



Ministry
of Defence

Deep Space Advanced Radar Capability (DARC)

Environmental Statement Volume 3: Appendices

Draft for Pre-application Consultation
Planning Application: 22/1136/SO
February 2026



ES Appendix 10.1: Archaeological Desk-based Assessment



Project DARC – Cawdor Barracks, St Davids, Haverfordwest, Wales

Archaeological Desk-based Assessment



WA Document Ref.: 272400.3
February 2023



© Wessex Archaeology Ltd 2023, all rights reserved

Unit R6
Sheaf Bank Business Park
Prospect Rd
Lowfield
Sheffield
S2 3EN

www.wessexarch.co.uk

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB.

Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.

Document Information

Document title Project DARC – Cawdor Barracks, St David’s, Haverfordwest, Wales
Document subtitle Archaeological Desk Based Assessment
Document reference 272400.4

Client name SWECO UK Limited
Address Sweco 2nd Floor Quay 2 139 Fountainbridge Edinburgh, EH3 9QG

Project management by Andrew Reid
Document compiled by Johanna Greaves
Graphics by Johanna Greaves and Thomas Piggott

Quality Assurance

Issue	Date	Author	Approved by
1	16/02/2023	JSG	



Contents

Summary	iii
1 INTRODUCTION	4
1.1 Project background.....	4
1.2 The Site	4
1.3 Development Proposals.....	5
1.4 Scope of document.....	5
1.5 Aims	6
2 LEGISLATION AND GUIDANCE	6
2.1 Introduction.....	6
2.2 National Policy	6
2.3 Local Planning Policy.....	6
2.4 Guidance	7
3 METHODOLOGY	7
3.1 Introduction.....	7
3.2 Study Areas	7
3.3 Sources consulted	7
3.4 Site visit.....	8
3.5 Significance	8
3.6 Assumptions and limitations.....	8
3.7 Copyright	8
4 BASELINE RESOURCE	9
4.1 Introduction.....	9
4.2 Designated heritage assets	9
4.3 Previous studies	9
4.4 Archaeological and historical context.....	9
5 ASSESSMENT OF BELOW-GROUND ARCHAEOLOGY	14
6 RECOMMENDATIONS	19
REFERENCES	21
Bibliography.....	21
APPENDICES	22
Appendix 1: Terminology	22
Appendix 2: Legislative and planning framework	23
Appendix 3: Gazetteer	25
Appendix 4: RAF Plans of RAF Brawdy	30



Figures

- Figure 1 Site Location, Study Area and Designated Heritage Assets
- Figure 2 Site, Study Area and Heritage Assets
- Figure 3 Historic mapping: 1888-1953
- Figure 4 Site and underlying geology based on British Geological Survey
- Figure 5 Site and Potential Impact Areas

Plates

- Plate 1 View across part of the airfield from the northern end of the runway
- Plate 2 Image showing vegetation ingress into areas of hardstanding
- Plate 3 View across the area of the former bomb stores, from the south
- Plate 4 View of now demolished buildings within the western section of the airfield
- Plate 5 Small structure in the area used for Vulcan QRA
- Plate 6 Example of overgrown gorse bushes within the airfield which may obscure former airfield structures
- Plate 7 View within the bomb stores and dispersal areas of overgrown gorse
- Plate 8 View of areas of standing water off the airfield
- Plate 9 View across the airfield showing ground level visibility
- Plate 10 View of surrounding landscape to the north showing change in elevation
- Plate 11 View of the surrounding landscape to the east showing change in elevation



Summary

Wessex Archaeology was commissioned by Sweco Ltd to prepare an Archaeological Desk-based Assessment for Cawdor Barracks, St David's, Haverfordwest, Wales, centred on National Grid Reference 184968, 225214.

The assessment is to support the development of a Deep Space Advanced Radar Capability (DARC) facility at Cawdor Barracks and will serve as a technical appendix for an Environmental Impact Assessment (EIA).

The aims of this study were to assess the known and potential heritage resource within the site and the surrounding area, and to assess the likely impacts of the development proposals on this resource.

The effect of the development proposals on the historic environment resource will be a material consideration in the determination of the planning application. This study has identified no overriding heritage constraints which are likely to prohibit development.

RAF Brawdy was operational from 1944 until 1992 when flying operations ceased and the station was passed to the army and continued as an operational base under the title of Cawdor Barracks. This study has found that with the exception of the airstrip, taxi way and some remaining earthworks, the earlier phases of the site's use as an RAF and RNAS station have been removed. Beyond the obvious military history, the site lies within a landscape which has high potential to yield evidence for; early prehistoric occupation, mid-late prehistoric settlement, prehistoric to medieval ritual practice and medieval to post-medieval agrarian activity.

A high level geoarchaeological analysis has also indicated the potential for deposits to be present within the site which could yield important environmental, and potentially artefactual, information about the climate, land use and conditions in this area during the Holocene and thus contribute to national research objectives.

Due to a lack of previous archaeological investigation, the presence, location and significance of any buried heritage assets within the site cannot currently be confirmed on the basis of the available information.

The need for, scale, scope and nature of any further assessment and/or archaeological works should be agreed through consultation with the statutory authorities.



Project DARC – Cawdor Barracks, St David's, Haverfordwest

Archaeological Desk-Based Assessment

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Sweco Ltd ('the Client'), to prepare an Archaeological Desk-based Assessment for a proposed Deep Space Advanced Radar Capability (DARC) facility at Cawdor Barracks, St David's, Haverfordwest, Wales (hereafter 'the Site', **Figure 1**), centred on National Grid Reference (NGR) 184968, 225214.

1.1.2 This study will form a technical appendix to an Environmental Impact Assessment (EIA)

1.2 The Site

1.2.1 The Site is located approximately 1.2 km northeast of the coast of St. David's peninsula in Pembrokeshire, South Wales. It lies within a rural expanse, encircled by open fields, and to the north, pockets of unmanaged scrubland. Newgate Beach lies to the south.

1.2.2 The A487 skirts the southern boundary of the Site, travelling east to west between the nearest settlements; the villages of Solva (4.5 km to the southwest) and Newgale (2 km to the south). Rickeston Hall, a 19th century mansion and grounds lie upon the north-western boundary of the Site.

1.2.3 The Site lies upon the plateau of an escarpment with a steep ridge that drops to the north and east. A decommissioned runway sits upon the raised plateau of the area while associated barrack buildings are arranged within a valley to the southwest, in a more sheltered part of the Site.

1.2.4 The built aspect of the Site comprises a wide range of buildings including; accommodation blocks, office and mess buildings, storage and maintenance facilities, aircraft and vehicle hangers and sports/recreation facilities. A number of natural springs are present to the north of the main technical site.

1.2.5 Some small, isolated villages are situated sporadically in the surrounding area including Penycwm and Newgale to the south; Llandeloy to the north and Trefgarn Owen to the east. In addition, the Pembrokeshire Coast National Park is situated immediately south of the application site extending around the coastline.

1.2.6 The bedrock geology beneath the Site is recorded as the Lingula Flags Formation comprising sandstone and mudstone; sedimentary bedrock formed between 508 and 485.4 million years ago during the Cambrian period. This is overlain in part by superficial deposits of glaciofluvial sands and gravels (BGS Online Viewer). The geological record for this area is incomplete, however, and where the Site corresponds with valleyed landscapes and spring water channels, there exists the potential for alluvium, colluvium, and peat deposits.



1.3 Development Proposals

- 1.3.1 The proposed development is to comprise the installation of up to six transmit radar antennas, 30 receive radar antennas, a radar antenna operations area and associated infrastructure.
- 1.3.2 The receiver antenna array footprint will have a footprint of up to 28 hectares (ha), and the transmit array footprint will be up to 20 ha. Additionally, the transmit array will be situated a minimum of 0.5 km away from the receiver array. The radar antenna operations area will be positioned adjacent to the receiver antenna array with its footprint dependant on the final layout.
- 1.3.3 The transmit and receive antenna height (above existing ground level) will be up to 15 m, with an antenna dish diameter of approximately 15 m. Each antenna will have a concrete foundation composed of an antenna foundation and a ground foundation. Each ground foundation will be approximately 7.3 m x 7.3 m and approximately 1.5 m deep, with the top graded. The antenna foundation will sit atop the ground foundation and will be approximately 4.9 m x 4.9 m in an octagonal shape. Surrounding the antenna ground foundation would be an additional 3.7 m width of pavement on each side to be used by maintenance vehicles.
- 1.3.4 Each transmit antenna will have an additional chiller unit and additional electronic equipment shelter, with a base foundation pad for the chiller of approximately 3.1 m x 13.7 m. The pad for the equipment shelter will be slightly smaller at approximately 3.7 m x 9.1 m.
- 1.3.5 The operations areas will be approximately 4.1 ha in size and include the system operations building, the system spares building, and the generator maintenance building. The operations area will also house a wastewater treatment outbuilding and leach field area, a shared fire suppression water tank with associated shared fire suppression pump, and an above-ground storage tank fuel farm.

1.4 Scope of document

- 1.4.1 This assessment was requested by the Client in order to determine, as far as is possible from existing information, the nature, extent and significance of the historic environment resource within the Site and its environs, and to provide an initial assessment of the potential impact of development on the heritage assets that embody that significance.
- 1.4.2 The Historic Environment, as defined in the *National Planning Policy Framework* (NPPF 2021): Annex 2, comprises:

'all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.'
- 1.4.3 NPPF Annex 2 defines a Heritage Asset as:

'a building monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing).'



1.5 Aims

1.5.1 The specific aims of this assessment are to:

- outline the known and potential heritage assets within the Site based on a review of existing information within a defined study area,
- assess the significance of known and potential heritage assets through weighted consideration of their valued components,
- assess the potential impact of development or other land changes on the significance of the heritage assets, and
- make recommendations for strategies to mitigate potential adverse impacts arising from the proposed development.

2 LEGISLATION AND GUIDANCE

2.1 Introduction

2.1.1 The following section summarises the main components of the national and local planning and legislative framework governing the treatment of the historic environment within the planning process. Further detail is presented in **Appendix 2**.

2.2 National Policy

2.2.1 There is national legislation relating to the protection of, and proposed development on or near, important archaeological sites or historical buildings within planning regulations as defined under the provisions of the following:

- Ancient Monuments and Archaeological Areas Act 1979, as amended by the Historic Environment (Wales) Act 2016
- Historic Environment (Wales) Act 2016
- Planning Policy Wales (PPW) Edition 11 2021
- The Protection of Military Remains Act 1973
- Future Wales – The National Plan 2040 (2019, updated February 2021); and
- Planning (Listed Buildings and Conservation Areas) (Wales) 1990 Act, as amended by the Historic Environment (Wales) Act, 2016.

2.3 Local Planning Policy

2.3.1 In addition, local authorities are responsible for the protection of the historic environment within the planning system, in this case the following policies of the Pembrokeshire County Council (2013) are applicable:

- GN.38 Protection and Enhancement of the Historic Environment

2.3.2 Pembrokeshire County Council, with assistance from Pembrokeshire Coast National Park Authority, have prepared Conservation Area Appraisals as Supplementary Planning Guidance (SPG) for designated Conservation Areas. Of relevance to this assessment are:



- Solva Conservation Area Proposals (2011a); and
- Caerfarchell Conservation Area Proposals (2011b)

2.4 Guidance

2.4.1 Relevant best practice standards and guidance are published in the Chartered Institute for Archaeologists (CIfA) standards and guidance. For the purposes of this assessment, the relevant standards and guidance comprise:

- Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment (2020); and
- Standard and guidance for historic environment desk-based assessment (2020)

2.4.2 Guidance prepared by Cadw Conservation Principles for the sustainable management of the historic environment in Wales (2011) is also relevant to this assessment. Cadw have also produced a series of best-practice guidance publications that complement the legislative and policy framework; documents relevant to this assessment comprise:

- Heritage Impact Assessment in Wales (2017a)
- Managing Change to Listed Buildings in Wales (2017b)
- Setting of Historic Assets in Wales (2017c).
- Managing Historic Character in Wales (2017d); and
- Managing Scheduled Monuments in Wales (2018)

3 METHODOLOGY

3.1 Introduction

3.1.1 The methodology employed during this assessment was based upon relevant professional guidance, including the Chartered Institute for Archaeologists' Standard and guidance for historic environment desk-based assessment (CIfA 2020).

3.2 Study Areas

3.2.1 Due to the nature of the assessment, two Study Areas were established at 1 km and 5 km from the Site boundary. The recorded historic environment resource within the 1 km Study Area was considered in this document, in order to provide a context for the discussion and interpretation of the known and potential resource within the Site.

3.3 Sources consulted

- Designated historic assets received in digital format from the Cadw (Cof Fymru)
- Historic Environment Record data supplied by Dyfed Archaeological Trust
- Historic maps provided via a Envirocheck search received from the client and items accessible online; and
- Historic Environment Record of Wales (Archwilio)



3.4 Site visit

- 3.4.1 A site visit was undertaken on the 12th January 2023. Weather conditions were dry and clear. A fieldwork record comprising digital photography is held in the project archive.
- 3.4.2 The aim of the Site visit was to assess the general aspect, character, and condition of the Site and to identify any prior impacts not evident from secondary sources. The Site visit also sought to ascertain if the Site contained any previously unidentified features of archaeological, architectural or historic interest.

3.5 Significance

- 3.5.1 Current national guidance for the assessment of the significance of historic assets is based on criteria provided by Cadw's (2017) *Heritage Impact Assessment in Wales*. Significance is weighed by consideration of the potential for the asset to demonstrate the following value criteria:
- evidential value: the extent to which the physical fabric tells how and when your historic asset was made, how it was used and how it has changed over time. There may be buried or obscured elements associated with your historic asset which may also be an important potential source of evidence.
 - historical value: your historic asset may illustrate a particular past way of life or be associated with a specific person or event; there may be physical evidence for these connections which it could be important to retain
 - aesthetic value: the design, construction and craftsmanship of your historic asset. This can also include setting and views to and from the historic asset, which may have changed through time.
 - communal value: your historic asset may have particular significance to people for its commemorative, symbolic or spiritual value, or for the part it has played in local cultural or public life. This will be particularly important in the case of buildings in public use or sites where public access must be maintained or improved.

3.6 Assumptions and limitations

- 3.6.1 Data used to compile this report consists of secondary information derived from a variety of sources, only some of which have been directly examined for the purposes of this Study. The assumption is made that this data, as well as that derived from other secondary sources, is reasonably accurate.
- 3.6.2 The records held by the DHER and on Archwilio are not a record of all surviving heritage assets, but a record of the discovery of a wide range of archaeological and historical components of the historic environment. The information held within it is not complete and does not preclude the subsequent discovery of further elements of the historic environment that are, at present, unknown.

3.7 Copyright

- 3.7.1 This report may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by

Wessex Archaeology. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

4 BASELINE RESOURCE

4.1 Introduction

4.1.1 The following section provides a summary of the recorded historic environment within the Study Area, compiled from the sources summarised above and detailed in the references section of this report. The aim is to identify the known and potential components of the historic environment (heritage assets) that could be affected by the proposed development.

4.2 Designated heritage assets

Site

4.2.1 There are no designated heritage assets within the Site.

Study Area

4.2.2 Designated heritage assets within the Study Area comprise ten Listed Buildings and two Scheduled Monuments.

4.2.3 There are eight Grade II and two Grade II* Listed Buildings. The Grade II Listed properties comprise the Paran Chapel (**12473**), Three-Seater Privy to north of Rickeston Hall (**13078**), U-Plan Farmhouse Ranges at Rickeston Hall (**13079**), Carriage-House at Rickeston Hall (**13080**), Church of Saint Teilo (**14397**), Hendre Cross (**14400**), Llethr (**14405**), Stable Block at Llethr (**14406**).

4.2.4 The Grade II* Listed Buildings comprise Rickeston Hall (**13077**) and the Church of St David (**14396**). The Scheduled Monuments include; Bay View Farm Defended Enclosure (**SAM PE540**) and the Brawdy Promontory Fort (**SAM422**).

4.2.5 There are no World Heritage Sites, Registered Parks and Gardens, Conservation Areas or Registered Battlefields within the Study Area.

4.2.6 Designated heritage assets located within the Study Area are depicted in **Figure 1**. Where relevant, these will be discussed in further detail in **Section 4.4**.

4.3 Previous studies

4.3.1 No records of any previous intrusive archaeological investigations within the Site nor Study Area have been identified during the preparation of this assessment. A single instance of desk-based impact assessment was carried out in preparation for a water pipeline between Troed-Y-Rhiw and Roch in 1993 (**30683**).

4.4 Archaeological and historical context

4.4.1 The following section summarises the archaeological and historical development of the Site and the Study Area, compiled from the sources listed above. The potential for the likelihood of as yet unrecorded archaeological remains within the Site is informed by the consideration of the known heritage assets within the Study Area, in conjunction with the geology and topography of the area.

4.4.2 Records obtained from the DHER and other sources are listed in **Appendix 3** and illustrated in **Figures 1–2**.



Introduction

- 4.4.3 Early prehistoric activity in particular is associated with hunter-gatherer patterns of exploitation and shifting seasonal settlement, and, as a result, evidence is normally ephemeral and difficult to identify. The study of prehistory generally relies upon the examination of the landscape and by predicting how early populations may have moved through and interacted with their surroundings.
- 4.4.4 Both wet and dry valleys were important elements of the prehistoric landscape as they enabled transport both by river and on foot. They served as recognisable landmarks which aided navigation, particularly through difficult terrain.
- 4.4.5 Moreover, the diversity and abundance of natural resources in coastal and riverine environments meant that early nomadic inhabitants were drawn to these loci. Common activities were hunting, fowling, and fishing, as well as gathering materials for tool making, basketry and clothing. The Site lies within a geographical location where both of these environments could be readily exploited.
- 4.4.6 This activity is reflected in the archaeological record largely through stray lithic artefacts and scatters concentrated close to the coast to the west of the Site, and along the water channels and valley systems which run-off the escarpment upon which the site is located. There exists the potential for prehistoric material to be deposited within the valleys of the Site and at the source of the springs.
- 4.4.7 Watery places; rivers, streams and springs were often a focus of ritual activity. Ritual deposition in watery places were carried out from the Neolithic period in Britain. Springs and later wells have long been revered as spiritual places and revered by both Pagan and Christian traditions.

Early Prehistory (970,000–4000 BC)

- 4.4.8 Occupation of Wales and Pembrokeshire fluctuated during the Palaeolithic period, influenced by the shifting temperatures and glacial ice sheets. The DHER records no instances of Palaeolithic activity within the Site nor in its immediate environs.
- 4.4.9 Evidence for post-glacial occupation of the area however has been recorded at the nearby coast. A complex flint working site dating to the Mesolithic period was discovered at Cwrn Bach and comprised a vast array of worked lithic implements; 250 cores, 28 scrapers, 26 graters, 40 microliths, a microburin, 103 flints and many flakes and waste material (**9835**). A few hundred metres along the shore at Pen Y Cwrn, an eroding cliff section revealed more Mesolithic flint implements (**12227**).

Neolithic to Bronze Age (4000–700 BC)

- 4.4.10 From the Neolithic period onwards, more permanent settlement was largely concentrated inland and on higher ground although coastal areas continued to be an integral part of indigenous populations subsistence strategies. The DHER records three Group VIII polished stone axes, between the Site's southern boundary and Newgate Beach (**2778**).

(2812) (2811). The stone axe tools are petrologically attributed to south-west Wales and are therefore locally manufactured tools¹.

- 4.4.11 The record of Bronze Age activity in the Study Area is equally scarce and comprises largely place name evidence on historical mapping which seem to suggest the possible locations of various standing stones including examples such as: 'Carreg', 'Maen' and 'Garreg'. Where these records correspond with the Site, none were observed and may have been removed over the course of its military occupation.
- 4.4.12 Beyond the Site boundary, a single record relating to a possible barrow mound associated with Brawdy castle is recorded within the DHER. This feature has not however been confirmed through detailed investigation.

Iron Age (700 BC–AD 43)

- 4.4.13 The DHER has recorded a total of four defended enclosures within the Study Area, reflective of the Iron Age occupation of Pembrokeshire and south-west Wales. They are all small and yet characteristic of monuments of this period, sited on higher ground or promontories; affording them clear views of the landscape below and the coast.
- 4.4.14 On the eastern border of the Site, perched on the crest of the ridge and north of Newgate Lodge, lies an univallate sub-rectangular enclosure (2772). No surface remains survive. To the south of the Site, the Scheduled Bay View Farm Defended Enclosure (PE540) is located on a gentle S-facing slope within an enclosed pasture field. It is also known as Bickney or Bigney and comprises a low and spread, circular earthwork bank.

Romano-British (AD 43–410)

- 4.4.15 The DHER records no instances of Romano-British occupation of the Site nor its environs. Generally, the record for the occupation of Pembrokeshire and south-west Wales is somewhat lacking during this period, however, a number of Iron Age enclosures, particularly along the southern coast, have provided evidence for a continuity of use from the Iron Age into the Romano-British period. An example of this lies 4 km to the west of the Site, at the Scheduled promontory fort at Solva Harbour (PE410).
- 4.4.16 Given their size, these defended enclosures are likely defensive farmsteads and there exists the potential for associated field systems, trackways and evidence for small-scale industries such as quarrying, associated with each monument.

Anglo-Saxon to Medieval (AD 410–1500)

- 4.4.17 The archaeological record of the Anglo-Saxon occupation of the area is based principally upon documentary evidence and some scant artefactual remains. For example, excavations at Brawdy promontory fort on the south-eastern periphery of the Study Area, found a single artefact in the form of a fragmentary piece of an early medieval bellows (14289). Latin inscribed stones dating from the 5th and 6th centuries have been found at Brawdy Farm and Rickeston Farm (2819) (2738).
- 4.4.18 Ecclesiastic records show that both the Brawdy and Llandeloy Parish Church have Anglo-Saxon origins (46771) (46809). Aside from this, there are no further known instances of

¹ <https://www.cambridge.org/core/journals/proceedings-of-the-prehistoric-society/article/abs/stone-axes-as-a-guide-to-neolithic-communications-and-boundaries-in-england-and-wales/9BA1D317F9467301D60B2CD366786173>

Anglo-Saxon activity within the Site nor Study Area. It is possible, however, given the known background activity that some of the other small satellite settlements can trace their origins to this period.

- 4.4.19 The DHER records a number of entries within the bounds of the Site; namely two possible locations of former settlements named *Newton* (**12350**); located close to the existing technical site, and '*Court Fach*', a possible settlement site based upon place name evidence. The latter corresponds with an area of scrub to the north of the Site (**6390**).
- 4.4.20 Many of the remaining entries within or around the Site relate to holy wells, and springs which are known to have been pilgrimage sites during the medieval period (**102716**). Ritual places such as these are likely to have held some significance for some time before being appropriated by the Christian Church.
- 4.4.21 The local economy was dependent upon farming, animal husbandry and small scale industrial practices such as wool manufacture, quarrying and ironmongery.

Post-medieval to 19th century (AD 1500–1900)

- 4.4.22 The archaeological record demonstrates that during the post-medieval period, the area continued to be reliant upon a small-scale agrarian economy. Historical mapping shows that a large number of post-medieval farmsteads and cottages in the area survived into the 19th century seven of which once stood within the bounds of the Site, although none now remain.
- 4.4.23 Rwhle or '*Rhiwlan*' Cottage (**118801**) and adjoining farmstead (**23749**) is depicted on First edition mapping (**Figure 3, Map A**) once stood on the western side of the Site, on land which today corresponds with the main technical area. Analysis of satellite imagery indicates that this section of the Site has been fully redeveloped.
- 4.4.24 The remaining post-medieval buildings coincide with areas of undeveloped land and in the case of Mutton Hall, (**118800**) (**23753**), there appear be some possible structural remains visible in differential vegetation growth which correspond with this former farmstead. The sites of Tre-newydd Cottage (**118803**), Broadway Cottage (**23754**), and Cross Wren Cottage (**23769**) are all sited within undeveloped grassy areas albeit with no visible surface expression.
- 4.4.25 First Edition mapping reveals a mixed landscape, pre-military occupation, with a combination of both partially enclosed field systems and furze scrubland. It also shows a number of natural springs beneath and to the north of the current Technical Area (**Figure 3, Map A**).

Modern (1900 - present)

- 4.4.26 In 1944, RAF Brawdy was established as a satellite station to RAF St David's, situated 5 km west of the site, primarily for use by No 19 Group of Coastal Command. The airfield was equipped with three runways, dispersal sites, taxiways, a main technical site, and several camps for stationed personnel. Although the RAF had begun constructing stations with three runways in 1942 (Class A Stations), the runways built at Brawdy were notably longer than standard, enabling large and heavily loaded aircraft to take off even in strong winds. (Historic England 2016:7). This meant that a Brawdy could be equipped with a squadron of meteorological planes that could weigh as much as or more than some of the heavy bombers in service.
- 4.4.27 **Appendix 4** illustrates the layout of RAF Brawdy during WWII, revealing that the majority of the station's structures were situated in the main technical area, which remains in use

today. The technical area was characterised by three Type 2 hangars that had direct access to the northeast-southwest aligned and north-northeast to south-southwest aligned runways. The other buildings included a bliser hangar, administrative blocks, stores, armouries, and workshops. The bomb stores, with a storage capacity of 200 tons of explosives, were positioned in the northwest corner of the airfield.

- 4.4.28 Although there is no historical record of any of the squadrons stationed at RAF Brawdy taking part in any of the decisive or famous aerial operations of the Second World War, their contribution to protecting the sea lanes cannot be overlooked. In fact, their level of involvement and success from the airfield was so impressive that in November 1945, it was decided that RAF Brawdy and St David's would switch roles, with Brawdy becoming the parent station.
- 4.4.29 Her Majesty's Station (HMS) Goldcrest II was established on January 1st, 1946, when the Royal Navy took over the airfield and converted it into a satellite station for HMS Dale.² Brawdy was utilised by the Royal Navy to operate a squadron of Sea Mosquitos that formed a part of the Fleet Requirements Unit (FRU). The squadron's primary function was to train FAA pilots in the skills required to fly heavy twin-engine aircraft.
- 4.4.30 Although Brawdy was officially under the control of the Navy, in 1961 it was selected to become one of the three dispersed 'Quick Reaction Alert' (QRA) airfields in Wales. The QRA airfield was to have pilots and a team of designated engineers on standby twenty-four hours a day, 365 days a year, in the event that war broke out with Russia. As a result of its new function, changes were made to the bomb stores and several areas of hardstanding so aircraft could be left on a state of readiness with most QRA requiring squadrons to be ready to be airborne within two and half minutes (Cocroft 2005).
- 4.4.31 Little further is known about the use of Brawdy as a QRA. At similar sites, new QRA areas were built over a portion of the hardstanding pads that came with electric generators and heaters to ensure the aircraft were in a constant state of readiness. The bombs stores may also have been enhanced to accommodate tactical nuclear weapons (or at least part of the nuclear weapon). While the bomb stores were certainly redeveloped, they do not appear to have been built to the same standard as those that were found at RAF Scampton or RAF Wethersfield.
- 4.4.32 In the 1970s, the RAF resumed control of the airfield, which saw the operation of British Aerospace Hawk trainers under what later became known as No 1 Tactical Weapons Unit (TWU). The TWU was responsible for providing training with the latest systems and jet planes available to the RAF, operating around 90 aircraft, including Hawks, Hunters, Jet Provost T. Mk 4s, and vintage Meteor Mk 7 and Mk 8. In addition, the RAF relocated one of their search and rescue teams, utilising the Westland Sea King, to Brawdy, while the US Navy established an oceanographic research centre at the site.
- 4.4.33 Brawdy underwent changes in the 1990s. The RAF disbanded No 1 TWU in 1992, relocated the search and rescue teams two years later, and handed over the site to the British Army in 1995. It was renamed Cawdor Barracks and has since been occupied by the 14th Signal Regiment, the sole regiment specializing in Electronic Warfare training.

² <https://www.abct.org.uk/airfields/airfield-finder/brawdy/>



5 ASSESSMENT OF BELOW-GROUND ARCHAEOLOGY

5.1 Introduction

5.1.1 This section presents an assessment of the potential and significance of the archaeological resource based upon a multi-disciplinary approach combining; HER data, geological data, documentary evidence, aerial and cartographic analysis, and field observations.

5.2 Site Visit Observations

5.2.1 This section will discuss observations made during the site visit. Areas where the below-ground archaeological resource is considered by this assessment to be at an increased risk from development within the Site, have been identified and were investigated during the site visit.

5.2.2 The Site was accessed through the main gate at the south-western edge of Cawdor Barracks and, following a briefing by the Quartermaster's Department, the airfield was access through the southern gate. The former technical area is now used by the 14 Signal Regiment with the majority of buildings occupied, well maintained and in regular use.

5.2.3 The airfield is currently used for training and has not been active for some time, although the margins and grassed areas separating the hardstanding are well maintained as short grass and punctuated by hay bales (**Plate 1**). Although not airworthy, the areas of hardstanding across the Site are clear, albeit indicating signs of vegetation ingress at the furthest ends of the runways (**Plate 2**).

5.2.4 Beyond the runways, there are few standing remains within the airfield with widespread demolition within the area of the former bomb stores leaving only the substantial earthen banks and blast walls (**Plate 3**).

5.2.5 Within the western section of the airfield, some of which is currently contained within the wire delineating the extent primary barracks, is a large area which contains the remains of a number of demolished buildings (**Plate 4**). Historic aerial imagery shows six hangars within this area which were used for the operation and maintenance of the V-Bomber force on QRA. There were no definitive elements of the infrastructure required for the QRA aside from a small structure (**Plate 5**) with other V-Bomber airfields often retaining the remnants of the starters to facility a 2-minute scramble (e.g. RAF Scampton).

5.2.6 It is possible that some elements of the former operational airfield remains within the Site which are currently indistinguishable either through obstruction by overgrown gorse bushes or have been removed to ground level but retain an underground presence (**Plate 6**).

5.2.7 The areas of overgrown gorse are primarily located in the vicinity of the former bomb stores (**Plate 7**) while there is also an indication of waterlogging in some areas off the runway in the eastern section of the airfield (**Plate 8**). These area are, however, the exception with the vast majority of the airfield affording clear ground level visibility (**Plate 9**).

5.2.8 The barracks sits on an area of topographic prominence within the wider landscape with the ground level noticeably dropping away on the northern and eastern edges (**Plate 10 & 11**). While not immediately appreciable on Site, these areas of changing elevation give way to a series of valleys below with small watercourses which meander through the landscape.

5.3 Geoarchaeological Background and Potential

Introduction

- 5.3.1 The key superficial deposits present at the Site are outlined briefly below with a statement on their potential supporting the scope for further geoarchaeological investigation.

Glaciofluvial sands and gravels

- 5.3.2 Where present, the superficial deposits within the Site are recorded as being gravel, sand and silt. These are sedimentary glaciofluvial deposits formed between 2.588 million years ago during the Quaternary period (**Figure 4**).
- 5.3.3 Glaciofluvial sands and gravels are deposited by seasonal meltwater outwash at the edge of ice sheets or as subglacial, englacial and supraglacial deposits of ice sheets.
- 5.3.4 Glaciofluvial sands and gravels have little direct geoarchaeological potential. They are assigned a low geoarchaeological potential, as there is a low potential that they may contain eroded and redeposited Palaeolithic archaeology or seal stratified deposits of archaeological and geoarchaeological potential.

Potential superficial deposits

- 5.3.5 Due to the incomplete nature of the geological record of the Site, very little is known about its geological profile. However, based upon the local topography and known presence of several water channel and springs, a potential geological profile can be presented below.

Holocene Colluvium

- 5.3.6 The site contains a number of dry valleys and shallow undulating slopes.
- 5.3.7 Holocene Colluvium is used to define slope deposits of Holocene age formed in areas of topographical relief where soil instability has been brought on by activities such as clearance of woodland, agricultural activity and soil degradation, leading to downslope movement of sediment.
- 5.3.8 Colluvium is not of direct geoarchaeological significance, but can contain eroded and deposited artefacts and seal underlying stratigraphy, including buried former Holocene land surfaces that may contain archaeology and palaeoenvironmental remains.

Alluvium

- 5.3.9 The Site contains areas associated with existing water channels.
- 5.3.10 Alluvium is a generalised term covering unconsolidated sediment transported by water in a non-marine environment. Glaciofluvial sands and gravels and Pleistocene river terrace deposits are technically alluvium, but the term here is applied to fine-grained deposits of Holocene date (11.7 Kya to present).
- 5.3.11 The geoarchaeological potential of alluvium is low, although it has the potential to contain layers of peat of high potential and may also contain or partially obscure archaeological remains.
- 5.3.12 The Site may also contain small palaeochannels which are key contexts for understanding the physical evolution of the landscape and act as effective traps preserving both artefacts and ecofacts indicative of the surrounding environment, human activity and land-use.

Peat

- 5.3.13 Peat has been mapped less than 100 m to the north-east of the Site, in association with existing water channels originating at Llandeloy.
- 5.3.14 Peat comprises partially decayed organic matter preserved within waterlogged anaerobic (oxygen-free) conditions. Peats are ideal contexts for the preservation of palaeoenvironmental remains (e.g. pollen, plant macrofossils, insects) that provide important data on past climate, vegetation, environment and land-use.
- 5.3.15 Any peat deposits identified within the Site interbedded in alluvium or preserved in palaeochannels are of high geoarchaeological potential.
- 5.3.16 The geoarchaeological and archaeological potential of these deposits can be summarised as follows:
- **Glaciofluvial deposits:** Low geoarchaeological potential.
 - **Colluvium (if present)** – Low geoarchaeological potential.
 - **Alluvium (if present)** – potential to contain or partially mask archaeology, preserve palaeochannels and contain peat beds of a high geoarchaeological potential;
 - **Peat (if present)** – potential for peat units to be preserved in Holocene floodplain alluvium, including within palaeochannels. High geoarchaeological potential, preserving a range of palaeoenvironmental remains informing on past landscape, environment and land-use.

5.4 Summary of Archaeological Potential

- 5.4.1 Due to a lack of previous, intrusive or non-intrusive archaeological investigation, the archaeological potential of the Site and its environs is not well calibrated.
- 5.4.2 In summary, based upon a multi-disciplinary research method, this assessment determines that there exists the potential for;
- Early- Middle Prehistoric artefacts,
 - Evidence for Iron Age occupation including field systems, trackways and boundary earthworks associated with defended enclosures,
 - Possible evidence of ritualistic behaviour associated with springs from the Neolithic through to the Medieval period,
 - Medieval and post-medieval settlement, agricultural and industrial activity, and
 - 20th century military remains associated with the various phases of the airfield and camp.

5.5 Archaeological Interest and Significance

Previous impacts and conditions for survival

- 5.5.1 Due to the almost continuous ownership of the Site by the MoD since the Second World War, the Site is unimpacted by non-military modern development. This study has determined that prior to the establishment of *RAF Brawdy*, the Site was agricultural or fallow
-

furze throughout its recorded history and earlier, subject only to light settlement, cultivation and animal grazing.

- 5.5.2 Today the Site remains fairly well maintained as part of an active site. However, much of the earlier elements of the airfield have since been removed, with the exception of the airstrip, taxi-way and some upstanding banks.
- 5.5.3 The walkover survey and analysis of satellite imagery has demonstrated that while much of the early built elements of the Site are no longer upstanding, they frequently retain a surface expression characterised by surviving building platforms, areas of spoil and built-up banks.
- 5.5.4 While widespread across the entirety of the Site, the dispersed nature of the installation means that there are large areas of undeveloped and undisturbed land in between the built-up sections of the airfield and Technical Area.
- 5.5.5 The ground surface beneath these undeveloped areas is frequently obscured by vegetation, thus concealing any possible upstanding features. Even so, these areas are considered to possess an increased potential for surviving buried archaeological features and deposits, contemporary with or earlier than the military phase of the Site.
- 5.5.6 It was observed that areas of the Site were inundated by standing water. The assessment has also demonstrated that a number of existing water channels and springs are present within the Site and have the potential to have associated deposits of peat. In archaeological terms, wet sites are important as the anaerobic conditions of waterlogged environments have the capacity to preserve organic materials which in other less ideal conditions would deteriorate and be lost.
- 5.5.7 As a result, the most delicate and vulnerable artefacts can remain well-preserved. Waterlogged geological deposits may have great potential for the identification of past landscape-use, the reconstruction of palaeoenvironments, and the understanding of human occupational patterns.

Archaeological Interest

- 5.5.8 The archaeological interest of any buried archaeological remains within the Site is derived from their evidential value through the information they may yield about past human activity.
- 5.5.9 A brief assessment of the geoarchaeological profile of the Site has determined that there exists a geoarchaeological potential in areas of waterlogged soils and in floodplains associated with the water channels and springs. If present, deposits of peat and/or alluvium could preserve a range of palaeoenvironmental remains informing on past landscape, environment and land-use.
- 5.5.10 Mesolithic and Neolithic lithic assemblages. Any further evidence relating to this period of occupation would help to understand where, when, and how these earliest people fitted into this landscape and ecosystem.
- 5.5.11 Studies have shown that the deposition of artefacts in wet places particularly in this instance; springs, was a widespread custom during the Bronze and Iron Ages although this is known to have also occurred during the Neolithic. This practice saw the dropping of precious objects such as weapons, tools and personal jewellery, or even musical instruments and carved figurines placed as spiritual offerings in watery places. Despite there being no previously recorded ritual activity at these locations prior to the medieval

period, any such archaeological remains would provide greater insight into earlier ritual behaviours.

- 5.5.12 The existence of defensive Iron Age enclosures at this geographical location is of archaeological interest as it signifies a prehistoric culture of territoriality and possible conflict. Iron Age enclosures have the potential to enhance our knowledge of later prehistoric defensive organisation and settlement.
- 5.5.13 During the medieval and post-medieval periods, the Site is likely to have formed part of the rural hinterland of dispersed farmsteads in the surrounding landscape. This assessment has shown that the majority of known farmsteads and cottages dating from the post-medieval period coincide with areas of undeveloped land.
- 5.5.14 Therefore, the presence of any former field systems and structural remains would illustrate the post-medieval land organisation of the area. Other archaeological artefacts may also survive including any stray finds deposited through casual loss during activities such as herding livestock. Any such remains would be considered to be of local significance.
- 5.5.15 In general, military aviation sites derive significance from various criteria, including their historical associations, the rarity and innovation of their component parts, their architectural interest, group value and legibility of function.
- 5.5.16 In general, the surviving combination of upstanding buildings and road networks demonstrate the organisation of former military aviation sites. Their survival contributes to our understanding of the functionality of any station and consequently enhances its historical, architectural and archaeological interest.
- 5.5.17 Unfortunately, the legibility of this Site has been diminished through the loss of almost the totality of original structures. From the air, the QRA additions for the V bombers are noticeable, albeit only by those with prior knowledge of military sites.
- 5.5.18 Moreover, the Site has limited direct associations with notable historical events and of the remaining built elements, none are considered to hold any particular significance in regard to military architecture. Almost the entirety of the original elements of the 20th century airfield have been demolished, thus seriously impacting both the architectural interest of the installation, the group value of the individual components and reducing its legibility of function.

Potential impact

- 5.5.19 Depending upon the final design of the proposals and the method of development, the proposed development has the potential to *directly* impact a number of known areas of risk. This includes but is not limited to:
- Previously unrecorded prehistoric buried archaeological remains beneath the airstrip and within undeveloped areas;
 - Elements of the preceding phases of the RAF Brawby station (bomb stores etc.) including those which are currently unknown; and
 - Any colluvial, alluvial and glacio-fluvial deposits with geoarchaeological potential.



- 5.5.20 Without further, more detailed assessment and investigation (also in areas which are not listed above), the full impact of the proposed development upon the archaeological resource cannot be fully determined.
- 5.5.21 It is anticipated that construction of the proposed development will entail the following sources of ground disturbance and excavations:
- Preliminary site investigation works,
 - Setting up a secure construction compound at key points within the Site,
 - Establishment of new car parking areas, and access points,
 - Plant movement,
 - Topsoil stripping,
 - Excavation of trenches and foundations,
 - Temporary storage of materials,
 - Installation of additional services, drainage and other infrastructure, *and*
 - Hard landscaping works (levelling, remodelling).
- 5.5.22 The aforementioned works have the potential to result in the damage to or loss of any buried archaeological features which may be present within their footprint. Any adverse impact to buried archaeological features would be permanent and irreversible in nature.
- 5.5.23 This physical loss would result in harm to significance of such remains, without mitigation or offsetting. This potential adverse effect could be reduced through the implementation of an appropriate scheme of archaeological mitigation.
- 5.5.24 The most destructive elements of the development proposals in terms of below ground archaeology (should any such remains be present within the Site) would likely to be associated with the main construction areas (**Figure 6**).
- 5.5.25 Topsoil removal and levelling works for the establishment of site compounds, facilities and car parks would also risk exposure and damage to any buried archaeological remains present within the affected areas.
- 5.5.26 Any adverse impact to buried archaeological features as a result of the implementation of the development proposals would be permanent and irreversible in nature. This potential adverse effect could be reduced through the implementation of an appropriate scheme of archaeological mitigation, in accordance with national and local planning policy.

6 RECOMMENDATIONS

Archaeology

- Due to the potential for buried archaeological remains within the Site, further work is likely to be required.



- In currently open areas, this may take the form of an initial non-intrusive survey (geophysics),
- The results of the geophysical survey, and the information gathered within this assessment, will inform an archaeological strategy that is likely to require intrusive archaeological investigations across the Site prior to determination;
- The details of any further works should be agreed in consultation with the appropriate statutory consultees.

Geoarchaeological remains

6.1.1 Depending on the construction design and likely depth of impact, the development of the Site may impact upon:

- Deposits of archaeological and paleoenvironmental potential sealed beneath the glacio-fluvial deposits;
- Possible deposits of archaeological and palaeoenvironmental potential within peat and alluvium;

6.1.2 The scope of any further archaeological evaluation and mitigation works will need to be considered when the below-ground impact of the development is known, as this will have a direct impact on the requirement for and extent of any further geoarchaeological evaluation and mitigation works.

6.1.3 Depending on the depth of impact, the most appropriate evaluation strategy for these deposits is likely to be in the form of geoarchaeological boreholes or test pits, the number and distribution of which should be determined as appropriate to the construction design.

General

6.1.4 Should any future application be successful, the following may be required via condition:

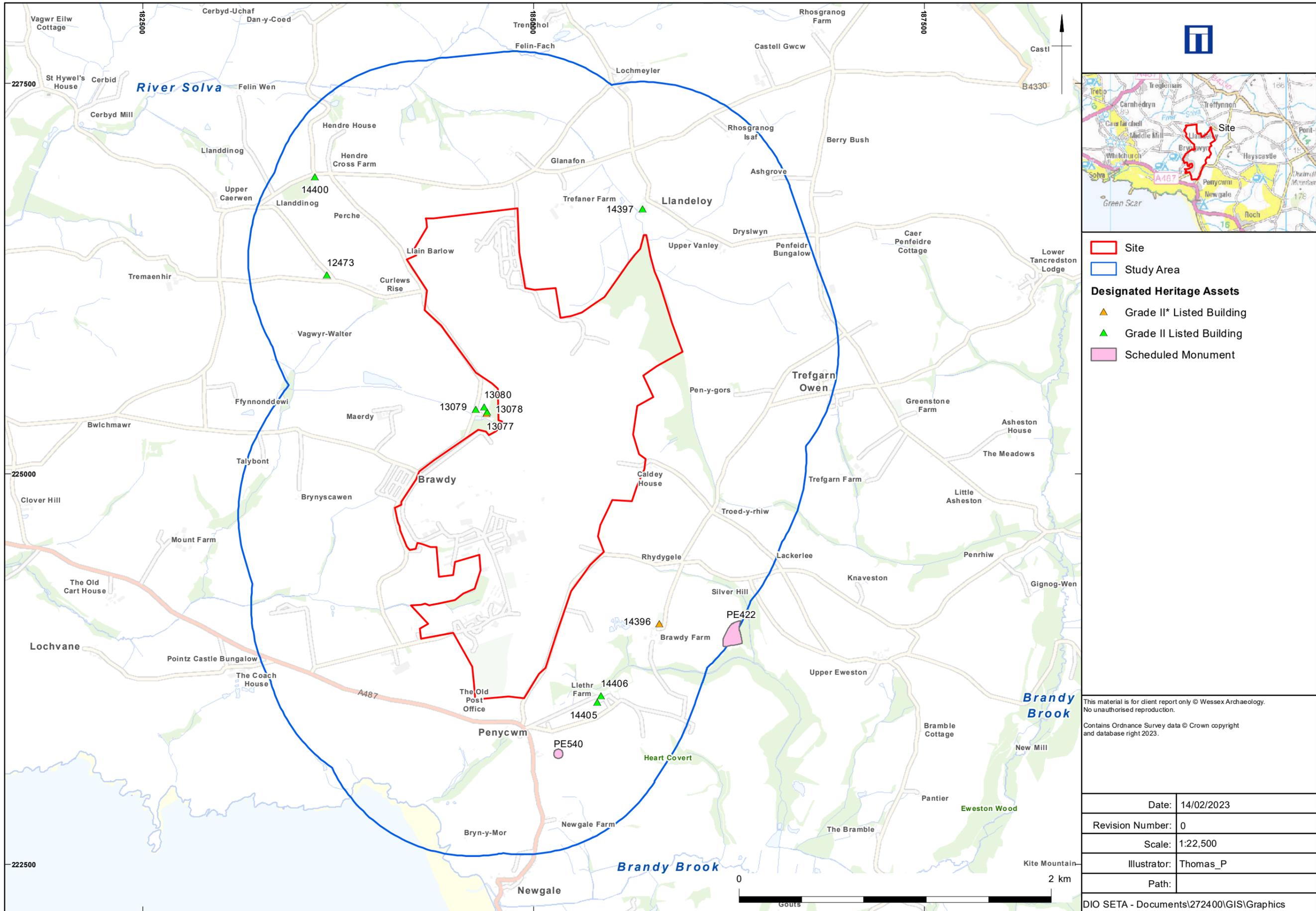
- Further archaeological works may be required to mitigate the loss of significance of any archaeological remains through preservation by record.



REFERENCES

Bibliography

- Ancient Monuments and Archaeological Areas Act 1979, as amended by Historic Environment (Wales) 2016.*
- Cadw 2011 *Conservation Principles for the Sustainable Management of the Historic Environment in Wales.* Available at: https://cadw.gov.wales/sites/default/files/2019-05/Conservation_Principles%20for%20the%20sustainable%20managment%20fo%20the%20historic%20environment%20of%20Wales.pdf
- Cadw 2017a *Heritage Impact Assessment in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Heritage%20Impact%20Assessment%20in%20Wales%2026917%20EN.pdf>
- Cadw 2017b *Managing Change to Listed Buildings in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Managing%20Change%20to%20Listed%20Buildings%20in%20Wales%2024303%20EN.pdf>
- Cadw 2017c *Setting of Assets in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/Setting%20of%20Historic%20Assets%20in%20Wales%20EN.pdf>
- Cadw 2017d. *Managing Historic Character in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/Managing%20Historic%20Character%20in%20Wales%20%20EN.pdf>
- Cadw 2018 *Managing Scheduled Monuments in Wales.* Available at: https://cadw.gov.wales/sites/default/files/2019-05/20181112Managing_Scheduled_Monuments_in_Wales_ENG.pdf
- Chartered Institute for Archaeologists 2020. *Standards and guidance for historic environment desk-based assessment.* Available at: <http://www.archaeologists.net/codes/ifa>
- Historic Environment (Wales) Act 2016.* Available at: <http://www.legislation.gov.uk/anaw/2016/4/contents>
- Pembrokeshire Coast National park Authority 2011a. *Solva Conservation Area Proposals.*
- Pembrokeshire Coast National Park Authority 2011b. *Caerfarchell Conservation Area Proposals.*
- Planning (Listed Buildings and Conservation Areas) Act 1990.* Available at: <http://www.legislation.gov.uk/ukpga/1990/9/contents>
- Planning (Wales) Act 2015.* Available at: <http://www.legislation.gov.uk/anaw/2015/4/contents/enacted>
- Protection of Wrecks Act 1973.* Available at: <http://www.legislation.gov.uk/ukpga/1973/33>
- Welsh Government 2017 *Technical Advice Note 24: The Historic Environment.*
- Welsh Government 2018 *Planning Policy Wales (Edition 10, December 2018).*
-



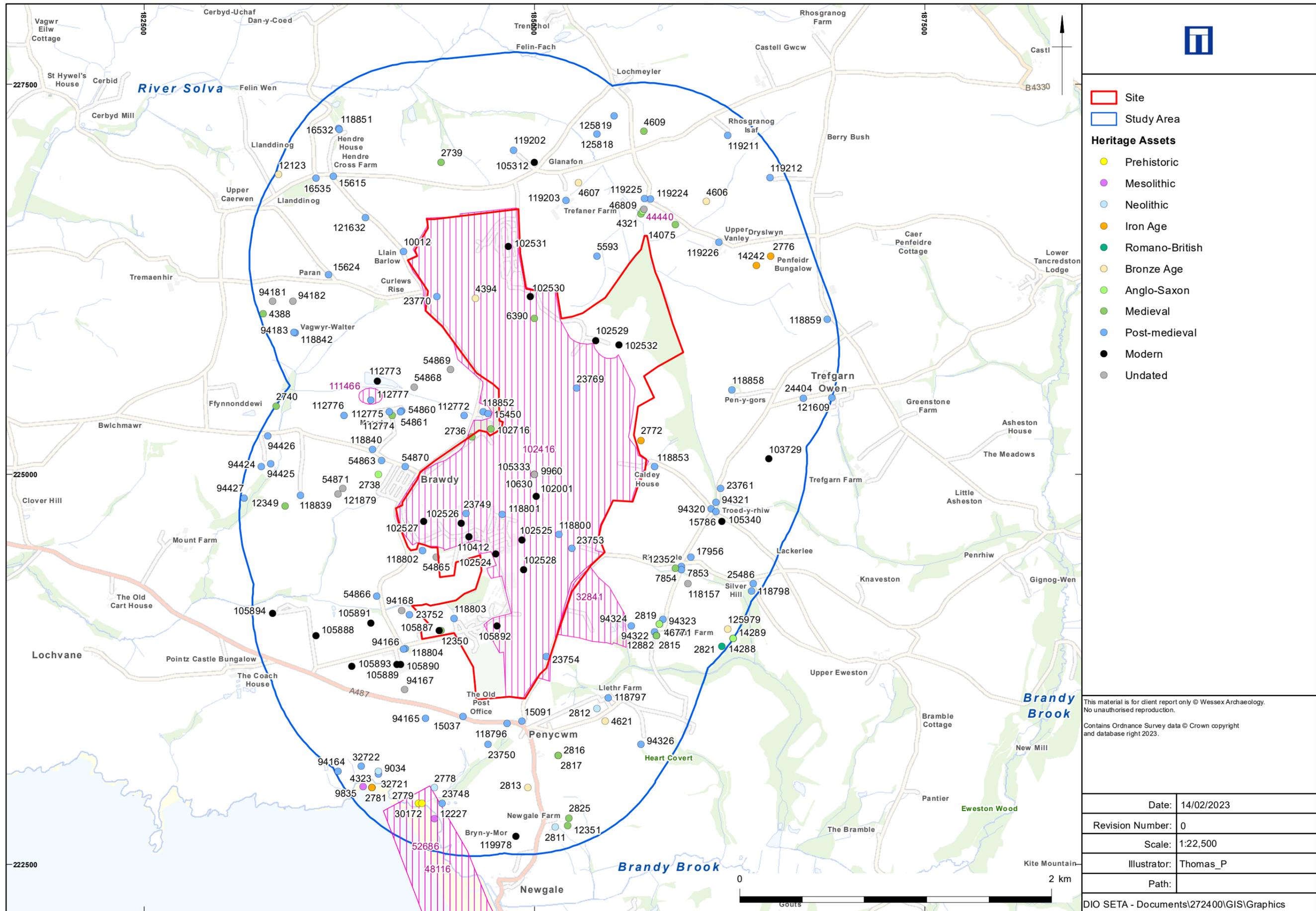
This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.
 Contains Ordnance Survey data © Crown copyright
 and database right 2023.

Date:	14/02/2023
Revision Number:	0
Scale:	1:22,500
Illustrator:	Thomas_P
Path:	

DIO SETA - Documents\272400\GIS\Graphics

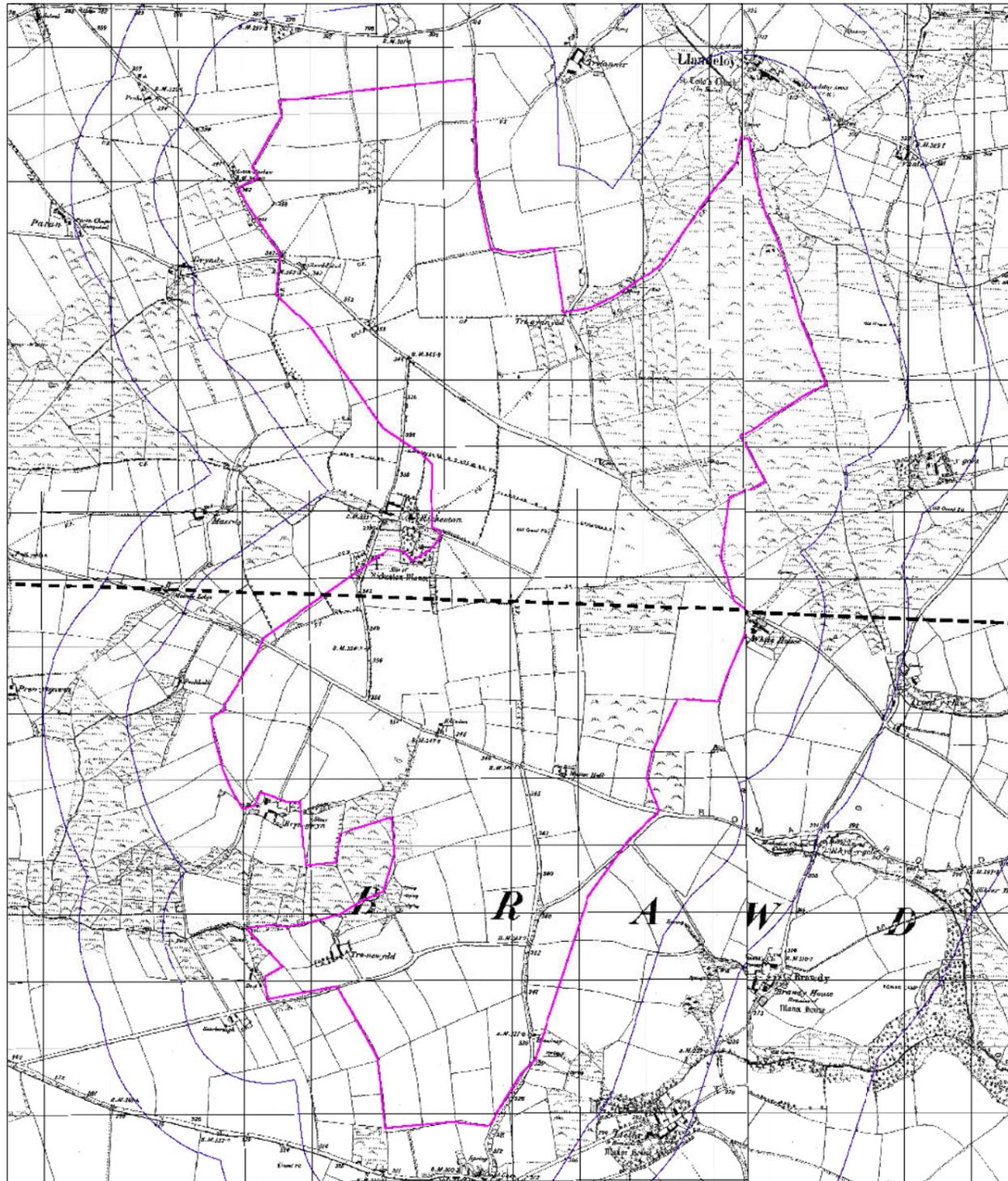
Site Location, Study Area and Designated Heritage Assets

Figure 1

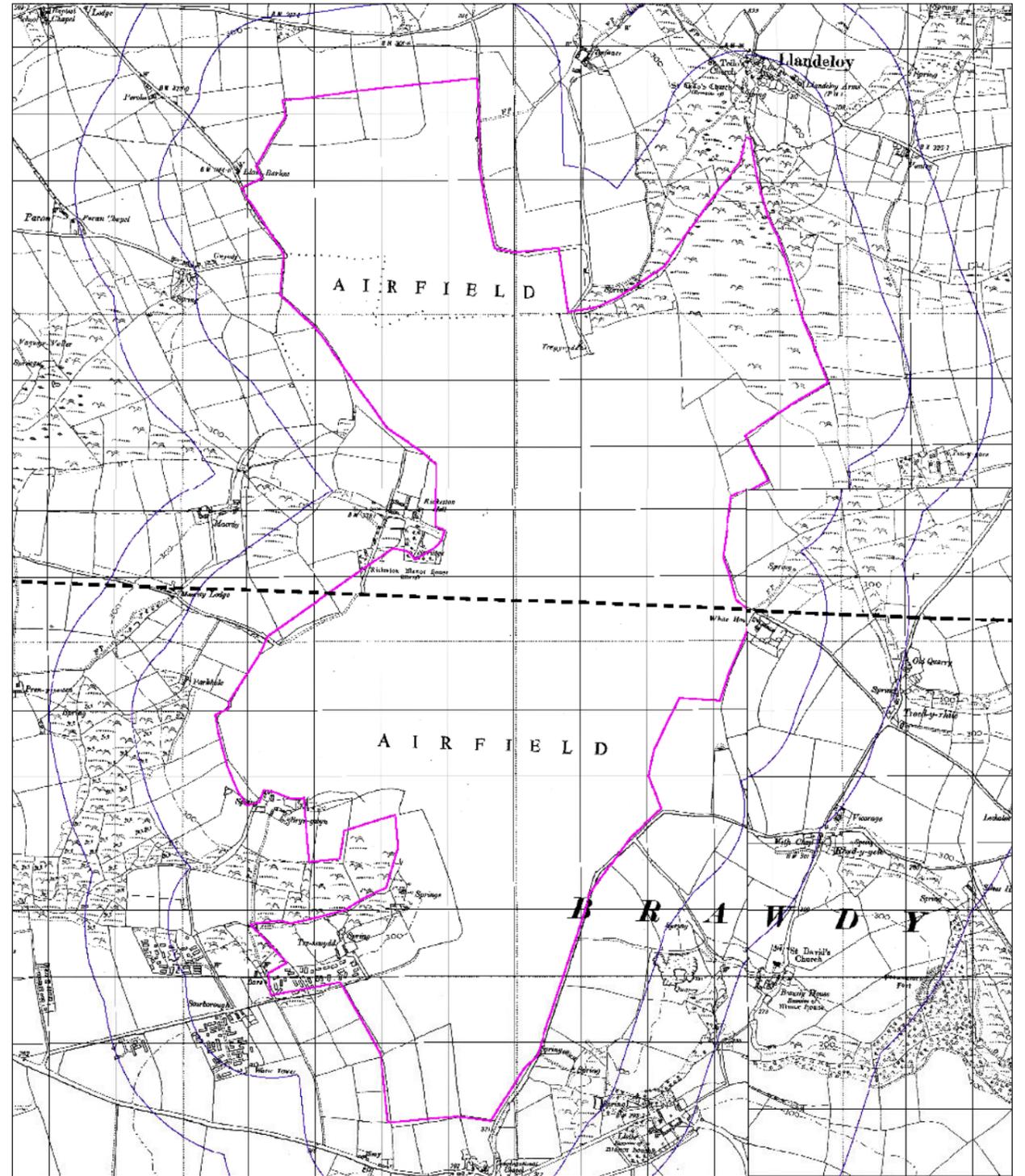


Site, Study Area and Heritage Assets

Figure 2



A) 1888 First Edition Ordnance Survey map



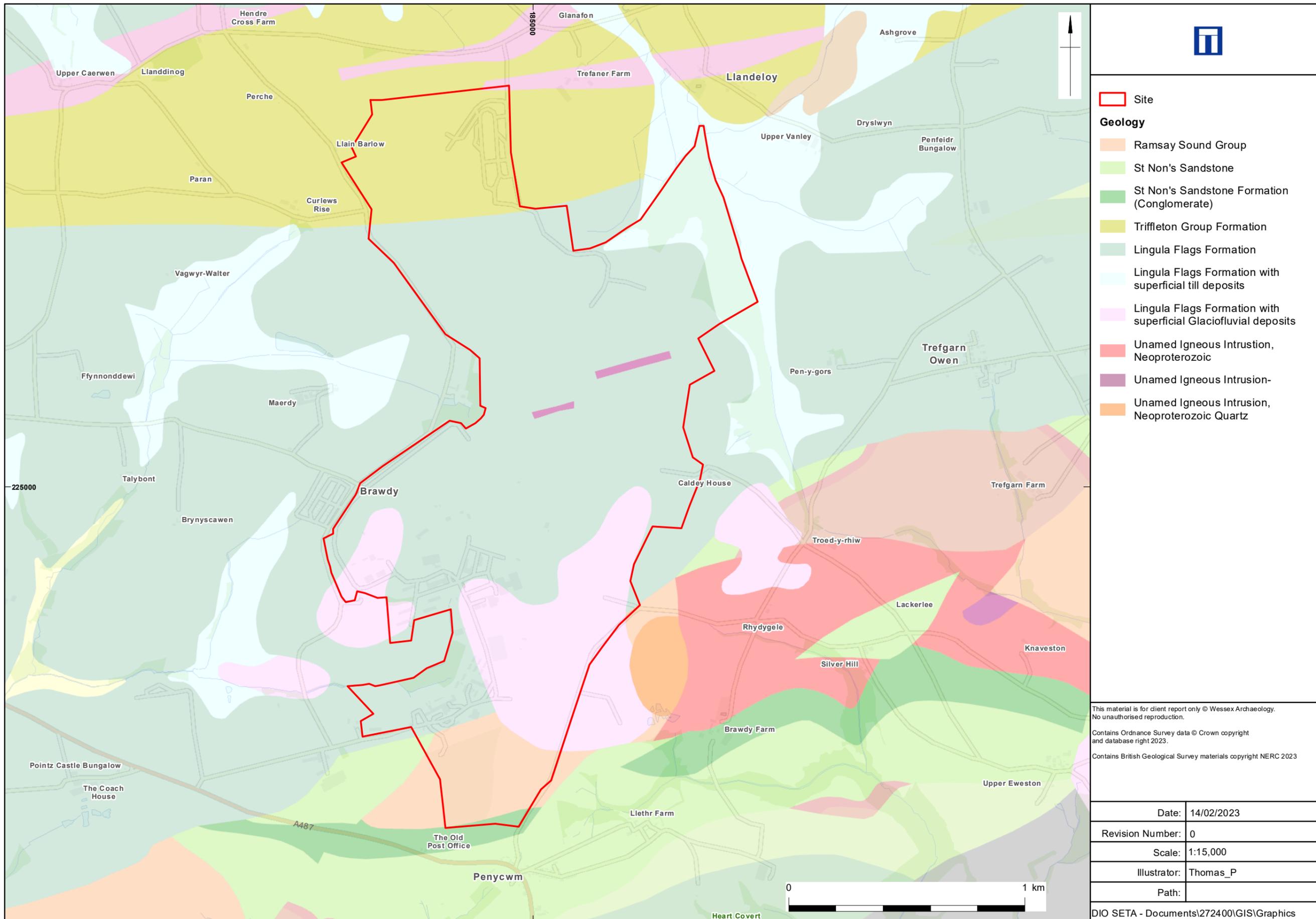
B) 1953 Edition Ordnance Survey map



 Site

Reproduced from the 1888 and 1953 Ordnance Survey maps.
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	14/02/2023	Revision Number:	0
Scale:	Not to scale	Illustrator:	Thomas_P
Path:	DIO SETA - Documents\272400\GIS\Graphics		



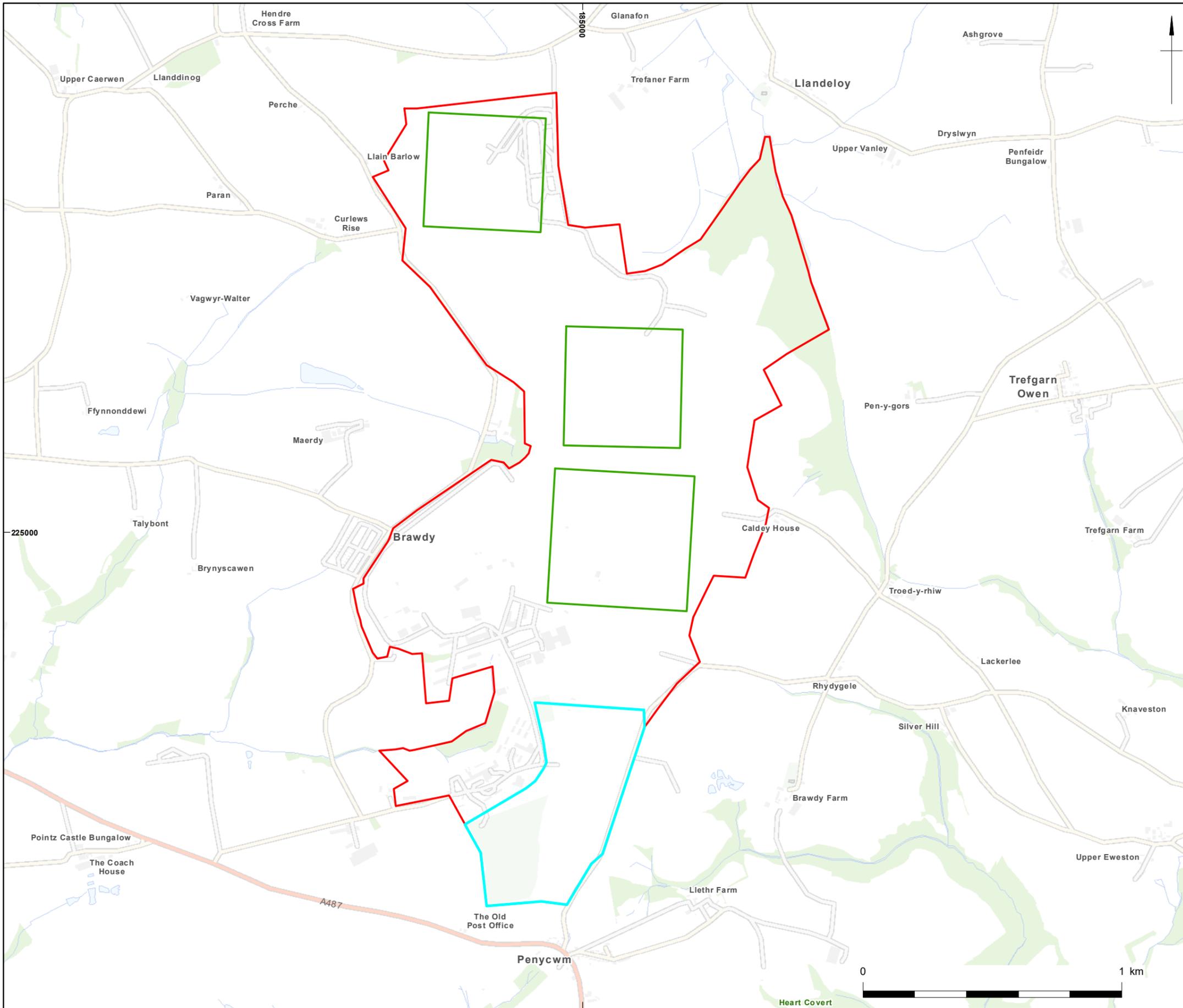
This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.
 Contains Ordnance Survey data © Crown copyright
 and database right 2023.
 Contains British Geological Survey materials copyright NERC 2023

Date:	14/02/2023
Revision Number:	0
Scale:	1:15,000
Illustrator:	Thomas_P
Path:	

DIO SETA - Documents\272400\GIS\Graphics

Site and underlying geology based on British Geological Survey

Figure 4



- Site
- Potential Impact Areas

Note: These 'potential impact areas' have been highlighted for information to show likely scale of development within the wider Cawdor Barracks site. These will be subject to change as the design progresses and there will also be supporting infrastructure within the wider site such as access roads and cable runs

This material is for client report only © Wessex Archaeology.
No unauthorised reproduction.
Contains Ordnance Survey data © Crown copyright and database right 2023.

Date:	14/02/2023
Revision Number:	0
Scale:	1:15,000
Illustrator:	Thomas_P
Path:	

DIO SETA - Documents\272400\GIS\Graphics

Site and Potential Impact Areas

Figure 5



Historic Environment Records

Dyfed Archaeological Trust Ltd

APPENDICES

Appendix 1: Terminology

Glossary

The terminology used in this assessment follows definitions contained within Cadw's *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* (2011, 35-39):

Conservation	The process of managing change to an historic asset in its setting in ways that will best sustain its heritage values, while recognizing opportunities to reveal or reinforce those values for present and future generations.
Designation	The recognition of particular heritage value(s) of an historic asset by giving it formal status under law or policy intended to sustain those values.
Heritage	All inherited resources which people value for reasons beyond mere utility.
Heritage, cultural	Inherited assets which people identify and value as a reflection and expression of their evolving knowledge, beliefs and traditions, and of their understanding of the beliefs and traditions of others.
Historic asset	An identifiable component of the historic environment. It may consist or be a combination of an archaeological site, an historic building, or a parcel of historic landscape. Nationally important historic assets will normally be designated.
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and deliberately planted or managed.
Historic environment record	A public, map-based data set, primarily intended to inform the management of the historic environment. In Wales these are maintained by the four Welsh Archaeological Trusts.
Setting	The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape.
Significance (within the historic environment)	The sum of the cultural heritage values, often set out in a Statement of Significance.
Value	An aspect of worth or importance, here given by people to historic assets.
Value, aesthetic	Value deriving from the ways in which people draw sensory and intellectual stimulation from a place.
Value, communal	Value deriving from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.
Value, evidential	Value deriving from the potential of a place to yield evidence about past human activity.
Value, historical	Value deriving from the ways in which past people, events and aspects of life can be connected through a place to the present

Chronology

Where referred to in the text, the main archaeological periods are broadly defined by the following date ranges:

Prehistoric		Historic	
Palaeolithic	970,000–9500 BC	Romano-British	AD 43–410
Early Post-glacial	9500–8500 BC	Early medieval	AD 410–1100
Mesolithic	8500–4100 BC	Medieval	AD 1100–1500
Neolithic	4100–2500 BC	Post-medieval	AD 1500–1800



Prehistoric		Historic	
Bronze Age	2500–700 BC	19th century	AD 1800–1899
Iron Age	800 BC–AD 400	Modern	1900–present day

Appendix 2: Legislative and planning framework

Designation	Associated Legislation	Overview
World Heritage Sites	-	The United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Committee inscribes World Heritage Sites for their Outstanding Universal Value (OUV) – cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. Wales protects its World Heritage Sites and their settings, including any buffer zones or equivalent, through the statutory designation process and through the planning system. Planning Policy Wales 2014 sets out detailed policies for the conservation and enhancement of the historic environment, including World Heritage Sites, through both plan-making and decision-taking.
Scheduled Monuments	<i>Ancient Monuments and Archaeological Areas Act 1979</i>	Under the Ancient Monuments and Archaeological Areas Act 1979, the National Assembly for Wales is required to compile and maintain a schedule of ancient monuments of national importance. Monuments included in the schedule have statutory protection. Under the Ancient Monuments and Archaeological Areas Act 1979, the Secretary of State can schedule any site which appears to be of national importance because of its historic, architectural, traditional, artistic or archaeological interest. Additional controls are placed upon works affecting Scheduled Monuments under the Act. All planning enquiries that may affect a SAM or its setting should be directed to Cadw. The process of Scheduled Ancient Monument consent is administered by Cadw and is required for certain works affecting these designated sites.
Listed Buildings	<i>Planning (Listed Buildings and Conservation Areas) Act 1990</i>	In Wales, under Section 1 of the Planning (Listed Buildings and Conservation Areas) Act 1990, the Welsh Ministers are required to compile lists of buildings of special architectural or historic interest, on advice from Cadw. Works affecting Listed Buildings are subject to additional planning controls administered by Local Planning Authorities. Cadw are a statutory consultee in certain works affecting Listed Buildings. Under most circumstances, Listed Building Consent is required for works affecting Listed Buildings.
Conservation Areas	<i>Planning (Listed Buildings and Conservation Areas) Act 1990</i>	A Conservation Area is an area which has been designated because of its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. In most cases, Conservation Areas are designated by Local Planning Authorities. Section 72 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires authorities to have regard to the fact that there is a Conservation Area when exercising any of their functions under the Planning Acts and to pay special attention to the desirability of preserving or enhancing the character or appearance of Conservation Areas.
Registered Landscapes of Historic Interest in Wales	-	Cadw, in partnership with the Countryside Council for Wales (CCW) and the International Council on Monuments and Sites (ICOMOS UK), has compiled a Register of Landscape of Historic Interest in Wales. These designations are non-statutory but are, nevertheless, material considerations in the planning process. Cadw and CCW should be consulted on any proposals affecting landscapes included in the Register.
Registered Parks and Gardens of Special Historic Interest in Wales and	-	Cadw and ICOMOS maintain the Register of Landscapes of Historic Interest in Wales. These designations are non-statutory but are, nevertheless, material considerations in the planning process. A voluntary system of consultation is in place on planning applications impacting on historic parks and gardens – local authorities are asked to refer all applications to the Garden History Society and those affecting grade I and II* parks and gardens to Cadw.



Designation	Associated Legislation	Overview
Registered Battlefields		In January 2012, the Minister for Housing, Regeneration and Heritage approved in principle the establishment of a Register of Historic Battlefields in Wales. Work is being carried out by Cadw and the Royal Commission on the Ancient and Historical Monuments of Wales to identify sites for inclusion but no register has yet been published.
Protected Wreck Sites	<i>Protection of Wrecks Act 1973</i>	The Protection of Wrecks Act 1973 allows the National Assembly of Wales to designate a restricted area around a wreck to prevent uncontrolled interference. These statutorily protected areas are likely to contain the remains of a vessel, or its contents, which are of historical, artistic or archaeological importance. Work on designated sites can only be carried out under a licence issued by the National Assembly for Wales.

National Planning Policy in Wales:

Planning Policy Wales (PPW) Edition 11 (2021)	
Para. 6.1.7	It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.
Para. 6.1.9	Any decisions made through the planning system must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place.
Para. 6.1.10	There should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage. For any development proposal affecting a listed building or its setting, the primary material consideration is the statutory requirement to have special regard to the desirability of preserving the building, its setting or any features of 124 125 special architectural or historic interest which it possesses.
Para. 6.1.12	The demolition of any listed building should be considered as exceptional and require the strongest justification.
Para. 6.1.13	Applicants for listed building consent must be able to justify their proposals, show why the alteration or demolition of a listed building is desirable or necessary and consider the impact of any change upon its significance. This must be included in a heritage impact statement, which will be proportionate both to the significance of the building and to the degree of change proposed.
Para. 6.1.14	There should be a general presumption in favour of the preservation or enhancement of the character or appearance of conservation areas or their settings. Positive management of conservation areas is necessary if their character or appearance are to be preserved or enhanced and their heritage value is to be fully realised. Planning authorities should establish their own criteria against which existing and/or new conservation areas and their boundaries should be reviewed. The preparation of conservation area appraisals and management plans can assist planning authorities in the exercise of their development management functions
Para. 6.1.15	There is a strong presumption against the granting of planning permission for developments, including advertisements, which damage the character or appearance of a conservation area or its setting to an unacceptable level. In exceptional cases, the presumption may be overridden in favour of development considered desirable on public interest grounds.
Para. 6.1.18	Planning authorities should value, protect, conserve and enhance the special interest of parks and gardens and their settings included on the register of historic parks and gardens in Wales. The register should be taken into account in planning authority decision making. Green Infrastructure Assessments should be used to explore the role of historic parks and gardens and the findings of other landscape character assessments should be fed into historical and cultural assessments to ensure consistency of information
Para. 6.1.19	The effect of a proposed development on a registered park or garden, or its setting, is a material consideration in the determination of planning applications.
Para. 6.1.20	The Welsh Government seeks to protect areas on the register of historic landscapes in Wales
Para. 6.1.21	Planning authorities should protect those assets included on the register of historic landscapes in Wales... The register should be taken into account in decision making when considering the implications of developments which meet the criteria for Environmental Impact Assessment or, if on call in, in the opinion



Planning Policy Wales (PPW) Edition 11 (2021)	
	of the Welsh Ministers, the development is of a sufficient scale to have more than a local impact on the historic landscape.
Para. 6.1.22	World Heritage Sites are international designations recognised for their Outstanding Universal Value, as inscribed by UNESCO. The planning system recognises the need to protect the Outstanding Universal Value of World Heritage Sites in Wales. The impacts of proposed developments on a World Heritage Site and its setting and, where it exists, the World Heritage Site buffer zone and its essential setting, is a material consideration in the determination of any planning application ¹
Para. 6.1.23	The planning system recognises the need to conserve archaeological remains. The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not.
Para. 6.1.24	Where nationally important archaeological remains and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a scheduled monument 129 (or an archaeological site shown to be of national importance) or has a demonstrably and unacceptably damaging effect upon its setting
Para. 6.1.25	In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.
Para. 6.1.26	Where archaeological remains are known to exist or there is a potential for them to survive, an application should be accompanied by sufficient information, through desk-based assessment and/or field evaluation, to allow a full understanding of the impact of the proposal on the significance of the remains.
Para. 6.1.27	If the planning authority is minded to approve an application and where archaeological remains are affected by proposals that alter or destroy them, the planning authority must be satisfied that the developer has secured appropriate and satisfactory provision for their recording and investigation, followed by the analysis and publication of the results and the deposition of the resulting archive in an approved repository.

Local Planning Policy:

Pembrokeshire County Council Local Development Plan (2013)		
Policy ref.	Title	Scope
GN38	Protection and Enhancement of the Historic Environment	Development that affects sites and landscapes of architectural and/or historical merit or archaeological importance, or their setting, will only be permitted where it can be demonstrated that it would protect or enhance their character and integrity.

Appendix 3: Gazetteer

HER Records

HER Number	Site Name	Period	Easting	Northing
2779	Cwm Mawr	Prehistoric	184257	222893
30172	Cwm Mawr	Prehistoric	184277	222893
9835	Cwm Bach	Mesolithic	183900	223000
12227	Pen Y Cwm	Mesolithic	184357	222793
2778	Cwm Mawr	Neolithic	184357	222993
9034	Cwm-bach	Neolithic	184000	223100
2812	Llethr	Neolithic	185400	223500
2811	Newgale Farm	Neolithic	185130	222740
125979	Brawdy Castle	Bronze Age	186238	224010
4621	Carreg Llwyd	Bronze Age	185450	223420
2813	Llethr Farm	Bronze Age	184957	222993
9960	Parc Carreg	Bronze Age	185000	225000
4607	Parc Maen	Bronze Age	185280	226870



12123	Parc Y Garreg	Bronze Age	183360	226920
4606	Parc Y Garreg	Bronze Age	186100	226750
4394	Parc Y Garreg Wen	Bronze Age	184620	226130
2816	Bickney;bigney	Iron Age	185150	223200
4323	Pen-y-cwm	Iron Age	183957	222993
14242	Vanley	Iron Age	186420	226340
2776	Vanley Enclosure	Iron Age	186510	226400
2772	White House	Iron Age	185680	225220
14288	Brawdy Castle	Romano-British	186270	223950
2821	Brawdy House	Romano-British	186200	223900
14289	Brawdy Castle	Anglo-Saxon	186270	223950
46771	Brawdy Parish Church;st David's	Anglo-Saxon	185800	224040
2738	Briaci Stone	Anglo-Saxon	184000	225000
46809	Llandeloy Parish Church;st Teilo's	Anglo-Saxon	185690	226690
2819	Maccatreni Stone	Anglo-Saxon	185800	224040
2817	Bickney;bigney	Medieval	185150	223200
12882	Breudy	Medieval	185780	223970
6390	Court Fach;parc Court Issa;park Court	Medieval	185000	226000
102716	Ffynnon Brawdy	Medieval	184720	225290
2740	Ffynnon Dewi	Medieval	183343	225438
2739	Ffynnon Wen	Medieval	184400	227000
4321	Llandelog Churchyard Well	Medieval	185680	226670
112774	Maerdy	Medieval	184086	225379
14075	Moelfryn	Medieval	185900	226600
2825	New Vill	Medieval	185220	222800
12351	Newgol	Medieval	185210	222750
12350	Newton	Medieval	184400	224000
4388	Parc Y Groes	Medieval	183260	226030
4609	Parc Yr Eglwys	Medieval	185700	227200
12349	Prenhesken	Medieval	183400	224800
12352	Rhyd-y-gele	Medieval	185900	224400
2736	Rickeston;rickardston;richardston	Medieval	184600	225240
121609		Post-medieval	186904	225494
125818		Post-medieval	185400	227180
125819		Post-medieval	185510	227300
15037		Post-medieval	184540	223450
15091		Post-medieval	184920	223420
15615		Post-medieval	183710	226910
17956		Post-medieval	186000	224470
54863		Post-medieval	184020	225090
54866		Post-medieval	183990	224220
54870		Post-medieval	184170	225050
94164		Post-medieval	183740	223100
94165		Post-medieval	184300	223440
94320		Post-medieval	186130	224780
94321		Post-medieval	186160	224820
94324		Post-medieval	185620	224030
94426		Post-medieval	183290	225250
94427		Post-medieval	183140	224850
118853	White House	Post-medieval	185770	225051
94326	Blaen-llyn	Post-medieval	185680	223270
94322	Brawdy	Post-medieval	185770	223990



94323	Brawdy	Post-medieval	185820	224070
2815	Brawdy House	Post-medieval	185780	223970
7853	Brawdy Methodist Chapel	Post-medieval	185940	224410
23754	Broadway	Post-medieval	185075	223836
5593	Bryn Merched	Post-medieval	185400	226400
118802	Bryn-gwyn	Post-medieval	184281	224512
119212	Byhold	Post-medieval	186507	226901
7854	Chapel Cottages	Post-medieval	185940	224390
23770	Clawdd Bwi	Post-medieval	184374	226141
23769	Cross Wen	Post-medieval	185268	225553
32721	Cwm Bach	Post-medieval	184000	223080
32722	Cwm Bach	Post-medieval	183890	223130
23748	Cwm Mawr	Post-medieval	184407	222893
118859	Great Hook	Post-medieval	186875	225995
16535	Hendre Croes	Post-medieval	183600	226900
118851	Hendre House	Post-medieval	183743	227218
16532	Hendre House	Post-medieval	183750	227210
10012	Llain-barlow	Post-medieval	184160	226430
119224	Llandeloy	Post-medieval	185742	226766
119225	Llandeloy	Post-medieval	185704	226769
118797	Llethr	Post-medieval	185472	223567
112775	Maerdy	Post-medieval	184070	225400
112776	Maerdy	Post-medieval	183780	225380
112777	Maerdy	Post-medieval	183951	225477
54860	Maerdy	Post-medieval	184150	225410
54861	Maerdy	Post-medieval	184140	225400
118840	Maerdy Lodge	Post-medieval	183962	225160
24404	Manse the	Post-medieval	186720	225490
118800	Mutton Hall	Post-medieval	185154	224616
23753	Mutton Hill	Post-medieval	185240	224530
23752	Newgale Hill	Post-medieval	184200	224100
15624	Paran Chapel	Post-medieval	183680	226280
118796	Pen-y-cwm	Post-medieval	184822	223405
23750	Pen-y-cwm	Post-medieval	184700	223270
118858	Pen-y-gors	Post-medieval	186264	225543
121632	Perche	Post-medieval	183915	226648
118839	Pren-ysgawen	Post-medieval	183500	224869
119211	Rhos-graeanog-isaf	Post-medieval	186235	227174
118801	Rhwle	Post-medieval	184794	224745
23749	Rhwle	Post-medieval	184560	224750
112772	Rickeston	Post-medieval	184550	225379
118852	Rickeston	Post-medieval	184672	225400
15450	Rickeston Hall	Post-medieval	184700	225390
118804	Scarborough	Post-medieval	184170	223884
94166	Scarborough	Post-medieval	184160	223880
118798	Silver Hill	Post-medieval	186388	224255
25486	Silver Hill	Post-medieval	186400	224300
94424	Tal-y-bont	Post-medieval	183250	225050
94425	Tal-y-bont	Post-medieval	183310	225070
118803	Tre-newydd	Post-medieval	184485	224077
119203	Trefanner	Post-medieval	185200	226757
119202	Treiva	Post-medieval	184865	227079
15786	Troed-y-rhiw	Post-medieval	186160	224760



23761	Troed-y-rhiw	Post-medieval	186190	224910
118842	Vagwyr-walter	Post-medieval	183466	225908
94183	Vagwyr-walter	Post-medieval	183460	225910
119226	Vanley	Post-medieval	186178	226486
119978		Modern	184881	222680
110412	Cawdor	Modern	184580	224600
103729	De Havilland Mosquito Hr495	Modern	186500	225100
105333	De Havilland Sea Vampire Xa106	Modern	185000	225000
105312	Hawker Hunter T.7 XI583	Modern	185000	227000
112773	Maerdy	Modern	183993	225601
105890	Navfac Brawdy	Modern	184140	223780
102001	Raf Brawdy / Rnas Brawdy	Modern	185010	224860
102524	Raf Brawdy / Rnas Brawdy	Modern	184750	224490
102525	Raf Brawdy / Rnas Brawdy	Modern	184920	224580
102526	Raf Brawdy / Rnas Brawdy	Modern	184530	224690
102527	Raf Brawdy / Rnas Brawdy	Modern	184290	224700
102529	Raf Brawdy / Rnas Brawdy	Modern	185390	225860
102530	Raf Brawdy / Rnas Brawdy	Modern	184970	226140
102531	Raf Brawdy / Rnas Brawdy	Modern	184830	226460
102532	Raf Brawdy / Rnas Brawdy	Modern	185540	225830
105894	Raf Brawdy Sewage Works	Modern	183320	224110
105887	Raf Brawdy Site No 2	Modern	184390	224000
105888	Raf Brawdy Site No 3	Modern	183600	223970
105889	Raf Brawdy Site No 4	Modern	184120	223780
105891	Raf Brawdy Site No 5	Modern	183950	224050
105892	Raf Brawdy Site No 6	Modern	184760	224030
105893	Raf Brawdy Site No 7	Modern	183830	223770
102528	Raf Brawdy/rnas Brawdy/cawdor Barracks	Modern	184930	224390
105340	Westland Whirlwind Has 7 Xk939	Modern	186200	224700
121879		Undated	183739	224876
54865		Undated	184370	224470
54868		Undated	184230	225560
54869		Undated	184460	225670
54871		Undated	183770	224910
94168		Undated	184150	224130
94181		Undated	183320	226110
94182		Undated	183450	226110
118157	Brawdy	Undated	185980	224300
94167	Brawdy	Undated	184166	223622
2781	Pen-y-cwm	Undated	183957	222993
10172	St Teilo Dedication	Undated	185700	226700
10630	St Tenoï Dedication	Undated	185000	225000
52686	Newgale (Intertidal and Coastal Zone 2004-5)	Event	184881	221379
48116	Newgale (Intertidal and Coastal Zone)	Event	184881	221379
111466	Maerdy Farm, Penycwm, Pembrokeshire	Event	183948	225502
32841	Brawdy Farm	Event	185376	224116
44440	Llandeloy Church	Event	185696	226697
102416	Twentieth Century Military Sites	Event	184909	225246

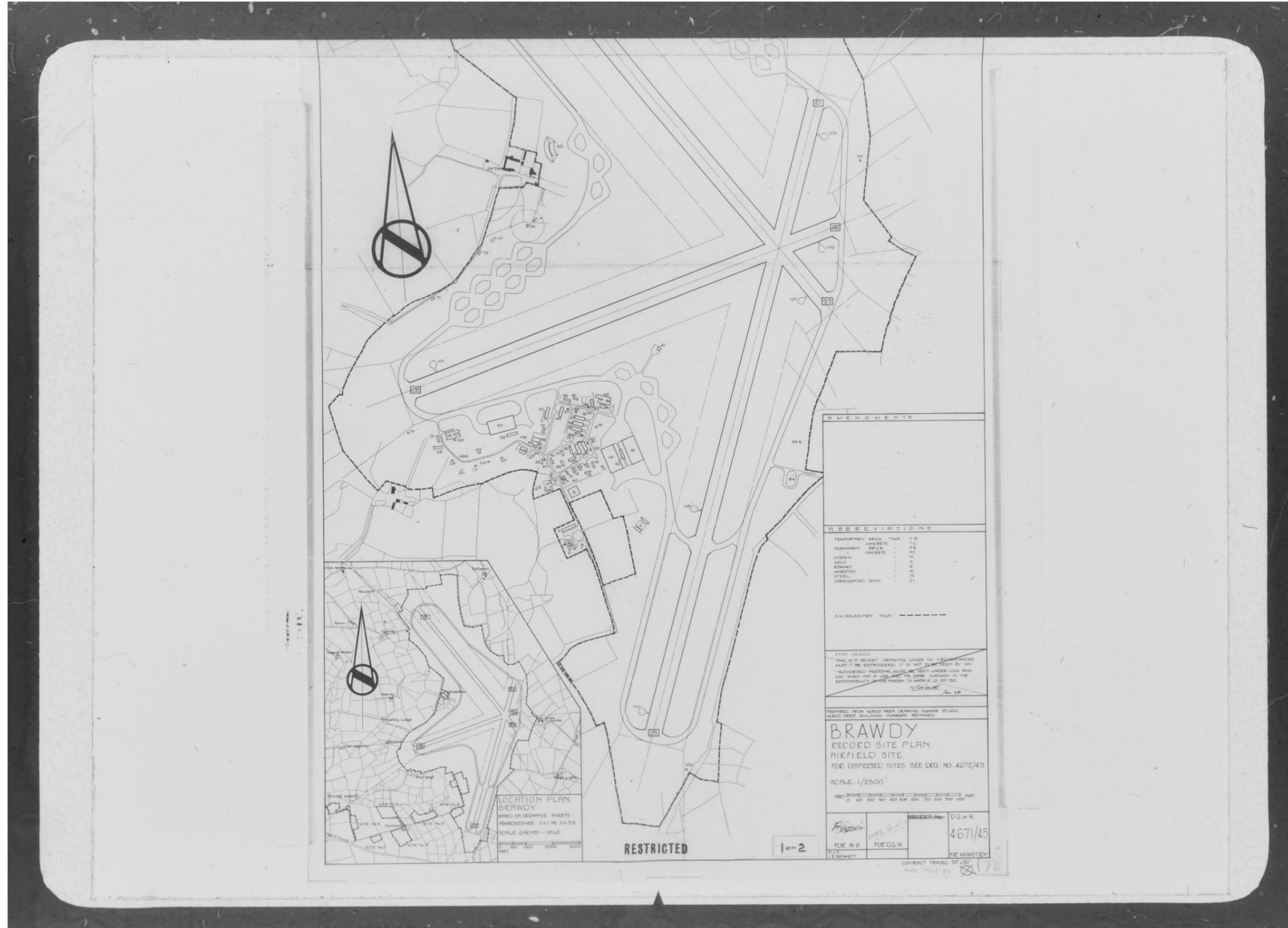


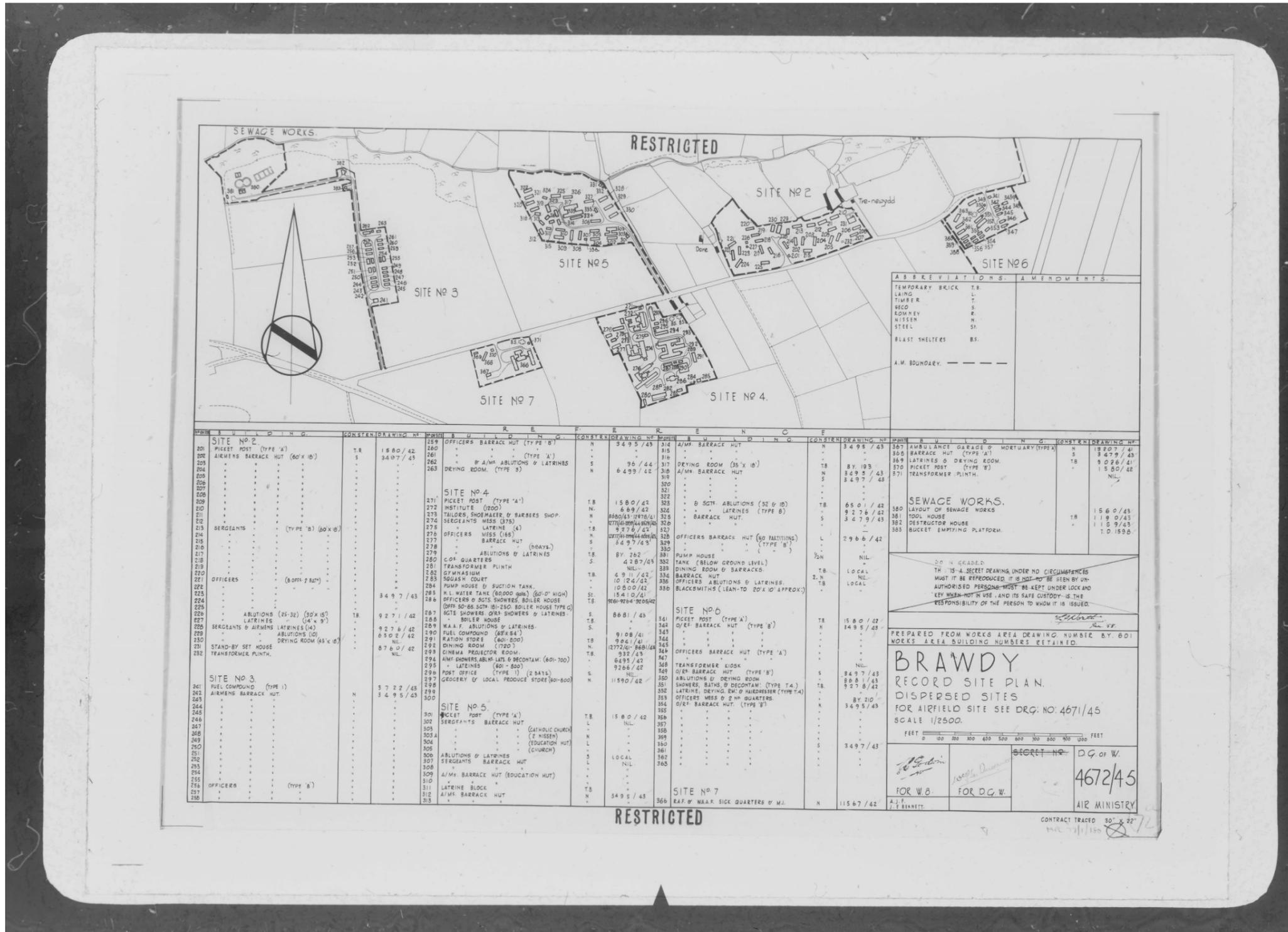
Designated Heritage Assets

Record Number	Name	Grade	Easting	Northing
12473	Paran Chapel	II	183675	226274
13077	Rickeston Hall	II*	184698	225387
13078	Three-Seater Privy to N of Rickeston Hall	II	184700	225398
13079	U-Plan Farmhouse Ranges at Rickeston Hall	II	184628	225414
13080	Carriage-House at Rickeston Hall	II	184681	225429
14396	Church of St David	II*	185804	224040
14397	Church of Saint Teilo	II	185696	226697
14400	Hendre Cross	II	183601	226903
14405	Llethr	II	185406	223538
14406	Stable Block at Llethr	II	185429	223580
PE540	Bay View Farm Defended Enclosure	Scheduled Monument	185157	223209
PE422	Brawdy Promontory Fort	Scheduled Monument	186273	223966

Appendix 4: RAF Plans of RAF Brawdy









Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk





ES Appendix 10.2: Historic Environment Settings Assessment - Stages 1 and 2



Project DARC – Cawdor Barracks, St Davids, Haverfordwest, Wales

Historic Environment Settings Assessment



WA Document Ref.: 272400.4
February 2023



© Wessex Archaeology Ltd 2023, all rights reserved

Unit R6
Sheaf Bank Business Park
Prospect Rd
Lowfield
Sheffield
S2 3EN

www.wessexarch.co.uk

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB.

Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.

Document Information

Document title Project DARC – Cawdor Barracks, St Davids, Haverfordwest, Wales
Document subtitle Historic Environment Settings Assessment
Document reference 272400.4

Client name SWECO UK Limited
Address Sweco 2nd Floor Quay 2 139 Fountainbridge Edinburgh, EH3 9QG

Project management by Andrew Reid
Document compiled by Thomas Piggott
Graphics by Thomas Piggott

Quality Assurance

Issue	Date	Author	Approved by
1	10/02/2023	TP	



Contents

Summary	iii
1 INTRODUCTION	1
1.1 Project background.....	1
1.2 The Site	1
1.3 Development Proposals.....	2
1.1 Aims and Purpose of the document	2
2 LEGISLATION AND GUIDANCE	2
2.1 Introduction.....	2
2.2 National Policy	3
2.3 Local Planning Policy.....	3
2.4 Guidance	3
3 METHODOLOGY	4
3.1 Introduction.....	4
3.2 Study Areas	4
3.3 Sources consulted	4
3.4 Site visit	4
3.5 Significance	5
3.6 Setting	5
4 DESIGNATED HISTORIC ASSETS	6
4.1 Summary of Assets.....	6
4.2 Historic asset grouping	6
5 INITIAL ASSESSMENT.....	9
6 CONCLUSIONS	29
6.1 General.....	29
REFERENCES	30
Bibliography	30
APPENDICES	31
Appendix 1: Terminology	31
Appendix 2: Legislative and planning framework	32



Figures

Figure 1 Site, Study Areas and Designated Historic assets

Plates

- Plate 1 View from the northwest section of the Site, facing southeast
- Plate 2 View from the northeast section of the Site, facing southwest
- Plate 3 View from the centre of the Site, facing north
- Plate 4 View the centre of the runway, facing southwest towards the Technical Site
- Plate 5 View from the southern section of the Site, facing northwest
- Plate 6 View the western section of the Site (north of the Technical Site), facing northwest to Ricketson Hall (List entry 13077)
- Plate 7 View from the northwest section of the Site, facing north towards Llandeloy
- Plate 8 View the southern section of the Site, facing southeast towards Penycwm and Llethr Farm
- Plate 9 View from the western section of the Site, facing east towards the Church of St David (List entry 14396)
- Plate 10 View the southern section of the Site, facing southeast towards Llethr (List entry 14405)
- Plate 11 View from the western limits of Upper Solva, facing east towards the Site



Summary

Wessex Archaeology was commissioned by Sweco Ltd to prepare a Historic Environment Settings Assessment for Cawdor Barracks, St Davids, Haverfordwest, Wales, centred on National Grid Reference 184968, 225214.

The assessment is to inform the development of a Deep Space Advanced Radar Capability (DARC) facility at Cawdor Barracks and will serve as a technical appendix for an Environmental Impact Assessment (EIA).

The aims of the study were to determine whether there may be an impact to the significance of historic assets through a change in their setting, or how the assets are experienced as a result of the development. A refinement exercise was undertaken for designated and undesignated historic assets within a 5 km study area from the site boundary.

This document presents the results of a refinement exercise providing a description of each historic asset, their setting, significance, and a rationale as to whether assets have been scoped in for further detailed assessment as part of the EIA. Following this refinement process, the following historic assets have been taken forward for detailed assessment:

- Rickeston Hall Listed Building Group (13078, 13077, 13080 and 13079)
- Grade II Listed Church of Teilo (14397)
- Grade II Listed Llethr and Stable Block at Llethr (14405 and 14408)
- Grade II* Listed Church of St David (14396)
- White House Burial Chamber (PE159);
- Bay View Farm Defended Enclosure (PE540)
- Brawdy Promontory Fort Scheduled Monument (PE 422); and
- St Davids Peninsula and Ramsey Head Historic Landscape Character Area



Project DARC – Cawdor Barracks, St Davids, Haverfordwest

Historic Environment Settings Assessment

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Sweco Ltd ('the Client'), to prepare a Historic Environment Settings Assessment for a proposed Deep Space Advanced Radar Capability (DARC) facility at Cawdor Barracks, St Davids, Haverfordwest, Wales (hereafter 'the Site', **Figure 1**), centred on National Grid Reference (NGR) 184968, 225214.

1.1.2 This study will form a technical appendix to an Environmental Impact Assessment (EIA)

1.2 The Site

1.2.1 The Site is located approximately 1.2 km northeast of the coast of St. David's peninsula in Pembrokeshire, South Wales (**Plates 1-10**). It lies within a rural expanse, encircled by open fields, and to the north, pockets of unmanaged scrubland. Newgate Beach lies to the south.

1.2.2 The A487 skirts the southern boundary of the Site, travelling east to west between the nearest settlements; the villages of Solva (4.5 km to the southwest) and Newgale (2 km to the south). Rickeston Hall, a 19th century mansion and grounds lie upon the north-western boundary of the Site.

1.2.3 The Site lies upon the plateau of an escarpment with a steep ridge that drops to the north and east. A decommissioned runway sits upon the raised plateau of the area while associated barrack buildings are arranged within a valley to the southwest, in a more sheltered part of the Site.

1.2.4 The built aspect of the Site comprises a wide range of buildings including; accommodation blocks, office and mess buildings, storage and maintenance facilities, aircraft and vehicle hangers and sports/recreation facilities. A number of natural springs are present to the north of the main technical site.

1.2.5 Some small, isolated villages are situated sporadically in the surrounding area including Penycwm and Newgale to the south; Llandeloy to the north and Trefgarn Owen to the east. In addition, the Pembrokeshire Coast National Park is situated immediately south of the application site extending around the coastline.

1.2.6 The bedrock geology beneath the Site is recorded as the Lingula Flags Formation comprising sandstone and mudstone; sedimentary bedrock formed between 508 and 485.4 million years ago during the Cambrian period. This is overlain in part by superficial deposits of glaciofluvial sands and gravels (BGS Online Viewer). The geological record for this area is incomplete however and where the Site corresponds with vallied landscapes and spring waterchannels, there exists the potential for alluvium, colluvium, and peat deposits.



1.3 Development Proposals

- 1.3.1 The proposed development is to comprise the installation of up to six transmit radar antennas, 30 receive radar antennas, a radar antenna operations area and associated infrastructure.
- 1.3.2 The receiver antenna array footprint will have a footprint of up to 28 hectares (ha), and the transmit array footprint will be up to 20 ha. Additionally, the transmit array will be situated a minimum of 0.5 km away from the receiver array. The radar antenna operations area will be positioned adjacent to the receiver antenna array with its footprint dependant on the final layout.
- 1.3.3 The transmit and receive antenna height (above existing ground level) will be up to 15 m, with an antenna dish diameter of approximately 15 m. Each antenna will have a concrete foundation composed of an antenna foundation and a ground foundation. Each ground foundation will be approximately 7.3 m x 7.3 m and approximately 1.5 m deep, with the top graded. The antenna foundation will sit atop the ground foundation and will be approximately 4.9 m x 4.9 m in an octagonal shape. Surrounding the antenna ground foundation would be an additional 3.7 m width of pavement on each side to be used by maintenance vehicles.
- 1.3.4 Each transmit antenna will have an additional chiller unit and additional electronic equipment shelter, with a base foundation pad for the chiller of approximately 3.1 m x 13.7 m. The pad for the equipment shelter will be slightly smaller at approximately 3.7 m x 9.1 m.
- 1.3.5 The operations areas will be approximately 4.1 ha in size and include the system operations building, the system spares building, and the generator maintenance building. The operations area will also house a wastewater treatment outbuilding and leach field area, a shared fire suppression water tank with associated shared fire suppression pump, and an above-ground storage tank fuel farm.

1.1 Aims and Purpose of the document

- 1.1.1 The aims of this document are to:
- Identify which historic assets have the potential to be affected by the development proposals.
 - Provide an initial high-level appraisal of their setting and how this contributes to their heritage significance; and
 - Justify the inclusion or exclusion of historic assets taken forward for further, more detailed assessment.

2 LEGISLATION AND GUIDANCE

2.1 Introduction

- 2.1.1 The following section summarises the main components of the national and local planning and legislative framework governing the treatment of the historic environment within the planning process. Further detail is presented in **Appendix 2**.



2.2 National Policy

2.2.1 There is national legislation relating to the protection of, and proposed development on or near, important archaeological sites or historical buildings within planning regulations as defined under the provisions of the following:

- Ancient Monuments and Archaeological Areas Act 1979, as amended by the Historic Environment (Wales) Act 2016
- Historic Environment (Wales) Act 2016
- Planning Policy Wales (PPW) Edition 11 2021
- The Protection of Military Remains Act 1973
- Future Wales – The National Plan 2040 (2019, updated February 2021); and
- Planning (Listed Buildings and Conservation Areas) (Wales) 1990 Act, as amended by the Historic Environment (Wales) Act, 2016.

2.3 Local Planning Policy

2.3.1 In addition, local authorities are responsible for the protection of the historic environment within the planning system, in this case the following policies of the Pembrokeshire County Council (2013) are applicable:

- GN.38 Protection and Enhancement of the Historic Environment

2.3.2 Pembrokeshire County Council, with assistance from Pembrokeshire Coast National Park Authority, have prepared Conservation Area Appraisals as Supplementary Planning Guidance (SPG) for designated Conservation Areas. Of relevance to this assessment are:

- Solva Conservation Area Proposals (2011a); and
- Caerfarchell Conservation Area Proposals (2011b)

2.4 Guidance

2.4.1 Relevant best practice standards and guidance are published in the Chartered Institute for Archaeologists (CIfA) standards and guidance. For the purposes of this assessment, the relevant standards and guidance comprise:

- Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment (2020); and
- Standard and guidance for historic environment desk-based assessment (2020)

2.4.2 The Welsh Government published a technical advice note (TAN) for the historic environment in May 2017 (Welsh Government 2017). The purpose of the TAN is to provide guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and Listed Building (LBC) applications.

2.4.3 Guidance prepared by Cadw Conservation Principles for the sustainable management of the historic environment in Wales (2011) is also relevant to this assessment. Cadw have

also produced a series of best-practice guidance publications that complement the legislative and policy framework; documents relevant to this assessment comprise:

- Heritage Impact Assessment in Wales (2017a)
- Managing Change to Listed Buildings in Wales (2017b)
- Setting of Historic Assets in Wales (2017c).
- Managing Historic Character in Wales (2017d); and
- Managing Scheduled Monuments in Wales (2018)

3 METHODOLOGY

3.1 Introduction

3.1.1 The methodology employed during this assessment was based upon relevant professional guidance, including the Chartered Institute for Archaeologists' Standard and guidance for historic environment desk-based assessment (ClfA 2020).

3.2 Study Areas

3.2.1 A Study Area of 5 km was established from the Site boundary. The use of a 5 km Study Area was based on professional judgement and considered an appropriate size to capture the potential effects the proposed development would have on the heritage cultural significance of surrounding designated assets through a change to their setting.

3.2.2 Assets outside of the 5 km Study Area were considered on a case-by-case basis dependant on whether, based on professional judgement, the proposed development may result in a change to their setting which would impact upon its significance and how we come to appreciate, understand and experience the asset.

3.3 Sources consulted

- Designated historic assets received in digital format from the Cadw (Cof Fymru)
- Historic Environment Record data supplied by Dyfed Archaeological Trust
- Historic maps provided via a Envirocheck search received from the client and items accessible online; and
- Historic Environment Record of Wales (Archwilio)

3.4 Site visit

3.4.1 A site visit was undertaken on the 12th January 2023. The aim of the site was to identify any additional historical assets located within the Site and gain a understanding of the Site's relationship with the surrounding landscape. The inspection aimed to examine how the Site interacts with its surrounding historical assets and determine the potential impact of the proposed development on these assets.

3.5 Significance

3.5.1 Current national guidance for the assessment of the significance of historic assets is based on criteria provided by Cadw's (2017) *Heritage Impact Assessment in Wales*. Significance is weighed by consideration of the potential for the asset to demonstrate the following value criteria:

- evidential value: the extent to which the physical fabric tells how and when your historic asset was made, how it was used and how it has changed over time. There may be buried or obscured elements associated with your historic asset which may also be an important potential source of evidence.
- historical value: your historic asset may illustrate a particular past way of life or be associated with a specific person or event; there may be physical evidence for these connections which it could be important to retain
- aesthetic value: the design, construction and craftsmanship of your historic asset. This can also include setting and views to and from the historic asset, which may have changed through time.
- communal value: your historic asset may have particular significance to people for its commemorative, symbolic or spiritual value, or for the part it has played in local cultural or public life. This will be particularly important in the case of buildings in public use or sites where public access must be maintained or improved.

3.6 Setting

3.6.1 The significance of a historic asset is also informed by its setting. The manner in which the setting assessment was undertaken was informed by the guidance published by Cadw (2017c) in *Setting of Historic Assets in Wales*.

3.6.2 This guidance defines setting as:

'the surroundings in which it is understood, experienced and appreciated, embracing present and past relationships to the surrounding landscape... Setting is not itself a historic asset... The importance of setting lies in what it contributes to the significance of a historic asset' (Cadw 2017, 2).

3.6.3 The guidance advocates a systematic and staged approach to the assessment of the effects of development:

Stage 1: Identify the historic assets that might be affected by a proposed change or development.

Stage 2: Define and analyse the settings to understand how they contribute to the significance of the historic assets and, in particular, the ways in which the assets are understood, appreciated and experienced.

Stage 3: Evaluate the potential impact of a proposed change or development on that significance.

Stage 4: If necessary, consider options to mitigate or improve the potential impact of a proposed change or development on that significance.



3.6.4 For the purposes of this assessments stages 1 and 2 were completed. Stages 3 and 4 will be considered in the EIA.

4 DESIGNATED HISTORIC ASSETS

4.1 Summary of Assets

4.1.1 The following designated historic assets are located within the Study Area:

- One Grade I Listed Building
- Four Grade II* Listed Buildings
- 88 Grade II Listed Buildings
- 29 Scheduled Monuments
- Two Conservation Areas; and
- One Historic Landscape Character Area

4.2 Historic asset grouping

4.2.1 A number of assets have been grouped together based on a number of criteria. For instance, the four Listed Buildings located at the historic farmstead of Rickeston Hall have been grouped as they have a shared history and important spatial relationships. Asset groups and the rationale for their grouping are provided in the table below.



Table 1 Asset groups

Asset Group	Assets within the group	Designation number	Reason for grouping
Asset Group 1	Rickeston Hall, Carriage-House at Rickeston Hall, U-Plan Farmhouse Ranges at Rickeston Hall and Three-Seater Privy to N of Rickeston Hall	13077, 13080, 13079 and 13078	The assets are all located within the historic farmstead known as Rickeston Hall. The assets have a spatial and historical association.
Asset Group 2	Tremaenhir and Lofted Stable to SW of Tremaenhir	12478 and 12479	The assets are all located within the historic farmstead known as Tremaenhir. The assets have a spatial and historical association.
Asset Group 3	Cerbyd Old Farmhouse and L-Plan Range of Outbuildings at Cerbyd Old Farmhouse	12411 and 12412	The assets are all located within the historic farmstead known as Cerbyd Old Farm. The assets have a spatial and historical association.
Asset Group 4	Cartshed to E of Trenewydd Fawr, Granary Range to E of Trenewydd Fawr, Trenewydd Fawr, Range of Outbuildings on S.Side of Farmyard at Trenewydd Fawr, Outbuilding on W.Side of Fawr at Trenewydd Fawr and Range of Outbuildings on E.side of Fawr at Trenewydd Fawr	12418, 12419, 12417, 12420, 12421 and 12422	The assets are all located within the historic farmstead known as Trenewydd Fawr. The assets have a spatial and historical association.
Asset Group 5	Lochturffin and Outbuilding attached to W.of Lochturffin	12959 and 12960	The assets are all located within the historic farmstead known as Lochturffin. The assets have a spatial and historical association.
Asset Group 6	Limekiln on S.Side of Estuary, Limekiln on S.Side of Estuary, Limekiln on S.Side of Estuary, Limekiln on S.Side of Estuary and Lime Kilns	12455, 12454, 12453, 12452 and 3075	The assets comprise five surviving 19th century limekilns located in a line within a former industrial site, which has been designated a Scheduled Monument. The assets have a spatial and historical association.
Asset Group 7	Solva Bridge, The Cambrian Inn, Tan-Yr-Allt, The Hungry Caterpillar Cafe & Shop, The Old Printing House, Gwryd House, Glennydd, Limekiln adjacent to the Smithy, Limekiln adjacent to Brookside, NO.10 HIGH STREET, SOLFACH UCHAF/UPPER SOLVA,,,,,DYFED, Mount Pleasant Baptist Chapel, War Memorial, St Teilo, Church of St Aidan, Pen yr Aber (Bryn y Mor), One of Two Cottages, One of Two Cottage, Bank House, Glan y Mor and Solva Conservation Area	12443, 12444, 12445, 12446, 12447, 12448, 12449, 12450, 12451, 12456, 12457, 12458, 12459, 12460, 12461, 12462, 12463, 12464 and 15875	The assets are all situated within the Solva Conservation Area and form part of the two historic settlements of Upper and Lower Solva. They have a shared history and document the development of the two settlements, primarily during the post-medieval period.
Asset Group 8	The Corn Mill, The Mill House and Middle Mill Bridge	12468, 12469 and 12467	The assets form the surviving elements of a post-medieval industrial corn mill and have a



			historical and spatial association.
Asset Group 9	Roch Castle, Entrance walls and gatepiers to Roch Castle	11982 and 19079	The assets comprise the Grade I Listed Roch Castle and its listed entrance.
Asset Group 10	The Vicarage and Outbuilding to W. of the Vicarage	12475 and 12476	The assets comprise a vicarage and an outbuilding that is historically associated with the vicarage.
Asset Group 11	Caer Farchell Farmhouse, including rear court with seat, Outbuilding to rear of Caerfarchell Farmhouse, Y Post/The Old Post Office, Outbuilding to E. of Hamilton House, Capel Caerfarchell & Outbuilding to NE corner of Forecourt, Hamilton House, The Manse, including Pigsty attached at N.End, Range of outbuildings to rear of Hamilton House, Outbuilding to rear of the Manse and Caerfarchell Conservation Area	12662, 12663, 12670, 12668, 12664, 12667, 12665, 12669 and 12666	The assets are all located within the historic farmstead known as Caer Farchell. The assets have a spatial and historical association.
Asset Group 12	Llethr and Stable Block at Llethr	14405 and 14408	The assets are all located within the historic farmstead known as Llethr. The assets have a spatial and historical association.
Asset Group 13	Abernant including Front Garden Railings and Gate and Coach-House at Abernant	14398 and 14399	The assets are all located within the historic farmstead known as Abernant. The assets have a spatial and historical association.
Asset Group 14	Linked Outbuildings NE of Tyllwyd and Linked Outbuilding NE of Tyllwyd	14402 and 14403	The assets have a historical and spatial association marking the entrance to the historic farmstead of Tyllwyd.
Asset Group 15	Southwood, Outbuilding to E of Southwood and Farmyard ranges at Southwood	12008, 19082 and 19083	The assets are all located within the historic farmstead known as Southwood. The assets have a spatial and historical association.
Asset Group 16	Kingheriot and Lofted Cartshed & Stable at Kingheriot	12471 and 12472	The assets are all located within the historic farmstead known as Kingheriot. The assets have a spatial and historical association.



5 INITIAL ASSESSMENT

5.1 Introduction

- 5.1.1 The following tables provide an initial assessment of the assets within the Study Areas described above. The table provides a list of the assets considered, their proximity to the Site, their designation and a brief description of their setting and significance. Observations made during the site visits are provided as part of the rationale as to whether the assets have been included for further assessment. This is analogous to Stages 1 and 2 of the Cadw *Setting of Historic Assets in Wales* (2017).

Table 2 Designated (or of equivalent significance) Historic Assets within the Study Areas

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
Asset group 1: 13078, 13077, 13080 and 13079	Rickeston Hall, Carriage-House at Rickeston Hall, U-Plan Farmhouse Ranges at Rickeston Hall and Three-Seater Privy to N of Rickeston Hall	Grade II* Listed Building and three Grade II Listed Buildings	0.06	<p>The assets comprise the early 19th century farmhouse known as Rickeston Hall and other associated farm buildings and domestic structures including a carriage house, farmhouse range and a privy. The house was built for Samuel Griffith who purchased the farm and its landholdings in 1785.</p> <p>Although the current house is early 19th century, Rickeston dates back to the medieval period and is named after a Norman, Rickart. The rear wing to Rickeston Hall may also be 17th or 18th century in origin.</p>	<p>The assets' immediate setting comprises the farmstead itself, which today contains both the assets discussed and a range of more modern additions. The farmstead is surrounded to the north, south and east by woodland and to the west by an agricultural field.</p> <p>The wider setting of the assets comprises the Site, which lies just beyond the woodland to the north, south and east, and the wider agricultural landscape.</p> <p>According to the title records, most of the land used to construct Cawdor Barracks was owned by Griffith family, who resided at Rickeston Hall.</p>	<p>The significance of the assets is drawn from their evidential and aesthetic values. This is through the physical fabric of the structures together with the overall design and construction, standing as good examples of their type. Rickeston Hall also has further evidential value associated with the earlier rear range and potential for further structural elements of an early domestic dwelling to exist within the built fabric of the 19th century house.</p> <p>The assets also derive significance from their historical value through their association with the Griffith family and through what they tell us of life on an early 19th century farmstead, particularly the relationship between the domestic and working areas.</p> <p>The immediate setting of the assets positively contributes to their significance as it is within the immediate setting that their evidential and aesthetic value is best appreciated and experienced. The agricultural land to the west also contributes to their significance and to our understanding of the farmstead's historical ties to the wider agriscap.</p> <p>Cawdor Barracks (the Site) does not contribute to their significance as it does not affect how we appreciate or understand its identified values. The legibility of this area as historic farmland associated with Rickeston Hall has been lost.</p>	Scoped In	Given the Site's proximity to the historic assets it is likely that the arrays (although dependant on their final position) may be appreciable above the woodland and from within the farmstead (Plate 6), particularly on the approach from the west. The presence of the arrays may have an effect on the appreciation and understanding of their significance. For the reasons outlined above the asset group has been included for detailed assessment.
14397	Church of Saint Teilo	Grade II Listed Building	0.17	The asset is a medieval church that was rebuilt in 1926 by J Coates Carter, architect of Cardiff and Penarth in the Arts and Crafts style, using local materials.	<p>The immediate setting of the asset comprises its surrounding churchyard, which is delineated by hedgerows to the east and south, trees to the west and two residential dwellings to the north.</p> <p>The wider setting of the assets includes the small village of Llandeloy, agricultural land and the Site. The church is visible from within the northern part of the Site and vice versa.</p>	<p>The significance of the asset is drawn from its evidential and aesthetic values as a rare example of a church in West Wales built according to the Arts and Craft style, while using local materials and conforming to a traditional small chapel design.</p> <p>The asset also has further evidential and historical value as there may be physical elements of the medieval church integrated into the later reconstruction and its ties to the village of Llandeloy and the Thomas family of Trehale, who commissioned the reconstruction.</p> <p>There is also some significance derived from its communal value due to the spiritual value it holds to the local people.</p> <p>Both the immediate and wider setting of the asset contributes to its significance, as its evidential and aesthetic value can be experienced in both, particularly in the land to the south when facing north. This includes from within the northern part of Cawdor Barracks (the Site) looking north. This view allows the relationship between the church, the agricultural land and the small village to be experienced.</p>	Scoped In	The Site is located 170 m to the south of the asset and forms part of its setting (Plate 7). Dependant on their final location, the arrays may have a potential effect on to the appreciation and understanding of its significance. For the reasons outlined above the asset group has been included for detailed assessment.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
Asset group 12: 14405 and 14408	Llethr and Stable Block at Llethr	Two Grade II Listed Buildings	0.4	The assets comprise the 19th century landed gentry house known as Llethr and its associated stable block. Both buildings were identified to be in a serious state of disrepair during an inspection in 1993. Their current condition is unknown.	<p>The asset's immediate setting comprises the farmstead itself, which today contains both the assets discussed and a range of more modern additions.</p> <p>The wider setting of the assets is defined by their surrounding rural landscape with agricultural fields in all directions. Just to their west also lies the small village of Penycwm.</p>	<p>The significance of the assets lies in their evidential and aesthetic values as an example of a 19th century landed gentry house with an associated stable, both built from local material to the traditional regional design. However, both values may have been significantly eroded if they have remained in the same state of disrepair as identified in the 1993 inspection.</p> <p>The assets also have historic value as part of a historic working farmstead, with Llethr dating back to at least the 18th century. Although they may not still be in use, Llethr remains a working farmstead.</p> <p>The immediate setting contributes towards their significance through the appreciation and understanding of the relationship between the two buildings and their evidential and aesthetic values. The wider farmstead also contributes to their significance, through the ability to understand that they remain part of a still functioning farm.</p>	Scoped In	The Site is located 400 m to the west of the assets and forms part of their wider setting (Plate 8 and 10). Dependant on the final location of the arrays, they may be visible above the woodland which borders the farmstead. Their presence may affect how we come to appreciate the heritage values of the assets and the contribution made by setting to their significance. For the reasons outlined above the asset group has been included for detailed assessment.
12473	Paran Chapel	Grade II Listed Building	0.52	The asset comprises a small Congregational Chapel built in 1841 in squared rubble stone under a slate roof. The chapel is no longer in use.	<p>The immediate setting of the asset comprises its former churchyard, defined by woodland and hedges.</p> <p>The wider setting of the asset is predominantly defined by its position within the surrounding agricultural landscape. A series of relatively modern domestic dwellings and modern farm buildings exist to the northwest of the chapel.</p> <p>Historically the chapel was positioned at the junction of the road. However, changes in the road layout have placed it further to the west behind the the modern woodland plantation.</p> <p>As a result of the woodland plantation and development to the west, views from the chapel are only possible to the north and south.</p>	<p>The significance of the asset is derived from its evidential and aesthetic values as an example of a small Congregational chapel built in a traditional style from traditional materials.</p> <p>The asset also has some communal value through its spiritual value to the local people. However, this has been eroded as the chapel is no longer in religious use.</p> <p>The asset's immediate setting contributes to its significance, as it is within this area that the evidential and aesthetic values are best appreciated.</p> <p>The wider setting of the assets makes a limited contribution towards its significance. Due to its squat size, it is not designed to be a landmark within the landscape (unlike larger examples with a tower). The surrounding rural landscape adds context as to why it was built to the size it is, as it served a small rural community, which enhances our understanding of its historic value. However, as a result of the woodland plantation an appreciation of its relationship to the rural landscape is only possible from the chapel northwards and southwards.</p>	Scoped out	<p>The woodland plantation screens any visibility from the asset in the direction of the Site. Equally, the plantation means that the chapel is no longer appreciable from within the surrounding landscape. Therefore, it is considered that the proposed development would have no effect on the significance of the asset or the contribution made by its setting towards its significance. It has been scoped out of detailed assessments.</p> <p>=</p>
14396	Church of St David	Grade II* Listed Building	0.58	The asset comprises the medieval parish church known as the Church of St David. The church is believed to date to around the 14th century but was restored and remodelled by E H Lingen-Barker in 1882-4.	<p>The immediate setting of the asset comprises its churchyard, which is defined by a series of hedges and trees. The church has been built on the eastern end of a raised plateau, with the historic farmstead of Brawdy located to its south.</p> <p>The surrounding rural landscape forms part of the wider setting of the asset along with the Site and several areas of woodland.</p>	<p>The significance of the asset is derived from its evidential and aesthetic values as an example of a medieval church that has undergone restoration works during the 19th century. The changes in built fabric and overall design provide insight into changes in church style within the region. It also has historical value, having served the local community as the parish church since the 14th century, and communal value for the part it has played in local life as a religious structure.</p> <p>The immediate setting of the asset contributes towards its significance as it is within close proximity that its evidential and aesthetic values are best appreciated and understood.</p> <p>The historical value is best appreciated from within its wider setting as this is where it is best understood as serving a dispersed rural community. Its position on the plateau makes it an important landmark building within the surrounding landscape.</p>	Scoped In	<p>The Site, located 580 m west of the asset, forms part of the setting of the heritage asset (Plate 9). There remain glimpsed views in the direction of the Site through breaks within the woodland boundary that surrounds the churchyard.</p> <p>The proposed development would represent a change to its setting which may affect the contribution made by setting to the significance of the asset, particularly the appreciation of its historic value.</p> <p>Therefore it has been scoped in for further detailed assessment as part of the ES.</p>



Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
14400	Hendre Cross	Grade II Listed Building	0.76	The asset comprises a former national school built by Joseph Jenkins of Haverfordwest in 1855. The building is a L plan shaped single-storey schoolroom constructed from coursed grey stone under a slate roof. The building now serves as a private residence.	The immediate setting of the asset comprises the former school playgrounds that have been converted into a garden and parking area for the residence. The boundaries of the asset are formed by woodland on three sides and a low boundary wall. The wider setting of the asset features the Site, a small woodland plantation to the west and agricultural land intermixed with dispersed farmsteads in all remaining directions.	The significance of the asset is derived from its evidential and aesthetic values as an example of a mid-19th century single-storey school designed to serve a small rural community. However, the elements that allowed the appreciation of the structure as a school have been lost by its transformation into a private residence. What remains of its evidential and aesthetic values are best appreciated from its immediate setting where they can be understood and appreciated. The wider setting of the asset does not contribute to its significance.	Scoped out	The wider setting of the asset does not contribute towards its significance with its heritage values only being appreciable from close proximity. As such, there can be no harm to its significance through the presence of the proposed development.
12465	Ffynnonddewi (Brawdy)	Grade II Listed Building	1.24	The asset comprises a small two-storey mid-19th century farmhouse constructed from roughcast rubble stone under a slate roof.	The immediate setting of the asset is formed by the wider farmstead with two ranges of agricultural buildings to the south. The farmstead's boundaries are formed by woodland and hedges. The wider setting is formed of its wider agricultural surroundings.	The significance of the asset is derived from its evidential and aesthetic values as an example of a small farmhouse of mid-19th century origin constructed from local materials to a traditional design. There is also some further significance derived from its historical value as it shows how domestic dwellings within a farmstead setting have evolved over the past 150 years. All three values are best appreciated within close proximity to the asset. The wider setting of the asset also contributes to its significance with Ffynnonddewi remaining a working farm and the surrounding agricultural lands allows us to understand and appreciate this.	Scoped out	The Site is screened from the asset by the woodland that surrounds the farmstead and a larger area of woodland to the east. The proposed development will not affect the ability to appreciate or understand the architectural quality (evidential and aesthetic values) of the building or its relationship to its surrounding agriscap (historic value). Therefore, there can be no harm to significance through the presence of the proposed development.
14401	Felin Wen	Grade II Listed Building	1.5	The asset comprises a early 19th century Watermill constructed in rubble stone under a slate roof. The mill stands to a height of two stories and features a number of loft windows. When designated the mill contained a large amount of its original machinery. The current condition of the mill is unknown.	The immediate setting of the asset is defined by its location on the bank of a small stream with woodland to its north, modern agricultural buildings to the east and south and agricultural land to the west. The wider setting is formed of its wider agricultural surroundings.	The significance of the asset is derived from its evidential and historical value, primarily through the survival of its original machinery. However, some value is also associated with its overall design and use of traditional materials. The mill's proximity to the small stream maintains its legibility as a former watermill and contributes to the appreciation and understanding of its evidential value. The wider agricultural surroundings also contribute to its significance as the surrounding land provides context for why the mill was required.	Scoped out	Although the wider setting of the asset contributes towards its significance, it is not considered to extend as far as the Site which is located 1.5 km to the southeast. As such, there can be no harm to significance through the presence of the proposed development.
Asset group 2: 12478 and 12479	Tremaenhir and Lofted Stable to SW of Tremaenhir	Two Grade II Listed Buildings	1.5	The assets comprise a two-storey farmhouse of late 18th century or early 19th-century origins and a 19th-century lofted stable.	The immediate setting of the assets is defined by their position within the historic farmstead of Tremaenhir. Most of the buildings within the farmstead are of modern origin, with the farmstead itself bound by woodland on all sides. Their wider setting is formed of their wider agricultural surroundings.	The significance of the assets is derived from their evidential and aesthetic values as surviving components of the farmstead and through their overall design. The buildings also have some historical value as they can show how life on a working farmstead has changed over time. All three values are best appreciated from within their immediate surroundings. The wider setting of the assets also contributes to their significance as they remain part of a working farm surrounded by its associated agricultural land.	Scoped out	Although the wider setting of the asset contributes towards its significance, it is not considered to extend as far as the Site which is located 1.5 km to the west. As such, there can be no harm to significance through the presence of the proposed development.



Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
Asset group 13: 14398 and 14399	Abernant its front garden railings and gate and its associated coach house.	Two Grade II Listed Buildings	1.7	The assets comprise a two-storey farmhouse of mid to late 19th-century farmhouse and its associated form coach-house.	The immediate setting of the assets is defined by their position within the historic farmstead of Abernat. Both assets are located within the farmstead's domestic area, with most of the agricultural buildings set to the north within a dispersed courtyard. The wider setting of the assets is formed of their wider agricultural surroundings.	The significance of the assets is derived from their evidential and aesthetic values as surviving components of the farmstead built from local materials in a traditional style. The buildings also have some historical value as they can show how life on a working farmstead has changed over time. All three values are best appreciated from within their immediate surroundings, especially the relationship between the domestic and working areas and the assets themselves. The wider surroundings also enhance the historical value of the farmhouse in aiding our understanding of this as an isolated farmhouse surrounded by agricultural fields.	Scoped out	Although the proposed development may be appreciable in glimpsed views from the rear of the farmhouse facing towards the Site, it will not affect the ability to understand the significance of the farmhouse, either in terms of the architectural quality of the building (aesthetic and evidential values), or its historic association with the wider agricultural landscape. Therefore, it has been scoped out of detailed assessment.
19081	Limekiln at S end of Newgale Sands	Grade II Listed Building	1.8	The assets comprise the remains of a mid to late 19th century lime kiln. The kiln is constructed from rubble stone and features an entrance in the east side.	The asset's setting comprises the bank it has been built into, the modern car park and road, and the Newgale Sands to its west.	The significance of the asset lies in evidential and historical values as a relic of the 19th century limekiln coastal trade. Both of these can be appreciated within its setting, particularly its relationship to the bank it has been cut into. Its relationship to the coast and Newgale Sands also remains legible.	Scoped out	The Site is located 1.8 km to the north of the asset and does not form part of its setting. As such, there can be no harm to their significance through the presence of the proposed development.
14404	Llanreithan	Grade II Listed Building	2	The asset is a late 18th or early 19th century farmhouse. The building is thought to have replaced an earlier gentry house of 16th century origins. The farmhouse appears to no longer form part of a working farm and is now a private residence.	The immediate setting of the farmhouse is defined by its position within the former farmstead, located in the northern section of the courtyard. The wider setting of the asset is formed by its wider agricultural surroundings.	The significance of the asset is derived from its evidential and aesthetic values as an example of a late 18th to early 19th century farmstead constructed from local materials to a traditional design. There is also some further significance derived from its historical value in how the structure can tell us how domestic dwellings within a farmstead setting have evolved over time. However, this has been partially eroded as Llanreithan is no longer a working farmstead. The authenticity of the surrounding buildings as being of agricultural use is diminished. The immediate setting of the asset contributes to its significance and how we come to appreciate its evidential and aesthetic values. The wider setting makes no contribution towards its significance as it no longer has an association with the surrounding agricultural land.	Scoped out	Although the proposed development may be appreciable in glimpsed views from the front elevation of the farmhouse facing south towards the Site, it will not affect the ability to understand the significance of the farmhouse, either in terms of the architectural quality of the building (aesthetic and evidential values), or its historic association with the wider agricultural landscape. Therefore, it has been scoped out of detailed assessment.
Asset group 14: 14402 and 14403	Linked Outbuildings NE of Tyllwyd and Linked Outbuilding NE of Tyllwyd	Two Grade II Listed Buildings	2.1	The assets comprise two coach houses built in 1844 and 1848.	The immediate setting of the coach houses are defined by their position at the eastern end of the historic farmstead courtyard. The wider setting of the assets are formed by their wider agricultural surroundings and the village of Treffynnon to their southeast.	The significance of the assets is derived from their evidential and aesthetic values as examples of coach houses built within a historic farmstead using traditional materials to a traditional design. The assets also have some historical value as part of the historic farmstead. Their presence provides insight into how the historic farmstead worked and the owners' wealth at the time of their construction. The immediate setting of the assets contributes to their significance and how we appreciate their evidential and aesthetic values, particularly their relationship to the wider farmstead and between each other.	Scoped out	The Site is located 2.1 km southeast of the assets and does not form part of their setting. As such, there can be no harm to their significance through the presence of the proposed development.



Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
Asset group 3: 12411 and 12412	Cerbyd Old Farmhouse and L-Plan Range of Outbuildings at Cerbyd Old Farmhouse	Two Grade II Listed Buildings	2.1	The assets comprise the early to mid-19th-century farmhouse known as Cerbyd and a range of outbuildings of similar origin that form part of Cebyd historic farmstead.	The immediate setting of the assets is defined by their immediate surroundings, which comprises the historic farmstead. The wider setting is formed by areas of woodland, agricultural fields and interspersed farmsteads.	<p>The significance of the assets is derived from their evidential and aesthetic values as examples of a 19th century farm and farm outbuilding constructed from local materials in a traditional design. The assets also have some historical interest as part of a historic farmstead and can show us how domestic and working farm buildings changed over time.</p> <p>The immediate setting of the assets contributes to their significance and how we appreciate their evidential and aesthetic values, particularly their relationship to the wider farmstead and each other.</p> <p>The wider surroundings also enhance the historical value of the farmhouse in aiding the understanding of this as an isolated farmhouse surrounded by agricultural fields.</p>	Scoped out	Although the wider setting of the assets contributes towards their significance, it is not considered to extend as far as the Site which is located 2.1 km southeast of the assets and screened by intervening woodland. As such, there can be no harm to significance through the presence of the proposed development.
Asset group 15: 12008, 19082 and 19083	Southwood, Outbuilding to E of Southwood and Farmyard ranges at Southwood	Three Grade II Listed Buildings	2.2	The assets comprise an early 19th century farmhouse known as Southwood and two ranges of farm buildings of contemporary date.	<p>The immediate setting of the assets is formed by the farmstead in which they are located. The farmhouse and other two assets delineate the northern and eastern boundary of a small square courtyard.</p> <p>The wider setting is formed by the wider agricultural surroundings.</p>	<p>The significance of the assets is drawn from their evidential, aesthetic and group value as one of the most complete sets of traditional farm buildings within the region, built from local materials to traditional designs.</p> <p>The immediate and wider setting contribute to their significance as it allows the relationship between the assets to be appreciated and their continued role as part of a working farm.</p>	Scoped out	Although the wider setting of the asset contributes towards its significance, it is not considered to extend as far as the Site which is located 2.2 km north of the assets. As such, there can be no harm to significance through the presence of the proposed development.
12413	Pont-y-Cerbyd	Grade II Listed Building	2.3	The asset comprises a late 18th to early 19th century stone bridge located over the River Solva.	The River Solva, agricultural fields and areas of woodland form the setting of the asset.	The significance of the asset is drawn from its evidential and aesthetic value as an example of a traditional stone bridge. The setting of the asset enhances its aesthetic value, with the river, woodland and agricultural land providing a scenic backdrop for the bridge.	Scoped out	The Site is located 2.3 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12423	Church of St Hywel	Grade II* Listed Building	2.5	The Church of St Hywel dates to possibly the 14th or 15th centuries but was heavily restored in the 19th century. It has served as the parish church and is built to a traditional design with a nave, chancel and small private chapel.	<p>The immediate setting of the asset is defined by its surrounding churchyard, the boundaries of which are delineated by a mix of woodland and hedges.</p> <p>The wider setting features St Hywel House to the northwest, with which the church has a historical association and agricultural land in all directions. The church is set on an east-west aligned slope that provides long-distance views south and east.</p>	<p>The significance of the asset is drawn from its evidential and aesthetic values as an example of a late medieval church that underwent restoration in the 19th century, which is best seen within the changes in its physical fabric. It has further historical value through its age and the information that it can provide about changes in religious worship over the past 600 years.</p> <p>Both the immediate and wider setting contribute towards the significance of the asset. It is from within its immediate surrounding that its evidential, aesthetic and historical values are best appreciated. Through the wider setting, the relationship between the church and St. Hywel House can be understood together with the reasons for its placement. The church was designed to be visible within the landscape.</p>	Scoped out	The Site is located 2.5 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
Asset group 4: 12418, 12419, 12417, 12420, 12421 and 12422	Cartshed to E of Trenewydd Fawr, Granary Range to E of Trenewydd Fawr, Trenewydd Fawr, Range of Outbuildings on S.Side of Farmyard at Trenewydd Fawr, Outbuilding on W.Side of Farmyard at Trenewydd Fawr and Range of Outbuildings on E.side of Farmyard at Trenewydd Fawr	Six Grade II Listed Buildings	2.9	The assets comprise the mid to late 19th century farmhouse known as Trenewydd Fawr and its contemporary range of farm buildings.	<p>Their immediate setting is defined by the historic farmstead and their placement within it, particularly the separation between the domestic and working areas.</p> <p>The wider setting is formed by a modern range of agricultural buildings to the southwest (which now form the working area of the farm) and their wider agricultural surroundings.</p>	<p>The significance of the assets is drawn from their evidential, aesthetic and group value as an example of a well-preserved mid to late 19th century farmstead which retains most of its original buildings. The assets also have some historical value as they can demonstrate how the farmstead has developed over the past 150 years. This is evident in some of the outbuildings, which now serve a different purpose but are likely to contain elements of their original use in their design. All three values are best appreciated and experienced within their immediate setting.</p> <p>The wider setting of the asset also contributes to their significance as Trenewydd Fawr remains a working farm, and the surrounding agricultural landscape reinforces our ability to experience this.</p>	Scoped out	The Site is located 2.9 km south of the assets and does not form part of their setting. As such, there can be no harm to their significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
Asset group 16: 12471 and 12472	Kingheriot and Lofted Cartshed & Stable at Kingheriot	Two Grade II Listed Buildings	2.9	The assets comprise a mid 19th century farmhouse and its associated cart shed and stable.	<p>The immediate setting of the assets are formed of the farmstead in which they sit, positioned at the western extent of the yard, with modern agricultural buildings to their east.</p> <p>Their wider setting is formed by the surrounding agricultural land.</p>	<p>The significance of the assets is drawn from their evidential, aesthetic and group value as an example of a substantial mid-19th century farmhouse and its associated service range. The assets also have historical value as the farmhouse can tell us how domestic dwellings and service buildings have changed over time to meet the needs of their owners. This can show how working life on the farm has altered over the past 150 years. All three values are best appreciated within the immediate setting. The later agricultural buildings provide additional evidence of how the farmstead developed.</p> <p>The wider setting also contributes to their significance as they remain part of a working farm, with the surrounding agricultural land a testament to this.</p>	Scoped out	The Site is located 2.9 km east of the assets and does not form part of their setting. As such, there can be no harm to their significance through the presence of the proposed development.
Asset group 5: 12959 and 12960	Lochturffin and Outbuilding attached to W.of Lochturffin	Two Grade II Listed Buildings	3.1	Lochturffin is a small mid 19th century two-storey country house constructed from rubble stone finished in unpainted render. The outbuilding is built to the same style as the main house but excludes the finished render.	<p>The immediate setting of the assets comprises their immediate grounds. To the west are two ranges of former farm buildings that have been converted into residences, stores and offices while to the south lies a walled garden. To the east are formal lawns and the main house's former carriageway.</p> <p>The wider setting is formed by an area of informal parkland to the west and agricultural land in all other directions.</p>	<p>The significance of the assets is drawn from their evidential, aesthetic and group values as original elements of a country estate. Lochturffin, which is constructed in a refined Georgian style, is an important regional example of a small country house that retains a large degree of its original features, while the outbuilding reflects how service buildings were afforded the same degree of care and design to match the principal residence.</p> <p>They also have historical value as they show how country estates have adapted over time in response to changes in their role and purpose. All three values are best appreciated within the immediate setting where the relationship between the assets and wider estate buildings can be understood.</p> <p>The wider setting of Lochturffin also contributes to its significance, with the informal parkland and agricultural land adding to the legibility of the house as part of a larger rural estate.</p>	Scoped out	The Site is located 3.1 km south of the assets and does not form part of their setting. As such, there can be no harm to their significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
Asset Group 7: 12443, 12444, 12445, 12446, 12447, 12448, 12449, 12450, 12451, 12456, 12457, 12458, 12459, 12460, 12461, 12462, 12463, 12464 12460 and 15875	Solva Bridge, The Cambrian Inn, Tan-Yr-Allt, The Hungry Caterpillar Cafe & Shop, The Old Printing House, Gwryyd House, Glennydd, Limekiln adjacent to the Smithy, Limekiln adjacent to Brookside, NO.10 HIGH STREET,SOLFACH UCHAF/UPPER SOLVA,,,,DYFED, Mount Pleasant Baptist Chapel, War Memorial, St Teilo, Church of St Aidan, Pen yr Aber (Bryn y Mor), One of Two Cottages, One of Two Cottage, Bank House, Glan y Mor, Church of St Aidan and Solva Conservation Area	Conservation Area and Grade II Listed Buildings	3.2-3.6	The Solva Conservation Area is focussed upon the historic cores of Upper and Lower Solva and their immediate landscape. The Listed Buildings that reside within the Conservation Area are predominantly of 18th and 19th century date and comprise shops, residences, churches and limekilns associated with a former lime kiln industry located on the east bank of the River Solva near Solva Harbour.	The Conservation Area's setting (and the designated historic assets that form part of the asset group) is very much connected with St Brides Bay and the River Solva. Both have heavily influenced the overall development and expansion of the two settlement centres located within the Conservation Area (Upper and Lower Solva). Coupled with the wider agricultural (which forms part of the setting of the Conservation Area), the landscape in which it resides portrays Solva (both settlement areas) as a quintessential Welsh coastal village. Although Solva has undergone some modern expansion, this does not affect its legibility as a historic coastal village or its overall character and appearance.	The assets derive their significance from their evidential and aesthetic values which is conveyed in their overall design and use of traditional materials. They also have further historical value through the story they tell about the establishment and development of the settlements of Upper and Lower Solva. This is especially apparent in the surviving elements of Solva's former coastal lime working industry. The ability to appreciate these values is primarily from within the two historic cores and areas of higher elevation that provide panoramic views of the two settlements, particularly the hills to the east of the village. There is further significance derived from the relationship between the assets, which enhances the experience and appreciation of the settlements and the overall character and appearance of the Conservation Area. The surrounding open agricultural land contributes to the scenic qualities of the Conservation Area and reaffirms our understanding of Solva as a small coastal community.	Scoped out	The Site is located between 3.2 km and 3.6 km east of the assets and does not form part of their setting (Plate 11). As such, there can be no harm to their significance through the presence of the proposed development.
12442	Treglemais Fawr	Grade II Listed Building	3.3	Treglemais Fawr is a large farmhouse of late 18th or early 19th century origins. It is built from whitewashed rubble stone under a concrete tiled roof. The farmhouse (and wider farmstead) may be sited on the location of an episcopal manor known as St David's which existed from 1322 to 1587.	The setting of the asset is formed by the farmstead in which it sits with modern agricultural buildings to the north, south and east. The wider setting is formed by its agricultural surroundings.	The significance of the asset lies in evidential and aesthetic value as an example of a late 18th to early 19th century farmhouse built in the traditional style using local materials and methods. It has further evidential value as it may contain evidence of the apparent medieval manor within or below. The farmhouse also has historical value through this potential connection to the episcopal manor and what it can tell us about how farmhouses have been adapted over time. The setting of the farmhouse within the working farm and the preservation of the farmyard and surrounding fields, including its field boundaries and hedgerows, contribute to the significance of the farmhouse and how we come to appreciate its evidential and historical values.	Scoped out	The Site is located 3.3 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
Asset Group 8: 12468, 12469 and 12467	The Corn Mill, The Mill House and Middle Mill Bridge	Three Grade II Listed Buildings	3.6	The assets comprise a late 18th to early 19th century corn mill and its associated mill house, and a rubble stone bridge that was built to provide access to the mill. The mill and mill house underwent a complete restoration in the late 20th century.	The setting of the assets is defined by their position within the historic mill site, which now features a series of residential buildings to the east and a range of commercial and farm buildings to the north and west. The bridge lies in the southwest corner of the mill, which runs over the River Solva. The Grade II Listed Capel y Bedyddwyr Baptist Chapel is just beyond the mill. The wider setting is formed by areas of woodland, the settlement of Lower Kingheriot and agricultural fields.	The significance of the assets lies in their evidential, aesthetic and group value as surviving components of a late 18th to early 19th century mill, with both assets providing insights into technological advancements and economic development of the time. All three values are best experienced in close proximity, where the relationship between the buildings and the association with the River Solva are best appreciated and experienced. The modern buildings around the two assets also contribute to their significance. They show how the mill site has developed and responded to changes within the wider economy and society while the commercial buildings continue to provide an industrial association to the complex. Lower Kingheriot also contributes to their significance and how we appreciate their historical value. The small settlement did not appear until the development of the mill, suggesting that its development was tied to the industrial complex, likely providing accommodation for some of its workers.	Scoped out	The Site is located 3.6 km east of the assets and does not form part of their setting. As such, there can be no harm to their significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
12470	Capel y Bedyddwyr/Baptist Chapel,	Grade II Listed Building	3.6	Capel y Bedyddwyr is a small chapel of 18th century origins. The chapel likely served the workers of the corn mill who resided at Lower Kingheriot.	The setting of the chapel is formed by its immediate surroundings positioned at the northern end of the historic mill site. It is located on the east slope of the valley, which affords it long distant views southwards. The wider setting of the asset contains areas of woodland, the settlement of Lower Kingheriot and agricultural fields.	The significance of the asset lies in its evidential and aesthetic value as an example of an ecclesiastic building designed to cater for the needs of the workers employed at a large industrial complex. Therefore, an important part of its significance is its relationship to the wider industrial complex. Its position above the rest of the mill was intentional. The chapel also has a historical association with Lower Kingheriot as those that resided within the settlement would have formed part of its congregation.	Scoped out	The Site is located 3.6 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
25613	Trehale	Grade II Listed Building	3.6	Trehale is a small mid 19th century two-storey country house constructed from rubble stone finished in white painted stucco render.	The immediate setting of the asset comprises its immediate grounds, with the asset surrounded on three sides by trees. To the south lies the historic farmstead known as Trehale, which existed before the house. The wider setting is defined by agricultural land and a series of cottages.	The significance of the asset is drawn from its evidential and aesthetic value as an example of a mid 19th century country house. The asset also has historical value through its association with the Trehale farm. It appears that the country house replaced the former farmhouse and implies that its original owners were of wealth. Both values are best appreciated in close proximity where its appearance and relationship with the farm can be experienced. The wider setting of Trehale also contributes to its significance as they maintain its legibility as part of a still working farm.	Scoped out	The Site is located 3.6 km south of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
Asset Group 6: 12455, 12454, 12453, 12452 and 3075	Limekiln on S.Side of Estuary, Limekiln on S.Side of Estuary, Limekiln on S.Side of Estuary, Limekiln on S.Side of Estuary and Lime Kilns	Scheduled Monument and four Grade II Listed Buildings	3.7	The asset comprises a series of 19th century limekilns and a scheduled area around the limekilns.	The setting of the assets is formed by the River Solva (the assets are located on the bank of the river), woodland and the settlements of Upper and Lower Stowa.	The significance of the assets lies in the evidential and historical value and what they can tell us about past lime manufacturing practices. The scheduled area has considerable archaeological potential with a strong possibility of associated archaeological features and deposits. The setting of the assets contributes to both values as it provides context to their placement. The relationship to the river, Solva and the former Solva Harbour would have been an important reason for their position.	Scoped out	The Site is located 3.7 km east of the assets and does not form part of their setting. As such, there can be no harm to their significance through the presence of the proposed development.
Asset Group 9: 11982 and 19079	Roch Castle, Entrance walls and gatepiers to Roch Castle and	Grade I Listed Building and three Grade II Listed Buildings	3.9	Roch Castle was first constructed in the early 13th century by Adam de Rupe or de la Roch as a wooden motte. The castle then underwent reconstruction in c.1170 into the Peel-tower design seen today. Further changes were made in the 15th and 17th centuries before it was burned down during the English Civil War From 1901-4 it was restored and made habitable for Sir J. Wynford Philipps Bt of Picton, later Viscount St Davids. The entrance wall and gatepiers were built in 1901-4 to provide the castle with a formal entrance. Today, the castle serves as a hotel.	The immediate setting of the assets are defined by the castle grounds and their position within the village of Roch. The Castle is built on a rock spur from which it gets its name, while its broader grounds are set to grass. The wider setting is formed by the wider landscape, which is predominantly made up of agricultural land, farmsteads, and woodland. The Castle's position affords it long distance and wide-ranging views in all directions, especially from the gallery, roof and viewing platform that has been carved into the rock spur.	The significance of Roch Castle lies in its evidential, aesthetic and historical values. The evidential and aesthetic values lie in the castle's construction and arrangement, a prime example of a peel-tower design. The sensitive nature of the reconstruction works in 1901-4 means that most of the external appearance of the Castle remains true to its 12th century design. Much of its significance lies in its historical value. The Castle was first constructed in response to the rising tensions between Wales and England following the unification of the Welsh by Llewelyn Fawr in the 1190s. The later reconstruction into the Peel-tower design took part during the campaigns of King Edward I to conquer and subjugate North Wales with the Castle positioned in the historic border region. Although it is located some distance from the coast, the decision to rebuild Roch Castle would have resulted from Edward's strategy to maintain supplies by sea routes rather than the more precarious and more easily interdicted land routes. Both the immediate and wider setting contribute to its significance and how we come to appreciate its inherent values, especially the Castle's relationship to the village, the coast and wider landscape. Its position provides it with uninterrupted views over the surrounding landscaping in all directions and would have been a key reason for the construction of the original castle and why it was rebuilt.	Scoped in	The Site is considered to lie within the wider setting of the Castle due to its long distance and wide ranging views over its surrounding landscape. As a result, the introduction of the proposed development would represent a change to its setting which may alter how we come to appreciate and experience its significance. Therefore, the assets have been scoped in for detailed assessment as part of the ES.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
19080	Church of St Mary	Grade II Listed Building	3.9	The Church of St Mary was built shortly after Roch Castle in the 13 th century by Adam de Rupe and also underwent restoration this time in the mid 19 th century. Further additions were made to it when Roch Castle was restored in 1901-4.	The immediate setting of the asset is formed of its churchyard which is delineated on all sides by woodland and a low stone wall. The wider setting of the asset is defined by the village of Roch, Roch Castle and agricultural land.	The significance of the asset lies in its evidential and aesthetic values as an example of an early medieval church that has undergone 19th century restoration. Evidence of the original church and the later changes is clearly visible within its built fabric and changes in its design. The asset also has historical value through its connections to Adam de Rupe, Roch Castle and the village of Roch. The setting of the asset contributes towards its significance through the ability to appreciate and experience its identified values, especially its relationship to Roch Castle and the village of Roch that it serves.	Scoped out	The Site is located 3.9 km northwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12955	Castle Cenlas	Grade II Listed Building	3.9	Castle Cenlas is a small early 19th century two-storey country house constructed from rubble stone which has been colour washed to the sides and rear and rendered to the front.	The immediate setting of the assets comprises laid-out lawns to the north and areas of woodland to the east and south. To the west is a walled garden. Beyond the immediate setting lies a range of agricultural buildings set along an L-shaped yard and agricultural land in all directions.	The significance of the asset is drawn from its evidential and aesthetic value as an example of an early 19th century country house. The asset also has historical value as it forms part of Castle Cenlas Farm, which has existed since at least the 18th century. It appears that the country house replaced the original farmhouse suggesting the owners had accrued considerable wealth. All three of its values are best appreciated within the assets the immediate setting where the architectural quality of the building and its relationship to the wider farm can be appreciated. The wider setting of the asset also contributes to its significance as it remains a working farm, and the agricultural land reinforces this.	Scoped out	The Site is located 3.9 km to the south of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12415	Y Lodge	Grade II Listed Building	3.9	Y Lodge is an early to mid 19th century single-storey lodge that stands at the entrance to the farmstead known as Trearched.	The setting of the assets comprises its roadside position, standing at the main entrance to the farmstead. The wider setting is formed by the surrounding agricultural land, the farmstead and the village of Croes-goch.	The significance of the asset is drawn from its evidential and aesthetic value as an example of a small lodge built in the traditional style and local materials. Both of these are best appreciated within its immediate setting. The wider setting of the asset contributes towards its significance. The lodge's relationship to Trearched implies that at the time of its construction, the owners thought it necessary to create a formal lodge to monitor access into and out of its grounds. This expense would suggest that they were of wealth.	Scoped out	The Site is located 3.9km southeast of the asset and does not part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12414	Capel y Bedyddwyr/Baptist Chapel	Grade II Listed Building	3.9	Capel y Bedyddwyr is a small chapel constructed in 1816 and redeveloped in 1858, located in the village of Croes-goch.	The immediate setting of the chapel is defined by its associated yard and a range of cottages to the east and south. The wider setting is defined as the village of Croes-goch and the agricultural land that surrounds the settlement.	The significance of the asset lies in its evidential and aesthetic value as an example of a small Baptist church designed to cater for a small rural community. The ability to appreciate these two values is within the immediate setting. The chapel also has historical value as it conveys that Croes-goch was far smaller than it is today, but its inhabitants were religious at the time. The surrounding agricultural land reinforces the idea that the chapel served a small rural community.	Scoped out	The Site is located 3.9 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
19085	Trefrane Cliff Colliery Chimney	Grade II Listed Building	3.9	Trefrane Cliff Colliery Chimney was constructed in the late 19th century and is the only surviving upstanding element of the Trefrane Cliff Colliery. Only the lower third of the chimney remains.	The colliery stands in isolation in a landscape that has been scarred by activities associated with the running of Trefrane Cliff Colliery. Its proximity to the coast indicates that the colliery mines ran under the sea bed.	The significance of the asset lies in its evidential and historical value as the last surviving element of a Trefrane Cliff Colliery and what it can tell us of chimney design in the late 19th century. The setting of the asset contributes to its significance. It is possible to appreciate its heritage values, the former extent of the colliery, and its relationship to the sea.	Scoped out	The Site is located 3.9 km northwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
12416	Trearched	Grade II Listed Building	4.1	Trearched is a mid to late 18th century farmhouse located on the outskirts of the village of Croes-goch.	The farmhouse's setting comprises its immediate grounds, which contains an area of well-maintained lawn to the north and agricultural buildings to the east and west. To the south a thin band of woodland lines its grounds. The wider setting is formed by its surrounding agricultural land, the lodge known as Y Lodge that stands at the entrance to the farmstead and the village of Croes-goch	The significance of the asset lies in its evidential and aesthetic value as an example of a 18th century farmstead constructed using local materials to a traditional design. The asset also has historical value, serving as the main domestic residence to Trearched Farm. All three heritage values are best appreciated from within its immediate setting. The wider agricultural surroundings also contribute towards its significance and our ability to experience Trearched as a working farm.	Scoped out	The Site is located 4.1 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12474	Church of St David	Grade II Listed Building	4.1	The Church of St David was constructed sometime during the 13th or 14th century to a traditional planform. After falling into disrepair it was heavily restored in 1872-4 by J L Pearson.	The setting of the asset is formed by its churchyard, which is delineated by a low stone wall, residential development to the north and agricultural land in all remaining directions. Just beyond the residential development and still within its setting is RAF St David's.	The significance of the asset lies in its evidential, aesthetic and historical value as an example of a late medieval church that has undergone 19th century restoration. Its heritage values are best appreciated within the immediate setting where the changes in physical fabric, planform and its churchyard can be appreciated and understood. There is also the ability to appreciate its evidential and aesthetic value from within the fields to the south of the church.	Scoped out	The Site is located 4.1 km west of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
25607	Tre-howell	Grade II Listed Building	4.2	Tre-howell is a late 18th to early 19th century farmhouse constructed from cement washed rubble stone under a slate roof.	The setting of the asset is formed by its associated farmstead with the house located in the northeast corner of the yard. The farmstead is surrounded on all sides by a thin band of trees. The wider setting is predominantly agricultural land with further farmsteads. However, part of one of the fields to the south has been used to store vehicles and machinery, which are set on either side of the main access road leading towards the farmstead.	The significance of the asset lies in its evidential and aesthetic value as an example of a late 18th to early 19th century farmhouse constructed using local material to a traditional design. The asset also has historical interest, having served as the main domestic residence to Tre-howell over the past two hundred years. All three heritage values are best appreciated from within its immediate setting. The wider agricultural surroundings also contribute towards its significance and our ability to experience Tre-howell as a working farm. The vehicles and machinery make no contribution towards its significance.	Scoped out	The Site is located 4.2 km south of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12672	Outbuilding with attached Horse Engine House in Farmyard to NE of Crug-Glas	Grade II Listed Building	4.2	The asset is a former outbuilding constructed in the historic farmstead of Crug-Glas in the early 19th century. The building is unique for the region as it contains a surviving example of a horse-engine house.	The setting of the asset is defined by the farmstead and its position within it. It is surrounded on three sides by modern agricultural buildings and to the east by a small areas of woodland. Beyond the farmstead lies agricultural fields in all directions.	The significance of the asset lies in its evidential, aesthetic and historical value as a traditional outbuilding with an attached horse-engine house built in traditional materials. The horse-engine house is of particular heritage value as the only surviving example of its type and date in the region. The agricultural buildings within the setting contribute to the asset's significance and how we appreciate its heritage values. They reinforce that the structure is part of a historic working farm.	Scoped out	The Site is located 4.2 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
12671	Vaulted Chamber in Earth Bank to W. of Trewellwell	Grade II Listed Building	4.4	The asset comprises a small tunnel-vaulted chamber located in the historic farmstead of Trewellwell. The use of the chamber is not known. However, it was likely built when the farmstead was owned by Rev Thomas Mortimer, suggesting it has a religious use.	The setting of the asset is formed by its immediate surroundings and position within the historic farmstead.	The significance of the asset lies in its evidential and aesthetic values as an example of stone vaulted chamber built within a private residence. The chamber may have some historical value as an example of a private religious site for contemplation, having likely been built by the Rev Thomas Mortimer. It can tell us how religious practices have evolved over time within a domestic environment.	Scoped out	The Site is located 4.4 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
13051	Former Blacksmiths Shop	Grade II Listed Building	4.4	The asset comprise a former blacksmith shop constructed in the 19th century. It is a rare example of its type and for its incorporation of earth-walling in its construction.	The setting of the asset is formed by its immediate surroundings with a series of domestic dwellings to the south and north. To the east lies the B4330 while to the west is a small paddock.	<p>The significance of the asset lies in its evidential, historic and aesthetic value as a surviving example of a 19th century blacksmith shop with a working forge and its use of earth-walling. Earth-walling is a traditional method that has long been replaced by brick and concrete.</p> <p>The setting makes a limited contribution towards its significance and this is by its position close to the B4330 which has served as the main road from Haverfordwest northwards to the coast. The blacksmith shop would have intentionally been positioned close to the road.</p>	Scoped out	The Site is located 4.4 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
Asset Group 10: 12475 and 12476	The Vicarage and Outbuilding to W. of the Vicarage	Grade II Listed Building	4.4	The assets comprise a two-storey vicarage built in 1842 by John Williams of Solva and an associated outbuilding.	<p>The asset is located in the northern part of a small plot of land defined by a woodland boundary. To the west of the Vicarage lies the associated outbuilding and to the east a walled vegetable garden. To the south lies a large grass paddock and RAF St David's to the north.</p> <p>The wider setting is defined by the village of Whitechurch with the Church of St David which shares a historical association with the Vicarage located at the east end of the village. To the south are agricultural fields.</p>	<p>The significance of the asset lies in its evidential and aesthetic values as an example of a mid 19th century vicarage constructed to traditional design using local materials. It also has some historical value through its link to John William of Solva, who was a wealthy shipment and patron of the local community.</p> <p>The outbuilding is also of evidential and aesthetic value in its own right, but it is from its group value with the vicarage that it gets most of its significance.</p> <p>The immediate grounds contribute towards its significance as it is within the grounds that we can best appreciate the heritage values of the assets.</p>	Scoped out	The Site is located 4.4 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
Asset Group 11: 12662, 12663, 12670, 12668, 12664, 12667, 12665, 12669 and 12666	Caer Farchell Farmhouse, including rear court with seat, Outbuilding to rear of Caerfarchell Farmhouse, Y Post/The Old Post Office, Outbuilding to E. of Hamilton House, Capel Caerfarchell & Outbuilding to NE corner of Forecourt, Hamilton House, The Manse, including Pigsty attached at N.End, Range of outbuildings to rear of Hamilton House, Outbuilding to rear of the Manse and Caerfarchell Conservation Area	Conservation Area, one Grade II* and eight Grade II Listed Buildings	4.7-4.9	The conservation area covers the historic hamlet of Caerfarchell and its immediate environs. The hamlet grew following the construction of the Calvinistic Methodist Chapel in 1763 and underwent a period of rebuilding in the early 19th century. Most of the buildings that exist today were constructed during this second phase. All the structures are built in the traditional vernacular style for the region and from local materials (rubble stone and Welsh slate).	The setting of the assets comprises the surrounding agricultural fields, most of which remain as strip fields, Trewellwell and Carnhedryn to the northeast and open heath locations on the outskirts of St David's Airfield to the south.	<p>The significance of the assets lies in their evidential, aesthetic, historical and group values as an example of a well-preserved 18th to 19th century Welsh hamlet. Caerfarchell has seen minimal levels of development, which means its appearance today is very similar to what existed over 200 years ago.</p> <p>The conservation area also has further evidential value through the presence of archaeological remains that date back to the Bronze Age, including a series of standing stones. There is potential for archaeology to survive below ground around the stones. Caerfarchell may also have been settled in the medieval period, with well-preserved medieval strip fields found to its west and east.</p> <p>The setting of the assets contributes towards their significance, especially how we come to appreciate its long-standing agrarian routes. The wider agricultural surroundings and limited development in the wider area preserve the hamlet's character and appearance as a typical of a 18th to 19th century Welsh hamlet.</p>	Scoped out	The Site is located between 4.7 km to 4.9km east of the assets and does not form part of their setting. As such, there can be no harm to its significance through the presence of the proposed development.
12591	Llandidgige Fach	Grade II Listed Building	4.7	Llandidgige Fach is a mid-19th century farmstead constructed from rubble under and slate low-pitched roof. The buildings form part of the historic farmstead of Llandidgige Fach	The setting of the asset is formed by the farmstead in which it is located with agricultural buildings to the west and south. Its wider setting is defined by its wider agricultural surroundings.	<p>The significance of the asset lies in its evidential and aesthetic value as an example of a mid 19th century farmhouse constructed using local material to a traditional design. The asset also has historical value having served as the main domestic residence to Llandidgige Fach over the past two hundred years. All three heritage values are best appreciated from within its immediate setting.</p> <p>The wider agricultural surroundings also contribute towards its significance and our ability to experience Llandidgige Fach as a working farm.</p>	Scoped out	The Site is located 4.7 km southwest of the asset and does not form part of their setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE540	Bay View Farm Defended Enclosure	Scheduled Monument	0.4	The asset comprises the scheduled remains of a small earthwork defended enclosure that likely dates to the Iron Age. The enclosure is roughly circular in shape and survives to a maximum height of 0.6m and 10 m wide.	The immediate setting of the asset is formed by the field in which it resides. The wider setting is formed by the small settlements of Penycwm and Llethr, the modern farmstead to its west, agricultural fields, the Site and the Newgale coastline. Due to the sudden drop in the landscape to its south and east there are long distance uninterrupted views from the monument in these directions.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of late prehistoric defensive organisation and settlement. There is considerable potential for archaeological remains and a strong possibility of evidence relating to chronology, layout, building techniques and functional detail. The asset also forms an important element within the wider later prehistoric context and within the surrounding landscape. The setting of the asset contributes toward its significance, especially in the long distance views from the monument. As a defended enclosure, a critical feature of the asset would be to have clear views in all directions to identify any incoming threats.	Scoped in	The Site is visible in long distance views from the asset. Depending on their final location, the arrays may be appreciable from the asset and represent a change to its setting. As a result, they may alter the contribution made by its setting towards its significance. Therefore, it requires further detailed assessment as part of the ES.
PE422	Brawdy Promontory Fort	Scheduled Monument	0.9	The asset comprises the remains of a defended enclosure, which probably dates to the Iron Age period. Brawdy Promontory Fort consists of a triangular promontory defended naturally by steep slopes on east and south, and by a multivallate system of three banks and ditches which curve around the west and north. The widely spaced banks are well preserved. The inner bank is 3m high internally, 3 – 4 m high externally, with a 2 m deep ditch, rock cut in places. The middle bank is 2 m high internally, 2.5 m high externally and the ditch is rather amorphous. The outer rampart is 2.5 m high internally and externally and the outer ditch is not apparent.	The asset is surrounded on three sides by woodland which has begun to encroach into its internal area. To the west lies a series of agricultural fields. Within the woodland to the east of the asset is a small stream that feeds into the Brandy Brook, itself flowing into Newgale Beach. The wider setting of the asset comprises further areas of agricultural fields, Brawdy Farm to the west, the continuation of the Brandy Brook, the Site and several areas of settlement. By virtue of its design, the asset has long and wide-ranging views westwards in the direction of the Site.	The significance of the asset lies in its evidential and historic values through its potential to enhance our knowledge of late prehistoric defensive organisation and settlement. There is considerable potential for archaeological remains and a strong possibility of evidence relating to chronology, layout, building techniques and functional detail. The asset also forms an important element within the wider later prehistoric context and within the surrounding landscape. The setting of the asset contributes toward its significance, especially in the long distance views from the monument. As a defended enclosure, a critical feature of the asset would be to have clear views in all directions to identify any incoming threats. However, the ability to appreciate this has been partially eroded by the woodland that now resides to the east, north and south of the asset.	Scoped in	The Site is visible in long distance views from the asset. Depending on their final location, the arrays may be appreciable from the asset and represent a change to its setting. As a result, they may alter the contribution made by its setting towards its significance. Therefore, it requires further detailed assessment as part of the ES..
PE272	Pointz Castle Mound	Scheduled Monument	1.2	The asset comprises the remains of a motte and ditch, dating to the medieval period and likely constructed in the 12th century by Punch or Ponce, a knight and tenant of Bishop Peter de Leia of St Davids (1176-1199). It measures 36 m in diameter at the base, 10.5 m in diameter across the top and is 6 m high. For the greater part it is surrounded by a ditch 3 m wide with a 1.5 m counterscarp and is eroded or has been dug into on the south side	The asset is located in the historic farmstead of Pointz Castle as it surrounded to the north, east and partly to the south by modern agricultural buildings. To the west lies a small track that leads to the Lochvane and southwards are a series of agricultural fields. Beyond this lies a predominantly rural landscape made up of modern agricultural fields and interspersed farmsteads. There are also long distance views from the monument southwards towards the coast and southeast towards Newgale Beach.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of medieval defensive practices. The asset is well-preserved and an important remnant of the medieval landscape. It retains considerable archaeological potential, with a clear probability of the presence of both structural evidence and intact associated deposits. The setting of the asset contributes towards its significance, especially its historical value and placement within the landscape. As a defended site, the asset was designed to have clear views over the surrounding landscape to watch for threats. Although these views to the east are mainly obscured from the asset today by the modern agricultural farm buildings, views in all other directions remain uninterrupted.	Scoped out	The Site does not form part of the asset's setting. It is not appreciable from the asset, nor does it have any historical or functional associations. Therefore, it has been excluded from any further assessment.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE130	Tre-Maen Hir Standing Stones	Scheduled Monument	1.4	The asset comprises the remains of two standing stones, which probably date to the Bronze Age.	The two stones are surrounded on all sides by woodland, which forms part of the historic boundary for the historic farmstead of Tree-Maen. The farmstead is found just west of the two stones. The wider setting is formed by the surrounding agricultural landscape.	<p>The significance of the stones lie in their evidential, historic and group values. They have the potential to enhance our knowledge of prehistoric burial and ritual practices. They are an important relic of a prehistoric funerary and ritual landscape and retain considerable archaeological potential. There is also a strong probability of intact burial or ritual deposits, together with environmental and structural evidence within their vicinity.</p> <p>The immediate setting contributes to their significance and how we come to appreciate their evidential, historic and group values as components of a large ritual site. The wider setting does not contribute to their significance.</p>	Scoped out	The Site is located 1.4km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE539	Dinas Fach Defended Enclosure	Scheduled Monument	1.9	The asset comprises the remains of a small, defended enclosure, which dates to the Iron Age and Romano-British periods.	The asset is located on a long, low and cliff-girt coastal promontory at the bottom of a steep coastal slope. To the north of the asset lies agricultural land while to the south are a series of rock pillars and sea stumps. Beyond this lies a predominantly rural landscape.	<p>The significance of the asset lies in its evidential and historic values through its potential to enhance our knowledge of late prehistoric defensive organisation and settlement. There is considerable potential for archaeological remains and a strong possibility of evidence relating to chronology, layout, building techniques and functional detail. The asset also forms an important element within the wider later prehistoric context and within the surrounding landscape.</p> <p>The setting of the asset makes a significant contribution to its significance and how we come to appreciate its evidential and historical values, especially its relationship to the coast and the reasons for its position. The cliff edges to the west, east and south provide natural defences to the asset while affording uninterrupted views over the coast to identify any seaward approaching threats.</p>	Scoped out	The Site is located 1.9 km northeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE027	Tre-Ffynnon Burial Chamber	Scheduled Monument	2	The asset comprises the remains of a chambered tomb, dating to the Neolithic period. The burial chamber is open on its northern side and has 2 m square base it is formed by three large orthostats each of which is 0.7 m in height. The displaced capstone rests on the eastern upright and on the ground at its northern end.	The asset has a rural setting positioned within a large arable field and surrounded in all directions by mixed-use agricultural land.	<p>The significance of the asset lies in evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape and retains considerable archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence, including a buried prehistoric land surface.</p> <p>The immediate setting of the asset contributes to its significance as from within its immediate setting its surviving upstanding remains can be appreciated (evidential value). The wider agricultural landscape does not contribute to its significance. Unlike similar monuments, the burial chamber does not appear to have been positioned to be a prominent feature within the landscape.</p>	Scoped out	The Site is located 2 km south of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE159	White House Burial Chamber	Scheduled Monument	2.4	The asset comprises the remains of a chambered tomb, dating to the Neolithic period. The chamber consists of a large collapsed capstone and at least two uprights, the stones lie on a low mound 0.1m higher than the surrounding ground level.	The asset has a rural setting positioned within a large arable field and surrounded in all directions by mixed use agricultural land. The asset is located on the south running slope of a ridge, suggesting it was designed to be visible within the landscape.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of both intact burial or ritual deposits and environmental and structural evidence. The setting of the asset contributes towards its significance and how we come to appreciate its heritage values. From within the immediate setting, the form and function of the burial chamber can be appreciated. There are also long distance views from the monument southwards due to its placement on the ridge slope. Its position shows us that it was designed to be a feature visible within the wider landscape and further enhances our understanding of prehistoric ritual beliefs.	Scoped In	Although the asset is located approximately 2.4 km to the north west of the Site, the wider landscape has been identified as contributing towards the asset's significance. At this stage, it is unclear whether the proposed development would result in harm to its significance through a change in setting so has been scoped in for more detailed assessment.
PE222	Castle Villa Camp	Scheduled Monument	2.6	The asset comprises the remains of an earthwork and stone-built enclosure likely of prehistoric date. The enclosure consists of two well-preserved banks and ditches with an outer scarp. The bank stands to a maximum height of 2 m. The eastern side of the enclosure has been completely removed by the development of the farmstead. Much of the enclosure is covered by woodland.	The asset is bound to the west by the B4330, to the east by the Castle Villa farm and north and south by agricultural fields. The wider setting is primarily formed by agricultural land together with pockets of woodland, heath and several isolated small farmsteads.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of late prehistoric defensive organisation and settlement. There is considerable potential for archaeological remains and a strong possibility of evidence relating to chronology, layout, building techniques and functional detail. The asset also forms an important element within the wider later prehistoric context and within the surrounding landscape. The immediate setting contributes towards its significance as what remains of the defended enclosure is appreciable, providing an overall sense of its size. However, the farmstead located to the east, which has removed a significant portion of the asset, does not contribute to its significance. The wider setting as its current condition means it cannot be appreciated or experienced within the surrounding agricultural land, nor can its place within the wider landscape.	Scoped out	The Site is located 2.6 km southwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE363	Brandy Brook Camp	Scheduled Monument	2.7	The asset comprises the remains of an earthwork and stone-built enclosure likely of prehistoric date. The enclosure is circular with a diameter of 75 m. Most of the bank has been ploughed out.	The asset is located just west of Brandy Brook. Half of the monument is located within an agricultural field while the other half is within an area of woodland that runs along the bank of the brook. To the west of the asset is agricultural fields while to the north, south and east the woodland continues to follow the line of the watercourse. The asset's position on an area of raised ground affords it long distance views to the west, north and south over the surrounding rural landscape.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of late prehistoric defensive organisation and settlement. There is considerable potential for archaeological remains and a strong possibility of evidence relating to chronology, layout, building techniques and functional detail. The asset also forms an important element within the wider later prehistoric context and within the surrounding landscape. The setting of the asset contributes toward its significance, especially in the long distance views from the monument. As a defended enclosure, an important feature of the asset would be to have clear views in all directions to identify any incoming threats. However, the ability to appreciate this has been partially eroded by the woodland that now resides to the east, north and south of the asset.	Scoped out	Although the wider setting of the asset contributes towards its significance, it is not considered to extend as far as the Site as changes in the landscape's topography severely restricts views beyond Lower Eweston, which is located 1.6 km west of the asset. As the Site does not form part of its setting, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE043	Burial Chamber	Scheduled Monument	3	The asset comprises the remains of a chambered tomb, dating to the Neolithic period. It consists of a large capstone which measures 3.3 m in length, 2.4 m wide and is 0.7 m thick and supported on the south by a small side stone, 0.7 m in height. The chamber has an internal measurement of 4m square and has a maximum height of 1m. It is open on the east, while the other sides are closed by several small boulders lying at ground level.	The asset is surrounded by a wood fence and a series of trackways that lead into the surrounding fields. To the north lies an area of marsh and woodland with a pond at its centre. The pond is fed by a small spring which also flows into the River Solva. Beyond its immediate setting is St Evlis farm and agricultural fields. The Welsh coastline lies approximately 400 m to the south, with views over St Brides Bay from the asset.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape. It retains significant archaeological potential, with a strong probability of both intact burial or ritual deposits and environmental and structural evidence. The setting of the asset also contributes towards its significance. Its proximity to both the coastline and the spring helps us understand the part played by water and the concept of liminality in prehistoric ritual beliefs. Due to its position, the asset is also appreciable from the coastal trail that runs along the edge of the cliff and enhances how we come to appreciate its evidential value as an upstanding prehistoric monument designed to be seen within its landscape.	Scoped out	The Site is located 3 km to the northeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE548	Porth y Bwch Defended Enclosure	Scheduled Monument	3	The asset comprises the remains of a defended enclosure of Iron Age date located on a narrow coastal promontory. The bank and ditch that define its northern boundary survive as slight earthworks, while steep sea cliffs form the rest of the defensive circuit.	The asset is located on a long, low, cliff-girt coastal promontory at the bottom of a steep coastal slope. To the north of the asset lies agricultural land while to the south are a series of rock pillars and sea stumps. Beyond this lies a predominantly rural landscape.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of late prehistoric defensive organisation and settlement. There is considerable potential for archaeological remains and a strong possibility of evidence relating to chronology, layout, building techniques and functional detail. The asset also forms an important element within the wider later prehistoric context and within the surrounding landscape. The setting of the assets makes a significant contribution to its significance and how we come to appreciate its evidential and historic values, especially its relationship to the coast and reasons for its position. The cliff edges to the west, east and south provide natural defences to the asset. Uninterrupted views over the coast would also have allowed its inhabitants to identify any seaward approaching threats from St Brides Bay.	Scoped out	The Site is located 3 km northeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE028	Lecha Burial Chamber	Scheduled Monument	3.1	The asset comprises the remains of a chambered tomb dating to the Neolithic period. The chamber is formed by enormous capstone which measures 5.3 m in length, 3.7 m wide and is a maximum of 1.3 m thick; it lies on two small side boulders with another boulder abutting onto the capstone. The chamber is 0.1 m in height. A large natural lump of rock lies slightly uphill from the site.	The asset is located adjacent to a small stream that runs into the River Solva, located to its south. An area of woodland lies to its east that runs along either bank of the stream, while to the west and north is agricultural land. Beyond this lies further agricultural land Lecha Farm.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape. It retains significant archaeological potential, with a strong probability of both intact burial or ritual deposits and environmental and structural evidence. The setting of the asset also contributes towards its significance. Its proximity to both streams helps us understand the part played by water and the concept of liminality in prehistoric ritual beliefs. As the asset lies at the base of a slope, unlike similar examples, it does not appear to have been built to be visible within the landscape.	Scoped out	The Site is located 3.1 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE449	Moated Site 100m East of Caeforiog Bridge	Scheduled Monument	3.1	The asset comprises the remains of a well-preserved medieval moated homestead. It is a relatively small, moated site measuring 25 m by 21 m, with the ditch 3 m wide and up to 1 m high. This is water-filled and fed by a stream entering at the north-east corner. The inner platform is raised and has the ruins of a rectangular stone buildings standing circa 1 m high and measuring 10 m by 5 m in plan.	The monument is located on the north bank of the River Solva close to the Pont-y-cerbyd bridge, which has likely served as a crossing point over the Solva dating back to when the moat was constructed. To the north is an area of woodland that runs along the banks of a small stream that feeds into the River Solva. To the south is agricultural land and a small public house that is positioned adjacent to the bridge. Its wider setting comprises its wider agricultural surroundings.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of medieval settlement. The monument is well preserved and is an important relic of the medieval landscape. It retains significant archaeological potential, with a strong probability of intact archaeological deposits and structural evidence. The relationship between the asset and River Solva is an important part of its significance and how we come to appreciate its historical value. It is also possible that the moated site was located here to take advantage of the crossing.	Scoped out	The Site is located 3.1 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE507	Standing Stone 100m ENE of Blaen-llyn	Scheduled Monument	3.1	The asset comprises a single standing stone located on a south facing slope. It measures 1.3 m tall, 1.1 wide and 0.8 m deep. The standing stone is believed to be of religious or ceremonial significance and to date to the Bronze Age.	The asset is located in the northwest corner of a large agricultural field, forming part of a wider rural landscape. Beyond the field lies the historic farmstead of Blaen-llyn. The standing stone is one of three located on the south-facing slope (PE508 and PE509).	The significance of the asset lies in its evidential, historical and group value. The three stones (each their own scheduled monument) have the potential to enhance our knowledge of prehistoric burial and ritual practices, especially in understanding the role axial alignment has with ritual monuments; many prehistoric monuments are placed on a northwest-to-southeast alignment associated with the solstices. The ability to appreciate all three standing stones is an important part of their setting and contributes to how we come to appreciate their historical and group values. However, their wider agricultural surroundings make a limited contribution to their significance.	Scoped out	The Site is located 3.1 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE221	Castle Mound	Scheduled Monument	3.5	The asset comprises the remains of a motte and ditch, dating to the medieval period. The motte measures 5 m high and is 35 m in diameter at the base and 15 m at the top. The ditch is traceable to the north and south west measuring up to 7 m across.	The motte is located within an area of woodland and is surrounded by trees. Beyond the woodland lies the historic farmsteads of Haycastle Farm and Upper Haycastle and agricultural fields.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of medieval defensive practices. The monument is well-preserved and an important relic of the medieval landscape. It retains significant archaeological potential, with a strong probability of the presence of both structural evidence and intact associated deposits. The asset's setting does not contribute to its significance and how we come to appreciate and understand its identified heritage value. The woodland prevents an ability to experience its upstanding remains or its presence within the wider landscape.	Scoped out	The setting of the asset makes no contribution towards its significance. Equally, the Site does not form part of its setting. Therefore, there can be no harm to its significance through the presence of the proposed development.
PE508	Standing Stone 270m NW of Trehale House	Scheduled Monument	3.6	The asset comprise a single standing stone located on a south facing slope. It is 1.25 m tall, 1.1 m wide and 0.8 m deep. The standing stone is believed to be of religious or ceremonial significance and to date to the Bronze Age.	The asset is located close to the centre of a large agricultural field which forms part of a wider rural landscape. The historic farmstead of Trehale is located 270 m to the southeast of the asset.	The significance of the asset lies in its evidential, historical and group value. The three stones (each their own scheduled monument) have the potential to enhance our knowledge of prehistoric burial and ritual practices, especially in understanding the role axial alignment has with ritual monuments; many prehistoric monuments are designed on a northwest-to-southeast alignment associated within the solstices. The ability to appreciate all three standing stones is an important part of their setting and contributes to how we come to appreciate their historical and group values. However, their wider agricultural surroundings make a limited contribution to their significance.	Scoped out	The Site is located 3.6 km southeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE509	Standing Stone 200m ENE of Trehale House	Scheduled Monument	3.8	The asset comprises a single standing stone located on a south facing slope. It is 1.6 m tall, 1.1 m wide and 0.75 m deep. The standing stone is believed to be of religious or ceremonial significance and to date to the Bronze Age.	The asset is located in the centre of a small field used as a paddock. The field forms part of a larger rural landscape and is bound to the west by the historic farmstead of Trehale.	The significance of the asset lies in its evidential, historical and group value. The three stones (each their own scheduled monument) have the potential to enhance our knowledge of prehistoric burial and ritual practices, especially in understanding the role axial alignment has with ritual monuments; many prehistoric monuments are designed on a northwest-to-southeast alignment associated with the solstices. The ability to appreciate all three standing stones is an important part of their setting and contributes to how we come to appreciate their historical and group values. However, their wider agricultural surroundings make a limited contribution to their significance.	Scoped out	The Site is located 1.9 km northeast of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE266	Rhyndaston-Fawr Standing Stone	Scheduled Monument	3.9	The asset comprises the remains of a standing stone which probably dates to the Bronze Age. It measures 2 m in height, 1 m in width and 1 m deep.	The asset is located in the eastern part of a large regular shaped agricultural field, which is part of a wider rural landscape. The historic farmstead of Rhyndaston-Fawr is located to the south of the asset with further agricultural fields in all directions. Located 200 m to the southwest of the asset is the former site of a prehistoric burial mound which may have had a historical and functional association with the standing stone. However, the mound has been completely removed through ploughing.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of prehistoric burial and ritual practices. It is an important relic of a prehistoric funerary and ritual landscape and retains considerable archaeological potential. There is also a strong probability of intact burial or ritual deposits, together with environmental and structural evidence within its vicinity. The only aspect of its setting that contributes towards its significance is the potential historical and functional association with the former burial mound. Standing stones are typically part of a larger prehistoric ritual landscape, which is evident by the proximity of the mound, enhancing its historical value.	Scoped out	The Site is located 3.9 km west of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE410	Promontory Fort S of Solva Harbour	Scheduled Monument	3.9	The asset comprises the remains of a defended enclosure of Iron Age date. The polygonal enclosure measures approximately 75 m southwest to northeast by 40 m southeast to northwest and is defined by a spread, stony bank, possibly the remains of a wall. The approaches to the enclosure along the ridge are defended on the northeast side by a rock-cut ditch c. 4 m wide and 1.5 m deep with bank up to 1 m high and 6 m wide and on the southwest by a bank up to 2 m high and 6 m wide and external ditch 5 m wide and 0.5 m deep.	The asset is located at the end of a ridge that overlooks Solva harbour in a strong natural well-defended location. To its east lies open agricultural fields, while to the north and west lies Solva harbour and the two settlements of Upper and Lower Solva. To the south is Bridges Bay. 200 m to the north of the asset lies another Iron Age defended enclosure (PE480) which may have been settled at the same time.	The significance of the asset lies in its evidential and historical values through its potential to enhance our knowledge of later prehistoric defensive organisation and settlement. The site forms an important element within the wider later prehistoric context and within the surrounding landscape. The site is well-preserved and retains considerable archaeological potential. There is a strong probability of the presence of evidence relating to chronology, layout, building techniques and functional detail. The setting of the asset makes a major contribution towards its significance and how we come to appreciate its historic value. The asset is designed to protect the River Solva entrance. The ridge provides exceptional natural defences and shows how Late Iron Age peoples utilised the natural landscape to their advantage. The presence of Upper Solva, Lower Solva and Solva Harbour shows the continued importance of the river mouth to local peoples. The presence of the second defended enclosure shows there was a significant prehistoric presence within the area.	Scoped out	The Site is located 3.9 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE480	Enclosure 200m SE of Solva Village	Scheduled Monument	4	The asset comprises the remains of an earthwork and stone built structure located on the promontory that overlooks the River Solva. It consists of an outer enclosure measuring 220 m south west to north east and 130 m south east to north west, the banks of which stand up to 1.5 m high, and an inner enclosure filling the eastern half with banks up to 2 m high and traces of an outer ditch. A possible entrance is sited at the north-east side.	The asset is located at the end of a ridge that overlooks Solva harbour in a strong natural well-defended location. To its east lies open agricultural fields, while to the north and west lies Solva harbour and the two settlements of Upper and Lower Solva. To the south is Bridges Bay. 200 m to the south of the asset lies another Iron Age defended enclosure (PE410) which may have been settled at the same time.	The significance of the asset lies in its evidential and historic values through its potential to enhance our knowledge of later prehistoric defensive organisation and settlement. The site forms an important element within the wider later prehistoric context and within the surrounding landscape. The site is well-preserved and retains considerable archaeological potential. There is a strong probability of the presence of evidence relating to chronology, layout, building techniques and functional detail. The setting of the asset makes a major contribution towards its significance and how we appreciate its historic value. The asset is designed to protect the River Solva entrance. The ridge provides exceptional natural defences and shows how Late Iron Age peoples utilised the natural landscape to their advantage. The presence of Upper Solva, Lower Solva and Solva Harbour shows the continued importance of the river mouth to local peoples. The presence of the second defended enclosure shows there was a significant prehistoric presence within the area.	Scoped out	The Site is located 4 km east of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE271	Slade Camp	Scheduled Monument	4.1	The monument comprises the remains of a defended enclosure, which probably dates to the Iron Age period.	The asset is located at the north end of a regular agricultural field and is surrounded to its south, east and west by agricultural land. To the north is an area of woodland and a small area of marsh. The wider setting of the asset is formed by the surrounding agricultural landscape.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of later prehistoric defensive organisation and settlement. The site forms an important element within the wider later prehistoric context and within the surrounding landscape. The site is well-preserved and retains considerable archaeological potential. There is a strong probability of the presence of evidence relating to chronology, building techniques and functional detail.	Scoped out	The Site is located 4.1 km northwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE047	Mesur-y-Dorth Cross-Incised Stone	Scheduled Monument	4.1	The monument consists of a stone with a cross carved into the surface, probably dating to the medieval period, which is set into boundary wall of a private dwelling on the road between Fishguard and St. Davids.	The setting of the asset is formed by its immediate surroundings and includes the A487 and domestic residences set on either side of the road.	The significance of the asset lies in its evidential and historical value as an example of a medieval carved stone with Christian motifs. The setting of the asset does not contribute towards its significance.	Scoped out	The Site is located 4.1 km northwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE063	Tre-Howell Burial Chamber	Scheduled Monument	4.1	The monument comprises the remains of a chambered tomb, dating to the Neolithic period. The remains of the burial chamber consist of two stones, surrounded by smaller ones, which lie in a hedge separating two fields. The larger of the two main stones is 1.8 m in height and 4.7 m long. The smaller one is 1.5 m high.	The asset is located on the southern hedge of a large field used for grazing that slopes south-westwards towards the Brandy Brook. The historic farmstead of Tre-Howell is located 40 m to its east. To the south of the asset is a small paddock with a series of modern agricultural buildings beyond. The wider setting of the asset is formed by the wider agricultural landscape it is located within and the Brandy Brook.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence, including a buried prehistoric land surface. The setting of the asset also contributes towards its significance. Its proximity to Brandy Brook helps us understand the part played by water and the concept of liminality in prehistoric ritual beliefs. As the asset lies at the base of a slope, unlike similar examples, it does not appear to have been built to be visible within the landscape.	Scoped out	The Site is located 4.1 km southwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE022	Tump Round Barrow	Scheduled Monument	4.4	The monument comprises the remains of a earthen built round barrow, which probably date to the Bronze Age. The barrow is located on the summit of a broad hill.	The asset marks the western boundary of the Hayscatle Tump farmstead with a series of domestic dwellings and agricultural buildings found to its south, north and east. To the west lie agricultural fields. The wider setting of the asset comprises the wider agricultural landscape it resides within.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual practices. There is a strong probability of the presence of both intact ritual and burial deposits, together with environmental and structural evidence. The setting of the asset contributes to its significance. The barrow's placement on the hill's summit shows an intent for the feature to be seen within the landscape, enhancing how we come to appreciate its evidential and historical values. However, this has been eroded by the presence of the surrounding buildings which restrict visibility towards and from the monument within its immediate surrounding and wider setting.	Scoped out	The Site is located 4.4 km west of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE510	Standing Stone 400m NE of Pen-lan-Mabws	Scheduled Monument	4.4	The monument comprises a standing stone located on the northwest shoulder of a hill. It measures 1.3 m tall, 1 m wide and 0.8 m deep. The stone is believed to date to the Bronze Age.	The asset is located broadly within the centre of a large field and is surrounded in all directions by further areas of agricultural land.	The significance of the asset lies in its evidential and historical value. The stone has the potential to enhance our knowledge of prehistoric burial and ritual practices, and there is potential for ritual deposits to be located within its vicinity. The immediate setting of the asset contributes to how we come to appreciate its historical and evidential values.	Scoped out	The Site is located 4.4 km southwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE132	Clyn-Ffwrn Burial Chamber	Scheduled Monument	4.6	The monument comprises the remains of a chambered tomb, dating to the Neolithic period. Little remains of Glyn-Ffwrw burial chamber save one upright which measures 1.7m in height and 0.6 by 0.5m.at its base tapering to one jagged tip. A smaller stone leans against the base where there is a slight hollow.	The chamber is located in a valley between two hill ranges within a large agricultural field. It is surrounded in all directions by further areas of agricultural land.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape and retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence, including a buried prehistoric land surface. The immediate setting of the asset contributes to its significance and how we come to appreciate its historical and evidential values. However, the wider setting makes no contribution. Unlike similar features, its position indicates it was not designed to be physically dominant within the landscape. The chamber could have been positioned at the summit of the two hills, which are a short distance from the monument.	Scoped out	The Site is located 4.9 km southwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.

Designated Number/s	Asset Name	Designation	Distance from Site (km)	Description	Setting	Significance	Scoped In/Out	Rationale
PE260	Bickny Round Barrow	Scheduled Monument	4.9	The monument comprises the remains of an earthen built round barrow, which probably dates to the Bronze Age. The barrow measures c 20 m in diameter and is c 0.7 m in height. When excavated in 1805 it revealed a large cist, sealed by a capstone 2.6 m long that contained possible traces of an inhumation together with a holed axe hammer and another perforated stone.	The asset is located on the north-facing slope of a broad hill located at approximately 100 m aOD. It is positioned at the northern end of a large regular-shaped field and surrounded to the north by an area of heath and single detached property, to the east and west by agricultural fields and two small farmsteads. To the south lies further agricultural land. Its wider setting is formed by the surrounding agricultural landscape. There may be potential glimpsed views northwards to St George's Channel and the Irish Sea.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual practices. There is a strong probability of the presence of both intact ritual and burial deposits, together with environmental and structural evidence. The setting of the asset contributes to its significance, particularly the views towards the coast and its position on the north running slope. The monument was designed to be visible within the landscape and for views towards the sea to be possible. Both factors enhance its historic value and provides insight into prehistoric ritual belief, especially the role of water to prehistoric peoples.	Scoped out	The Site is located 4.9 km south of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
PE131	Pen-Lan-Mebws-Uchaf Burial Chamber	Scheduled Monument	5	The monument comprises the remains of a chambered tomb, dating to the Neolithic period. One single upright is all that remains of the formal burial chamber. It stands 1.3 m tall, and 2m wide and is very roughly situated in the centre of a field known locally as Y gromlech.	The asset is located on the north-running slope of a large, steep hill, positioned broadly within the centre of a large agricultural field. It is surrounded in all directions by agricultural land, forming part of a wider agricultural landscape.	The significance of the asset lies in its evidential and historical value through its potential to enhance our knowledge of prehistoric burial and ritual. The monument is an important relic of a prehistoric funerary and ritual landscape. It retains significant archaeological potential, with a strong probability of the presence of both intact burial or ritual deposits and environmental and structural evidence, including a buried prehistoric land surface. The setting of the asset contributes towards its significance. The burial chamber has been intentionally placed in an area of raised ground close to the summit of the hill, providing it within long distant views over the landscape to the north, east and west.	Scoped out	The Site is located 5 km southwest of the asset and does not form part of its setting. As such, there can be no harm to its significance through the presence of the proposed development.
HLW (D) 4	St Davids Peninsula and Ramsey Head	Historic Landscape Area	3.5	The historic landscape area contains relict evidence of land use, ritual and religious activity from the prehistoric period onwards, continuing into the Christian era as Dewisland, home and territory of St David (Dewi Sant), the patron saint of Wales. Here is possibly one of the most culturally significant and esteemed landscapes in Wales today. Cadw has registered it as having outstanding heritage value.	The historic landscape area is surrounded on three sides by the sea, St Brides Bay to the south and the Irish Sea to the north and west. To the east lies an extensive agricultural landscape that is broken by the presence of isolated farmsteads and small villages. It is largely a modern agriscap but does contain some relict medieval strip fields in places; a particular concentration can be found west of Solva. From the highest points within the landscape, such as the summit of Carn Llidi that stands at 181 m aOD, there are long distant panoramic views over the surrounding landscape.	The significance of the historic landscape character area is derived from its evidential, historic and aesthetic values. The landscape has been continually occupied since the Neolithic period and contains a plethora of prehistoric ritual monuments which form part of a wider ritual landscape that is spread over South Wales. It is, however, the secular and religious settlement patterns of the early medieval period, particularly with the location of the cult centre of St David at Mynyw (Menevia), which has shaped the area and still defines its distinctive historic character and its significance. Its significance is also partly drawn from a number of post-medieval industrial sites, including the remains of several coastal limekilns and disused coal mines. They show how the landscape has been altered and adapted over the years, with the two industries giving rise to the development of coastal settlements and mining communities. The asset's setting significantly contributes to its significance and character. Its coastal surroundings have shaped how the landscape has been used throughout history by its inhabitants, while the agricultural land to the east reflects a continuation of the agriscap that dominates the historic landscape character area.	Scoped in	Due to the site's elevated position on a relatively high plateau the proposed development may be appreciable in the distant views east from the historic landscape area. It is not currently understood whether this alteration to its setting would change the contribution made by its setting towards its significance and how we come to appreciate its heritage values as the final position of the arrays has not been defined. Therefore, it not possible to scope out the historic landscape area from detailed assessment.



6 CONCLUSIONS

6.1 General

6.1.1 This high-level initial assessment has considered assets within the defined Study Area surrounding the Site. Historic assets which have been shown to be sensitive to change as a result of the proposed development will be included for detailed assessment with the EIA. Those historic assets which have been shown not to derive their cultural significance from their wider surroundings or are not to receive any effects to their significance as a result of the proposed development have been excluded from any further assessment.

6.1.2 The following historic assets will be included for further detailed assessment within the EIA:

- Rickeston Hall Listed Building Group (13078, 13077, 13080 and 13079)
- Grade II Listed Church of Teilo (14397)
- Grade II Listed Llethr and Stable Block at Llethr (14405 and 14408)
- Grade II* Listed Church of St David;
- White House Burial Chamber (PE159);
- Bay View Farm Defended Enclosure (PE540)
- Brawdy Promontory Fort Scheduled Monument (PE 422); and
- St Davids Peninsula and Ramsey Head Historic Landscape Character Area

6.1.3 The historic assets listed above is susceptible to additional refinement during the EIA process, based on the finalised designs.

REFERENCES

Bibliography

Ancient Monuments and Archaeological Areas Act 1979, as amended by Historic Environment (Wales) 2016.

Cadw 2011 *Conservation Principles for the Sustainable Management of the Historic Environment in Wales.* Available at: https://cadw.gov.wales/sites/default/files/2019-05/Conservation_Principles%20for%20the%20sustainable%20managment%20fo%20the%20historic%20environment%20of%20Wales.pdf

Cadw 2017a *Heritage Impact Assessment in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Heritage%20Impact%20Assessment%20in%20Wales%2026917%20EN.pdf>

Cadw 2017b *Managing Change to Listed Buildings in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Managing%20Change%20to%20Listed%20Buildings%20in%20Wales%2024303%20EN.pdf>

Cadw 2017c *Setting of Assets in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/Setting%20of%20Historic%20Assets%20in%20Wales%20EN.pdf>

Cadw 2017d. *Managing Historic Character in Wales.* Available at: <https://cadw.gov.wales/sites/default/files/2019-05/Managing%20Historic%20Character%20in%20Wales%20%20EN.pdf>

Cadw 2018 *Managing Scheduled Monuments in Wales.* Available at: https://cadw.gov.wales/sites/default/files/2019-05/20181112Managing_Scheduled_Monuments_in_Wales_ENG.pdf

Chartered Institute for Archaeologists 2020. *Standards and guidance for historic environment desk-based assessment.* Available at: <http://www.archaeologists.net/codes/ifa>

Historic Environment (Wales) Act 2016. Available at: <http://www.legislation.gov.uk/anaw/2016/4/contents>

Pembrokeshire Coast National park Authority 2011a. *Solva Conservation Area Proposals.*

Pembrokeshire Coast National Park Authority 2011b. *Caerfarchell Conservation Area Proposals.*

Planning (Listed Buildings and Conservation Areas) Act 1990. Available at: <http://www.legislation.gov.uk/ukpga/1990/9/contents>

Planning (Wales) Act 2015. Available at: <http://www.legislation.gov.uk/anaw/2015/4/contents/enacted>

Protection of Wrecks Act 1973. Available at: <http://www.legislation.gov.uk/ukpga/1973/33>

Welsh Government 2017 *Technical Advice Note 24: The Historic Environment.*

Welsh Government 2018 *Planning Policy Wales (Edition 10, December 2018).*



Plate 1) View from the northwest section of the Site, facing southeast



Plate 2) View from the northeast section of the Site, facing southwest

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	14/02/2023	Revision Number:	0
	Scale:	N/A	Illustrator:	Thomas_P
	Path:	DIO SETA - 272400\GIS\Graphics\Plates\Images\Cawdor\Setting		



Plate 3) View from the centre of the Site, facing north



Plate 4) View the centre of the runway, facing southwest towards the Technical Site

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	14/02/2023	Revision Number:	0
	Scale:	N/A	Illustrator:	Thomas_P
	Path:	DIO SETA - 272400\GIS\Graphics\Plates\Images\Cawdor\Setting		



Plate 5) View from the southern section of the Site, facing northwest



Plate 6) View the western section of the Site (north of the Technical Site), facing northwest to Ricketson Hall (List entry 13077)

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	14/02/2023	Revision Number:	0
	Scale:	N/A	Illustrator:	Thomas_P
	Path:	DIO SETA - 272400\GIS\Graphics\Plates\Images\Cawdor\Setting		



Plate 7) View from the northwest section of the Site, facing north towards Llandeloy



Plate 8) View the southern section of the Site, facing southeast towards Penycwm and Llethr Farm

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	14/02/2023	Revision Number:	0
	Scale:	N/A	Illustrator:	Thomas_P
	Path:	DIO SETA - 272400\GIS\Graphics\Plates\Images\Cawdor\Setting		



Plate 9) View from the western section of the Site, facing east towards the Church of St David (List entry 14396)



Plate 10) View the southern section of the Site, facing southeast towards Llethr (List entry 14405)

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	14/02/2023	Revision Number:	0
	Scale:	N/A	Illustrator:	Thomas_P
	Path:	DIO SETA - 272400\GIS\Graphics\Plates\Images\Cawdor\Setting		



Plate 11) View from the western limits of Upper Solva, facing east towards the Site

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	14/02/2023	Revision Number:	0
	Scale:	N/A	Illustrator:	Thomas_P
	Path:	DIO SETA - 272400\GIS\Graphics\Plates\Images\Cawdor\Setting		



Historic Environment Records

Dyfed Archaeological Trust Ltd

APPENDICES

Appendix 1: Terminology

Glossary

The terminology used in this assessment follows definitions contained within Cadw's *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* (2011, 35-39):

Conservation	The process of managing change to an historic asset in its setting in ways that will best sustain its heritage values, while recognizing opportunities to reveal or reinforce those values for present and future generations.
Designation	The recognition of particular heritage value(s) of an historic asset by giving it formal status under law or policy intended to sustain those values.
Heritage	All inherited resources which people value for reasons beyond mere utility.
Heritage, cultural	Inherited assets which people identify and value as a reflection and expression of their evolving knowledge, beliefs and traditions, and of their understanding of the beliefs and traditions of others.
Historic asset	An identifiable component of the historic environment. It may consist or be a combination of an archaeological site, an historic building, or a parcel of historic landscape. Nationally important historic assets will normally be designated.
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and deliberately planted or managed.
Historic environment record	A public, map-based data set, primarily intended to inform the management of the historic environment. In Wales these are maintained by the four Welsh Archaeological Trusts.
Setting	The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape.
Significance (within the historic environment)	The sum of the cultural heritage values, often set out in a Statement of Significance.
Value	An aspect of worth or importance, here given by people to historic assets.
Value, aesthetic	Value deriving from the ways in which people draw sensory and intellectual stimulation from a place.
Value, communal	Value deriving from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.
Value, evidential	Value deriving from the potential of a place to yield evidence about past human activity.
Value, historical	Value deriving from the ways in which past people, events and aspects of life can be connected through a place to the present

Chronology

Where referred to in the text, the main archaeological periods are broadly defined by the following date ranges:

Prehistoric		Historic	
Palaeolithic	970,000–9500 BC	Romano-British	AD 43–410
Early Post-glacial	9500–8500 BC	Early medieval	AD 410–1100
Mesolithic	8500–4100 BC	Medieval	AD 1100–1500
Neolithic	4100–2500 BC	Post-medieval	AD 1500–1800



Prehistoric		Historic	
Bronze Age	2500–700 BC	19th century	AD 1800–1899
Iron Age	800 BC–AD 400	Modern	1900–present day

Appendix 2: Legislative and planning framework

Designation	Associated Legislation	Overview
World Heritage Sites	-	The United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Committee inscribes World Heritage Sites for their Outstanding Universal Value (OUV) – cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. Wales protects its World Heritage Sites and their settings, including any buffer zones or equivalent, through the statutory designation process and through the planning system. Planning Policy Wales 2014 sets out detailed policies for the conservation and enhancement of the historic environment, including World Heritage Sites, through both plan-making and decision-taking.
Scheduled Monuments	<i>Ancient Monuments and Archaeological Areas Act 1979</i>	Under the Ancient Monuments and Archaeological Areas Act 1979, the National Assembly for Wales is required to compile and maintain a schedule of ancient monuments of national importance. Monuments included in the schedule have statutory protection. Under the Ancient Monuments and Archaeological Areas Act 1979, the Secretary of State can schedule any site which appears to be of national importance because of its historic, architectural, traditional, artistic or archaeological interest. Additional controls are placed upon works affecting Scheduled Monuments under the Act. All planning enquiries that may affect a SAM or its setting should be directed to Cadw. The process of Scheduled Ancient Monument consent is administered by Cadw and is required for certain works affecting these designated sites.
Listed Buildings	<i>Planning (Listed Buildings and Conservation Areas) Act 1990</i>	In Wales, under Section 1 of the Planning (Listed Buildings and Conservation Areas) Act 1990, the Welsh Ministers are required to compile lists of buildings of special architectural or historic interest, on advice from Cadw. Works affecting Listed Buildings are subject to additional planning controls administered by Local Planning Authorities. Cadw are a statutory consultee in certain works affecting Listed Buildings. Under most circumstances, Listed Building Consent is required for works affecting Listed Buildings.
Conservation Areas	<i>Planning (Listed Buildings and Conservation Areas) Act 1990</i>	A Conservation Area is an area which has been designated because of its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. In most cases, Conservation Areas are designated by Local Planning Authorities. Section 72 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires authorities to have regard to the fact that there is a Conservation Area when exercising any of their functions under the Planning Acts and to pay special attention to the desirability of preserving or enhancing the character or appearance of Conservation Areas.
Registered Landscapes of Historic Interest in Wales	-	Cadw, in partnership with the Countryside Council for Wales (CCW) and the International Council on Monuments and Sites (ICOMOS UK), has compiled a Register of Landscape of Historic Interest in Wales. These designations are non-statutory but are, nevertheless, material considerations in the planning process. Cadw and CCW should be consulted on any proposals affecting landscapes included in the Register.
Registered Parks and Gardens of Special Historic Interest in Wales and	-	Cadw and ICOMOS maintain the Register of Landscapes of Historic Interest in Wales. These designations are non-statutory but are, nevertheless, material considerations in the planning process. A voluntary system of consultation is in place on planning applications impacting on historic parks and gardens – local authorities are asked to refer all applications to the Garden History Society and those affecting grade I and II* parks and gardens to Cadw.



Designation	Associated Legislation	Overview
Registered Battlefields		In January 2012, the Minister for Housing, Regeneration and Heritage approved in principle the establishment of a Register of Historic Battlefields in Wales. Work is being carried out by Cadw and the Royal Commission on the Ancient and Historical Monuments of Wales to identify sites for inclusion but no register has yet been published.
Protected Wreck Sites	<i>Protection of Wrecks Act 1973</i>	The Protection of Wrecks Act 1973 allows the National Assembly of Wales to designate a restricted area around a wreck to prevent uncontrolled interference. These statutorily protected areas are likely to contain the remains of a vessel, or its contents, which are of historical, artistic or archaeological importance. Work on designated sites can only be carried out under a licence issued by the National Assembly for Wales.

National Planning Policy in Wales:

Planning Policy Wales (PPW) Edition 11 (2021)	
Para. 6.1.7	It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.
Para. 6.1.9	Any decisions made through the planning system must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place.
Para. 6.1.10	There should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage. For any development proposal affecting a listed building or its setting, the primary material consideration is the statutory requirement to have special regard to the desirability of preserving the building, its setting or any features of 124 125 special architectural or historic interest which it possesses.
Para. 6.1.12	The demolition of any listed building should be considered as exceptional and require the strongest justification.
Para. 6.1.13	Applicants for listed building consent must be able to justify their proposals, show why the alteration or demolition of a listed building is desirable or necessary and consider the impact of any change upon its significance. This must be included in a heritage impact statement, which will be proportionate both to the significance of the building and to the degree of change proposed.
Para. 6.1.14	There should be a general presumption in favour of the preservation or enhancement of the character or appearance of conservation areas or their settings. Positive management of conservation areas is necessary if their character or appearance are to be preserved or enhanced and their heritage value is to be fully realised. Planning authorities should establish their own criteria against which existing and/or new conservation areas and their boundaries should be reviewed. The preparation of conservation area appraisals and management plans can assist planning authorities in the exercise of their development management functions
Para. 6.1.15	There is a strong presumption against the granting of planning permission for developments, including advertisements, which damage the character or appearance of a conservation area or its setting to an unacceptable level. In exceptional cases, the presumption may be overridden in favour of development considered desirable on public interest grounds.
Para. 6.1.18	Planning authorities should value, protect, conserve and enhance the special interest of parks and gardens and their settings included on the register of historic parks and gardens in Wales. The register should be taken into account in planning authority decision making. Green Infrastructure Assessments should be used to explore the role of historic parks and gardens and the findings of other landscape character assessments should be fed into historical and cultural assessments to ensure consistency of information
Para. 6.1.19	The effect of a proposed development on a registered park or garden, or its setting, is a material consideration in the determination of planning applications.
Para. 6.1.20	The Welsh Government seeks to protect areas on the register of historic landscapes in Wales
Para. 6.1.21	Planning authorities should protect those assets included on the register of historic landscapes in Wales... The register should be taken into account in decision making when considering the implications of developments which meet the criteria for Environmental Impact Assessment or, if on call in, in the opinion



Planning Policy Wales (PPW) Edition 11 (2021)	
	of the Welsh Ministers, the development is of a sufficient scale to have more than a local impact on the historic landscape.
Para. 6.1.22	World Heritage Sites are international designations recognised for their Outstanding Universal Value, as inscribed by UNESCO. The planning system recognises the need to protect the Outstanding Universal Value of World Heritage Sites in Wales. The impacts of proposed developments on a World Heritage Site and its setting and, where it exists, the World Heritage Site buffer zone and its essential setting, is a material consideration in the determination of any planning application ¹
Para. 6.1.23	The planning system recognises the need to conserve archaeological remains. The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not.
Para. 6.1.24	Where nationally important archaeological remains and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a scheduled monument 129 (or an archaeological site shown to be of national importance) or has a demonstrably and unacceptably damaging effect upon its setting
Para. 6.1.25	In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.
Para. 6.1.26	Where archaeological remains are known to exist or there is a potential for them to survive, an application should be accompanied by sufficient information, through desk-based assessment and/or field evaluation, to allow a full understanding of the impact of the proposal on the significance of the remains.
Para. 6.1.27	If the planning authority is minded to approve an application and where archaeological remains are affected by proposals that alter or destroy them, the planning authority must be satisfied that the developer has secured appropriate and satisfactory provision for their recording and investigation, followed by the analysis and publication of the results and the deposition of the resulting archive in an approved repository.

Local Planning Policy:

Pembrokeshire County Council Local Development Plan (2013)		
Policy ref.	Title	Scope
GN38	Protection and Enhancement of the Historic Environment	Development that affects sites and landscapes of architectural and/or historical merit or archaeological importance, or their setting, will only be permitted where it can be demonstrated that it would protect or enhance their character and integrity.



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk





ES Appendix 10.3: Historic Environment Settings Assessment - Stage 3



Contents

Historic Environment Settings Assessment: Stage 3	1
1. Introduction	1
2. Legislation and Guidance	2
3. Stage 3 Assessment.....	3
4. Conclusion	30
5. References	31

Images

Image 1 - View towards Rickeston Hall from the west	4
Image 2- The Grade II listed U-Plan Farmhouse Ranges.....	4
Image 3 - View towards the Rickeston Hall asset group from within the Site, view from the north-east.....	6
Image 4 - View encompassing the Rickeston Hall asset group and the Site, from the north	6
Image 5 - the Grade II listed Church of St Teilo, from the north	8
Image 6 - View from the Church of St Teilo to the north	8
Image 7 - View from the Church of St Teilo towards the Site	9
Image 8 - View across the Grade II listed Llethr Stable Block towards Llethr	10
Image 9 - View of the chimney stacks and roof of the Grade II listed Llethr.....	11
Image 10 - View of the route into the hamlet of Llethr from the south-east	12
Image 11 - View of the route into the hamlet of Llethr from the north-east.....	12
Image 12 - The Grade I listed Roch Castle and its Grade II listed entrance walls and gate piers	14
Image 13 - The Grade I listed Roch Castle, from the south.....	14
Image 14 - The Grade II listed Church of St Mary, Roch	16
Image 15 - View towards the Site from the vicinity of Roch Castle.....	16
Image 16 - View of the White Horse Burial Chamber, from the south	18
Image 17 - View towards the Bay View Farm Defended Enclosure from the north.....	20
Image 18 - View towards the Site from close to the Bay View Farm Defended Enclosure	20
Image 19 - The western bank of the Brawdy Promontory Fort	22
Image 20 - View from the Brawdy Promontory Fort to the east	22
Image 21 - View from the Brawdy Promontory Fort towards the Site	23
Image 22 - The Scheduled Pointz Castle Mound.....	25
Image 23 - Pointz Castle Mount with agricultural buildings in the background.....	25
Image 24 - View from beside Pointz Castle Mound towards the Site	26
Image 25 - View from the St David and Ramsey Head Historic Landscape out to sea	29



Image 26 - View towards the Site from within the St David and Ramsey head Historic
Landscape Area, near Caerfarchell..... 29



Historic Environment Settings Assessment: Stage 3

1. Introduction

General

- 1.1. This document has been produced by Sweco UK Limited and comprises Stage 3 of a settings assessment in line with the Cadw guidelines laid out in The Setting of Historic Assets in Wales (Cadw 2017a) for a proposed radar array at Cawdor Barracks, near Haverfordwest, Pembrokeshire (the Site).
- 1.2. This assessment follows on from the Stage 1 and 2 assessment (Wessex Archaeology 2023; Technical Appendix 10.3) which identified the following assets as requiring further detailed assessment as they could be susceptible to a potential significant effect from the development:
 - The Rickeston Hall listed building Group (Asset Group 1) which includes:
 - The Grade II* listed Rickeston Hall (13077);
 - The Grade II listed Three-Seater Privy to N of Rickeston Hall (13078);
 - The Grade II listed Carriage-House at Rickeston Hall (13080); and
 - The Grade II listed U-Plan Farmhouse Range at Rickeston Hall (13079).
 - The Grade II listed Church of St Teilo (14397);
 - The Grade II listed Llethr and Stable Block at Llethr (14405 and 14408);
 - The Roch Castle listed building group (Asset Group 9) which includes:
 - The Grade I listed Roch Castle (11982); and
 - The Grade II listed Entrance walls and Gatepiers to Roch Castle (19079).
 - The Scheduled Monument White House Burial Chamber (PE159);
 - The Scheduled Monument Bay View Farm Defended Enclosure (PE540);
 - The Scheduled Monument Brawdy Promontory Fort (PE422); and
 - The St Davids Peninsula and Ramsey Head Historic Landscape Character Area.
- 1.3. The Grade II* Church of St David has been scoped out of further assessment following the application of the ZTV which confirmed there would be no visibility of the Site from the asset.
- 1.4. The Scheduled Monument Pointz Castle Mound (PE272) has been scoped into further assessment on the basis of the work undertaken during the Environmental Statement and through consultation with CADW.

Conditions for inclusion in Environmental Statement Chapter

Only those assets where the conclusion of this assessment indicates the Development will lead to an impact through a change in setting, where that setting contributes to their significance, will be taken forward and reported within the ES chapter.



2. Legislation and Guidance

Introduction

- 2.1. This section summarises the elements of the legislative framework, national and local planning policy and industry standards relevant to this settings assessment.

Legislation

- The Protection of Military Remains Act 1973; and
- The Historic Environment (Wales) Act 2023;

National planning policy

- Future Wales – The National Plan 2040 (2019, updated February 2021);
- Planning Policy Wales (PPW) Edition 12, 2024; and
- Supplementary planning advice is provided by the Welsh Government through technical advice note (TAN) 24: The Historic Environment (Welsh Government 2017).

Local Planning Policy

- Pembrokeshire County Council Local Development Plan 2013: Policy GN.38 Protection and Enhancement of the Historic Environment
- Supplementary Planning Guidance (SPG) for Conservation Areas which for this assessment comprise:
 - The Solva Conservation Area Proposals (2011a); and
 - The Caerfarchell Conservation Area Proposals (2011b).

Guidance

- Heritage Impact Assessment in Wales (Cadw 2017b);
- Managing Change to Listed Buildings in Wales (Cadw 2017c);
- Setting of Historic Assets in Wales (Cadw 2017a);
- Managing Historic Character in Wales (Cadw 2017d);
- Managing Scheduled Monuments in Wales (Cadw 2018); and
- Standard and Guidance for desk-based assessment (ClfA 2020).

Aims

- 2.2. The aims of a settings assessment are this assessment are to:
- To identify the historic assets that might be affected by a proposed change or development;
 - Define and analyse the settings to understand how they contribute to the significance of the historic assets and, in particular, the ways in which the assets are understood, appreciated and experienced;



- Evaluate the potential impact of a proposed change or development on that significance; and
- If necessary, consider options to mitigate or improve the potential impact of a proposed change or development on that significance.

2.3. The first two aims have been addressed in the Stage 1 and 2 assessment (Wessex Archaeology 2023; Technical Appendix 10.3) with this report addressing the third. The fourth aim will be addressed within the ES chapter.

3. Stage 3 Assessment

The Rickeston Hall listed building group

Asset description

- 3.1. Consisting of four listed buildings, this group is centred on the Grade II* listed Rickeston Hall (13077) which principally dates to the early 19th century, but may have earlier elements within its rear wing (Photos 1 and 2). The group lies immediately adjacent to the Site's western boundary.
- 3.2. Rickeston Hall is a three-storey house with a south-eastern range to the rear constructed from rubble stone with a slate roof. Its principal elevation is aligned to the west and features four bays, three of which are evenly spaced, overlooking a small forecourt which is accessed from the south. Internally, the house has a large entrance hall off which the former dining room lies to the left and contains a Regency chimney piece with an iron grate while the room to the left contains a deep cornice and slate chimney piece.
- 3.3. The south-eastern range is likely older than the main house which was constructed for Samuel Griffith before his death in 1824. Internally, this range has a large stone end stack and a rounded bread oven at the eastern end.
- 3.4. Documentary evidence indicates the etymology of 'Rickeston' traces its origins to the Norman name Rickart while the Griffith Family were in possession of the land by the early to mid-18th century. This indicates the presence of an earlier hall which was demolished, at least partially, and replaced.
- 3.5. The Grade II listed Carriage-House (13080) was probably constructed in the latter decades of the 19th century. The carriage-house is a single storey building built from rubble stone with a hipped slate roof and a broad flattened red brick arch on the front elevation.
- 3.6. The Grade II listed U-Plan Farmhouse Ranges (13079) dates from the early 19th century and was probably built around the same time as Rickeston Hall, and extended in the later 19th century. The early part of the building comprises the western range, with north and south returns, is constructed from rubble stone with slate roofs.
- 3.7. In the late 19th century, the northern return was extended with a cow-house and a subsequent two-storey machine shed. This was laterally added to in 1885 through the construction of a double-fronted stable built for W. W. Griffiths and memorialised in a plaque on the eastern gable end.
- 3.8. The Grade II listed Three-Seater Privy (13078) lies to the north of Rickeston Hall and comprises a simple structure constructed from rubble stone and a slate roof and features an internal bench with three holes over a culverted stream. The privy was probably built at the same time as the main Rickeston Hall.



Image 1 - View towards Rickeston Hall from the west



Image 2- The Grade II listed U-Plan Farmhouse Ranges



Setting description

- 3.9. The principal setting of the individual assets within the group is defined by their spatial, visual and historic relationship with each other as elements of a 19th century farm complex. While the farm has been subject to modern development and alterations, the appreciation and understanding of the buildings, their related function and historic connection is still clear and best experienced in close proximity.
- 3.10. The complex is surrounded on three sides (the north, south and east) by mature vegetation which is patching in areas allowing some glimpsed views of the asset from the Site, particularly from the north east (Photo 3). To the west, the group is bounded immediately by a road which in turn is bounded by a high hedgerow, beyond which lie agricultural fields (Photo 4).
- 3.11. The Site forms a substantial element of the assets' wider setting with the airfield the principal element of the landscape beyond the vegetation surrounding the complex.

Significance including contribution made by setting

- 3.12. The significance of the assets within this group is principally determined by their evidential and historic values as remaining elements of the late 18th and early 19th century agricultural landscape of the area. The main hall also derives significance from its aesthetic value through the remaining external architectural detailing and remaining internal features while there is also some limited aesthetic value in the consistency of materials used to construct each of the buildings.
- 3.13. The relationship between the assets, which constitutes the assets' immediate setting, makes a contribution to their significance and greatly enhances the ability to appreciate their evidential and historic values.
- 3.14. Documentary evidence indicates much of the land used to construct RAF Brawdy in the 1940s, now Cawdor Barracks, was owned by the Griffith Family who resided in Rickeston Hall. The Site therefore has a historic connection with the assets in this group, however, that connection is entirely unappreciable on the ground, and can now only be understood through documents.
- 3.15. Beyond this, the wider setting makes no contribution to the significance of the asset group or the individual assets, there are no visual links upon which an understanding of the evidential, historic and/or aesthetic values are contingent or dependant.



Image 3 - View towards the Rickeston Hall asset group from within the Site, view from the north-east



Image 4 - View encompassing the Rickeston Hall asset group and the Site, from the north

Potential impact of the Development

- 3.16. The principal significance of the assets will remain entirely unaffected by the Development in that the appreciation and understanding of their evidential, historic and aesthetic values will not be altered in any way.



- 3.17. The Development will also not change the immediate setting of the assets which is determined by their historic and spatial relationship with each other while the asset group, and the individual assets within that group, were not constructed with any defined views in mind towards the Site. The principal elevation of the Grade II* listed Rickeston Hall faces west while the farmyard layout of the other assets necessarily creates an inward and enclosed focus.
- 3.18. Based on the information gathered during the Site visit indicated that the surrounding vegetation was patchy in places, particularly the north-east, which may allow some visibility from the asset group towards the Site. The Development will be a noticeable introduction into the landscape due to its scale and size, although none of the elements of the assets' significance is determined by their prominence or dominance. The ZTV based on the maximum radar antenna height indicates these may only be visible from the U-Plan Farmhouse Ranges (13079). There may be some visibility of the Development through the mature vegetation, but this will be limited and glimpsed and will not alter the ability to understand or appreciate the key elements of the assets' significance.
- 3.19. While the Site has a tangible connection to the asset group, this connection is purely historic through the former ownership of the land taken to construction RAF Brawdy in the 1940s. That connection is not appreciable on the ground today, only through documentary evidence which requires sufficient research and knowledge to access and understand. This cannot be affected by the Development.
- 3.20. The Development will not have any effect on the significance of the assets or on the appreciation or understanding of that significance through a change in setting.

The Grade II listed Church of St Teilo (14397);

Asset description

- 3.21. A church constructed in the medieval period located approximately 160 m north of the Site which was rebuilt from ruins in 1926 for the Thomas family of Trehale. The church is an interesting and rare example of the application of the Arts and Crafts architectural principles on an ecclesiastic building in Wales whereby the simplest local materials were used without any embellishment or attempts to copy period styles.
- 3.22. The church is compact comprising a nave, chancel, south transept and west bellcote, and is constructed from rubble stone with a single slate roof (Photo 5). Internally, the church is long and low with exposed stone walls and cambered tie beams to the roof. At the entrance to the nave lies an octagonal font which is medieval in date, possibly 13th century while a built-out passage within the northern wall gives access to the stairs towards the rood-loft which features a carved crucifixion to the front.

Setting description

- 3.23. The church is located on the southern edge of the village of Llandeloy accessed along a grass path from the main settlement road. The church sits low in the ground on a south facing slope surrounded by patchy vegetation on all sides (Photo 6). This vegetation varies in height and thickness with the denser areas situated to the east and west allowing generally open views to the south where it overlooks mainly agricultural land and the Site of which there is no discernible, visual evidence (Photo 7).



Image 5 - the Grade II listed Church of St Teilo, from the north



Image 6 - View from the Church of St Teilo to the north



Image 7 - View from the Church of St Teilo towards the Site

Significance including contribution made by setting

- 3.24. The significance of the asset is principally determined through its aesthetic, evidential and historic values. It is difficult to separate these values as the nature of the asset means these three values are entirely entwined and inextricably linked. The historic value of the church's medieval origins and evidential value of the reused materials are enhanced through the aesthetic value of the simple Arts and Crafts architectural ideals which saw the church rebuilt in the early 20th century.
- 3.25. These values and their contribution to what makes the church important are best understood and appreciated within the small, enclosed space within which the church sits, and within the internal spaces where the intricate detailing of the font, screen and pulpit can be viewed and the reverent atmosphere experienced. This immediate setting therefore contributes to the significance of the asset.
- 3.26. Beyond the confines of the enclosed church yard, the wider landscape provides an attractive backdrop comprising agricultural land and mature vegetation where the Site is barely perceptible due to trees at the end of the north-east/south-west aligned runway. This enables the character of the surrounding landscape to remain, or at least seem, overwhelmingly rural despite the substantial military establishment at such close proximity.

Potential impact of the Development

- 3.27. The Development will not alter any of the principal elements of the significance of the asset in that it will not change its aesthetic, historic or evidential values. It will also not have any effect on how those values are experienced and appreciated within the church interior or its immediate setting as defined by the enclosed area within which it sits.
- 3.28. There will be no change from the Development in the historic link between the church and the settlement at Llandeloy.



- 3.29. The Development will be visible from the asset to the south-west with the radar antenna protruding above the existing treeline. This will represent a change in the wider landscape as it will bring the military establishment into visual perception from the church to the south which makes a contribution to the appreciation of its significance. This change will lead to a small reduction in the ability to appreciate the rural character of the landscape by increasing the perceptibility of the modern military presence which corresponds with a Low impact as per Table 10.3 in the ES Chapter.
- 3.30. This asset is reported in the ES chapter.

The Grade II listed Llethr and Stable Block at Llethr (14405 and 14406);

Asset description

- 3.31. An early 19th century, and possibly earlier, gentry house and associated stable block located approximately 500 m east of the Site (Photo 8).
- 3.32. Llethr is a two-storey house with a slate roof and features a four-window front elevation with three stone chimney stacks which is recorded as belonging to the Thomas Family in the early 19th century (Photo 9). To the rear lies a parallel range of two and a half storeys separated by a long stair-light with a brick head. While not inspected at the time of listing, the interior is thought to contain a stairway from the 18th century.
- 3.33. The stable block is located opposite the house to the north-east separated by small access tracks and likely dates to the late 18th or early 19th century with an extension added in 1861. The stable block is constructed from rubble stone with red-brick dressings and an asbestos sheet roof which replaced the original roof sometime in the 20th century. The asset features a number of elaborate architectural details which are unusual for an estate farm building.



Image 8 - View across the Grade II listed Llethr Stable Block towards Llethr



Image 9 - View of the chimney stacks and roof of the Grade II listed Llethr

Setting description

- 3.34. The immediate setting of the assets is defined by their spatial and historic relationship with each other as contemporary and associated structures. Beyond this link, the setting of both assets is characterised by the presence of a number of modern residential properties which form a neat hamlet surrounded by mature vegetation. The southern boundary of the hamlet lies on the northern edge of the Erw Lon road which reinforces the break in character between the hamlet and the agricultural fields beyond.
- 3.35. The approaches into the hamlet, two from the settlement of Penycwm to the south-west, one from the north-east and one from the south-east, are all characterised by tree-lined single-track roads which enhances the sense of enclosure and disconnection with the wider landscape (Photos 10 and 11).
- 3.36. The wider setting of the assets is formed by the general rural character of the area, interspersed with areas of dense vegetation, and the Site which is located to the north-west.



Image 10 - View of the route into the hamlet of Llethr from the south-east



Image 11 - View of the route into the hamlet of Llethr from the north-east

Significance including contribution made by setting

- 3.37. The significance of these assets is principally vested in the evidential and historic values of the two structures as remnants of the post-medieval agricultural landscape.
- 3.38. The immediate setting, defined principally by the relationship between the two assets contributes to their significance as it enhances the understanding of them as contemporary structures which



formed part of a single farm complex. The surrounding hamlet also makes a small contribution to that understanding and appreciation as it ensures the assets are contained and enclosed, a character which is maintained from at least the late 19th century as is visible on historic maps.

- 3.39. The wider setting of the asset, as defined by the surrounding rural landscape, which includes the Site, makes no contribution to the significance of the asset nor does it enhance the appreciation or understanding of the asset's significance.

Potential impact of the Development

- 3.40. While the Site sits within the wider setting of the asset, this makes no contribution to its significance and the Development will have no impact on that significance.

The Roch Castle asset group (Asset Group 9)

Asset Description

- 3.41. Comprising the Grade I listed Roch Castle (11982) and its Grade II listed Entrance walls and gatepiers (19079), the asset is located approximately 3.9 km south of the Site.
- 3.42. Constructed from stone rubble with some later 20th century ashlar window dressings, the castle is a tall single structure in a rough D-shape in plan comprising two towers with the southern constructed on top of a rock spur. The castle is three storeys in height accessed through a raised door, likely via a wooden staircase (Photos 12 and 13).
- 3.43. The original Roch castle was built in around AD 1200 by Adam de Rupe, generally known as Adam de la Roche with *Roche* meaning 'rock' in French signifying both the physical location of the castle and the Norman origins of its founder. The first castle is likely to have been a wooden structure which later replaced by the present stone tower approximately 70 years later.
- 3.44. By the 15th century, the de la Roche family line died out and the castle was noted as being ruinous. Its ownership was eventually passed to the Walter family in the 17th century who declared for King Charles during the English Civil War. After it was burned down in 1644, the castle was left unoccupied and decaying until 1900 when it was purchased and restored by John Philipps. The entrance walls and gate piers were constructed by Philipps in around 1910.
- 3.45. The castle was restored again in 2013 and converted to a hotel.



Image 12 - The Grade I listed Roch Castle and its Grade II listed entrance walls and gate piers



Image 13 - The Grade I listed Roch Castle, from the south

Setting description

- 3.46. The immediate setting of the assets is defined by their historic and spatial relationship to each other and their location within the settlement at Roch which includes the Grade II listed Church of St Mary (19080) (Photo 14). The deliberate siting of the castle on its position of topographic



prominence gives the asset wide-ranging views across the surrounding landscape including towards the Site.

- 3.47. The setting of the Castle is also defined through its visibility within the landscape. The castle was designed to be a prominent feature in the surrounding area providing an overt demonstration of control and power.
- 3.48. The wider setting of the asset generally comprises enclosed fields and dispersed settlements with the most obvious exception to this the airfield at the former RAF Brawdy which encompasses the Site. The buildings, runways and associated infrastructure are all clearly visible from the asset and are generally incongruous with the post-medieval landscape (Photo 15). However, the features of the Site can be read as part of a turbulent period of historic when rapid and dramatic changes were required to meet the demands of the defence of the nation. As a result, the Site forms a definitive component of the development of the area within the setting of the asset and does not reduce any contribution made to its significance from that setting.

Significance including contribution made by setting

- 3.49. The principal heritage significance of the asset is determined by its evidential and historic value as a well preserved, and laterally restored, medieval castle also associated with the English Civil War. The asset provides a physical remnant of the dominance the Norman lords, and later the English aristocracy, held over the landscape.
- 3.50. The asset's immediate setting makes a strong contribution to its significance allowing firstly allowing its evidential value to be appreciated which includes obvious architectural remnants from the medieval period and where later alterations and restorations have been made. This particular component of the significance of the asset is best experienced through the spatial relationship it shares with the now Grade II listed Entrance walls and gate piers which mark the point at which the castle was reinvigorated by modern restoration.
- 3.51. Views to and from the castle are important components of its setting, and contribute to its significance through the ability to appreciate its specific and deliberate location both from a defensive point of view and as a visible manifestation of the power and control exerted by its residents over the area.



Image 14 - The Grade II listed Church of St Mary, Roch



Image 15 - View towards the Site from the vicinity of Roch Castle

Potential impact of the Development

- 3.52. The development will be a noticeable and novel introduction into the wider landscape, albeit only within views in a single direction from the asset and at a distance of approximately 4 km. The introduction of the antenna will be mitigated by that distance, however, this will represent a discernible alteration to a component of its wider setting which contributes to its significance.



- 3.53. Equally, some views towards the castle from the north may be obstructed by the radar antenna which will again only be from a single direction and at distance. However, this will alter the ability to appreciate and understand the dominance of the castle over the landscape from those areas.
- 3.54. The combination of these changes will lead to a small impact to the overall significance of the asset as the change is restricted to reduction in one element of the asset's setting, with its evidential and historic value along with other key components of its setting will remain unaltered. This corresponds with a Low impact as per Table 10.3 in the ES Chapter.
- 3.55. This asset is reported in the ES chapter.

The Scheduled Monument White House Burial Chamber (PE159);

Asset description

- 3.56. The remains of a chambered tomb which dates to the Neolithic period, located approximately 2.4 km north-east of the Site. The remains are characterised by a large capstone, now collapsed, and at least two uprights situated on a low mound approximately 0.1 m higher than the surrounding ground level.

Setting description

- 3.57. The setting of the asset is defined by its location within a broadly agricultural landscape comprising fields with regular boundaries, isolated patches of mature vegetation and dispersed farmsteads. The character of the landscape is indicative of the formal enclosure process in the post-medieval period and 19th century when common land and open fields legally became the property of a landlord (Photo 16).
- 3.58. Beyond the immediate landscape context, the setting of the asset is broadly similar with the landscape of much of the St David's peninsula reflective of the alterations brought about by the enclosure process.
- 3.59. There are three broadly contemporary assets from the earlier prehistoric periods (Neolithic and Bronze Age) which represent funerary or ritual monuments located within 5 km of the asset: Lecha Burial Chamber (PE028), Tre-Ffynnon Burial Chamber (PE027), and Tre-Maen Hir Standing Stone (PE130).
- 3.60. The Site and the former RAF St David's airfield, approximately 3.5 km to the south-west of the asset, both lie within this wider setting and are appreciable modern elements within the rural landscape.



Image 16 - View of the White Horse Burial Chamber, from the south

Significance including contribution made by setting

- 3.61. The majority of the significance of the asset is derived from its evidential value through both the visible remains of the monument and the potential for preserved archaeological remains to be present within the monument area. Those archaeological remains are likely to be of value to national research objectives, and reflective of the designated status of the asset.
- 3.62. This evidential value is best appreciated in close proximity, particularly in relation to the upright stones and collapsed capstone, while the evidential value of the potential archaeological remains is appreciated through the knowledge that any such remains are preserved beneath the ground. The immediate setting of the asset allows that evidential value to be appreciated in a complementary landscape, albeit one that has been fundamentally altered by the process of enclosure.
- 3.63. Relationships between prehistoric funerary monuments can be important, particularly when they are clustered together within groups. Given the distance between the monuments and their distribution throughout the landscape, there is no indication these assets share any meaningful relationship or that they were deliberately sited in view of each other that would constitute consideration as being part of the setting for White House Burial Chamber. Any visibility is incidental.
- 3.64. The wider setting of the asset, which includes two existing military establishments, makes no contribution to the significance of the asset nor does it have any effect on the appreciation or understanding of its principal significance, vested in its evidential value.

Potential impact of the Development

- 3.65. While the Development will be a noticeable introduction into the wider landscape, it will not alter any of elements which contribute to the significance of the asset. The appreciation of the evidential value of the asset will remain unchanged.



- 3.66. The Site is located within the wider landscape context of the asset which makes no contribution to the asset's significance and while the Development will be a visible, novel introduction, this will not alter the understanding and appreciation of the asset's significance.

The Scheduled Monument Bay View Farm Defended Enclosure (PE540):

Asset description

- 3.67. A small, broadly circular defended enclosure located approximately 400 m south of the Site which likely dates to the Iron Age. The enclosure comprises a low earthwork bank approximately 50 m in diameter of up to 0.6 m in height and 10 m in width which defines a complete circuit, albeit with differing levels of preservation. There is a slight depression on the eastern side which is suggestive of an entrance while there are also traces of an outer defensive ditch.
- 3.68. The defended enclosure was principally a settlement with the earthworks surrounding a number of internal structures, likely domestic dwellings which usually take the form of roundhouses and/or those used for storage. These settlements are a common occurrence across the Welsh landscape and are characteristic of Iron Age occupation and settlement patterns.

Setting description

- 3.69. The setting of the asset is defined by its location within an enclosed, agricultural field on a south facing slope. The asset overlooks the landscape beyond which falls away gradually affording clear views to the south-west, south and south-east particularly towards Newgale Beach and the Irish Sea.
- 3.70. To the north-west of the asset lies the settlement of Penycwm which sits between the asset and the south of the Site formed of a number of modern residential properties arranged around the junction of Erw Lon and the A487 (Photo 17). To the north lies the settlement at Llethr, albeit significantly curtailed visually by large mature vegetation present along both sides of Erw Lon.
- 3.71. Although the Site is part of the asset's wider setting, it is not immediately appreciable from the asset (Photo 18).



Image 17 - View towards the Bay View Farm Defended Enclosure from the north



Image 18 - View towards the Site from close to the Bay View Farm Defended Enclosure

Significance including contribution made by setting

- 3.72. The significance of the asset is principally defined by its evidential value through the well preserved archaeological remains within the Scheduled Area. Those remains could include internal buildings, evidence for how the enclosure was constructed, evidence for occupation and domestic activity and evidence for the enclosure's chronology.



- 3.73. The setting of the asset also makes a contribution to its significance where the importance of its defensive position which is vested in views overlooking the landscape to the south.

Potential impact of the Development

- 3.74. The Development will not affect the evidential or historic value of the asset in which the majority of its significance is vested.
- 3.75. The Development will not be present or appreciable within the principal views from the asset to the south which contribute to an understanding of its defensive topography.
- 3.76. There may be some intervisibility of the Development in shared views with the asset when moving north along the A487 to the north through the mature vegetation along the roadside, however, this will not affect the appreciation of the key elements which form the asset's setting. Rather, any visibility will be incidental and the glimpsed views of the radar arrays unlikely to be overt.
- 3.77. While the Site sits within the wider setting of the asset, this makes no contribution to its significance and the Development will have no impact on that significance.

The Scheduled Monument Brawdy Promontory Fort (PE422):

Asset description

- 3.78. The remains of a promontory fort which likely dates to the Iron Age located approximately 1 km to the south-east of the Site. The fort is triangular with natural defences on the eastern and southern sides by steep sloping ground, bolstered in the west and north by a multivallate system of three ditches and banks (Photo 19). The banks are well preserved rising from between 2 m to 4 m in height while the associated ditches are generally less well preserved with only the inner ditch exhibiting a regular, observable form.
- 3.79. Promontory forts were defensive structures with the example at Brawdy likely situated to overlook the confluence of the two watercourses located immediately to the east. Promontory forts were not solely defensive structures but also served as a display of the power and wealth of those in control of the surrounding land.

Setting description

- 3.80. The setting of the asset is defined by its position within the landscape which was specifically chosen both for its strategic location overlooking the watercourses to the east, but also for its topography (Photo 20). The steep slopes allowed the fort to be defended naturally towards its principal defensive focus with the western and northern sides artificially reinforced. At present, the fort looks out across the watercourses densely covered by trees beyond which lies a generally post-medieval agricultural landscape defined by enclosed fields.
- 3.81. Beyond its immediate strategic location, the setting of the asset is defined by enclosed fields to the south and north. To the west, more enclosed fields lie immediately adjacent to the asset with the Site situated beyond (Photo 21).
- 3.82. The setting of the asset is also defined by its historic association with other, contemporary assets in the area like the Scheduled Monument Bay View Farm Defended Enclosure (PE540).



Image 19 - The western bank of the Brawdy Promontory Fort



Image 20 - View from the Brawdy Promontory Fort to the east



Image 21 - View from the Brawdy Promontory Fort towards the Site

Significance including contribution made by setting

- 3.83. The principal component of the asset's significance is defined by the well preserved archaeological remains protected by the scheduled area, including the extant banks and ditches and any potential structural remains which may be present internally.
- 3.84. The asset derives significance from its setting in relation to its topographic prominence and strategic location overlooking the confluence of the watercourses to the east. The higher elevation of the asset allows views across the landscape, enhancing the appreciation of the defensive function of the asset, and for complimentary views towards the asset, which in turn enhance the appreciation of the asset's prominence as an overt display of power.
- 3.85. As the distance from the asset increases, the degree to which the defensive views are important reduces in terms of understanding and appreciating the significance of the asset. This reduction is due to the extended visual range where the identification of threats to the fort would have been increasingly difficult and where the reciprocal views attesting to its influence over the landscape would have been less effective. This is also true for the relationships with similar type assets where greater distance reduces the importance of strategic and historic associations.

Potential impact of the Development

- 3.86. The Development will not alter the evidential or historic value of the asset which is tied to its well preserved archaeological remains nor will it affect the understanding and appreciation of its primary defensive location. The Development will not alter the visible and spatial connection between the asset and the confluence of the two watercourses to the east which is integral to understanding why this location was selected.
- 3.87. The Development will not interrupt any of the existing visibility between the asset and the Scheduled Monument Bay View Farm Defended Enclosure (PE540).



- 3.88. The Development will be located 1 km to the west of the Site and will be a noticeable introduction into the landscape in this direction, comfortably larger and more prominent than any other structure. While this will not affect the understanding of why the fort was located in its position of topographic prominence, it will change the character of the view across the wider landscape within the sphere of influence of the forts defensive outlook. The Development will also alter the ability to appreciate the prominence and overt expression of power and influence of the fort from the west.
- 3.89. This will lead to a small change to the overall significance of the asset as the change is restricted to reduction in one element of the asset's setting, with its evidential and historic value along with other key components of its setting will remain unaltered. This corresponds with a Low impact as per Table 10.3 in the ES Chapter.
- 3.90. This asset is reported in the ES chapter.

The Scheduled Monument Pointz Castle Mound (PE272)

Asset description

- 3.91. The remains of a medieval motte and ditch located approximately 1.2km to the east of the Site. The motte is thought to have been constructed in the 12th century by a tenant of Bishop Peter de Leia of St Davids (1176-1199) to control and manage the surrounding land. The castle has been referred to as Castrum or Villa Poncii based on its original occupant, the Norman Knight Poncius and became one of the most important granges in the diocese.
- 3.92. The asset comprises a conical mound measuring approximately 36m diameter at the base and approximately 6m in height (Photo 22). The mound is surrounded by a 3m ditch with a 1.5m counterscarp on all sides except south where this has either been eroded or removed. The mound would have been topped with a tower, constructed either from stone or wood, the footings of which have been visible above the ground surface, although access to the castle at the time of visiting was prohibited so their status is not clear. There are no discernible remains of the associated outer bailey, although it has been suggested to have been located in the field to the west which is named Parc y Castle.

Setting description

- 3.93. The setting of the asset is defined by its location on the western edge of Pointz Castle Farm where it sits adjacent to a several large agricultural buildings (Photo 23). The eastern aspect of the castle is dominated by the farm and its ancillary buildings while the remaining surroundings comprise large, agricultural fields currently used for livestock grazing.
- 3.94. The Site is located beyond the farm buildings to the east and is visible from the access track to the north and likely from the top of the monument, although this could not be confirmed due to access issues (Photo 24).
- 3.95. To the south and west, the wider setting of the asset is defined by the Pembrokeshire Coast and the Irish Sea beyond.



Image 22 - The Scheduled Pointz Castle Mound



Image 23 - Pointz Castle Mound with agricultural buildings in the background



Image 24 - View from beside Pointz Castle Mound towards the Site

Significance including contribution made by setting

- 3.96. The significance of the asset is principally defined by its archaeological value through the information excavations could yield on medieval defensive practices and the interaction of the diocesan granges associated with St Davids.
- 3.97. The asset also draws significance from its strategic location which was a deliberate choice from both a defensive and landscape management perspective. Views out towards the surrounding landscape were therefore an important component of the positioning of the asset while the prominence of the asset was also an important factor in how control was maintained over the surrounding land.
- 3.98. The prominence of the asset as a landscape feature has been substantially reduced by the presence of the adjacent agricultural buildings which are larger than the extant remains of the monument. This reduction is effectively total as the asset is not visible from the east which from the remaining directions, that prominence is unappreciable due to the adjacent larger agricultural buildings.

Potential impact of the Development

- 3.99. The Development will not alter the evidential or historic value of the asset which is tied to its well-preserved archaeological remains.
- 3.100. While views from the asset on three sides remain unrestricted, the agricultural buildings to the east effectively block views from ground level. There are likely, however, to be views across the top of the agricultural buildings from the summit of the mound which reach beyond towards the Site. This will lead to a change, albeit minimal, to the wider landscape by introducing novel and prominent modern features into an otherwise rural surrounding whereby an appreciation of the
- 3.101. This will lead to a limited change to the overall significance of the asset as the change is restricted to reduction in one element of the asset's setting, which itself has already been compromised,

with its evidential and historic value along with other key components of its setting will remain unaltered. This corresponds with a Negligible impact as per Table 10.3 in the ES Chapter.

3.102. This asset is reported in the ES chapter.

The St Davids Peninsula and Ramsey Head Registered Historic Landscape

Asset description

- 3.103. A landscape area covering St Davids Peninsula and Ramsey Head located approximately 1.7 km to the west of the Site. The landscape is historically important through the relict evidence of land use, ritual and religious activity dating from the prehistoric period becoming the home of St David, patron saint of Wales from the 6th century AD.
- 3.104. The earliest evidence for settlement on St David's peninsula dates to the Neolithic period through the presence of chambered tombs alongside the remains of a fortified stronghold uncovered during excavations. Prehistoric occupation continued into the Iron Age where the peninsula was extensively used for agriculture, the archaeological traces of which are well preserved throughout the landscape due to a lack of later disturbance.
- 3.105. Ramsey Island is located approximately 1 km to the west of the Welsh coast shares a diverse geological profile with the mainland. There is evidence for occupation on the island from at least 5,000 years ago in the form of cairns, field systems and barrows.
- 3.106. St Davids came to prominence in the early medieval period when it became the centre for the cult of Dewi (David). The earliest ecclesiastic site associated with Dewi is thought to lie somewhere to the west of the current settlement, however, by the mid-6th century a church and associated monastery had been established where the cathedral stands today.
- 3.107. After David's death in the late 6th century, the area became a prominent destination for Christian pilgrims. The ecclesiastic settlement was known as Tyddewi (House of David) which by the early 12th century was determined by Pope Calixtus II to be of such great importance that two pilgrimages to St Davids were equivalent to one to Rome. The pilgrimage attracted common people and monarchs alike having been visited by William the Conqueror in 1077, Henry II in 1171 and Edward I in 1284.
- 3.108. Ramsey Island was also a place of pilgrimage in the 12th century with at least one chapel recorded on the Island, St Tyfanogs', with another possible chapel dedicated to St Justinian. The island was owned by the Bishops of St David until the early 20th century and for most of its recorded history was used for agricultural purposes.
- 3.109. The popularity of St Davids as a pilgrimage destination led to the establishment of numerous religious sites in the surrounding area including holy wells, chapels and unenclosed cist cemeteries and a significant boost in economic prosperity.
- 3.110. By the time of the reformation in the early 16th century, St Davids importance was waning as an ecclesiastic destination in part due to the decline of pilgrimages as acts of religious devotion and further affected by ambivalence from Bishops who were increasingly Anglo-centric.
- 3.111. By the 19th century, St Davids and the surrounding peninsula is described in contemporary documentary sources as economically poor with many of the historic buildings in the settlement beyond repair.



Setting description

- 3.112. The setting of the asset is defined by its location on the western coast of Wales where it shares a fundamental relationship with the Irish Sea (Photo 25).
- 3.113. The asset also shares a historic connection with the East Coast of Ireland where from Porth-Mawr or Whitesands Bay, journeys were made across the Irish sea from at least the early medieval period.
- 3.114. To the east, the setting of the asset is defined by its location within a broadly agricultural landscape comprising fields with regular boundaries, isolated patches of mature vegetation and dispersed farmsteads. The character of the landscape is indicative of the formal enclosure process in the post-medieval period and 19th century when common land and open fields legally became the property of a landlord (Photo 26).
- 3.115. The setting of the asset is also defined by historic routes into the city of St David used during the medieval period by Christian pilgrims. While there is little in the way of available documentary evidence as to the exact routes taken by pilgrims, two routes have been suggested by the British Pilgrimage Trust¹. These projected routes run along the coast from the south from Pembroke and from the north from Fishguard and would likely have connected with routes across Wales and beyond via Llanboidy, Carmarthenshire.

Significance including contribution made by setting

- 3.116. The significance of the asset is primarily derived from its importance as a national cultural and historic centre, from the longevity of occupation and associated archaeological record, from its impressive geological strata and from the rugged nature of its coastal, rocky landscape.
- 3.117. The principal setting of the asset, defined by its coastal location and its historic connection with the east coast of Ireland, contributes to its significance through enhancing the appreciation of the key elements of its significance.
- 3.118. The settlement at St Davids, and by extension the surrounding area covered by the Registered Historic Landscape, was a focal point for medieval pilgrims. Pilgrims would have travelled long distances cross country, and in some cases internationally, to visit St Davids for its spiritual importance with the journey itself a fundamental component. While the landscape has been substantially altered since the medieval period, principally through the enclosure of the common and along with modern development, the overwhelmingly rural character allows a degree of understanding of the journey for those walking along the projected routes.
- 3.119. The accessibility of these routes allows the importance of the Historic Landscape to be experienced in a broadly similar way to how it would have been during the medieval period and contributes to the significance of the asset.

¹ Pilgrim Routes - British Pilgrimage Trust



Image 25 - View from the St David and Ramsey Head Historic Landscape out to sea



Image 26 - View towards the Site from within the St David and Ramsey head Historic Landscape Area, near Caerfarchell

Potential impact of the Development

- 3.120. The Development will have no effect on the principal components of the historic landscape's significance as it lies outside of the landscape boundaries and will not change any historic or cultural association attached to the area. The Development will not alter the relationship of the historic landscape to the Irish Sea or beyond to the east coast of Ireland.
- 3.121. Due to the large area covered by the Registered Historic Landscape, numerous sections lie within the ZTV and thus the Development could potentially be visible from within the boundaries of the landscape. However, taking into consideration the distance between the Site and the boundary of the historic landscape area, any visibility of the Development would be minimal, likely restricted



to the tips of the radar arrays. Such a small presence in the wider landscape will not be a noticeable addition, rather an incidental inclusion on the distant horizon. This will not change any understanding or appreciation of the significance of the historic landscape area.

- 3.122. The Development will be visible and noticeable on the projected southern route into the Historic Landscape, principally when moving along the Pembrokeshire coast from the south before turning to the west towards St David's in the vicinity of Newgale, Penycwn and the Site. The projected northern route lies more than 7 km away from the Site and the Development would not be visible as shown on the ZTV.
- 3.123. There will, therefore, be some change through the addition of a noticeably large, modern and industrial development along the projected southern pilgrim route but in relatively close proximity to the point at which the route turns towards St Davids. From here, the experience and appreciation of the route remains unaffected as the Development will be behind and so is not visible, not noticeable and causing no change to the appreciation of the significance of this route and its importance to the significance of the historic landscape area.
- 3.124. The change from the Development will, overall, be extremely limited and that change only appreciable in very limited circumstances. This limited change corresponds with a Negligible impact as per Table 10.3 in the ES Chapter.
- 3.125. This asset is reported in the ES chapter.

4. Conclusion

General

- 4.1. This assessment has concluded that four designated heritage assets will be impacted by the introduction of the Development through a change in setting, where that setting contributes to their significance:
- The Grade II listed Church of St Teilo;
 - The Grade I listed Roch Castle;
 - The Scheduled Brawdy Promontory Fort;
 - The Scheduled Pointz Castle; and
 - The St Davids Peninsula and Ramsey Head Registered Historic Landscape.
- 4.2. These assets have been carried forward into the ES chapter for assessment of the effect those impacts will have upon their significance.



5. References

Cadw 2011. *Conservation Principles for the sustainable management of the historic environment in Wales*. Available at: https://cadw.gov.wales/sites/default/files/2019-05/Conservation_Principles%20for%20the%20sustainable%20managment%20fo%20the%20hi%20storic%20environment%20of%20Wales.pdf

Cadw 2017a. *The Setting of Historic Assets in Wales*. Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Setting%20of%20Historic%20Assets%20in%20Wales%2026918%20EN.pdf>

Cadw 2017b. *Heritage Impact Assessment in Wales*. Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Heritage%20Impact%20Assessment%20in%20Wales%2026917%20EN.pdf>

Cadw 2017c. *Managing Change to Listed Buildings in Wales*. Available at: <https://cadw.gov.wales/sites/default/files/2019-05/20170531Heritage%20Impact%20Assessment%20in%20Wales%2026917%20EN.pdf>

Cadw 2017d. *Managing Historic Character in Wales* Available at: <https://cadw.gov.wales/sites/default/files/2019-09/Managing%20Historic%20Character%20in%20Wales%20%20EN.pdf>

Cadw 2018. *Managing Scheduled Monuments in Wales*. Available at: https://cadw.gov.wales/sites/default/files/2019-05/20181112Managing_Scheduled_Monuments_in_Wales_ENG.pdf

Chartered Institute for Archaeologists (CIfA) 2020. *Standard and guidance for historic environment desk-based assessment*. Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf

Welsh Government 2017. *Planning Policy Wales Technical Advice Note 24: The Historic Environment* Available at: <https://www.gov.wales/sites/default/files/publications/2018-09/tan24-historic-environment.pdf>

OFFICIAL



Ministry
of Defence

ES Appendix 10.4: Detailed Gradiometer Survey Report



Project DARC Cawdor, Pembrokeshire

Detailed Gradiometer Survey Report

Document Ref.: 272401.03
February 2024



© Wessex Archaeology Ltd 2024, all rights reserved

Unit R6
Sheaf Bank Business Park
Prospect Road
Sheffield
S2 3EN

www.wessexarch.co.uk

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB

Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage

Document Information

Document title Project DARC, Cawdor, Pembrokeshire
Document subtitle Detailed Gradiometer Survey Report
Document reference 272401.03

Commissioned by SWECO UK Limited
Address Sweco 2nd Floor
Quay 2
139 Fountainbridge
Edinburgh
EH3 9QG

Site location Brawdy
County Pembrokeshire, Wales
National grid reference 185200 225100 (SM 85200 25100)

WA project name Project DARC Cawdor
WA project code 272401
Date of fieldwork 15/01/2024 – 19/01/2024
Fieldwork directed by Rok Plesnicar
Project management by Patricia Edwards
Document compiled by Rok Plesnicar
Contributions from Jo Instone-Brewer
Graphics by Rok Plesnicar

Quality Assurance

Issue	Date	Author	Approved by
1	19/02/2024	RP	 TR



Contents

Summary.....	iii
Acknowledgements.....	iii
1 INTRODUCTION	1
1.1 Project background	1
1.2 Scope of document	1
1.3 The site.....	1
2 ARCHAEOLOGICAL BACKGROUND	1
2.1 Introduction.....	1
2.2 Archaeological and historical context	2
3 METHODOLOGY	3
3.1 Introduction.....	3
3.2 Aims and objectives	4
3.3 Fieldwork methodology	4
3.4 Data processing	4
4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION.....	4
4.1 Introduction.....	4
4.2 Gradiometer survey results and interpretation	5
5 DISCUSSION	6
REFERENCES	8
APPENDICES.....	9
Appendix 1: Survey equipment and data processing	9
Appendix 2 Geophysical interpretation	11

List of Figures

Figure 1	Site location and survey extents
Figure 2	Detailed gradiometer survey results: Overview greyscale plot
Figure 3	Detailed gradiometer survey results: Overview interpretation
Figure 4	Detailed gradiometer survey results: Overview greyscale plot
Figure 5	Detailed gradiometer survey results: Overview interpretation
Figure 6	Detailed gradiometer survey results: Overview greyscale plot
Figure 7	Detailed gradiometer survey results: Overview interpretation
Figure 8	Detailed gradiometer survey results: greyscale plots (LP_005, LP_021, LP_022)
Figure 9	Detailed gradiometer survey results: interpretation (LP_005, LP_021, LP_022)
Figure 10	Detailed gradiometer survey results: greyscale plots (LP_005, LP_009, LP_021)
Figure 11	Detailed gradiometer survey results: interpretation (LP_005, LP_009, LP_021)
Figure 12	Detailed gradiometer survey results: greyscale plots (LP_001, LP_003, LP_004, LP_005, LP_007, LP_008, LP_022)
Figure 13	Detailed gradiometer survey results: interpretation (LP_001, LP_003, LP_004, LP_005, LP_007, LP_008, LP_022)
Figure 14	Detailed gradiometer survey results: greyscale plots (LP_001, LP_005, LP_008, LP_009, LP_010)
Figure 15	Detailed gradiometer survey results: interpretation (LP_001, LP_005, LP_008, LP_009, LP_010)
Figure 16	Detailed gradiometer survey results: greyscale plots (LP_003, LP_006, LP_007, LP_008, LP_016, LP_017, LP_018, LP_019)
Figure 17	Detailed gradiometer survey results: interpretation (LP_003, LP_006, LP_007, LP_008, LP_016, LP_017, LP_018, LP_019)



- Figure 18** Detailed gradiometer survey results: greyscale plots (LP_008, LP_009, LP_010)
Figure 19 Detailed gradiometer survey results: interpretation (LP_008, LP_009, LP_010)
Figure 10 Detailed gradiometer survey results: greyscale plots (LP_008, LP_009, LP_010, LP_011, LP_012, LP_014, LP_015, LP_020)
Figure 21 Detailed gradiometer survey results: interpretation (LP_008, LP_009, LP_010, LP_011, LP_012, LP_014, LP_015, LP_020)
Figure 22 Detailed gradiometer survey results: greyscale plots (LP_009, LP_011, LP_012, LP_013, LP_014)
Figure 23 Detailed gradiometer survey results: interpretation (LP_009, LP_011, LP_012, LP_013, LP_014)



Summary

A gradiometer survey was conducted over land at Cawdor Barracks, Cawdor, Pembrokeshire (centred on NGR 185200 225100). The project was commissioned by SWECO UK Limited with the aim of establishing the presence, or otherwise, and nature of detectable archaeological features in support of the development of a Deep Space Advanced Radar Capability facility at Cawdor Barracks.

The site comprises grass fields located 1.2 km north-east of the coast of St. David's peninsula and 2 km north of Newgale in Pembrokeshire, covering an area of 116.6 ha. The geophysical survey was undertaken between 15 – 23 January 2024. The survey has identified several anomalies which could suggest archaeological potential within the area, as well as numerous associated with former military activity.

Several clusters of annular features have been identified throughout the site. Although they could relate to prehistoric round houses or round barrows, it is equally possible that they are the result of mobile anti-aircraft gun placements during the Second World War. The areas where dense clusters of anomalies are present are more suggestive of Second World War activity, while the more isolated anomalies have a higher potential of being prehistoric.

There is extensive evidence for past agricultural activity across the site. This includes former field boundaries noted on late 19th century mapping and those that likely predate the available mapping. Given the known archaeology in the surrounding area the anomalies that predate the mapping could date anywhere from the prehistoric to post-medieval period.

The remaining anomalies are associated with modern military infrastructure, modern services, and agrarian activities throughout the site.

Acknowledgements

Wessex Archaeology would like to thank SWECO UK Limited for commissioning the geophysical survey. The assistance of Sam Lord and Mark Murphy is gratefully acknowledged in this regard.

The fieldwork was undertaken by Rok Plesnicar and Max McShane. Rok Plesnicar processed and interpreted the geophysical data with contributions from Brett Howard and Filippo Carrozzo. Rok Plesnicar wrote the report with contributions from Jo Instone-Brewer. The geophysical work was quality controlled by Brett Howard. Illustrations were prepared by Rok Plesnicar. The project was managed on behalf of Wessex Archaeology by Patricia Edwards.



Project DARC, Cawdor, Pembrokeshire

Detailed Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by SWECO UK Limited to carry out a geophysical survey at Brawdy, Pembrokeshire, Wales (centred on NGR 185200 225100) (**Figure 1**). The survey forms part of an ongoing programme of archaeological works being undertaken in support of the development of a Deep Space Advanced Radar Capability facility at Cawdor Barracks.

1.2 Scope of document

1.2.1 This report presents a brief description of the methodology followed by the detailed survey results and the archaeological interpretation of the geophysical data.

1.3 The site

1.3.1 The geophysical survey area is located approximately 1.2 km northeast of the coast of St. David's peninsula and 2 km north of Newgale in Pembrokeshire.

1.3.2 The survey comprises 116.4 ha of land, currently utilised as an airbase. The site is bounded by the extents of the RAF Brawdy.

1.3.3 The site is situated in a relatively flat landscape at about 108 m above Ordnance Datum (aOD).

1.3.4 The solid geology comprises Sandstone and Mudstone of the Lingula Flags Formation with overlying superficial geological deposits of glaciofluvial sands and gravels (BGS 2024).

1.3.5 The soils underlying the site are likely to consist of brown soils of the 541f (Neath) association, and stagnogley soils of the 713f (Brickfield 2) association (SSEW SE Sheet 2 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The archaeological and historical background was assessed in a prior archaeological desk-based assessment (ADBA) (Wessex Archaeology 2023), which considered the recorded historic environment resource within a 1 km study area of the proposed development. The DBA used information from the Historic Environment Record supplied by Dyfed Archaeological Trust (DHER) and the Historic Environment Record of Wales (Archwilio). Additional sources of information are referenced, as appropriate. The findings of the DBA are summarised below.



2.2 Archaeological and historical context

- 2.2.1 Designated heritage assets within the 1 km study area of the site comprise 10 listed buildings and 2 scheduled monuments.
- 2.2.2 There are eight Grade II and two Grade II* listed buildings. The Grade II properties comprise the Paran Chapel; Three-Seater Privy to north of Rickeston Hall; U-Plan Farmhouse Ranges at Rickeston Hall; Carriage-House at Rickeston Hall; Church of Saint Teilo; Hendre Cross, Llethr; and Stable Block at Llethr.
- 2.2.3 The Grade II* buildings comprise Rickeston Hall and the Church of St David. The scheduled monuments include Bay View Farm Defended Enclosure and the Brawdy Promontory Fort.

Early Prehistory (970,000 – 4000 BC)

- 2.2.4 Evidence for post-glacial occupation of the area has been recorded at the nearby coast. A complex flint working site dating to the Mesolithic period was discovered at Cwrn Bach and comprised a vast array of worked lithic implements and many flakes and waste material. A few hundred metres along the shore at Pen Y Cwrn, an eroding cliff section revealed more Mesolithic flint implements.

Neolithic – Bronze Age (4000 – 700 BC)

- 2.2.5 From the Neolithic period onwards, more permanent settlement was largely concentrated inland and on higher ground although coastal areas continued to be an integral part of indigenous populations subsistence strategies. The DHER records three Group VIII polished stone axes, between the site's southern boundary and Newgale Beach.
- 2.2.6 There is a single record of Bronze Age activity in the study area relating to a possible barrow mound associated with Brawdy castle, which is recorded within the DHER. This feature has not however been confirmed through detailed investigation.

Iron Age (700 BC – AD 43)

- 2.2.7 The DHER has recorded a total of four defended enclosures within the study area, reflective of the Iron Age occupation of Pembrokeshire and south-west Wales.
- 2.2.8 On the eastern border of the site, perched on the crest of the ridge and north of Newgale Lodge, lies an univallate sub-rectangular enclosure. To the south of the site, the scheduled Bay View Farm Defended Enclosure is located on a gentle S-facing slope within an enclosed pasture field. It is also known as Bickney or Bigney and comprises a low and spread, circular earthwork bank.

Anglo-Saxon to Medieval (AD 410 – 1500)

- 2.2.9 The archaeological record of the Anglo-Saxon occupation of the area is based principally upon documentary evidence and some scant artefactual remains.
- 2.2.10 Excavations at Brawdy promontory fort on the south-eastern periphery of the study area, found a single artefact in the form of a fragmentary piece of an early medieval bellows. Latin inscribed stones dating from the 5th and 6th centuries have been found at Brawdy Farm and Rickeston Farm.



- 2.2.11 Ecclesiastic records show that both the Brawdy and Llandeloy Parish Church have Anglo-Saxon origins.
- 2.2.12 The DHER records a number of entries within the bounds of the site; namely two possible locations of former settlements named *Newton*, located close to the existing technical site, and '*Court Fach*', a possible settlement site based upon place name evidence. The latter corresponds with an area of scrub to the north of the site.
- 2.2.13 Many of the remaining entries within or around the site relate to holy wells, and springs which are known to have been pilgrimage sites during the medieval period.

Post-medieval to 19th century (AD 1500 – 1900)

- 2.2.14 The archaeological record demonstrates that during the post-medieval period, the area continued to be reliant upon a small-scale agrarian economy. Historical mapping shows that a large number of post-medieval farmsteads and cottages in the area survived into the 19th century seven of which once stood within the bounds of the site, although none now remain.
- 2.2.15 Rwhle or '*Rhiwlan*' Cottage and adjoining farmstead once stood on the western side of the site, on land which today corresponds with the main technical area. Analysis of satellite imagery indicates that this section of the site has been fully redeveloped.
- 2.2.16 The remaining post-medieval buildings coincide with areas of undeveloped land and, in the case of Mutton Hall, there appear to be some possible structural remains visible in differential vegetation growth which correspond with this former farmstead. The sites of Tre-newydd Cottage, Broadway Cottage, and Cross Wren Cottage are all sited within undeveloped grassy areas albeit with no visible surface expression.

Modern (1900 – present)

- 2.2.17 In 1944, RAF Brawdy was established as a satellite station to RAF St David's, situated 5 km west of the site. The airfield was equipped with three runways, dispersal sites, taxiways, a main technical site, and several camps for stationed personnel. RAF Brawdy was operational from 1944 until 1992 when flying operations ceased and the station was passed to the army and continued as an operational base under the title of Cawdor Barracks.
- 2.2.18 With the exception of the airstrip, taxi way, and some remaining earthworks, the earlier phases of the site's use as an RAF and RNAS station have been removed.

3 METHODOLOGY

3.1 Introduction

- 3.1.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 15 – 23 January 2024. Field conditions for the majority of the site were favourable throughout the period of survey. An overall coverage of 105.1 ha was achieved. Several areas were unsurveyable due to thick vegetation and boggy ground conditions.
- 3.1.2 The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2023), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2014) and European Archaeologiae Consilium (Schmidt *et al.* 2015).



3.2 Aims and objectives

3.2.1 The aims of the survey comprise the following:

- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
- To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.2.2 In order to achieve the above aims, the objectives of the geophysical survey are:

- To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
- To clarify the presence/absence of anomalies of archaeological potential; and
- Where possible, to determine the general nature of any anomalies of archaeological potential.

3.3 Fieldwork methodology

3.3.1 The cart-based gradiometer system used a Carlson BRx7 RTK instrument, which receives corrections from a network of reference stations, with the ability to support multi-frequency GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas L-Band capability. These systems allow positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by Europae Archaeologiae Consilium recommendations (Schmidt et al. 2015) for geophysical surveys.

3.3.2 The detailed gradiometer survey was undertaken using eight SenSys FGM650/3 gradiometers spaced at 0.5 m intervals and mounted on a non-magnetic cart, towed by a 4x4 vehicle. Data were collected with an effective sensitivity of 0.03 nT at a rate of 100 Hz, producing intervals of 0.15 m along transects spaced 4 m apart.

3.4 Data processing

3.4.1 Data from the survey were subjected to minimal correction processes. These comprise a 'Destripe' function (± 5 nT thresholds), applied to correct for any variation between the sensors, and an interpolation used to grid the data and discard overlaps where transects have been collected too close together.

3.4.2 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

4.1 Introduction

4.1.1 The detailed gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plot overviews and archaeological interpretations overviews at a scale of 1:4000 (**Figures 2 – 7**) and greyscale plots and archaeological interpretations at a scale of 1:2000 (**Figures 8 – 23**). The data are displayed at -6 nT (white) to +9 nT (black) for the greyscale images.

4.1.2 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figures 9, 11,**



13, 15, 17, 19, 20, 21, 23). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.

- 4.1.3 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to unless considered relevant to the archaeological interpretation.
- 4.1.4 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 4.1.5 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g., CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

4.2 Gradiometer survey results and interpretation

- 4.2.1 Several clusters of positive annular anomalies (**4000 – 4006**) have been identified in land parcels (LPs) 01, 08, 10, 13, and 22 (**Figures 9, 13, 19, 23**). They are 11 m – 13 m in diameter and 1 m wide, indicating ditch-like features or areas of compacted ground. They vary in numbers, from clusters of more than 10 to a single isolated feature. This could relate to prehistoric activities such as round barrows or indication of round houses identified in the wider area. However, the regularity and number of anomalies is more suggestive of modern military activities such as mobile anti-aircraft defences.
- 4.2.2 A dipolar linear anomaly at **4007** has been identified in the southern part of LP 22 (**Figure 9**). It is up to 4 m wide by 73 m long on a general east – west alignment and likely indicates a ditch-like feature. Similar anomalies have been identified throughout the site as former field boundaries which suggest a feature of such not known from available historical mapping.
- 4.2.3 A similar linear dipolar anomaly is located 200 m to the south-east of **4007**, at **4008** in LP 01 (**Figure 13**). It is fragmented into two parts, which are up to 2 m wide by 40 m and 110 m long respectively indicating a ditch feature of unknown origin. It has a predominant NNE – SSW orientation and likely belongs to a wider field system, which predates available maps. Additionally, a group of five positive circular anomalies has been identified 40 m to the west of **4008**, at **4009**. They are up to 3.5 m in diameter, indicating pit-like features of an unknown origin. They could be a result of natural undulations in the local geology and as such archaeologically insignificant.
- 4.2.4 Further isolated positive linear anomalies have been identified at **4010 – 4014** (**Figures 13, 15, 17, 21**) in LPs 01, 07, 08, and 10. They are up to 2.5 m wide and up to 250 m long pertaining to ditch features identified as possible former field boundaries. Due to their absence from available maps, they are identified as parts of field systems predating historical mapping. A similar anomaly is identified in LP 10, where two positive linear anomalies run parallel to each other at **4015** (**Figures 19, 21**). They are up to 1 m wide by 45 m long and are spaced 2.5 m apart. They indicate ditches alongside a former path not known from historical mapping.
- 4.2.5 Two strong curvilinear anomalies have been identified in LP 16 at the western end of the site at **4016** and **4017** in LP 16 (**Figure 17**). **4016** is a U-shaped linear anomaly which is 2 m wide and 80 m long. About 20 m to the east of it is a similar rectilinear anomaly (**4017**) which occupies a space of 28 m by 30 m. Both features have a negative part of the anomaly on the inside of the feature which could suggest a ditch with an accompanying embankment and is most likely related to the military activities within the area since the establishment of the airfield. This is corroborated by the orientations of the anomalies which correspond with the network of the modern roads on site. However, due to their shape, an earlier origin



cannot be ruled out and it would require further investigation to fully understand the function of these features.

- 4.2.6 Numerous positive linear anomalies on a predominately orthogonal grid have been identified throughout the site **4018 – 4091 (Figures 9, 11, 13, 15, 17, 19, 21, 23)**. These are identified on the 2nd edition OS mapping for Pembrokeshire published in 1908 and are interpreted as historical field boundaries. Additionally, several roads that are known from the historical map have been identified together with several currently present on site as a remnant of military infrastructure (**4092 – 4104**). The clearest examples are at **4022 – 4025, 4092**, and **4093** in LP 21 and 22.
- 4.2.7 Two areas of increased response have been identified in LP 05 and LP 08 at **4105** and **4106 (Figures 9, 17)**. They cover areas of up to 38 m by 29 m and correspond with the location of buildings noted on 1908 OS mapping. Additionally, an increased response at **4107** indicates the site of a former quarry located in LP 09 (**Figure 11**).
- 4.2.8 Numerous weak positive linear anomalies have been identified across the site. They are associated with agricultural practices such as land management and farming. Numerous positive and negative linear anomalies have been identified which are associated with drainage systems on site.
- 4.2.9 Numerous dipolar linear anomalies have been identified throughout the site. They are associated with modern services. Additionally, anomalies indicating former infrastructure associated with military activities have been identified throughout the site as well as areas of increased magnetic response, indicating made ground likely caused by the development of the military base. An example of such an area is in LP 09 at **4108**, where a wider area of made ground, which covers 330 m by 300 m has been identified. It comprises numerous ferrous anomalies and anomalies pertaining to landscaping for military base. These kinds of anomalies would obscure any weak archaeological anomalies still possibly present within the area, h
- 4.2.10 Numerous weak positive and negative linear trends have been identified that are too weak for a confident interpretation.

5 DISCUSSION

- 5.1.1 The gradiometer survey has identified several anomalies which could suggest archaeological potential within the area, as well as numerous associated with former military activity.
- 5.1.2 Several clusters of annular features have been identified throughout the site. Although they could relate to prehistoric round houses or round barrows, it is equally possible that they are the result of mobile anti-aircraft gun placements during the Second World War. The areas where dense clusters of anomalies are present are more suggestive of Second World War activity, while the more isolated anomalies have a higher potential of being prehistoric.
- 5.1.3 Several linear anomalies identified on site are associated with former field boundaries which predate available maps. Additionally, several pit features were identified. While this suggests an agricultural landscape, it is unclear when this dates to from the geophysical survey alone. Given the known archaeology in the surrounding area these anomalies could date anywhere from the prehistoric to post-medieval period.



- 5.1.4 Evidence of more recent agricultural activity is noted in the form of numerous former field boundaries that relate to those recorded on historical mapping. Additionally, the locations of two buildings and a quarry known from historical mapping have been identified.
- 5.1.5 The remaining anomalies are associated with modern military infrastructure, modern services, and agrarian activities throughout the site.



REFERENCES

British Geological Survey online viewer <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
(accessed February 2024)

Chartered Institute for Archaeologists [CIfA] 2014 *Standards and guidance for archaeological geophysical survey*. Reading, CIfA.

Schmidt, A., Linford, P., Linford, N., David, A., Gaffney, C., Sarris, A. and Fassbinder, J. 2015. *Guidelines for the use of geophysics in archaeology: questions to ask and points to consider*. EAC Guidelines 2, Belgium: European Archaeological Council.

Soil Survey of England and Wales 1983 *Sheet 2, Soils of Wales*. Ordnance Survey, Southampton

The Welsh Archaeological Trusts 2022 *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*

Wessex Archaeology 2023, *Project DARC - Cawdor Barracks, St Davids, Haverfordwest, Wales: Archaeological Desk Based Assessment (ADBS)*

Wessex Archaeology 2023, *Project DARC Cawdor, Pembrokeshire Written Scheme of Investigation for an Archaeological Geophysical Survey*



APPENDICES

Appendix 1: Survey equipment and data processing

Survey methods and equipment: Sensors

The magnetic data for this project were acquired using a non-magnetic cart fitted with SenSys FGM650/3 magnetic gradiometers. The carts have the capability to mount four or eight sensor assemblies fixed horizontally between 1 m and 0.5 m apart dependent on data quality requirements. The system allows multiple traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 0.6 m separation and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of $\pm 8 \mu\text{T}$ over $\pm 1000 \text{ nT}$ range. All of the data are then relayed to a FZ-G1 tablet, running the MONMX program, which is used to record the survey data from the array of FGM650/3 probes at a rate of either 20 Hz or 100 Hz. The program also receives measurements from a GPS system, which is fixed to the cart at a measured distance from the sensors, providing real time locational data for each data point.

Survey methods and equipment: Towed cart

The tow cart system for data collection utilises either the Sensys Magneto MXV3 system, or the Sensys Magneto MX Heavy Duty cart system. The system can host up to 16 gradiometers on a trailer 3.85 m wide. The cart allows for rapid non-invasive survey behind an appropriate vehicle, usually an ATV or four-wheel drive car.

The cart-based systems rely upon accurate GPS location data which is collected using a Leica Captivate system with rover and base station, or a Carlson BRx7 GNSS rover. The GPS receives corrections from a network of reference stations, with the ability to support multi-frequency GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas L-Band capability. These systems allow positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by European Archaeologiae Consilium recommendations (Schmidt et al. 2015) for geophysical surveys.

Data may be collected with a higher sample density where complex archaeological anomalies are encountered, to aid the detection and characterisation of small and ephemeral features. Data may be collected at up to 0.01 m intervals along traverses spaced up to 0.25m apart.

Post-processing

The magnetic data collected during the survey is downloaded from the system for processing and analysis using both commercial and in-house software. The software allows for both the data and the images to be processed in order to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

Typical data and image processing steps may include:

- GPS DeStripe – Determines the median of each transect and then subtracts that value from each datapoint in the transect within the defined window. May be used to remove the striping effect seen within a survey caused by directional effects, drift, etc.



- Discard Overlaps - Intended to eliminate a track(s) that have been collected too close to one another. Without this, the results of the interpolation process can be distorted as it tries to accommodate very close points with potentially differing values.
- GPS Base Interpolation – Sets the X & Y interval of the interpolated data and the track radius (area around each datapoint that is included in the interpolated result).

Typical displays of the data used during processing and analysis:

- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.



Appendix 2 Geophysical interpretation

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Possible archaeology – used for features which give a response, but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

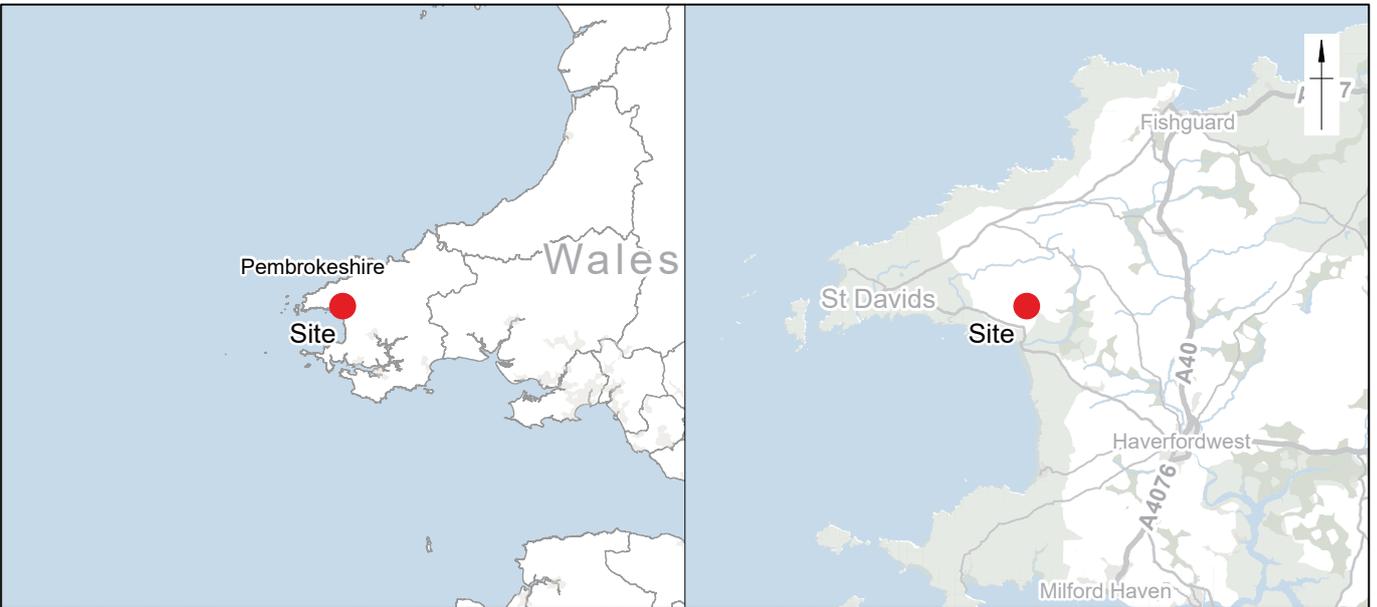
- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.
- Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.

The agricultural category is used for the following:

- Former field boundaries – used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Ridge and furrow – used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing – used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage – used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Superficial geology – used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative, or broad bipolar (positive and negative) anomalies.



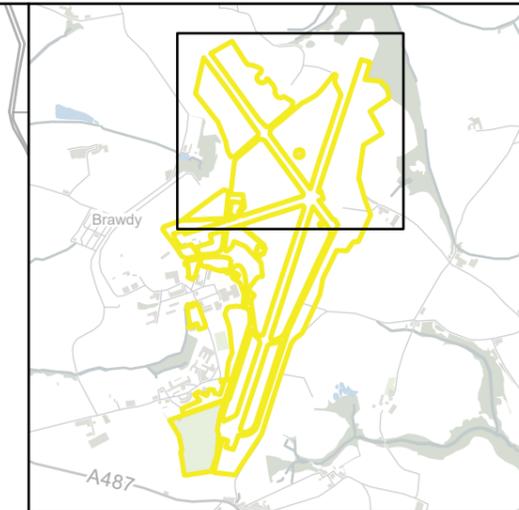
Coordinate system: OSGB 1936 OSGB 1936 / British National Grid

Contains Ordnance Survey data © Crown copyright and database right 2024.
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

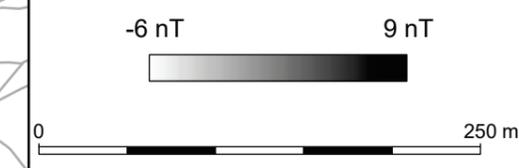
Date: 08/02/2024 Created by: RP Revision: 0 Scale: 1:50,000 at A4

Figure 1: Site location and survey extents





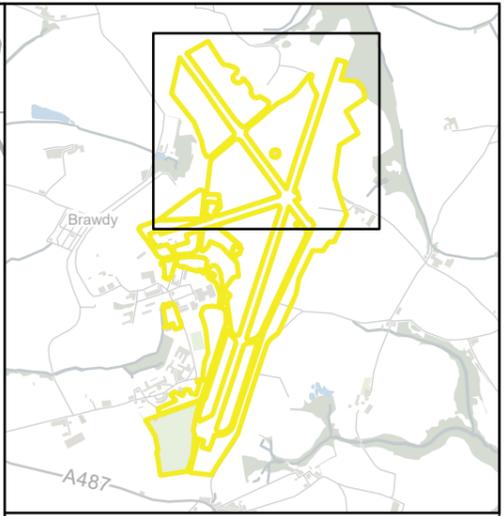
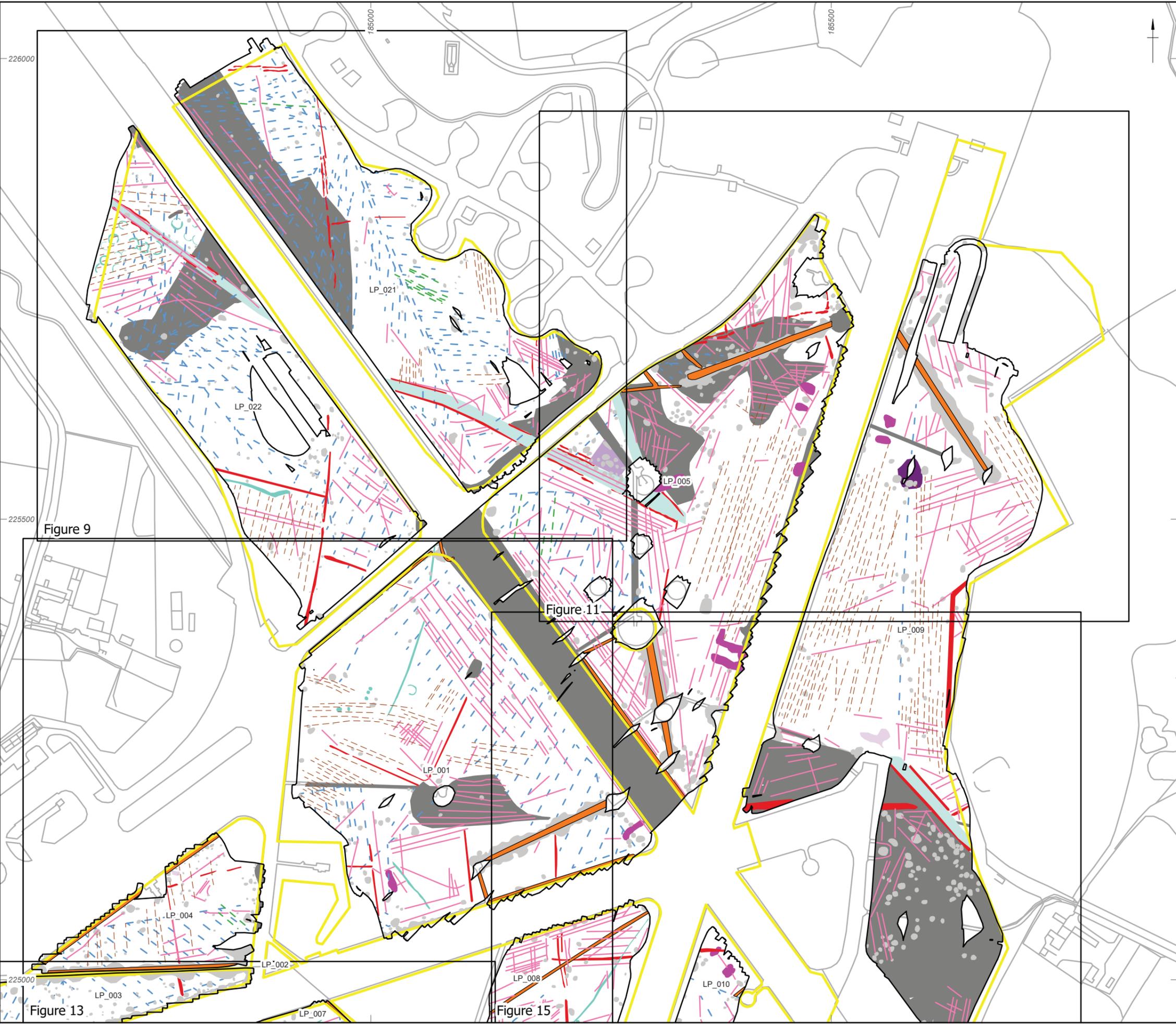
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:4,000	Revision: 0	

Figure 2: Detailed gradiometer survey results: Overview greyscale plot



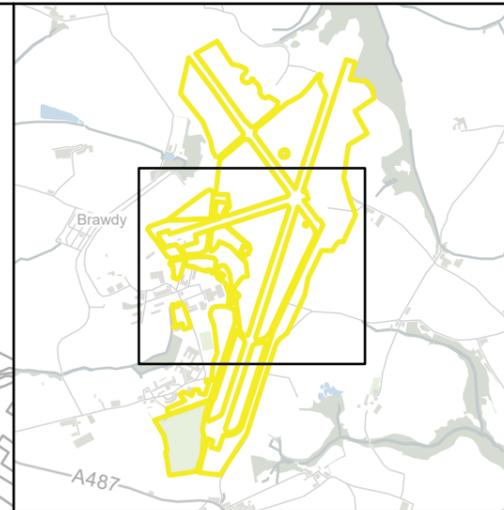
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Ferrous
- Modern service
- AnomalyNum

0 250 m

Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:4,000	Revision: 0	

Figure 3: Detailed gradiometer survey results: overall interpretation



- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Ferrous
- Modern service
- AnomalyNum



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:4,000	Revision: 0	

Figure 5: Detailed gradiometer survey results: overall interpretation

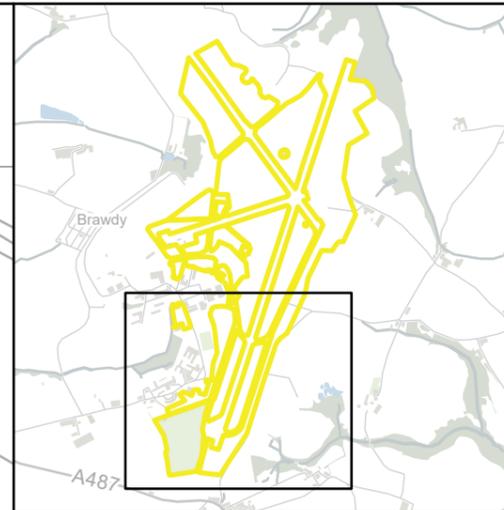


Figure 16

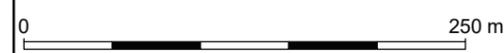
Figure 18

Figure 20

Figure 22



- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:4,000	Revision: 0	

Figure 6: Detailed gradiometer survey results: Overview greyscale plot

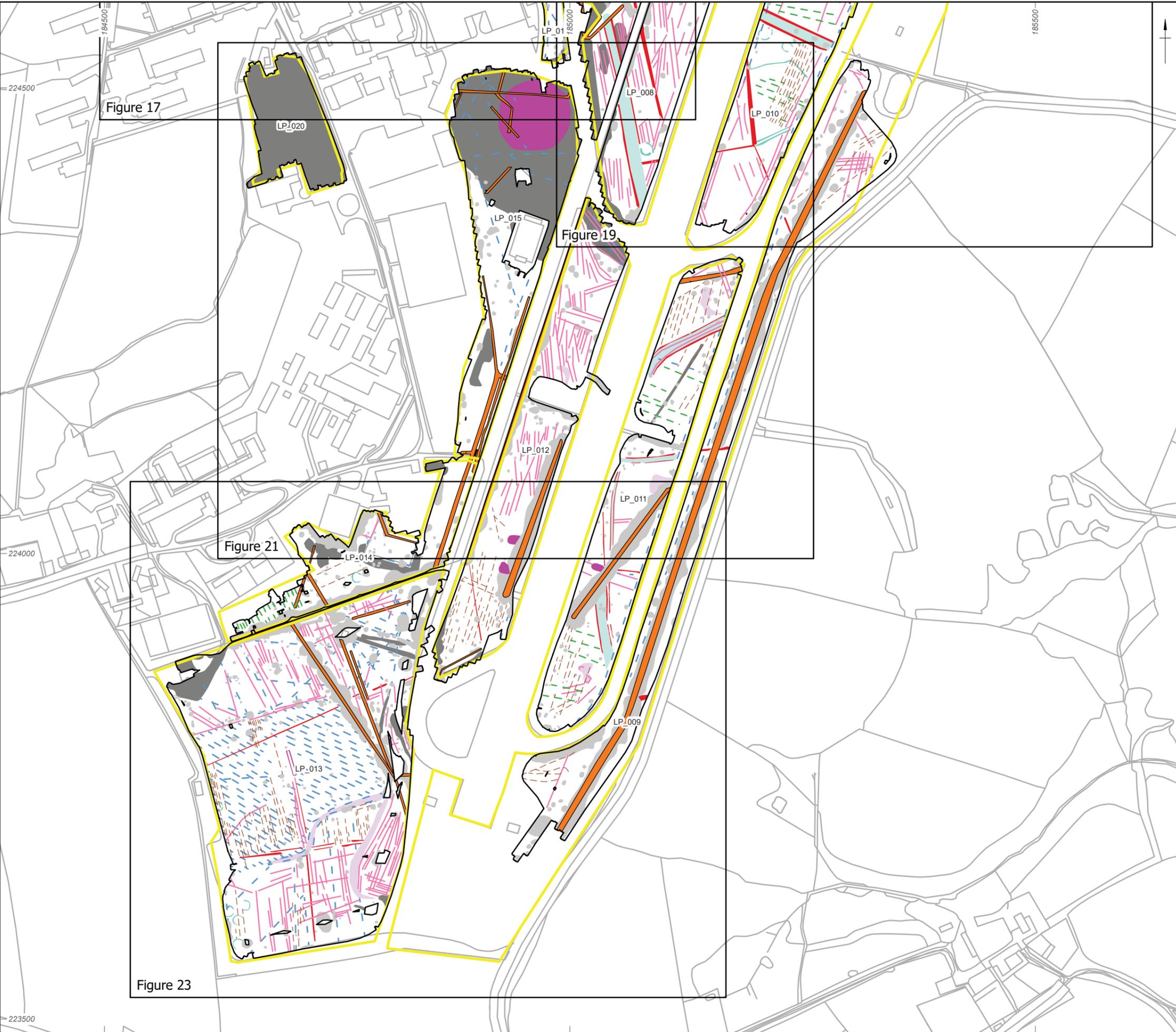
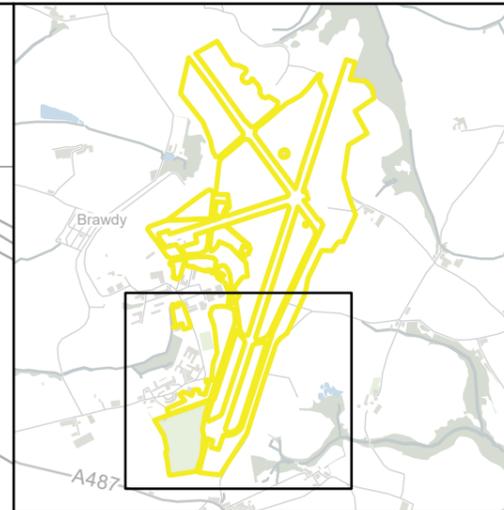


Figure 17

Figure 19

Figure 21

Figure 23



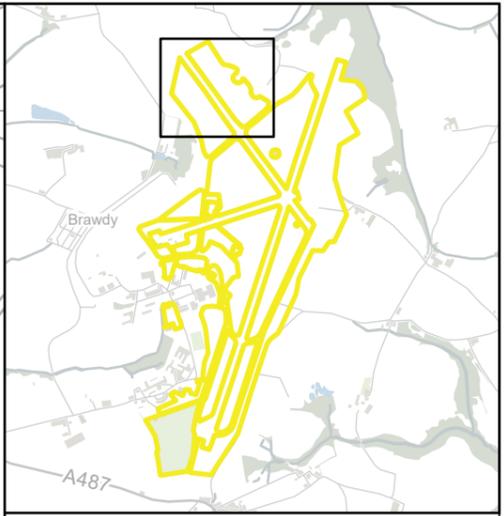
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Ferrous
- Modern service
- AnomalyNum

0 250 m

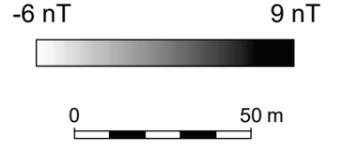
Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:4,000	Revision: 0	

Figure 7: Detailed gradiometer survey results: overall interpretation



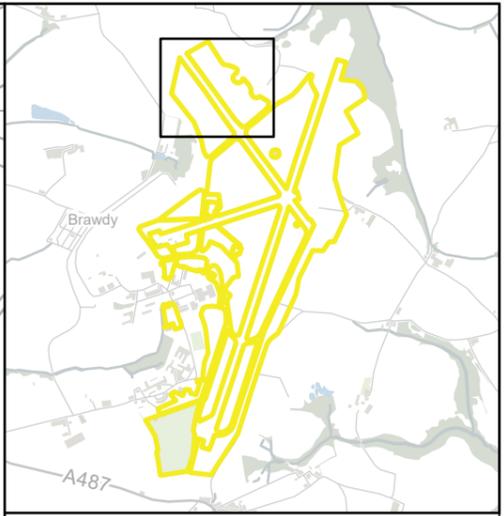
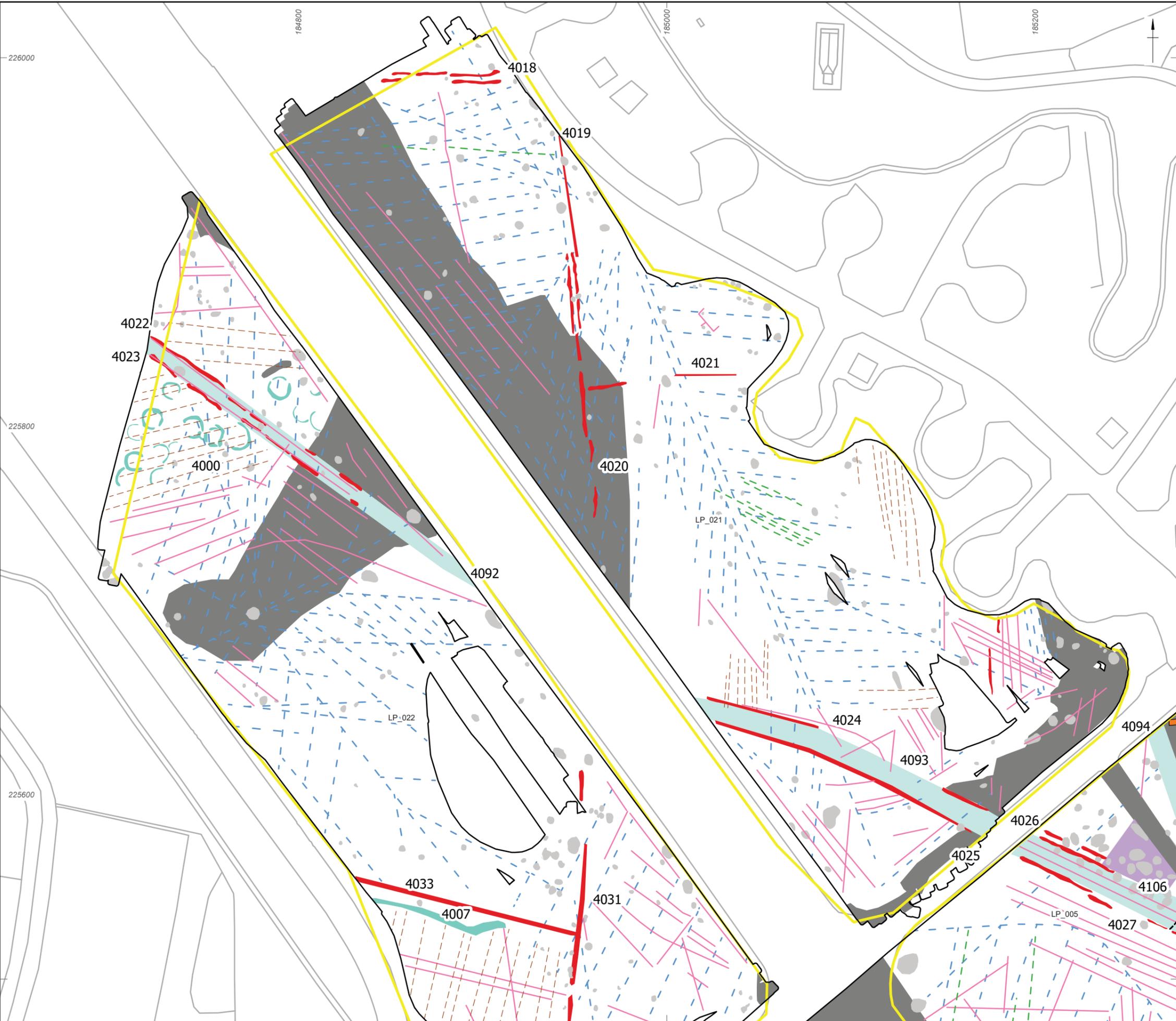
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 8: Detailed gradiometer survey results: greyscale plots (LP_05, LP_21, LP_22)



- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous

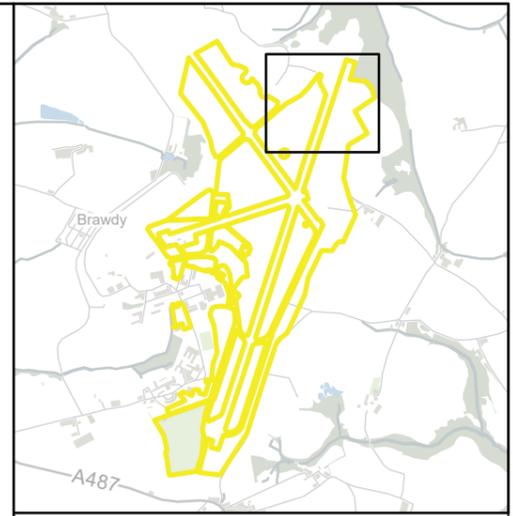


Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

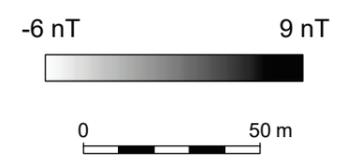
Date: 19/02/2024	Created by: RP
Scale: 1:2,000	Revision: 0

Figure 9: Detailed gradiometer survey results: greyscale plots (LP_05, LP_21, LP_22)





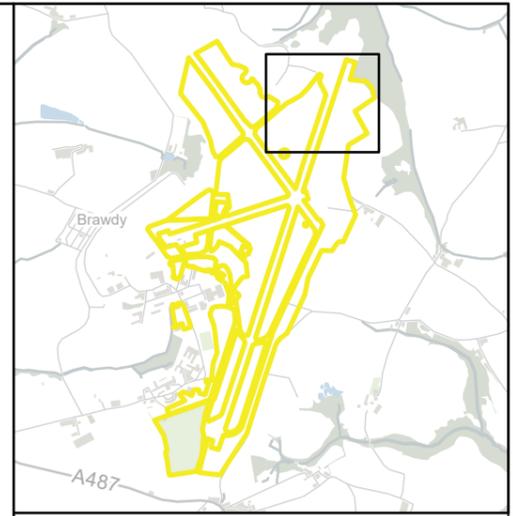
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 10: Detailed gradiometer survey results: greyscale plots (LP_05, LP_09, LP_21)



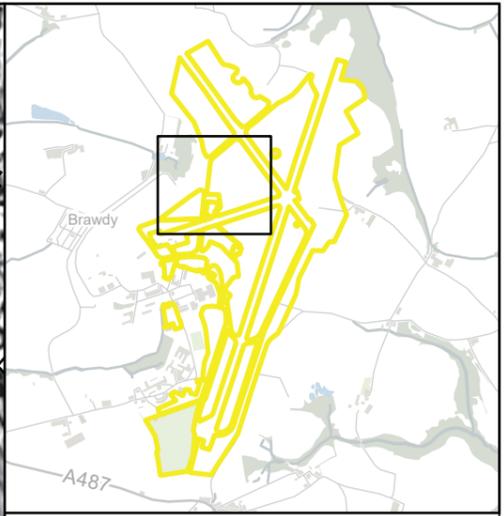
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous



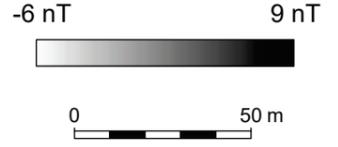
Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 11: Detailed gradiometer survey results: greyscale plots (LP_05, LP_09, LP_21)



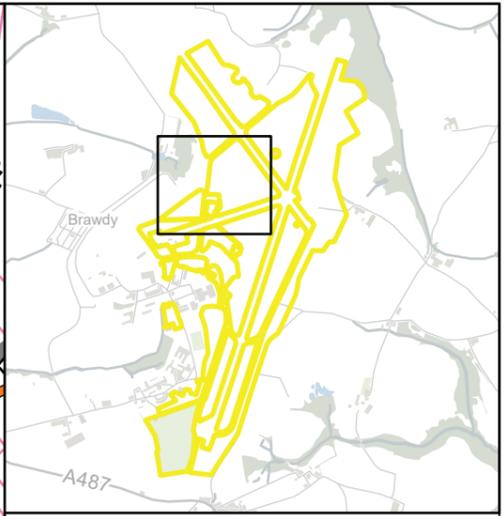
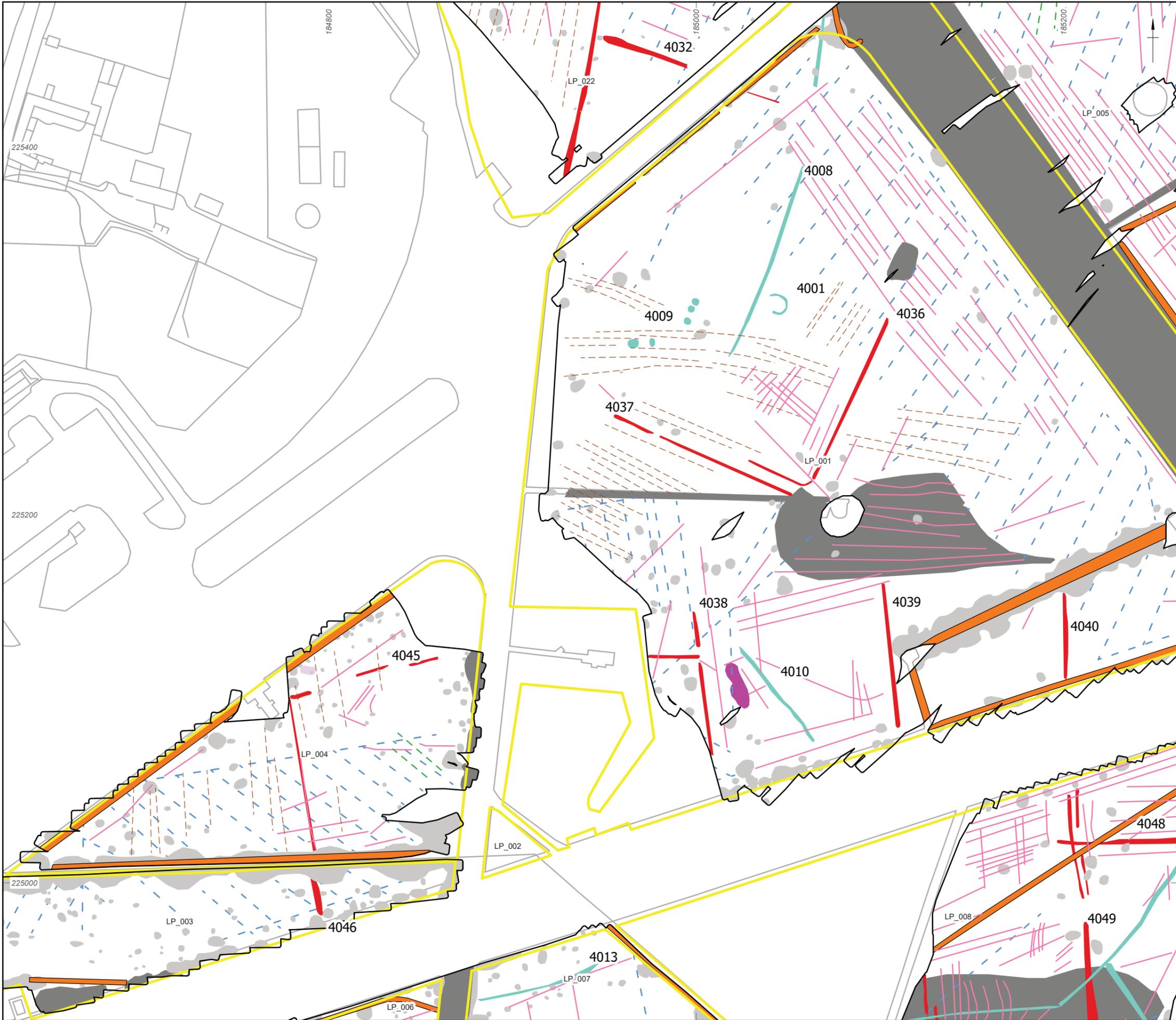
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 12: Detailed gradiometer survey results: greyscale plots (LP_01, LP_03, LP_04, LP_05, LP_07, LP_08, LP_22)



- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous

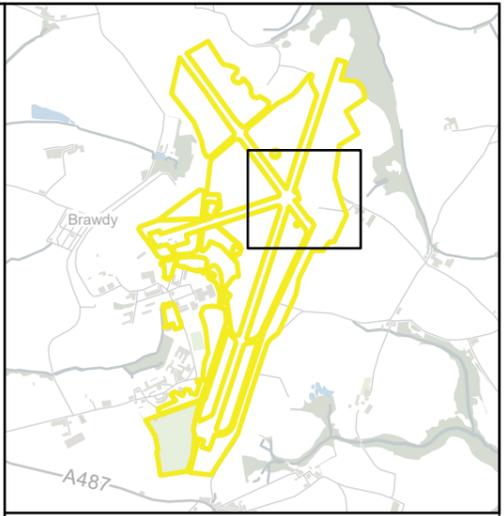


Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

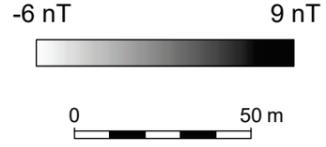
Date: 19/02/2024	Created by: RP
Scale: 1:2,000	Revision: 0

Figure 13: Detailed gradiometer survey results: greyscale plots (LP_01, LP_03, LP_04, LP_05, LP_07, LP_08, LP_22)





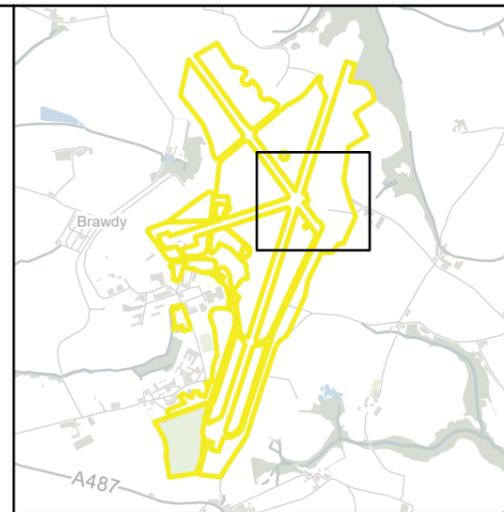
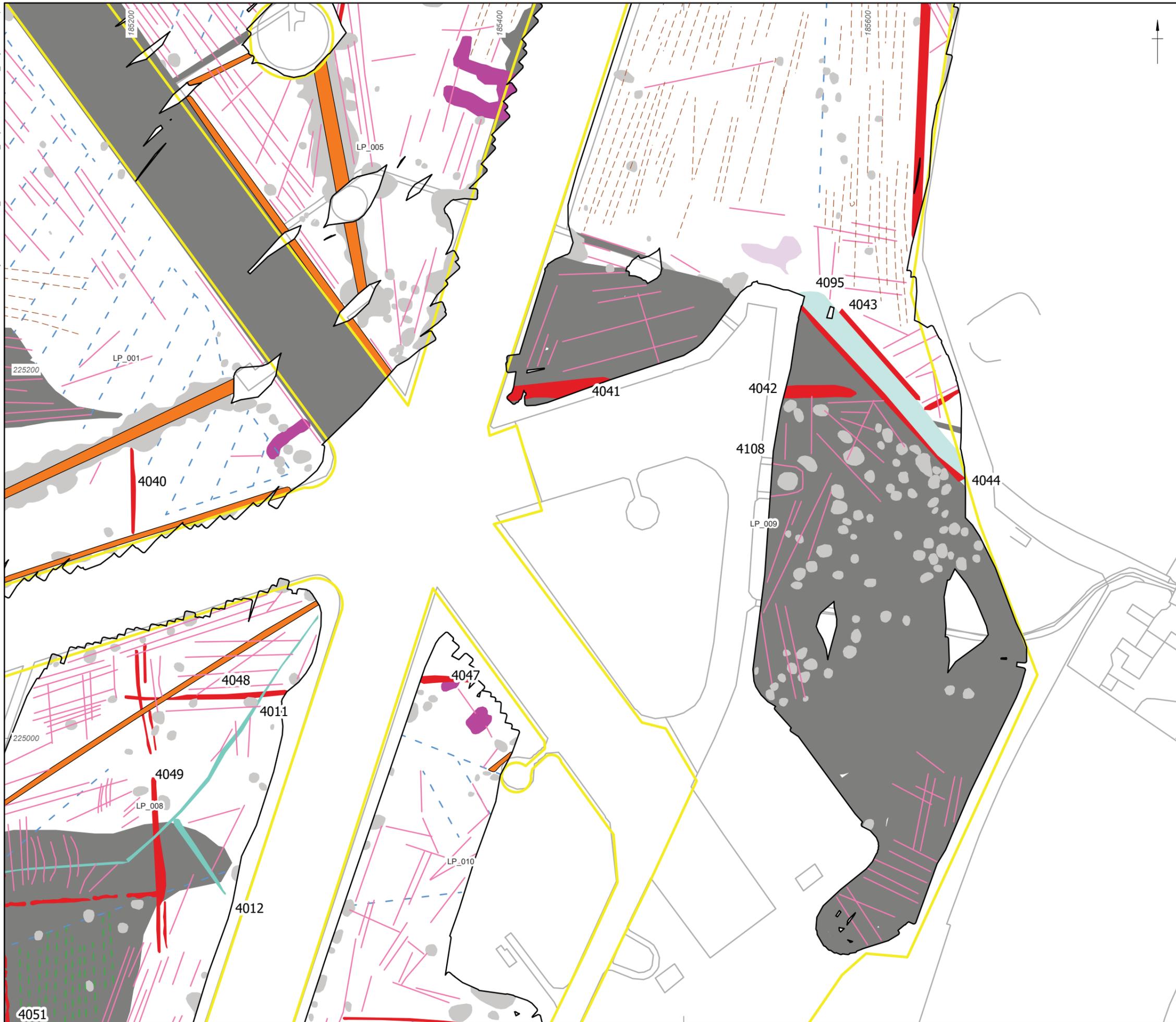
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 14: Detailed gradiometer survey results: greyscale plots (LP_01, LP_05, LP_08, LP_09, LP_10)



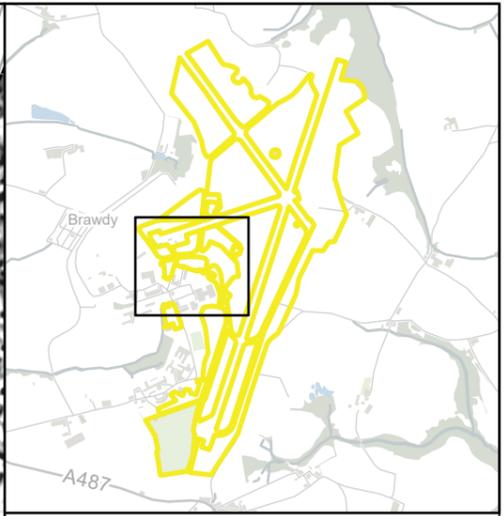
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous



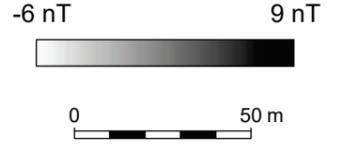
Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 15: Detailed gradiometer survey results: greyscale plots (LP_01, LP_05, LP_08, LP_09, LP_10)



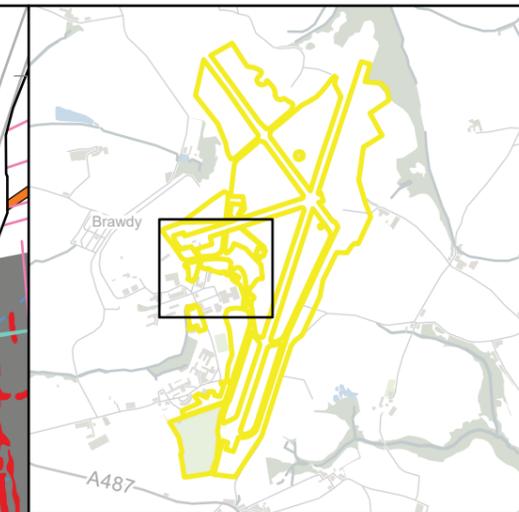
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 16: Detailed gradiometer survey results: greyscale plots (LP_03, LP_06, LP_07, LP_08, LP_16, LP_17, LP_18, LP_19)



Legend

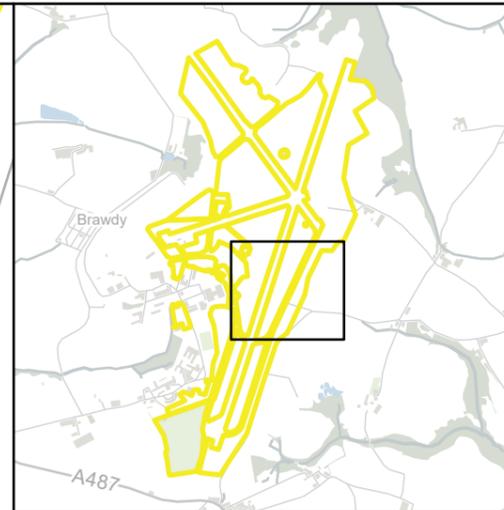
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous

0 50 m

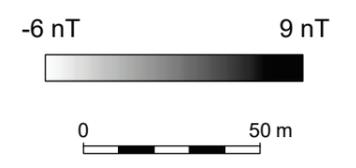
Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP
Scale: 1:2,000	Revision: 0

Figure 17: Detailed gradiometer survey results: greyscale plots (LP_03, LP_06, LP_07, LP_08, LP_16, LP_17, LP_18, LP_19)



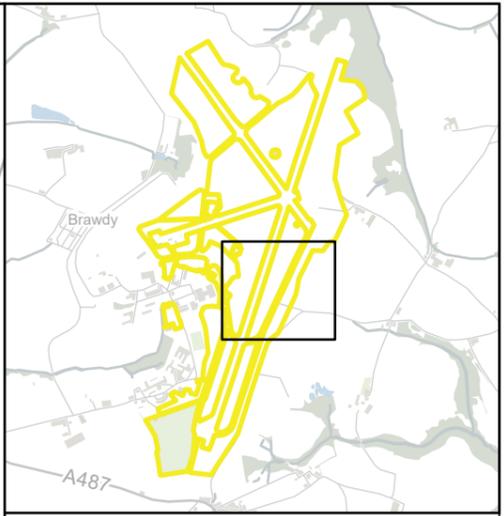
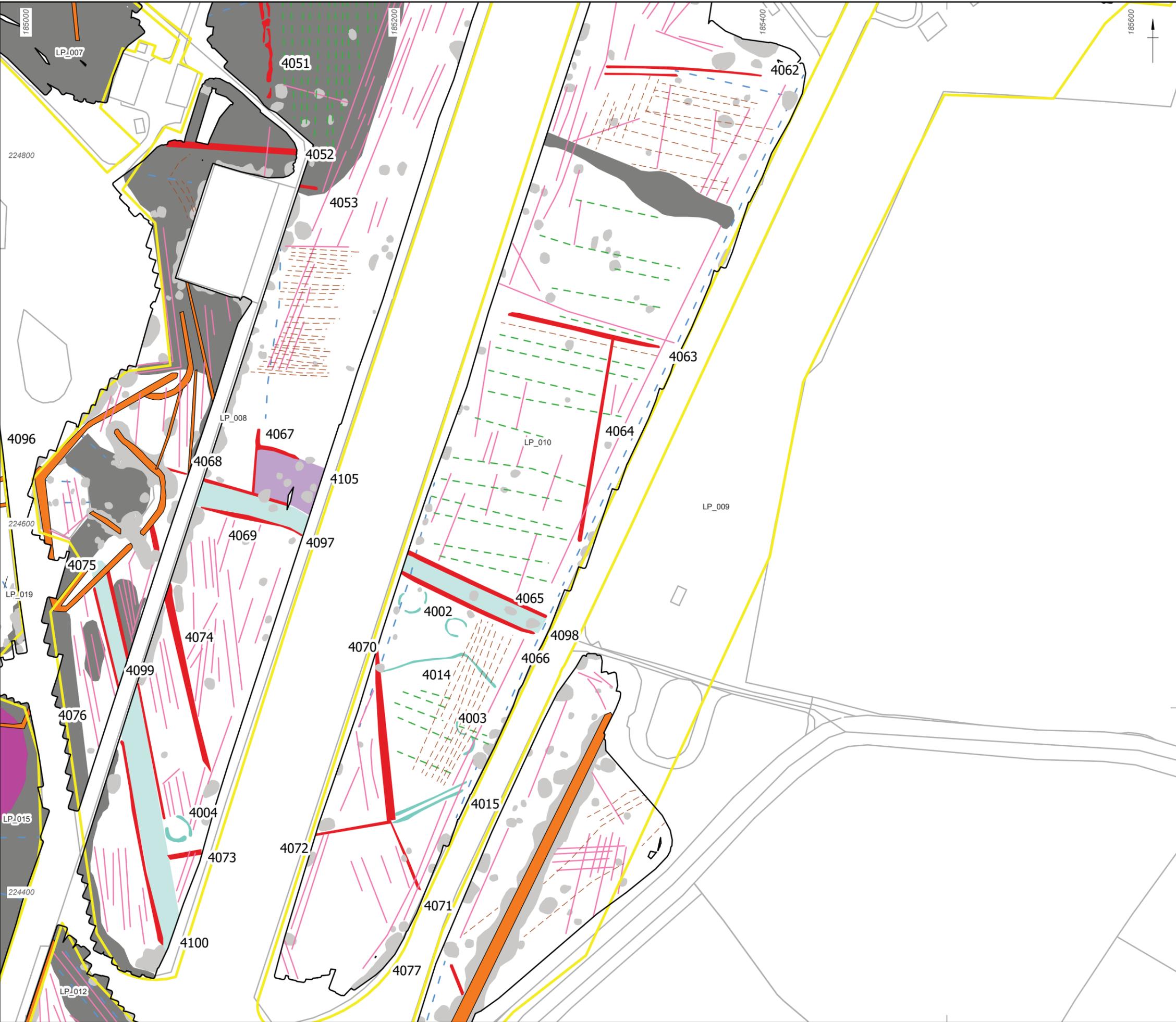
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 18: Detailed gradiometer survey results: greyscale plots (LP_08, LP_09, LP_10)



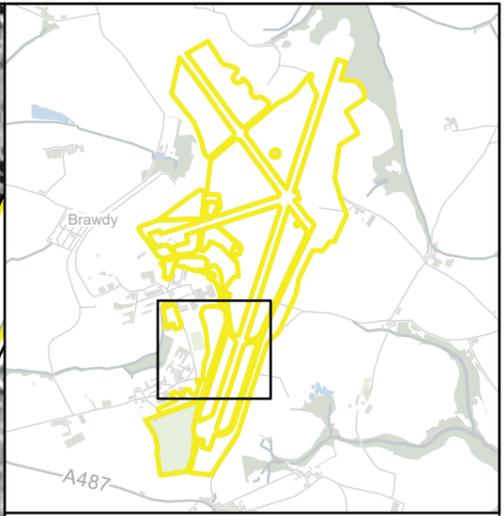
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous



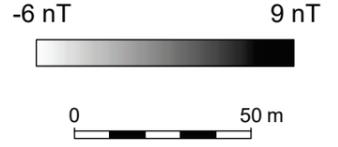
Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 19: Detailed gradiometer survey results: greyscale plots (LP_08, LP_09, LP_10)



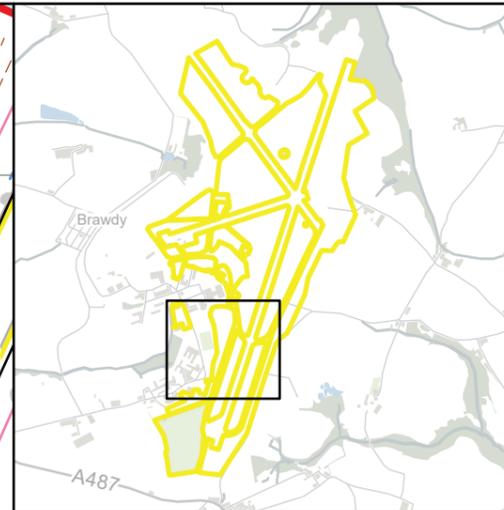
- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 20: Detailed gradiometer survey results: greyscale plots (LP_08, LP_09, LP_10, LP_11, LP_12, LP_14, LP_15, LP_20)



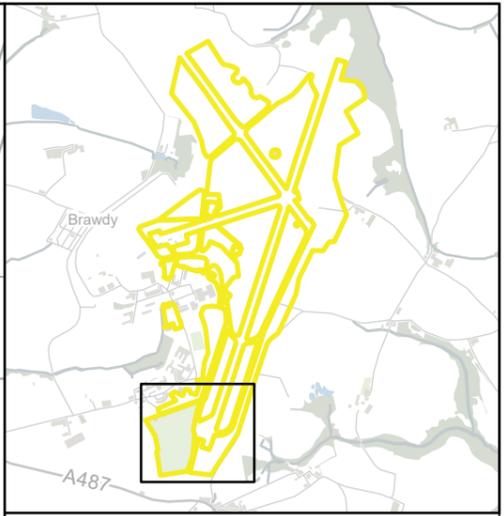
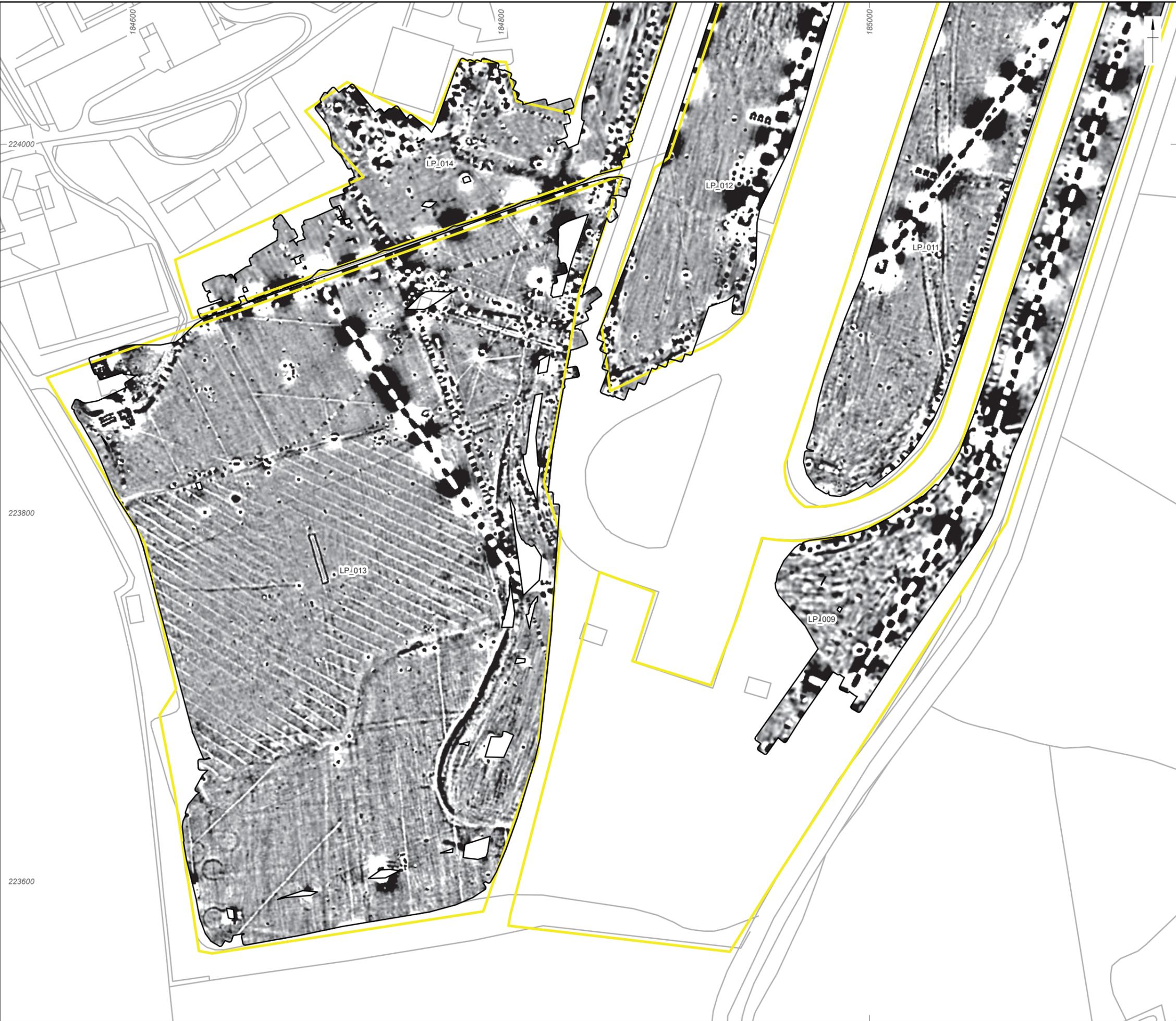
- Land parcel
- Detailed survey extent
- Possible archaeology
- Former field boundary
- Increased response
- Historic cultivation
- Trend
- Agricultural feature
- Drain
- Road
- Former infrastructure
- Building
- Extraction
- Geology
- Geomorphology
- Modern service
- Ferrous



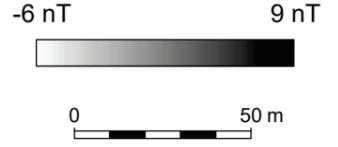
Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 21: Detailed gradiometer survey results: greyscale plots (LP_08, LP_09, LP_10, LP_11, LP_12, LP_14, LP_15, LP_20)



- Land parcel
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid
 Digital data reproduced from Ordnance Survey data © Crown Copyright (2024) All rights reserved. Reference Number: 100022432.
 Contains Ordnance Survey data © Crown copyright and database right 2024.
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 19/02/2024	Created by: RP	
Scale: 1:2,000	Revision: 0	

Figure 22: Detailed gradiometer survey results: greyscale plots (LP_09, LP_11, LP_12, LP_13, LP_14)



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk



OFFICIAL



Ministry
of Defence

ES Appendix 10.5: Archaeological Management Strategy

Contents

Archaeological Management Strategy.....	1
1. Introduction	1
2. Work carried out to date	1
3. Strategy overview	3
4. Trial trenching	3
5. Mitigation measures.....	4
6. Application of mitigation	7
7. Post-excavation	7
8. Roles and responsibilities	9
9. References.....	10

Tables

Table 1: Levels of heritage significance	5
--	---



Archaeological Management Strategy

1. Introduction

Purpose of the report

- 1.1. This document sets out the requirements for further archaeological work to be undertaken at Cawdor Barracks, Haverfordwest centred on National Grid Reference SM 85206 25399 following the granting of planning permission for a proposed radar array (Deep Space Advanced Radar Capability; DARC), ancillary structures and associated infrastructure (the proposed development).
- 1.2. As the area proposed for development sits within Cawdor Barracks, this document will refer to the entire barracks site as 'Cawdor Barracks' and the area within which the proposed development is located 'the application site'.
- 1.3. This document has been submitted as a technical appendix to the Environmental Statement supporting the planning application.

Ecological constraints

- 1.4. The grassed areas of the airfield contain nationally important waxcap fungi, which are highly vulnerable to ground disturbance. This ecological constraint is further described in Chapter 8 (Biodiversity). To minimise unnecessary impacts on this habitat, it has been agreed that trial trenching will be deferred to a post-determination but pre-construction phase. This approach ensures that archaeological investigations are limited to areas where construction works will definitively take place, thereby reducing the extent of disturbance to the ecological resource.

Consultation

- 1.5. Following consultation with the Planning Archaeologist for Heneb: Dyfed Archaeology, it was agreed that intrusive archaeological works needed to determine the extent, nature and significance of any potential archaeological remains within the application site could be deferred to post-determination.
- 1.6. To ensure those works are carried out to the required standard and are appropriate for the significance of any archaeological remains, this archaeological management strategy has been produced to fix the requirements for future work in agreement with the Planning Archaeologist for Heneb: Dyfed Archaeology who has reviewed and agreed its contents.

2. Work carried out to date

Desk-based Assessment

- 2.1. An archaeological desk-based assessment (DBA; Wessex Archaeology 2023; Technical Appendix 10.2) was carried out across Cawdor Barracks which used a number of sources to collate, synthesise and analyse the available data on the historic environment for a 1 km Study Area around Cawdor Barracks. The DBA uses this information to assess the significance of known and potential historic assets within Cawdor Barracks and the impact that development could have on that significance.
- 2.2. The DBA summary reads as follows:



“The effects of the development proposals on the historic environment resource will be a material consideration in the determination of the planning application. This study has identified no overriding heritage constraints which are likely to prohibit development.”

RAF Brawdy was operational from 1944 until 1992 when flying operations ceased and the station was passed to the army and continued as an operational base under the title of Cawdor Barracks. This study has found that with the exception of the airstrip, taxi way and some remaining earthworks, the earlier phases of the site’s use as an RAF and RNAS station has been removed. Beyond the obvious military history, the site lies within a landscape which has high potential to yield evidence for early prehistoric occupation, mid-late prehistoric settlement, prehistoric to medieval ritual practice and medieval to post-medieval agrarian activity.

A high level geoarchaeological analysis has also indicated the potential for deposits to be present within the site which could yield important environmental, and potentially artefactual, information about the climate, land use and conditions in this area during the Holocene and thus contribute to national research objectives.

Due to a lack of previous archaeological investigation, the presence, location and significance of any buried heritage assets within the site cannot currently be confirmed on the basis of the available information.”

Geophysical Survey

- 2.3. A detailed gradiometer survey was undertaken across an area totalling 105.1 ha within Cawdor Barracks in January 2024 with the subsequent report (Wessex Archaeology 2024) included as Technical Appendix 10.4 to the Environmental Statement. For all figure and site boundary reference see Appendix 10.4
- 2.4. For ease of reference and clarity of description, the geophysical survey area has been divided into the following areas and set out in Figure 1 of Appendix 10.4:
- Geophysics Area 1: Covers the proposed Rx Array
 - Geophysics Area 2: Covers the proposed Tx Array
 - Geophysics Area 3: Covers Translocation Area 1
 - Geophysics Area 4: Covers Translocation Area 2
 - Geophysics Area 5: Covers the southern section of the buffer included to cover all areas of possible works; and
 - Geophysics Area 6.
- 2.5. The report identified anomalies consistent with potential archaeological remains across the survey area including several clusters of circular features which have been interpreted as possible prehistoric roundhouses or barrows. These anomalies are present within the Rx Array area and the Mid-site Buffer area.
- 2.6. Elsewhere, anomalies were identified which are consistent with a ditch-like feature likely representing a field boundary, the course of which is not visible on any historic mapping suggesting an earlier provenance. These anomalies are present within the Rx Array area, the Northern Buffer area and the Mid-site Buffer area.
- 2.7. Aside from the anomalies of archaeological provenance, or possible archaeological provenance, the survey also identified several field boundaries which are visible on historic mapping, indicating their likely establishment during enclosure in the late 18th or early 19th century.



- 2.8. The survey also identified a number of anomalies which were interpreted as representing elements of the 20th century military occupation of Cawdor Barracks. These are present within the Rx Array area, the Tx Array area, the Northern Buffer area, and the Mid-site buffer area.

3. Strategy overview

General

- 3.1. The DBA and geophysical survey have indicated the likely presence of prehistoric archaeological remains within the application site. However, due to a lack of previous intrusive investigations both within Cawdor Barracks and the surrounding area, the nature, extent and significance of these remains cannot be categorically determined, although this is not likely to be greater than Medium significance (as defined in Table 1) given the information gathered to date.

Written Scheme of Investigation

- 3.2. Prior to the commencement of any archaeological works, a Written Scheme of Investigation (WSI) will be submitted to the Planning Archaeologist for Heneb: Dyfed Archaeology for comment and approval.
- 3.3. Each phase of works will require a separate and specific WSI.
- 3.4. The WSI shall be produced in line with the relevant standards and guidance set out by the Chartered Institute for Archaeologists (CIfA) for archaeological evaluation (CIfA 2023a), archaeological excavation (CIfA 2023b) and/or archaeological monitoring and recording (CIfA 2023c).
- 3.5. Works will be undertaken by a Registered Organisation of the Chartered Institute led and staffed by appropriately qualified and experienced archaeologists.

Ecological input

- 3.6. Due to the significant ecological constraints set out in Section 1.2, specialist ecological input must be sought when preparing any WSI. At all stages of intrusive works, steps will be taken to minimise the impact on the fungus and their mycelial network which may include strategies for spoil management and reinstatement.
- 3.7. Provision should be made to allow ecological monitoring during works if deemed appropriate.

4. Trial trenching

General

- 4.1. As trial trenching has not been undertaken in advance of the determination of the planning application, this section sets out the parameters by which the trenching exercise will be carried out. These parameters have been guided by, and are in line with, the CIfA standards for archaeological evaluation (CIfA 2023a). Trenching will be limited to areas where construction works will definitively take place, thereby reducing the extent of disturbance to ecological resources.

Underlying principles

- 4.2. The main objective of the trial trenching programme is to confirm the presence of archaeological remains through testing anomalies identified on the geophysical survey interpreted as likely representing archaeology, and to test the veracity of the survey results.



- 4.3. That veracity is tested through sampling areas where no anomalies have been identified within the geophysical survey data, referred to in common parlance as ‘blank’ areas. In some cases, interference from other sources including stray metal objects, services etc. can mask archaeological features which have a subtle magnetic signature.

Fungi grassland translocation

- 4.4. The grassed areas of the airfield contain sensitive ecological features, including nationally important waxcap fungi, which are highly vulnerable to ground disturbance. This ecological constraint is further described in Chapter 8 (Biodiversity). To minimise unnecessary impacts on this habitat, it has been agreed that trial trenching will be deferred to a post-determination but pre-construction phase. This approach ensures that archaeological investigations are limited to areas where construction works will definitively take place, thereby reducing the extent of disturbance to the ecological resource.
- 4.5. The impacted fungi grassland will be translocated, which is described further in Chapter 8 (Biodiversity).
- 4.6. The archaeological works will comprise a programme of strip, map and record carried out in line with the requirements of the ClFA standards for archaeological excavation (ClFA 2023b).

Trench layout

- 4.7. The trenches will be located within the application site only where direct impacts from construction will occur and targeted on anomalies identified within the geophysical survey as possible archaeology, historic cultivation, former field boundaries and in apparent areas that have not been surveyed.
- 4.8. The strategy will be designed to confirm the nature, extent and significance of any archaeological remains insofar as is possible which will inform the need for, scale and scope of any further archaeological work in line with the mitigation measures set out in Section 5.
- 4.9. The final number of trenches and overall area to evaluate will be dependent on the details of the final design. The strategy must be proportionate to the significance, or likely significance, of the potential archaeological remains but must consider the ecological constraints and the potential impacts unnecessary excavations will have on the waxcap fungus network.
- 4.10. The final trench layout will be agreed with the Planning Archaeologist for Henneb: Dyfed Archaeology and submitted within a relevant WSI for approval.

5. Mitigation measures

Overview

- 5.1. Following the completion of the trial trenching programme, should the presence of archaeological remains be confirmed in areas where construction will take place, mitigation measures will be applied to either remove impacts on archaeological remains entirely or to mitigate their loss through preservation by record.

Mitigation hierarchy

- 5.2. This strategy is predicated upon the mitigation hierarchy:
- Mitigation by design – removing impacts through design changes and management procedures to ensure the protection of remains during construction and beyond; or

- Mitigation through preservation by record – the application of a range of archaeological techniques prior to and during construction to record remains which would otherwise be removed.
- 5.3. Provision for mitigation by design will be made should archaeological remains of sufficient significance be encountered.
- 5.4. Where mitigation by design is not possible, or not warranted due to the significance of the archaeological remains identified, mitigation through preservation by record will be applied.

Mitigation by design

- 5.5. Mitigation by design can be applied through a range of measures which could include, but is not limited to, micro-siting of radar array foundation pads, micro-routing of utilities, collaboration with relevant specialists during design of ecological and/or landscape mitigation measures.
- 5.6. The decision to employ mitigation by design will be taken as part of a balanced approach which will consider other environmental issues and engineering requirements. Where remains are of Medium significance or greater, as set out within Table 1 below, these will be considered for mitigation by design. Table 1 shows method of assigning heritage significance to heritage assets.
- 5.7. Remains determined to be of lesser significance will normally be mitigated through preservation by record.

Table 1: Levels of heritage significance

Heritage Significance	Heritage Asset Description
High	World Heritage Sites
	Scheduled Monuments
	Grade I and II* listed buildings
	Registered battlefields
	Grade I and II* registered parks and gardens
	Registered historic landscapes
	Non-designated assets of equivalent heritage significance which are potentially nationally important
Medium	Grade II listed buildings
	Regionally important archaeological features and areas (as defined in the Historic Environment Record (HER) or identified during archaeological excavations)
	Conservation Areas, which are assets considered to be regionally important

Low	Sites and features noted as locally important in the HER, other non-designated features of heritage significance
Negligible	Assets compromised by poor preservation and/or poor contextual association, or very common archaeological features/buildings of little or no value at local or other scale

Mitigation through preservation by record

Set piece excavation

- 5.8. Preservation by record through set piece excavation will be applied in all cases where archaeological remains of sufficient significance have been considered for preservation by record, but avoidance of impacts is not possible. All such remains will be of Medium significance or greater as set out in Table 1.
- 5.9. Where identified archaeological remains are of Low significance these will normally be mitigated by way of monitoring and recording, in some circumstances these may be considered for recording by set-piece excavation. The criteria for this are as follows:
- Where archaeological remains are found as part of a complex of features associated with a single site or occupation event, and the proposed development will remove or damage so much of those remains that the context for understanding that complex is significantly reduced; or
 - Where archaeological remains have been determined to have been of greater significance, but substantially truncated or damaged.
- 5.10. All archaeological investigations or mitigation measures will be agreed in advance of any activity with the Planning Archaeologist for Heneb: Dyfed Archaeology.
- 5.11. Excavations will be carried out in line with the standard and guidance set out by the ClfA and in line with an approved WSI as set out in Section3.

Monitoring and recording

- 5.12. Where archaeological remains are deemed to be of Low significance, as defined in Table 1, these will normally be subject to monitoring and recording by way of mitigation through preservation by record.
- 5.13. Where archaeological remains which are identified as being of Negligible significance, these will be subject to monitoring and recording by way of mitigation through preservation by record.

No mitigation

- 5.14. Where there is no physical impact from the proposed development, either through permanent structures or through other activities associated with the construction process, no mitigation will be required.
- 5.15. Additionally, no mitigation will be required where previous work has determined that archaeological remains have been so severely truncated that their significance has been fundamentally altered or removed entirely.

6. Application of mitigation

General

- 6.1. Once the specific requirements for mitigation have been established following the completion of the programme of trial trenching as set out in Section 5, any necessary intrusive archaeological work will be undertaken in advance of construction works commencing in areas that may impact a heritage asset.
- 6.2. All work will be carried out in line with relevant health and safety regulations by an approved archaeological contractor.

Geoarchaeology

- 6.3. The DBA has indicated there is a potential for superficial deposits located within the application site to contain important palaeoenvironmental evidence, which could include artefactual remains.
- 6.4. Any intrusive excavations should include the provision for specialist geoarchaeological input if it is likely that such deposits could be encountered. This provision should, as a minimum, allow for:
 - Review of available borehole data both from the British Geological Survey and those undertaken within the application site as part of geotechnical investigations.
- 6.5. The need for and scale of geoarchaeological assessment and investigation works required will be agreed in advance with the Planning Archaeologist for Heneb: Dyfed Archaeology. This will take into account the likelihood of such deposits being encountered and the level of impact from the development proposals on those deposits.

Post-construction

No further archaeological fieldwork is anticipated to be required post-construction following the implementation of this mitigation strategy.

Ongoing Consultation

- 6.6. Consultation with the Planning Archaeologist for Heneb: Dyfed Archaeology will be ongoing throughout the post-consent process with specific consultation points at the following milestones:
 - Following planning consent to set out detailed construction methodologies and discuss the potential for mitigation by design as there has been flexibility through micrositing;
 - To gain approval for the trial trenching WSI;
 - Following the completion of the trial trenching to agree the approach to next steps;
 - To gain approval for any subsequent WSI(s) which may be required;
 - Following the completion of all on-site field work
- 6.7. Consultation will also be undertaken should there be a requirement to deviate from this strategy and an updated document produced.

7. Post-excavation

General

- 7.1. This section sets out the general post-excavation requirements for any archaeological fieldwork undertaken. The specific requirements for each fieldwork instance will be set out within the relevant WSI(s), approved by the Planning Archaeologist for Heneb: Dyfed Archaeology.



Reporting

- 7.2. Following each stage of archaeological fieldwork, a draft post-excavation assessment report will be submitted for approval to the Ministry of Defence and the Planning Archaeologist for Heneb: Dyfed Archaeology, for comment. Once approved, a final version will be submitted.
- 7.3. Each report will include the following elements as a minimum:
- A Non-Technical Summary;
 - Archaeological and historical context;
 - Aims and objectives;
 - Methods;
 - Results – stratigraphic, finds and environmental;
 - Archive preparation;
 - Appendices;
 - Illustrations; and
 - References
- 7.4. Should archaeological remains of sufficient significance be uncovered which warrant more detailed post-excavation analysis, an updated project design for the analysis required should be included within the relevant report and any amendments made in consultation with the Planning Archaeologist for Heneb: Dyfed Archaeology.

Deposition

- 7.5. Copies of each report will be deposited with the Dyfed Archaeological Trust Historic Environment Record (HER) and with the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) with the project archive(s) deposited with the RCAHMW. The finds archive(s) should be deposited with an appropriate collecting museum detailed in the relevant WSI. The digital data from each project will be deposited in line with the Digi.

Publication

- 7.6. Provision will be made for the publication of results from any fieldwork undertaken in a relevant journal if remains of sufficient significance and/or interest are uncovered.
- 7.7. The specific journal, format and scale of the publication will be agreed in conjunction with the Ministry of Defence and the Planning Archaeologist for Heneb: Dyfed Archaeology for which the criteria will be proportionate and reflective of the significance of the archaeological remains.

OASIS

- 7.8. An OASIS (online access to the index of archaeological investigation record) will be created for each instance of archaeological fieldwork with key fields completed and a PDF version of the final report submitted.
- 7.9. Subject to requirements of confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) Arch Search catalogue.



8. Roles and responsibilities

The Undertaker

- 8.1. Ultimate responsibility for the implementation of the requirements set out within this document rests with the Undertaker.
- 8.2. Any Principal Contractor (PC) or sub-contractor undertaking work within the application site will be made aware of the archaeological requirements within this document, to be delivered in accordance with the wording of any relevant planning conditions and in line with any WSI.

Archaeological Contractors

- 8.3. Archaeological Contractor(s) will be appointed to carry out specific packages of work and may be appointed by the Undertaker or their appointed representatives. In the case of the latter, the representative will have a co-ordinating role to ensure works are specified, planned, undertaken and reported in accordance with the requirements of this document and carried out by suitably qualified and experienced personnel.



9. References

Chartered Institute for Archaeologists (CIfA), 2023a. *Universal guidance for archaeological field evaluation*. Available at:

<https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20field%20evaluation.pdf>

CIfA 2023b. *Universal guidance for archaeological excavation*. Available at:

<https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20excavation.pdf>

CIfA 2023c. *Universal guidance for archaeological monitoring and recording*. Available at:

<https://www.archaeologists.net/sites/default/files/Universal%20guidance%20for%20archaeological%20monitoring%20%26%20recording.pdf>

Wessex Archaeology 2023. *Project DARC – Cawdor Barracks, St Davids, Haverfordwest, Wales: Archaeological Desk-based Assessment*. Unpublished Report ref.272400.3

Wessex Archaeology 2024. *Project DARC, Cawdor, Pembrokeshire: Detailed Gradiometer Survey Report*. Unpublished Report ref. 272401.03