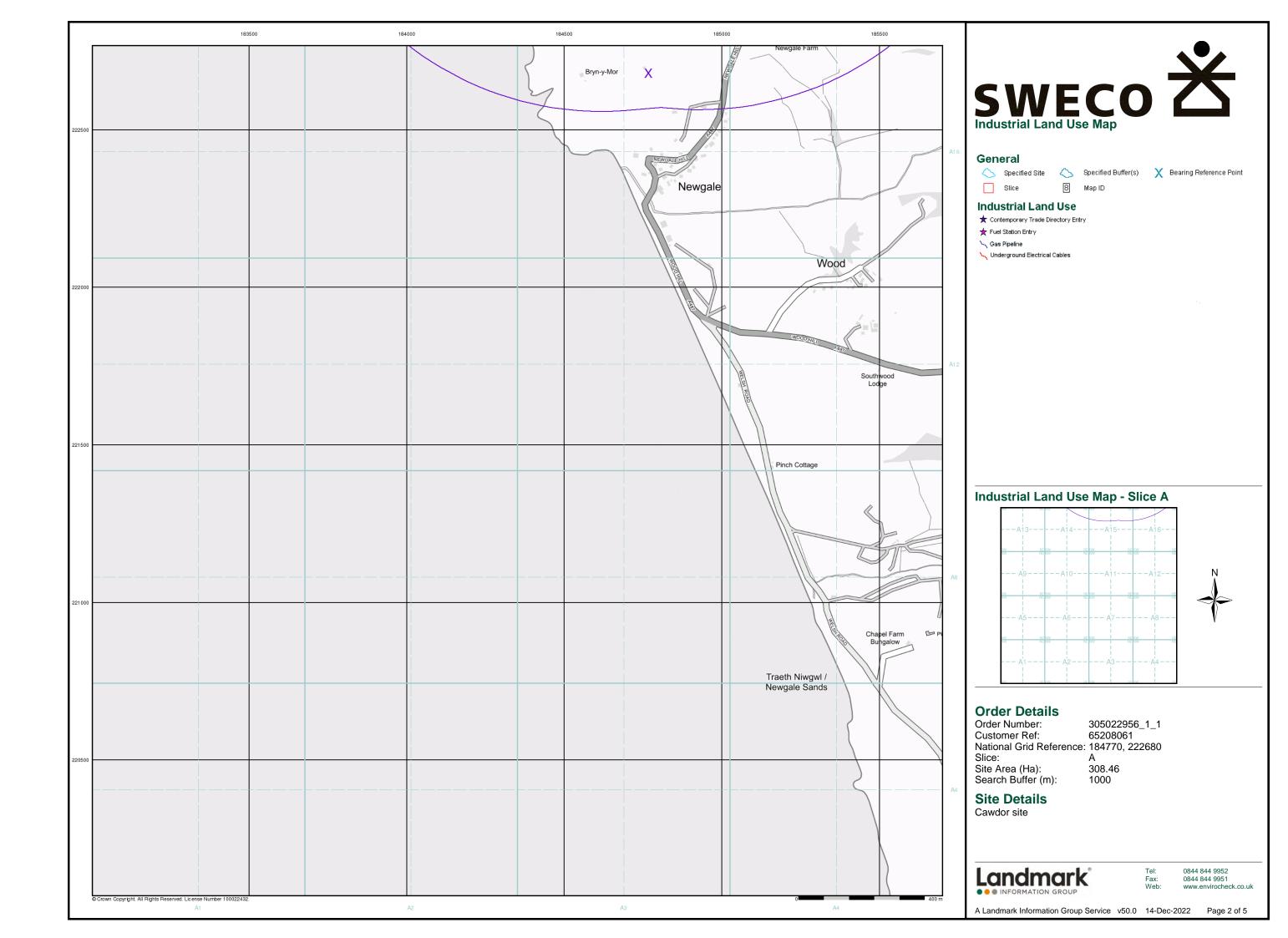
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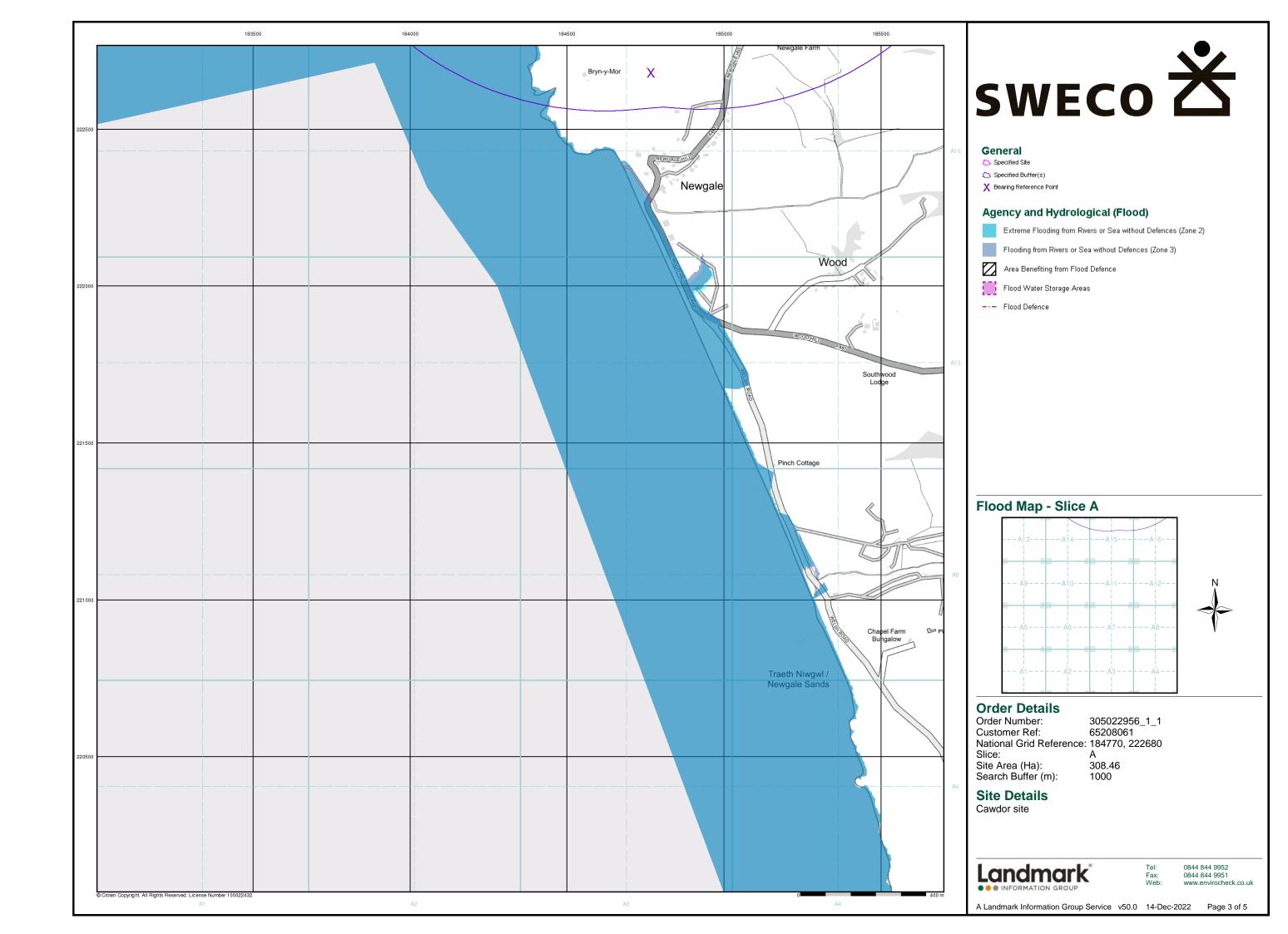
0844 844 9951 www.envirocheck.co.uk

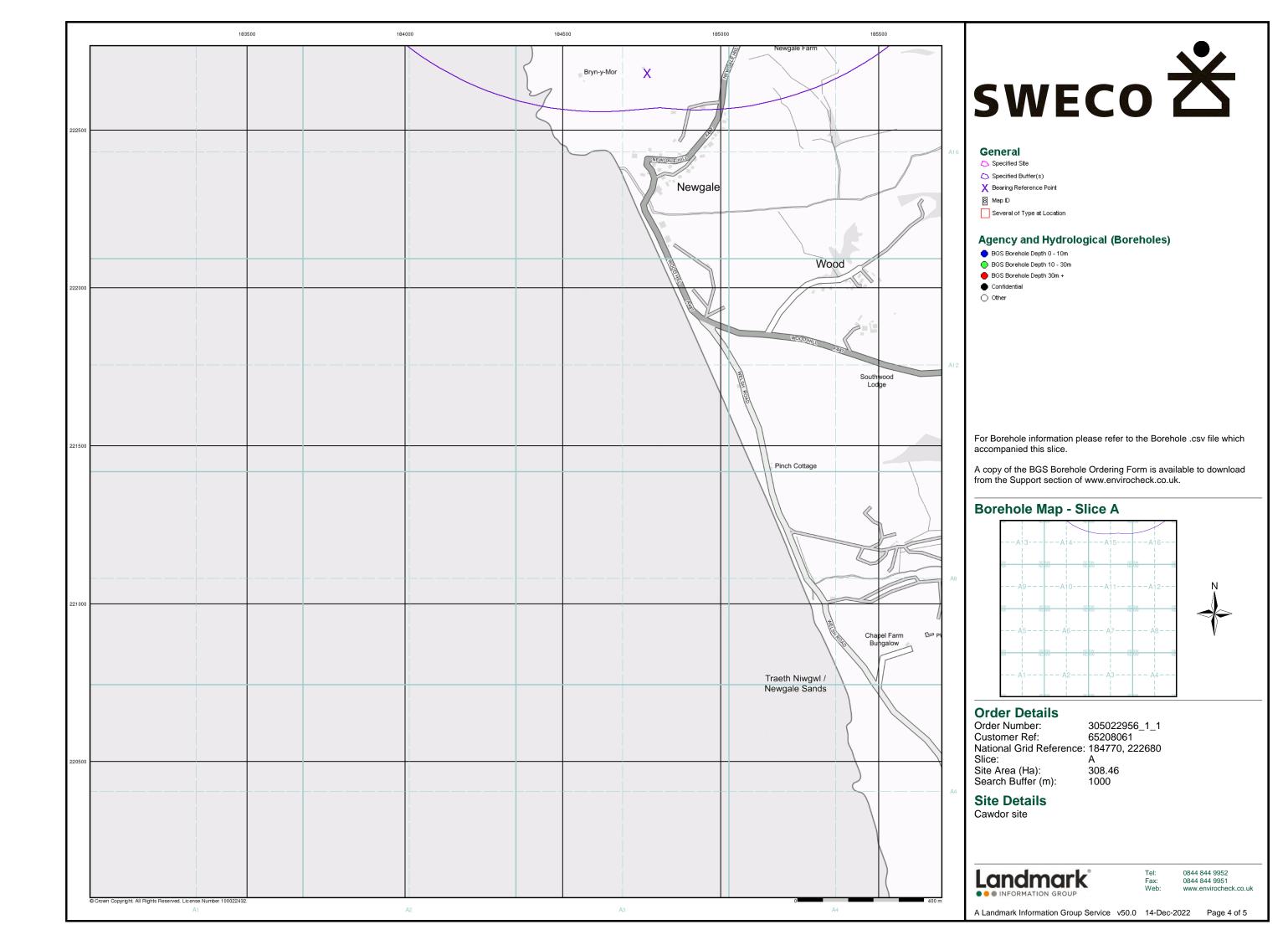
A Landmark Information Group Service v50.0 14-Dec-2022

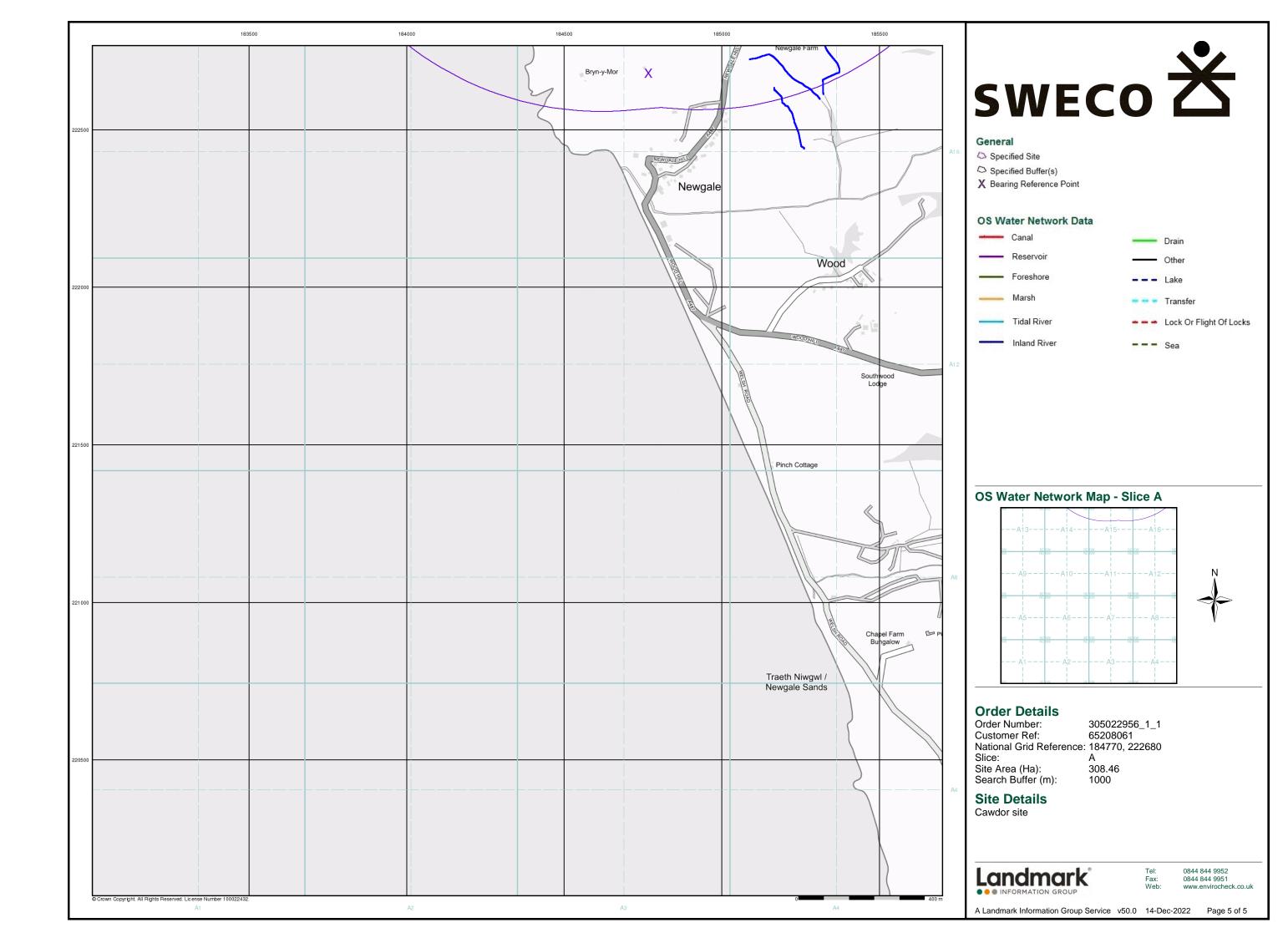


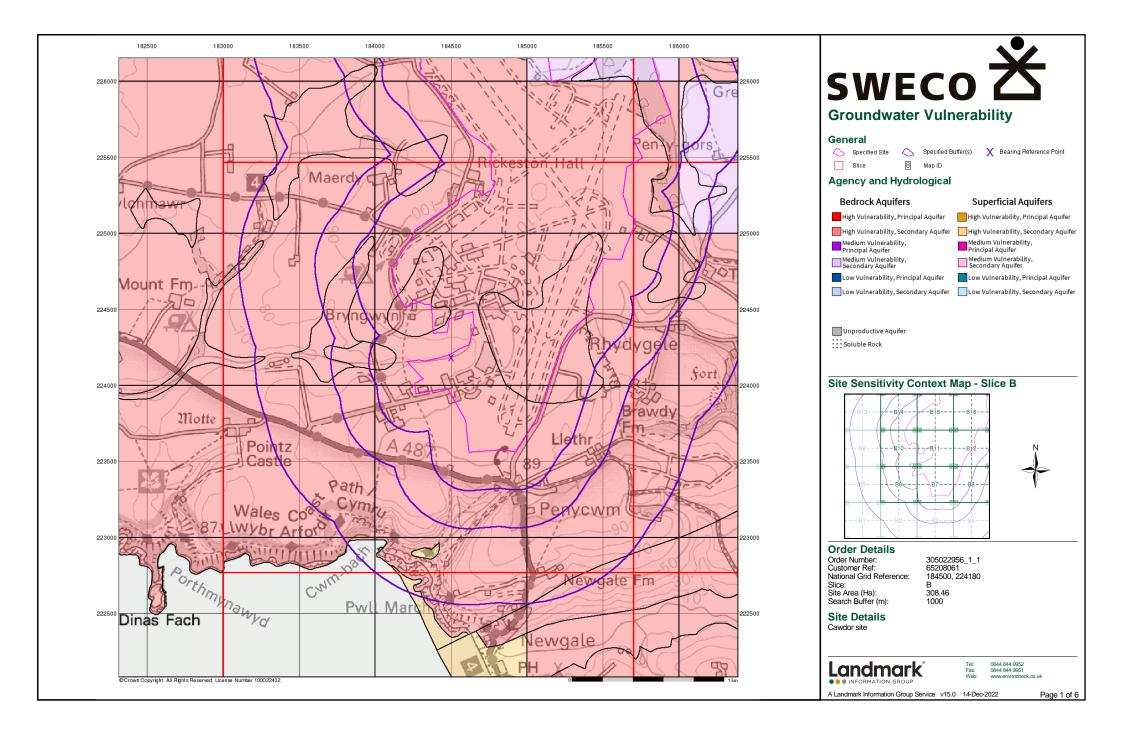


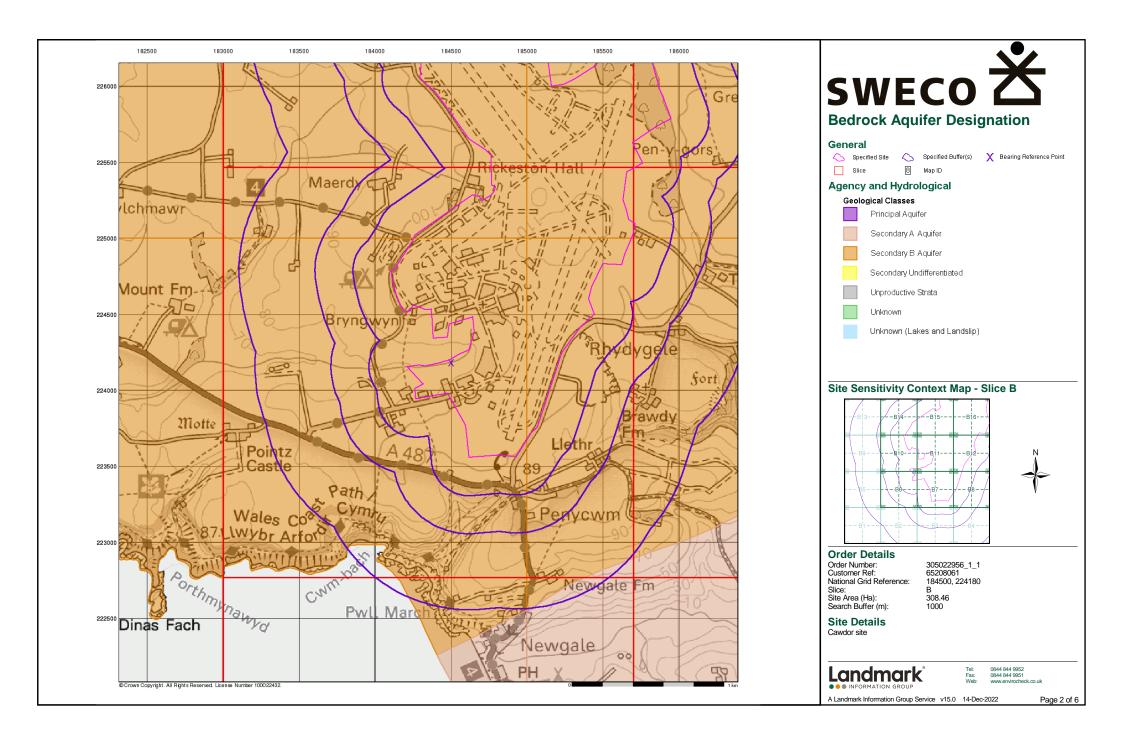


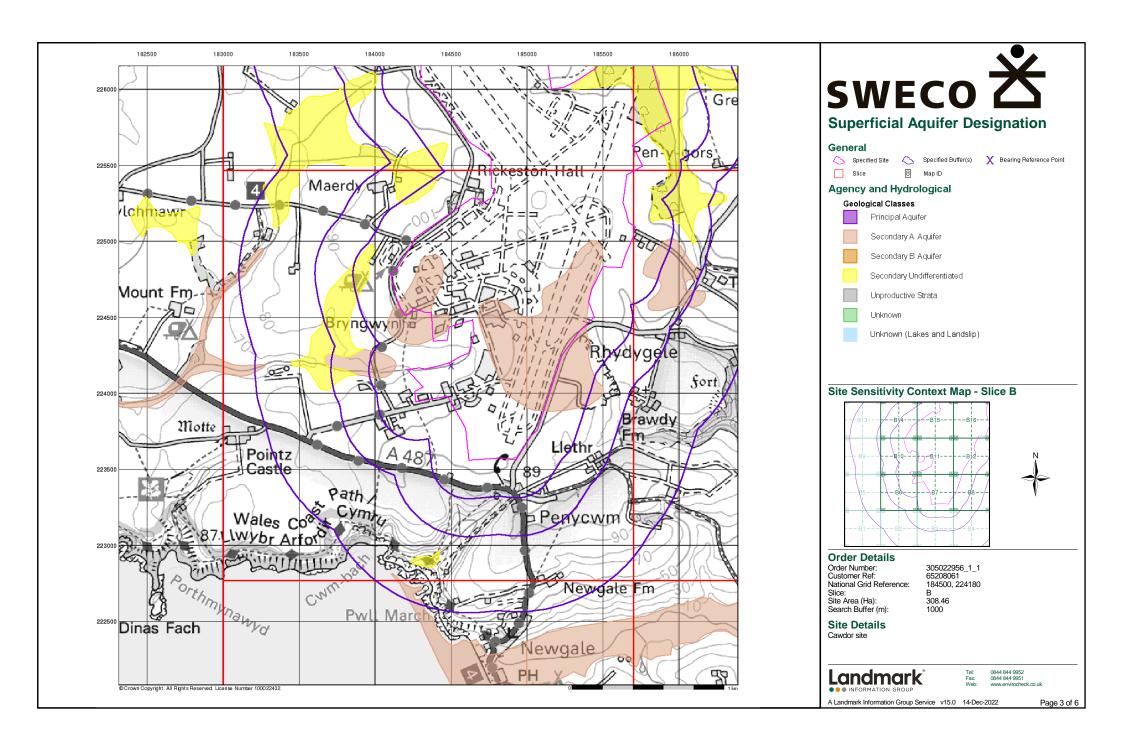


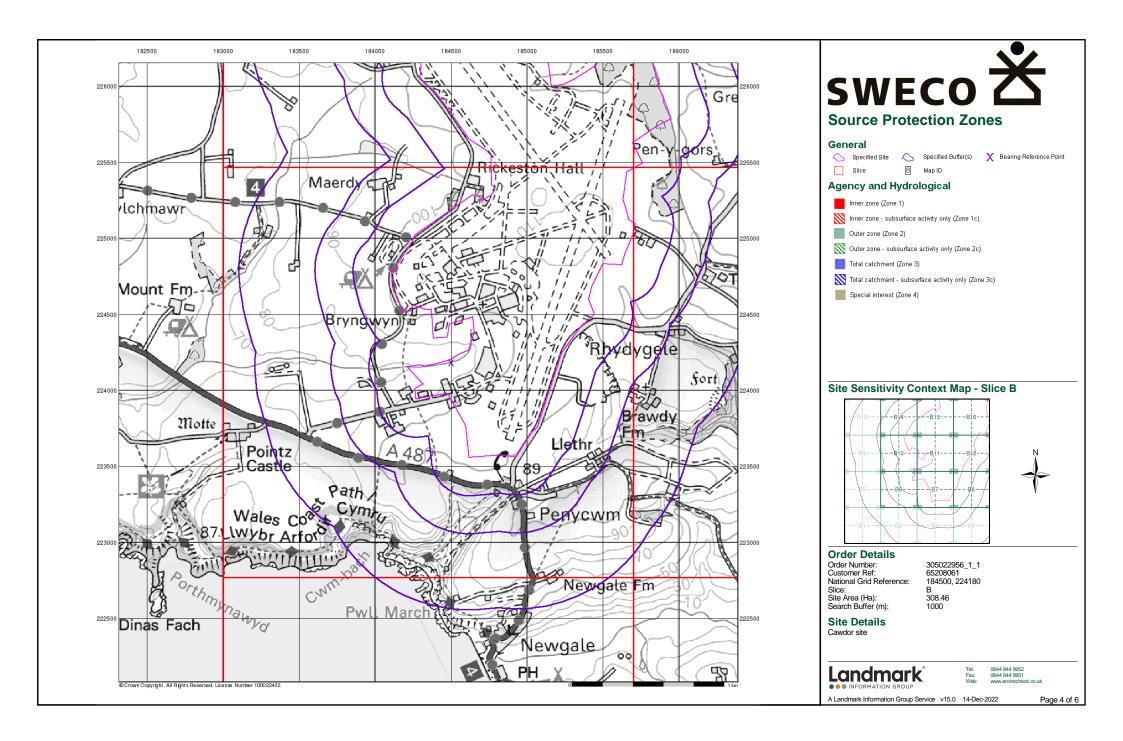


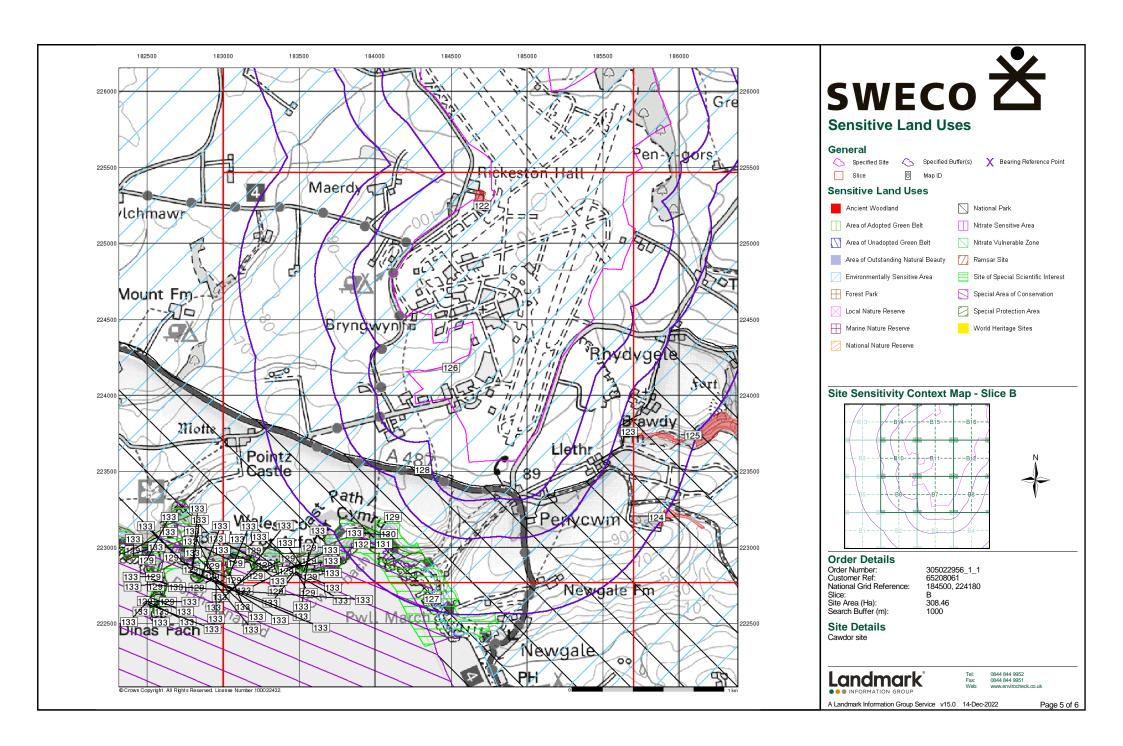


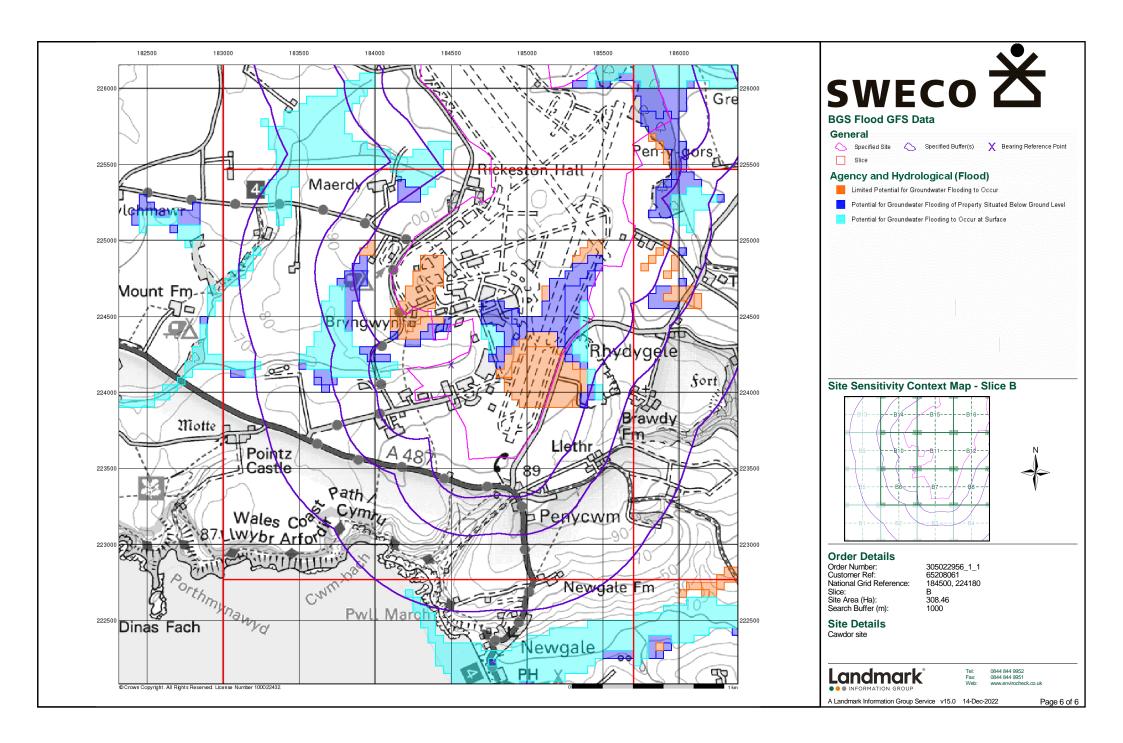














Envirocheck® Report:

Datasheet

Order Details:

Order Number:

305022956_1_1

Customer Reference:

65208061

National Grid Reference:

184500, 224180

Slice:

R

Site Area (Ha):

308.46

Search Buffer (m):

1000

Site Details:

Cawdor site

Client Details:

Ms C Bithell Sweco Services UK Ltd Grove House Mansion Gate Drive Leeds LS7 4DN







Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	28
Hazardous Substances	-
Geological	29
Industrial Land Use	34
Sensitive Land Use	35
Data Currency	37
Data Suppliers	41
Useful Contacts	42

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

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

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Report Version v53.0





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 4		3	3	17
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 9	Yes			
Pollution Incidents to Controlled Waters	pg 9		11	1	2
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions					
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 12	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 16	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 16	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 17	11	27	21	36





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 28	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 29	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 29	1	1	2	5
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities	pg 30			1	
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 30	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 31	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 31	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 32	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 32		Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 33	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 33	Yes	n/a	n/a	n/a



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 34		5		
Fuel Station Entries					
Gas Pipelines					
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland	pg 35	1			3
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas	pg 35	1			1
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks	pg 35		1		
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest	pg 35				1
Special Areas of Conservation	pg 35				3
Special Protection Areas	pg 36				1
World Heritage Sites					



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	el B11SE	0	1	184800 224184
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	185600 226050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	el B16SE (NE)	0	1	185450 224800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B7NE	0	1	184850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B11SE	0	1	185000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	224184 184950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(E) B11SE	0	1	224350 184750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	224250 184850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B12SW	0	1	185200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	185250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	184700 224450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	184900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B10SE	0	1	184250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	184500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	184500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	(N) el (NE)	0	1	185750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	el (NE)	0	1	185950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B11SE	0	1	184800 224150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(E) B11SE (E)	0	1	224150 185000 224300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B16SW (NE)	0	1	185300 224850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	185300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	el (NE)	0	1	226000 185450 226000



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NE)	0	1	185400 226000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B11SE (E)	0	1	184750 224200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B12NW (NE)	0	1	185100 224600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B10SE (NW)	0	1	184300 224350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B12SW	0	1	185300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	185000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		0	1	184400 224350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NW)	3	1	185800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		16	1	185250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		57	1	185300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B10SE	60	1	184150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(W) (NE)	72	1	224184 185850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B12SW	83	1	225600 185300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	(E) el B10SE	84	1	224184 184300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NW) B14NE	99	1	224300 184350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	(N)	103	1	225300 185800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NE)	115	1	225150 185750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve		118	1	224800 184100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	(W)	123	1	224200 184150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Leve	(NW) el B12SW	126	1	224350 185350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(E)	138	1	224184 185900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NE)	143	1	225500 185800



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B12SW (E)	146	1	185350 224150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev		148	1	186000 225550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev	el B10SW (W)	154	1	183850 224400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	B14SW	154	1	184000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev		155	1	224900 183950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NW) B8NW	160	1	224800 185300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev		166	1	223950 184300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev	(N) el (NE)	167	1	225250 185900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NE)	169	1	225350 185850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev	el (NE)	170	1	224900 186050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev		192	1	185350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B12SE	194	1	185400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(E) (NE)	203	1	224150 185900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev		224	1	224950 185400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(E) (NE)	244	1	224050 185950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev	el (E)	251	1	225150 185800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B8NE	272	1	224550 185450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(E)	274	1	185900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NE)	281	1	185950 224800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev	el (NE)	311	1	186000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(E)	330	1	185900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Lev	el (E)	384	1	224600 186000



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	B6NW (W)	463	1	183750 224100
	Discharge Consent					
1		William E L Harries HOLIDAY ACCOM/CAMP SITE/CARAVAN SITE/HOTEL/HOSTEL Septic Tanks @ Park Hill Van Park, Pen Y Cwm, Haverfordwest, Pembrokeshire, Sa62 6ls Natural Resources Wales Not Supplied Yb3790hg 2 1st April 2017 26th January 2018 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Into Land Groundwater Via Infiltration System Effective Located by supplier to within 10m	B14SW (NW)	198	2	183936 224890
	Discharge Consent	s				
1	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water:	Mr William E L Harries Other Tourist/Short Stay Accommadation Septic Tanks @ Park Hill Van Park, Pen Y Cwm, Haverfordwest, Pembrokeshire, Sa62 6ls Natural Resources Wales Not Supplied Epryb3790hg 1 1st June 2016 1st June 2016 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Into Land Not Supplied	B14SW (NW)	198	2	183936 224890
	Status:	New issued under EPR 2010 Located by supplier to within 10m				
1	,	William E L Harries HOLIDAY ACCOM/CAMP SITE/CARAVAN SITE/HOTEL/HOSTEL Septic Tanks @ Park Hill Van Park, Pen Y Cwm, Haverfordwest, Pembrokeshire, Sa62 6ls Natural Resources Wales Not Supplied Yb3790hg 1 1st June 2016 1st June 2016 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Into Land Not Supplied Effective Located by supplier to within 10m	B14SW (NW)	198	2	183936 224890
2	Discharge Consent		DONE	070	0	104000
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Dwr Cymru Cyfyngedig Sewerage Network - Pumping Staions Penycwm Ps Natural Resources Wales Not Supplied BH0057004 1 29th October 1976 29th October 1976 Not Supplied Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Unnamed Trib Of Cwm Mawr Strea Effective Located by supplier to within 100m	B3NE (S)	273	2	184800 223300



Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Dwr Cymru Cyfyngedig Sewerage Network - Pumping Staions Penycwm Ps Natural Resources Wales Not Supplied Bh0057004 1 29th October 1976 29th October 1976 Not Supplied Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Unnamed Trib Of Cwm Mawr Strea Effective Located by supplier to within 100m	B3NE (S)	273	2	184800 223300
3	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	,	B8SE (SE)	368	2	185400 223600
4	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	14th Signal Regiment (Ew) Sewage Disposal Works - Water Company Cawdor Barracks Brawdy Haverfordwe, Brawdy Haverfordwest Natural Resources Wales Not Given BP0239501 2 15th April 1998 15th April 1998 1st February 2002 Sewage Discharges - Final/Treated Effluent - Not Water Company Not Supplied Brawdy Stream New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	B9SE (W)	773	2	183440 224230
4	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	14th Signal Regiment (Ew) Sewage Disposal Works - Water Company Cawdor Barracks Brawdy Haverfordwe, Brawdy Haverfordwest Natural Resources Wales Not Supplied Bp0239501 1 28th March 1995 28th March 1995 14th April 1998 Sewage Discharges - Final/Treated Effluent - Not Water Company Not Supplied Brawdy Stream Authorisation revoked Located by supplier to within 10m	B9SE (W)	773	2	183440 224230



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	14th Signal Regiment (Ew) Undefined Or Other Cawdor Barracks Brawdy Haverfordwe, Brawdy Haverfordwest Natural Resources Wales Not Given BP026980101 1 18th May 1998 18th May 1998 18th February 2002 Unspecified Not Supplied Brawdy Stream New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	B9SE (W)	802	2	183410 224220
	Discharge Consent					
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 5 29th March 2022 6th September 2022 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230
	Discharge Consent					
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 5 29th March 2022 6th September 2022 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230
	Discharge Consent	s				
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 4 28th March 2022 4th April 2022 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230



Map ID		Details		Estimated Distance From Site	Contact	NGR
	Discharge Consents					
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 4 28th March 2022 4th April 2022 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230
4	-	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 3 23rd March 2018 23rd March 2018 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230
	Discharge Consent		2005			
4	-	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 3 23rd March 2018 23rd March 2018 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230
	Discharge Consents		DOOF	000	_	100440
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Kelda Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 2 2nd February 2002 1st February 2002 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	803	2	183410 224230



Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Discharge Consents Operator: Kelda Water Services (Estates) Limited			803	2	183410
7	Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment:	MOD/Civil Establishment Cawdor Barracks Stw Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp0269801 2 2nd February 2002 1st February 2002 Not Supplied SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - NOT WATER COMPANY Freshwater Stream/River	B9SE (W)	303	2	224230
	Receiving Water: Status: Positional Accuracy:	Brawdy Stream Effective Located by supplier to within 10m				
	Discharge Consent	,				
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment:	Kelda Water Services (Estates) Limited Any Mod Establishment Cawdor Barracks Stw Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp026980101 2 2nd February 2002 1st February 2002 Not Supplied Sewage Discharges - Sewage Treatment Works Storm Overflow/Storm Tank - Not Water Company Freshwater Stream/River	B9SE (W)	803	2	183410 224230
	Receiving Water: Status: Positional Accuracy:	Brawdy Stream Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m				
	-					
4	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Kelda Water Services (Estates) Limited Any Mod Establishment Cawdor Barracks Stw Brawdy, Haverfordwest, Pembrokeshire, Sa62 6nn Natural Resources Wales Not Supplied Bp026980101 2 2nd February 2002 1st February 2002 Not Supplied Sewage Discharges - Sewage Treatment Works Storm Overflow/Storm Tank - Not Water Company Freshwater Stream/River Brawdy Stream Varied by Application - (Water Resources Act 1991, Schedule 10 as	B9SE (W)	803	2	183410 224230
		amended by Environment Act 1995) Located by supplier to within 10m				
	Discharge Consent	s				
5	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, 14th Signal Regiment, Haverfordwest, Sa62 6nn Natural Resources Wales Not Supplied Bp0239501 7 1st April 2022 6th September 2022 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Brawdy Stream	B9SE (W)	800	2	183410 224160
	Status:	Effective Located by supplier to within 10m				



Map ID		Details		Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
5	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: Status: Positional Accuracy:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, 14th Signal Regiment, Haverfordwest, Sa62 6nn Natural Resources Wales Not Supplied Bp0239501 6 31st March 2022 4th April 2022 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	800	2	183410 224160
5	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: Status: Positional Accuracy:	Ancala Water Services (Estates) Limited MOD/Civil Establishment Cawdor Barracks Stw, Brawdy, Haverfordwest, Sa62 6nn Natural Resources Wales Not Supplied Bp0239501 5 5th April 2018 5th April 2018 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	800	2	183410 224160
5	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Kelda Water Services (Estates) Limited Not Supplied Cawdor Barracks Stw, Brawdy, Haverfordwest, Sa62 6nn Natural Resources Wales Not Supplied Bp0239501 3 2nd February 2002 1st February 2002 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Brawdy Stream Effective Located by supplier to within 10m	B9SE (W)	800	2	183410 224160
	Nearest Surface Wa	ater Feature	B11SW (S)	0	-	184515 224151
	Pollution Incidents	to Controlled Waters	, ,			
6	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Airports/Aircraft Garden Centre Environment Agency, Welsh Region Crude Sewage Accidental Spillage/Leakage 19th November 1991 2372 Not Given Not Given Spillage Category 2 - Significant Incident Located by supplier to within 100m	B11SW (NE)	39	3	184600 224345



Map ID	Det	ails	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Pollution Incidents to Controlled Waters Property Type: Airports/Aircraft Location: Airfield Authority: Environment Agency, Welst Pollutant: Oils - Diesel (Including Agric Note: Accidental Spillage/Leakage Incident Date: 19th November 1991 Incident Reference: 2372 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 2 - Significant Inci-	cultural)	B11SW (NE)	40	3	184600 224350
7	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Av Authority: Environment Agency, Welst Pollutant: Crude Sewage Note: Not Supplied Incident Date: 9th February 1996 Incident Reference: 27317 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Incident Severity: Positional Accuracy: Located by supplier to within	n Region	B15NE (N)	67	3	184700 225400
7	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Av Authority: Environment Agency, Welst Pollutant: Crude Sewage Note: Diesel Tank Leaking Incident Date: 9th February 1996 Incident Reference: 27317 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within	n Region	B15NE (N)	67	3	184700 225395
8	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Rickeston Mill Authority: Environment Agency, Welsh Pollutant: Oils - Diesel (Including Agric Note: Not Supplied Incident Date: 11th February 1996 Incident Reference: 27334 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within	cultural)	B15NW (N)	117	3	184600 225395
8	Pollution Incidents to Controlled Waters Property Type: Road Location: Rickeston Mill Authority: Environment Agency, Welst Pollutant: Sewage Fungus Note: Not Supplied Incident Date: 11th February 1996 Incident Reference: 27334 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Spillage Incident Severity: Positional Accuracy: Located by supplier to within		B15NW (N)	121	3	184600 225400
9	Pollution Incidents to Controlled Waters Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy: Controlled Waters Private Sewage (Non-PLC): Location Description Not Avenue Environment Agency, Welst Chemicals - Other Organic Blocked Sewer Sth November 1991 2354 Not Given Not Given Overflow Category 3 - Minor Incident Located by supplier to within	ailable n Region	B10SE (W)	118	3	184100 224200



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	Pollution Incidents to Controlled Waters Property Type: Building Sites Location: Broady, Aerodrome Authority: Environment Agency, \(\) Pollutant: Sewage - Treated Efflu Not Supplied Incident Date: 12th April 1996 Incident Reference: 28049 Catchment Area: Not Given Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy: Located by supplier to	dent	B15NW (N)	156	3	184610 225450
10	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Adjacent To The River. Authority: Environment Agency, V Pollutant: Sewage - Treated Efflu. Note: Not Supplied Incident Date: 12th April 1996 Incident Reference: 28049 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Severity: Located by supplier to	Welsh Region ent	B15NW (N)	156	3	184610 225445
11	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Pond Authority: Environment Agency, Note: Note: Not Supplied Incident Date: 5th June 1996 Incident Reference: 28614 Catchment Area: Not Given Receiving Water: Cause of Incident: Unknown Incident Severity: Positional Accuracy: Located by supplier to	dent	B3NE (S)	169	3	184750 223400
11	Pollution Incidents to Controlled Waters Property Type: Location: Authority: Pollutant: Note: In Pond, Near Riversid Authority: Environment Agency, Note Sewage Not Supplied Incident Date: Incident Reference: Catchment Area: Not Given Cause of Incident: Incident Severity: Positional Accuracy: Located by supplier to	dent	B3NE (S)	174	3	184750 223395
12	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Penycwm, Harp Lane, Authority: Environment Agency, Note: Note: Not Supplied Incident Date: 12th August 1996 Incident Reference: 29667 Catchment Area: Not Given Receiving Water: Oause of Incident: Incident Severity: Positional Accuracy: Located by supplier to	Welsh Region	B3NE (S)	278	3	184800 223295
13	Pollution Incidents to Controlled Waters Property Type: Not Given Location: North End, Newgale, P Authority: Environment Agency, N Pollutant: Farm Effluent/Slurry Note: Not Supplied Incident Date: 17th December 1996 Incident Reference: 30669 Catchment Area: Not Given Receiving Water: Oause of Incident: Incident Severity: Positional Accuracy: Located by supplier to	Velsh Region dent	B3SW (S)	559	3	184600 223000



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Pollution Incidents	to Controlled Waters				
14	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Private Sewage (Non-PLC): Other Below Brawdy Stream Environment Agency, Welsh Region Farm Effluent/Slurry Emergency Overflow 28th October 1994 21557 Not Given Not Given Direct Discharge Category 2 - Significant Incident Located by supplier to within 100m	B9SE (W)	811	3	183400 224200
	Groundwater Vulne	rability Map				
	Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Secondary Bedrock Aquifer - High Vulnerability High Productive Bedrock Aquifer, No Superficial Aquifer Intermediate Well Connected Fractures >550 mm/year 40-70% <90% <3m No Data	(N)	0	2	184501 226000
	Groundwater Vulne	• •		_	_	
	Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge: Groundwater Vulne Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed:	Secondary Bedrock Aquifer - Medium Vulnerability Medium Productive Bedrock Aquifer, No Superficial Aquifer Low	(NE)	0	2	185309 226000 185000 226000
	Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge: Groundwater Vulne Combined Classification: Combined Vulnerability: Combined Aquifer:	Well Connected Fractures >550 mm/year 40-70% <90% <3m No Data rability Map Secondary Bedrock Aquifer - High Vulnerability High Productive Bedrock Aquifer, No Superficial Aquifer	B15SW (N)	0	2	184501 225000
	Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Intermediate Well Connected Fractures >550 mm/year 40-70% <90% <3m No Data				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B15SE (NE)	0	2	185000 225000
	Combined Vulnerability:	High				
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness:	Productive Bedrock Aquifer, No Superficial Aquifer Intermediate Well Connected Fractures >550 mm/year 40-70% <90%				
	Superficial Thickness: Superficial Recharge:	<3m No Data				
	Groundwater Vulne	erability Map				
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability High	B7NW (S)	0	2	184501 224000
	Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index:	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year <40%				
	Superficial Patchiness: Superficial	<90%				
	Thickness: Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B7NE (SE)	0	2	185000 223908
	Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index:	High Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year <40% <90%				
	Superficial Patchiness: Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B11SW (W)	0	2	184501 224184
	Combined Vulnerability:	High				
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial	Productive Bedrock Aquifer, No Superficial Aquifer Intermediate Well Connected Fractures >550 mm/year 40-70% <90%				
	Patchiness: Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B11NE (NE)	0	2	185000 224501
	Combined Vulnerability:	High	, ,			
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year 40-70% <90%				
	Patchiness: Superficial Thickness: Superficial	<3m No Data				
	Recharge:	NO Data				
	Groundwater Vulne	erability Map				
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability	B12SE (E)	0	2	185405 224246
	Vulnerability: Combined Aquifer: Pollutant Speed:	High Productive Bedrock Aquifer, No Superficial Aquifer High				
	Bedrock Flow: Dilution: Baseflow Index:	Well Connected Fractures >550 mm/year 40-70%				
	Superficial Patchiness: Superficial	<90% <3m				
	Thickness: Superficial	No Data				
	Recharge:					
	Groundwater Vulne	•				
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability High	B11SW (NW)	0	2	184409 224372
	Vulnerability: Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate				
	Bedrock Flow: Dilution: Baseflow Index:	Well Connected Fractures >550 mm/year 40-70%				
	Superficial Patchiness: Superficial	<90%				
	Thickness: Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B11SE (E)	0	2	184753 224272
	Combined Vulnerability:	High				
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution:	Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	40-70% <90%				
	Superficial Thickness: Superficial	<3m No Data				
	Recharge:	no bala				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B11SE (E)	0	2	185000 224184
	Combined Vulnerability: Combined Aquifer:	High Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial	High Well Connected Fractures >550 mm/year 40-70% <90%				
	Patchiness: Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B7NE (SE)	0	2	184870 224000
	Combined Vulnerability: Combined Aquifer:	High Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed: Bedrock Flow: Dilution:	High Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	<40% <90%				
	Superficial Thickness:	<3m No Data				
	Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	B7NE (E)	0	2	185000 224000
	Combined Vulnerability: Combined Aquifer:	High Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed: Bedrock Flow: Dilution:	High Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	<40% <90%				
	Superficial Thickness: Superficial	<3m No Data				
	Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - Medium Vulnerability	(NE)	0	2	185298 226002
	Combined Vulnerability: Combined Aquifer:	Medium Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed: Bedrock Flow: Dilution:	Low Well Connected Fractures				
	Baseflow Index: Superficial	>550 mm/year 40-70% <90%				
	Patchiness: Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				

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ap D		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	rability Map				
	Combined	Secondary Bedrock Aguifer - High Vulnerability	(NE)	0	2	185816
	Classification:	,	, ,			225140
	Combined	High				
	Vulnerability:	Describing Describes Describes Describes Compatibility Assistan				
	Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate				
	Bedrock Flow:	Well Connected Fractures				
	Dilution:	>550 mm/year				
	Baseflow Index:	40-70%				
	Superficial Patchiness:	<90%				
	Superficial	<3m				
	Thickness:					
	Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined	Secondary Bedrock Aguifer - High Vulnerability	B16SE	0	2	185421
	Classification:		(NE)		_	225000
	Combined	High				
	Vulnerability:	Draduative Padrack Aguifes Destructive Co. (1) 1.4. (1)				
	Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate				
	Bedrock Flow:	Well Connected Fractures				
	Dilution:	>550 mm/year				
	Baseflow Index:	40-70%				
	Superficial Patchiness:	<90%				
	Superficial	<3m				
	Thickness:					
	Superficial	No Data				
	Recharge:					
	Bedrock Aquifer De	esignations				
	Aquifer Designation:	Secondary Aquifer - B	B15SE	0	2	185000
			(NE)			225000
	Bedrock Aquifer De					
	Aquifer Designation:	Secondary Aquifer - B	B15SW (N)	0	2	184501 225000
	Bedrock Aquifer De	signations	(14)			223000
	-	Secondary Aquifer - B	B11SE	0	2	185000
	Aquilor Designation.	Occordany Adultor B	(E)		_	224184
	Bedrock Aquifer De	esignations				
	Aquifer Designation:	Secondary Aquifer - B	B11SW	0	2	184501
			(W)			224184
	Superficial Aquifer	-		_	_	
	Aquifer Designation:	Secondary Aquifer - Undifferentiated	(NE)	0	2	185816 225140
	Superficial Aquifer	Designations				223140
	-	Secondary Aquifer - A	B16SE	0	2	185421
	Aquiler Designation.	Secondary Aquilei - A	(NE)	0		225000
	Superficial Aquifer	_				
	Aquifer Designation:	Secondary Aquifer - A	B11SE (E)	0	2	185000 224184
	Superficial Aquifer	Designations				
	Aquifer Designation:	Secondary Aquifer - A	B11SW	0	2	184409
	Cuporficial Aif	Designations	(NW)			224372
	Superficial Aquifer	_	D1105		0	404750
	Aquiter Designation:	Secondary Aquifer - A	B11SE (E)	0	2	184753 224272
	Extreme Flooding f	rom Rivers or Sea without Defences				
	None					
	=	rs or Sea without Defences				
	None					
	Areas Benefiting fro	om Flood Defences				
	Flood Water Storag	e Areas				
	None					
	Flood Defences					
	None					

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 200.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (S)	0	4	184515 224151
	OS Water Network Lines				
16	Watercourse Form: Inland river Watercourse Length: 56.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (SW)	0	4	184459 224143
17	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 218.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (W)	0	4	184413 224177
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (W)	0	4	184417 224178
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (W)	0	4	184421 224179
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 457.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (NW)	0	4	184495 224199
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11NW (NE)	0	4	184642 224489
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11NW (NE)	0	4	184641 224494
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11NW (NE)	0	4	184640 224504



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11NW (NE)	0	4	184642 224509
	OS Water Network Lines				
25	Watercourse Form: Inland river Watercourse Length: 31.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B11SW (SW)	0	4	184463 224140
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 173.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B10SE (W)	9	4	184200 224158
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 170.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B10SE (W)	9	4	184200 224158
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 117.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B15NE (N)	32	4	184724 225297
29	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 49.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B15NW (N)	67	4	184667 225348
30	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 16.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B15NW (N)	74	4	184604 225350
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B15NW (N)	74	4	184604 225350
32	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 13.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B15NW (N)	75	4	184619 225357



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B15NW (N)	89	4	184612 225370
	OS Water Network Lines				
34	Watercourse Form: Inland river Watercourse Length: 403.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B15NW (N)	98	4	184598 225374
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 50.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B7SE (SE)	111	4	184945 223455
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 358.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B14SW (NW)	120	4	183992 224850
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 102.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	136	4	185206 223740
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 148.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NE (SE)	156	4	184934 223409
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B10SE (W)	172	4	184039 224134
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B10SE (W)	174	4	184037 224133
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 59.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	186	4	185263 223757



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 497.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B10SE (W)	187	4	184025 224126
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 95.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	204	4	185263 223697
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 39.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	222	4	185166 223524
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 69.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	225	4	185234 223607
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 108.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	227	4	185250 223623
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	227	4	185250 223623
48	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 21.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	236	4	185209 223562
49	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 5.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	237	4	185210 223567
50	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 10.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	238	4	185209 223562



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: 45.5 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B8SW (SE)	246	4	185284 223640
52	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 42.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	246	4	185284 223640
53	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 59.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NE (S)	263	4	184797 223310
54	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 66.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NE (S)	268	4	184828 223306
55	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 11.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	284	4	185326 223639
56	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 39.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SW (SE)	295	4	185337 223637
57	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 288.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NE (S)	309	4	184781 223263
58	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 14.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	321	4	184524 223252
59	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 115.2 Volume 115.2	B3NW (S)	331	4	184531 223239



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
60	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	331	4	184515 223241
	OS Water Network Lines				
61	Watercourse Form: Inland river Watercourse Length: 284.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SE (SE)	334	4	185376 223629
62	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 108.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	334	4	184546 223233
63	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 271.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B10NW (W)	401	4	183703 224498
64	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 271.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B10NW (W)	405	4	183697 224497
65	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	421	4	184544 223144
66	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 42.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	430	4	184573 223131
67	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	433	4	184557 223130
68	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 191.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8NE (E)	440	4	185597 223959



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 183.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3NW (S)	441	4	184554 223122
	OS Water Network Lines				
70	Watercourse Form: Inland river Watercourse Length: 176.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B3NW (S)	441	4	184554 223122
71	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1002.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	(N)	448	4	184151 225539
72	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 238.3 Watercourse Level: Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3SW (S)	473	4	184568 223088
73	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 279.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B9SE (W)	489	4	183673 224447
74	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SE (E)	501	4	185601 223775
75	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 950.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B8SE (E)	503	4	185604 223776
76	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 857.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B8SE (E)	503	4	185604 223776
77	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 23.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3SW (S)	593	4	184448 222991



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3SW (S)	597	4	184442 222988
	OS Water Network Lines				
79	Watercourse Form: Inland river Watercourse Length: 55.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3SW (S)	613	4	184435 222974
80	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B9SE (W)	630	4	183584 224231
81	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 33.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B9SE (W)	635	4	183579 224231
82	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 707.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B9SE (W)	656	4	183557 224223
83	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 132.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B3SW (S)	660	4	184406 222934
84	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 6.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	671	4	185163 222935
85	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	673	4	185170 222935
86	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 96.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	678	4	185180 222934



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
87	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 17.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	724	4	185274 222927
88	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13SE (NW)	728	4	183460 225125
89	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 80.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	734	4	183469 225154
90	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 4.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	740	4	185286 222915
91	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 99.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	743	4	183449 225138
92	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 29.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	744	4	185289 222913
93	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	767	4	185295 222890
94	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 134.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B4SW (SE)	773	4	185301 222886
95	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: 95.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13SE (NW)	794	4	183351 225042



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 175.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13SE (NW)	798	4	183370 225099
	OS Water Network Lines				
97	Watercourse Form: Inland river Watercourse Length: 34.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13SW (NW)	809	4	183328 225029
98	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13SW (NW)	811	4	183318 225004
99	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	884	4	183362 225267
100	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	884	4	183362 225267
101	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	885	4	183361 225268
102	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	888	4	183358 225267
103	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 93.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	893	4	183357 225274
104	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 175.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B2NW (SW)	894	4	183798 223177



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
105	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 7.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	932	4	183373 225365
106	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 200.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B13NE (NW)	936	4	183374 225372
107	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 25.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B2SW (SW)	966	4	183834 222996
108	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 231.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	B1SE (SW)	991	4	183664 223105
109	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 190.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	B13NW (NW)	999	4	183316 225399

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR	
	Local Authority Landfill Coverage						ĺ
	Name:	Pembrokeshire County Council - Has supplied landfill data		0	5	184501 224184	

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid	d Geology				
	Description:	Lower Cambrian Rocks (Undifferentiated)	B7NW (SE)	0	1	184609 223932
	BGS 1:625,000 Solid	d Geology				
	Description:	Unnamed Extrusive Rocks, Neoproterozoic	B7NW (SE)	0	1	184672 223958
	BGS 1:625,000 Solid	d Geology Upper Cambrian, Including Tremadoc	B11SW	0	1	184501
	Description:		(W)	U	ı	224184
110	BGS Recorded Mine Site Name: Location: Source:	eral Sites Rickeston Llandeloy, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service	B16NW (NE)	0	1	185137 225330
	Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	89683 Opencast Ceased Unknown Operator Not Supplied Ordovician Unnamed Igneous Intrusion, Ordovician Sand and Gravel Located by supplier to within 10m				
	BGS Recorded Mine	• • • • • • • • • • • • • • • • • • • •				
111	Site Name: Location: Source: Reference: Type:	Brawdy Farm Sandpit Penycwm, Brawdy, Haverfordwest, Pembrokeshire British Geological Survey, National Geoscience Information Service 3748 Opencast	B12SE (E)	177	1	185395 224175
	Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Ceased Mason Brothers Quarry Products Ltd. Not Supplied Quaternary Glaciofluvial Deposits, Devensian Sand and Gravel				
		Located by supplier to within 10m				
112	-	Pen-Y-Cwm Penycwm, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89867 Opencast Ceased Unknown Operator Not Supplied Cambrian St Non'S Sandstone Formation Sandstone Located by supplier to within 10m	B3NE (S)	305	1	184718 223261
440	BGS Recorded Mine		Door	200	4	404000
113		Pen-Y-Cwm Sand Pit Penycwm, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89868 Opencast Ceased Unknown Operator Not Supplied Cambrian St Non'S Sandstone Formation Sand Located by supplier to within 10m	B6SE (S)	330	1	184308 223449
444	BGS Recorded Mine		B 40144	700	,	405000
114	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Newgale Farm Newgale, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89870 Opencast Ceased Unknown Operator Not Supplied Cambrian Menevian Group Common Clay and Shale Located by supplier to within 10m	B4SW (SE)	788	1	185203 222825





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology:	Tal-Y-Bont Bryngwyn, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89857 Opencast Ceased Unknown Operator Not Supplied Cambrian Lingula Flags Formation Sandstone	B13SE (NW)	791	1	183350 225024
	Commodity: Positional Accuracy: BGS Recorded Mine	Located by supplier to within 10m				
116	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Tal-Y-Bont Bryngwyn, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89858 Opencast Ceased Unknown Operator Not Supplied Cambrian Lingula Flags Formation Sandstone Located by supplier to within 10m	B13SW (NW)	838	1	183318 225077
117	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Ffynnon Ddewi-Fach Bryngwyn, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89695 Opencast Ceased Unknown Operator Not Supplied Cambrian Lingula Flags Formation Sandstone Located by supplier to within 10m	B13NW (NW)	915	1	183309 225238
	BGS Recorded Mine	,				
118	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Cwm Bach Penycwm, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89869 Opencast Ceased Unknown Operator Not Supplied Neoproterozoic 3 (Late Precambrian) Ramsey Sound Group Igneous and Metamorphic Rock Located by supplier to within 10m	B2SW (SW)	978	1	183757 223097
	Coal Mining Affecte					
	Man-Made Mining C Easting: Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Commodity: Solid Geology Detail: Superficial Geology Detail:	184800 223100 473 : B3 : SE S Shaft (Copper) Copper	B3SE (S)	473	7	184800 223100
	Non Coal Mining Ar Risk: Source:	reas of Great Britain Highly Unlikely British Geological Survey, National Geoscience Information Service	B11SE (E)	0	1	185000 224184
		reas of Great Britain Highly Unlikely British Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	184501 224184
		eas of Great Britain Highly Unlikely British Geological Survey, National Geoscience Information Service	B15SE (NE)	0	1	185000 225000

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
		is of Great Britain lighly Unlikely British Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	184501 225000
	Hazard Potential: V	ble Ground Stability Hazards /ery Low british Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	184501 224184
	Hazard Potential: V	ble Ground Stability Hazards /ery Low british Geological Survey, National Geoscience Information Service	B11SE (E)	0	1	185000 224184
	Hazard Potential: V	ble Ground Stability Hazards /ery Low British Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	184501 225000
	Hazard Potential: V	ble Ground Stability Hazards /ery Low sritish Geological Survey, National Geoscience Information Service	B15SE (NE)	0	1	185000 225000
	Hazard Potential: N	ssible Ground Stability Hazards lo Hazard stritish Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	184501 224184
	Hazard Potential: N	ssible Ground Stability Hazards lo Hazard dritish Geological Survey, National Geoscience Information Service	B11SE (E)	0	1	185000 224184
	Hazard Potential: N	ssible Ground Stability Hazards lo Hazard dritish Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	184501 225000
	Hazard Potential: N	ssible Ground Stability Hazards Io Hazard British Geological Survey, National Geoscience Information Service	B15SE (NE)	0	1	185000 225000
	Hazard Potential: N	Dissolution Stability Hazards Io Hazard British Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	184501 225000
	Hazard Potential: N	Dissolution Stability Hazards Io Hazard Pritish Geological Survey, National Geoscience Information Service	B15SE (NE)	0	1	185000 225000
	Hazard Potential: N	Dissolution Stability Hazards Io Hazard Pritish Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	184501 224184
	Hazard Potential: N	Dissolution Stability Hazards Io Hazard Pritish Geological Survey, National Geoscience Information Service	B11SE (E)	0	1	185000 224184
	Hazard Potential: V	e Ground Stability Hazards /ery Low british Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	184501 225000
	Hazard Potential: V	e Ground Stability Hazards /ery Low british Geological Survey, National Geoscience Information Service	B15SE (NE)	0	1	185000 225000
	Hazard Potential: N	e Ground Stability Hazards lo Hazard british Geological Survey, National Geoscience Information Service	B7SW (S)	0	1	184561 223557
	Hazard Potential: N	e Ground Stability Hazards lo Hazard british Geological Survey, National Geoscience Information Service	B16NW (NE)	0	1	185268 225457
	Hazard Potential: V	e Ground Stability Hazards Yery Low british Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	184501 224184
	Hazard Potential: V	e Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	B11SE (E)	0	1	185000 224184
	Hazard Potential: N	e Ground Stability Hazards lo Hazard dritish Geological Survey, National Geoscience Information Service	B15NE (NE)	0	1	185000 225297
_	Hazard Potential: N	e Ground Stability Hazards lo Hazard British Geological Survey, National Geoscience Information Service	B15NE (NE)	0	1	185004 225288

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/lap ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards	,			
	Hazard Potential: Source: No Hazard British Geological Survey, National Geoscience Information	B7SE (SE)	18	1	185000 223644
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information	B12SE Service (E)	79	1	185405 224246
	Potential for Running Sand Ground Stability Hazards	Gervice (L)			224240
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information	B11SE Service (E)	0	1	185000 224184
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information	Service B11SW (NW)	0	1	184409 224372
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information	Service B16SE (NE)	0	1	185421 225000
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: Very Low Source: Very Low British Geological Survey, National Geoscience Information	Service B11SE (E)	0	1	184753 224272
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	B7NE Service (SE)	0	1	185000 223908
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard Source; National Geoscience Information	Service B11NE (NE)	0	1	18500 22450
	Potential for Running Sand Ground Stability Hazards	(1.2)			
	Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information	B15SE (NE)	0	1	18500 22500
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	Service B11SW (W)	0	1	18450 22418
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	Service B15SW (N)	0	1	18450 22500
	Potential for Running Sand Ground Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information	B10SE (W)	73	1	18414 22419
	Potential for Running Sand Ground Stability Hazards	(11)			
	Hazard Potential: Very Low	B14NE	129	1	18422
	Source: British Geological Survey, National Geoscience Information	Service (N)			22524
	Potential for Shrinking or Swelling Clay Ground Stability Hazards	5.750			40
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	Service B15SW (N)	0	1	18450 22500
	Potential for Shrinking or Swelling Clay Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	Service B11SE (E)	0	1	18500 22418
	Potential for Shrinking or Swelling Clay Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	Service B15SE (NE)	0	1	18500 22500
	Potential for Shrinking or Swelling Clay Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information	Service B11SW (W)	0	1	18450 22418
	Potential for Shrinking or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information	B14NE Service (N)	129	1	18422 22524
	Potential for Shrinking or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information	B10SW (W)	143	1	18392 22429
	Radon Potential - Radon Affected Areas				
	Affected Area: The property is in an Intermediate probability radon area (1 are estimated to be at or above the Action Level).	to 3% of homes B7NW (SE)	0	1	18460 22395

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p		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR		
Radon I	Radon Potential - Radon Affected Areas							
Affected Source:		The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	B7NE (E)	0	1	185000 224100		
Radon I	Potential - R	adon Affected Areas						
Affected Source:		The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	18450 22418		
Radon I	Potential - R	adon Affected Areas						
Affected Source:	d Area:	The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	B11SE (E)	0	1	18500 22418		
Affected Source:	d Area:	adon Affected Areas The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	18450 22500		
		adon Affected Areas						
Affected		The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level).	B15SE (NE)	0	1	18500 22500		
Source:		British Geological Survey, National Geoscience Information Service	()					
Radon I	Potential - R	adon Protection Measures						
Protection Source:		No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B7NW (SE)	0	1	18460 22395		
Radon I	Potential - R	adon Protection Measures						
Protection	on Measure:	No radon protective measures are necessary in the construction of new dwellings or extensions	B7NE (E)	0	1	18500 22410		
Source:		British Geological Survey, National Geoscience Information Service						
		adon Protection Measures						
Protection Source:		Full radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B11SW (W)	0	1	18450 22418		
Radon I	Potential - R	adon Protection Measures						
		Full radon protective measures are necessary in the construction of new dwellings or extensions	B11SE (E)	0	1	18500 22418		
Source:		British Geological Survey, National Geoscience Information Service						
Radon I	Potential - R	adon Protection Measures						
Protection Source:		Full radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B15SW (N)	0	1	18450 22500		
		adon Protection Measures Full radon protective measures are necessary in the construction of new dwellings or extensions	B15SE (NE)	0	1	18500 22500		
Source:		British Geological Survey, National Geoscience Information Service	(14)			22300		

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Industrial Land Use

Map ID		Details			Contact	NGR
	Contemporary Trad	e Directory Entries				
119	Name: Location:	Cambrian Bears Ltd Roch House, Brawdy Business Park, Brawdy, Haverfordwest, Dyfed, SA62 6NP	B6NE (SW)	165	-	184128 223861
	Classification: Status: Positional Accuracy:	Manufacturers Inactive Automatically positioned to the address				
	Contemporary Trad	e Directory Entries				
119	Name: Location:	Gengard Newgale House, Brawdy Business Park, Brawdy, Haverfordwest, Dyfed, SA62 6NP	B6NE (SW)	199	-	184093 223854
	Classification: Status: Positional Accuracy:	Lawnmowers & Garden Machinery - Sales & Service Inactive Automatically positioned to the address				
	Contemporary Trad	e Directory Entries				
119	Name: Location:	Blindings Ltd 1, Solva House, Brawdy Business Park, Brawdy, Haverfordwest, Dyfed, SA62 6NP	B6NE (SW)	230	-	184059 223852
	Classification: Status: Positional Accuracy:	Food Products - Manufacturers Inactive Automatically positioned to the address				
	Contemporary Trad	e Directory Entries				
120	Name: Location: Classification: Status: Positional Accuracy:	Concept Foods 3,Brawdy Business Pk, Brawdy, Haverfordwest, Dyfed, SA62 6NP Food Products - Manufacturers Inactive Manually positioned within the geographical locality	B6NE (SW)	167	-	184150 223827
	Contemporary Trad	e Directory Entries	_			
121	Name: Location:	Period Oakdoors Ltd 3, Maritime House, Brawdy Business Park, Brawdy, Haverfordwest, Dyfed, SA62 6NP	B6NE (SW)	229	-	184098 223793
	Classification: Status: Positional Accuracy:	Joinery Manufacturers Inactive Automatically positioned to the address				

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Sensitive Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
122	Ancient Woodland Name: Reference: Area(m²): Type:	Not Supplied 4751 6110.46 Restored Ancient Woodland Site	B15NE (N)	0	2	184706 225249
123	Ancient Woodland Name: Reference: Area(m²): Type:	Not Supplied 4712 8596.98 Ancient and Semi-Natural Woodland	B8SE (E)	570	2	185669 223762
124	Ancient Woodland Name: Reference: Area(m²): Type:	Not Supplied 4710 8906.03 Ancient and Semi-Natural Woodland	(SE)	967	2	185854 223196
125	Ancient Woodland Name: Reference: Area(m²): Type:	Not Supplied 4713 119967.99 Ancient and Semi-Natural Woodland	(E)	979	2	186095 223736
126	Environmentally Se Name: Multiple Areas: Total Area (m2): Source:	Preseli (decommissioned) Y 1187932672 The National Assembly for Wales, GI Services (Department of Planning & Countryside)	B11SW (W)	0	8	184501 224184
127	Environmentally Se Name: Multiple Areas: Total Area (m2): Source:	Preseli (decommissioned) Y 484.375 The National Assembly for Wales, GI Services (Department of Planning & Countryside)	(S)	931	8	184376 222660
128	National Parks Name: Multiple Area: Area (m2): Source: Status: Designation Date:	Pembrokeshire Coast Y 187013417.05 Natural Resources Wales Fully Designated - designated as a National Park 31st December 1951	B6SE (S)	140	2	184315 223510
129	Sites of Special Sci Name: Multiple Areas: Total Area (m2): Source: Reference:	entific Interest St. Davids Peninsula Coast Y 6858510.94 Natural Resources Wales 108832wtj Mixed Biological And Geological 1st January 1954 Notified	B2NE (S)	597	2	184116 223201
130	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	St Davids / Ty Ddewi Y 9398841.84 Natural Resources Wales UK0013045 Designated	B2SE (S)	674	2	184091 223083
131	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	Pembrokeshire Marine / Sir Benfro Forol Y 1380663657.51 Natural Resources Wales Uk0013116 Designated	B2SE (S)	746	2	184057 223024
132	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	West Wales Marine / Gorllewin Cymru Forol Y 7377173853.81 Natural Resources Wales UK0030397 Designated	B2SW (SW)	832	2	183912 223019

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Sensitive Land Use

Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
133	Special Protection Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Areas Ramsey And St Davids Peninsula Coast Y 8462392.96 Natural Resources Wales Uk9014062 24th July 1996	B2SE (S)	674	2	184091 223083

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Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Natural Resources Wales	June 2020	Annually
Pembrokeshire County Council - Public Protection Division	September 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - Welsh Region	August 2014	Quarterly
Natural Resources Wales	October 2022	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Welsh Region	March 2013	
ntegrated Pollution Controls		
Environment Agency - Welsh Region	January 2009	
ntegrated Pollution Prevention And Control		
Environment Agency - Welsh Region	January 2021	Quarterly
Natural Resources Wales	October 2022	Quarterly
Local Authority Integrated Pollution Prevention And Control	0.1122.7.2.2.2	
Pembrokeshire County Council - Environmental Health Department	November 2015	Variable
	140VGHIDEL 2013	v anable
Local Authority Pollution Prevention and Controls		A 1 5 111 11 11 11
Pembrokeshire County Council - Environmental Health Department	November 2015	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Pembrokeshire County Council - Environmental Health Department	November 2015	Variable
Nearest Surface Water Feature		
Ordnance Survey	October 2022	
Pollution Incidents to Controlled Waters		
Environment Agency - Welsh Region	December 1998	
Prosecutions Relating to Authorised Processes		
Environment Agency - Welsh Region	July 2015	
Natural Resources Wales	July 2015	
	July 2013	
Prosecutions Relating to Controlled Waters	March 0040	
Environment Agency - Welsh Region Natural Resources Wales	March 2013	
	March 2013	
Registered Radioactive Substances		
Natural Resources Wales	January 2015	
Environment Agency - Welsh Region	June 2016	As notified
Substantiated Pollution Incident Register		
Environment Agency Wales - South West Area	January 2021	Quarterly
Natural Resources Wales	October 2022	Quarterly
Water Abstractions		
Environment Agency - Welsh Region	October 2022	Quarterly
Natural Resources Wales	October 2022	Quarterly
Water Industry Act Referrals		
Environment Agency - Welsh Region	October 2017	
Natural Resources Wales	October 2022	Quarterly
Groundwater Vulnerability Map		
Natural Resources Wales	June 2018	As notified
	33.70 20 10	7.0 110411104
Bedrock Aquifer Designations	lanuari 2040	٠ الممددة
Natural Resources Wales	January 2018	Annually
Superficial Aquifer Designations		
Natural Resources Wales	January 2018	Annually
Source Protection Zones		
Natural Resources Wales	July 2022	Annual Rolling Update
Extreme Flooding from Rivers or Sea without Defences		
Natural Resources Wales	September 2020	

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Agency & Hydrological	Version	Update Cycle
Flooding from Rivers or Sea without Defences Natural Resources Wales	September 2020	
Areas Benefiting from Flood Defences		
Natural Resources Wales	November 2019	Quarterly
Flood Water Storage Areas Natural Resources Wales	August 2019	Quarterly
Flood Defences Natural Resources Wales	November 2019	Quarterly
OS Water Network Lines Ordnance Survey	October 2022	Quarterly
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified
Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites Natural Resources Wales	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Welsh Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)	Garidary 2000	Trot / tppilodbio
Natural Resources Wales	October 2021	Quarterly
Environment Agency Wales - South West Area	October 2022	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency Wales - South West Area	July 2021	Quarterly
Natural Resources Wales	July 2022	Quarterly
Local Authority Landfill Coverage Pembrokeshire County Council - Environmental Health Department	February 2003	Not Applicable
Local Authority Recorded Landfill Sites Pembrokeshire County Council - Environmental Health Department	October 2018	
Registered Landfill Sites		
Environment Agency Wales - South West Area	March 2006	Not Applicable
Registered Waste Transfer Sites Environment Agency Wales - South West Area	April 2018	
Registered Waste Treatment or Disposal Sites Environment Agency Wales - South West Area	June 2015	
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	January 2022	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Pembrokeshire Coast National Park Authority - Development Control	February 2016	Variable
Pembrokeshire County Council - Planning Department	October 2015	Variable
Planning Hazardous Substance Consents Pembrokeshire Coast National Park Authority - Development Control Pembrokeshire County Council - Planning Department	February 2016 October 2015	Variable
Pembrokeshire County Council - Planning Department	October 2015	Variable

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Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	November 2022	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	
Cheshire Brine Subsidence Compensation Board (CBSCB)	November 2020	As notified
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	September 2022	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	September 2022	Annually
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	October 2022	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	August 2022	Quarterly
Gas Pipelines		
National Grid	October 2021	Bi-Annually
Underground Electrical Cables		
National Grid	May 2021	Bi-Annually

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Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural Resources Wales	September 2018	Bi-Annually
Areas of Adopted Green Belt		
Pembrokeshire Coast National Park Authority - Development Control	July 2022	Quarterly
Pembrokeshire County Council	July 2022	Quarterly
Areas of Unadopted Green Belt		
Pembrokeshire Coast National Park Authority - Development Control	July 2022	Quarterly
Pembrokeshire County Council	July 2022	Quarterly
Areas of Outstanding Natural Beauty		
Natural Resources Wales	August 2022	Bi-Annually
Environmentally Sensitive Areas		
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Pembrokeshire County Council	August 2018	Bi-Annually
Marine Nature Reserves		
Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves		
Natural Resources Wales	February 2022	Bi-Annually
National Parks		
Natural Resources Wales	February 2018	Annually
Nitrate Vulnerable Zones		
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	April 2016	
Natural Resources Wales	July 2019	Bi-Annually
Ramsar Sites		
Natural Resources Wales	July 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural Resources Wales	March 2020	Bi-Annually
Special Areas of Conservation		
Natural Resources Wales	August 2020	Bi-Annually
Special Protection Areas		
Natural Resources Wales	August 2018	Bi-Annually

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A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPA Scottish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE 必公司
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Stantec UK Ltd	Stantec

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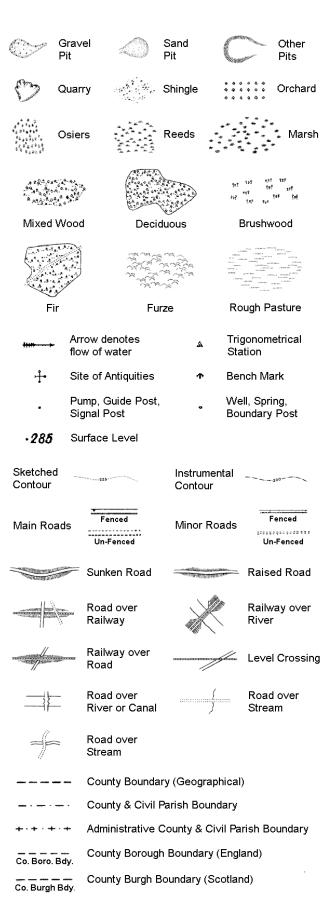
Useful Contacts

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Pembrokeshire County Council - Environmental Health Department Public Protection Division, Pembrokeshire County Council, County Hall, Haverfordwest, Pembrokeshire, SA61 1TP	Telephone: 01437 764551 Fax: 01437 775838 Website: www.pembrokeshire.gov.uk
6	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	Stantec UK Ltd Caversham Bridge House, Waterman Place, Reading, RG1 8DN	Telephone: 0118 950 0761 Email: pba.reading@stantec.com Website: www.stantec.com
8	The National Assembly for Wales - GI Services (Department of Planning & Countryside) Yr Hen Ysgol Gymraeg, Alexandria Road, Aberystwyth, Ceredigion, SY23 1LD	Telephone: 02920 825111 Website: www.wales.gov.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Historical Mapping Legends

Ordnance Survey County Series 1:10,560



Rural District Boundary

····· Civil Parish Boundary

R.D. Bdy.

Ordnance Survey Plan 1:10,000

	Eurann	Chalk Pit, Clay Pit or Quarry	0 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	🐎 Gravel Pit	
		Sand Pit	(、 Disused Pit ✓ or Quarry	
1		Refuse or Slag Heap		Lake, Loch or Pond	
		Dunes		Boulders	
	* * *	Coniferous Trees	$\varphi \varphi \varphi$	Non-Coniferous Trees	
	ф ф с	rchard Ω n _	Scrub	∖Yn/ Coppice	
	ជ ^{ជា} B	racken willing	Heath '	、 , , , Rough Grassland	
	<u> ۱۳۰۰</u> ۱۷	flarshV///	Reeds	그 <u>노</u> Saltings	
			ion of Flow of	Water	
	В	uilding	1/5	Shingle	
		>	**	Sand	
	≅ SST G	lasshouse		- Carlo	
			Pylon		
				Electricity	
	S THEFE	loping Masonry		Transmission	
	min o	loping masoniy	Pole	Line	
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	Cutting	Embankme		Chandand Carre	

	11	//	\\		
- 1	Road ' '' ''	Road Leve	Foot	⊨ Standard Gauge Single Track	
	Under	Over Crossi			
- 1				Siding, Tramway or Mineral Line	
- 1					
				→ Narrow Gauge	
9		- Geographical Cou	ınty		
		 Administrative Co or County of City 	unty, County I	Borough	
		Municipal Boroug Burgh or District (ural District,	
		. Borough, Burgh of Shown only when no			
	Civil Parish Shown alternately when coincidence of boundaries occurs				
	BP, BS Bo	undary Post or Stone	Pol Sta	Police Station	
		urch		Police Station Post Office	
		ub House		Public Convenience	
	FESta Fir	e Engine Station	PH	Public House	
		ot Bridge		Signal Box	
		untain	•	Spring	
		ide Post		Telephone Call Box	

Mile Post

TCP

Telephone Call Post

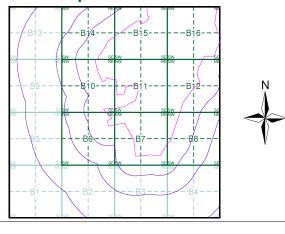
1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock	3 3	Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle	Mud	Mud
Sand	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,	• • • • • •	Ci∨il, parish or community boundary
	Metropolitan, London Borough boundary		Constituency boundary
۵ ⁰	Area of wooded vegetation	۵ ^۵	Non-coniferous trees
\Box	Non-coniferous trees (scattered)	**	Coniferous trees
*	Coniferous trees (scattered)	ĊΘ	Positioned tree
ፉ ፉ ፉ ፉ	Orchard	* *	Coppice or Osiers
affr,	Rough Grassland	www.	Heath
On_	Scrub	7/√\r 7/√\r	Marsh, Salt Marsh or Reeds
5	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)
← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)	\boxtimes	Pylon, flare stac or lighting tower
•	Site of (antiquity)		Glasshouse
	General Building		Important Building

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:10,560	1888	2
Pembrokeshire	1:10,560	1908	3
Pembrokeshire	1:10,560	1953	4
Ordnance Survey Plan	1:10,000	1964	5
Ordnance Survey Plan	1:10,000	1979	6
Ordnance Survey Plan	1:10,000	1980	7
10K Raster Mapping	1:10,000	2000	8
Street View	Variable		9

Historical Map - Slice B



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

Site Area (Ha): 308.46 Search Buffer (m): 1000

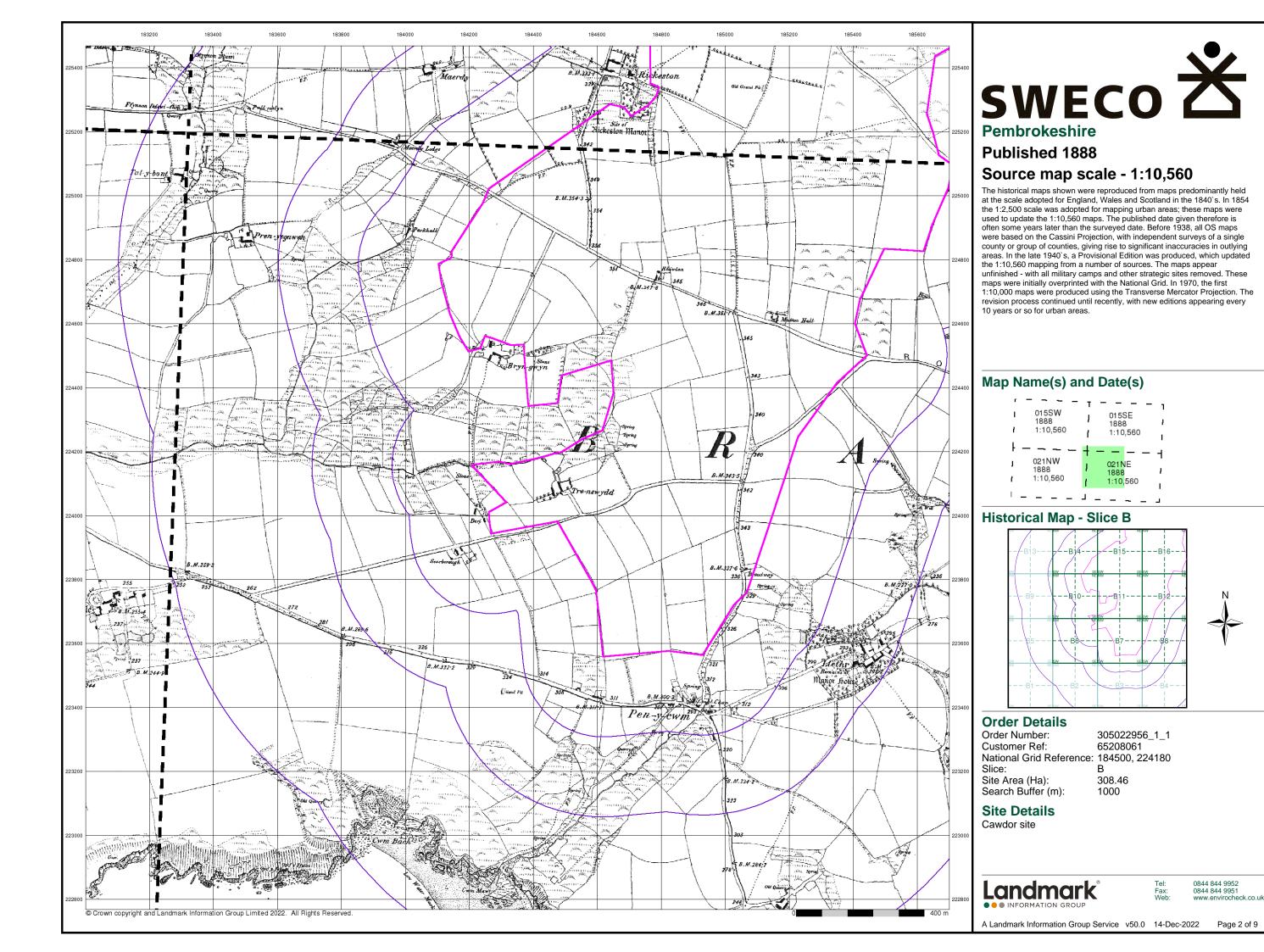
Site Details

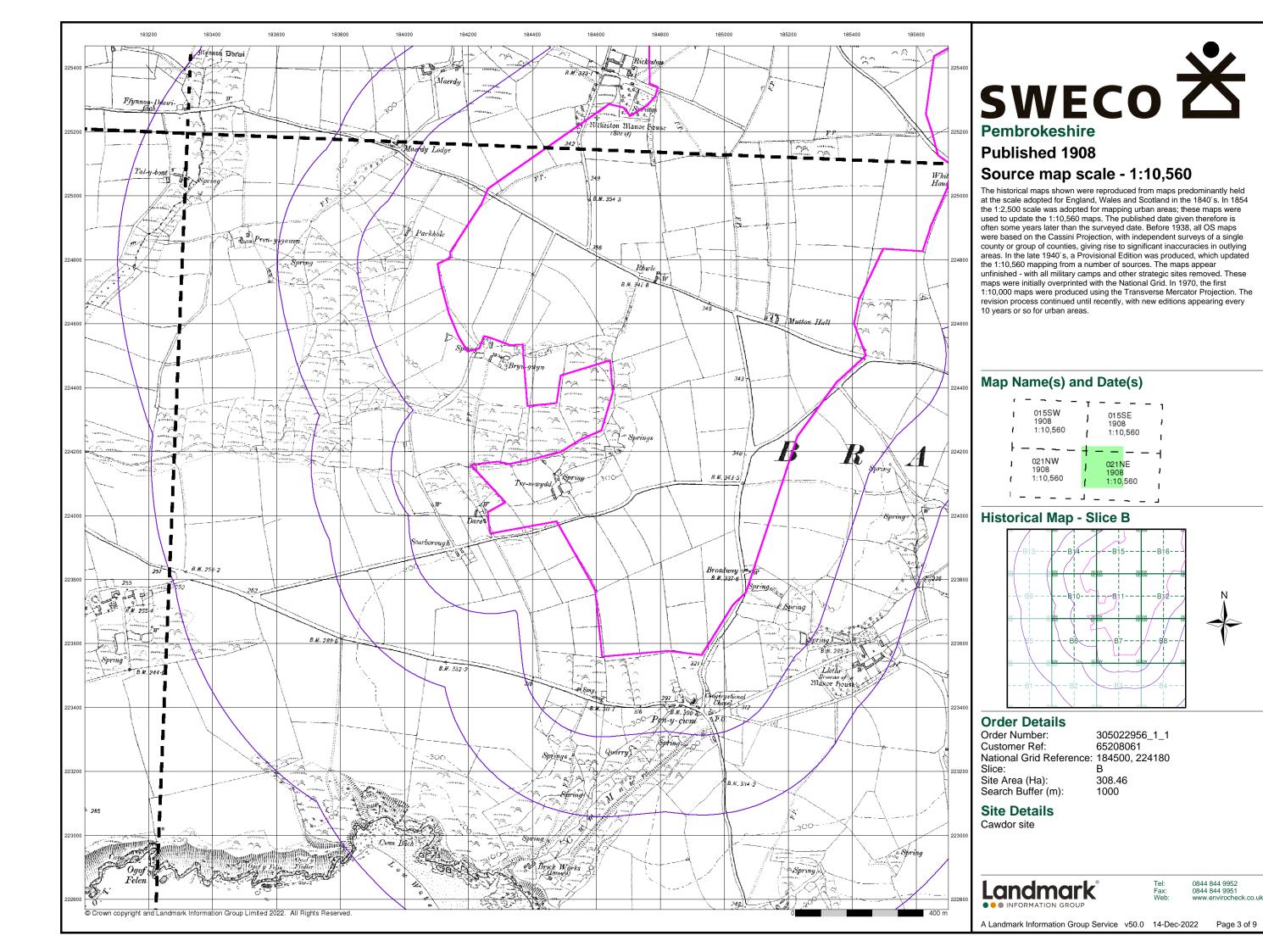
Cawdor site

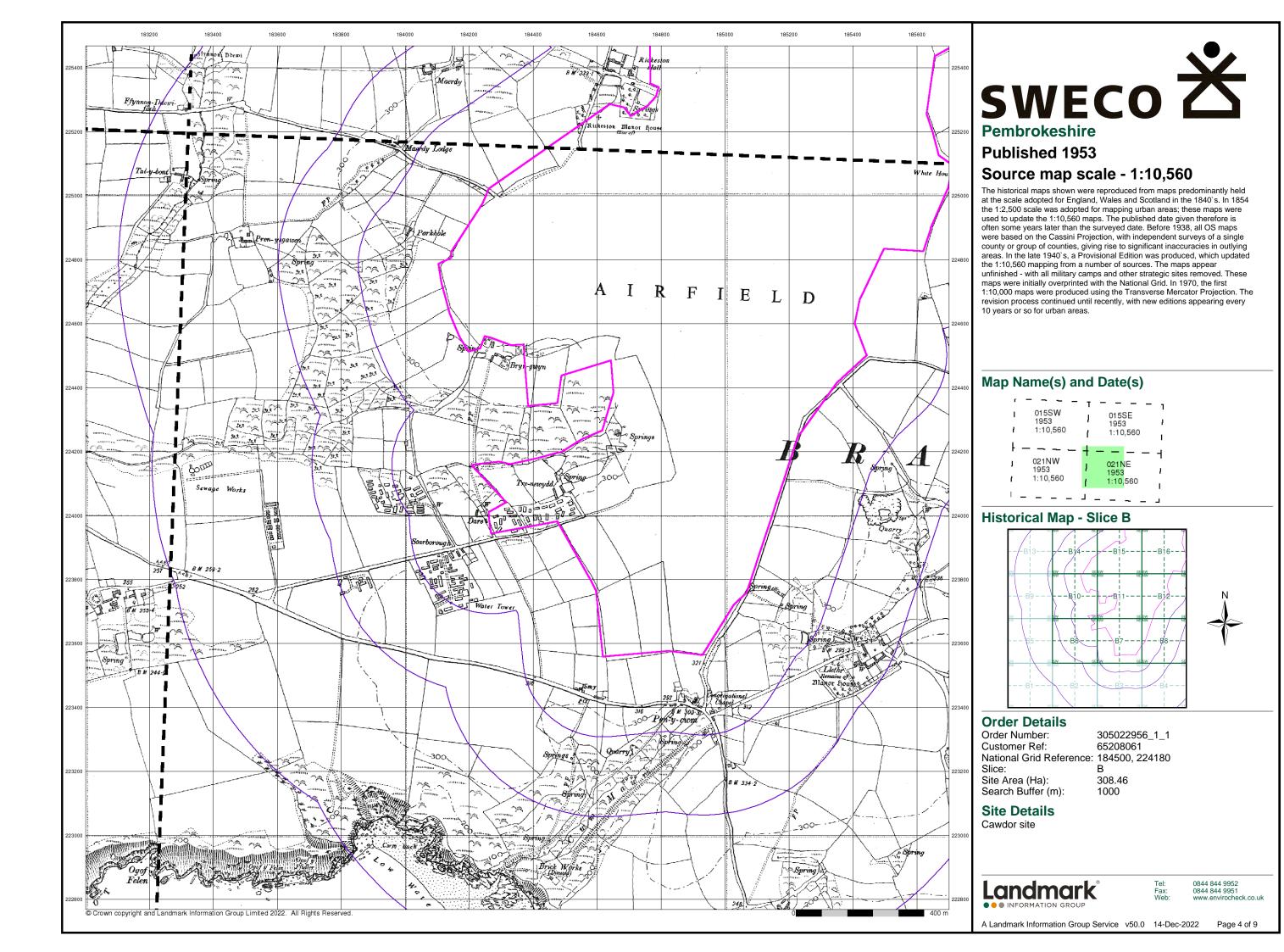
Landmark

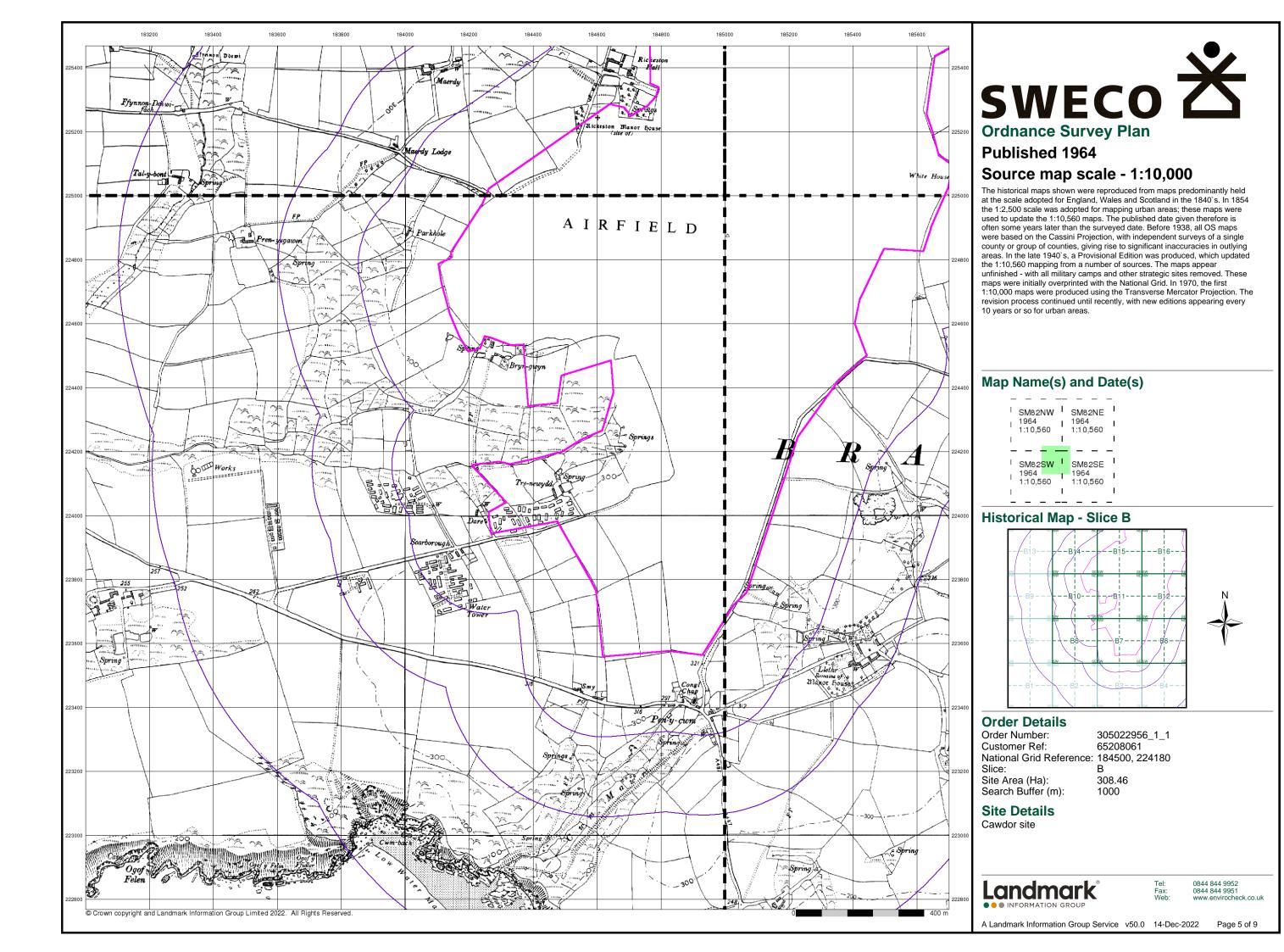
0844 844 9952 0844 844 9951 www.envirocheck.co.uk

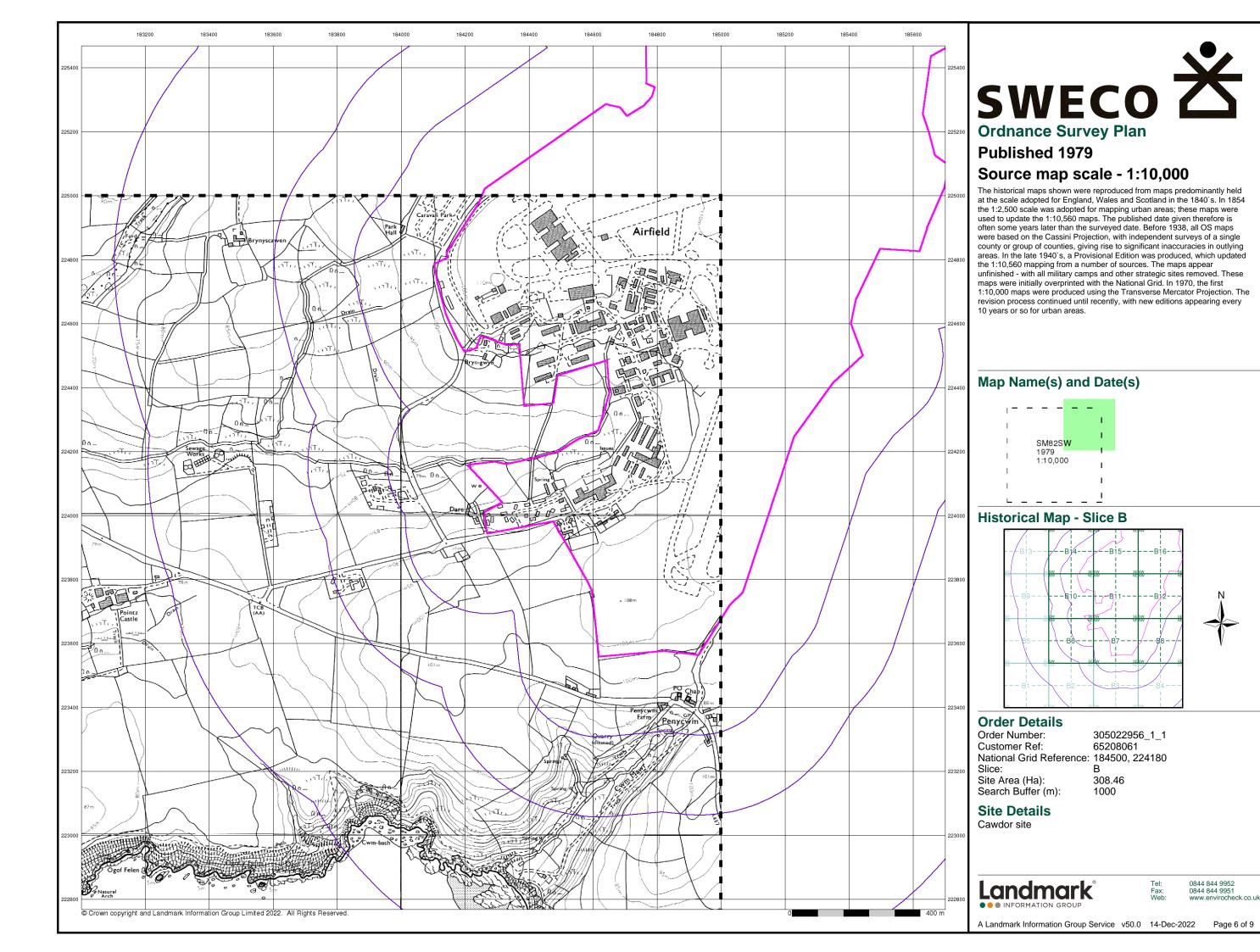
A Landmark Information Group Service v50.0 14-Dec-2022 Page 1 of 9



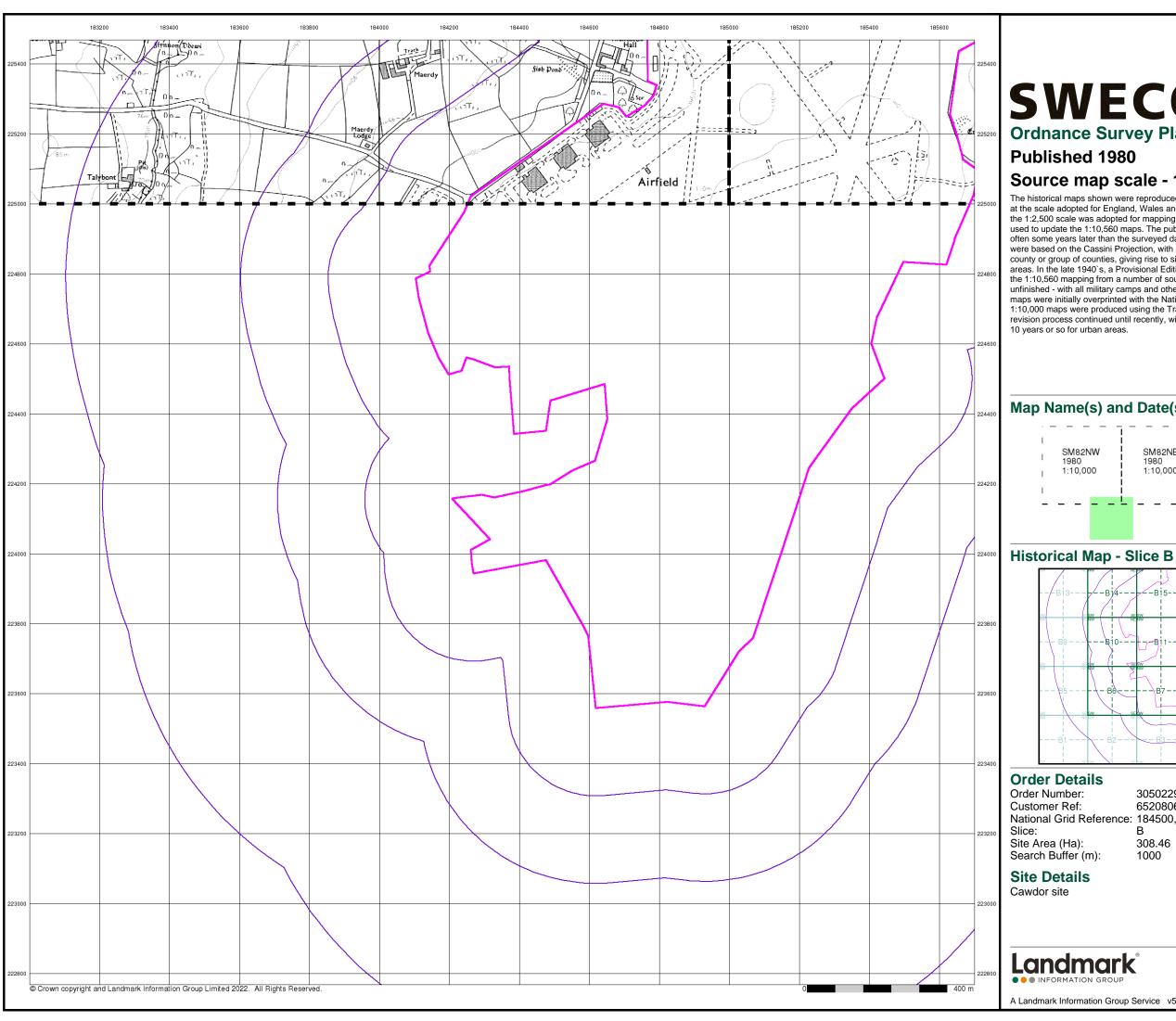








Page 6 of 9



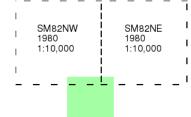
SWECO **本**

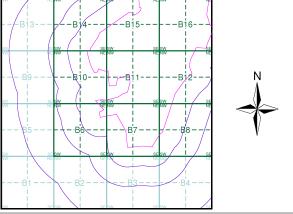
Ordnance Survey Plan

Source map scale - 1:10,000

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

Map Name(s) and Date(s)





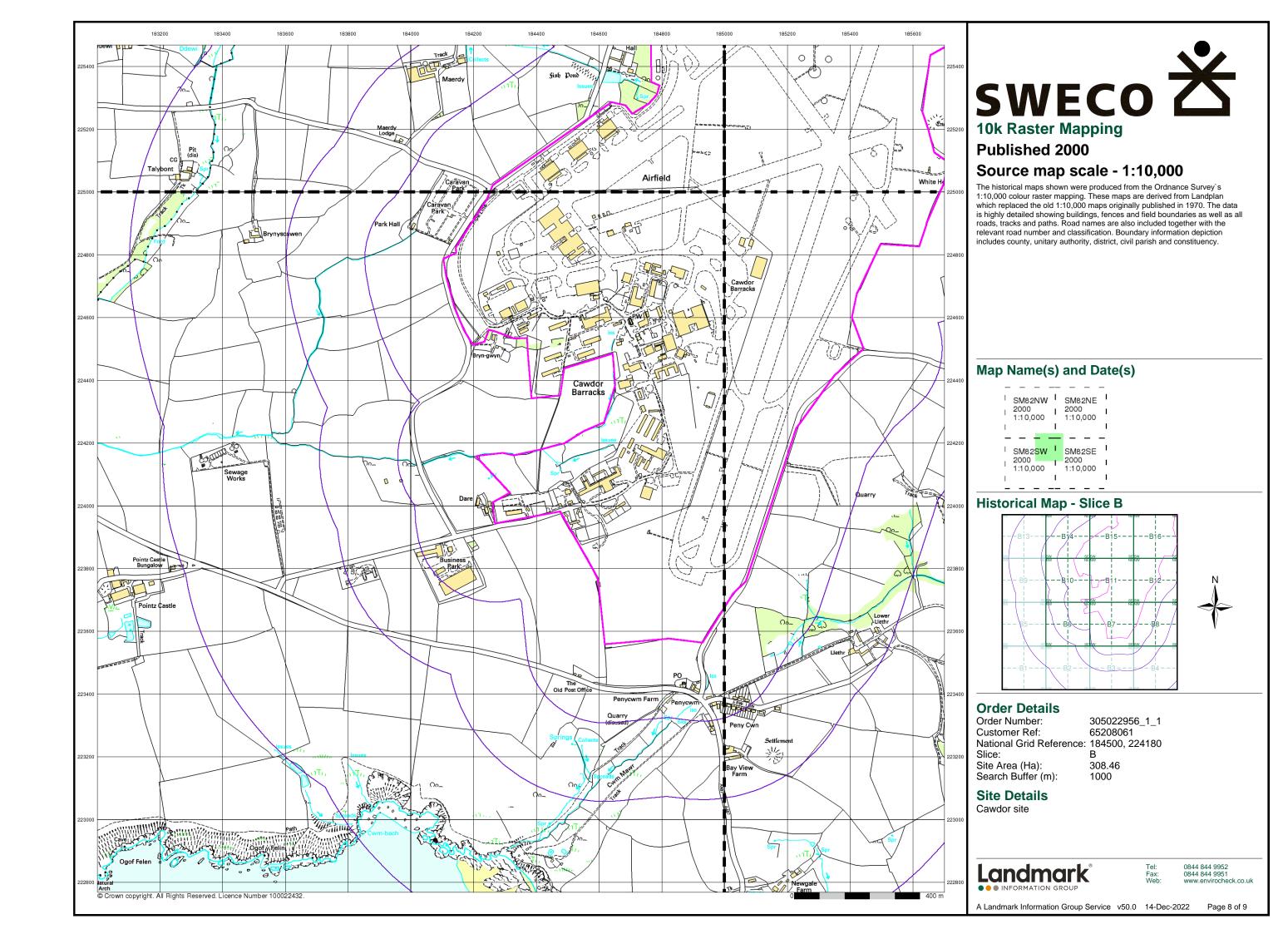
305022956_1_1 65208061 National Grid Reference: 184500, 224180

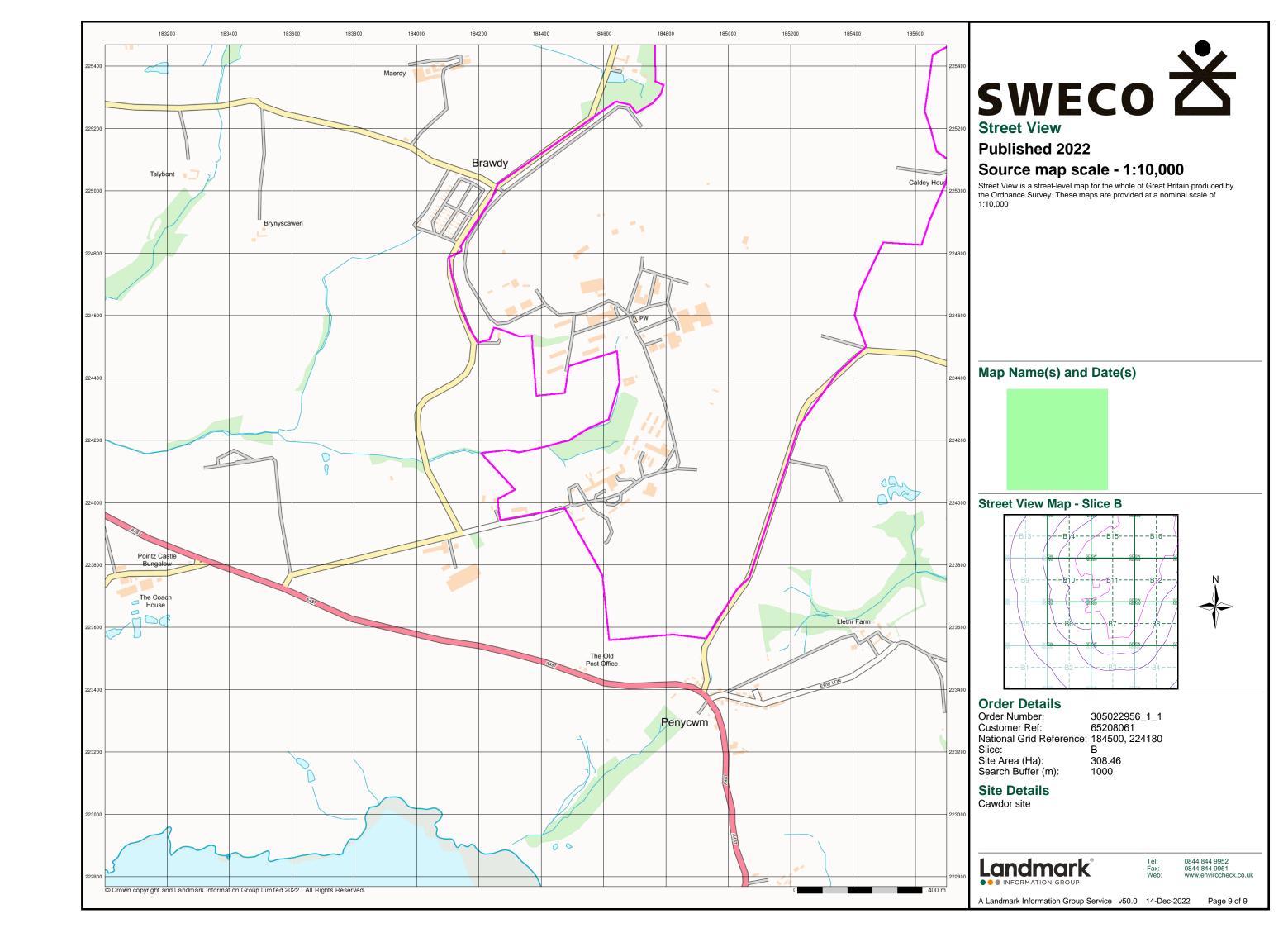
> 308.46 1000

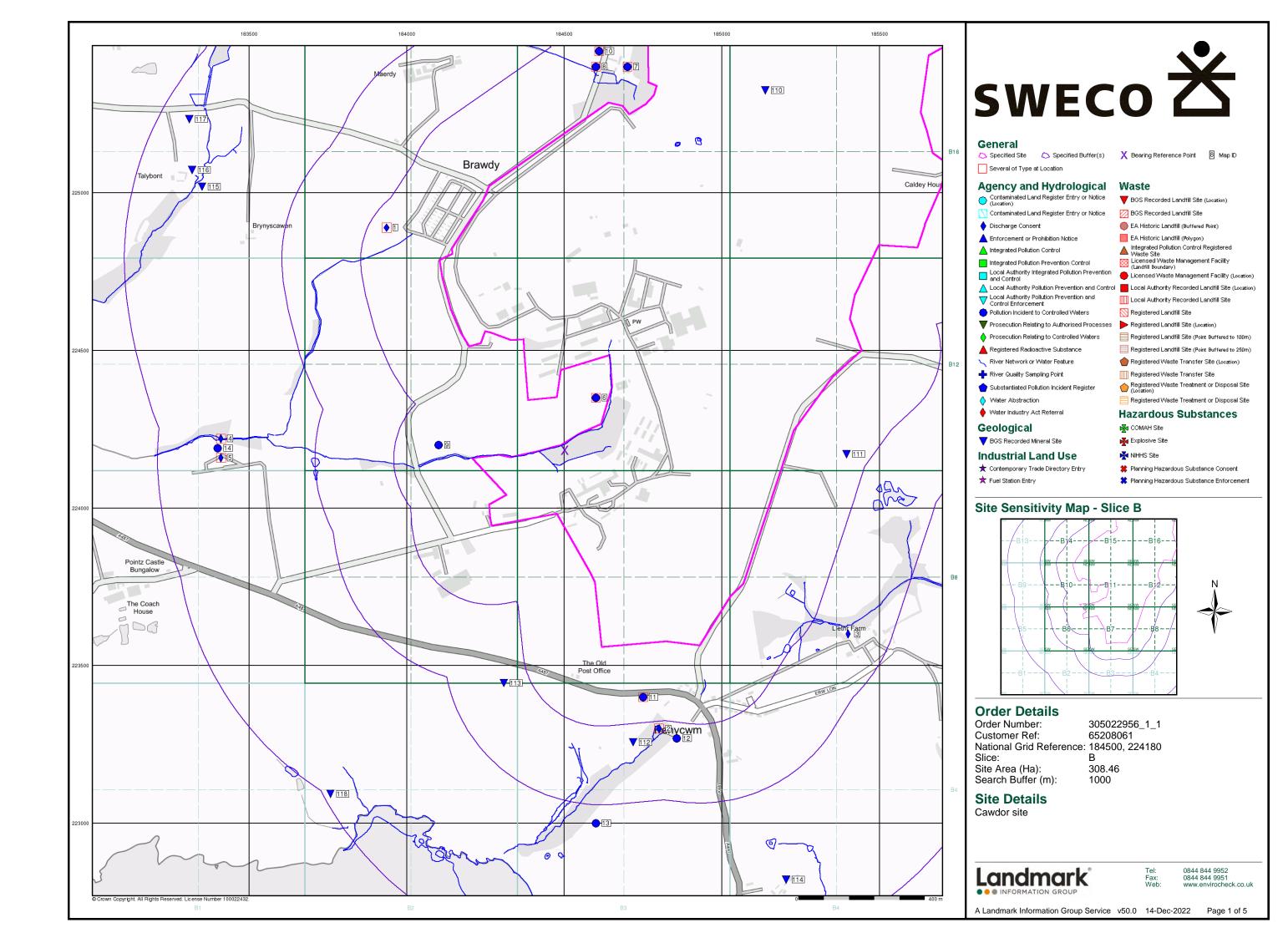
> > 0844 844 9951 www.envirocheck.co.uk

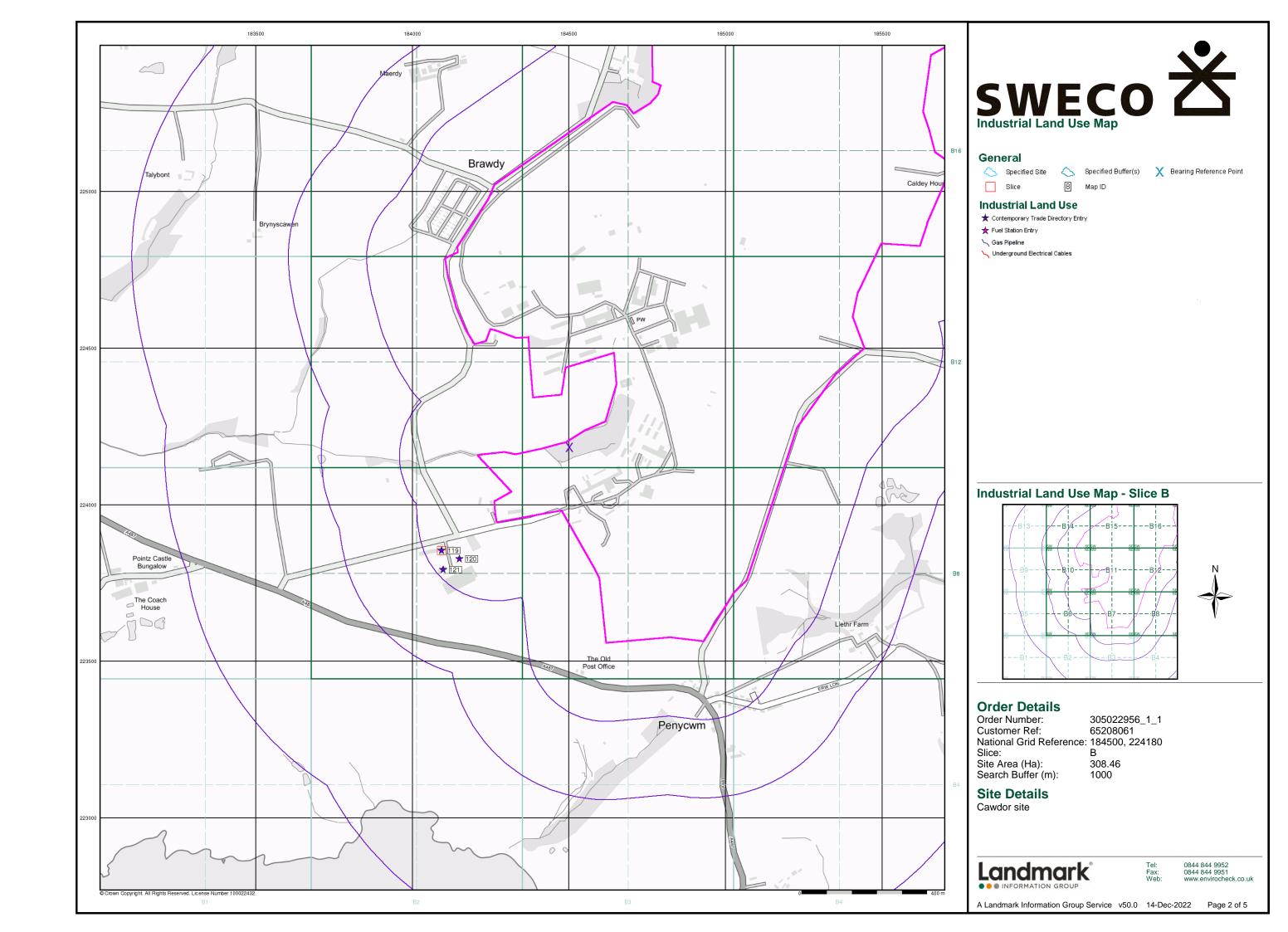
Page 7 of 9

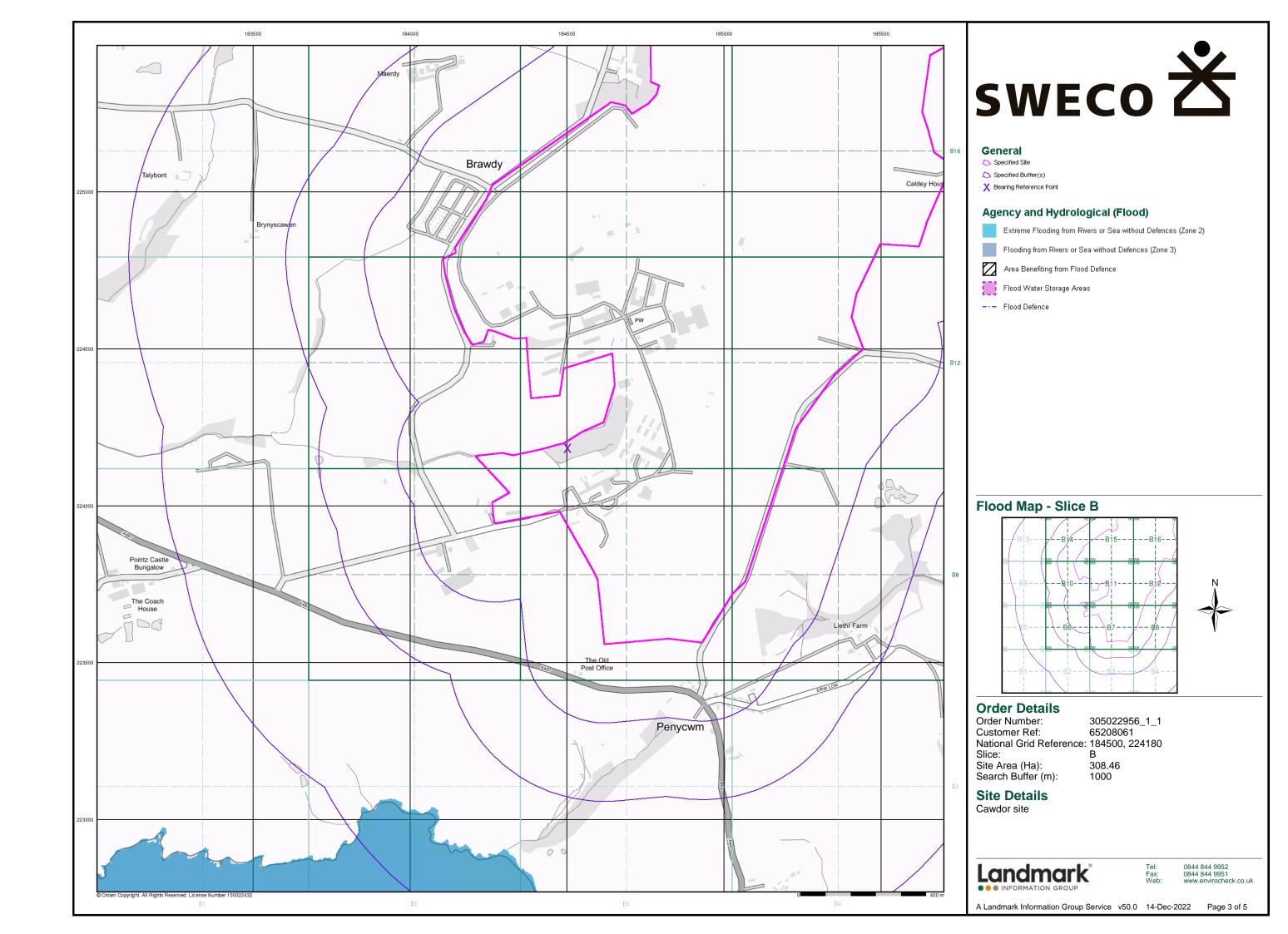
A Landmark Information Group Service v50.0 14-Dec-2022

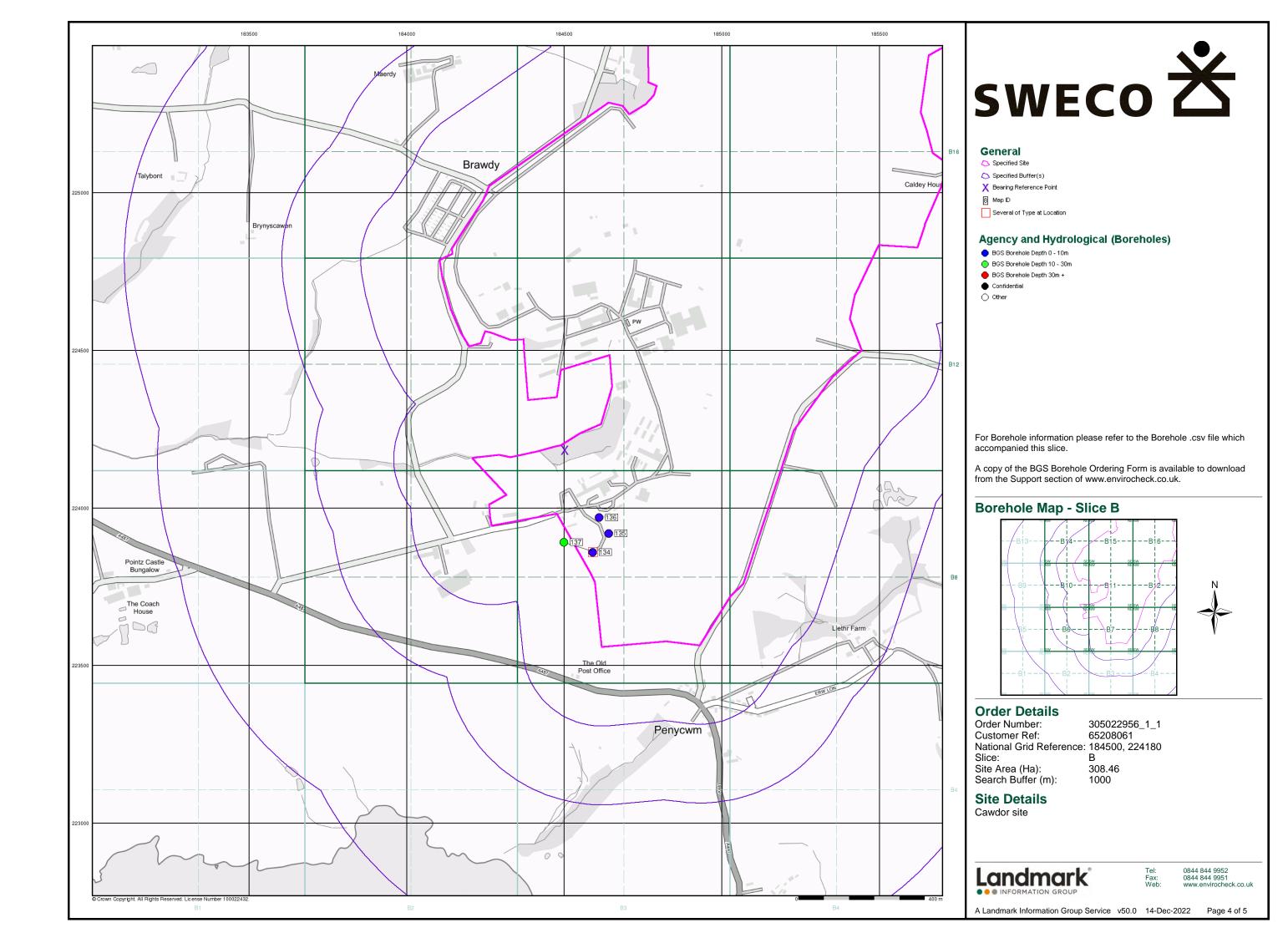


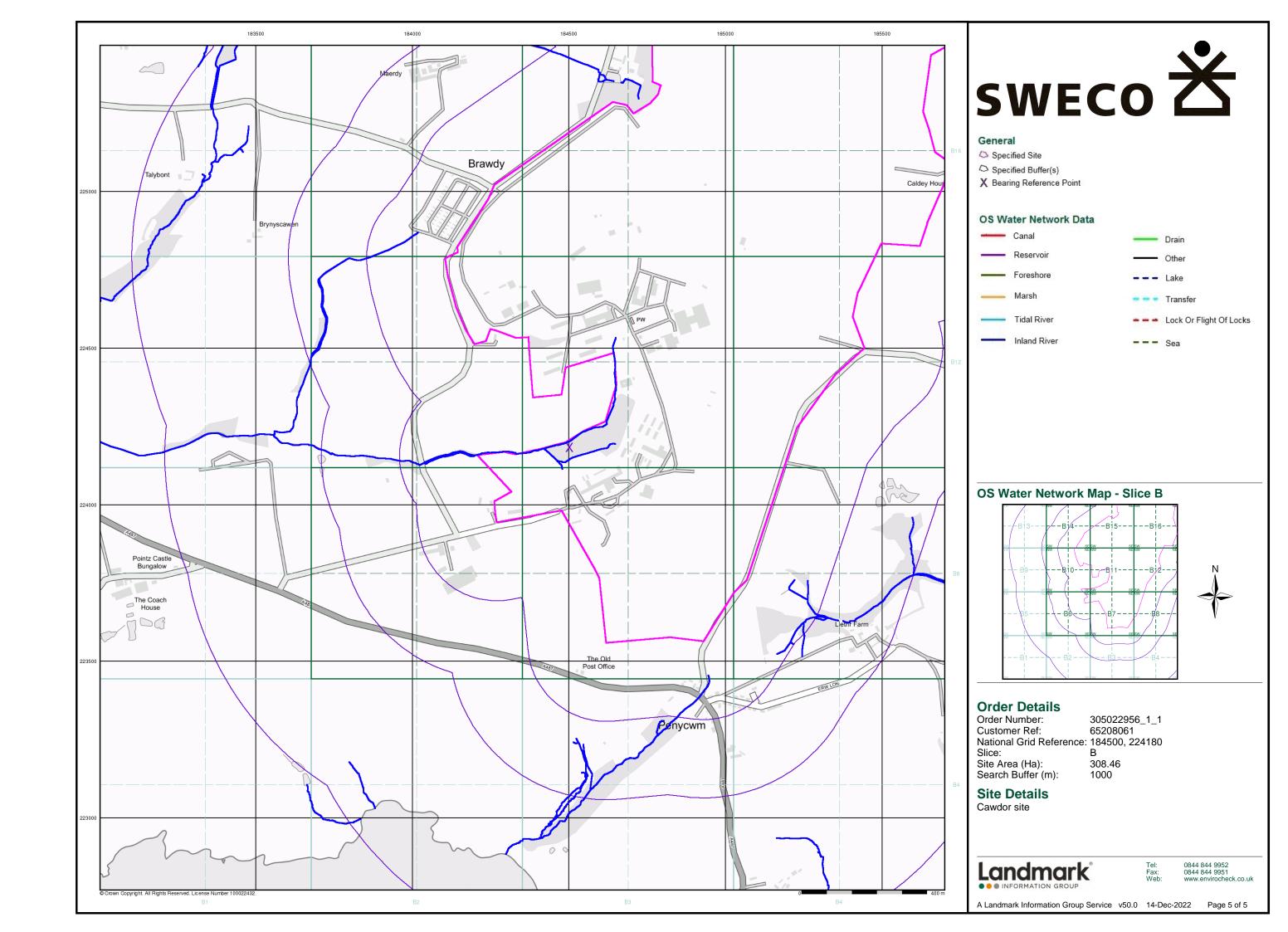




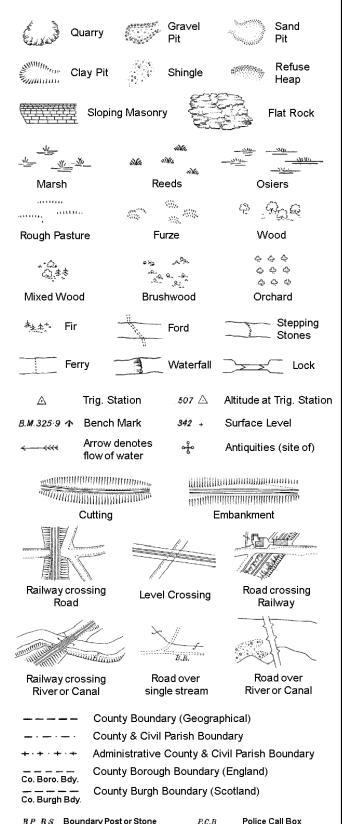








Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Pump

Sluice

Spring

Trough Well

Signal Post

Telephone Call Box

S.P

T.C.B

Sl.

 T_T

B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

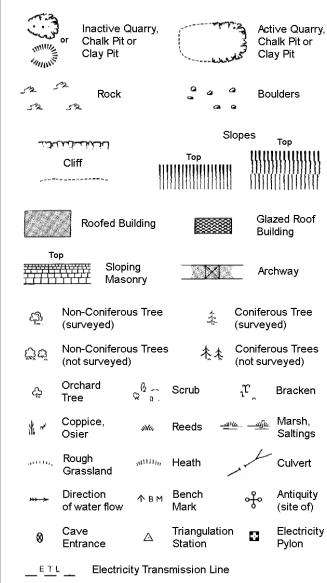
Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



mereing changes				
	вн	Beer House	Р	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
	EIP	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
	Н	Hydrant or Hydraulic	тсв	Telephone Call Box
	LC	Level Crossing	TCP	Telephone Call Post
	MH	Manhole	Tr	Trough
	MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
	MS	Mile Stone	W	Well
	NTL	Normal Tidal Limit	Wd Pp	Wind Pump

County Boundary (Geographical)

Admin. County or County Bor. Boundary

Symbol marking point where boundary

FΒ

GVC

Fn/DFn

Filter Bed

Gas Governer

Guide Post

Manhole

Fountain / Drinking Ftn.

Gas Valve Compound

Mile Post or Mile Stone

County & Civil Parish Boundary

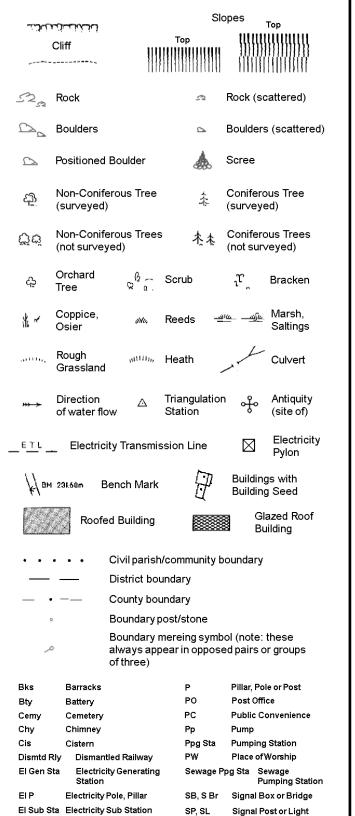
Civil Parish Boundary

London Borough Boundary

L B Bdy

0×54.

1:1,250



Spr

Tr

Wd Pp

Wks

Spring

Trough

Wind Pump Wr Pt. Wr T Water Point, Water Tap

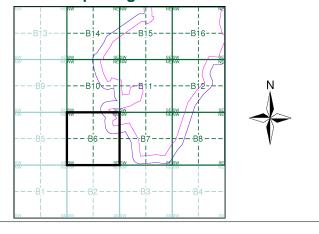
Works (building or area)

Tank or Track

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5
Large-Scale National Grid Data	1:2,500	1995	6

Historical Map - Segment B6



Order Details

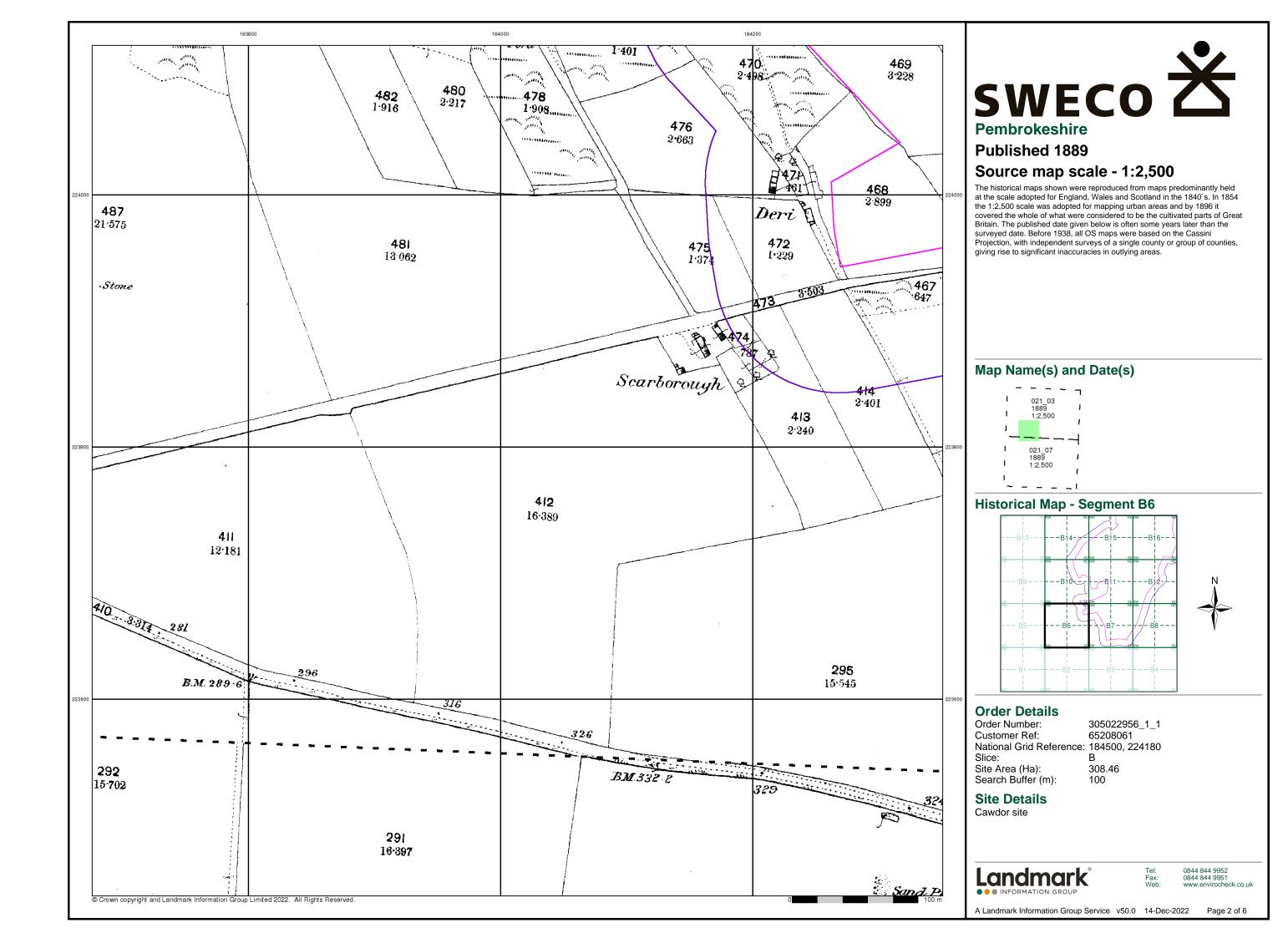
Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

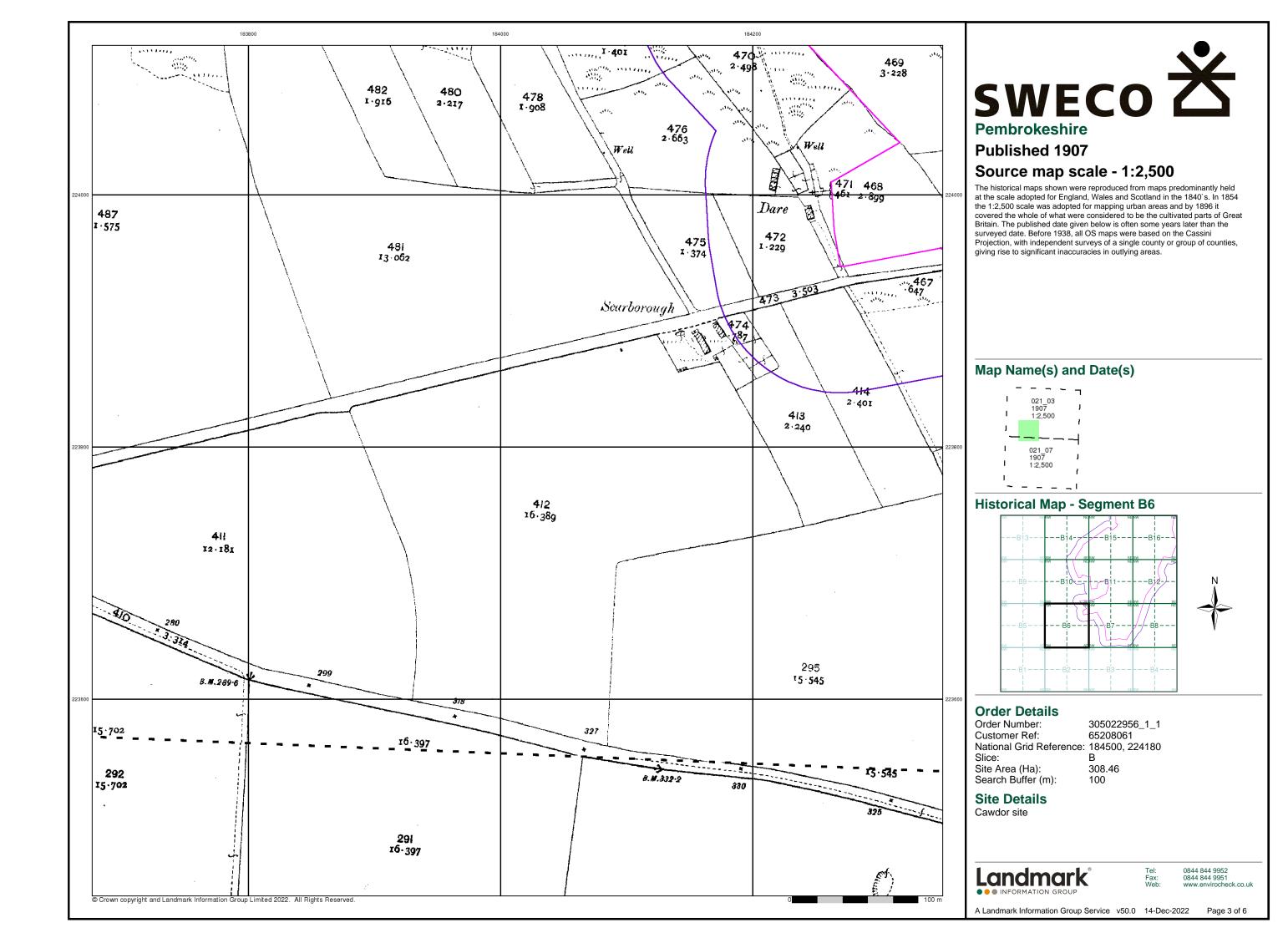
Site Area (Ha): 308.46 Search Buffer (m): 100

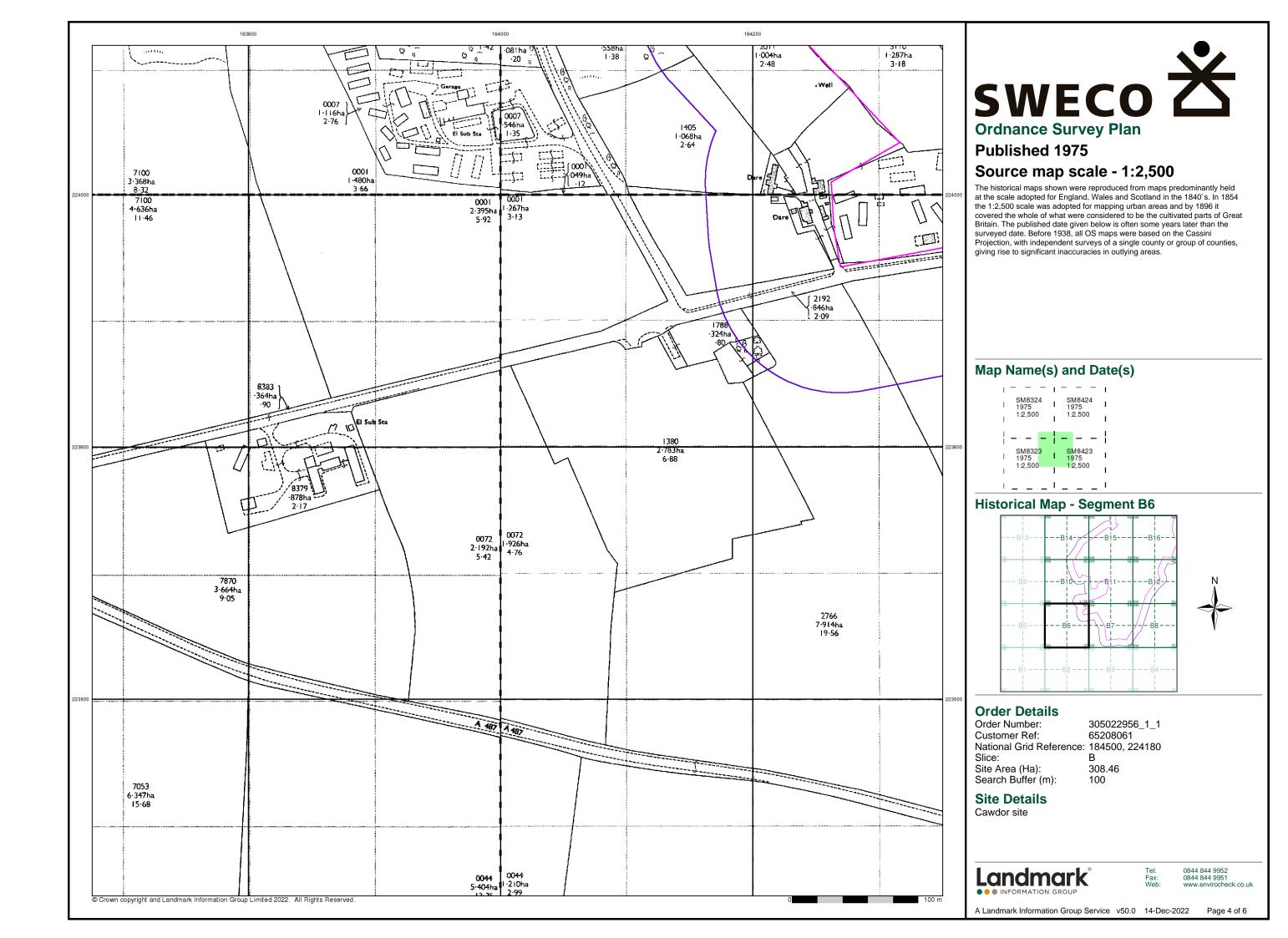
Site Details Cawdor site

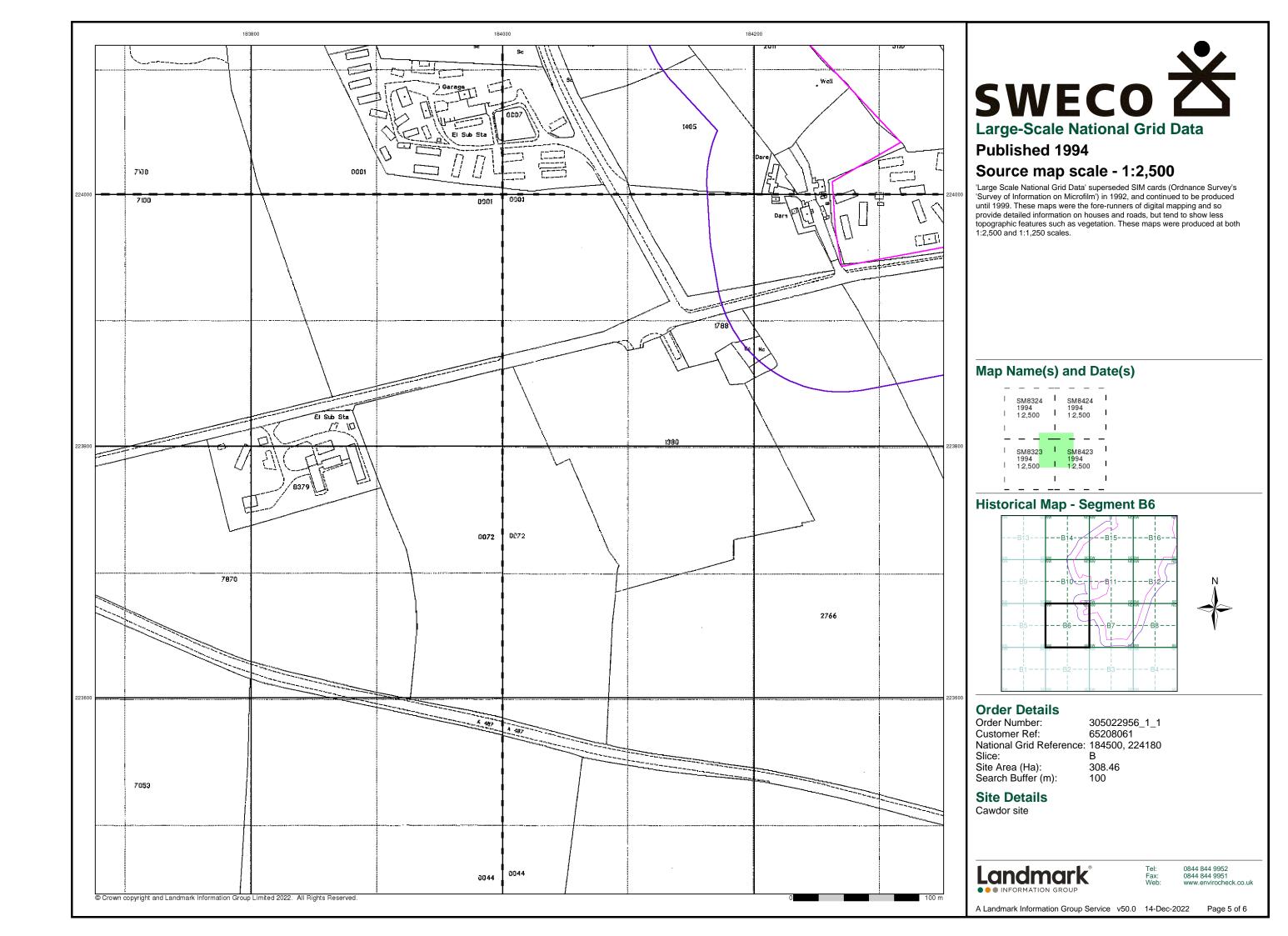
Landmark

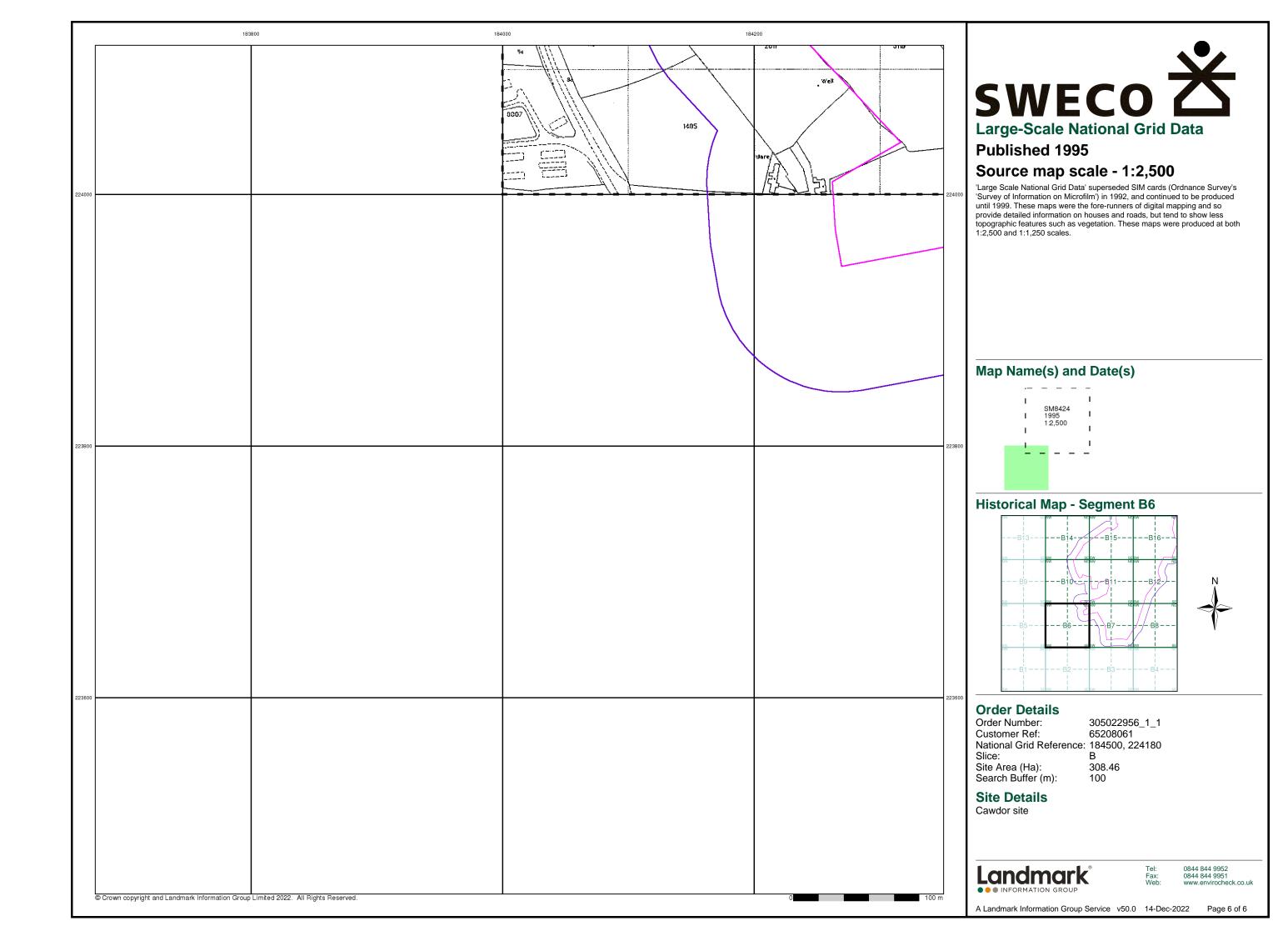
0844 844 9952 0844 844 9951



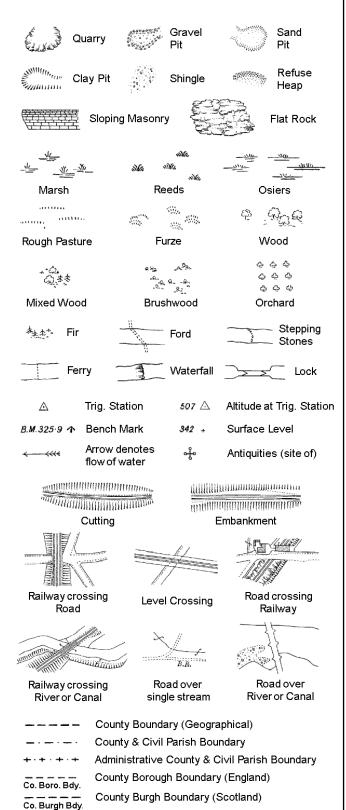








Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

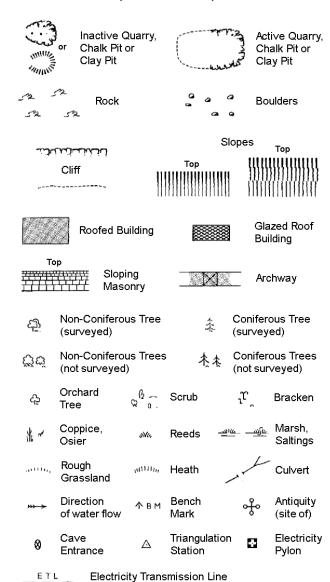
Well

S.P

Sl.

Tr:

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



		ocanity a civil ranion boardary				
		Civil Parish Boundary				
		 -	Admin. County or County Bor. Boundary			
	L B Bd	^{ly} — ●	London Borough Boundary			
2		Symbol marking point where boundary mereing changes				
	вн	Beer House		Р	Pillar, Pole or Post	
	BP, BS	Boundary Po	st or Stone	PO	Post Office	
	Cn, C	Capstan, Cra	ne	PC	Public Convenience	
	Chy	Chimney		PH	Public House	
	D Fn	Drinking Fou	ntain	Pp	Pump	
	EIP	Electricity Pil	lar or Post	SB, S Br	Signal Box or Bridge	
	FAP	Fire Alarm Pi	llar	SP, SL	Signal Post or Light	
	FB	Foot Bridge		Spr	Spring	
	GP	Guide Post		Tk	Tank or Track	

Hydrant or Hydraulic

Mile Post or Mooring Post

Level Crossing

Normal Tidal Limit

Manhole

LC

MP

MS

NTL

County Boundary (Geographical) County & Civil Parish Boundary

тсв

TCP

Wd Pp

Telephone Call Box

Telephone Call Post

Water Point, Water Tap

Trough

Wind Pump

1:1,250

<i>با</i> لاند	لخناسان			opes	Top
,	Cliff		Top		;;))))))))) ((((((((((((((((((((((((((((
523	Rock		7,5	Rock (so	cattered)
\triangle_{a}	Boulders		₽	Boulders	s (scattered)
	Positioned	Boulder		Scree	
<u>ක</u>	Non-Conif	erous Tree)	\$	Conifero	
Öά	Non-Conife (not surve	erous Trees yed)	本本	Conifero	ous Trees /eyed)
දා	Orchard Tree	Q 6 €.	Scrub	'L	Bracken
* ~	Coppice, Osier	siHe,	Reeds 🛥	<u>।ए —ग्र</u> ीह	Marsh, Saltings
arttir,	Rough Grassland	^H HH)	Heath	1	Culvert
>>>	Direction of water flo	Δ ow	Triangulatior Station	ું નુ	Antiquity (site of)
_ E_TL _	_ Electric	ity Transmi	ssion Line	\boxtimes	Electricity Pylon
∤ ∤ вм	231.60m E	Bench Mark	7	Building Building	
	Roofe	ed Building		×1	azed Roof iilding
· •	· · ·	Ci∨il parish	n/community b undary	oundary	
_ •		County box	undary		
0	,	Boundary	ost/stone		
£	>		mereing symb pear in oppose		
Bks	Barracks		Р	Pillar, Pol	le or Post
Bty	Battery		PO	Post Offi	
Cemy	Cemetery		PC	Public Co	onvenience
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumping	
Dismtd F	-	tled Railway	PW	Place of\	
El Gen S	ta Electric Station	ity Generating	Sewage P		ewage Imping Station
EIP	Electricity	Pole, Pillar	SB, S Br	Signal B	ox or Bridge
El Sub S	ta Electricity	Sub Station	SP, SL	Signal Po	ost or Light
El Gen S El P	ta Electric Station Electricity	ity Generating Pole, Pillar	Sewage P	pg Sta Se Pu Signal B	ewage Imping Station ox or Bridge

Filter Bed

Fn / D Fn Fountain / Drinking Ftn.

Gas Governer

Guide Post

Manhole

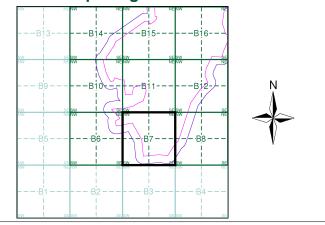
Gas Valve Compound

Mile Post or Mile Stone

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5
Large-Scale National Grid Data	1:2,500	1995	6

Historical Map - Segment B7



Order Details

Order Number: 305022956_1_1 65208061 Customer Ref: National Grid Reference: 184500, 224180

Slice:

Tank or Track

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Tr

Wd Pp

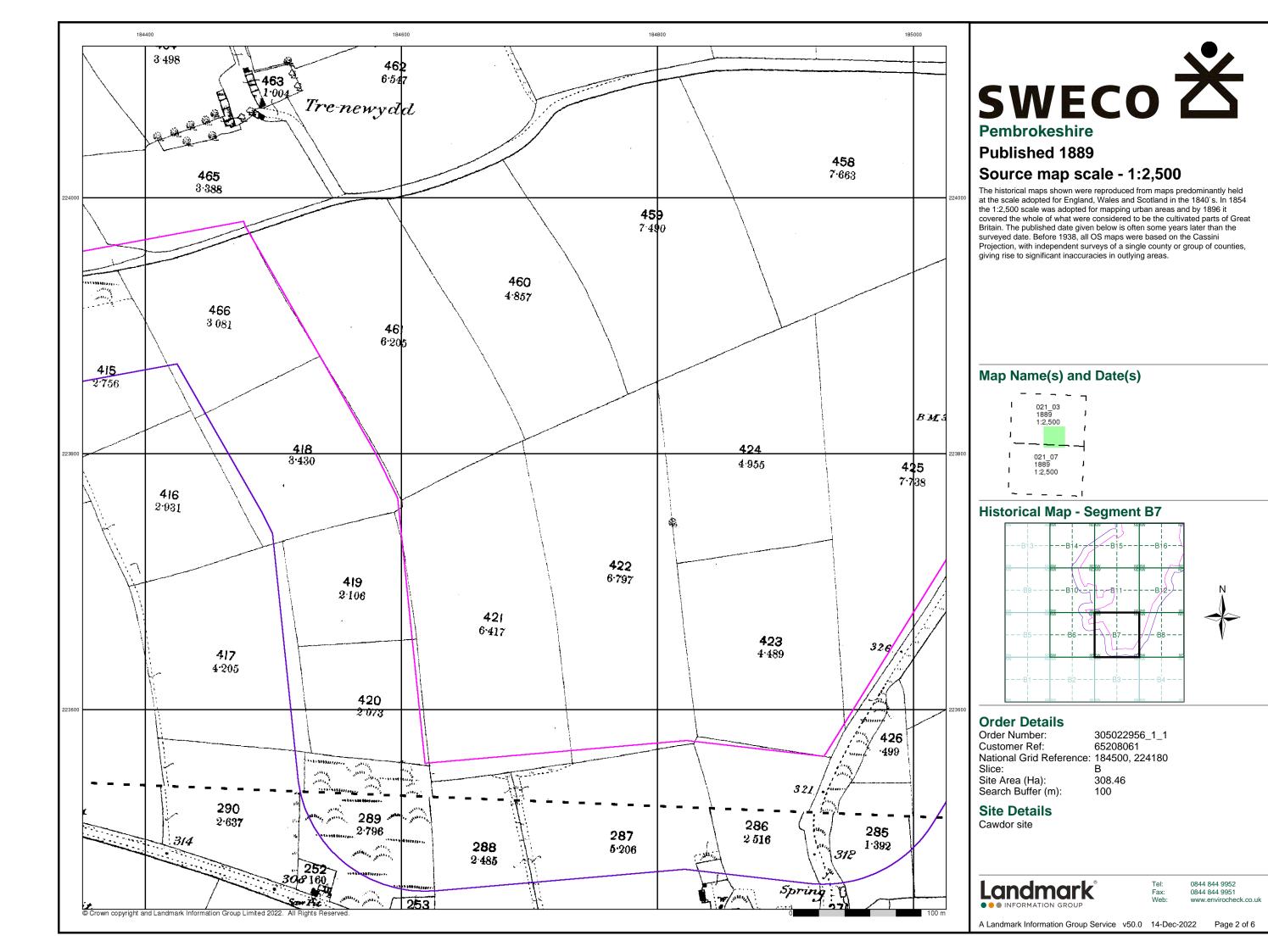
Wks

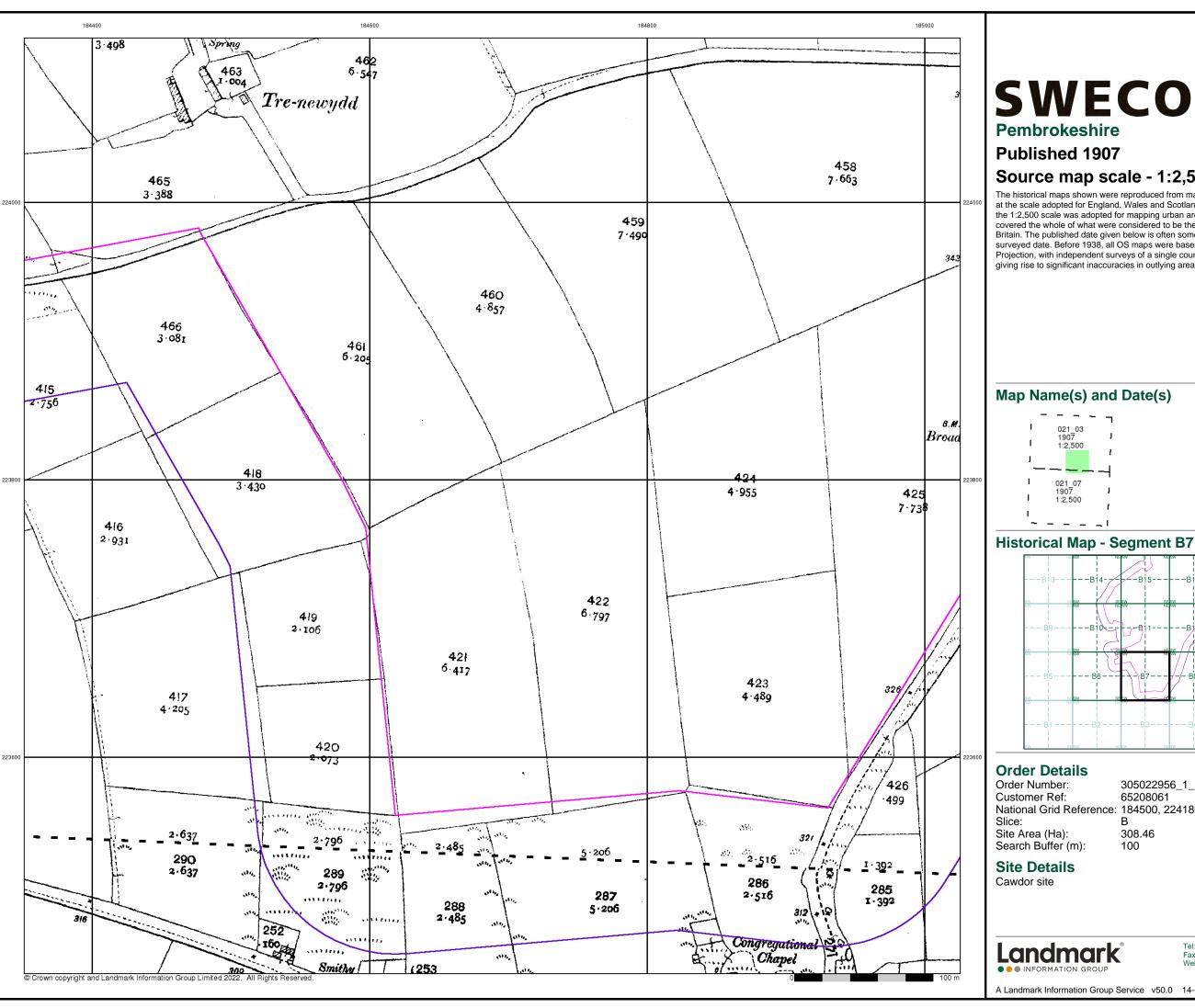
Site Area (Ha): 308.46 Search Buffer (m):

Site Details Cawdor site

0844 844 9952 www.envirocheck.co.uk





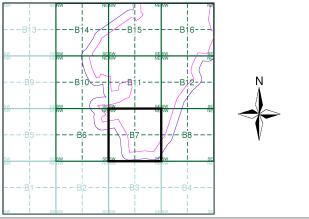


SWECO Bembrokoshire

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.

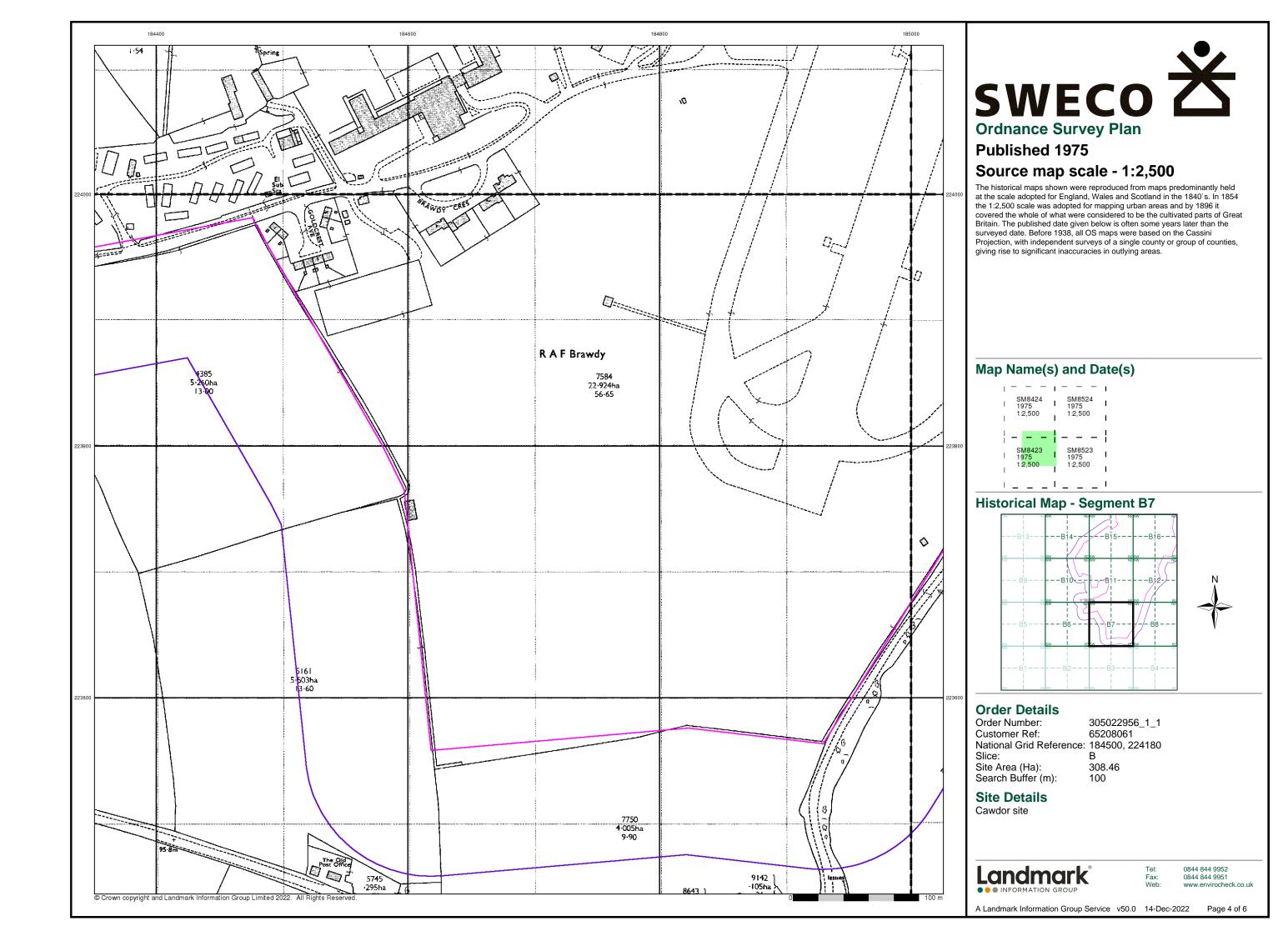
Map Name(s) and Date(s)

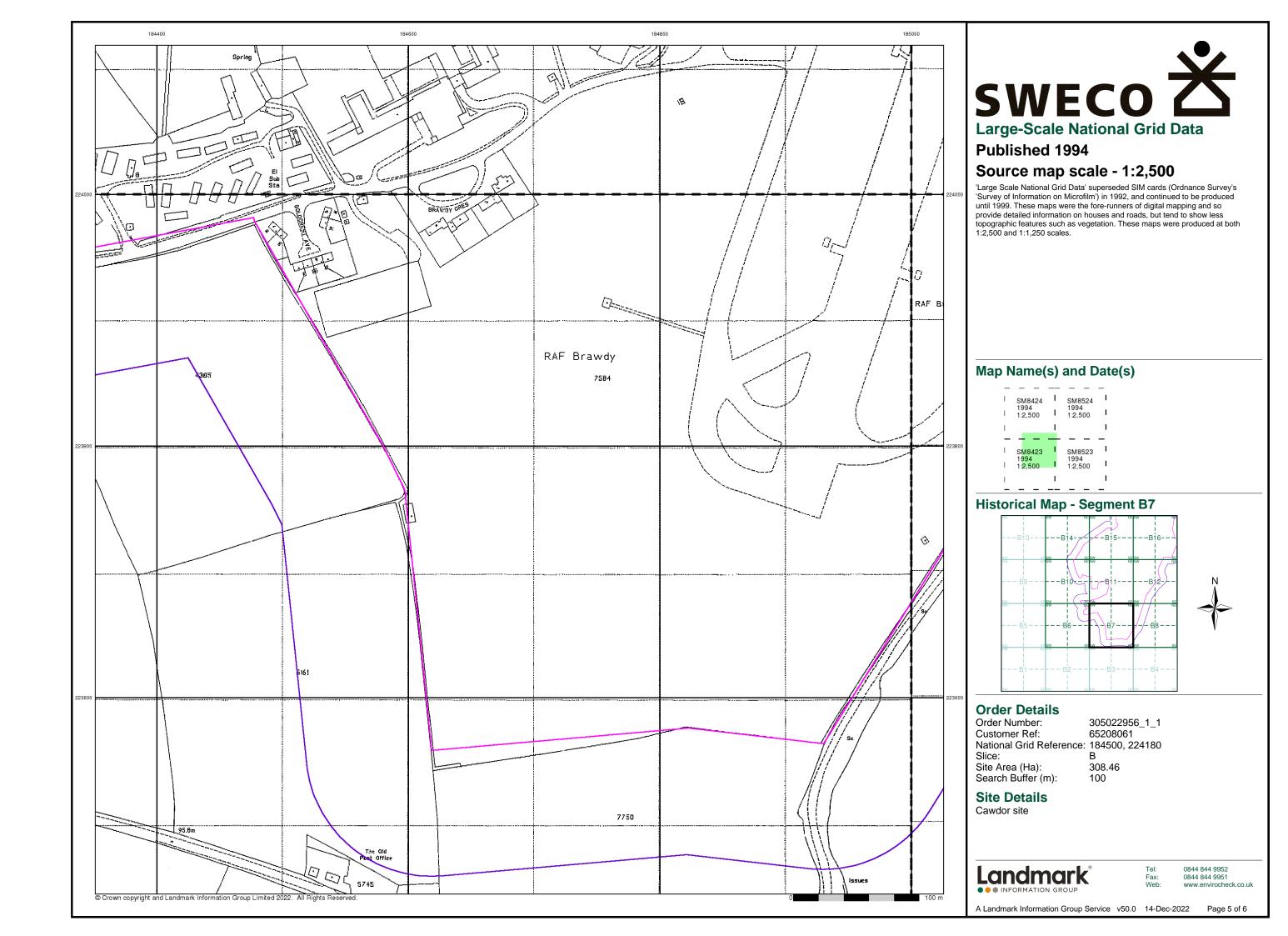


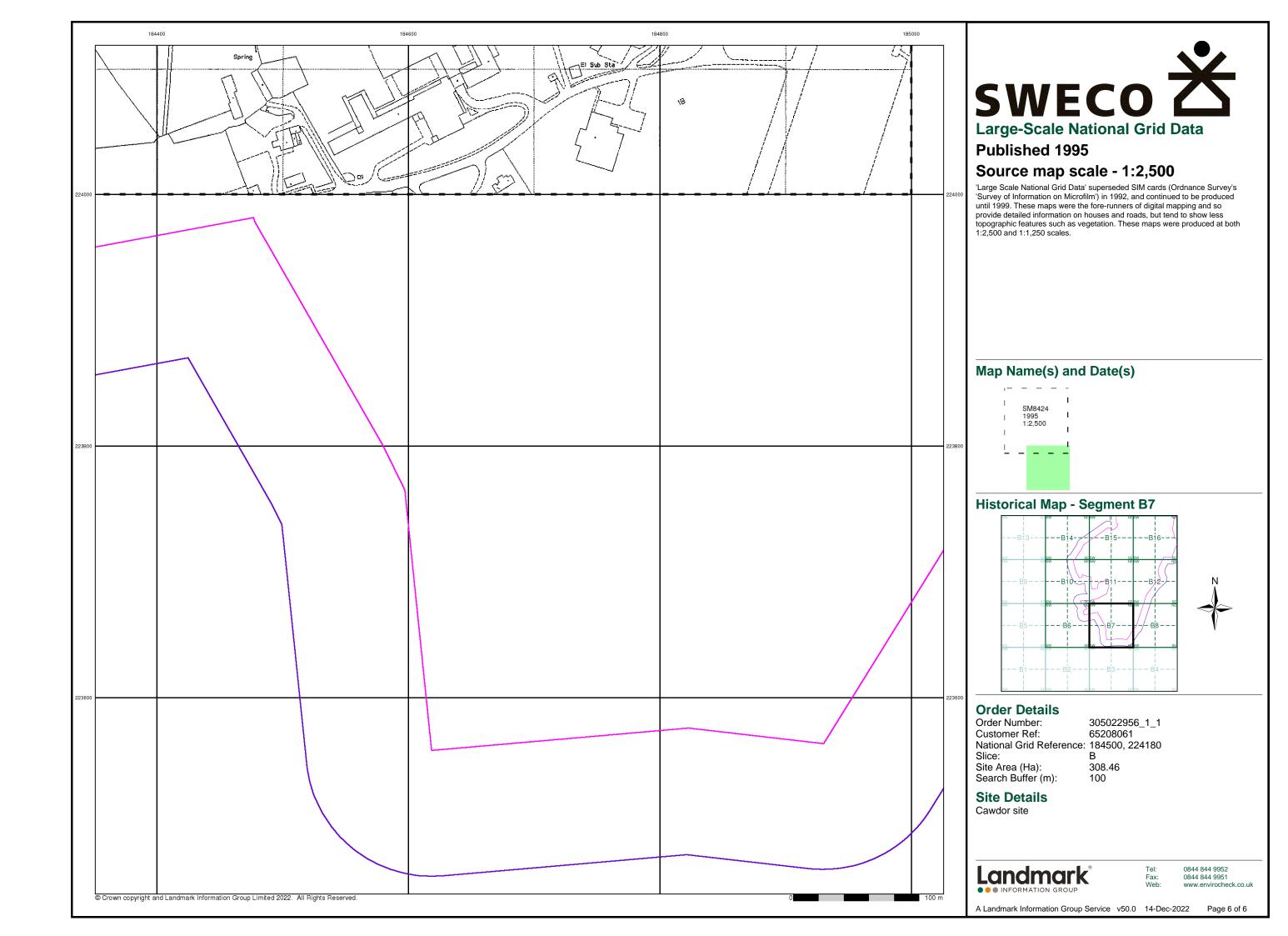
305022956_1_1 65208061 National Grid Reference: 184500, 224180

308.46

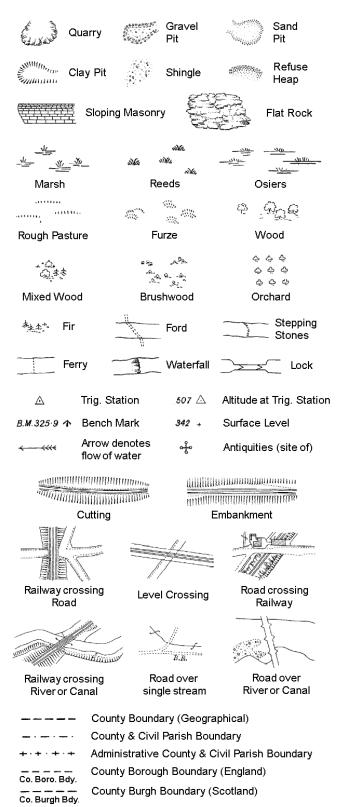
0844 844 9952







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



B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

Well

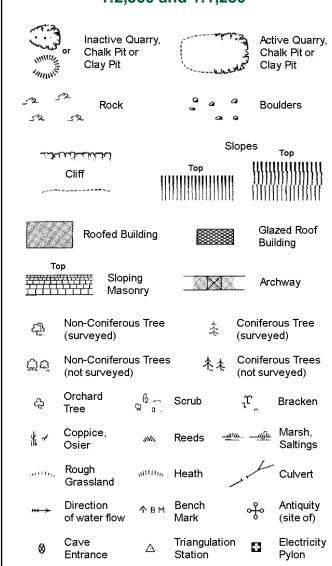
S.P

T.C.B

Sl.

 T_T

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



ETL **Electricity Transmission Line**

County Boundary (Geographical) County & Civil Parish Boundary Civil Parish Boundary Admin. County or County Bor. Boundary L B Bdy London Borough Boundary Symbol marking point where boundary mereing changes

,	_	_	
вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Fn/DFn

GVC

MP, MS

Fountain / Drinking Ftn.

Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

Guide Post

Manhole

Tank or Track

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

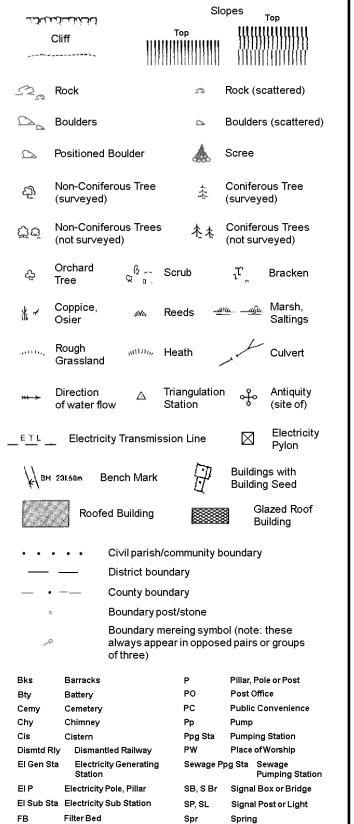
Works (building or area)

Tr

Wd Pp

Wks

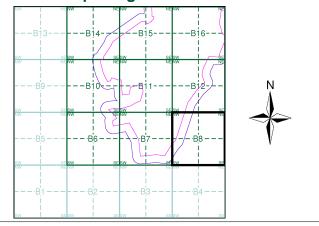
1:1,250



SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5

Historical Map - Segment B8



Order Details

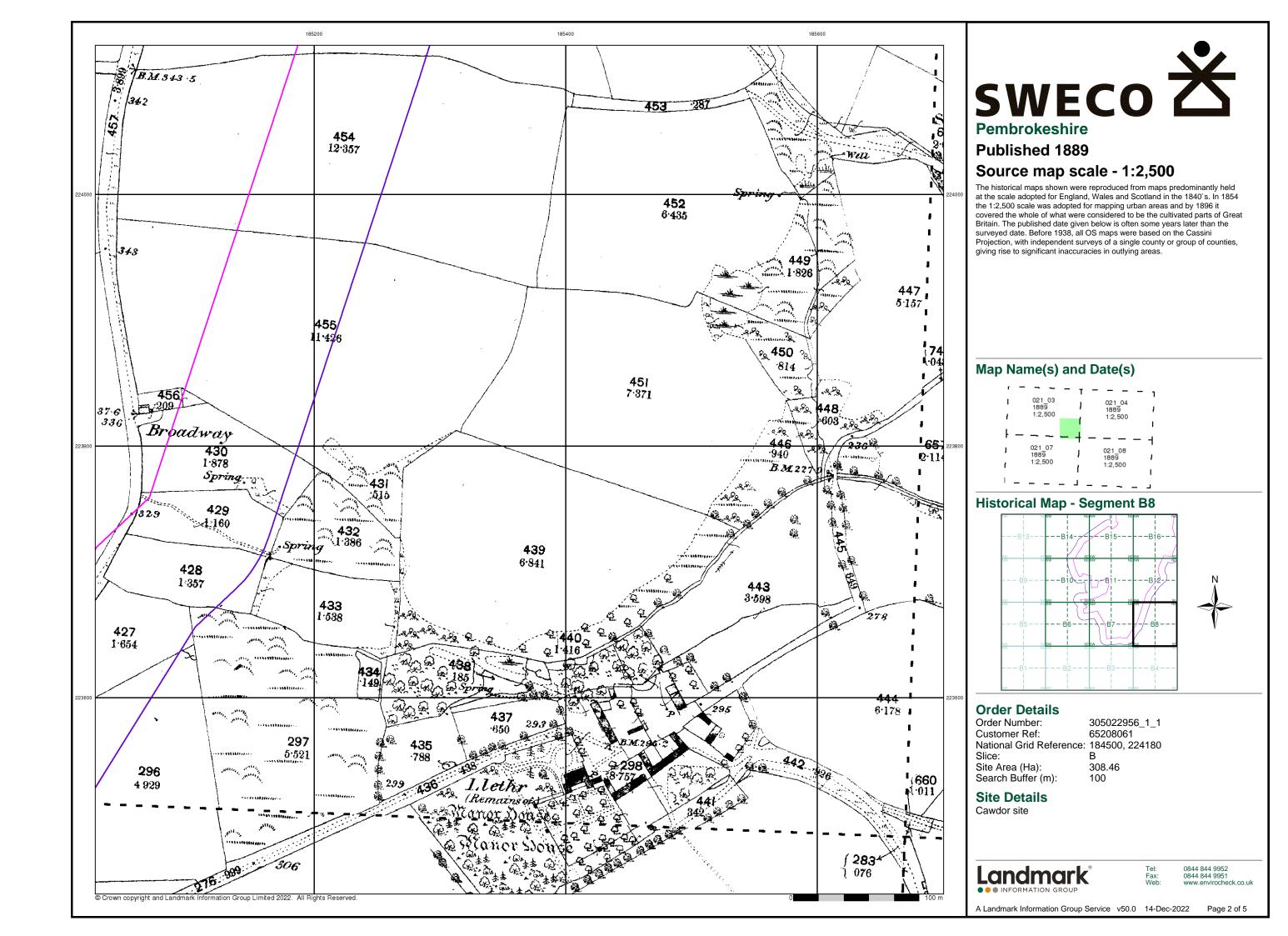
Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

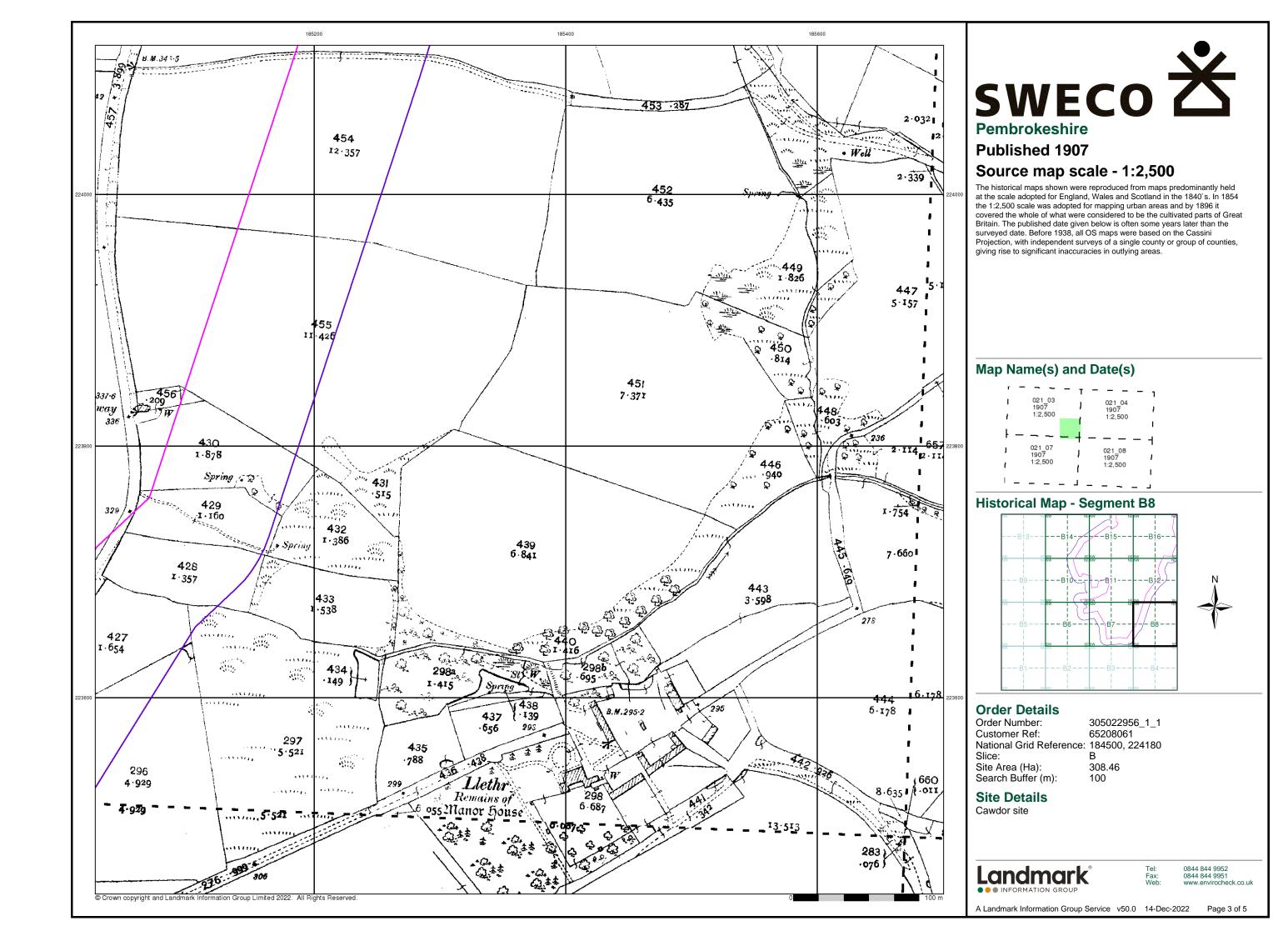
Site Area (Ha): 308.46 Search Buffer (m): 100

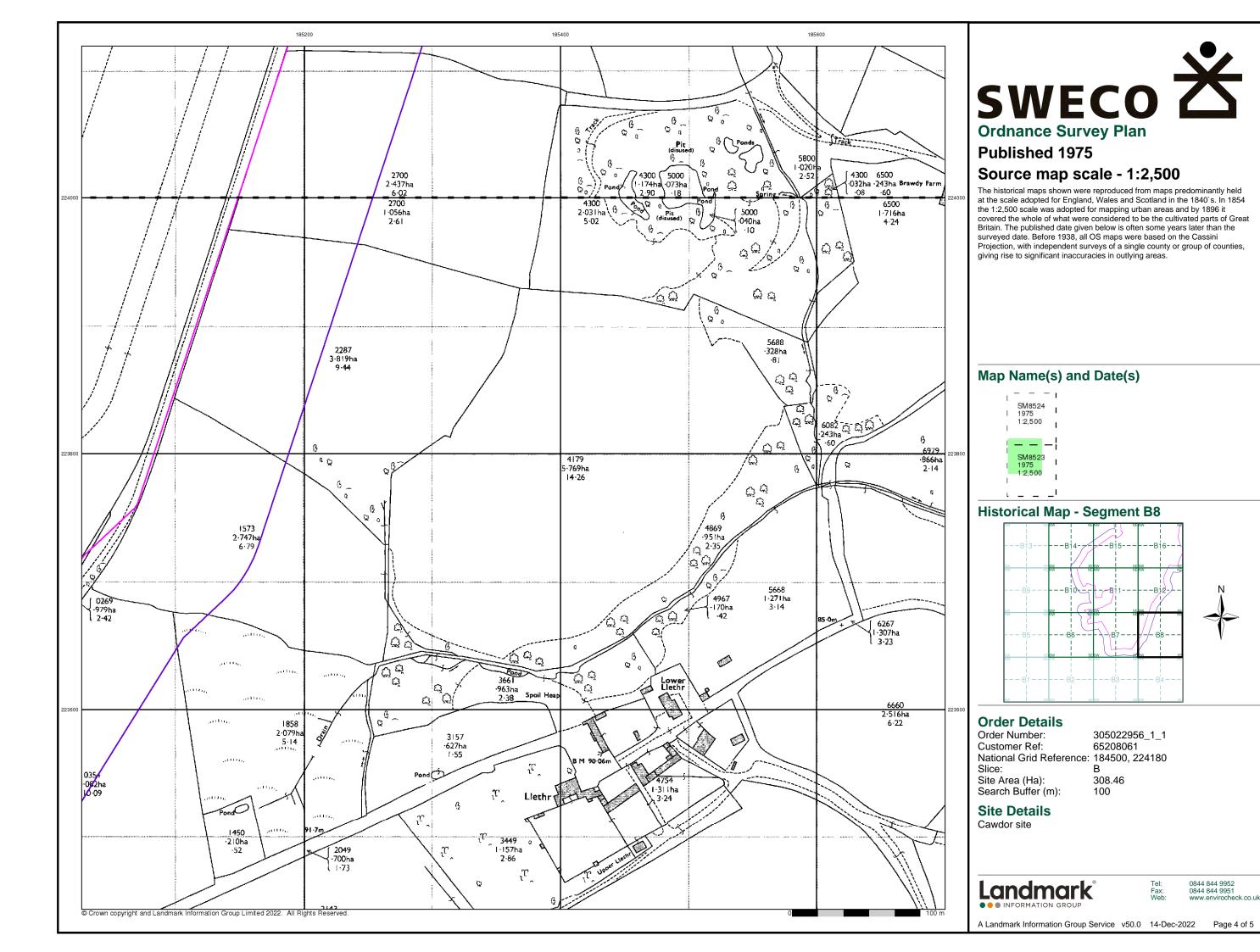
Site Details Cawdor site

Landmark

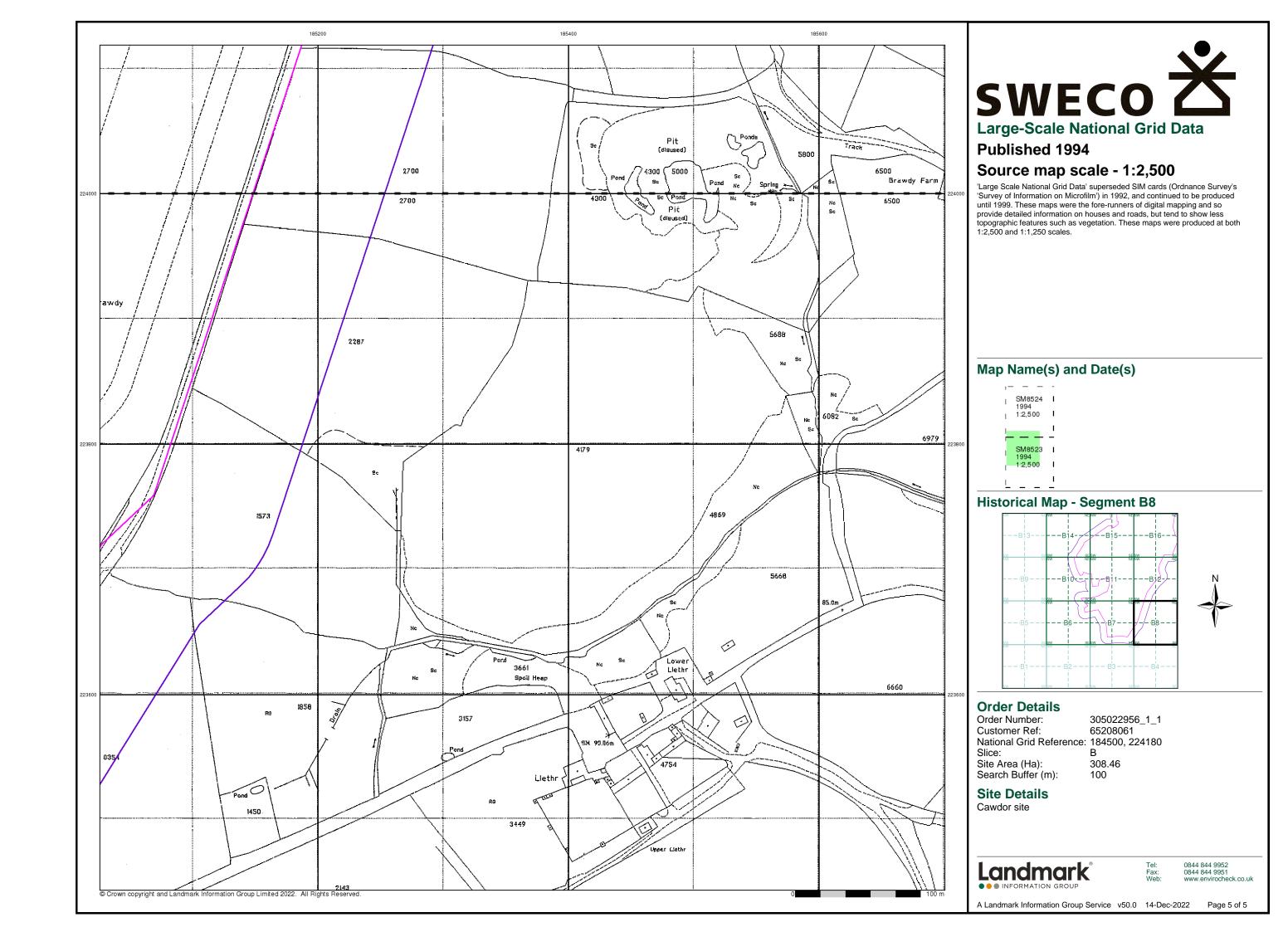
0844 844 9952 0844 844 9951



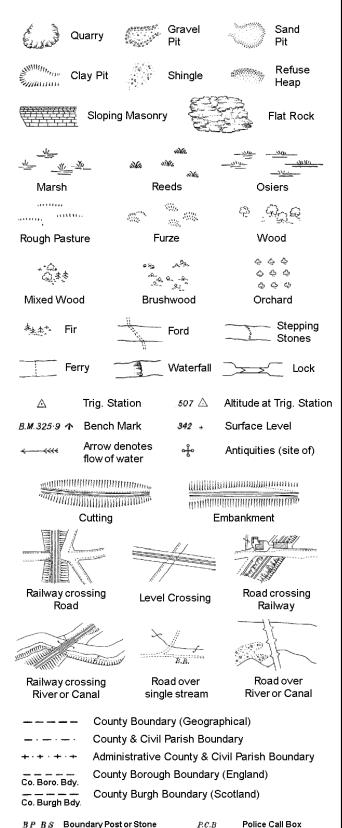




Page 4 of 5



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



Pump

Sluice

Spring

Trough

Well

Signal Post

Telephone Call Box

S.P

Sl.

Tr:

B.R.

E.P

F.B.

M.S

Bridle Road

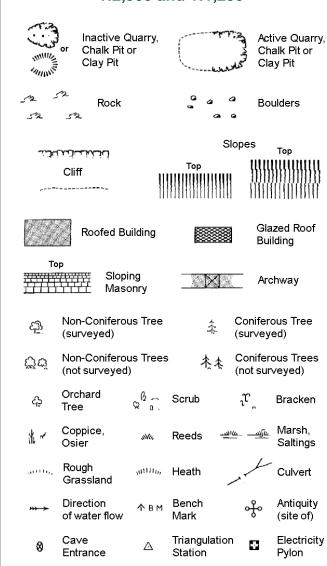
Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



		County Bo	undary (G	eographical)
· — ·		County & C	i∨il Parish	n Boundary
		Civil Parish	n Boundar	у
• 🕂 •	 ·	Admin. Co	unty or Co	unty Bor. Boundary
LBB0	ly -⊕ -	London Bo	rough Bou	ındary
24		Symbol marking point where boundary mereing changes		
вн	Beer House		Р	Pillar, Pole or Post
BP, BS	Boundary Po	st or Stone	PO	Post Office
Cn, C	Capstan, Cra	ne	PC	Public Convenience
Chy	Chimney		PH	Public House

Electricity Transmission Line

вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

1:1,250

נינאטוניי			Slopes Top		
Cliff		1111	Тор	!!!!!!!	!!!!!!!!!!
~ · · · · · · ·					(((((((((((((((((((((((((((((((((((((((
32 g	Rock		23	Rock (so	attered)
\triangle	Boulders		Δ	Boulders	(scattered)
	Positioned	Boulder		Scree	
ফ্র	Non-Conif (surveyed	erous Tree)	*	Conifero (surveye	
ζţά	Non-Conif (not surve	erous Trees yed)	杰杰	Conifero (not surv	ous Trees ⁄eyed)
දා	Orchard Tree	\$ a.	Scrub	⁵ 46.	Bracken
* ~	Coppice, Osier	ista,	Reeds 🛥	<u>।स्ट —ग्र</u> ीह	Marsh, Saltings
actities,	Rough Grassland	1111111 ₁₁ ,	Heath	1	Culvert
*** >	Direction of water flo		Triangulatior Station	ું નુ	Antiquity (site of)
ETL	_ Electric	ity Transmis	sion Line	\boxtimes	Electricity Pylon
\ 	231.60m E	Bench Mark		Building Building	
	Roofe	ed Building		251	azed Roof ilding
	· · ·	District bou	-	oundary	
- •		County bou			
¢	,	Boundary p		17.1	a.
غر		-	nereing symb ear in oppose	•	
Bks	Barracks		Р	Pillar, Pol	e or Post
Bty	Battery		PO	Post Offic	ce
Cemy	Cemetery		PC	Public Co	onvenience
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumping	
Dismtd F	•	tled Railway	PW	Place of\	
El Gen S	Station	ity Generating	Sewage P	Pu	ewage Imping Station
EIP		Pole, Pillar	SB, S Br	Signal B	ox or Bridge
El Sub S	ta Electricity	Sub Station	SP, SL	Signal Po	ost or Light

Filter Bed

Fn / D Fn Fountain / Drinking Ftn.

Gas Governer

Guide Post

Manhole

GVC

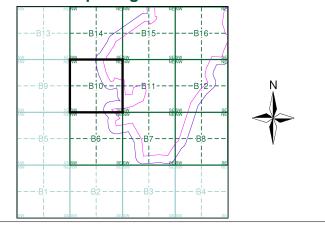
Gas Valve Compound

Mile Post or Mile Stone

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5
Large-Scale National Grid Data	1:2,500	1995	6

Historical Map - Segment B10



Order Details

Order Number: 305022956_1_1 65208061 Customer Ref: National Grid Reference: 184500, 224180 Slice:

Tank or Track

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Tr

Wd Pp

Wks

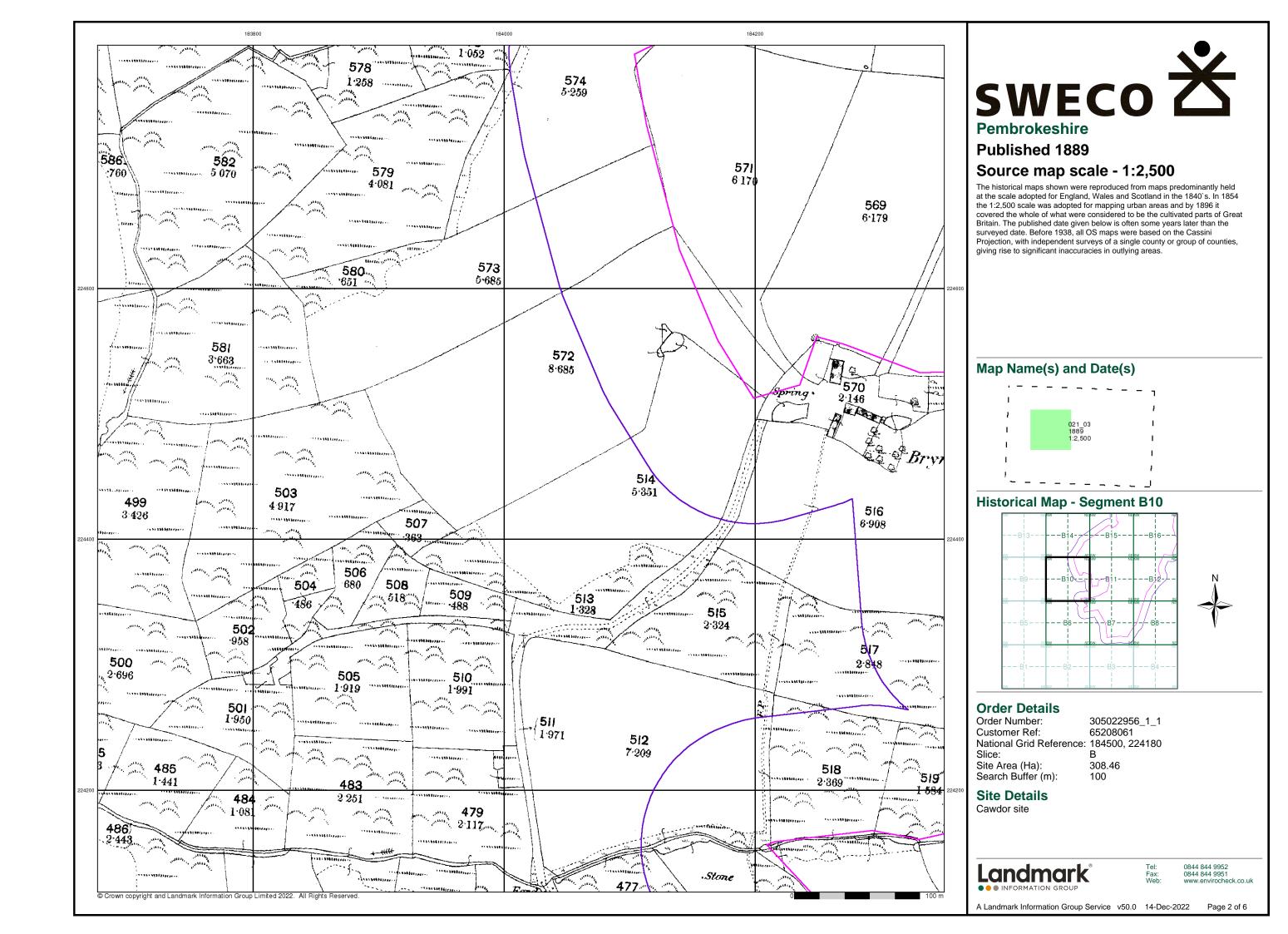
Site Area (Ha): Search Buffer (m):

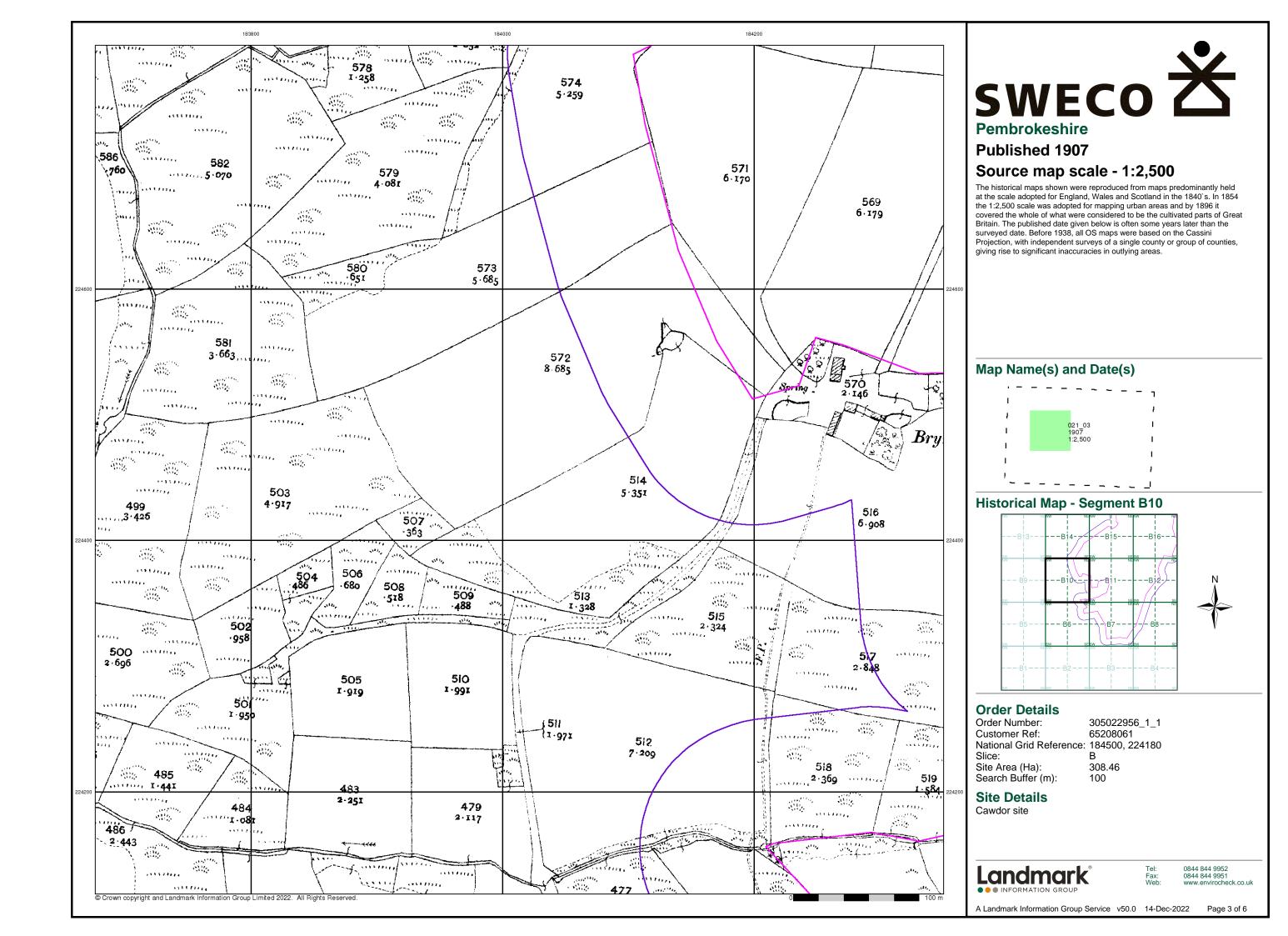
Site Details

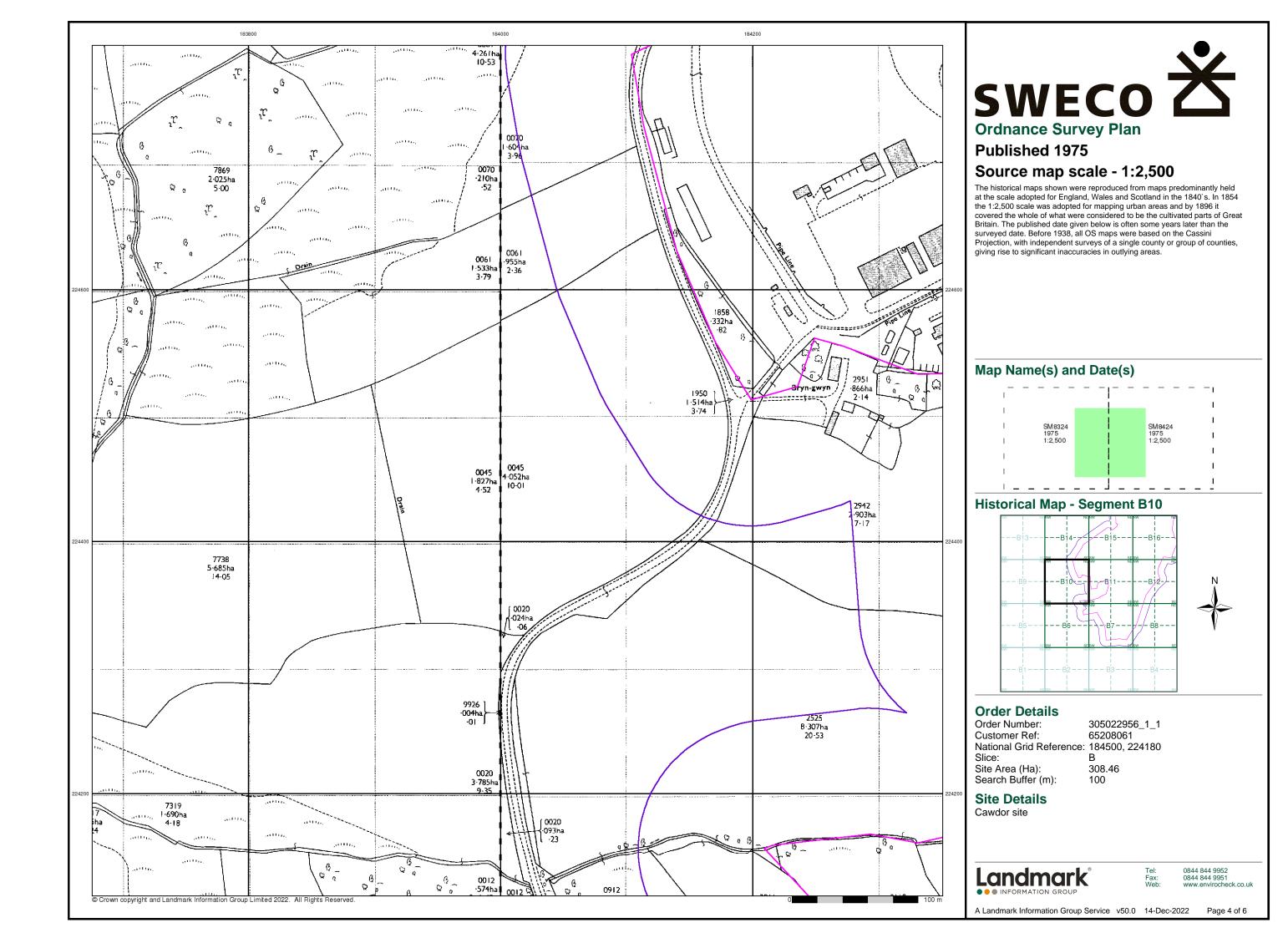
Cawdor site

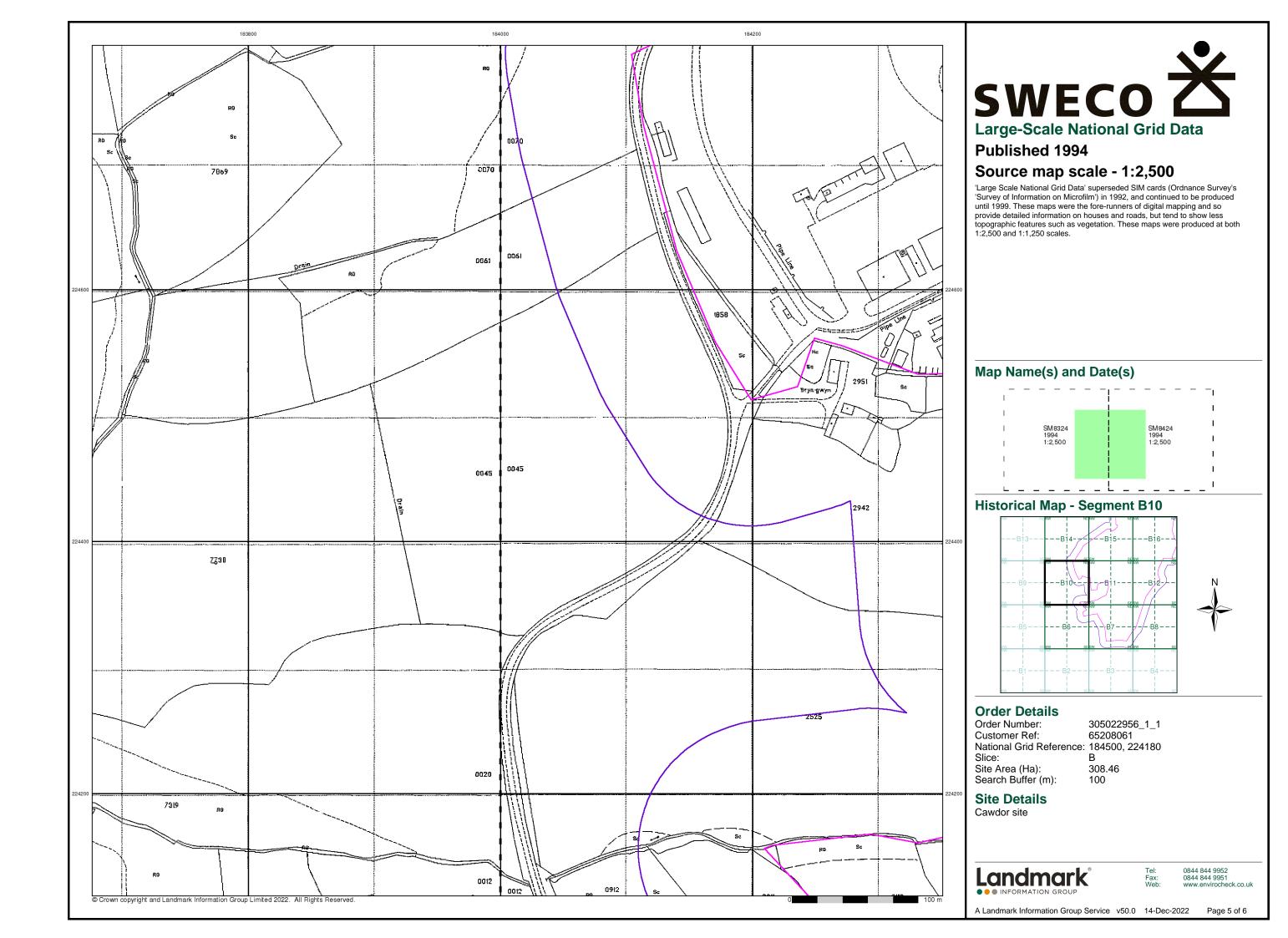


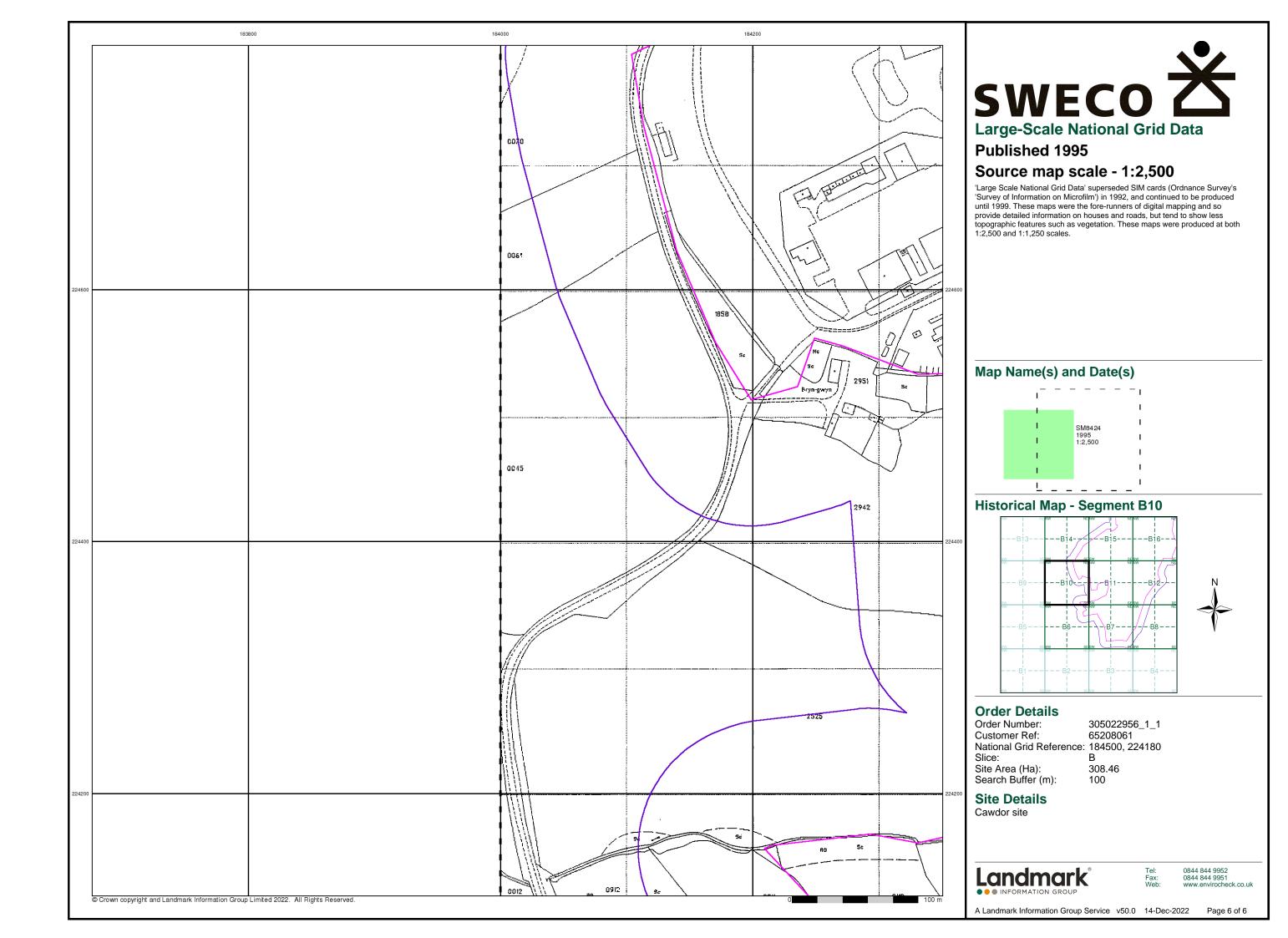
0844 844 9952 0844 844 9951



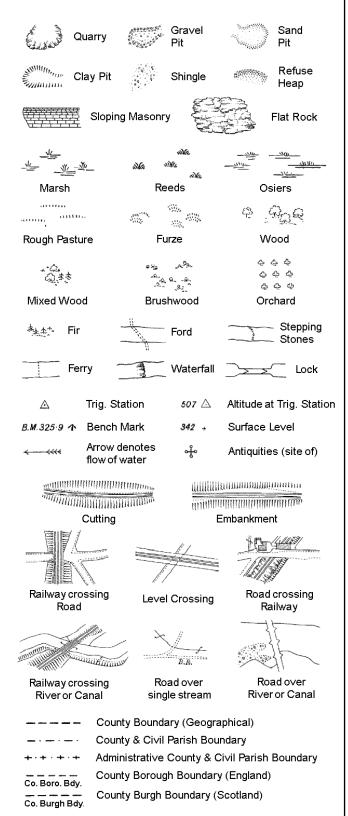








Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

Well

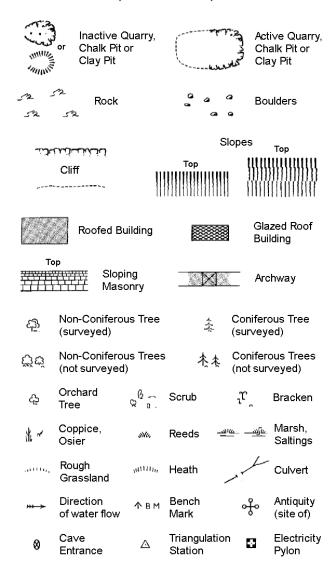
S.P

T.C.B

Sl.

 T_T

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



ETL **Electricity Transmission Line**

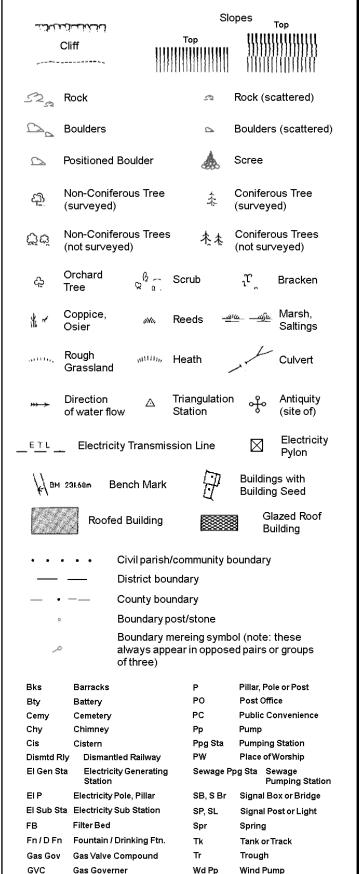
County Boundary (Geographical) County & Civil Parish Boundary L B Bdy

Civil Parish Boundary Admin. County or County Bor. Boundary London Borough Boundary

Symbol marking point where boundary mereing changes

вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

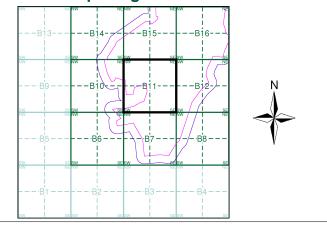
1:1,250



SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5
Large-Scale National Grid Data	1:2,500	1995	6

Historical Map - Segment B11



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

Site Area (Ha): 308.46 Search Buffer (m): 100

Site Details

Cawdor site

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Wks

Guide Post

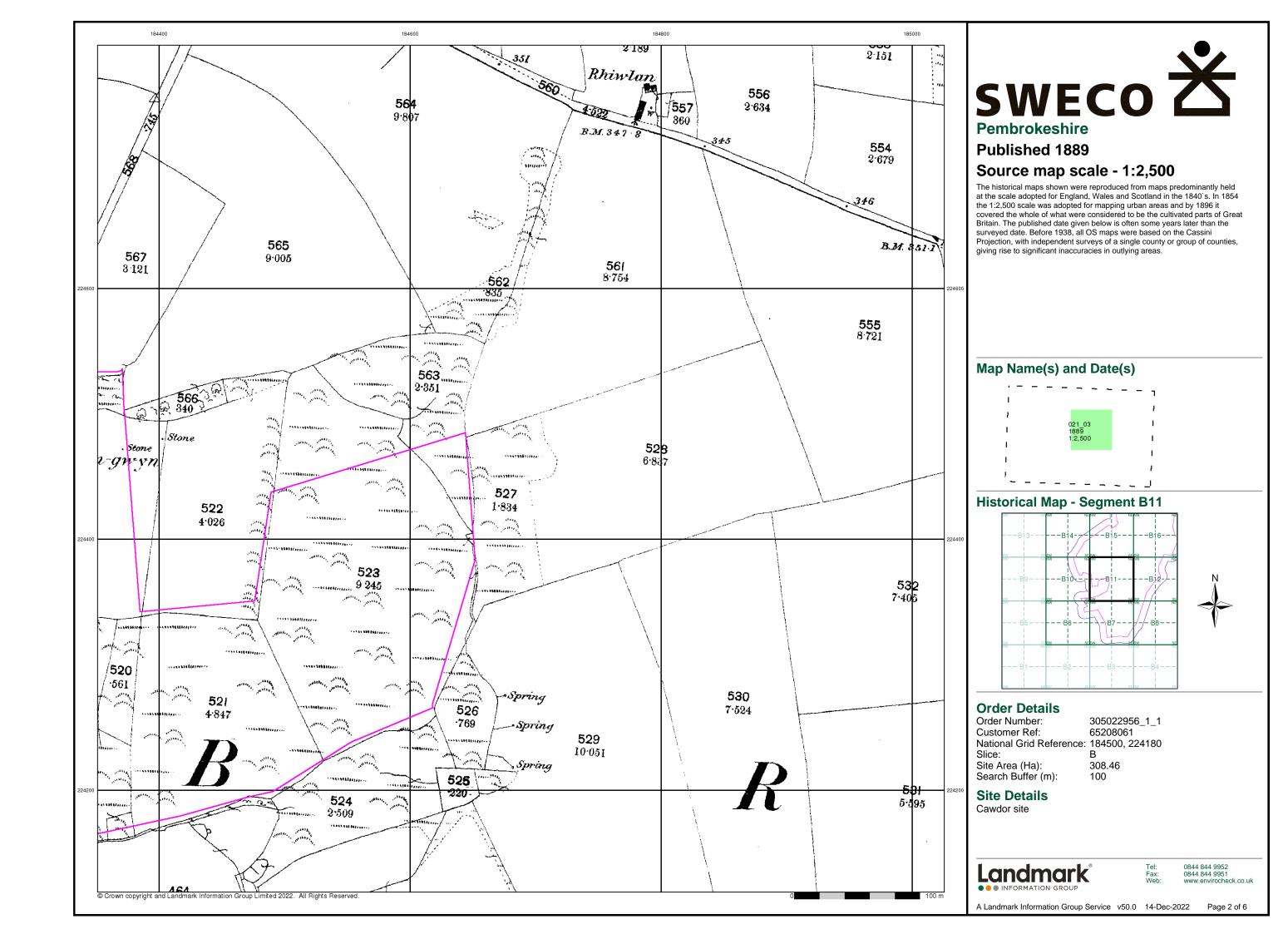
Mile Post or Mile Stone

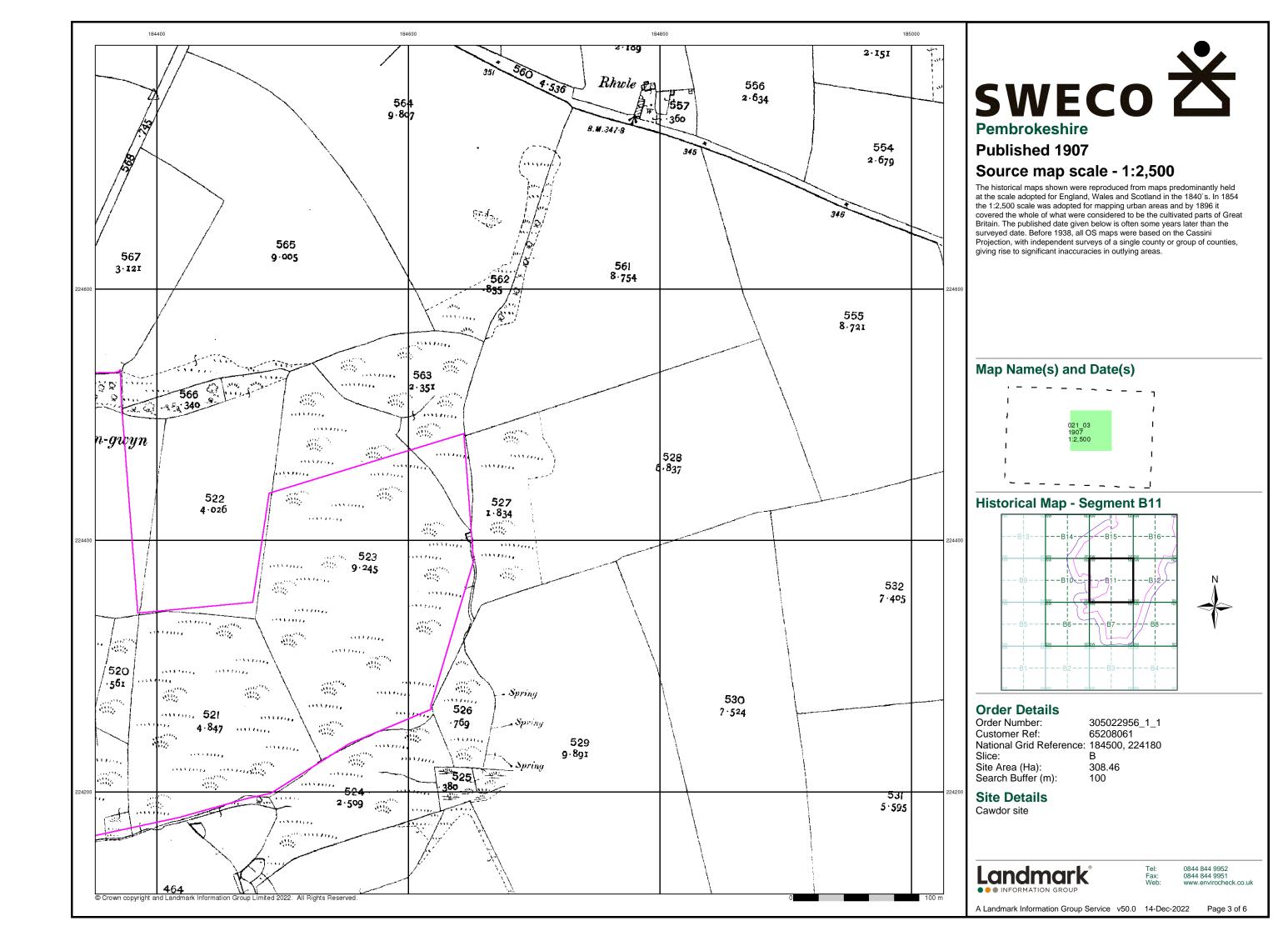
Manhole

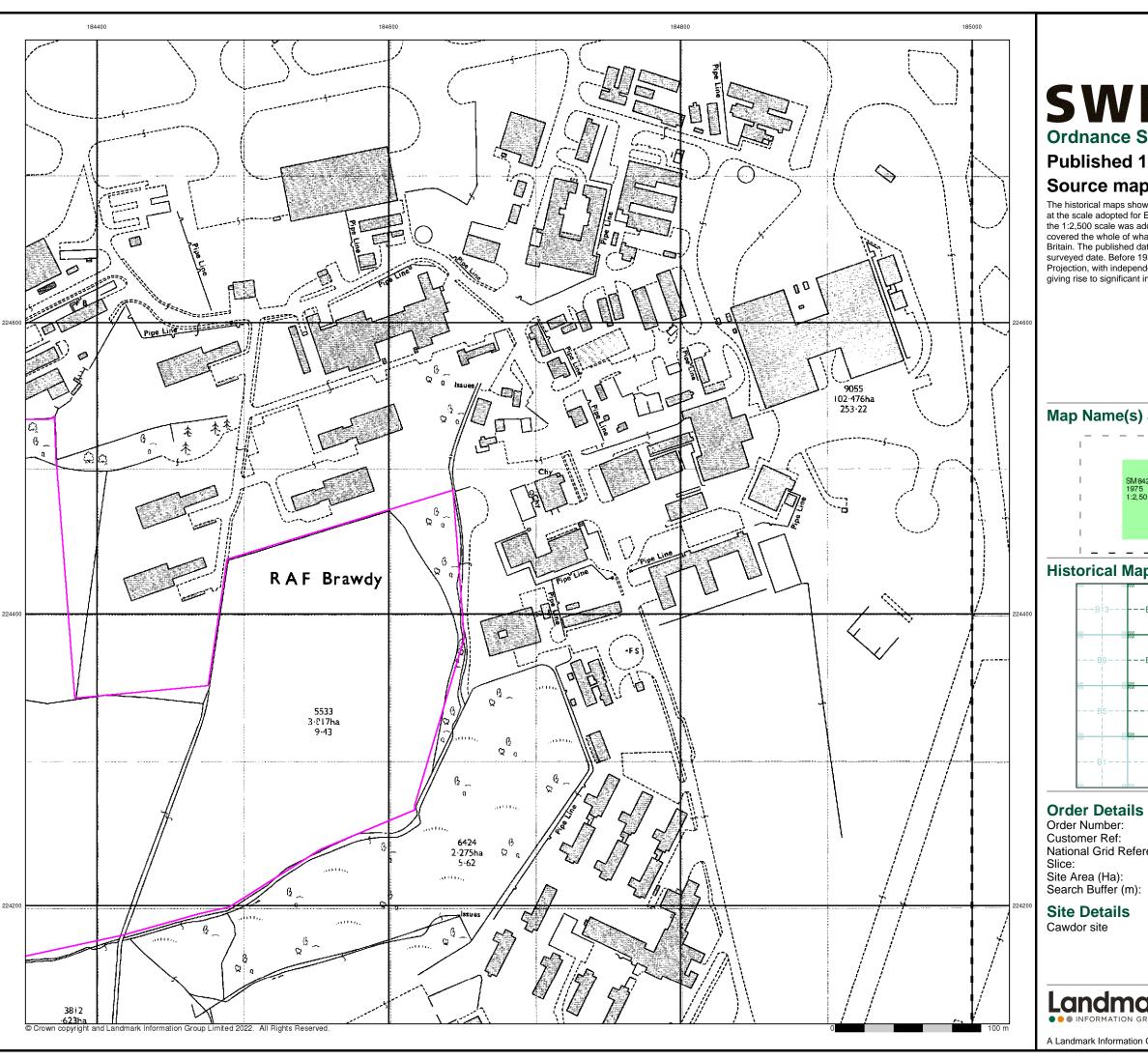
MP, MS



0844 844 9952 0844 844 9951







SWECO T

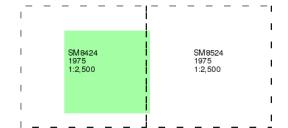
Ordnance Survey Plan

Published 1975

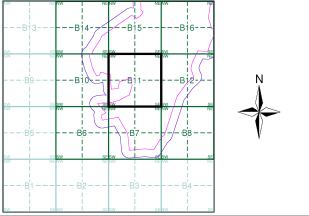
Source map scale - 1:2,500

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 B11



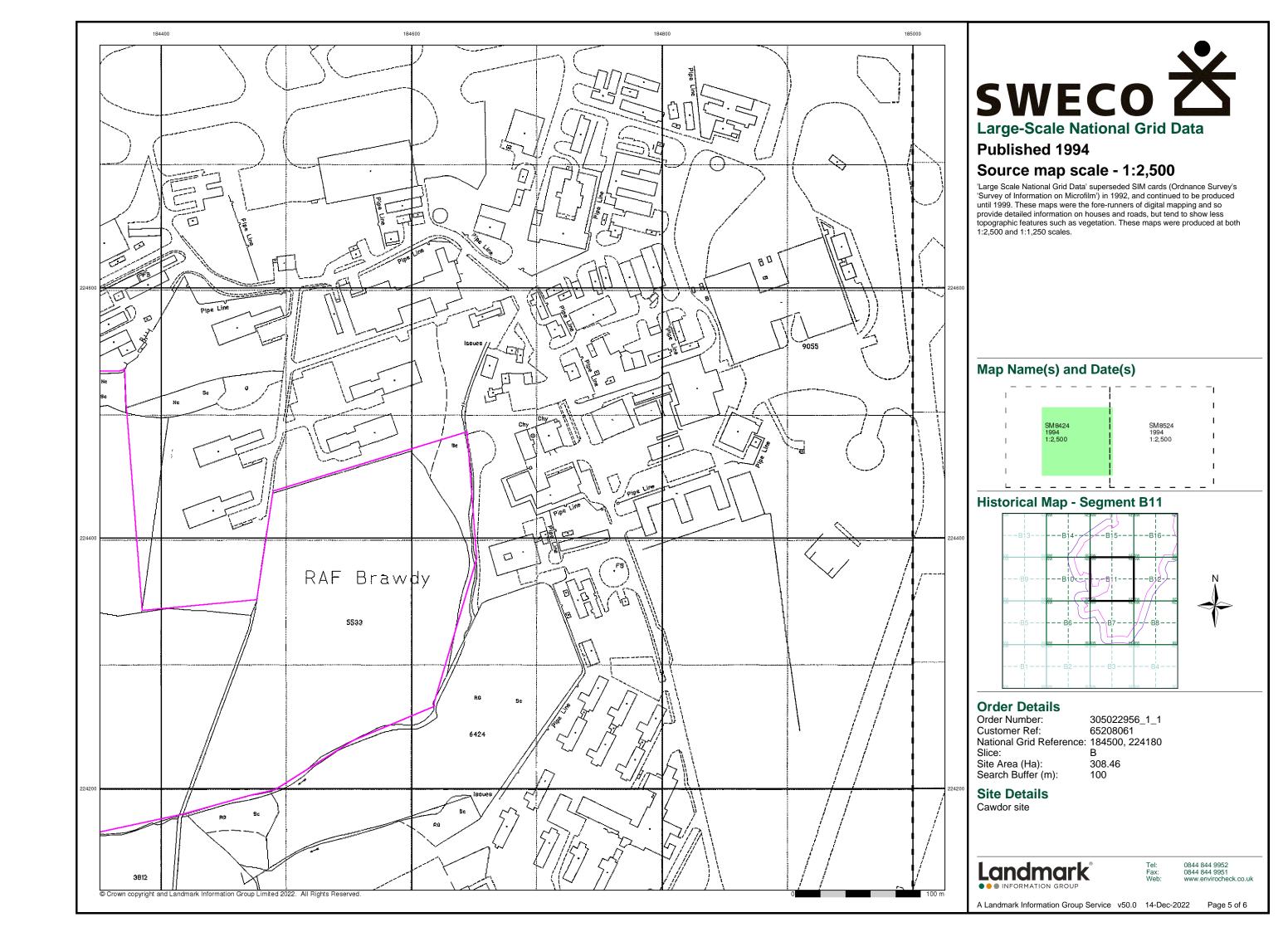
Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180

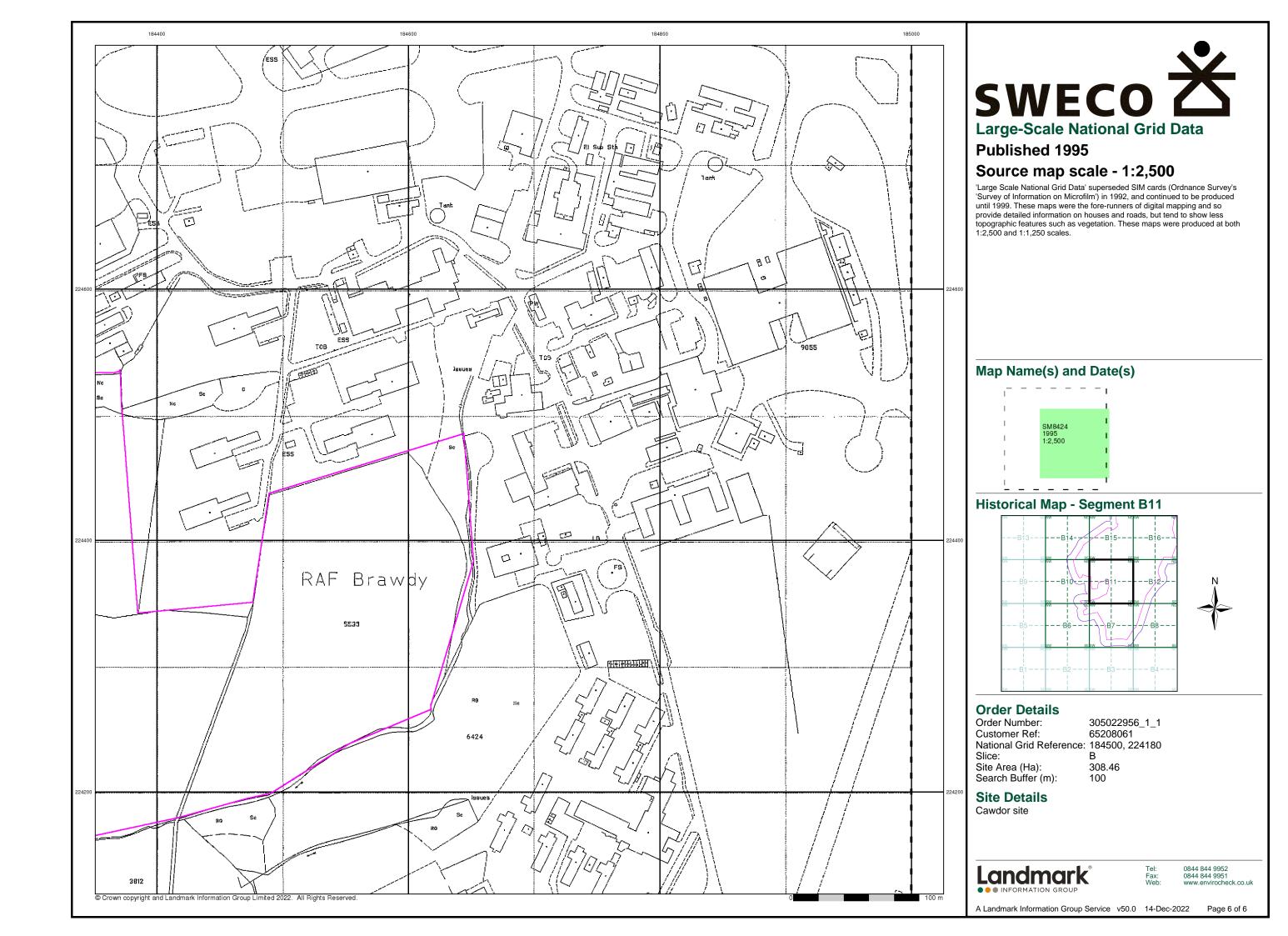
308.46

Site Details

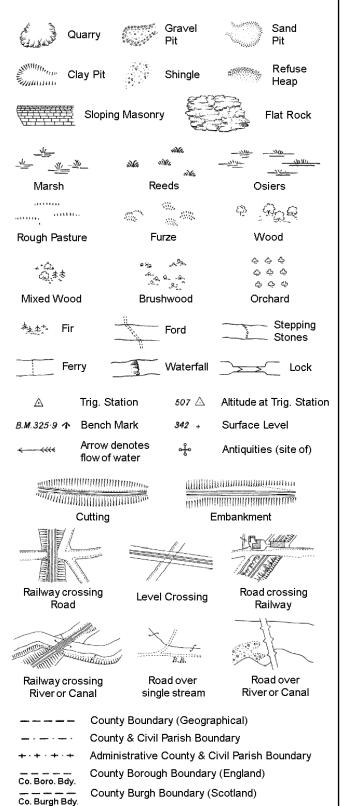
Landmark

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



B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

Well

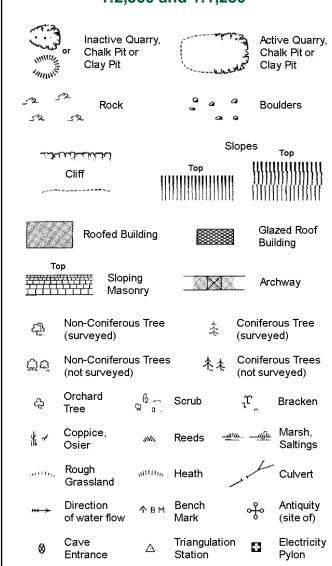
S.P

T.C.B

Sl.

 T_T

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



Electricity Transmission Line

County Boundary (Geographical) County & Civil Parish Boundary Civil Parish Boundary Admin. County or County Bor. Boundary L B Bdy London Borough Boundary Symbol marking point where boundary mereing changes

вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

GVC

MP, MS

Gas Governer

Mile Post or Mile Stone

Guide Post

Manhole

Wd Pp

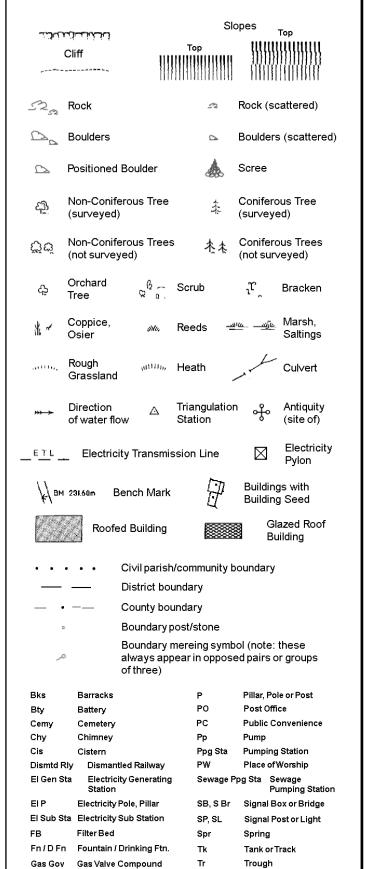
Wks

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

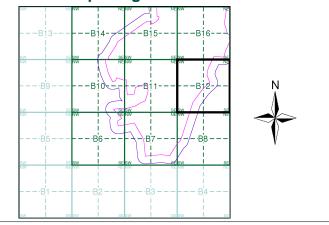
1:1,250



SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5

Historical Map - Segment B12



Order Details

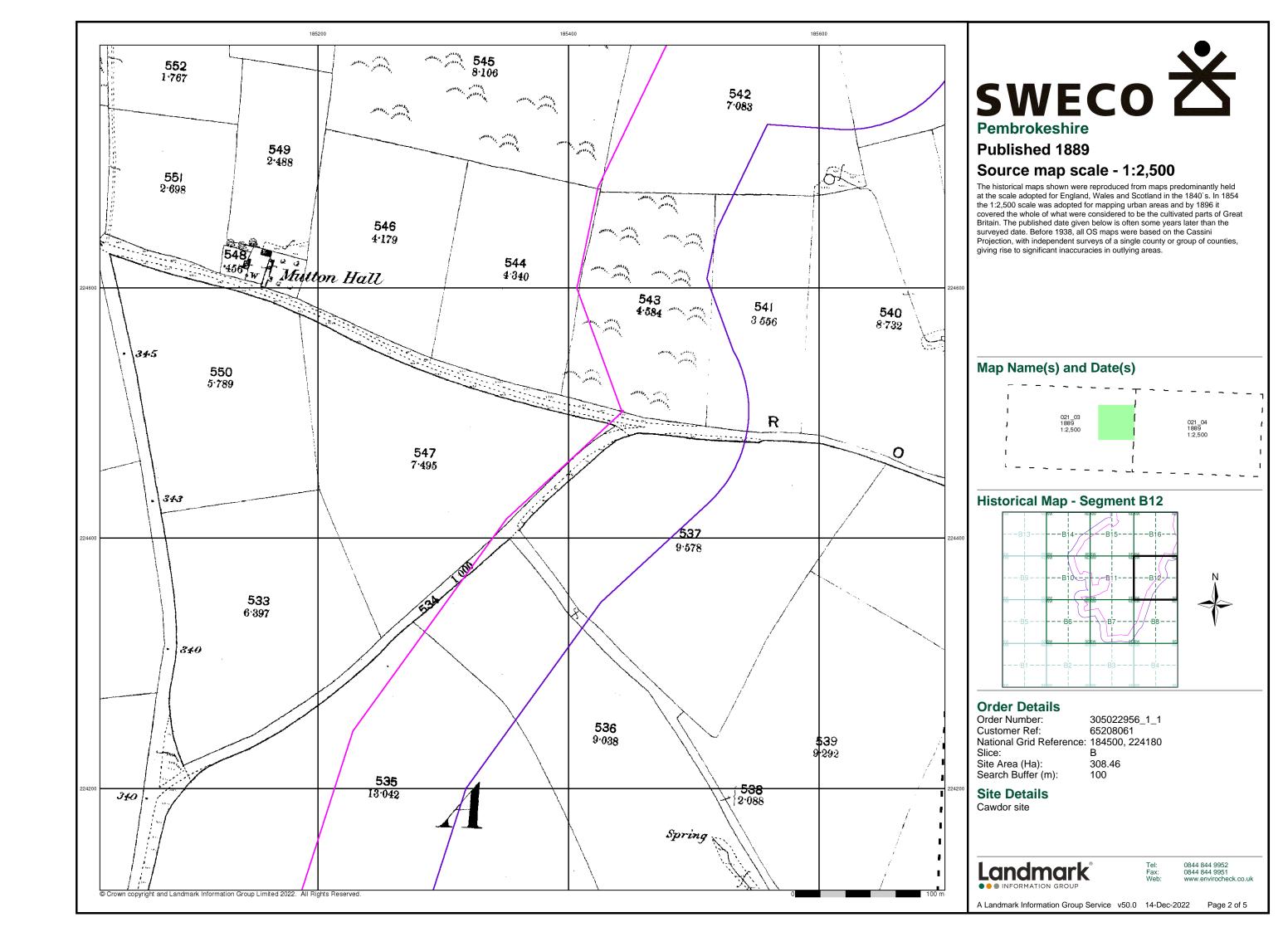
Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

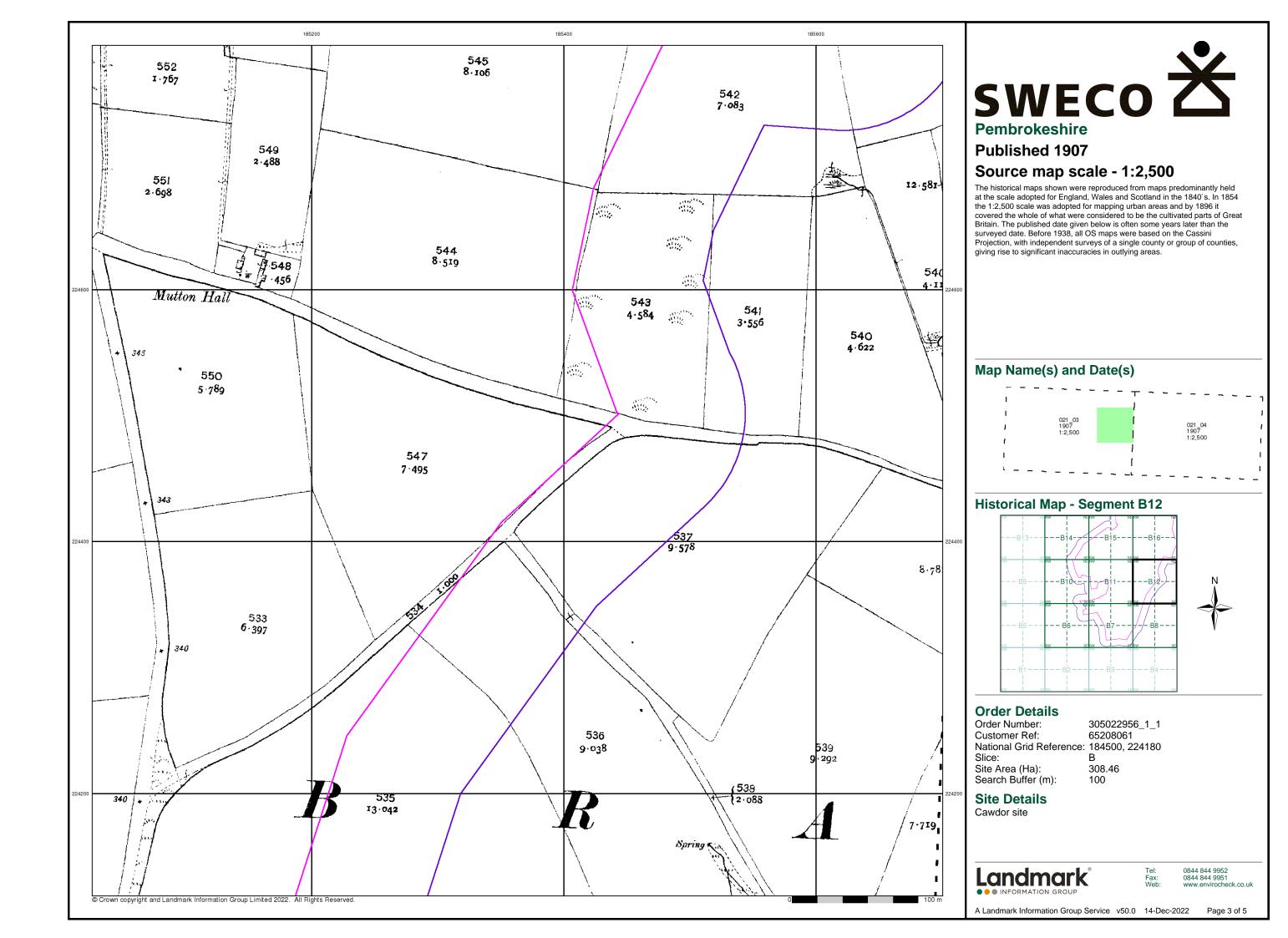
Site Area (Ha): 308.46 Search Buffer (m): 100

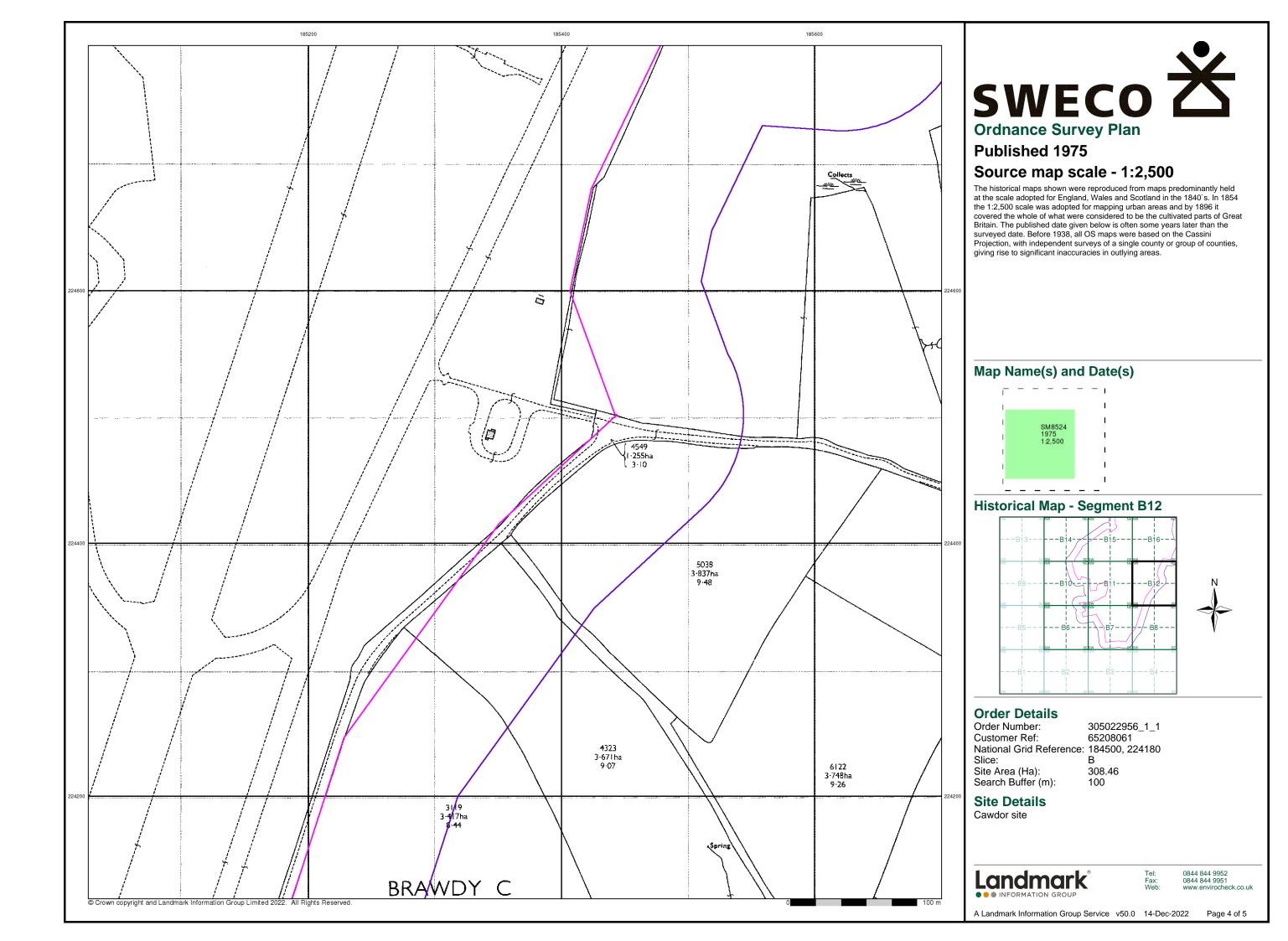
Site Details Cawdor site

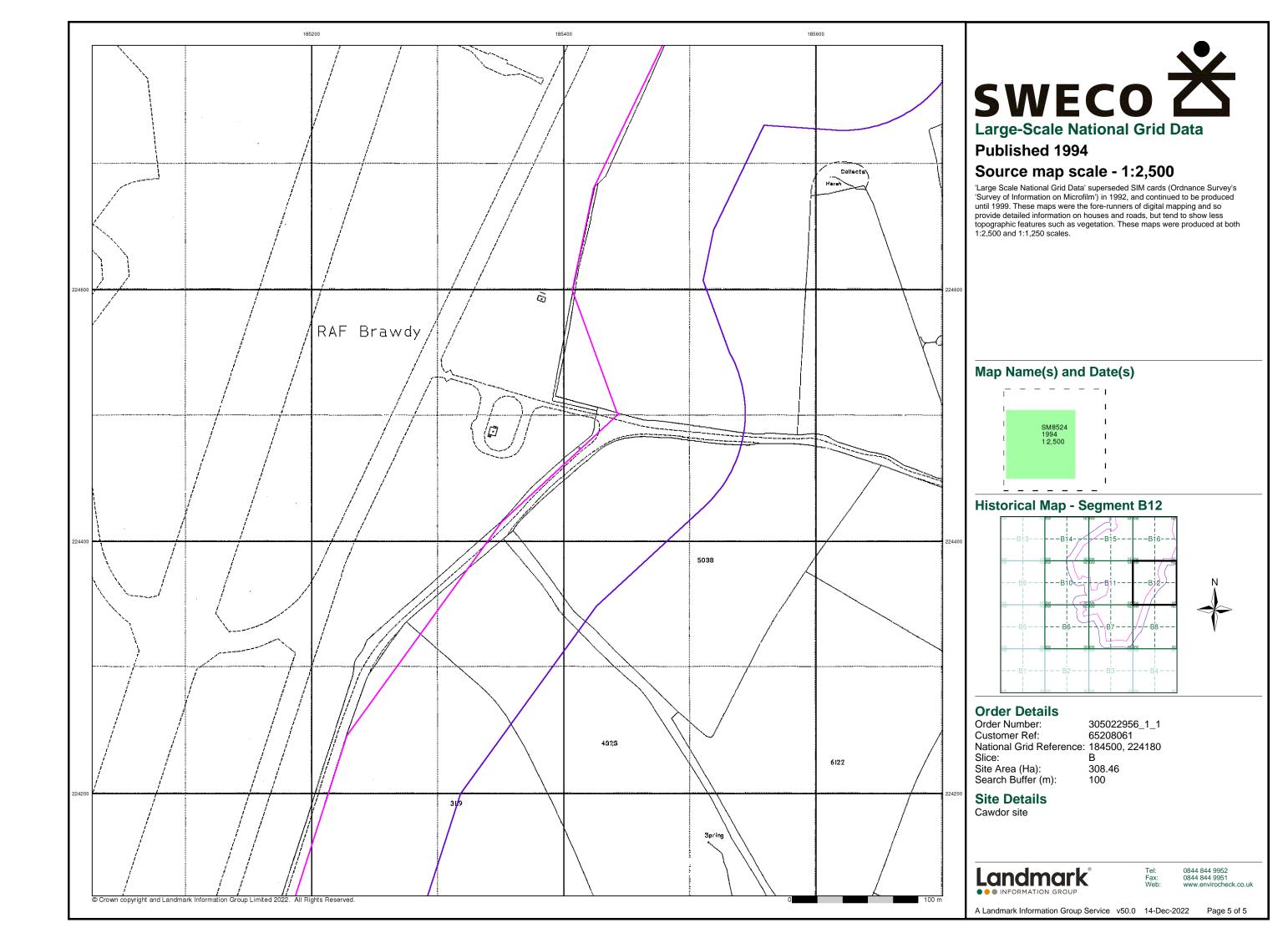
Landmark

0844 844 9952 0844 844 9951

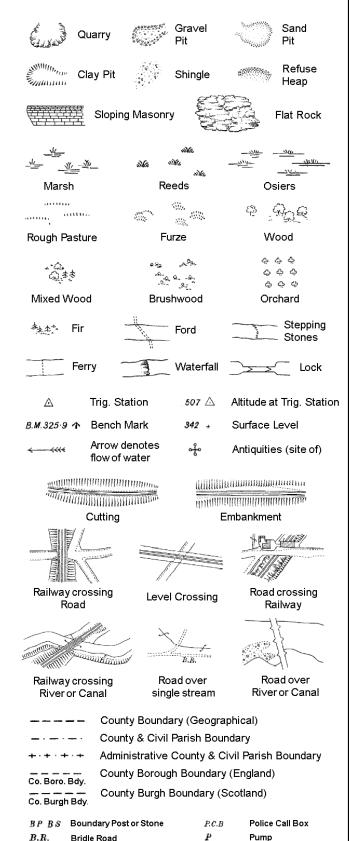








Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



S.P

Sl.

 T_T

T.C.B

Electricity Pylor

Guide Post or Board

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

E.P

F.B.

M.S

Signal Post

Telephone Call Box

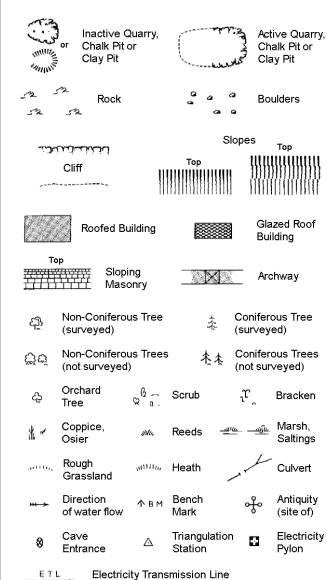
Sluice

Spring

Trough

Well

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



				3
· — ·		County & C	i∨il Parish	Boundary
		Civil Parish	n Boundary	1
. —	 ·	Admin. Cou	unty or Co	unty Bor. Boundary
L B Bd	^y →	London Bo	rough Bou	ndary
***	•	Symbol ma mereing ch	• .	where boundary
вн	Beer House		Р	Pillar, Pole or Post
BP, BS	Boundary Po	st or Stone	PO	Post Office
Cn, C	Capstan, Cra	ne	PC	Public Convenience
Chy	Chimney		PH	Public House
D Fn	Drinking Fou	ntain	Pp	Pump
EIP	Electricity Pil	lar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pi	lar	SP, SL	Signal Post or Light

FB

LC

MP

MS

NTL

Foot Bridge

Guide Post

Manhole

Level Crossing

Normal Tidal Limit

Hydrant or Hydraulic

Mile Post or Mooring Post

County Boundary (Geographical)

Spr

Tk

тсв

TCP

Wd Pp

Spring

Trough

Wind Pump

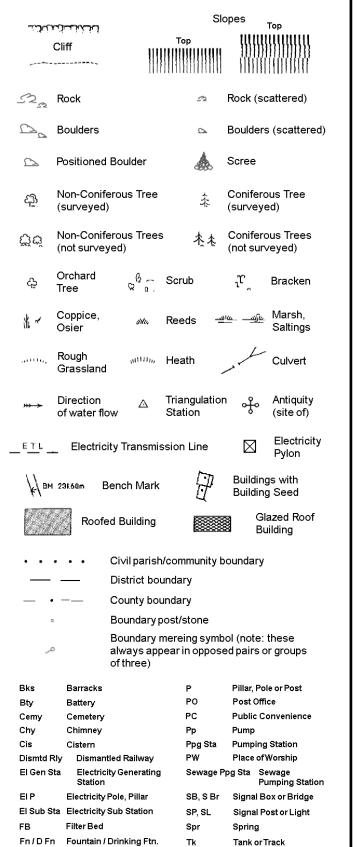
Tank or Track

Telephone Call Box

Telephone Call Post

Water Point, Water Tap

1:1,250



Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

Guide Post

Manhole

GVC

Tr

Wd Pp

Wks

Trough

Wind Pump

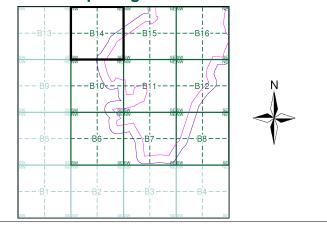
Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5
Large-Scale National Grid Data	1:2,500	1995	6

Historical Map - Segment B14



Order Details

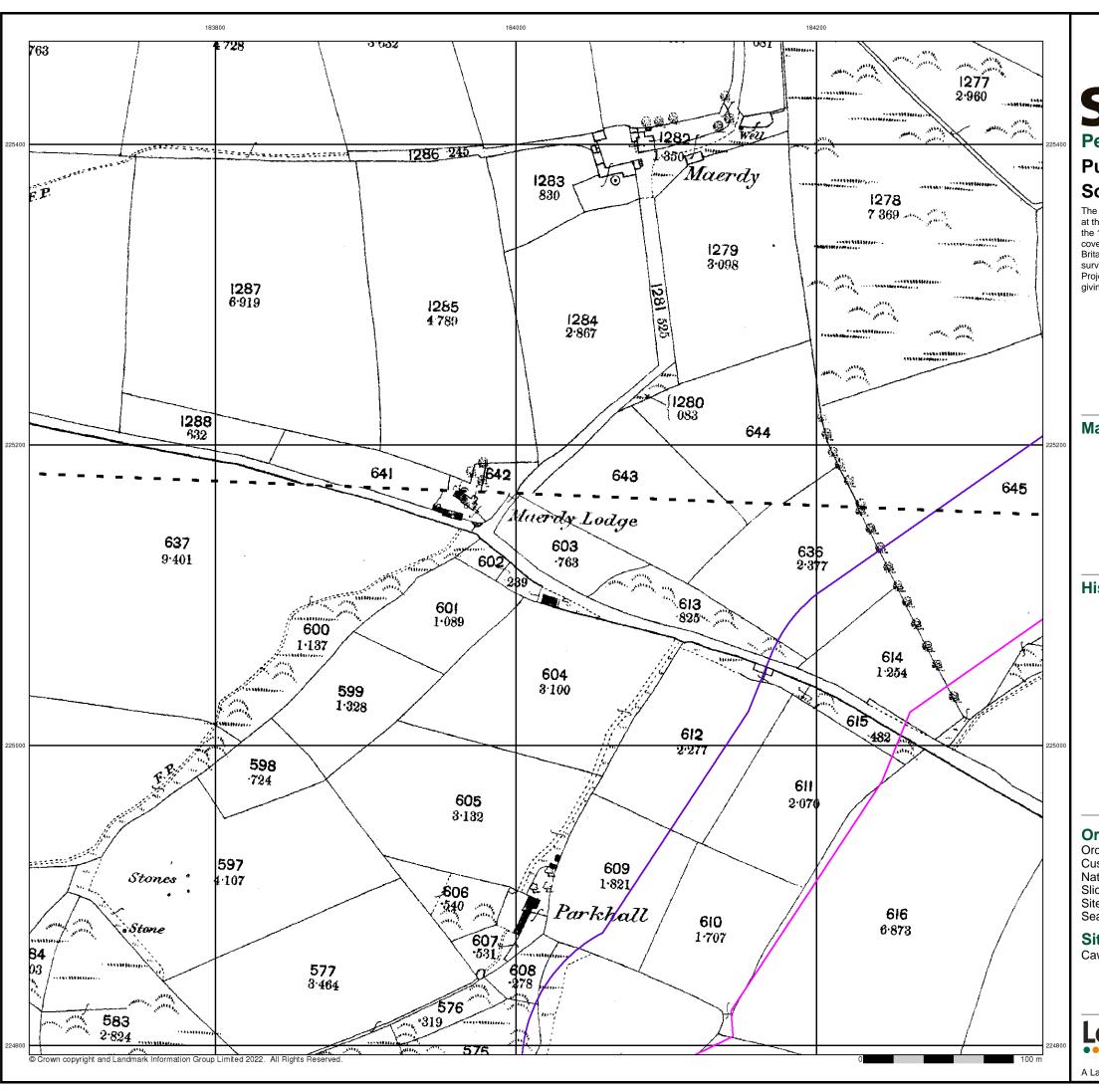
Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

Site Area (Ha): 308.46 Search Buffer (m): 100

Site Details Cawdor site

Landmark

0844 844 9952 0844 844 9951



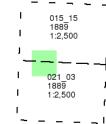
SWECO **本**

Pembrokeshire

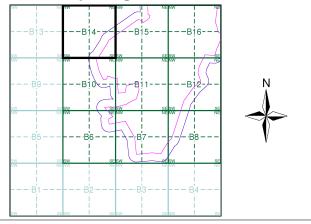
Published 1889 Source map scale - 1:2,500

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 B14



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180

Slice:

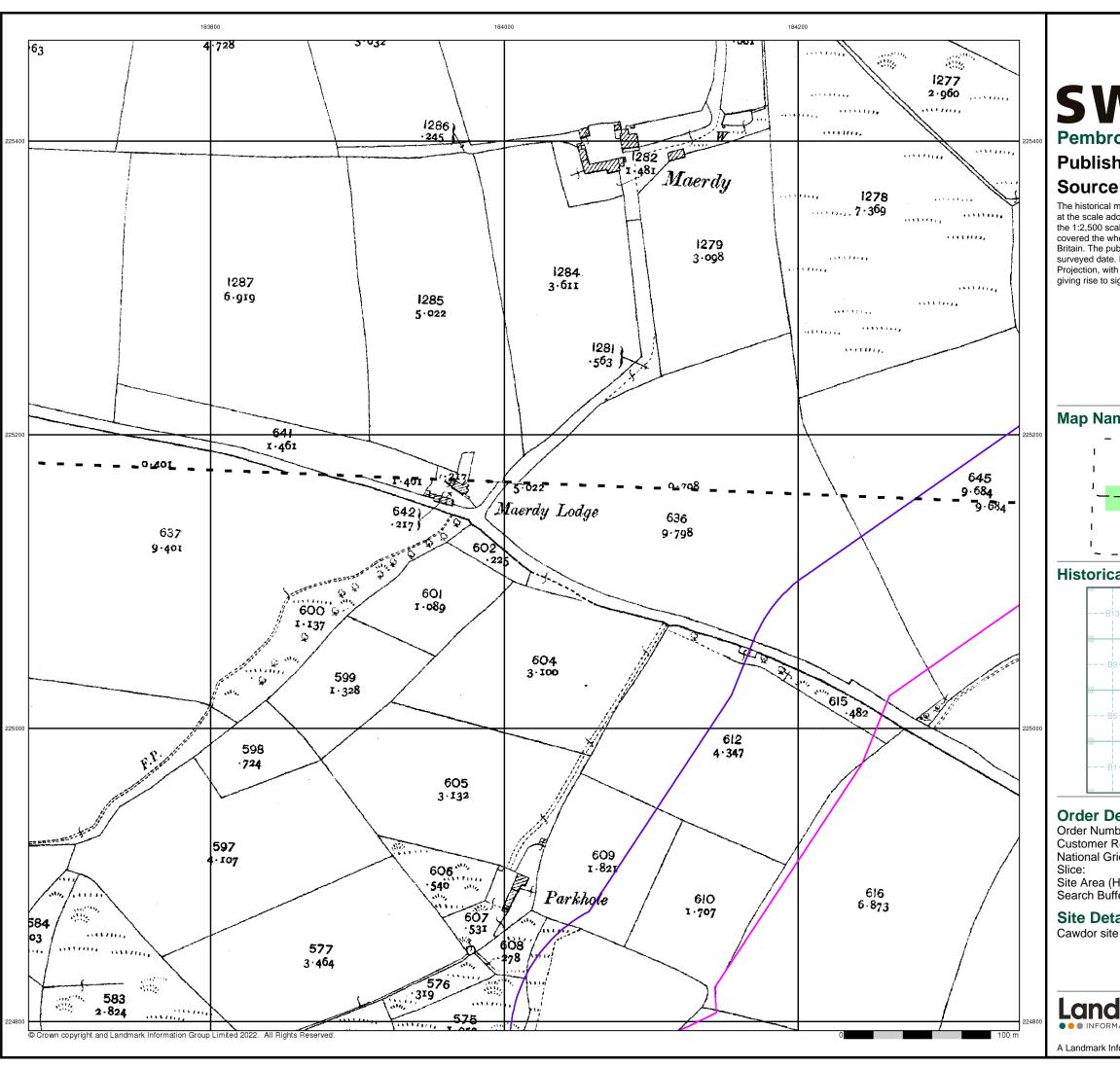
Site Area (Ha): Search Buffer (m): 308.46

Site Details

Cawdor site

Landmark

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SWECO **古**

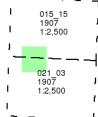
Pembrokeshire

Published 1907

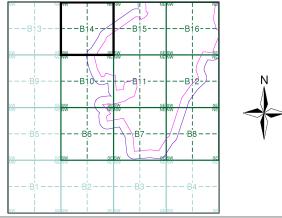
Source map scale - 1:2,500

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 B14



Order Details

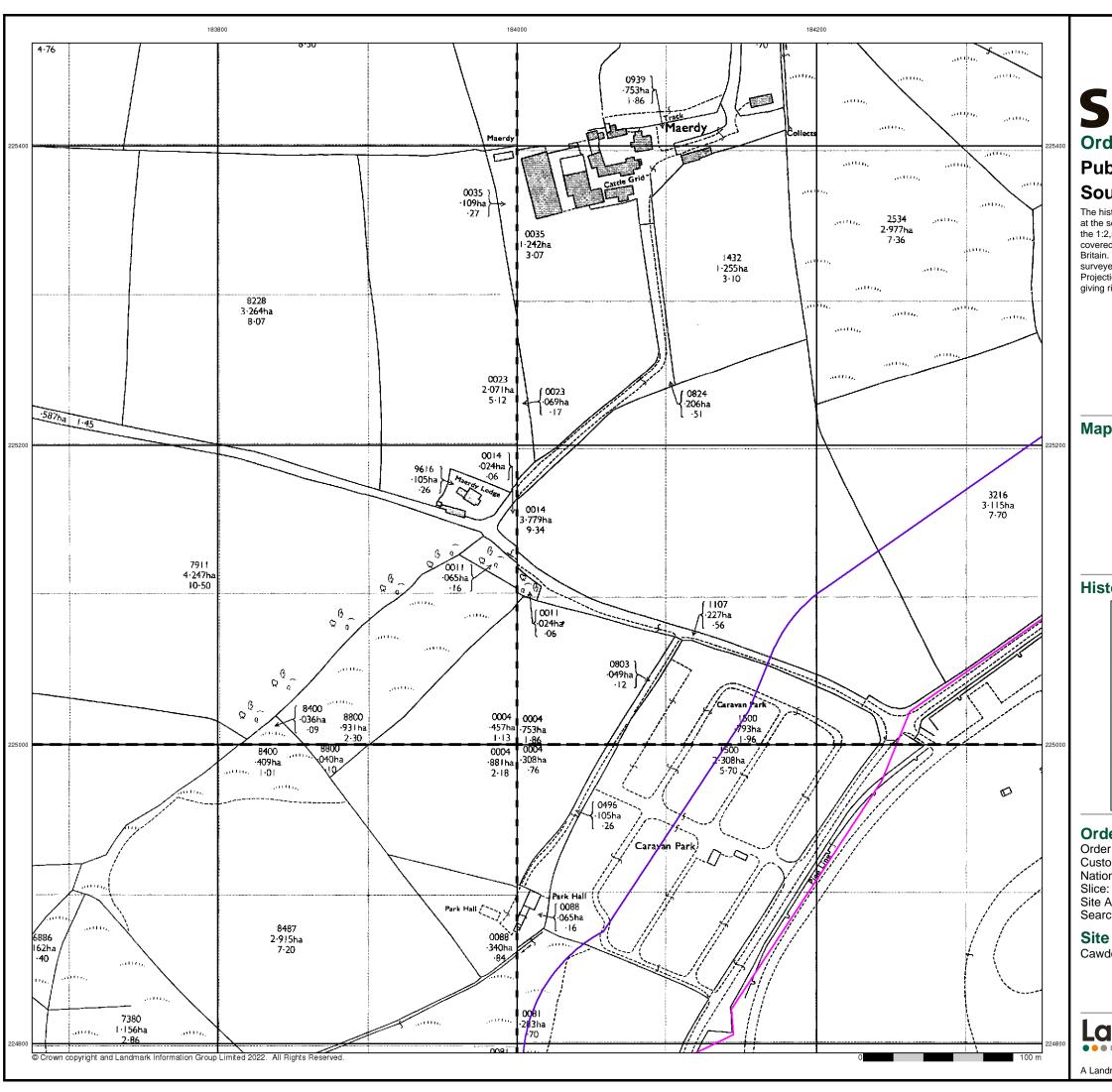
Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 В

Site Area (Ha): Search Buffer (m): 308.46

Site Details



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SWECO **乙**

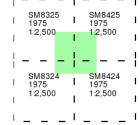
Ordnance Survey Plan

Published 1975

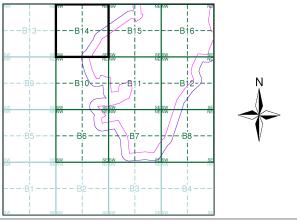
Source map scale - 1:2,500

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 B14



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180

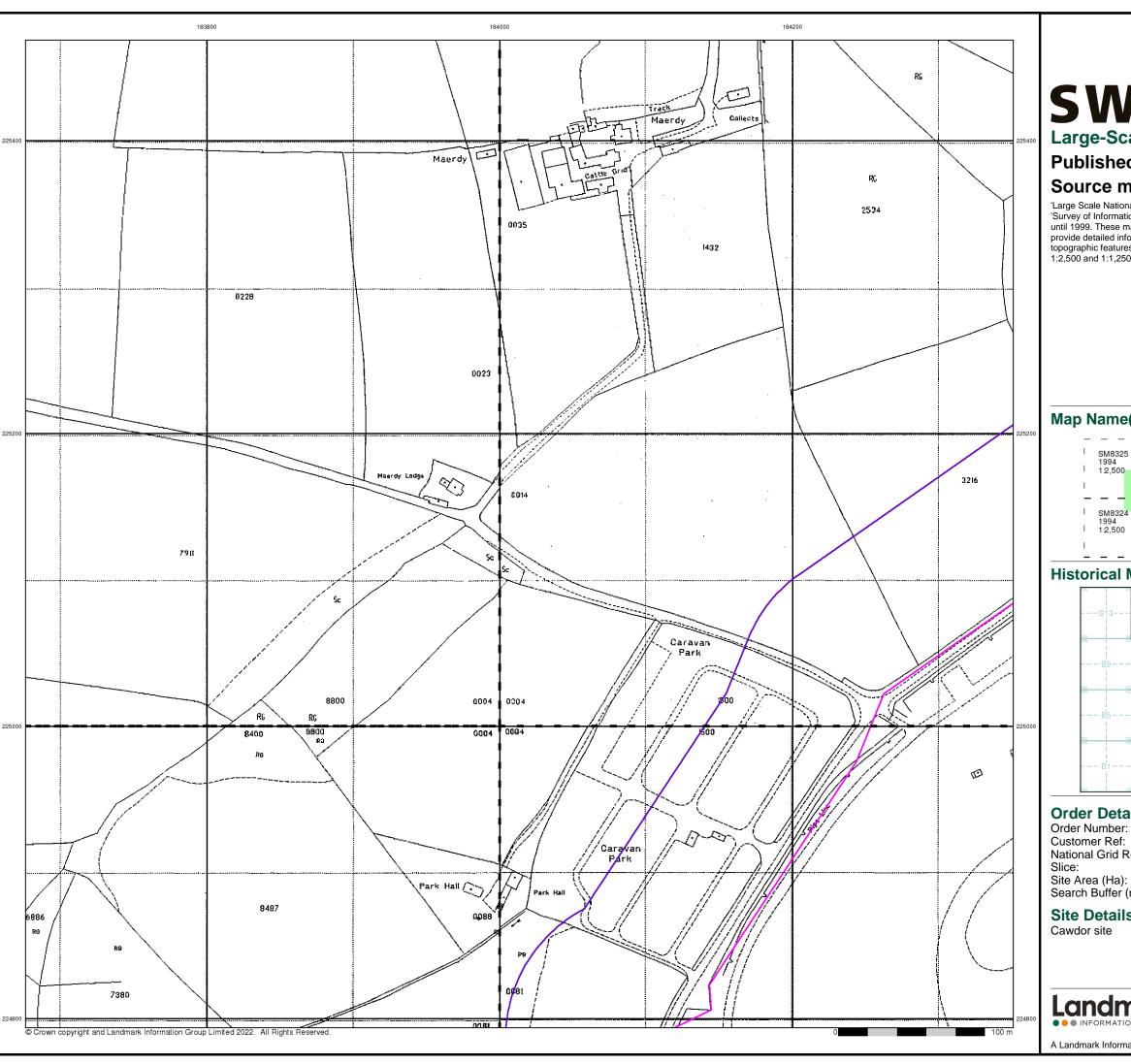
Site Area (Ha): Search Buffer (m): 308.46

Site Details

Cawdor site

Landmark

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SWECO 乙

Large-Scale National Grid Data

Published 1994

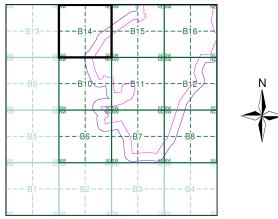
Source map scale - 1:2,500

'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)

_	_			_	_	_
I	SM8		ı		8425	ı
I	1994 1:2,5			199 1:2,	4 500	ı
I			1			1
_	_	_	_	_	_	_
	SM8		- 1		8424	ı
1	SM8 1994 1:2,5	4	1	199		l I
 	1994	4	1	199	4	

Historical Map - Segment B14



Order Details

305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180

Site Area (Ha): Search Buffer (m): 308.46

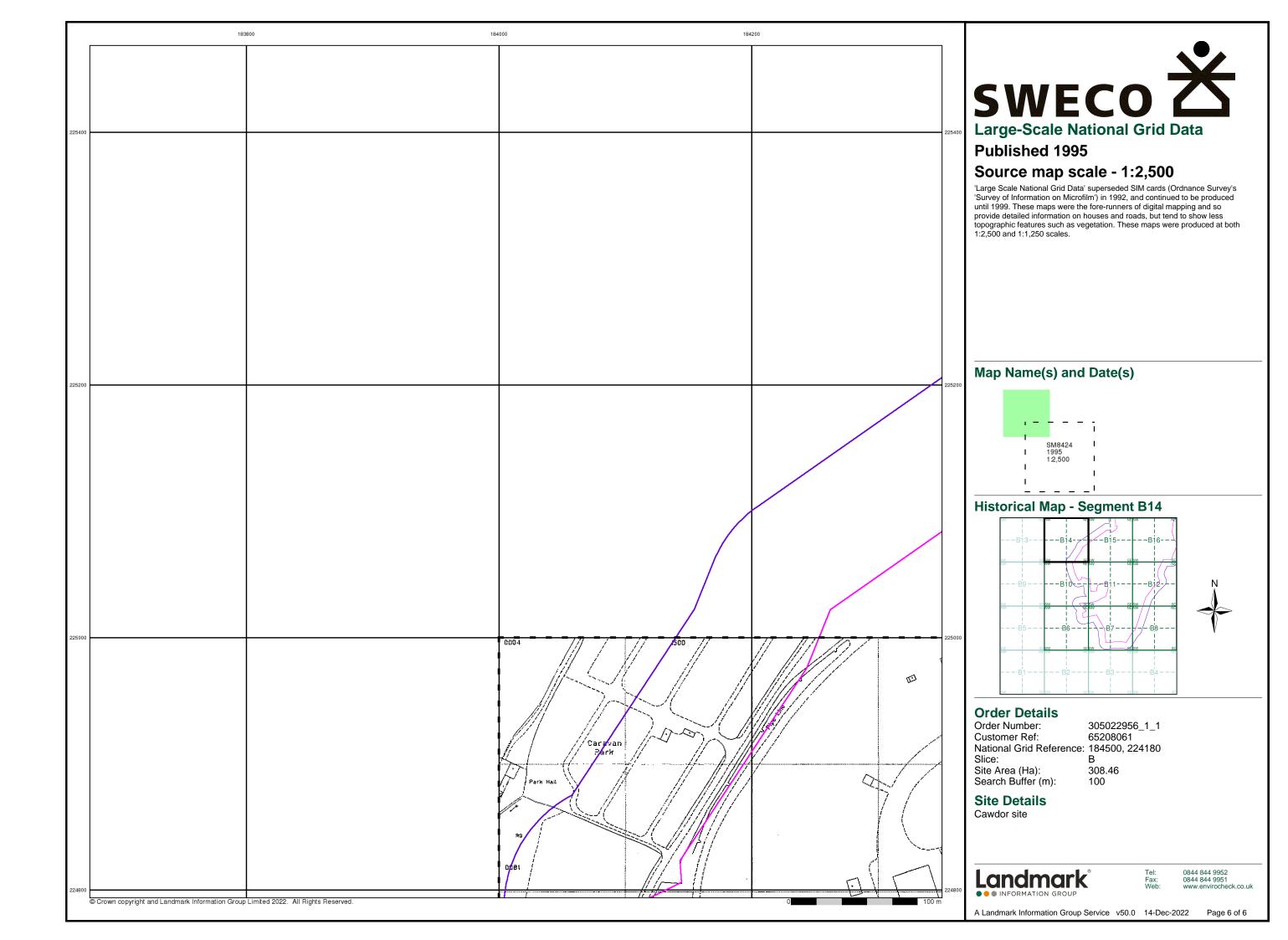
Site Details

Cawdor site

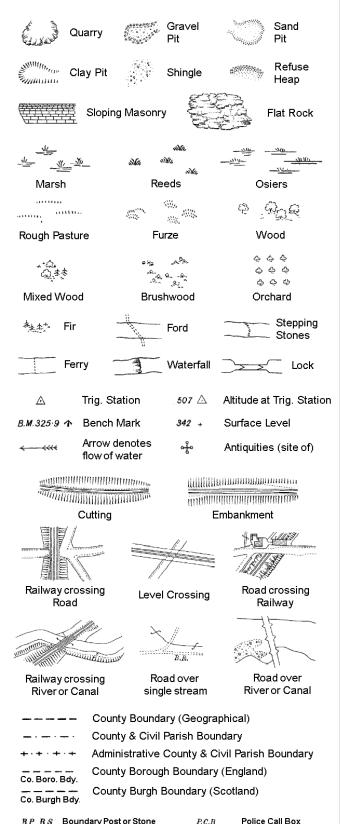


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A Landmark Information Group Service v50.0 14-Dec-2022



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



Pump

Sluice

Spring

Trough

Well

Signal Post

Telephone Call Box

S.P

T.C.B

Sl.

 T_T

B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

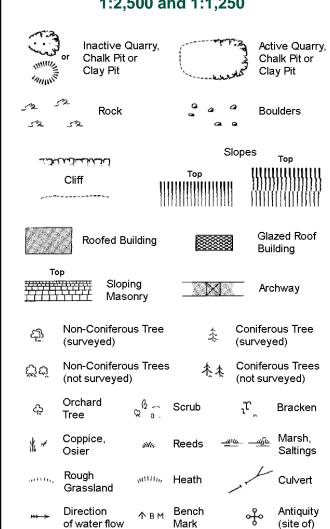
Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



Electricity Transmission Line County Boundary (Geographical) County & Civil Parish Boundary Civil Parish Boundary Admin. County or County Bor. Boundary L B Bdy London Borough Boundary Symbol marking point where boundary mereing changes

Cave

Entrance

Triangulation

Electricity

GVC

MP, MS

Gas Governer

Mile Post or Mile Stone

Guide Post

Manhole

Wd Pp

Wks

Wind Pump

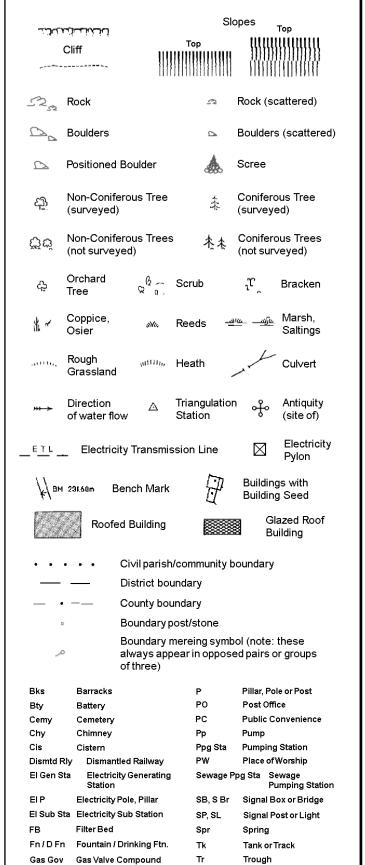
Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

÷

вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

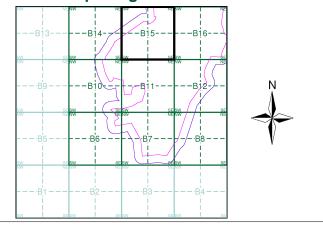
1:1,250



SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5
Large-Scale National Grid Data	1:2,500	1995	6

Historical Map - Segment B15



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

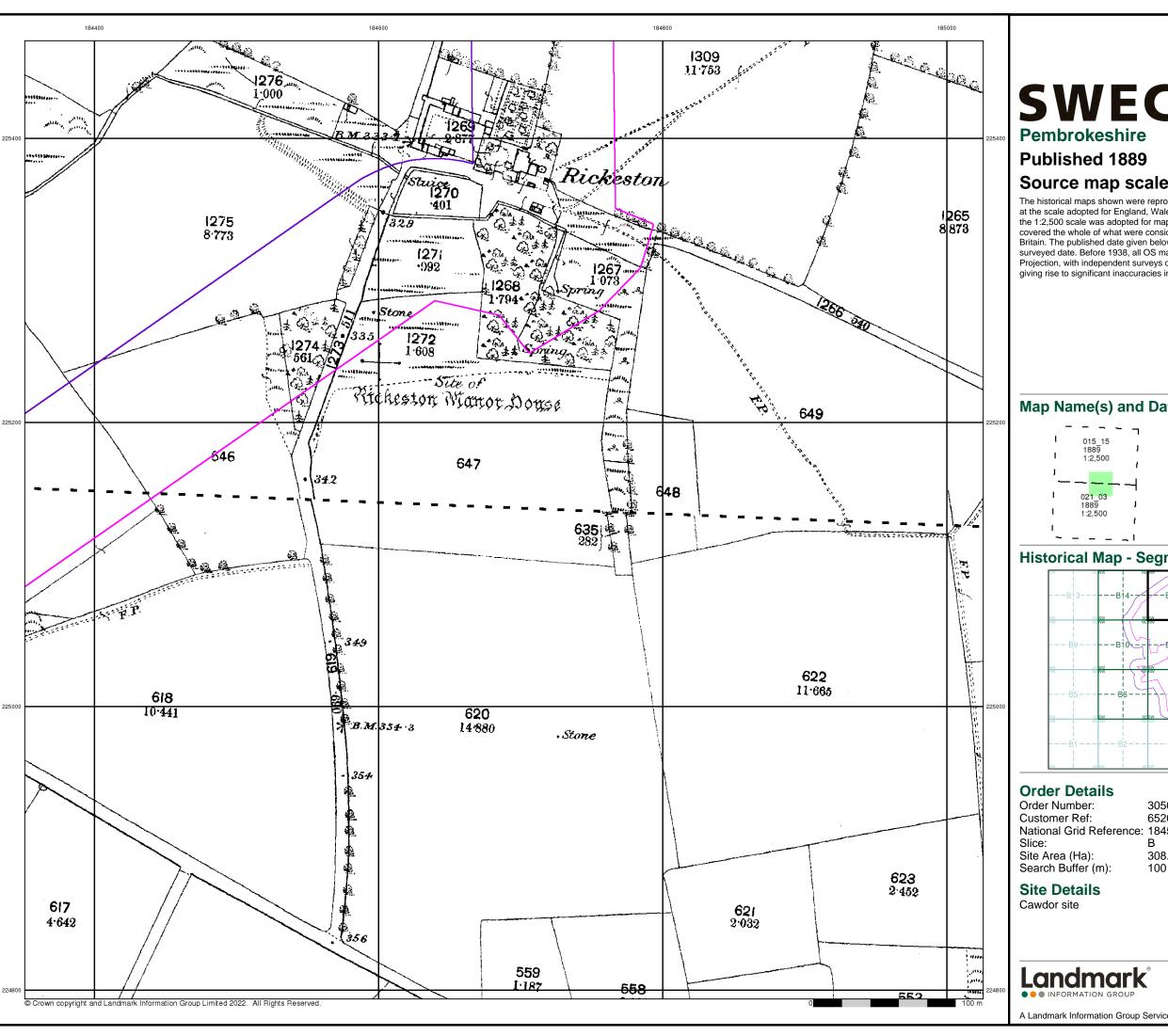
Site Area (Ha): 308.46 Search Buffer (m): 100

Site Details

Cawdor site



0844 844 9952 0844 844 9951



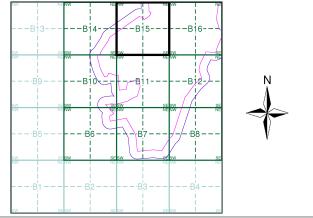
SWECO **本**

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)

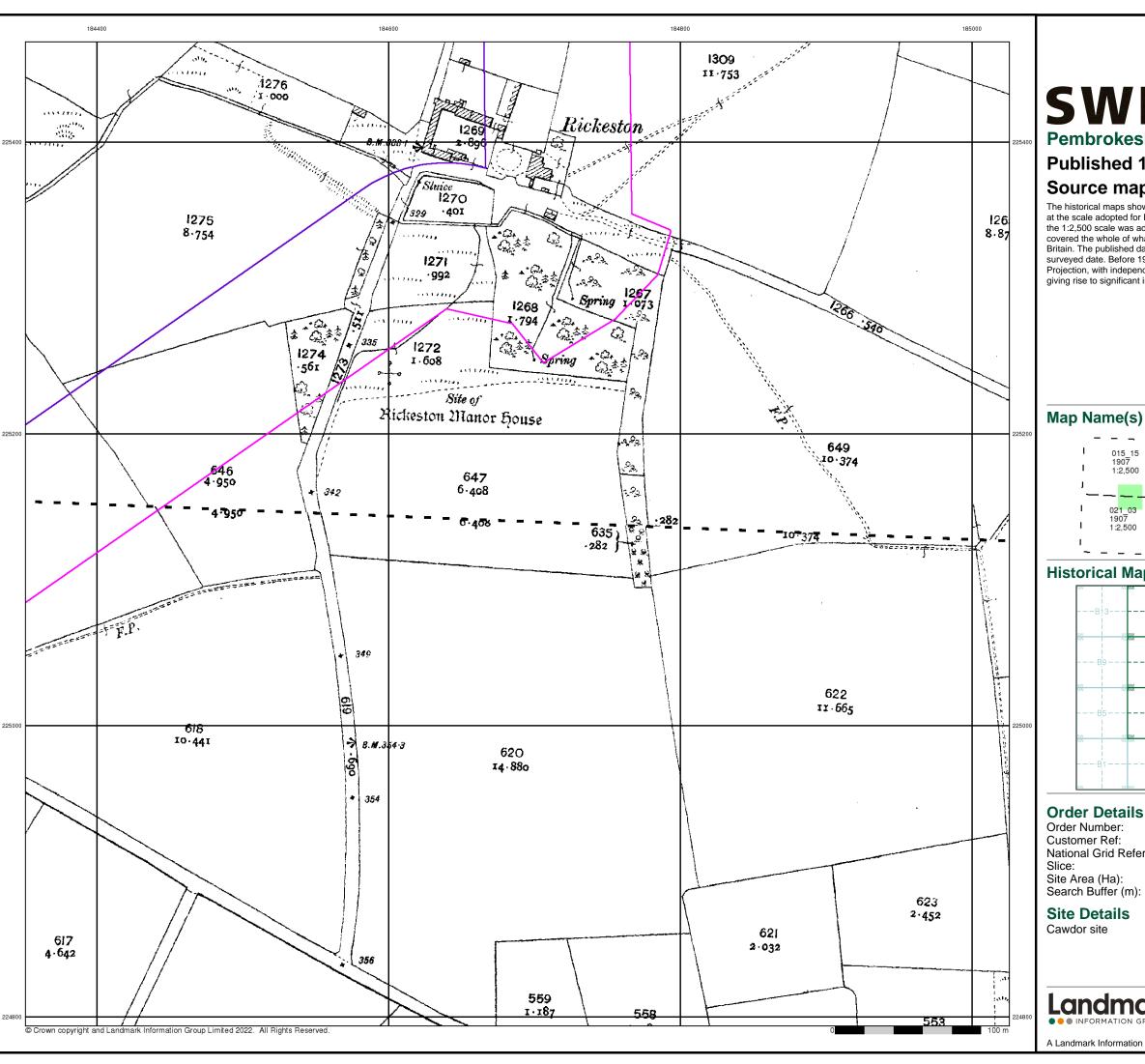
Historical Map - Segment B15



305022956_1_1 65208061 National Grid Reference: 184500, 224180

308.46

0844 844 9952 0844 844 9951 www.envirocheck.co.uk



SWECO 🕇

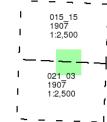
Pembrokeshire

Published 1907

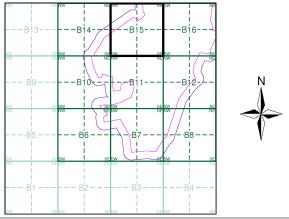
Source map scale - 1:2,500

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 B15



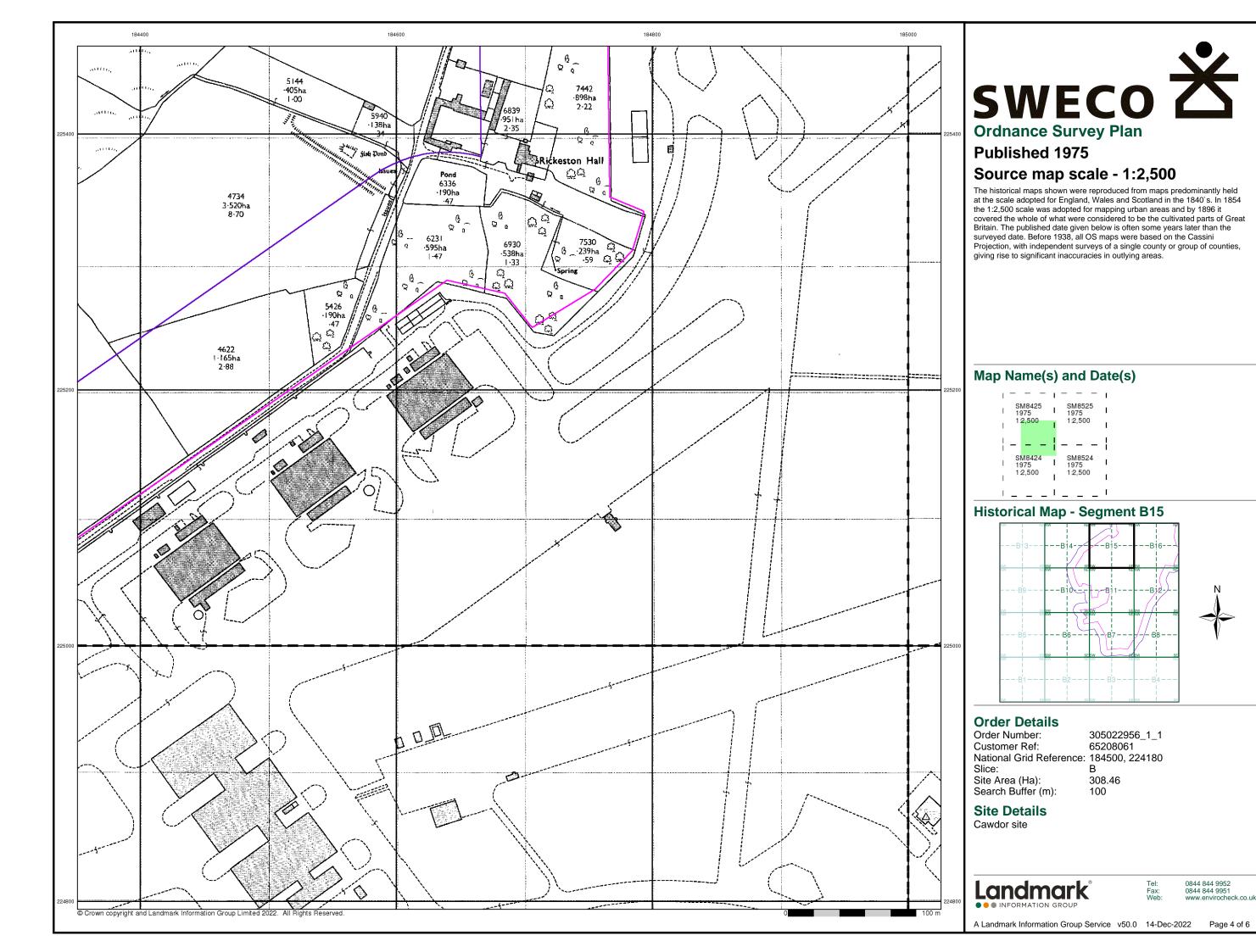
305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180

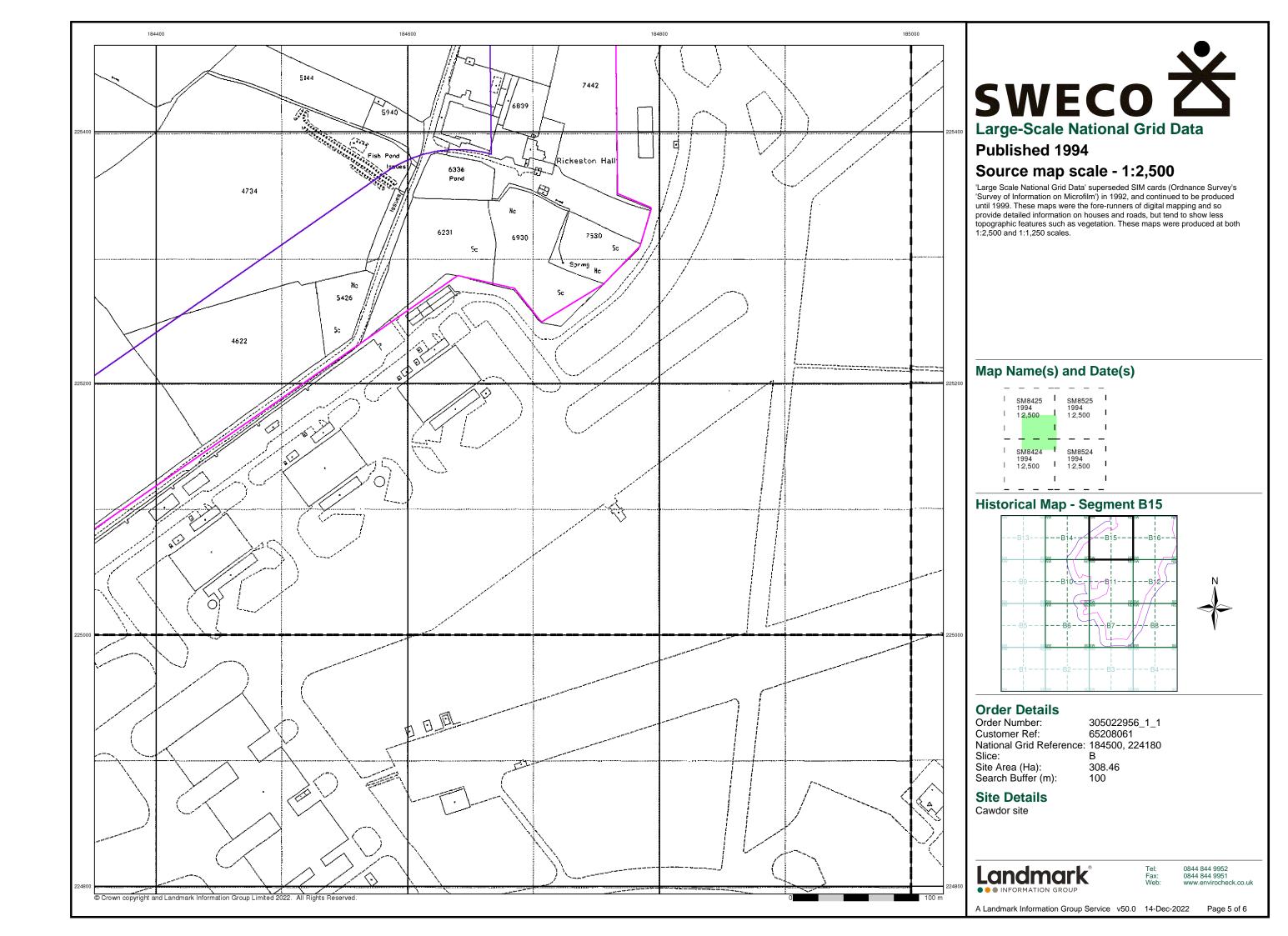
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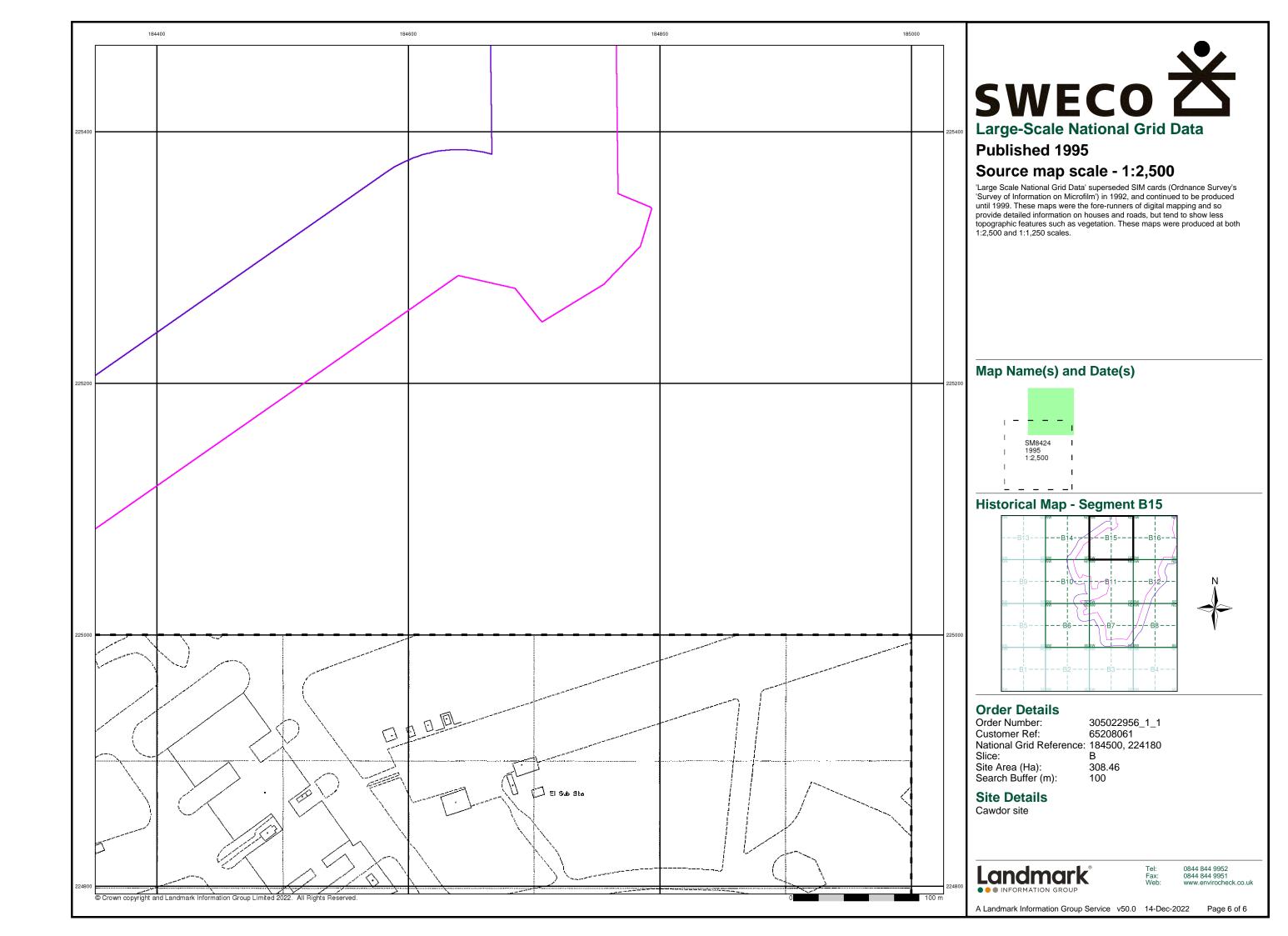
Site Details

Landmark

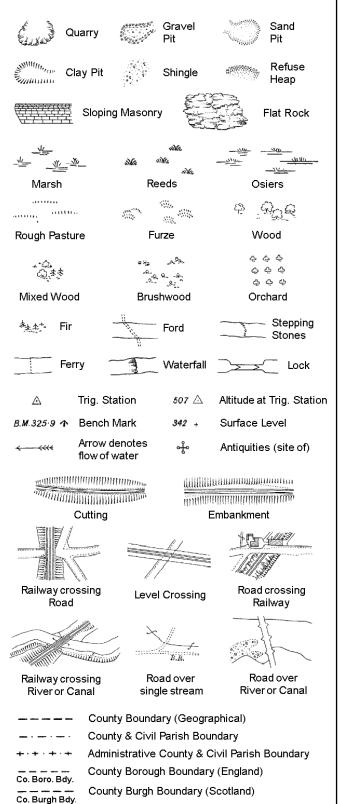
0844 844 9952 0844 844 9951 www.envirocheck.co.uk







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



B.R.

E.P

F.B.

M.S

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Guide Post or Board

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough

Well

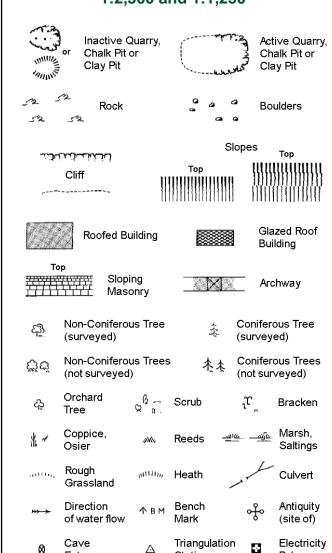
S.P

T.C.B

Sl.

 T_T

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



ETL **Electricity Transmission Line** County Boundary (Geographical)

Entrance

County & Civil Parish Boundary Civil Parish Boundary Admin. County or County Bor. Boundary L B Bdy London Borough Boundary Symbol marking point where boundary mereing changes

вн	Beer House	Р	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
EIP	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
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Fn/DFn

GVC

MP, MS

Fountain / Drinking Ftn.

Gas Valve Compound

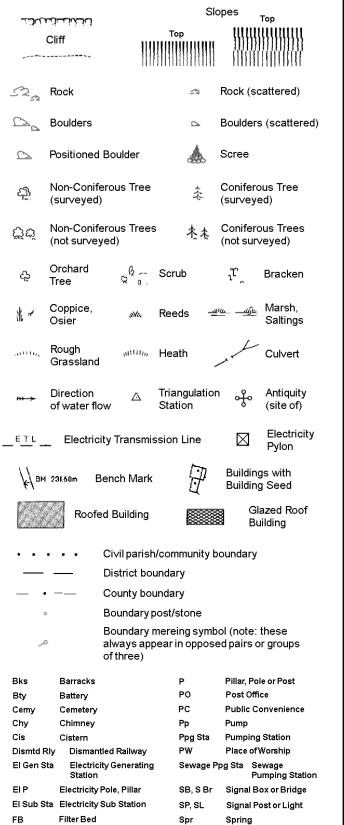
Mile Post or Mile Stone

Gas Governer

Guide Post

Manhole

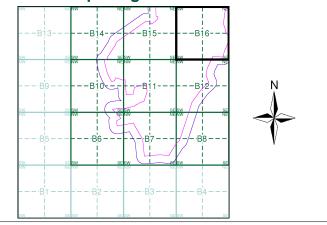
1:1,250



SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:2,500	1889	2
Pembrokeshire	1:2,500	1907	3
Ordnance Survey Plan	1:2,500	1975	4
Large-Scale National Grid Data	1:2,500	1994	5

Historical Map - Segment B16



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 184500, 224180 Slice:

Site Area (Ha): 308.46 Search Buffer (m): 100

Site Details

Cawdor site

Tank or Track

Trough

Wind Pump Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

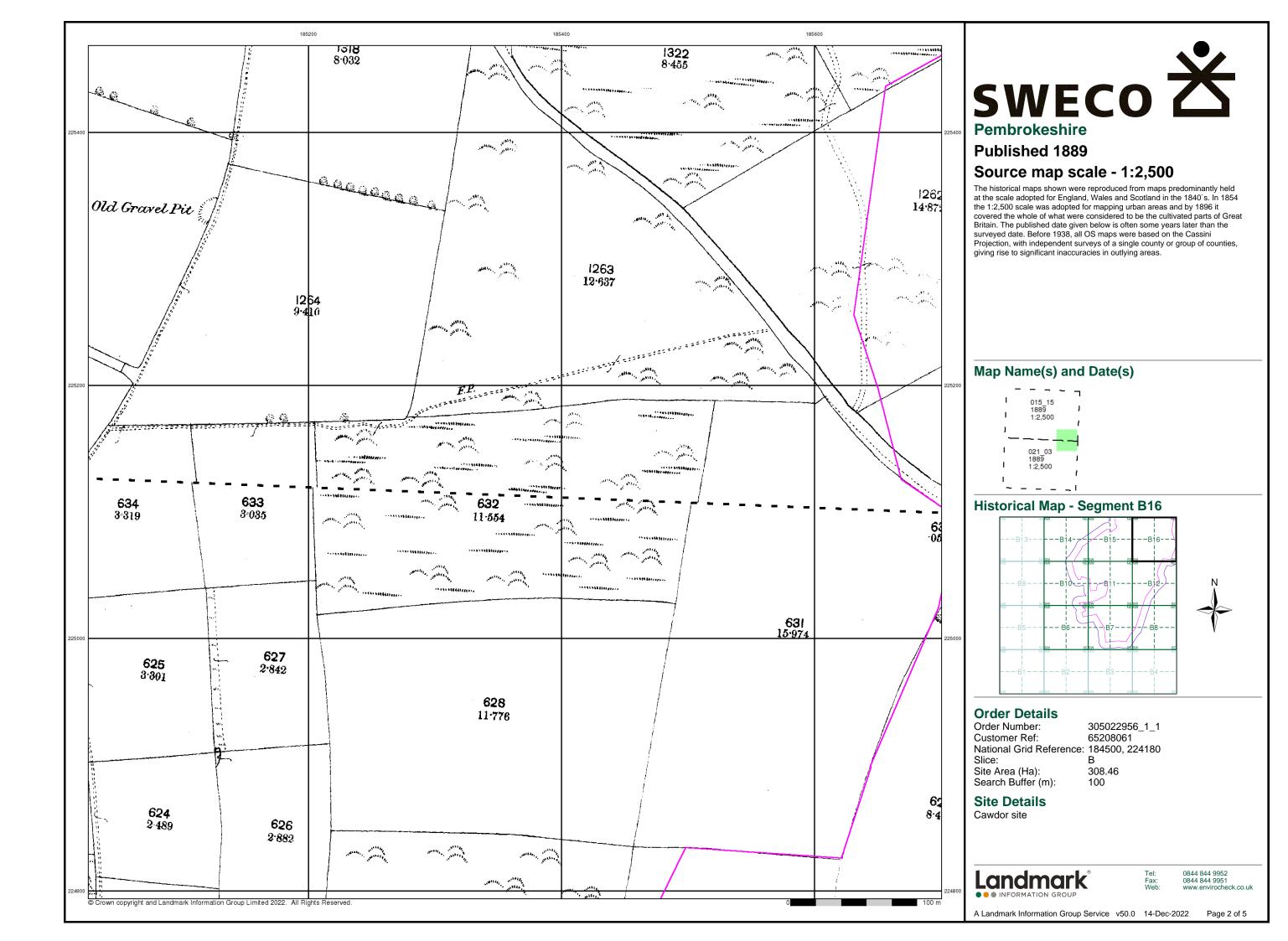
Tr

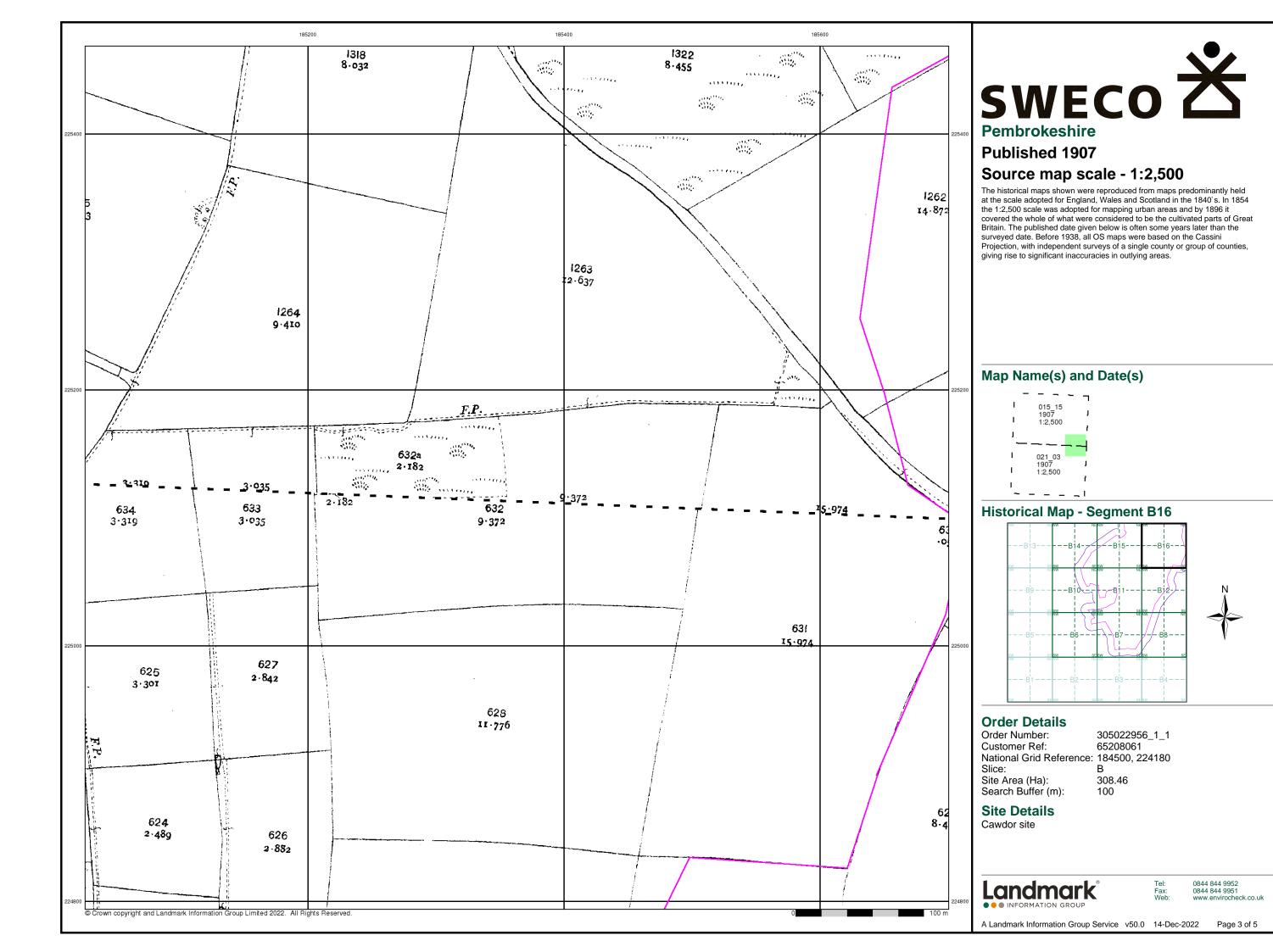
Wd Pp

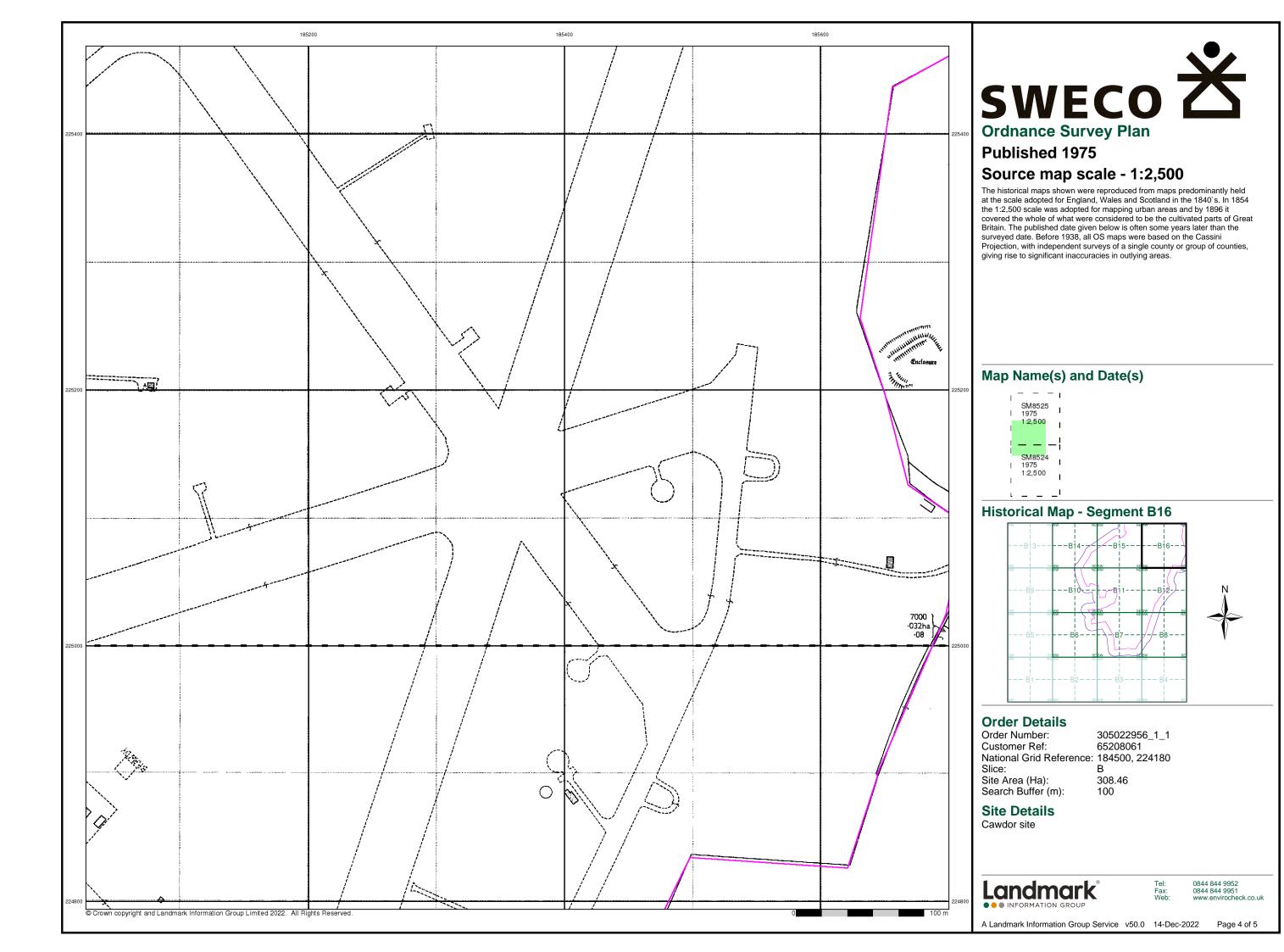
Wks

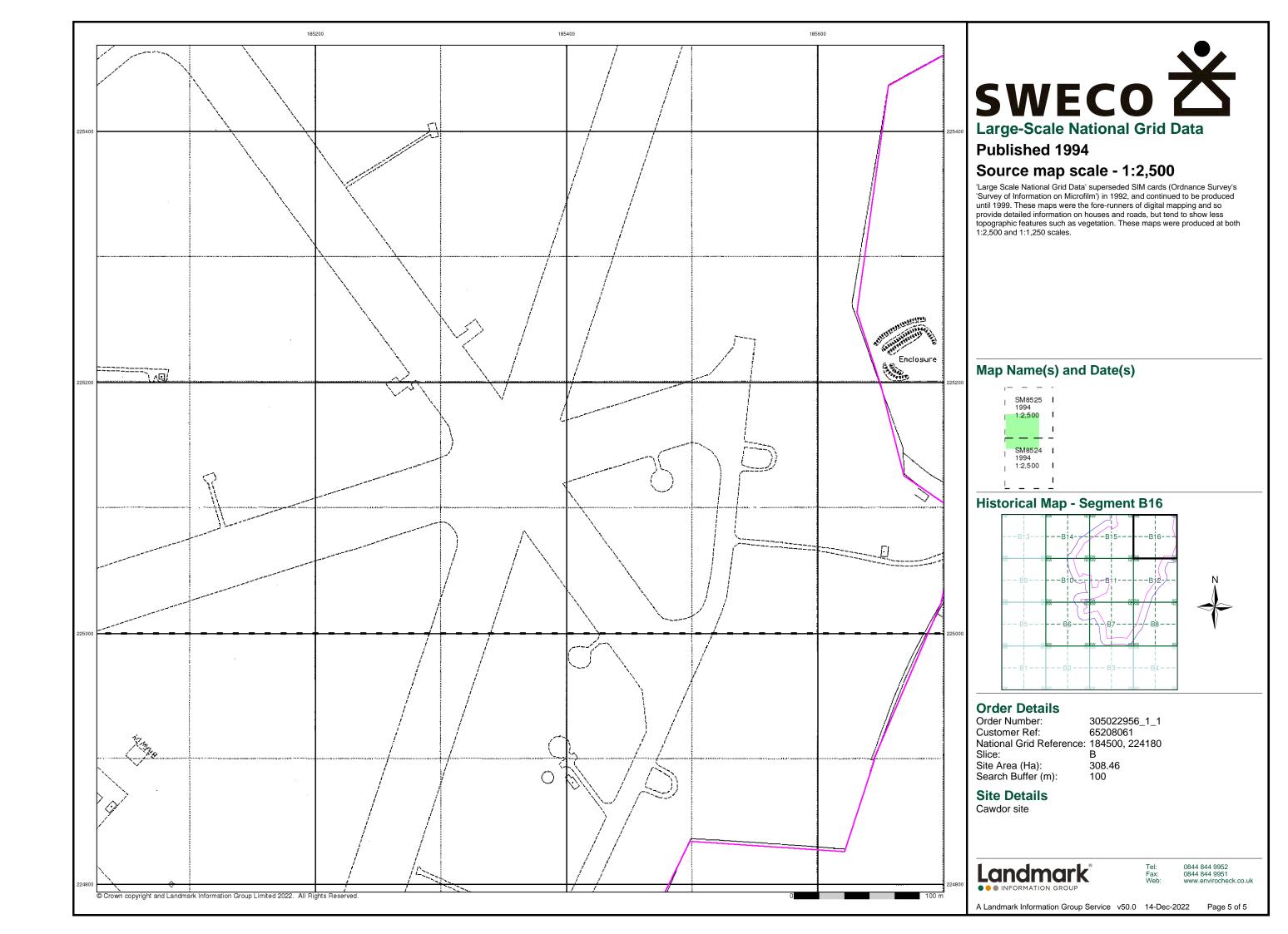


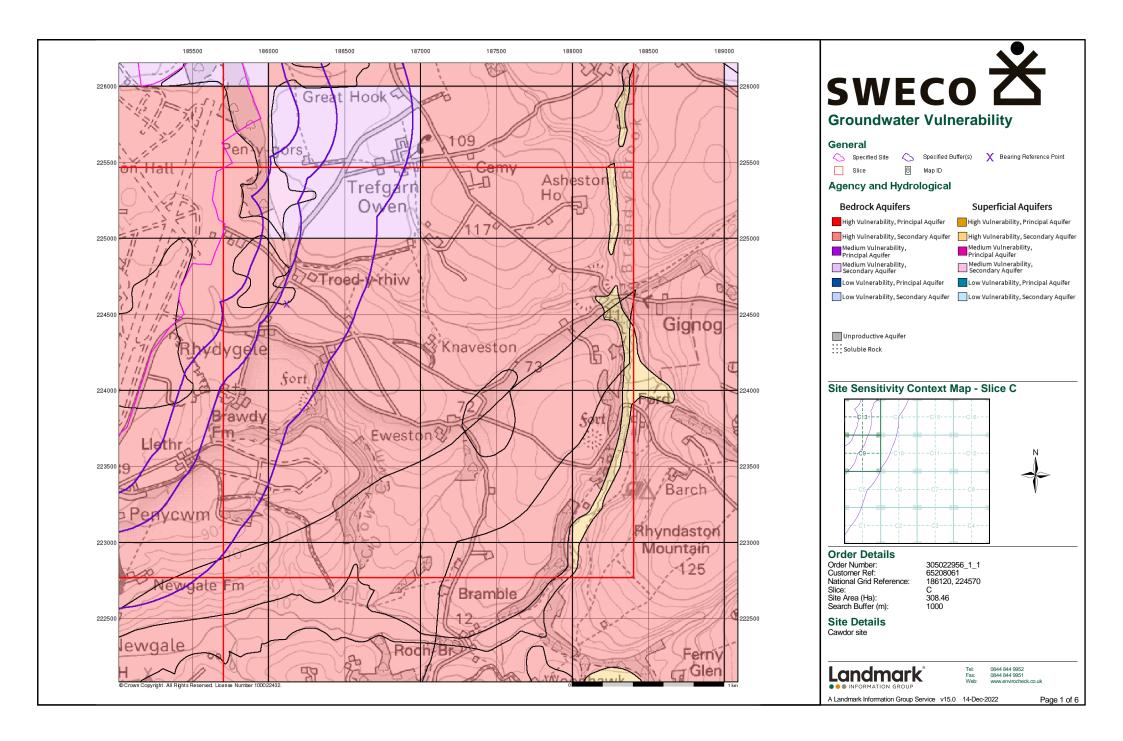
0844 844 9952 0844 844 9951

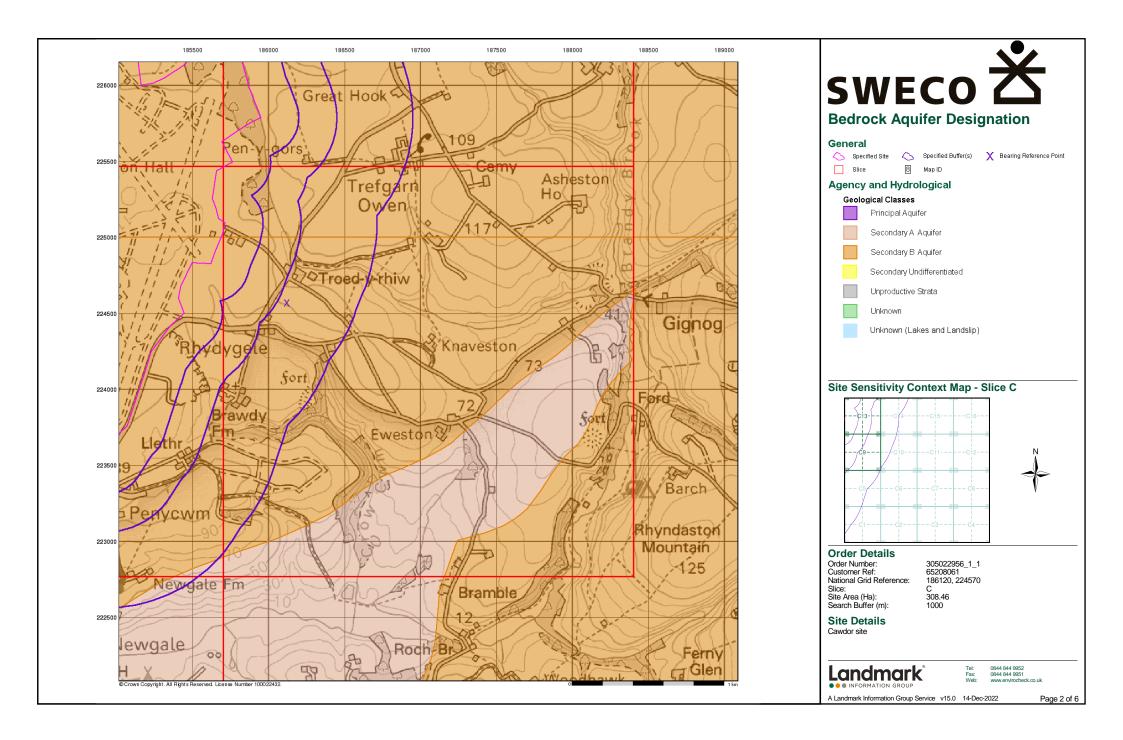


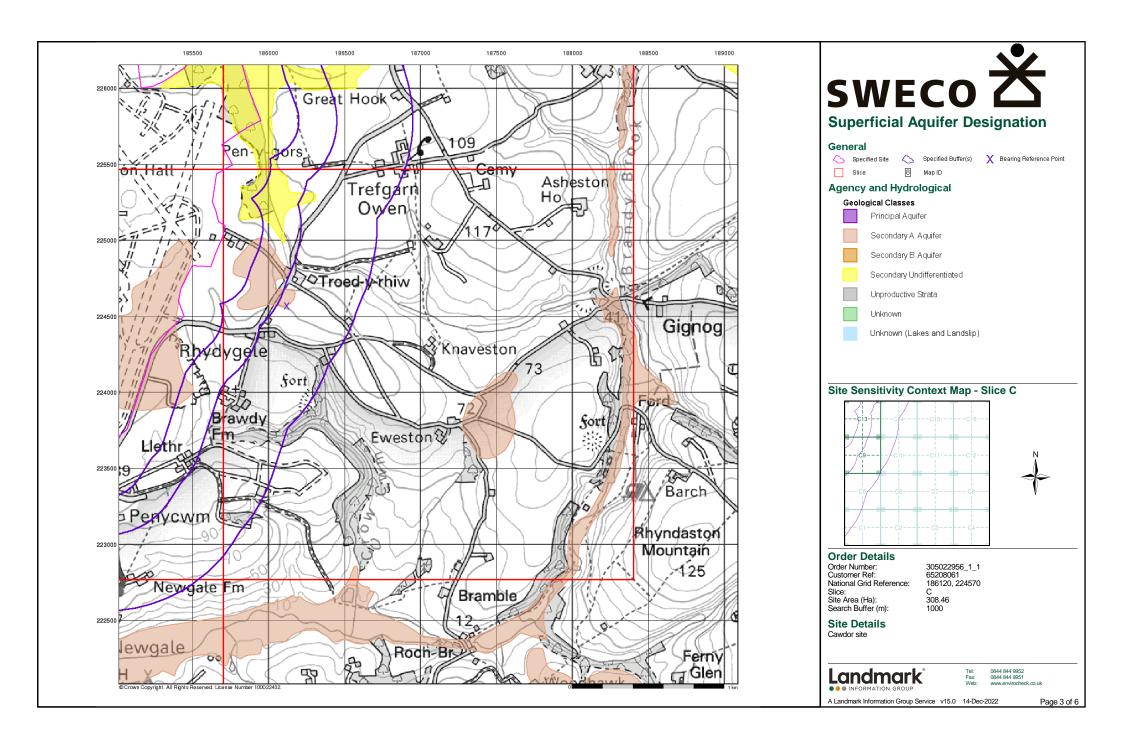


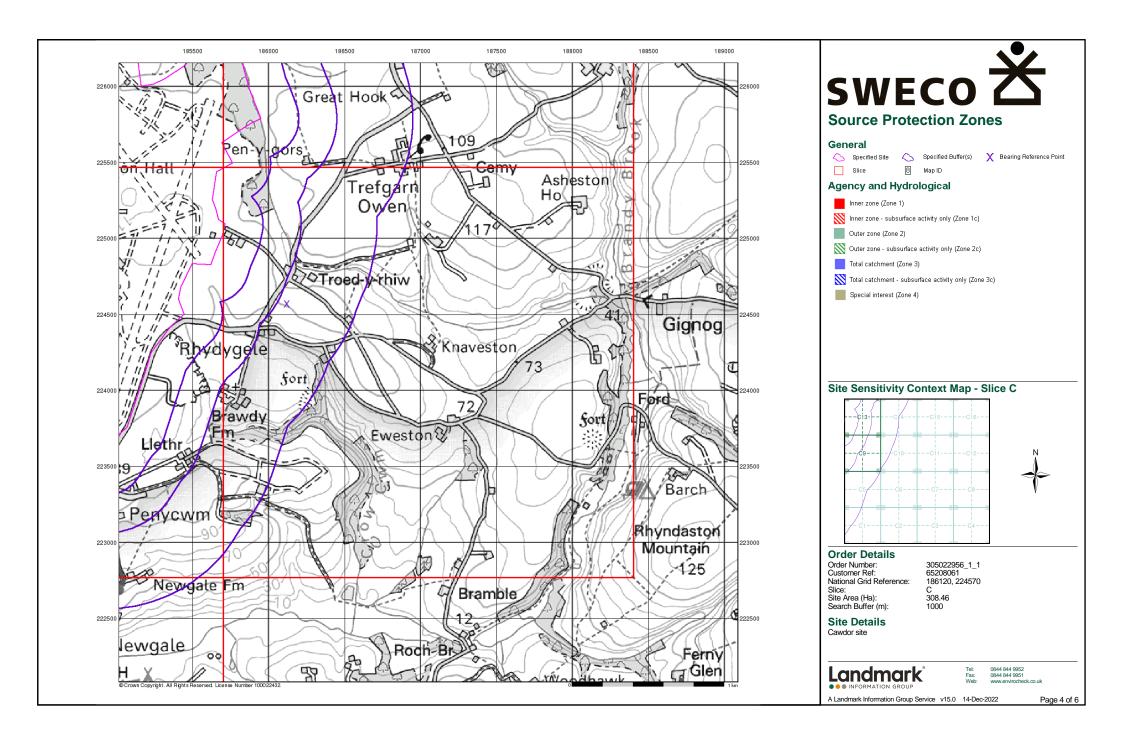


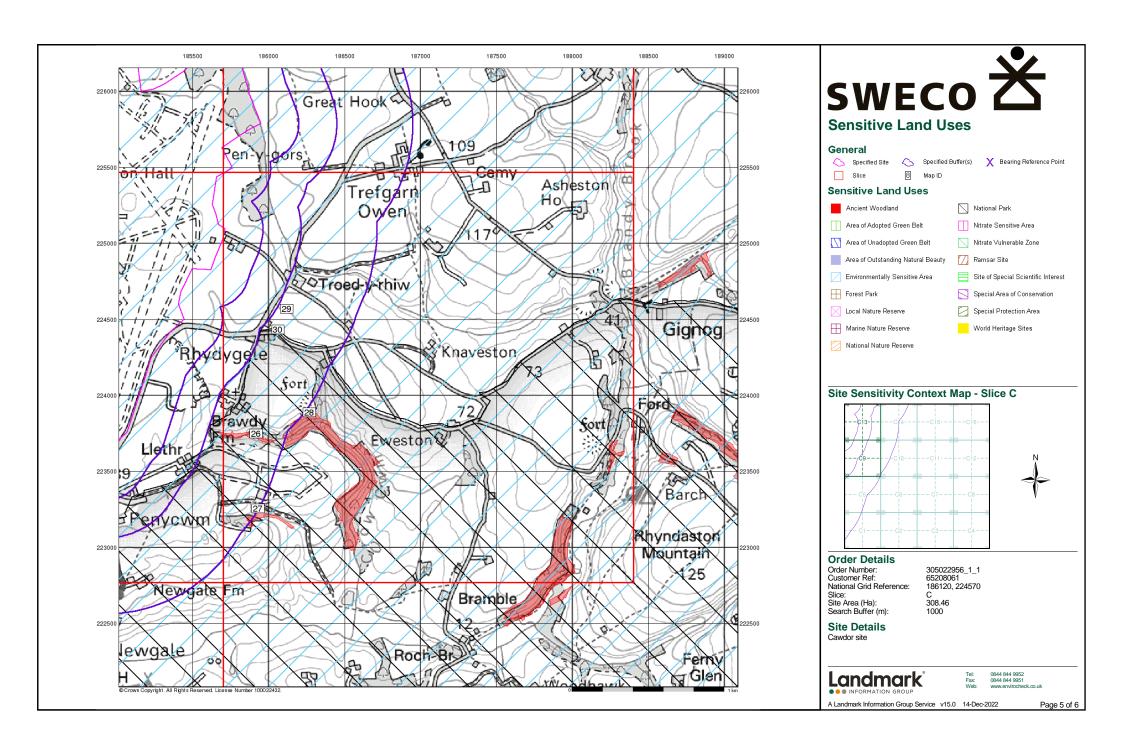


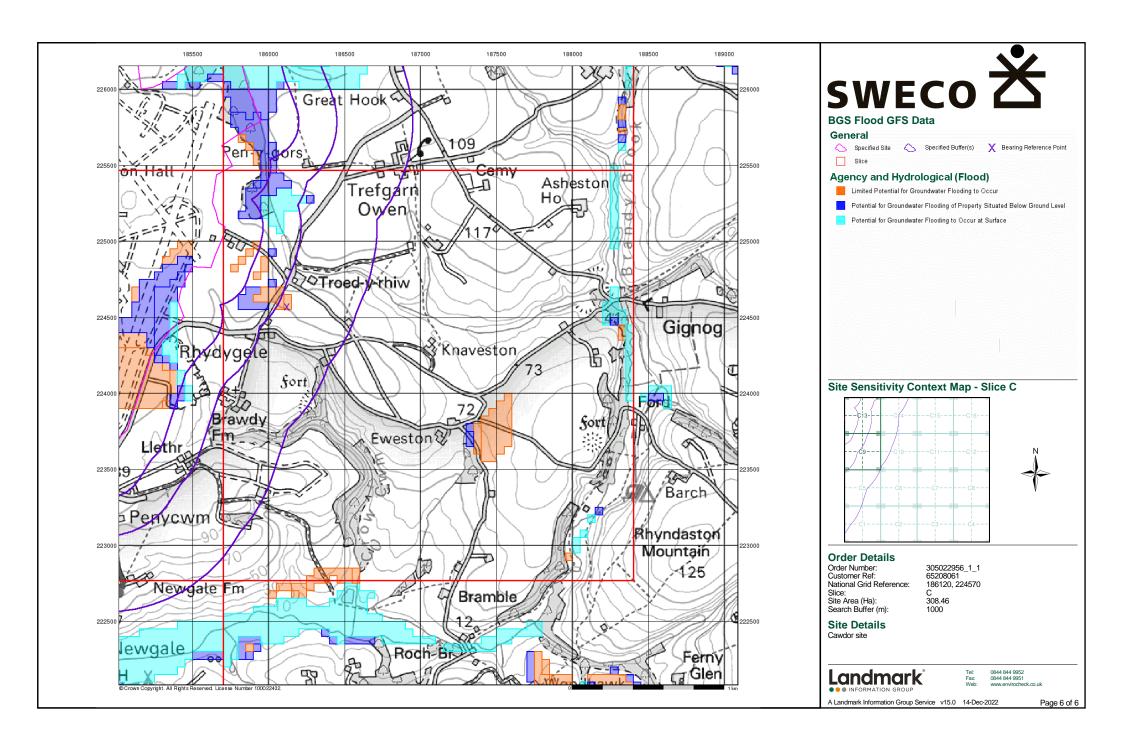














Envirocheck® Report:

Datasheet

Order Details:

Order Number:

305022956_1_1

Customer Reference:

65208061

National Grid Reference:

186120, 224570

Slice:

С

Site Area (Ha):

308.46

Search Buffer (m):

1000

Site Details:

Cawdor site

Client Details:

Ms C Bithell Sweco Services UK Ltd Grove House Mansion Gate Drive Leeds LS7 4DN







Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	11
Hazardous Substances	-
Geological	12
Industrial Land Use	15
Sensitive Land Use	16
Data Currency	17
Data Suppliers	21
Useful Contacts	22

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0





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





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 11	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 12	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 12				3
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities	pg 12				1
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 12	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 12	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 13	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 13	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 13	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 14	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 14	Yes	n/a	n/a	n/a



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 15				1
Fuel Station Entries					
Gas Pipelines					
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland	pg 16				3
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas	pg 16	1			
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks	pg 16		1		
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					



Agency & Hydrological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	0	1	185700
		(N)	0	ı	226050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	0	1	185500 224800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(SW)	0	1	185350
	BGS Groundwater Flooding Susceptibility	, ,			224150
	Flooding Type: Limited Potential for Groundwater Flooding to Occur	(W)	0	1	185250 224300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	0	1	185450
		(**)	0		224700
ļ	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	0	1	186000 225800
	BGS Groundwater Flooding Susceptibility				223000
	Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	C13NW (N)	0	1	186000 225400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(W)	0	1	185200
	BGS Groundwater Flooding Susceptibility				224400
	Flooding Type: Limited Potential for Groundwater Flooding to Occur	(NW)	0	1	185500 224900
	BGS Groundwater Flooding Susceptibility	(N.D.A.)		4	405400
	Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	0	1	185400 226000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	0	1	185550
	BGS Groundwater Flooding Susceptibility				226000
	Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(N)	0	1	186050 226000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(W)	0	1	185150
		(**)		· .	224600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(W)	0	1	185400
	BGS Groundwater Flooding Susceptibility				224571
	Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	0	1	185500 224850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(N)	3	1	185850
	BGS Groundwater Flooding Susceptibility				225650
	Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	16	1	185300 224250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	57	1	185350
	BGS Groundwater Flooding Susceptibility	(511)			224250
	Flooding Type: Limited Potential for Groundwater Flooding to Occur	(N)	72	1	185900 225600
	BGS Groundwater Flooding Susceptibility	(0)::::	0-		
	Flooding Type: Limited Potential for Groundwater Flooding to Occur	(SW)	83	1	185350 224200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	C13NW (N)	103	1	185950 225150
	BGS Groundwater Flooding Susceptibility	(14)			



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	126	1	185400 224200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(N)	138	1	185950 225500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	C13SW (NW)	143	1	185850 224850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(SW)	146	1	185400 224150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	148	1	186050 225550
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	(SW)	160	1	185350 223950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	C13NW (N)	167	1	185950 225350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	C13SW (NW)	169	1	185900 224900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	170	1	186100 226000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	192	1	185400 224000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(SW)	194	1	185450 224150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	C13SW (NW)	203	1	185950 224950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	224	1	185450 224050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	C13SE (N)	244	1	186100 225050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	C9NW (W)	251	1	186000 224571
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(SW)	272	1	185500 224050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	C9NW (NW)	274	1	185950 224750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	C13SW (NW)	281	1	186000 224800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	C13SE (N)	311	1	186050 224900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	C9NE (W)	330	1	186100 224571
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	C9NE (NW)	384	1	186050 224700

Order Number: 305022956_1_1 Date: 14-Dec-2022 rpr_ec_datasheet v53.0 A Landmark Information Group Service Page 2 of 22



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Issued Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Osborne-Dowle P F W Undefined Or Other Dwelling Plot 752 Rhyd Y Gele Penyc, Penycwm H/West Natural Resources Wales Not Supplied Bn0097501 1 19th November 1973 19th November 1973 7th July 1994 Unspecified Not Supplied To Land Near Crwo Cwm Brook, R Consent expired Located by supplier to within 100m	C9SW (SW)	468	2	185900 224400
2	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	* **	C13SE (N)	550	2	186200 224800
	Nearest Surface Wa	nter Feature	C13NW (NW)	106	-	185808 225142
3	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters Not Given Druidstone Beach, NEWGALE Environment Agency, Welsh Region Sewage Fungus Not Supplied 20th December 1994 21922 Not Given Not Given Unknown Category 2 - Significant Incident Located by supplier to within 100m	C13SW (NW)	204	3	185901 225001
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr & Mrs P Gwyther 22/61/2/0060 100 Crow Cwm Stream At Lower Llethr, Penycwm Natural Resources Wales General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied Not Supplied O1 April 31 October 31st March 2005 Not Supplied Located by supplier to within 10m	(S)	1843	2	186590 222720

Order Number: 305022956_1_1 Date: 14-Dec-2022 rpr_ec_datasheet v53.0 A Landmark Information Group Service



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	P.T & M Gwyther 22/61/2/0060 Not Supplied Location Description Not Available Environment Agency, Welsh Region General Agriculture: Spray Irrigation - Storage Not Supplied Surface Not Supplied 12000 Crow Cwm Stream At Lower Llethr; Penycwm Not Supplied	(S)	1843	3	186590 222720
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Located by supplier to within 100m Mr & Mrs P.T & M Gwyther 22/61/2/0060 Not Supplied Land At Brawdy Farm Natural Resources Wales General Agriculture: Spray Irrigation - Storage Water may be abstracted from any point within an area Surface Not Supplied	(S)	1843	2	186590 222720
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr & Mrs P.T & M Gwyther 22/61/2/0060 Not Supplied Land At Brawdy Farm Natural Resources Wales Mineral Products: General use relating to Secondary Category (High Loss) Water may be abstracted from any point within an area Surface Not Supplied Located by supplier to within 10m	(S)	1843	2	186590 222720
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr & Mrs P Gwyther 22/61/2/0060 100 Crow Cwm Stream At Lower Llethr, Penycwm Natural Resources Wales General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied Licenced from 01-Apr to 31-Oct 04 January 10 July 31st March 2005 Not Supplied Approximate location provided by supplier	(S)	1845	2	186590 222715

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date:	Mr & Mrs P Gwyther 22/61/2/0060 100 Crow Cwm Stream At Lower Llethr, Penycwm Natural Resources Wales Mineral Products: General Use(High Loss) Water may be abstracted from a single point Surface Not Supplied Not Supplied Licenced from 01-Apr to 31-Oct 01 April 31 October 31st March 2005	(S)	1850	2	186595 222715
	Permit End Date: Positional Accuracy:	Not Supplied Approximate location provided by supplier				
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Mr G D Lovegrove 22/61/2/0036 Not Supplied Location Description Not Available Environment Agency, Welsh Region Spray Irrigation Not Supplied Surface 100 7201 Brandy Brook Not Supplied Located by supplier to within 100m	(S)	1869	3	186400 222410
	Groundwater Vulne	rability Map				
	Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Secondary Bedrock Aquifer - Medium Vulnerability Medium Productive Bedrock Aquifer, No Superficial Aquifer Low Well Connected Fractures >550 mm/year 40-70% <90% <3m No Data	(N)	0	2	185705 226000
	Groundwater Vulne	, ·				
	Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Secondary Bedrock Aquifer - Medium Vulnerability Medium Productive Bedrock Aquifer, No Superficial Aquifer Low Well Connected Fractures >550 mm/year 40-70% <90% <3m No Data	(NW)	0	2	185309 226000

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	C13SW (N)	0	2	186000 225000
	Combined Vulnerability:	High	(**)			
	Combined Áquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness:	Productive Bedrock Aquifer, No Superficial Aquifer Intermediate Well Connected Fractures >550 mm/year 40-70% <90%				
	Superficial Thickness: Superficial	<3m No Data				
	Recharge:					
	Groundwater Vulne	• •				
	Combined Classification: Combined	Secondary Bedrock Aquifer - High Vulnerability High	C5NW (S)	0	2	186000 224000
	Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow:	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures				
	Dilution: Baseflow Index: Superficial Patchiness:	>550 mm/year <40% <90%				
	Superficial Thickness: Superficial	<3m No Data				
	Recharge:	NO Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	(NW)	0	2	185421 225000
	Combined Vulnerability:	High				
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution:	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	40-70% <90%				
	Superficial Thickness: Superficial	<3m				
	Recharge:	No Data				
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	C9NW (W)	0	2	186000 224571
	Combined Vulnerability:	High	(**)			
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution:	Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	40-70% <90%				
	Superficial Thickness: Superficial	<3m No Data				
	Recharge:	INO Data				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	(W)	0	2	185469 224802
	Combined Vulnerability:	High				22 1002
	Combined Áquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness:	Productive Bedrock Aquifer, Productive Superficial Aquifer High Well Connected Fractures >550 mm/year 40-70% <90%				
	Superficial Thickness: Superficial	<3m No Data				
	Recharge:					
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	(SW)	0	2	185499 224000
	Combined Vulnerability: Combined Aquifer: Pollutant Speed:	High Productive Bedrock Aquifer, Productive Superficial Aquifer High				
	Bedrock Flow: Dilution: Baseflow Index:	Well Connected Fractures >550 mm/year <40%				
	Superficial Patchiness: Superficial	<90%				
	Thickness: Superficial	No Data				
	Recharge:					
	Groundwater Vulne	erability Map				
	Combined Classification:	Secondary Bedrock Aquifer - Medium Vulnerability	(N)	0	2	186000 226000
	Combined Vulnerability: Combined Aquifer:	Medium Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed: Bedrock Flow: Dilution:	Low Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	40-70% <90%				
	Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				
	Groundwater Vulne	erability Map	1			
	Combined Classification:	Secondary Bedrock Aquifer - High Vulnerability	C13SW (N)	0	2	186000 225118
	Combined Vulnerability:	High	(14)			223110
	Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution:	Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate Well Connected Fractures >550 mm/year				
	Baseflow Index: Superficial Patchiness:	40-70% <90%				
	Superficial Thickness:	<3m				
	Superficial Recharge:	No Data				

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Secondary Bedrock Aquifer - High Vulnerability Classification: Combined High Vulnerability: Combined Aquifer: Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: 40-70% Superficial <90% Patchiness: Superficial <3m Thickness: Superficial No Data Recharge:	(NW)	0	2	185458 225000
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	C13SE (N)	0	2	186119 225000
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	C9NE (S)	0	2	186119 224571
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	C13SE (N)	0	2	186107 225000
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(NW)	0	2	185458 225000
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(W)	0	2	185469 224802
	Extreme Flooding from Rivers or Sea without Defences None Flooding from Rivers or Sea without Defences None Areas Benefiting from Flood Defences				
	None Flood Water Storage Areas None				
	Flood Defences None				
4	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (NW)	106	4	185808 225142
5	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 32.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	C13NW (NW)	170	4	185853 225192
6	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 78.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (NW)	170	4	185853 225192

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (N)	192	4	185873 225216
	OS Water Network Lines				
8	Watercourse Form: Inland river Watercourse Length: 46.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (N)	202	4	185873 225216
9	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 242.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (N)	239	4	186032 225274
10	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 31.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (N)	247	4	185945 225245
11	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 28.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (N)	249	4	185922 225228
12	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 92.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13NW (N)	277	4	185945 225245
13	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 175.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C9SW (SW)	293	4	185885 224387
14	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 626.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13SE (NE)	349	4	186236 224816
15	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C9SW (SW)	456	4	185902 224384



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 853.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Catchment Name: Primacy: 1 OS Water Network Inland river Inland river Inland river Story Story	C9SE (S)	474	4	186060 224344
17	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 950.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 2	C5NE (S)	503	4	186281 223823
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 857.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C5NE (S)	503	4	186264 223824
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13SE (NE)	680	4	186338 224795
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 912.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C13SE (NE)	683	4	186341 224795
21	OS Water Network Lines Watercourse Forn: Inland river Watercourse Length: 517.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: St Davids Head and St Brides North Primacy: 1	C9SE (S)	809	4	186227 224291

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Land	ill Coverage				
		Pembrokeshire County Council - Has supplied landfill data		0	5	186119 224571

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solie	d Geology				
	Description:	Lower Cambrian Rocks (Undifferentiated)	C9SE (S)	0	1	186175 224155
	BGS 1:625,000 Solid	d Geology				
	Description:	Upper Cambrian, Including Tremadoc	C13SW (NW)	0	1	185892 224855
	BGS Recorded Mine	eral Sites				
22	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Troed-Y-Rhiw Hayscastle, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89859 Opencast Ceased Unknown Operator Not Supplied Cambrian Caerbwdy Sandstone Formation Sandstone Located by supplier to within 10m	C13SE (N)	510	1	186199 224930
	BGS Recorded Mine	eral Sites				
23	-	Pen-Y-Gors Llandeloy, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89682 Opencast Ceased Unknown Operator Not Supplied Cambrian Lingula Flags Formation Sand and Gravel Located by supplier to within 10m	C13NE (N)	527	1	186294 225393
	BGS Recorded Mine	eral Sites				
24	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Brawdy Penycwm, St David'S, Pembrokeshire British Geological Survey, National Geoscience Information Service 89866 Opencast Ceased Unknown Operator Not Supplied Cambrian St Non'S Sandstone Formation Sandstone Located by supplier to within 10m	C5NW (SW)	680	1	185794 223789
	Coal Mining Affecte	d Areas				
	In an area that might	not be affected by coal mining				
	Man-Made Mining C Easting: Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Commodity: Solid Geology Detail: Superficial Geology Detail:	186400 224300 940 C10 SW SE Not supplied Lead No Details	C10SW (SE)	940	7	186400 224300
	Non Coal Mining Ar	eas of Great Britain				
	Risk: Source:	Highly Unlikely British Geological Survey, National Geoscience Information Service	C9NE (S)	0	1	186119 224571
	Non Coal Mining Ar Risk: Source:		C13SE (N)	0	1	186119 225000
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C9NE (S)	0	1	186119 224571
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186119 225000

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Comp Hazard Potential: Source:	ressible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C9NE (S)	0	1	186119 224571
	Potential for Comp Hazard Potential: Source:	ressible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186119 225000
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186119 225000
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C9NE (S)	0	1	186119 224571
	Potential for Lands Hazard Potential: Source:	lide Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186119 225000
	Potential for Lands Hazard Potential: Source:	lide Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C9NE (N)	0	1	186119 224572
	Potential for Lands Hazard Potential: Source:	lide Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C9NE (S)	79	1	186119 224571
	Potential for Runni Hazard Potential: Source:	ng Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186107 225000
	Potential for Runni Hazard Potential: Source:	ng Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C9NE (S)	0	1	186119 224571
	Potential for Runni Hazard Potential: Source:	ng Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186084 225000
	Potential for Runni Hazard Potential: Source:	ng Sand Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C13SE (N)	49	1	186119 225000
	Potential for Runni Hazard Potential: Source:	ng Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C9NE (N)	139	1	186119 224572
	Potential for Runni Hazard Potential: Source:	ng Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C13SW (N)	209	1	185991 225000
	Potential for Shrink Hazard Potential: Source:	ring or Swelling Clay Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C9NE (S)	0	1	186119 224571
	Potential for Shrink Hazard Potential: Source:	ring or Swelling Clay Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186084 225000
	Potential for Shrink Hazard Potential: Source:	ving or Swelling Clay Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186107 225000
	Potential for Shrink Hazard Potential: Source:	king or Swelling Clay Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	C13SE (N)	49	1	186119 225000
	Radon Potential - R Affected Area: Source:	Tadon Affected Areas The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	C9NW (NW)	0	1	186025 224750
	Radon Potential - R Affected Area: Source:	Ladon Affected Areas The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	C13SW (NW)	0	1	185825 224800
		Radon Affected Areas The property is in a Higher probability radon area (10 to 30% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186050 225000

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Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	C9NW (NW)	0	1	186025 224750
	Radon Potential - R	adon Protection Measures				
		Full radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	C13SW (NW)	0	1	185825 224800
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	Full radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	C13SE (N)	0	1	186050 225000

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Industrial Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
25	Name: Location: Classification: Status: Positional Accuracy:	Techtronics Silver Hill, Pen y Cwm, Haverfordwest, Dyfed, SA62 6JZ Radio Communication Equipment Inactive Automatically positioned to the address	C10SW (SE)	988	-	186407 224228

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Sensitive Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
26	Ancient Woodland	Not Supplied	C5SW	570	2	185919
20	Reference: Area(m²): Type:	4712 8596.98 Ancient and Semi-Natural Woodland	(S)	0.0	_	223748
	Ancient Woodland					
27	Name: Reference: Area(m²): Type:	Not Supplied 4710 8906.03 Ancient and Semi-Natural Woodland	C1NW (S)	967	2	185930 223257
	Ancient Woodland					
28	Name: Reference: Area(m²): Type:	Not Supplied 4713 119967.99 Ancient and Semi-Natural Woodland	C5NE (S)	979	2	186270 223887
	Environmentally S	ensitive Areas				
29	Name: Multiple Areas: Total Area (m2): Source:	Preseli (decommissioned) Y 1187932672 The National Assembly for Wales, GI Services (Department of Planning & Countryside)	C9NE (S)	0	8	186119 224571
	National Parks					
30	Name: Multiple Area: Area (m2): Source: Status: Designation Date:	Pembrokeshire Coast Y 187013417.05 Natural Resources Wales Fully Designated - designated as a National Park 31st December 1951	C9SE (SW)	140	2	186060 224434

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Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Natural Resources Wales	June 2020	Annually
Pembrokeshire County Council - Public Protection Division	September 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - Welsh Region	August 2014	Quarterly
Natural Resources Wales	October 2022	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Welsh Region	March 2013	
ntegrated Pollution Controls		
Environment Agency - Welsh Region	January 2009	
ntegrated Pollution Prevention And Control		
Environment Agency - Welsh Region	January 2021	Quarterly
Natural Resources Wales	October 2022	Quarterly
Local Authority Integrated Pollution Prevention And Control	0.1122.7.2.2.2	
Pembrokeshire County Council - Environmental Health Department	November 2015	Variable
	140Veriliber 2013	v anabie
Local Authority Pollution Prevention and Controls	Name 1 2045	Americal Delle 11 1 1
Pembrokeshire County Council - Environmental Health Department	November 2015	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Pembrokeshire County Council - Environmental Health Department	November 2015	Variable
Nearest Surface Water Feature		
Ordnance Survey	October 2022	
Pollution Incidents to Controlled Waters		
Environment Agency - Welsh Region	December 1998	
Prosecutions Relating to Authorised Processes		
Environment Agency - Welsh Region	July 2015	
Natural Resources Wales	July 2015	
	July 2013	
Prosecutions Relating to Controlled Waters	March 0040	
Environment Agency - Welsh Region	March 2013	
Natural Resources Wales	March 2013	
Registered Radioactive Substances		
Natural Resources Wales	January 2015	
Environment Agency - Welsh Region	June 2016	As notified
Substantiated Pollution Incident Register		
Environment Agency Wales - South West Area	January 2021	Quarterly
Natural Resources Wales	October 2022	Quarterly
Water Abstractions		
Environment Agency - Welsh Region	October 2022	Quarterly
Natural Resources Wales	October 2022	Quarterly
Water Industry Act Referrals		
Environment Agency - Welsh Region	October 2017	
Natural Resources Wales	October 2022	Quarterly
Groundwater Vulnerability Map		,
Natural Resources Wales	June 2018	As notified
	34/16 20 TO	A3 HOUNEU
Bedrock Aquifer Designations	In 2010	A
Natural Resources Wales	January 2018	Annually
Superficial Aquifer Designations		
Natural Resources Wales	January 2018	Annually
Source Protection Zones		
Natural Resources Wales	July 2022	Annual Rolling Update
Extreme Flooding from Rivers or Sea without Defences		
Natural Resources Wales	September 2020	

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Agency & Hydrological	Version	Update Cycle
Flooding from Rivers or Sea without Defences		
Natural Resources Wales	September 2020	
Areas Benefiting from Flood Defences		
Natural Resources Wales	November 2019	Quarterly
Flood Water Storage Areas		
Natural Resources Wales	August 2019	Quarterly
Flood Defences		
Natural Resources Wales	November 2019	Quarterly
OS Water Network Lines		
Ordnance Survey	October 2022	Quarterly
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	As notified
Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites		
Natural Resources Wales	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Welsh Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)	,	
Natural Resources Wales	October 2021	Quarterly
Environment Agency Wales - South West Area	October 2022	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency Wales - South West Area	July 2021	Quarterly
Natural Resources Wales	July 2022	Quarterly
Local Authority Landfill Coverage		
Pembrokeshire County Council - Environmental Health Department	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Pembrokeshire County Council - Environmental Health Department	October 2018	
Registered Landfill Sites		
Environment Agency Wales - South West Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency Wales - South West Area	April 2018	
Registered Waste Treatment or Disposal Sites	·	
Environment Agency Wales - South West Area	June 2015	
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	January 2022	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		,
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements	3	
Pembrokeshire Coast National Park Authority - Development Control	February 2016	Variable
Pembrokeshire County Council - Planning Department	October 2015	Variable
Planning Hazardous Substance Consents		
Pembrokeshire Coast National Park Authority - Development Control	February 2016	Variable
Pembrokeshire County Council - Planning Department	October 2015	Variable
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Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	November 2022	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	
Cheshire Brine Subsidence Compensation Board (CBSCB)	November 2020	As notified
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	September 2022	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	September 2022	Annually
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	October 2022	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	August 2022	Quarterly
Gas Pipelines		
National Grid	October 2021	Bi-Annually
Underground Electrical Cables		
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Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural Resources Wales	September 2018	Bi-Annually
Areas of Adopted Green Belt		
Pembrokeshire Coast National Park Authority - Development Control	July 2022	Quarterly
Pembrokeshire County Council	July 2022	Quarterly
Areas of Unadopted Green Belt		
Pembrokeshire Coast National Park Authority - Development Control	July 2022	Quarterly
Pembrokeshire County Council	July 2022	Quarterly
Areas of Outstanding Natural Beauty		
Natural Resources Wales	August 2022	Bi-Annually
Environmentally Sensitive Areas		
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Pembrokeshire County Council	August 2018	Bi-Annually
Marine Nature Reserves		
Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves		
Natural Resources Wales	February 2022	Bi-Annually
National Parks		
Natural Resources Wales	February 2018	Annually
Nitrate Vulnerable Zones		
The National Assembly for Wales - GI Services (Department of Planning & Countryside)	April 2016	
Natural Resources Wales	July 2019	Bi-Annually
Ramsar Sites		
Natural Resources Wales	July 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural Resources Wales	March 2020	Bi-Annually
Special Areas of Conservation		
Natural Resources Wales	August 2020	Bi-Annually
Special Protection Areas		
Natural Resources Wales	August 2018	Bi-Annually

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A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPA Scottish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE 必公司
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Stantec UK Ltd	Stantec

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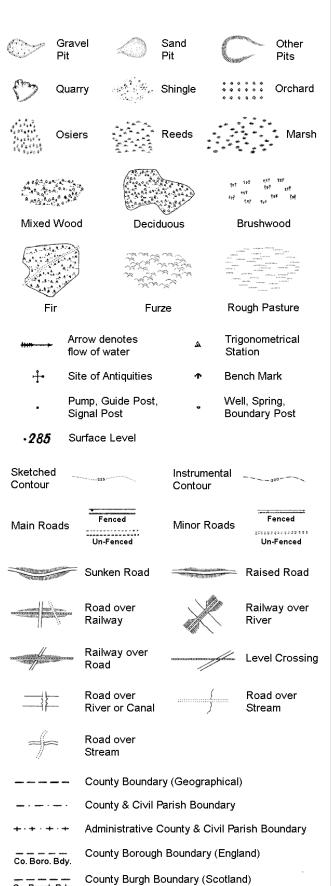
Useful Contacts

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Pembrokeshire County Council - Environmental Health Department Public Protection Division, Pembrokeshire County Council, County Hall, Haverfordwest, Pembrokeshire, SA61 1TP	Telephone: 01437 764551 Fax: 01437 775838 Website: www.pembrokeshire.gov.uk
6	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	Stantec UK Ltd Caversham Bridge House, Waterman Place, Reading, RG1 8DN	Telephone: 0118 950 0761 Email: pba.reading@stantec.com Website: www.stantec.com
8	The National Assembly for Wales - GI Services (Department of Planning & Countryside) Yr Hen Ysgol Gymraeg, Alexandria Road, Aberystwyth, Ceredigion, SY23 1LD	Telephone: 02920 825111 Website: www.wales.gov.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Historical Mapping Legends

Ordnance Survey County Series 1:10,560



Rural District Boundary

····· Civil Parish Boundary

R.D. Bdy.

Ordnance Survey Plan 1:10,000

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	س <u>ــ</u> ــ Marsh	\\\\/\\	Reeds	<u> </u>	Saltings
	Buildin		ion of Flow of		Shingle
	₩ Glassh	ouse	<i>3</i> //		<u>₩</u> Sand
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		Borough, Burgh o			ies
		Civil Parish Shown alternately wh	en coincidence	of boundaries	occurs
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Guide Post

Mile Post

TCB

TCP

Telephone Call Box

Telephone Call Post

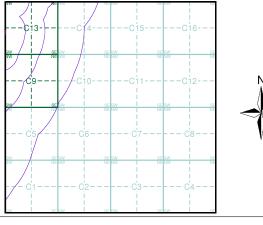
1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock	3 3	Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle	Mud	Mud
Sand	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)	• • • • • •	Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
۵ ^۵	Area of wooded vegetation	۵ ^۵	Non-coniferous trees
\Diamond	Non-coniferous trees (scattered)	**	Coniferous trees
*	Coniferous trees (scattered)	Ö̈	Positioned tree
4 4 4 4	Orchard	* *	Coppice or Osiers
alli,	Rough Grassland	www.	Heath
On_	Scrub	7 <u>√</u> 15	Marsh, Salt Marsh or Reeds
S	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)
← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)	\boxtimes	Pylon, flare stac or lighting tower
+	Site of (antiquity)		Glasshouse
	General Building		Important Building

SWECO

Mapping Type	Scale	Date	Pg
Pembrokeshire	1:10,560	1888	2
Pembrokeshire	1:10,560	1908	3
Pembrokeshire	1:10,560	1953	4
Ordnance Survey Plan	1:10,000	1964	5
Ordnance Survey Plan	1:10,000	1980	6
10K Raster Mapping	1:10,000	2000	7
Street View	Variable		8

Historical Map - Slice C



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 186120, 224570 Slice:

Site Area (Ha): 308.46 Search Buffer (m): 1000

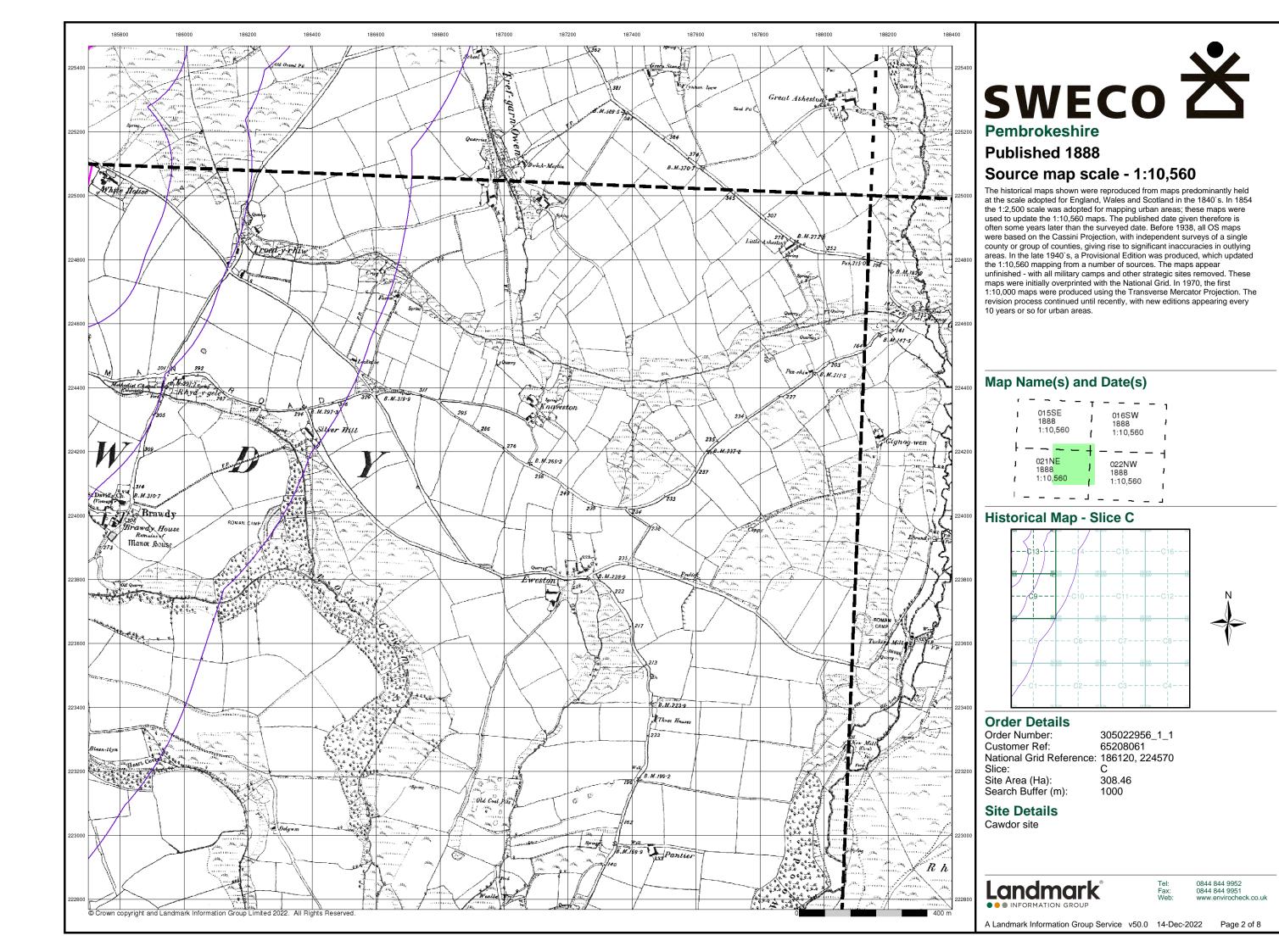
Site Details

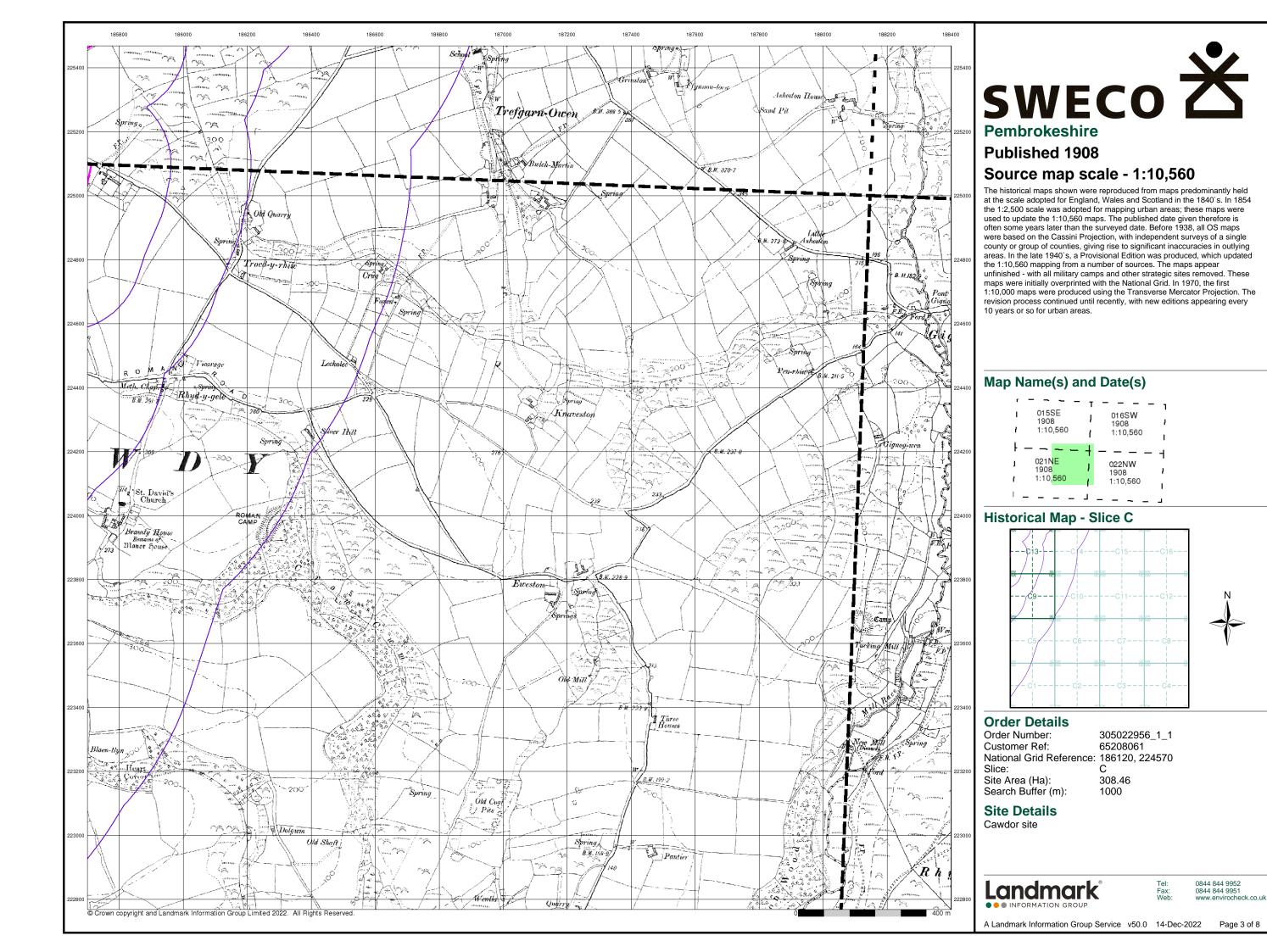
Cawdor site

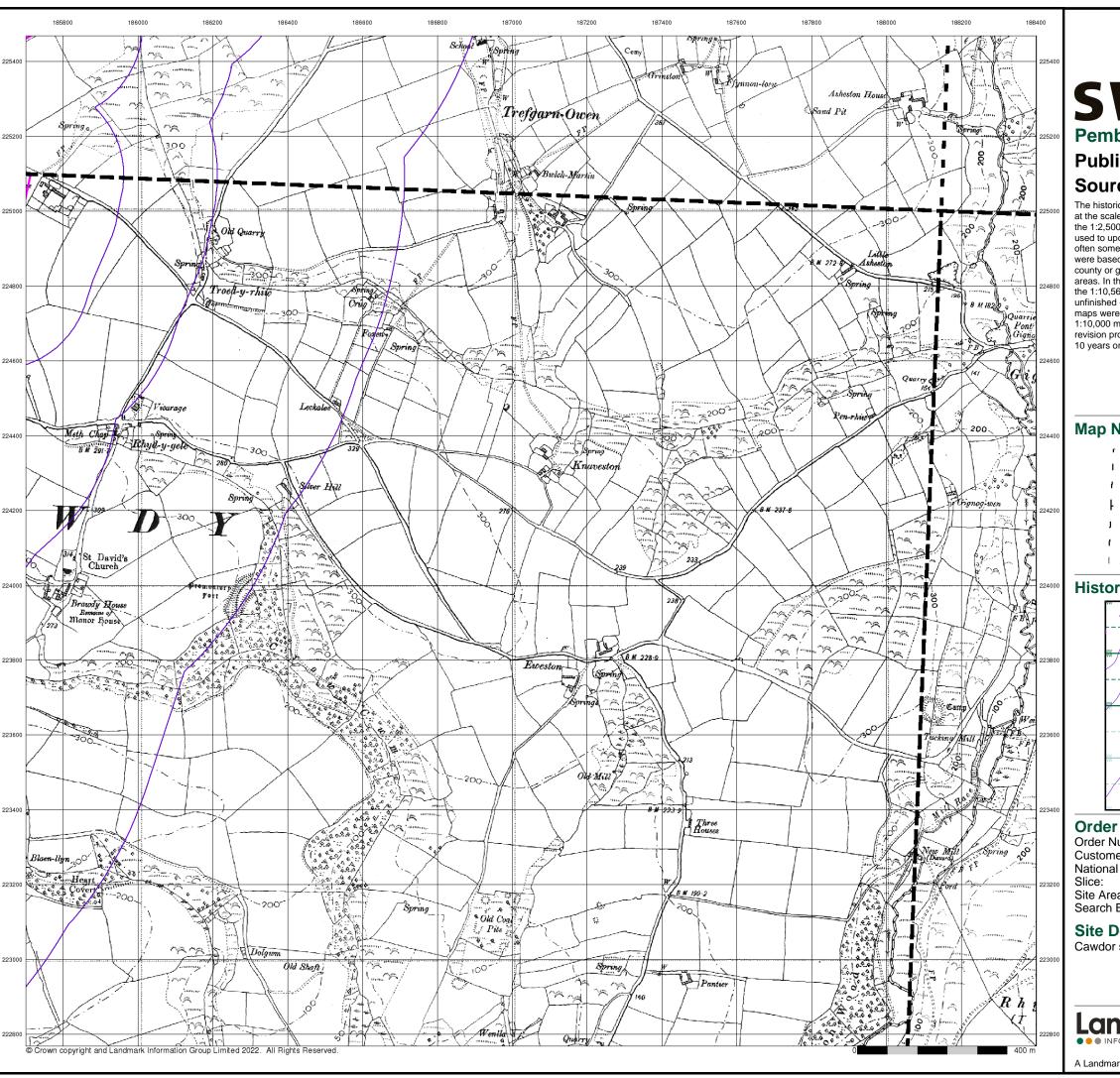
Landmark

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SWECO

Pembrokeshire

Published 1953

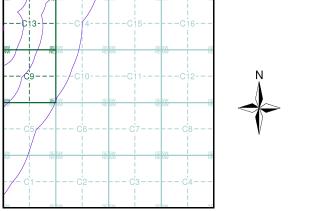
Source map scale - 1:10,560

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)

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Historical Map - Slice C



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 186120, 224570

Site Area (Ha):

308.46 Search Buffer (m): 1000

Site Details

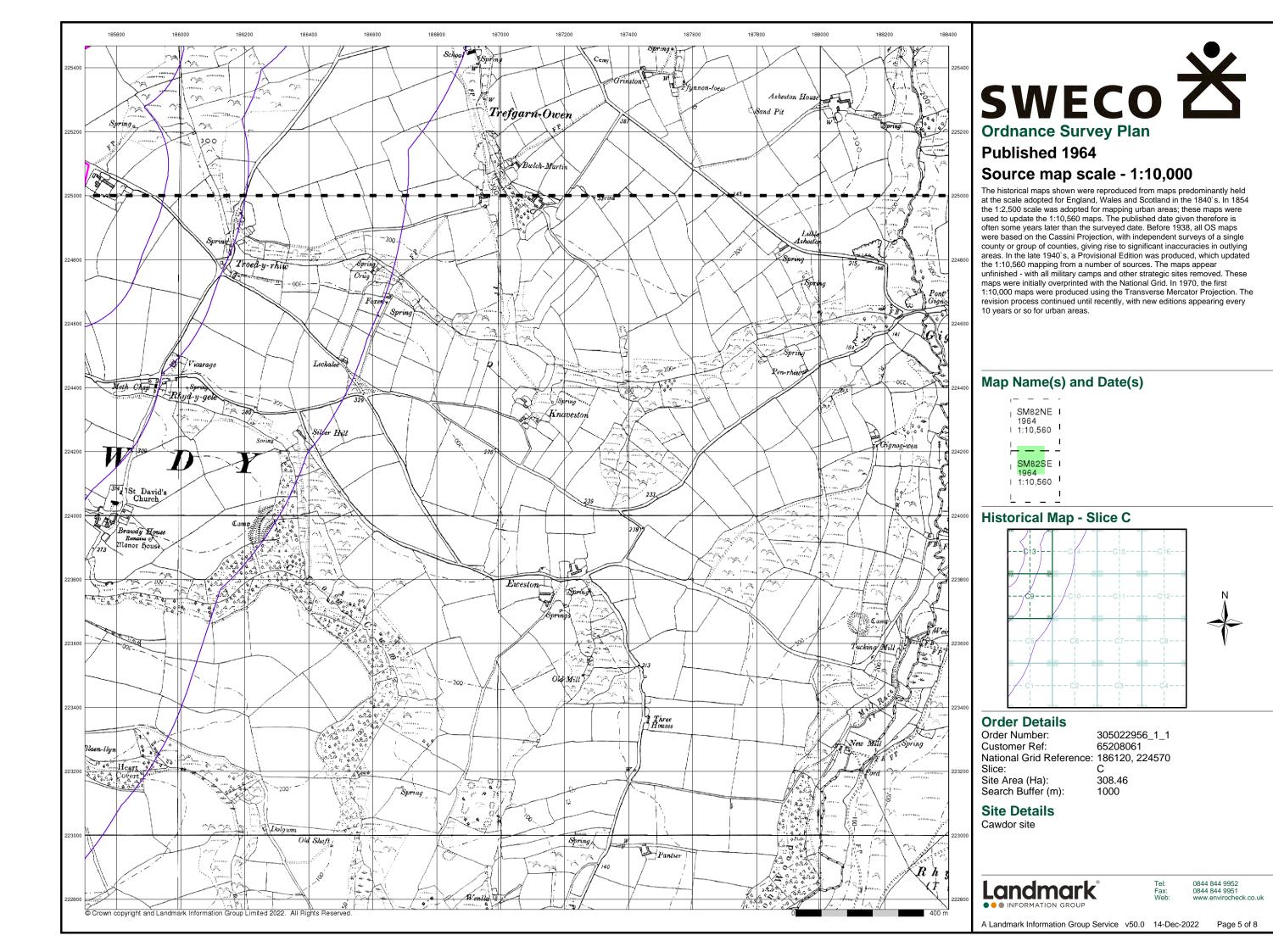
Cawdor site

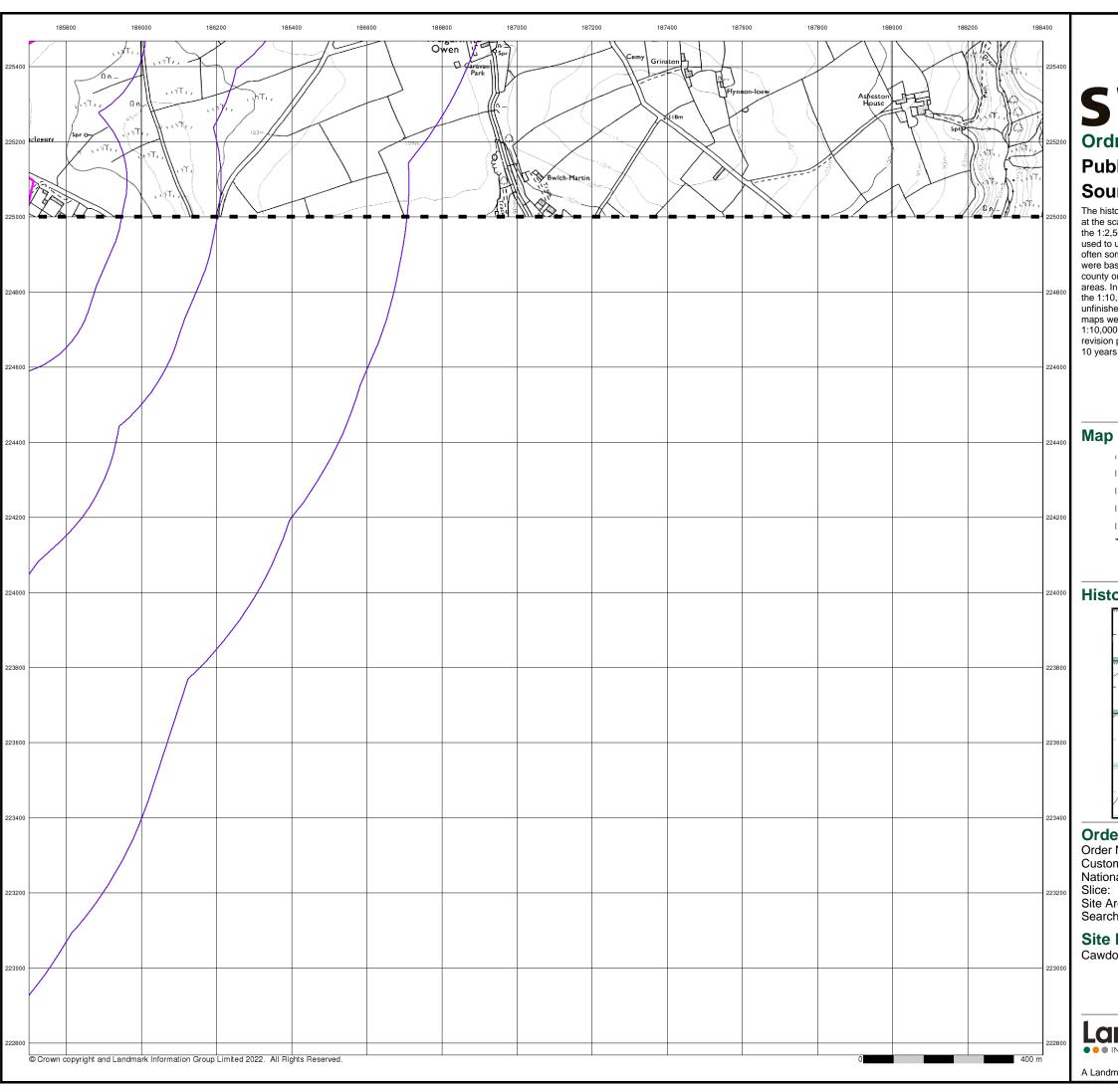
Landmark

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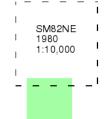
SWECO 💍

Ordnance Survey Plan

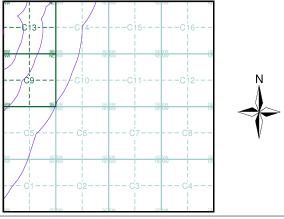
Published 1980 Source map scale - 1:10,000

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 C



Order Details

Order Number: 305022956_1_1 Customer Ref: 65208061 National Grid Reference: 186120, 224570 С 308.46

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

Site Details

Cawdor site



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