

PERRAN SPRINGS HOLIDAY PARK
GOONHAVERN
PERRANZABULOE
CORNWALL

Heritage Assessment and Geophysical Survey



South West Archaeology Ltd. report no. 220106



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Perran Springs Holiday Park, Goonhavern, Perranzabuloe, Cornwall

Heritage Assessment and Geophysical Survey

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Work undertaken by SWARCH for a private client (The Client)

SUMMARY

This report presents the results of a heritage assessment and geophysical survey carried out by South West Archaeology Ltd. (SWARCH) for land at Perran Springs Holiday Park, Goonhavern, Perranzabuloe, Cornwall. This work was undertaken in advance of a planning application.

The site comprises five fields currently in use as part of the existing Perran Springs Holiday Park and as fishing lakes at the western edge of the settlement of Goonhavern. The proposal site falls within land designated on the Historic Landscape Characterization as 'Post-medieval Enclosed Land' and 'Modern Enclosed Land', enclosed from common rough grazing in the 19th century. There is clear evidence for prehistoric funerary activity and settlement within the surrounding landscape; though much of the evidence relates to historic medieval and post-medieval settlement and field-systems, and more immediately post-medieval mining. Cornwall has a rich mining history, and whilst falling outside of the designated World Heritage Site areas for the region, Goonhavern and its environs form part of this, assessment of the historic and cartographic sources indicating that the site sits on the edge of the former Wheal Albert mine and is likely to have previously been common land open as grazing. Whilst medieval settlement is recorded in the area, including at Tywarnhale, Goonhavern did not begin to expand until the post-medieval period as a result of the mining in the area, though it has only grown significantly during the 20th and 21st centuries as a holiday destination.

The geophysical survey identified five groups of anomalies. The anomalies identified include: possible removed field boundaries or drains (Group 1), modern disturbance (Groups 2, 3 and 4) and possible agricultural activity (Group 5).

Any development of the site is likely to encounter and destroy the buried archaeological resource, and whilst there is a high potential suggested by the surrounding prehistoric and post-medieval mining landscape, the results of the geophysical survey would suggest that the archaeological potential for the site is low, the identified anomalies likely reflecting post-medieval or modern disturbance. Given the results of this assessment further archaeological mitigation is not likely to be required in this instance.

*In terms of direct impacts, most of the designated heritage assets in the wider area are located at such a distance as to minimize the impact of the proposed development, or else the contribution of setting to overall significance is less important than other factors. The landscape context of many of these buildings and monuments is such that they would be partly or wholly insulated from the effects of the proposed development by a combination of local blocking from trees, topography or buildings, or that other modern intrusions have already impinged upon their setting. The only sites where there might be the potential for an appreciable impact are the undesignated Wheal Albert mine and the Scheduled bowl barrow south of Treworthal Farm (both **negligible**). In the case of Wheal Albert mine, the location of the proposed development means that an impact is unavoidable, though is restricted by local screening and the fact that half of the proposal site already contains the existing holiday park. The proposal site is not clearly visible from scheduled barrow at Treworthal, largely being screened by local topography and surrounding woodland screening, and whilst its location puts it in the wider landscape context of such a monument, this landscape has already been significantly altered and if visible through the screening the proposals would not be discernible from the existing holiday park of which it would form part.*

*With this in mind, the overall impact of the proposed development can be assessed as **neutral to negligible**. The impact of the development on any buried archaeological resource may be **permanent and irreversible** but the archaeological potential of the site appears **low** and it is unlikely that there will be need for any archaeological mitigation in this instance.*

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1.0 INTRODUCTION

LOCATION:	PERRAN SPRINGS HOLIDAY PARK
PARISH:	GOONHAVERN
COUNTY:	CORNWALL
CENTROID NGR:	SW 79620 53492
PLANNING REF:	PRE-APPLICATION
SWARCH REF:	GPS21
OASIS REF:	SOUTHWES1-507787

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by a private client (The Client) to undertake a heritage statement and geophysical survey at Perran Springs Holiday Park, Goonhavern, Cornwall, in advance of proposed development of the land. This work was undertaken in accordance with best practice and CIfA guidelines.

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site is located at the eastern edge of the settlement of Goonhavern, off the B3285, c.700m from the village centre and 3km east of Perranporth. It comprises the Perran Springs Holiday Park, including the existing park layout and two adjacent fields used for recreation and fishing. It is situated at a height of between c.70 and 75m AOD (Figure 1). The soils of this area are well drained, fine loamy soils over slate or slate rubble of the Denbigh 2 Association (SSEW 1983), overlying the mudstone and siltstones of the Trendrean Formation with superficial head deposits in the northern part of the site (BGS 2021).

1.3 HISTORICAL BACKGROUND

The site lies in the parish of Perranzabuloe, in the deanery and hundred of Pydar, on former common land and later enclosure associated with the manor of Tywarnhale. Both the manors of Perranzabuloe (*Perran/Lanpiran*) and Tywarnhale (*Tiwarthel*) predate Domesday as Saxon manors held by Algar, becoming land of the church, the Canons of St Piran, and held by Robert Count of Mortain by 1086. Settlement at Goonhavern is first recorded in c.1300, though the village is primarily 19th century with later significant expansion. Lysons records the manor of Tywarnhale as being granted to Edward the Black Prince in 1337, given to Sir Walter de Woodland, and later annexed to the Duchy of Cornwall until 1798 when it was purchased by John Thomas Esq.

The site falls within land designated on the Historic Landscape Characterization as Post-Medieval Enclosed Land: *land enclosed in the 17th, 18th and 19th centuries, usually from land that was previously Upland Rough Ground and often medieval commons. Generally in relatively high, exposed or poorly-drained parts of the county.* It is surrounded by a mix of Modern Enclosed Land, Upland Rough Ground and Medieval Farmland.

1.4 ARCHAEOLOGICAL BACKGROUND

The site lies within land recorded on the Cornwall and Scilly Historic Landscape Characterization (HLC) as 'Modern Enclosed Land' and 'Post-Medieval Enclosed Land' and incorporates former common land enclosed in the 19th and 20th centuries when field-systems were being substantially altered. The Cornwall and Scilly Historic Environment Record (HER) records several heritage assets within 1km of the proposed development site. A complete list of these with location maps can be seen in Section 3. These generally depict a prehistoric landscape which develops through the medieval period with increased settlement, though significant development does not occur until

the post-medieval period when settlements expand and there is significant evidence of mineral extraction as part of the wider Cornish mining landscape. No Listed Buildings or Scheduled Monuments are located immediately adjacent to the proposal site, however, a number of designated heritage assets are located within the wider area.

Only limited known archaeological works have been carried out in the vicinity, predominantly geophysical survey, identifying phases of removed field boundaries.

1.5 METHODOLOGY

This work was undertaken in accordance with best practice. The assessment following the guidance as outlined in: *Standard and Guidance for Archaeological Desk-Based Assessment* (CIfA 2014a) and *Understanding Place: historic area assessments in a planning and development context* (English Heritage 2012). The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014b).

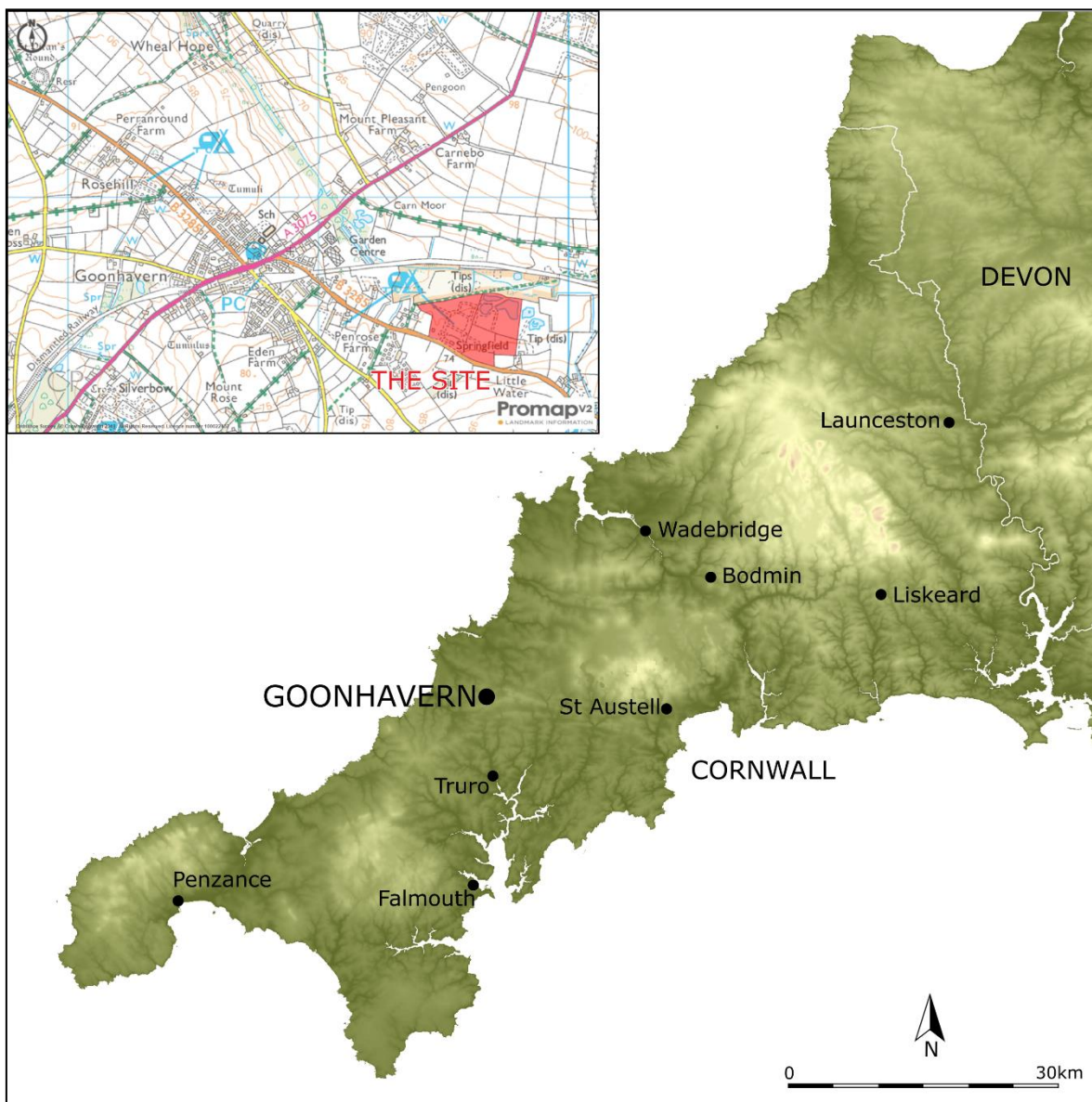


FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

2.0 HERITAGE IMPACT ASSESSMENT

2.1 HERITAGE IMPACT ASSESSMENT - OVERVIEW

The purpose of heritage impact assessment is twofold: Firstly, to understand – insofar as is reasonably practicable and in proportion to the importance of the asset – the significance of a historic building, complex, area, monument or archaeological site (the ‘heritage asset’). Secondly, to assess the likely effect of a proposed development on the heritage asset (direct impact) and/or its setting (indirect impact). This methodology employed in this assessment is based on the approach outlined in the relevant DoT guidance (DMRB vol.11; WEBTAG), used in conjunction with the ICOMOS (2011) guidance and the staged approach advocated in *The Setting of Heritage Assets* (GPA3 Historic England 2015). The methodology employed in this assessment can be found in Appendix 1.

2.2 NATIONAL POLICY

General policy and guidance for the conservation of the historic environment are now contained within the *National Planning Policy Framework* (Department for Communities and Local Government 2018). The relevant guidance is reproduced below:

Paragraph 189

In determining applications, local planning authorities should require the applicant to describe the significance of any heritage assets affected, including the contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should be consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which a development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Paragraph 190

Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset’s conservation and any aspect of the proposal.

A further key document is the Planning (Listed Buildings and Conservation Areas) Act 1990, in particular section 66(1), which provides *statutory protection* to the setting of Listed buildings:

In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

2.3 LOCAL POLICY

Policy 24: *Historic Environment* in *The Cornwall Local Plan: Strategic Policies 2010-2030* makes the following statement:

All development proposals should be informed by proportionate historic environment assessments and evaluations... identifying the significance of all heritage assets that would be affected by the proposals and the nature and degree of any affects and demonstrating how, in order of preference, any harm will be avoided, minimised or mitigated.

Great weight will be given to the conservation of Cornwall’s heritage assets... Any harm to the significance of a designated or non-designated heritage asset must be justified... In those exceptional circumstances where harm to any heritage assets can be fully justified, and the development would result in the partial or total loss of the asset and/or its setting, the applicant will be required to secure a programme of recording and analysis of that asset, and archaeological excavation where relevant, and ensure the publication of that record to an appropriate standard in public archive.

2.4 STRUCTURE OF ASSESSMENT – DIRECT AND INDIRECT IMPACTS

This assessment is broken down into two main sections. Section 3.0 addresses the *direct impact* of the proposed development i.e. the physical effect the development may have on heritage assets within, or immediately adjacent to, the development site. Designated heritage assets on or close to a site are a known quantity, understood and addressed via the *design and access statement* and other planning documents. Robust assessment, however, also requires a clear understanding of the value and significance of the *archaeological* potential of a site. This is achieved via the staged process of archaeological investigation detailed in Section 3.0. Section 4.0 assesses the likely effect of the proposed development on known and quantified designated heritage assets in the local area. In this instance the impact is almost always indirect i.e. the proposed development impinges on the *setting* of the heritage asset in question, and does not have a direct physical effect.



FIGURE 2: PROPOSED DEVELOPMENT PLANS (COURTESY OF THE CLIENT).

3.0 DIRECT IMPACTS

3.1 STRUCTURE OF ASSESSMENT

For the purposes of this assessment, the *direct effect* of a development is taken to be its direct physical effect on the buried archaeological resource. In most instances the effect will be limited to the site itself. However, unlike designated heritage assets (see Section 4.0) the archaeological potential of a site, and the significance of that archaeology, must be quantified by means of a staged programme of archaeological investigation. Sections 3.2-3.4 briefly examine the documentary, cartographic and archaeological background to the site; Section 3.5 details the results of a geophysical survey; Section 3.7 summarises this information in order to determine the significance of the archaeology, the potential for harm, and outlines mitigation strategies as appropriate. Appendix 1 details the methodology employed to make this judgement.

3.2 DESK-BASED APPRAISAL

3.2.1 DOCUMENTARY HISTORY

The proposal site is located at the eastern edge of the settlement of Goonhavern, in the historic parish of Perranzabuloe, in the deanery and hundred of Pydar. Perranzabuloe, or 'St Piran in the Sands', 'Perran' and 'Lanpiran', was the principle manor of the parish in the Domesday survey and was held by the church, the Canons of St Piran in 1086 (Williams and Martin 2002). It subsequently passed through the Kendall and Vincent families, although with some interests owned by the Marquis of Buckingham and the church including farm land and tin mines (Lysons 1814). The parish of Perranzabuloe was the supposed burial place of St Piran, Patron saint of Cornwall and tinners who founded an oratory church in the 7th century on the coast north of Perranporth. The Church was subsumed by the sands, which gives the parish its name: from the Medieval Latin *Perranus in Sabuloe*, for 'Piran in the sand' (Lysons 1814; Watts 2004). In the late 18th to early 19th century the church of St Piran was moved, in part, to the village of Lambourn, now called Perranzabuloe, near the centre of the parish. This new church was consecrated in 1805 (Lysons 1814).

Goonhavern was first recorded in c.1300 as *Goenhavar*, meaning 'downs of summer ploughe land', from the Cornish *goon* and *havar*, which refer to an area of rough grazing with an area of summer-ploughed land in or near it (Watts 2004). The village itself is primarily 19th century with significant 20th and 21st century expansion. It is likely that the land lay within the manor of Tywarnhayle (*Tiwarthel*), from the Cornish for 'house on the salt river/estuary' (Watts 2004), at Domesday, held by Robert Count of Mortain from the Canons of St Petroc. However, the manor predates Domesday, when it had previously been held by Algar (Williams & Martin 2002). Lysons records that the manor of Tywarnhayle was granted to Edward the Black Prince in 1337 and given to Sir Walter de Woodland. It was afterwards annexed to the Duchy of Cornwall until 1798 when it was purchased under the land tax redemption act by John Thomas Esq., of Chiverton, with the exception of the mines and wrecks which were reserved by the Duchy (Lysons 1814).

By the middle of the 19th century, the Perranzabuloe tithe apportionment records the site as still being within the holdings of Tywarnhayle, though it largely fell within the area of Tywarnhayle Common. The south-eastern field (plot no. 286), however, is recorded as being under the ownership of Stephen and Richard Davey and was occupied by William Lampshire as part of a string of enclosed fields with a dwelling to the east, and was named *close*. The 1841 census for Perranzabuloe records an agricultural labourer named William Lampshire as living at Littlewater. The historic mapping shows that Tywardreath Common began to be more fully enclosed between 1840 and 1878, whilst the settlement of Goonhavern developed. An enclosure map for the parish of Perranzabuloe is held at the National Archives (MAF 1/608). The Ordnance Survey First Edition map shows that Wheal

Albert lead mine, to the north of the site, had gone out of use by 1878, with the surrounding settlement presumably having developed around the need for miners accommodation.

Stephen and Richard Davey, owners of the south-eastern plot comprising part of the site at the date of the Tithe survey were from Redruth and were both Justice's of the Peace. Richard Davey of Bochym House was an MP for West Cornwall (Burke 1862); and both were involved in investing in Cornish mining during the 19th century.

The site falls within land designated on the Historic Landscape Characterization as Post-Medieval Enclosed Land: *land enclosed in the 17th, 18th and 19th centuries, usually from land that was previously Upland Rough Ground and often medieval commons. Generally in relatively high, exposed or poorly-drained parts of the county.* It is surrounded by a mix of Modern Enclosed Land, Upland Rough Ground and Medieval Farmland.

3.2.2 CARTOGRAPHIC DEVELOPMENT

The earliest detailed cartographic source available to this study is the 1810 Ordnance Survey surveyor's draft map for St Columb (Figure 3). Depictions of field systems on these early drafts is more illustrative than accurate, though it does show the site as part of an unenclosed area to the east of Goonhavern, itself labelled as a small settlement at a crossroads. A road across the unenclosed land can be seen running east to west along the southern edge of the proposal site.



FIGURE 3: EXTRACT FROM THE 1810 ORDNANCE SURVEY SURVEYORS DRAFT MAP FOR ST COLUMB MAJOR (BL); THE APPROXIMATE LOCATION OF THE SITE IS INDICATED.

The first detailed cartographic source is the Perranzabuloe tithe survey of 1840 (Figure 4). This shows the site within the largely unenclosed land of Tywarnhayle Common. Settlement in the vicinity appears to comprise a scatter of small buildings at 'Tywarnhayle', possibly relating to mining activity or miner's dwellings, which are located on the common to the west of the proposal site. A string of small enclosures are depicted within the common (plot nos. 285-290), with a single building within plot no. 288. Only one of these, plot no. 286, falls within the proposal area and is recorded on the accompanying apportionment as *Close* owned by Stephen and Richard Davey and occupied by William Lampshire. All of the plots in this strip of enclosed land are under arable cultivation at this date. Whilst not depicted within the common ground, the road of the earlier map

is likely to have existed, running between the southern edge of plots 286-290 and northern edge of plot no.285.

By the latter half of the 19th century, the 1878 Ordnance Survey 1st edition map (Figure 5) shows that a substantial part of Tywarnhayle Common had been enclosed, including the entirety of the proposal site which encompassed at this date eight rectilinear fields, one of which remains ‘rough ground’ and contains a possible structure; whilst the string of small enclosures appears to have been consolidated into larger enclosures. Wheal Albert lead mine, to the north of the site boundary, appears to have only been very short-lived as it is not depicted on the earlier mapping and is labelled as disused by 1878. A number of dwellings are depicted by this date to the west of the proposal site, whilst additional structures appear to surround the structure within tithe plot no. 288. Several of the structures depicted within the common land on the tithe map are no longer depicted within the confines of the disused mine. Along with the shafts and structures associated with Wheal Albert to the norther of the proposal site, an ‘old shaft’ is depicted within land to the east. The Goonhavern Road is now clearly depicted along the southern edge of the proposal site.



FIGURE 4: EXTRACT FROM THE PERRANZUBALOE TITHE MAP OF 1840; THE APPROXIMATE SITE IS INDICATED.

TABLE 1: EXTRACT FROM THE 1841 PERRANZUBALOE TITHE APPORTIONMENT.

No	Landowner	Occupier	Field Name	Cultivation
Tywarnhayle				
285	Stephen and Richard Davey	William Lampshire	Inclosure	Arable
286			Close	Arable
287			House Plot	Arable
288			Cottage and Courtlage	Arable
289			Meadow	Arable
3110	Commons, Roads and Wastes exempt from Tithes		Tywarnhayle Common	...

Ordnance Survey mapping from the later 19th and early 20th centuries (Figure 6) shows little observable change within much of the surrounding landscape by the time of the second edition survey of 1906, the field boundaries largely appearing unaltered; though the field depicted as ‘rough ground’ is no longer depicted as such and an enclosure with two buildings has been added to the south-western corner, accessed from the Goonhavern Road. The main notable difference within the landscape is the addition of Great Western Railway Truro and Newquay branch line running to the north of the proposal site, which opened in 1905 and closed in 1963. It is not until the late 20th century (post 1960; not depicted) that Goonhavern begins to significantly expand

alongside it becoming a holiday destination with numerous campsites appearing.

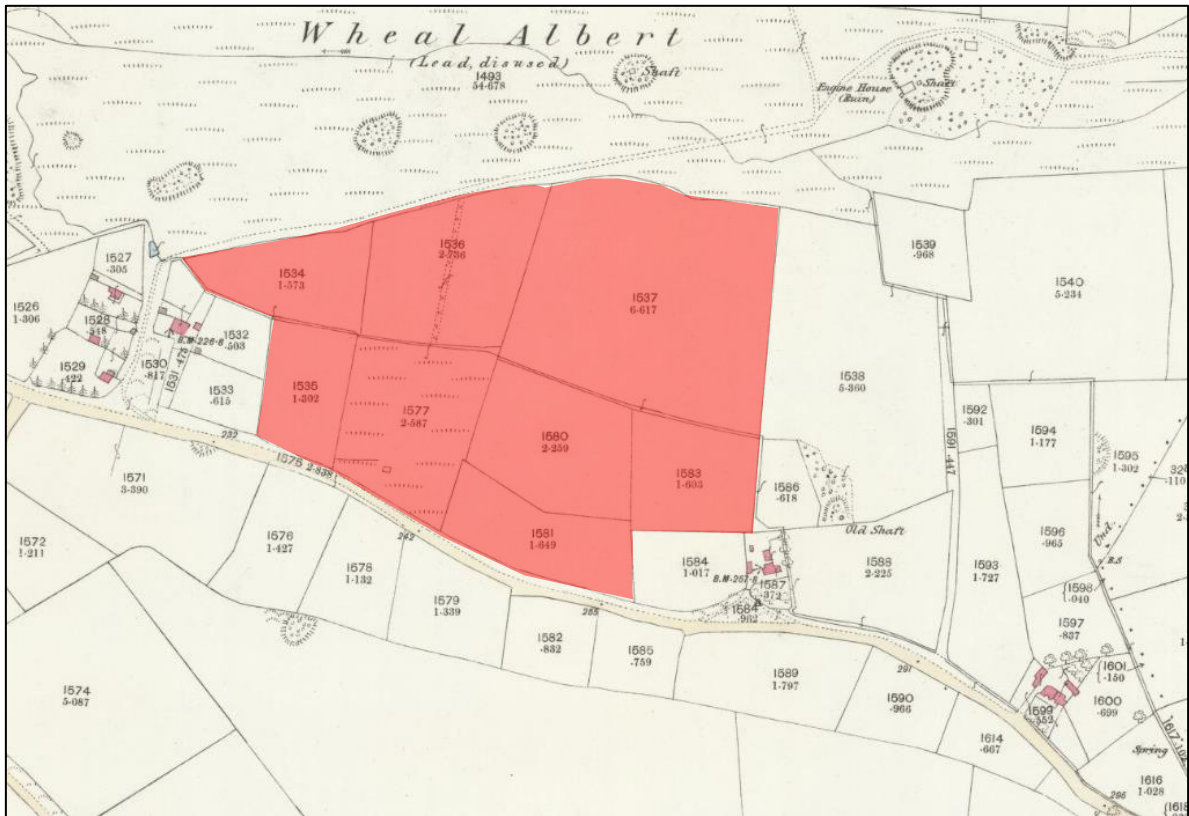


FIGURE 5: EXTRACT FROM THE ORDNANCE SURVEY FIRST EDITION 25INCH MAP OF 1878; THE APPROXIMATE SITE IS INDICATED (NLS).

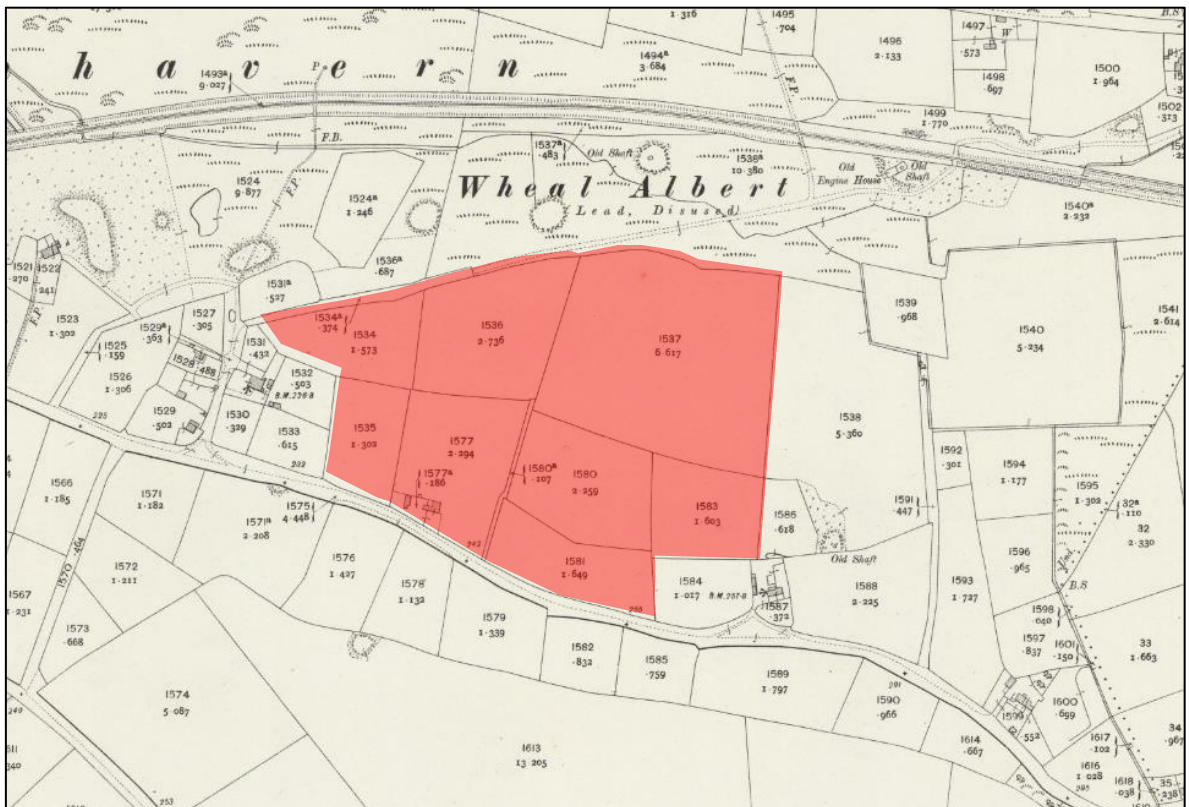


FIGURE 6: EXTRACT FROM THE ORDNANCE SURVEY SECOND EDITION 6INCH MAP OF 1906; THE APPROXIMATE SITE IS INDICATED (NLS).

3.3 ARCHAEOLOGICAL BACKGROUND

There has been only a limited amount of archaeological fieldwork carried out in the local area (Figure 7 and Table 2), and none on the proposal site itself. This has been limited to impact assessments of the Perranporth to Newquay Multi-use Trail, along the former railway line (Fleming 2020; ECO5383), of the Monkey Tree Campsite (ECO4372) and nearby wildlife habitats (Herring 2000; ECO857); geophysical survey at: Chyvounder Farm (Boyd *et al* 2018; ECO5288), to the north of Wheal Albert (Webb 2020; ECO5427), south of Marshfield Close (ECO5352), at Oyster Bay Holiday Park (Webb 2022), off Pollard's Close (Sharpe 2013; ECO4346) and at Wheal Albert Road (ECO5063). These identified undated features such as former tracks, field boundaries and disturbed ground, though all likely associated with the agricultural and mining history of the area.

The Cornwall and Scilly Historic Environment Record (HER; Figure 8 and Table 3) identifies the surrounding landscape as containing evidence of activity dating back to prehistory, though much of the evidence within the more immediate environs includes medieval and post-medieval settlement and landscape use. The earliest evidence dates to the Bronze Age with bowl barrows recorded to the north at Carnebo (MCO2371, MCO2372), though the first evidence of settlements does not appear until later in prehistory with a (possible) Iron Age ditched enclosure identified as a cropmark at Higher Engalley (MCO32554). Settlement remains scarce until the medieval period when isolated farmsteads such as at Lanteague (MCO15315) begin to appear alongside field-systems; though it is not until the post-medieval period that settlement and more substantial agricultural and industrial activities begin to take place.

Three Listed Buildings are recorded within 1km of the site: Wheal Anna House, Goonhavern Methodist Church and Goonhavern County Primary School.

The historic landscape characterisation (HLC) for Cornwall shows this as *Post-Medieval Enclosed Land*, land enclosed in the 17th, 18th and 19th centuries, usually from land that was previously Upland Rough Ground and often medieval commons. Generally in relatively high, exposed or poorly-drained parts of the county.

3.3.1 PREHISTORIC 4000BC - AD43

The evidence for prehistoric activity in this area is relatively limited, and may reflect a lack of fieldwork rather than necessarily a genuine absence of archaeological remains. Numerous bowl barrows survive as earthwork mounds across the wider landscape demonstrating a prehistoric ritual landscape, with two suggested by cropmark evidence at Carnebo (MCO2371, MCO2372). Evidence for a (possible) Iron Age settlement is suggested by a ditched enclosure identified by cropmarks (MCO32554).

3.3.2 MEDIEVAL AD1066 - AD1540

A limited number of sites of medieval date are recorded in the Cornwall and Scilly HER in the vicinity of the site. Lanteague Farm, to the north-east is first recorded in 1302 or 1452 (MCO15315) with an associated field-system (MCO32357).

3.3.3 POST-MEDIEVAL AD1540-AD1899

Population and settlement expanded during the post-medieval period in parallel with the industrialization of the Cornish landscape (North Chiverton, MCO12312; Tywarnhale, MCO12738; Wheal Albert, MCO12806, MCO56586; and Wheal Anna Account House, MCO4201, List1141544). Despite this, the economy was dominated by agriculture, and the most common undesignated heritage assets in this landscape remain historic hedgerows and removed boundaries. Goonhavern can be seen to have grown to a limited extent during the post-medieval period, with the addition of a Methodist Chapel (List1312552), school (List1141553) and blacksmith's workshop during the 19th century.

3.3.4 MODERN AD1900 – PRESENT AND UNKNOWN

During the 20th century this development and expansion continued, with the creation of the Chacewater & Newquay railway branch line and associated infrastructure, which opened in 1905 (MCO55865). Further undesignated assets such as: enclosures (MCO32358, MCO32556, MCO32595) and trackways (MCO32555) are at present undated, though are likely to represent further evidence of the settlement and agricultural practices and activity already discussed.

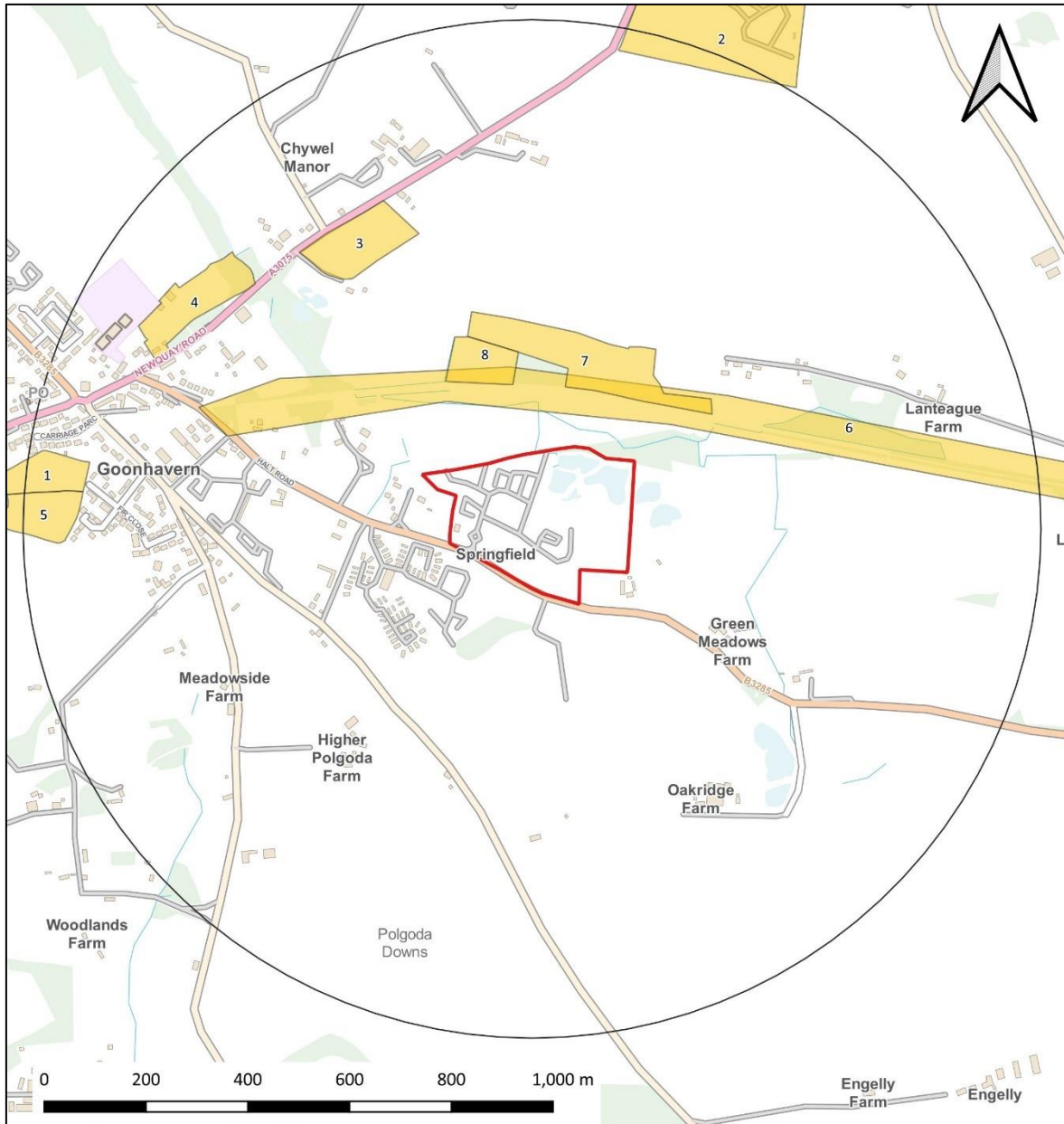


FIGURE 7: EVENT RECORDS WITHIN 1KM OF THE SITE; © HISTORIC ENGLAND 2021. CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2021. THE APPROXIMATE SITE LOCATION IS INDICATED (SOURCE: CSHER AND HISTORIC ENGLAND).

TABLE 2: TABLE OF EVENT RECORDS WITHIN 1KM OF THE SITE (SOURCE: CSHER AND HISTORIC ENGLAND).

No	Event ID	Type	Name
1	ECO4346	Geophysical Survey	Land off Pollard's Close, Goonhavern, Cornwall
2	ECO4372	Assessment; Walkover Survey	Land at Monkey Tree Campsite
3	ECO5063	Geophysical Survey	Goonhavern, Cornwall
4	ECO5288	Geophysical Survey; Assessment	Land at Chyvounder Farm
5	ECO5352	Geophysical Survey	Land south of Marshfield Close
6	ECO5383	Assessment	Perranporth to Newquay Multi-Use Trail, Cornwall

7	ECO5427	Geophysical Survey	Land north of Wheal Albert
8	ECO857	Assessment	CWT Reserves - Report

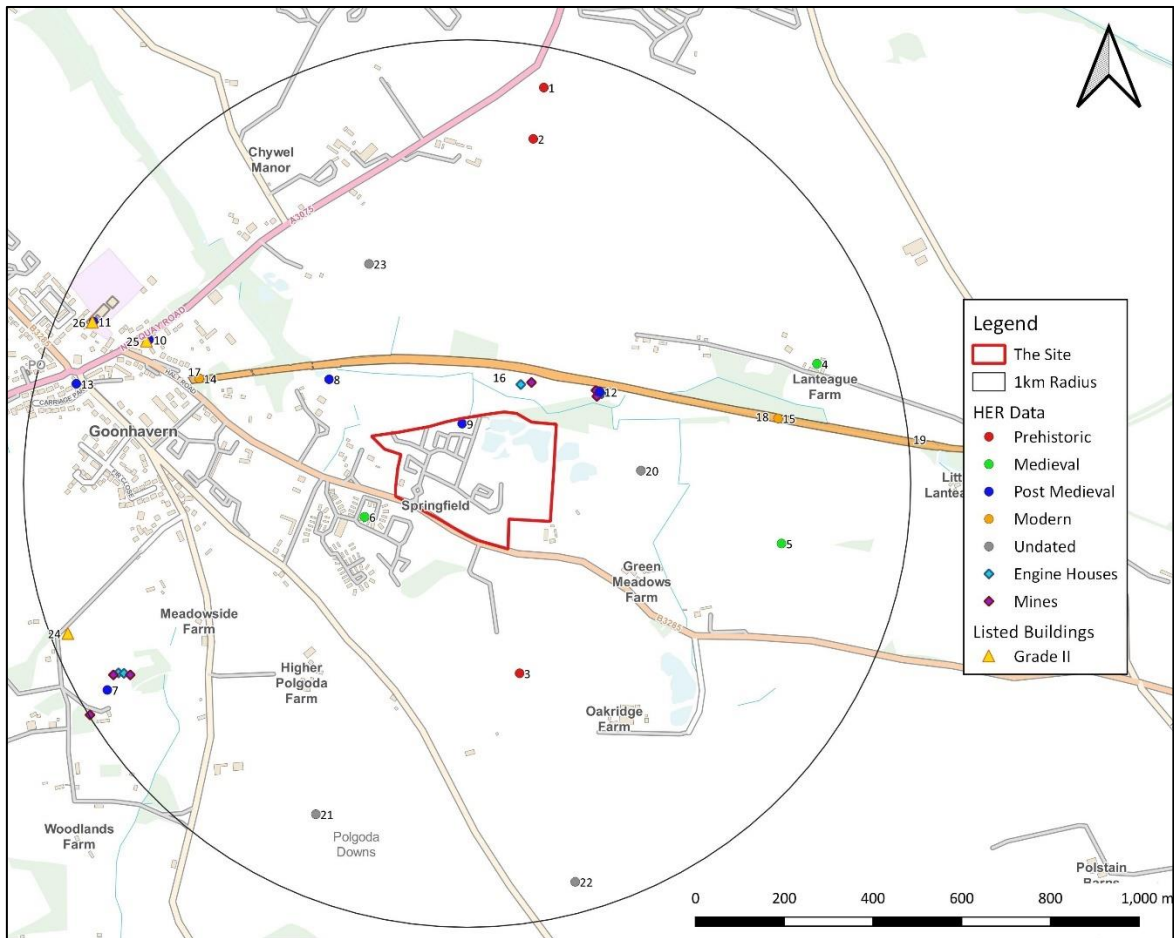


FIGURE 8: HERITAGE ASSETS WITHIN 1KM OF THE SITE; © HISTORIC ENGLAND 2021. CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2021. THE APPROXIMATE SITE LOCATION IS INDICATED (SOURCE: CSHER AND HISTORIC ENGLAND).

TABLE 3: TABLE OF HERITAGE ASSETS WITHIN 1KM OF THE SITE (SOURCE: CSHER AND HISTORIC ENGLAND).

No	Mon ID	Name	Summary
1	MCO2371	CARNEBO - Bronze Age barrow	One of two barrows recorded by Thomas, now visible as cropmarks on aerial photographs.
2	MCO2372	CARNEBO - Bronze Age barrow	One of two barrows recorded by Thomas, now visible as cropmarks on aerial photographs.
3	MCO32554	HIGHER ENGELLEY - Prehistoric enclosure, Undated enclosure	A subcircular ditched enclosure, 51m across, is visible as a cropmark on vertical aerial photographs.
4	MCO15315	LANTEAGUE - Medieval settlement	The settlement of Lanteague is first recorded in 1302 or 1452.
5	MCO32357	LITTLE LANTEAGUE - Medieval field system, Post Medieval field system	Fragments of a banked, rectilinear field system, are visible as cropmarks on vertical aerial photographs between Little Lanteague and Little Water.
6	MCO32553	GOONHAVERN - Medieval trackway, Post Medieval trackway, Undated trackway	
7	MCO12312	NORTH CHIVERTON - Post Medieval mine	North Chiverton mine was once part of Wheal Anna and resumed work between 1863 and 1868.
8	MCO12738	TYWARNHAYLE - Post Medieval mine	
9	MCO12806	WHEAL ALBERT - Post Medieval mine	Wheal Albert previously worked as Goonhavern mine and was working in 1840.

10	MCO32306	GOONHAVERN - Post Medieval nonconformist chapel	Late C19 Bible Christian chapel with attached Sunday school that is probably the earlier chapel, also an attached traphouse.
11	MCO51341	GOONHAVERN - Post Medieval school	Board School, built 1876 (datestone). Recorded on the OS 1st and 2nd Edition 1:2500 maps. Gothic style details. Single storey. Plan: E-shaped plan plus porches between the wings. Original plan has large central schoolroom.
12	MCO56586	WHEAL ALBERT - C19 engine house	A pumping engine at Wheal Albert mine is extant but in poor condition.
13	MCO9068	GOONHAVERN - Post Medieval blacksmiths workshop	
14	MCO53895	GOONHAVERN - Modern railway station	The site of Goonhavern Halt.
15	MCO54337	LANTEAGUE - Modern accommodation bridge	A bridge carrying the line of the Chacewater to Newquay branch over a farm lane.
16	MCO55865	CHACEWATER & NEWQUAY BRANCH - Post Medieval railway	The GWR branch line from Blackwater Junction to Newquay, opened in 1905.
17	MCO53895	GOONHAVERN - Modern railway station	The site of Goonhavern Halt.
18	MCO54337	LANTEAGUE - Modern accommodation bridge	A bridge carrying the line of the Chacewater to Newquay branch over a farm lane.
19	MCO55865	CHACEWATER & NEWQUAY BRANCH - Post Medieval railway	The GWR branch line from Blackwater Junction to Newquay, opened in 1905.
20	MCO32358	LITTLE WATER - Undated enclosure	Cropmarks of what appears to be an oval ditched enclosure, 79m by 56m, are visible on vertical aerial photographs.
21	MCO32555	POLGODA DOWNS - Undated trackway	
22	MCO32556	HIGHER ENGELLEY - Undated enclosure	Faint traces of a subcircular enclosure are visible as cropmarks on vertical aerial photographs.
23	MCO32595	CARNEBO FARM - Undated enclosure	Perpendicular linear ditches are visible as cropmarks on vertical aerial photographs.
24	1141544	WHEAL ANNA HOUSE	Grade II
25	1312552	GOONHAVERN METHODIST CHURCH, WITH FORECOURT WALLS GATE AND ADJOINING SCHOOLROOM	Grade II
26	1141553	GOONHAVERN COUNTY PRIMARY SCHOOL	Grade II

3.4 AERIAL PHOTOGRAPHY AND LiDAR

Assessment of the readily-available aerial photography and LiDAR imagery for the proposal site (Figure 9) suggests that the site has largely been pastoral land, the significant expansion and growth of Goonhavern not beginning until the late 20th century, alongside the addition of campsites, including both Perran Springs and the Oyster Bay Holiday Park to the south. The fishing lakes/ponds can be seen to be added at the start of the 21st century.

The image below (Figure 10) is derived from LiDAR data freely available from the Environment Agency. Digital Terrain (*i.e.*, bare earth, DTM) data was processed. The highest detail sampling interval available for the site was a 1m interval.

The LiDAR data for the site gives the impression of generally level but uneven and overgrown landscape, particularly to the north and east of the site. The proposal site itself can be seen to contain numerous linear features (roads/tracks) which form the layout of the holiday park, as well as the three main fishing lakes/ponds, and a smaller fourth shallower pond. This field is clearly bounded by straight hedges. Two linear features which are not part of the holiday park layout can be seen to the south of the lakes/ponds: one east to west aligned and continuing the southern

boundary of this field as a removed boundary depicted on the 20th century historic maps; whilst the second runs north to south between this and lakes/ponds and is not depicted on the historic maps.



FIGURE 9: AERIAL PHOTOGRAPH OF THE SITE TAKEN IN 2005 (© 2021 MAXAR TECHNOLOGIES); THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED.



FIGURE 10: 1M DTM LIDAR SLOPE IMAGE DATA PROCESSED USING QGIS 3.12 MULTIHILLSHADE. THE SITE BOUNDARY IS INDICATED. CONTAINS PUBLIC SECTOR INFORMATION LICENCED UNDER THE OPEN GOVERNMENT LICENCE.

3.5 GEOPHYSICAL SURVEY

3.5.1 INTRODUCTION

An area of c.2.3ha was the subject of a magnetometry (gradiometer) survey. The purpose of this survey was to identify and record magnetic anomalies within the proposed site. While identified anomalies may relate to archaeological deposits and structures, the dimensions of recorded anomalies may not correspond directly with any associated features. The following discussion attempts to clarify and characterise the identified anomalies. The survey was undertaken on the 14th of December 2021 by P. Webb; the survey data was processed and interpreted by P. Webb. Additional graphic images of the survey data and grid locations can be found in Appendix 1; and supporting photographs for the site inspection can be seen in Appendix 2.

3.5.2 SITE INSPECTION

The site comprises five sub-rectangular to irregular fields (Figure 11; Fields F1-F5) associated with the Perran Springs Holiday Park. Of these, two fields (F2 and F5) show significant modern disturbance including the creation of tracks and caravan/chalet base construction as part of with the extant holiday park; one (F4) shows contains modern disturbance associated with the creation of tracks and waste/spoil storage associated with the holiday park and/or the construction of nearby buildings; one (F1) contains fishing lakes/ponds; and two (F1 south and F3) are under pasture. All of the fields are relatively flat, though the ground level is higher within field F1, sloping gently down to the south to fields F2 and F3 and stepping down to the north-west to field F5.

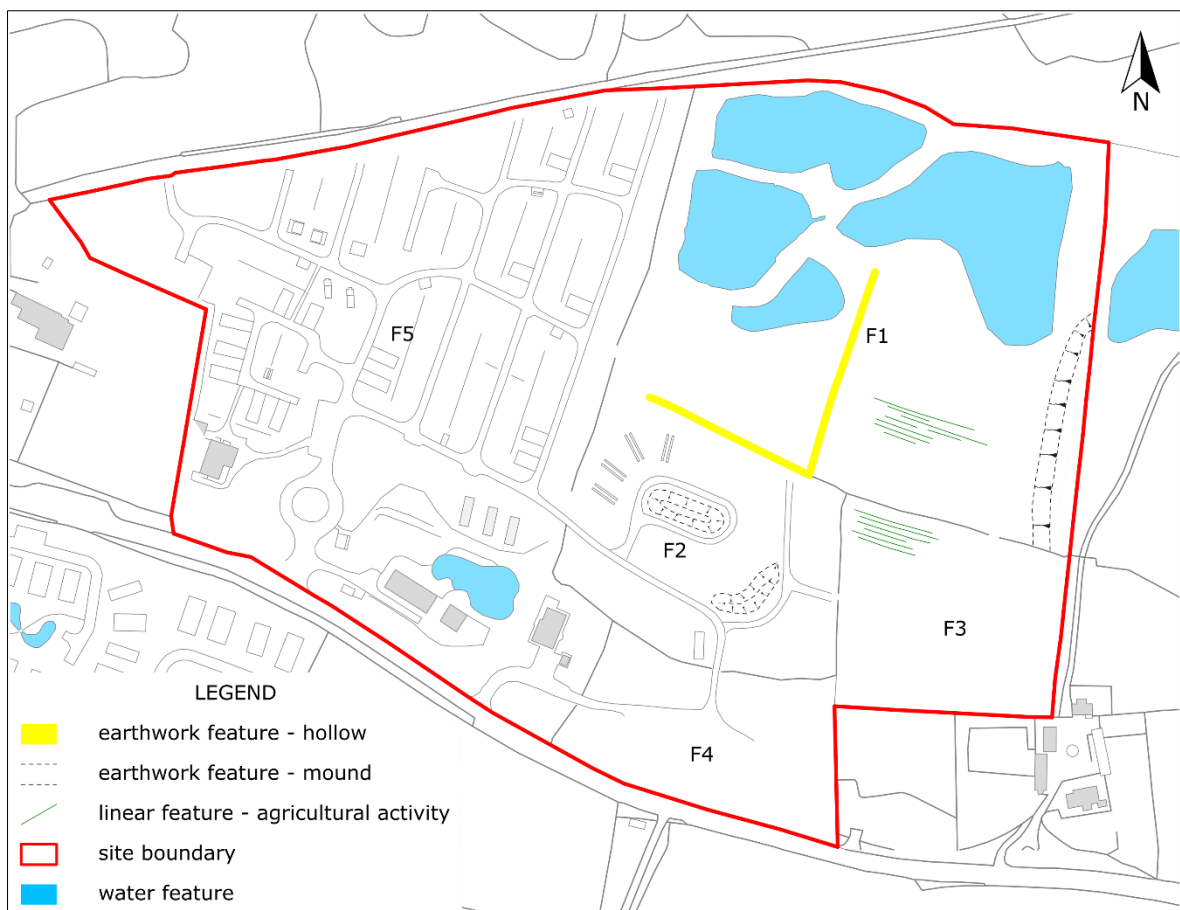


FIGURE 11: SITE LAYOUT SHOWING THE APPROXIMATE POSITION OF FEATURES OBSERVED ON THE GROUND.

Field F1, forming the north-eastern corner of the site, is sub-rectangular in shape and orientated approximately north-north-east to south-south-west, with straight boundaries. It is relatively level, except for four lakes/ponds at the northern end and the linear mound along the eastern boundary.

To the north is an area of woodland and scrub forming the site of the former Wheal Albert mine site; an area of woodland with further lakes/ponds lies to the east; and fields containing the current layout of Perran Springs Holiday Park to the south and west. It is bounded to all sides by tree- and hedge-lined low earth banks with traces of an internal ditch to the southern boundary. This is particularly evident along the western half of the boundary (to F2) where the hedge and bank have been removed and a linear waterlogged channel survives. An additional linear channel, orientated approximately north-north-east to south-south-west was identified towards the middle of the field, corresponding approximately with the linear feature identified by the LiDAR data, and partially waterlogged. To the east of this a series of moderately tightly spaced linear ridges orientated approximately west-north-west to east-south-east were identified and may indicate historic (modern/recent) agricultural activity.



FIGURE 12: FIELD F1, DETAIL OF LINEAR WATERLOGGED CHANNEL; VIEWED FROM THE NORTH (1M SCALE).

Field F2, located to the south of field F1, is sub-rectangular in shape and orientated approximately west-north-west to east-south-east with straight northern and western boundaries, and curving eastern and southern boundaries. It is fairly undulating with a series of raised mounds created across the field. To the north is field F1, field F3 is to the east, field F4 to the south, and field F5 to the west. It is bounded to the east, south and west by low tree- and hedge-line banks with traces of internal ditches; and to the north by a removed boundary surviving a waterlogged channel. This field has been heavily disturbed in the recent past, with stoned tracks, concrete pads and drainage features associated with the holiday park across the entirety of the field.

Field F3, located to the south of field F1 and west of field F2, is sub-rectangular in shape and orientated approximately west-north-west to east-south-east with straight eastern and southern boundaries, and curving northern and western boundaries. It is fairly flat. To the north is field F1, F2 is to the west, an area of woodland to the east, and to the south are plots containing gardens and waste/construction activity. It is bounded to the north and west by low hedgebanks with traces of internal ditches; whilst to the east and south are high overgrown banks. A series of tightly spaced linear ridges orientated approximately north-west to south-east were identified towards the north-

western corner and may indicate historic (modern/recent) agricultural activity.



FIGURE 13: FIELD F3, DETAIL OF NARROW EARTHWORK RIDGES; VIEWED FROM THE NORTH-WEST (1M SCALE).

Field F4, located to the south of field F2, is sub-rectangular to irregular in shape and orientated approximately west-north-west to east-south-east with straight sided boundaries to the east and west, and curving boundaries to the north and south. It is fairly flat. To the north is field F2, to the east is waste/scrub/construction ground, to the south is the B3285, and to the west is 'The Meadows' with associated gardens. It is bounded tree- and hedge-lined low earth banks, though the southern boundary is heavily overgrown. A large portion of the field has previously been stripped and stoned to create a compacted surface, and a series of waste and spoil heaps are spread across the area.

Field F5, covering the western half of the site, is sub-rectangular to irregular in shape and orientated approximately north-north-east to south-south-west with straight sided boundaries to the east and west, and curving boundaries to the north and south. It is bounded to the north, east and west by tree- and hedge-lined low earth banks, and is largely open to the south with partial chain and post fence. This field has been heavily disturbed with tarmac and stoned tracks/roads crossing the site creating the layout for the bulk of the existing holiday park, with associated structures and landscaping.

Based on the results of the site inspection, fields F4 and F5 were not subjected to geophysical survey, the level of disturbance caused by the intrusion of modern features meaning that any buried archaeological features are likely to have been masked and/or destroyed by the creation of the holiday park (and reflected in the results for field F2). The presence of the large water features also means that the northern end of field F1 cannot be surveyed.

3.5.3 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for*

Archaeological Geophysical Survey (CifA 2014b).

The survey was carried out using a twin-sensor fluxgate gradiometer (Bartington Grad601). These machines are sensitive to depths of up to 1.50m. The survey parameters were: sample intervals of 0.25m, traverse intervals of 1m, a zigzag traverse pattern, traverse orientation was circumstantial, grid squares of 30x30m. The gradiometer was adjusted ('zeroed') every 0.5-1ha. The survey grid was tied into the Ordnance Survey National Grid. The data was downloaded onto *Grad601 Version 3.16* and processed using *TerraSurveyor Version 3.0.25.0*. The primary data plots and analytical tools used in this analysis were *Shade* and *Metadata*. The details of the data processing are as follows:

Processes:

Clip +/- 1SD; removes extreme data point values.

DeStripe all traverses, median; used to equalize underlying differences between grids (potentially caused by instrument drift or orientation, directional effects inherent in magnetic instrument, or differences in instrument set up during the survey, e.g. using two gradiometers).

TABLE 4: SURVEY DETAILS (UNADJUSTED).

Field	Area Surveyed (ha)	Max (nT)	Min (nT)	Standard Deviation (nT)	Mean (nT)	Median (nT)
F1-F2	1.911 of (3.6)	98.50	-100.00	14.00	-1.69	-1.31
F3	0.3839 of (0.6)	98.47	-100.00	6.15	-1.40	-1.52
F4	0 of (0.5)	-	-	-	-	-
F5	0 of (3.5)	-	-	-	-	-
Full site	2.2949 of (8.2)	98.50	-100.00	13.03	-1.64	-1.35

3.5.4 RESULTS

Table 5 with the accompanying Figures 14 and 15 show the analysis and interpretation of the geophysical survey data. Additional graphic images of the survey data and numbered grid locations can be found in Appendix 1.

TABLE 5: INTERPRETATION OF GRADIOMETER SURVEY DATA.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
Field F1				
1	Weak positive & negative, possible	Linear	Ditch or cut feature	Indicative of cut and infilled features such as ditches. Aligned approximately north-north-east to south-south-west. Responses of between -17.19nT and +15.23nT.
2	Weak to very strong positive & negative, mixed	Irregular	Modern disturbance	Mixed responses indicative of disturbed ground and disturbance caused by proximity to metallic debris. Responses of between -17.81nT and +80.19nT.
Field F2				
3	Weak to very strong positive & negative, mixed	Irregular	Modern disturbance	Mixed responses indicative disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -198.46nT and +100.85nT.
Field F3				
4	Strong to very strong positive & negative, mixed	Irregular	Modern disturbance	Mixed responses indicative of disturbance caused by proximity to metallic fences and debris. Responses of between -134.24nT and +103.29nT.
5	Weak positive & negative, probable	Linear	Agricultural activity	Linear striations appearing with regularity. Aligned approximately west-north-west to east-south-east. Weak positive with associated negative responses suggestive of shallow ploughing. Responses of between -2.41nT and +3.16nT.

3.5.5 DISCUSSION

The survey identified 4 groups of anomalies. These were predominantly linear anomalies likely to be associated with phases of historic boundaries, land drainage and agricultural activity; as well as significant modern disturbance associated with the creation of the extant holiday park. Evidence of metallic debris was also identified.

The general response variation across the site was between $\pm 1nT$ with occasional clear background geological variation up to $\pm 2nT$. The response strength of possible archaeological activity was relatively low (typically between $\pm 10n$). The weak responses of many of the anomalies indicates that the majority are only likely to survive to a shallow depth.

The anomaly groups identified include: one possible ditch feature related to field boundaries forming elements of the historic field-system (Group 1); linear features suggestive of agricultural activity (Group 4); and modern disturbance associated with the creation of the existing holiday park (Groups 2 & 3).

Field 1

Anomaly Group 1 consists of a weak positive (+0.06nT to +15.23nT) linear anomaly with associated negative (-17.19nT to -0.07nT) responses indicative of a cut and infilled feature such as a ditch. It is orientated approximately north-north-east to south-south-west, congruent with elements of the existing field-system and may belong to an earlier phase. However, given the level of disturbance across the site, along with the negative, weak nature of the responses, and the waterlogged nature of the feature, it is perhaps more likely that it reflects the presence of a drainage feature or channel.

Anomaly Group 2 consists of a weak to very strong mixed positive (+0.03nT to +80.19nT) and negative (-17.81nT to -0.08nT) irregular anomaly indicative of disturbed ground and disturbance caused by proximity to metallic debris. Given its position close to the lakes/ponds, it is likely to represent activity related to their construction and/or later disturbance.

Field 2

Anomaly Group 3 consists of weak to very strong mixed positive (+0.01nT to +100.85nT) and negative (-198.46nT to -0.01nT) di-polar anomalies indicative of magnetic disturbance, disturbed ground, modern services, and disturbance caused by proximity to metallic fences and debris. Much of this area shows signs of having been stripped with stoned tracks and spoil mounds present, whilst concrete pads with evidence of modern services are also visible. These level of disturbance across this field is likely to mask the presence of any surviving archaeological features, including a likely removed historic boundary to the northern edge of the field, visible as a waterlogged linear feature on the ground extending from a stub of hedge-line (see above).

Field 3

Anomaly Group 4 consists of very strong positive (+0.11nT to +103.29nT) and negative (-134.24nT to -0.15nT) indicative of disturbance caused by proximity to metallic fences and ferrous debris.

Linear striations (anomaly Group 5) of weak positive (+0.09nT to +3.16nT) and negative (-2.41nT to -0.09nT) responses orientated approximately west-north-west to east-south-east are present across the field, the regularity of the responses suggesting that they represent episodes of ploughing.

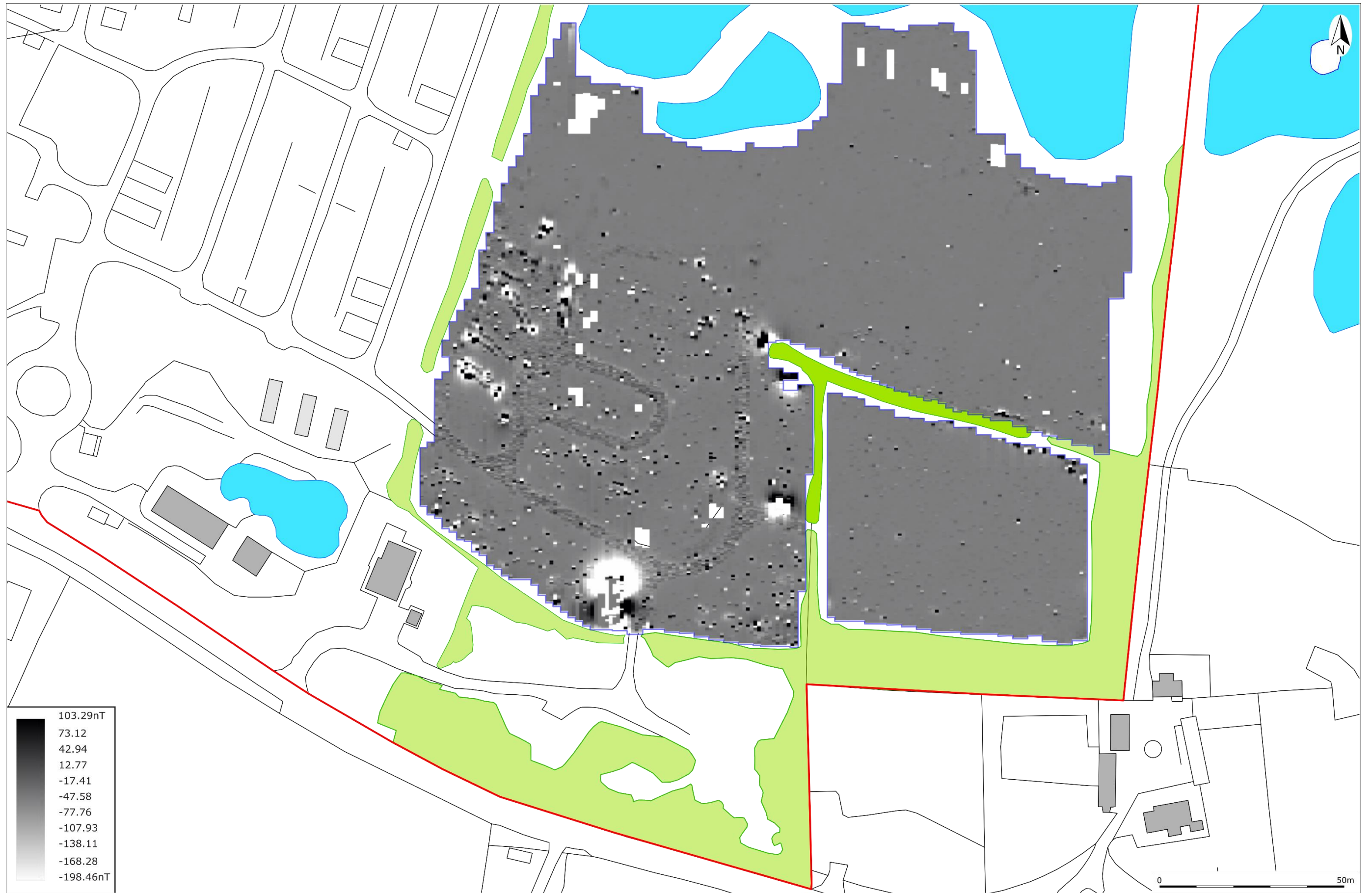


FIGURE 14: SHADE PLOT OF GRADIOMETER SURVEY DATA; GREYSCALE, MINIMAL PROCESSING.



FIGURE 15: INTERPRETATION OF GRADIOMETER SURVEY DATA.

3.6. ARCHAEOLOGICAL POTENTIAL

The survey identified 5 groups of anomalies across five fields. These were a linear anomaly associated with a possible removed boundary or drainage feature (Group 1); linear striations indicative of possible agricultural activity (Group 5); and modern disturbance, including the creation of tracks/roads, spoil mounds, and modern services associated with the creation of the existing holiday park (Groups 2,3 and 4).

The surrounding historic field pattern is characterized (Cornwall and Scilly HLC) as post-medieval enclosed land, developing from earlier field-systems and often represented by straight sided boundaries seen in elements of the surrounding field-system, and perhaps represented by anomaly Group 1. However, given the poorly-draining nature of the surrounding landscape, and heavily disturbed nature of much of the site (anomaly Groups 2, 3 and 4) this feature may reflect later drainage or landscaping.

The remaining features identified across the site reflect historic episodes of ploughing, the narrow spacing and shallow depth of their earthwork representations indicating more recent plough scarring, though some of the features may reflect drainage.

3.7. ARCHAEOLOGICAL POTENTIAL AND IMPACT SUMMARY

The direct *effect* of the development would be the possible disturbance or destruction of archaeological features or deposits present within the footprint of the development; the *impact* of the development would depend on the presence and significance of archaeological features and deposits. Given the historic use of the site it is considered likely that should archaeological features survive, they are likely to only be the larger and deeper cut examples. The results of the walkover and geophysical surveys, however, suggest that these features are likely to be limited to those associated with agricultural practices, with less common occurrences of field boundaries, though this does not rule out the potential for other features to be present. Given the extent of modern disturbance across the site, it is thought that the survival of such features is unlikely across, with the exception of within field F3.

TABLE 6: SUMMARY OF DIRECT IMPACTS.

Asset	Type	Distance	Value	Magnitude of Impact	Assessment	Overall Assessment
Direct Impacts						
Unidentified archaeological features	U/D	On site	Unknown	Major	Low	Negative/Substantial
<i>After mitigation</i>			Negligible	Minor	Neutral/Slight	Neutral/Negligible

4.0 INDIRECT IMPACTS

4.1 STRUCTURE OF THE ASSESSMENT

For the purposes of this assessment, the *indirect effect* of a development is taken to be its effect on the wider historic environment. The principal focus of such an assessment falls upon identified designated heritage assets like Listed buildings or Scheduled Monuments. Depending on the nature of the heritage asset concerned, and the size, character and design of a development, its effect – and principally its visual effect – can impact on designated assets up to 20km away.

The methodology adopted in this document is based on that outlined in *The Setting of Heritage Assets* (GPA3 Historic England 2015), with reference to ICOMOS (2011) and DoT (DMRB, WEBTAG) guidance. The assessment of effect at this stage of a development is an essentially subjective one, but one based on the experience and professional judgement of the authors. Appendix 4 details the methodology employed.

This report follows the staged approach to proportionate decision making outlined in *The Setting of Heritage Assets* (Historic England 2017, 6). *Step one* is to identify the designated heritage assets that might be affected by the development. The first stage of that process is to determine an appropriate search radius, and this would vary according to the height, size and/or prominence of the proposed development. For instance, the search radius for a wind turbine, as determined by its height and dynamic character, would be much larger than for a single house plot or small agricultural building. The second stage in the process is to look at the heritage assets within the search radius and assign to one of three categories:

- Category #1 assets: Where proximity to the proposed development, the significance of the heritage asset concerned, or the likely magnitude of impact, demands detailed consideration.
- Category #2 assets: Assets where location and current setting would indicate that the impact of the proposed development is likely to be limited, but some uncertainty remains
- Category #3 assets: Assets where location, current setting, significance would strongly indicate the impact would be no higher than negligible and detailed consideration both unnecessary and disproportionate. These assets are still listed in the impact summary table.

For *Step two* and *Step three*, and with an emphasis on practicality and proportionality (*Setting of Heritage Assets* p15 and p18), this assessment then groups and initially discusses heritage assets by category (e.g. churches, historic settlements, funerary remains etc.) to avoid repetitious narrative; each site is then discussed individually, and the particulars of each site teased out. The initial discussion establishes the baseline sensitivity of a given category of monument or building to the potential effect, the individual entry elaborates on local circumstance and site-specific factors. The individual assessments should be read in conjunction with the overall discussion, as the impact assessment is a reflection of both.

4.2 QUANTIFICATION

There are three Listed Buildings and one Scheduled Monument (SAM) recorded within 1km of the proposed development, and are represented in Table 7 (below). A further four undesigned assets, all engine houses/mines, within the 1km search area, and one Scheduled Bronze Age barrow just outside, were also considered due to wider landscape considerations. The undesigned asset groups to the immediate west (Temple House, Tremorna, Moorlands and Belmont) and to the east of the site were (Little Water) were also considered, due to their proximity to the development, and as they appear of the 1st Edition OS Map.

The assets selected for assessment were: Bowl Barrow south of Treworthal Farm Scheduled Monument; the Grade II Listed Goonhavern County Primary School, Goonhavern Methodist Church and Wheal Anna House; the engine houses at North Chiverton (x2) and Wheal Albert (x2); and the buildings to the east of the site (Little Water) and to the west (Temple House, Tremorna, Moorlands and Belmont). Based on their perceived value and locations relative to the site, these have been treated as *Category #1*, *Category #2* and *Category #3* assets.

With an emphasis on practicality and proportionality (see *Setting of Heritage Assets* p15 and p18), only those assets where there is the possibility for an effect greater than negligible (see Table 1 in Appendix 4) are considered here in detail and in summary Table 7. All other Scheduled and Listed assets can be seen listed and mapped in section 3.1, although they have been scoped out of this assessment due to their neutral relationship to the proposed development.

- Category #1 assets: the Scheduled barrow south of Treworthal Farm.
- Category #2 assets: the Grade II Listed Goonhavern County Primary School, Goonhavern Methodist Church, and Wheal Anna House
- Category #3 assets: the undesignated engine houses/mines at North Chiverton and Wheal Albert and the groups of buildings at Little Water (east of the site) and Temple House, Tremorna, Moorlands and Belmont (west of the Site).

4.3 IMPACT BY CLASS OF MONUMENT OR STRUCTURE

4.3.1 INDUSTRIAL BUILDINGS AND INFRASTRUCTURE

A range of industrial and extractive structures, often exhibiting elements of formal planning, rarely with a view to aesthetics

A whole range of structures relating to a whole range of industries falls under this broad category, and include ruined, standing and functioning buildings. This might include: bridges, canals, capstans, clay-drying facilities, engine houses, fish cellars, gunpowder mills, railways, warehouses and so forth. However, in most instances industrial buildings were not built with aesthetics in mind, despite the elements of formal planning that would often be present. The sensitivity of these structures to the visual intrusion of a development depends on type, age and location.

It is usually the abandoned and ruined structures, now overgrown and ‘wild’, that are most sensitive to intrusive new visual elements. The impact on these buildings could be significant. Where they occur in clusters – as they often do – the impact of an isolated development is lessened, but the group value of the heritage asset is enhanced.

What is important and why

This is a very heterogeneous group, though all buildings and associated structures retain some evidential value, which ranges with the degree of preservation. Some structures are iconic (e.g. Luxulyan viaduct) and quite often others are, due to the rapid intensification of industry in the 18th and 19th centuries, innovative in both design and application (historical/illustrative). Some may survive as working examples – in which case the associational value is maintained – but many are ruinous or converted (historical/associational). All were designed, and many conform to a particular template (e.g. engine houses) although incremental development through use-life and subsequent decrepitude may conceal this. Fortuitous development may then lead to ruinous or deserted structures or building complexes taking on the air of a romantic ruin (e.g. Kennall Vale gunpowder works), imagery quite at odds with the bustle and industry of their former function. Some of the more spectacular or well-preserved structures may become symbolic (e.g. South Crofty Mine), but communal value tends to be low, especially where public access is not possible.



FIGURE 16: VIEW ACROSS THE DISUSED NORTH CHIVERTON MINE; VIEWED FROM THE SOUTH-WEST.

Asset Name: Engine Houses at North Chiverton mine	
Parish: Perranzabuloe	Value: Low
Designation: Undesignated	Distance to Development: c.0.85km
<p><i>Description:</i> The sites of three engine houses are located on the Cornwall & Scillies HER under 'engine houses' as part of North Chiverton Mine.</p> <p>HER text: North Chiverton mine was once part of Wheal Anna and resumed work between 1863 and 1868. The mine is mentioned by Spargo and Collins who notes that the lode was large but poor. A 50" pumping engine was started in 1864 when the mine was 10 fathoms below adit. In 1870 it attained a depth of 80 fathoms and some 'bunches' of lead ore were discovered. Besides lead ore, it produced some iron pyrites, silver and zinc.</p> <p>It is shown on Brenton's map of 1869, the OS map of 1878 and on Hamilton Jenkin's map, and its position is marked on the OS map of 1976. The shafts and tips associated with this mine are clearly visible on vertical aerial photographs.</p>	
<p><i>Supplemental Comments:</i> No structures are visible from publicly accessible land, though mine waste spoil heaps and covered shafts are visible. Currently left to rewild.</p>	
<p><i>Conservation Value:</i> Engine houses are typically listed for their historic and architectural value as good examples of their type, within a wider historical context, particularly as part of wider WHS areas. When surviving there will be aesthetic value, in the use of vernacular materials and functional use. As upstanding remains of the mine workings, which sit within an extensive extractive landscape, these assets can have considerable narrative value. Whilst no surviving structures were identified, the spoil heaps and mine shafts still provide the narrative. These are much less aesthetically pleasing, though rewilding makes them less intrusive to the surrounding natural landscape.</p>	
<p><i>Authenticity and Integrity:</i> Mines and their workings were an important element of the 19th century Cornish life, each one appearing as a scar on the landscape, with engine houses and chimneys visible from miles around. None of the structures of the mine appear to survive, or if they do, only as footprints. Whilst the spoil mounds are being rewilded, reducing the visibility of the site within the landscape, the regenerating scrub does contribute an aesthetic air that makes the site less jarring than it would have been in its heyday.</p> <p>Very few of the structures of the wider mine survive, and none of the industrial scale buildings can be seen. Only the former count house for the Wheal Anna phase of mine workings, and this has been surrounded by woodland.</p>	
<p><i>Setting:</i> The mine site is located towards the summit of a steep sided hill surrounded by small areas of woodland.</p>	

A small number of farm buildings, some new, are present in the locality. The immediate surroundings are partially overgrown.

Contribution of Setting to the Significance of the Asset: Incidental. Mines had a specific function within an industrial landscape. Their location was determined by the presence of mineral deposits and land ownership, and they were not clearly designed for outward views or to create a landmark. Engine houses and chimneys tended to be solid looking structures which dominated their immediate environs and are visible on a landscape scale. The immediate setting is fairly constrained, with scrub regeneration and woodlands/hedgerows blocking much of the site from wider landscape and outward views. However, the fact the site is growing into the landscape as a ruin, renders it more sensitive to unsympathetic development in the wider area.

Magnitude of Impact and Effect: The proposed development would be located to the north-east and surrounded by existing holiday parks, forming an extension to one. Existing residential development and woodland growth block wider views both to and from the asset. Whilst there would be a change in function of the land, the proposal site is already partially in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing urban and natural screening reduces the impact of any development further. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases; though the existing screening would limit this, and noise pollution particularly from heavy machinery would have formed a fundamental part of the mining experience.

Magnitude of Impact: Low value asset + no change effect = **Neutral** impact

Overall Impact Assessment: **Neutral**



FIGURE 17: THE ENGINE HOUSE AT WHEAL ALBERT; VIEWED FROM THE SOUTH-WEST.

Asset Name: Engine Houses at Wheal Albert	
Parish: Perranzabuloe	Value: Low
Designation: Undesignated	Distance to Development: c.0.125km
<i>Description:</i> The sites of three engine houses are located on the Cornwall & Scillies HER under 'engine houses' as part of Wheal Albert Mine. HER text: A pumping engine house at Wheal Albert mine is extant but in poor condition.	

<p><i>Supplemental Comments:</i> Only one structure was identified, though further remains may exist within areas of woodland/scrub regeneration. The surviving structure appears to be of granite rubble construction, with further detail not clear due to growth of ivy over the structure. Stands to an estimated three storey height, with southern gable wall standing highest. Appears to be rectangular in plan. Unclear whether internal fittings have been removed, but thought highly likely.</p>
<p><i>Conservation Value:</i> Engine houses are typically listed for their historic and architectural value as good examples of their type, within a wider historical context, particularly as part of wider WHS areas. When surviving there will be aesthetic value, in the use of vernacular materials and functional use. As upstanding remains of the mine workings, which sit within an extensive extractive landscape, these assets can have considerable narrative value. The surviving structure has historic and architectural value as a typical example of its type, particularly within a wider historical context and in the use of vernacular materials and functional use. There is aesthetic value despite (and because of) its ruination. As upstanding remains of the Wheal Albert Mine, which sits within an extensive extractive landscape, the asset has considerable narrative value.</p>
<p><i>Authenticity and Integrity:</i> The engine house is an authentic structure of the 19th century, and has not been subject to alteration and conservation work as many similar examples in the county have been, and as such carries greater authenticity and integrity than these examples despite its condition. Much of the industrial feel of the mine site has, however, been lost though the regenerating scrub covering the asset, though this contributes to an aesthetic air of ruinous dereliction. The engine house survives to eaves height as a shell. All internal and most external fixtures and fittings are likely to have decayed or been removed.</p>
<p><i>Setting:</i> The mine site is located on a mid-slope plateau within a landscape of steep sided hills and valleys. It is surrounded by a combination of woodland/scrub and residential and tourism development. The engine house is located towards the eastern end of the mine site, furthest from this development and is surrounded by scrub regenerations.</p>
<p><i>Contribution of Setting to the Significance of the Asset:</i> Incidental. Mines had a specific function within an industrial landscape. Their location was determined by the presence of mineral deposits and land ownership, and they were not clearly designed for outward views or to create a landmark. Engine houses and chimneys tended to be solid looking structures which dominated their immediate environs and are visible on a landscape scale. The immediate setting is fairly constrained, with scrub regeneration, particularly around the base of the engine house, and woodlands/hedgerows restricting outward views. However, the fact the site is growing into the landscape as a ruin, renders it more sensitive to unsympathetic development in the wider area.</p>
<p><i>Magnitude of Impact and Effect:</i> The proposed development would be located to the north-east and surrounded by existing holiday parks, forming an extension to one. Existing woodland/scrub growth block wider views both to and from the asset. Whilst there would be a change in function of the land, the proposal site is already partially in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing urban and natural screening reduces the impact of any development further. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases, especially given the proximity; though the existing screening would limit this, and noise pollution particularly from heavy machinery would have formed a fundamental part of the mining experience.</p>
<p><i>Magnitude of Impact:</i> Low value asset + minor effect = Neutral/Slight impact</p>
<p><i>Overall Impact Assessment:</i> Negligible.</p>



FIGURE 18: WHEAL ANNA HOUSE; VIEWED FROM THE NORTH-NORTH-EAST.

Asset Name: Wheal Anna House	
Parish: Perranzabuloe	Value: Medium
Designation: GII	Distance to Development: c.0.85km
<p><i>Description:</i> Listing: (List Entry no. 1141544) Former count (account) house for Wheal Anna (mine) now a private house. Circa 1840s or 1850s. Built for a mine captain. Killas rubble. Grouted scantle slate hipped roof with brick chimneys over the side walls. Plan: Double-depth plan with 2 rooms at the front flanking a central entrance hall leading to stair hall between rear service rooms. The 2 front rooms on the first floor are divided by a folding partition (now fixed) which could be opened to create a meeting room for the mine management. Exterior: 2 storeys. Unaltered elevations. Symmetrical 3-window south front with original door and windows in openings spanned by shallow segmental brick arches. Central doorway with 4-panel door and overlight. 12-pane hornless sashes. Similar window at rear including tall stair window. Interior: Virtually unaltered with most of its original features including: dog-leg stair; panelled doors, and chimney-pieces with iron grates. Wooden screen between front chambers.</p>	
<p><i>Supplemental Comments:</i> The house appears to be in relatively good condition. It is surrounded by woodland/tree growth.</p>	
<p><i>Conservation Value:</i> Listed for its historic and architectural value as a good example of its type, within a wider historical context, particularly as part of the wider mining landscape. There will be aesthetic value, in the use of vernacular materials and functional use.</p> <p>Whilst not as visually dominating as an engine house or chimney, the use of count houses was fundamental to the running of a mine, and as upstanding remains of the Wheal Anna Mine, which sits within an extensive extractive landscape, the asset has considerable narrative value.</p>	
<p><i>Authenticity and Integrity:</i> The count house is an authentic structure of the 19th century, and whilst now solely a domestic dwelling, it still would have served a residential purpose whilst the mine was working. Externally the structure appears not to have altered much, and at the time of the listing survey the interior had not been much altered. However, rather than having an unobstructed view of the mine workings as may be expected, the asset is now surrounded by trees.</p>	
<p><i>Setting:</i> The count house is located on a roadside behind a roadside hedgebank at what is likely to have been an entrance to the mine. It is currently surrounded by woodland/tree growth, with other isolated residential and farm buildings nearby.</p>	

<p><i>Contribution of Setting to the Significance of the Asset:</i> Incidental. The count house had a specific function as part of a mine complex within a wider industrial landscape. The mine location was determined by the presence of mineral deposits and land ownership, and it was not clearly designed for outward views or to create a landmark. The count house is a solid looking structure, and is of purely functional design. The immediate setting is fairly constrained, with woodland/tree growth around the building and surrounding garden/field hedgerows restricting outward views.</p>
<p><i>Magnitude of Impact and Effect:</i> The proposed development would be located to the north-east and surrounded by existing holiday parks, forming an extension to one. Existing residential development and woodland growth block wider views both to and from the asset. Whilst there would be a change in function of the land, the proposal site is already partially in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing urban and natural screening reduces the impact of any development further, whilst primary views from the house are not in the direction of the proposal site. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases; though distance and the existing screening would limit this, and noise pollution particularly from heavy machinery would have formed a fundamental part of the mining experience.</p>
<p><i>Magnitude of Impact:</i> Medium value asset + no change effect = Neutral impact</p>
<p><i>Overall Impact Assessment:</i> Neutral.</p>

Asset Name: Temple House, Tremorna, Moorlands and Belmont	
Parish: Perranzabuloe	Value: Low
Designation: Undes.	Distance to Development: c.0.1km
<p><i>Description:</i> Group of mid-19th century to modern buildings located on private road accessed from the B3285 (Halt Road) to the south. Buildings likely originated as part of Mine Workings at Wheal Albert, potentially as miners cottages, mine captains house and/or other structures. Temple House appears to potentially be large enough to have been a mine captains house similar in scale and style to Wheal Anna House (see above)</p>	
<p><i>Supplemental Comments:</i> The houses appear to be in relatively good condition. Mature gardens and hedges surrounding which limit visibility and more detailed assessment.</p>	
<p><i>Conservation Value:</i> Undesignated asset group, value is largely as a group, and their association with Wheal Albert. Whilst not as visually dominating as engine houses or chimneys, these buildings once formed part of the fundamental workings and life of a working mine complex, and they are considered to have narrative value.</p>	
<p><i>Authenticity and Integrity:</i> It is unclear how authentic these structures are, several of them have vernacular and or typical 19th century appearances, but they all appear to now be domestic dwellings, and may once have served other purposes whilst the mine was working. Externally the structure appears not to have been modified and likely altered internally. They have become slightly removed from the nearby mine workings thanks to their mature gardens and hedges.</p>	
<p><i>Setting:</i> They are all located along a private road, but which is likely to have been an entrance to the mine. The Site is located to the immediate east of these buildings.</p>	
<p><i>Contribution of Setting to the Significance of the Asset:</i> Incidental. The buildings would have once had specific functions as part of a mine complex within a wider industrial landscape. The mine location was determined by the presence of mineral deposits and land ownership, and it was not clearly designed for outward views or to create a landmark. Temple House is a solid looking structure, and is of purely functional design. The immediate setting is fairly constrained, with woodland/tree growth around the building and surrounding garden/field hedgerows restricting outward and inward views.</p>	
<p><i>Magnitude of Impact and Effect:</i> The proposed development would be east of these assets, but is already an existing holiday park. Existing woodland and mature gardens limit wider views both to and from the assets. The proposal site is already in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing screening reduces the impact of any development further, whilst primary views from the assets are not in the direction of the proposal site. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases; though again existing screening would limit this, and noise pollution particularly from heavy machinery would have once formed a fundamental part of the mining experience.</p>	

<i>Magnitude of Impact:</i> Low value asset + Negligible effect = Neutral to Negligible impact
<i>Overall Impact Assessment:</i> Neutral to Negligible

Asset Name: Little Water	
Parish: Perranzabuloe	Value: Low
Designation: Undesignated	Distance to Development: c.0.1km
<i>Description:</i> Group of former farm buildings, now converted into accommodation and /or holiday lets. Originally or an agricultural character, appear to have 19 th century origins and buildings are shown in this location on the tithe map.	
<i>Supplemental Comments:</i> The buildings are set away and lower than the B3285 (Halt Road) from which they are accessed from the south.	
<i>Conservation Value:</i> Historic structures, with some remaining vernacular character, although much altered.	
<i>Authenticity and Integrity:</i> Low, much altered and original function and use loss, now divorced from any former land-holding. Externally appear to be of 19 th century and vernacular style, although altered and perhaps in part re-imagined. Likely that internally have been altered substantially.	
<i>Setting:</i> The buildings still frame a central (parking) yard, formerly a farmyard. Mature hedges screen the group in wider views, and they are set fairly low in the landscape which further limits their prominence.	
<i>Contribution of Setting to the Significance of the Asset:</i> Incidental. They once functioned as a part of a working farm/ small-holding. Mature hedgerows restrict outward views. The key views are between the assets and their immediate yard.	
<i>Magnitude of Impact and Effect:</i> The proposed development would be located to the west and a mature hedge limits views between the site and these buildings. Whilst there would be a change in function of the land, the proposal site is already partially in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing natural screening reduces the impact of any development further, whilst primary views are between this group and not in the direction of the proposal site. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases; though distance and the existing screening would limit this, and noise pollution particularly from heavy machinery would have formed a fundamental part of the mining experience.	
<i>Magnitude of Impact:</i> Low value asset + Negligible effect = Neutral to Negligible impact	
<i>Overall Impact Assessment:</i> Neutral to Negligible	

4.3.2 INSTITUTIONAL BUILDINGS

Range of structures, usually exhibiting elements of formal planning, often with a view to aesthetics

A wide range structures relating to formal governance or care, built and/or maintained by local, county or national authorities. This category covers structures built for a specific purpose and includes: work/poor houses, hospitals, asylums, schools, council offices or other facilities. Some of these buildings are 18th century in date, but most are 19th century or later. The earlier structures that fall into this category – principally almshouses – may have been privately built and supported. These structures betray a high degree of formal planning, within which aesthetics, setting and long views could play an important part. The sensitivity of these structures to the visual intrusion of a wind turbine depends on type, age and location.

What is important and why

Some of these structures are good examples of institutional architecture, and may retain period fittings (evidential). They are likely to conform to a particular architectural template, and may be associated with an architect of note; they may or may not retain their original function, which will have a bearing on associational value (historical/associational). There is usually a clear aesthetic/design value, with form following function but ameliorated by design philosophy. The

exteriors are more likely to retain authentic period features, as the interiors will have been subject to repeated adaptation and redevelopment. There may be some regard to the layout of associated gardens and the position of buildings within a historical settlement (aesthetic/design). The level of communal value will depend on continuity of function – older structures redeveloped as residential flats will lose the original social value.



FIGURE 19: GOONHAVERN COUNTY PRIMARY SCHOOL; VIEWED FROM THE SOUTH-EAST.

Asset Name: Goonhavern County Primary School	
<i>Parish:</i> Perranzabuloe	<i>Value:</i> Medium
<i>Designation:</i> GII	<i>Distance to Development:</i> 0.65km
<p><i>Description:</i> Listing: (List Entry no. 1141553) <i>Summary:</i> Board school. Datestone 1876. Killas brought to course, granite dressings. Tall brick lateral stacks. Plan: E-shaped plan plus porches between the wings. Original plan has large central schoolroom (for the top class) with folding screen on its right (so that it could be linked to room on its right) an entrance hall and cloakroom left of the schoolroom, and at the left and right forward projecting cross wings each containing two rooms with folding screen between the 2 rooms on the left plus a short central wing projecting at the front containing a small room (now the staff room). Until the 1950s there was a gallery in the front right-hand room. The plan is unchanged except that the folding screens have been replaced with fixed partitions and there is a small C20 extension in front of the left-hand wing. Gothic style details. Exterior: Single storey. Unaltered elevations except where front wing (left) is partly obscured by C20 addition. Original doors and windows. Symmetrical 1:1:1-bay front with projecting cross wings with gable ends at left and right, smaller gable end of central projecting wing and small gable-ended entrance porches between the wings. Pointed arched opening with hoodmould to each gable end: doorway to each porch and large 3-light traceried reticulated wooden window to each of the other gable ends. Ledged doors have shouldered heads with blind tympana over. Interior: Some original doors and dado panelling; original Gothic style roof structures obscured by C20 acoustic ceilings.</p>	
<p><i>Supplemental Comments:</i> The building appears as described, though whilst the 20th century addition in front of the left front wing has been removed, further additional structures have been added surrounding the asset as part of the growth of the school. Internally it is not clear how much has changed.</p>	
<p><i>Conservation Value:</i> Listed for its historic and architectural value as a good example of its type, within a wider historical context. In particular it holds significant community value as a still functioning educational facility. There will be aesthetic value, in the use of vernacular materials and functional use.</p>	

<p><i>Authenticity and Integrity:</i> The building is still of public use and is well maintained. The exterior appears unaltered, with later additions having been removed. However, modern buildings have been added within the school complex, though these are of sympathetic design. It is expected that there have been limited modernisations to the interior.</p>
<p><i>Setting:</i> The building stands within a school yard in the centre of Goonhavern, set back from the main road. New school buildings have been constructed and modern fencing encloses the site, whilst significant modern residential development surrounds it.</p>
<p><i>Contribution of Setting to the Significance of the Asset:</i> Incidental. The school is functional building, and whilst of public nature it was intended to be visible within the village, it was originally set back from the main street and would have been partially obscured from view, though with wider views across open fields outside of the village, creating an element of isolation that is no longer present in its current setting.</p>
<p><i>Magnitude of Impact and Effect:</i> The proposed development would be located to the south-east and surrounded by existing holiday parks, forming an extension to one. Existing residential development and woodland growth block wider views both to and from the asset. Whilst there would be a change in function of the land, the proposal site is already partially in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing urban and natural screening reduces the impact of any development further, and whilst primary views from the schoolhouse are in the direction of the proposal site, these are incidental and immediately blocked by buildings within the village. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases; though distance and the existing screening would limit this.</p>
<p><i>Magnitude of Impact:</i> Medium value asset + no change effect = Neutral impact</p>
<p><i>Overall Impact Assessment:</i> Neutral</p>

4.3.3 NON-CONFORMIST CHAPELS

Non-Conformist places of worship, current and former

Non-Conformist chapels are relatively common and tend to be fairly modest structures in all but the largest settlements, lacking towers and many of the ostentatious adornments of older Church of England buildings. They are usually Grade II Listed structures, most dating from the 19th century, and adjudged significant more for their religious and social associations than necessarily any individual architectural merit. They can be found in isolated locations, but are more often encountered in settlements, where they may be associated with other Listed structures. In these instances, the setting of these structures is very local in character and references the relationship between this structure and other buildings within the settlement. The impact of a wind turbine is unlikely to be particularly severe, unless it is built in close proximity.

What is important and why

Nonconformist chapels are typically 18th century or later in date, and some retain interior period fittings (evidential). Some of the better preserved or disused examples are representative of the particularly ethos of the group in question, and buildings may be linked to the original preachers (e.g. John Wesley) (historical value). Congruent with the ethos of the various movements, the buildings are usually adapted from existing structures (early) or bespoke (later), and similar in overall character to Anglican structures of the same period (aesthetic value). They often have strong communal value, where they survive as places of worship (communal value).



FIGURE 20: GOONHAVERN METHODIST CHURCH; VIEWED FROM THE WEST.

Asset Name: Goonhavern Methodist Church, with forecourt, walls, gate and adjoining school room	
<i>Parish:</i> Perranzabuloe	<i>Value:</i> Medium
<i>Designation:</i> GII	<i>Distance to Development:</i> 0.55km
<p><i>Description:</i> Listing (List Entry no. 1312552) Nonconformist chapel, forecourt walls and gate and adjoining school room. Circa early C19 schoolroom. Circa late C19 chapel. Killas rubble walls with brick dressings. Asbestos slate roof with pedimented gable at the entrance front. Plan: Rectangular aisle-less plan probably with galleries on 3 sides. Schoolroom adjoining at rear and small room probably a former vestry (now used as a funeral directors) at far rear. Schoolroom is possibly the original chapel. Exterior: Unaltered 2-storey elevations (chapel) and single-storey schoolroom. Symmetrical 3-window south-west pedimented entrance front with central round-arched doorway. Plinth impost strings (string continues as hoodmould over first-floor windows). Cogged upper cornice to triangular pediment, stepped lower cornice. Round-headed window openings. Original doors and windows. Traceried tympanum over pair of V-jointed, boarded doors. Horned sashes with glazing bars and fanlight heads (3 similar windows to each side wall). Schoolroom has 3-window north-west front with doorway on its left. Original door and windows; 4-panel door, 16-pane hornless sashes. Cement coped rubble walls at roadside adjoining front left-hand side of entrance front. Original braced iron gates. Interior: Unaltered interior has gallery with panelled front, moulded plaster ceiling cornices and an elaborate central ceiling rose with acanthus detail.</p>	
<p><i>Supplemental Comments:</i> The building appears unaltered and in relatively good condition, though is now no longer in use and appears to be uninhabited.</p>	
<p><i>Conservation Value:</i> Listed for its historic and architectural value as a good example of its type, within a wider historical context. In particular it holds significant community value it still functioned as a religious building until 2006. There will be aesthetic value, in the use of vernacular materials and functional use.</p>	
<p><i>Authenticity and Integrity:</i> The Church appears moderately well maintained and much as originally constructed, though there is an air of abandonment with grass and weeds growing unkempt. No longer functions as an active part of the community.</p>	
<p><i>Setting:</i> The asset stands on the roadside, behind stone walls, at the north-western edge of the historic (19th century) settlement, surrounded on all sides by houses and small businesses. The size and scale of the asset makes it stand out from the surrounding buildings.</p>	
<p><i>Contribution of Setting to the Significance of the Asset:</i> Intentional. The church stands within the 19th century</p>	

<p>settlement of which it originally formed a part, and within the community it served. The size and scale of the building, as well as its position indicates the status of the building as a focal point in the community. The main focus of the setting would have been the town, and particularly the roadside, within which it sits.</p>
<p><i>Magnitude of Impact and Effect:</i> The proposed development would be located to the south-east and surrounded by existing holiday parks, forming an extension to one. Existing residential development and woodland growth block wider views both to and from the asset. Whilst there would be a change in function of the land, the proposal site is already partially in use as a holiday park, the proposals extending the site and development would therefore appear as a growth of this rather than a new intrusion, reducing the level of impact. The existing urban and natural screening reduces the impact of any development further, and whilst primary views from the Church are focused within the village and any views in the direction of the proposal site are incidental and immediately blocked by buildings within the village. Indirect effects may be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases; though distance and the existing screening would limit this.</p>
<p><i>Magnitude of Impact:</i> Medium value asset and No change = Neutral impact</p>
<p><i>Overall Impact Assessment:</i> Neutral</p>

4.3.4 PREHISTORIC AND EARLY MEDIEVAL RITUAL/FUNERARY MONUMENTS

Stone circles, stone rows, barrows and barrow cemeteries

These monuments undoubtedly played an important role in the social and religious life of past societies, and it is clear they were constructed in locations invested with considerable religious/ritual significance. In most instances, these locations were also visually prominent, or else referred to prominent visual actors, e.g. hilltops, tors, sea stacks, rivers, or other visually prominent monuments. The importance of intervisibility between barrows, for instance, is a noted phenomenon. As such, these classes of monument are unusually sensitive to intrusive and/or disruptive modern elements within the landscape. This is based on the presumption these monuments were built in a largely open landscape with clear lines of sight; in many cases these monuments are now to be found within enclosed farmland, and in varying condition. Sensitivity to development is lessened where tall hedgebanks restrict line-of-sight.

What is important and why

Prehistoric and early medieval ritual sites preserve information on the spiritual beliefs of early peoples, and archaeological data relating to construction and use (evidential). The better examples may bear names and have folkloric aspects (historical/illustrative) and others have been discussed and illustrated in historical and antiquarian works since the medieval period (historical/associational). It is clear they would have possessed design value, although our ability to discern that value is limited; they often survive within landscape palimpsests and subject to the 'patina of age', so that fortuitous development is more appropriate. They almost certainly once possessed considerable communal value, but in the modern age their symbolic and spiritual significance is imagined or attributed rather than authentic. Nonetheless, the location of these sites in the historic landscape has a strong bearing on the overall contribution of setting to significance: those sites located in 'wild' or 'untouched' places – even if those qualities are relatively recent – have a stronger spiritual resonance and illustrative value than those located within enclosed farmland or forestry plantations.



FIGURE 21: BOWL BARROW SOUTH OF TREWORTHAL FARM; VIEWED FROM THE EAST.

Asset Name: Bowl Barrow 150m south of Treworthal Farm	
<i>Parish:</i> Perranzabuloe	<i>Value:</i> High
<i>Designation:</i> Scheduled Monument	<i>Distance to Development:</i> c.1km
<i>Description:</i> Listing (SAM no. 1016164) The monument includes a bowl barrow situated 150m south of Treworthal Farm in Goonhavern. The site of the barrow is on a north west facing spur with higher ground behind it to the south east. The barrow survives as a low mound which has been reduced by ploughing but which retains a height of 0.3m and a diameter of 20m. Despite having been ploughed, the barrow 150m south of Treworthal Farm will contain archaeological and environmental evidence relating to the monument and the landscape in which it was built.	
<i>Supplemental Comments:</i> The barrow survives as a visible low mound within a pastoral field.	
<i>Conservation Value:</i> Scheduled for their high evidential value, barrows provide evidence for funerary and ritual practices during prehistoric periods. No previous archaeological excavations have been carried out, though it is likely that archaeological and environmental evidence will survive.	
<i>Authenticity and Integrity:</i> Set on the summit of a hill overlooking the wider landscape. The monument does not survive to its original height. Whilst an isolated example, this barrow would have formed part of a wider Neolithic and Bronze Age largely open landscape with intervisibility between monuments key. This landscape has been drastically altered by modern infrastructure and development.	
<i>Setting:</i> The asset stands as a (low) monument near the summit of a hill overlooking the wider landscape. It is surrounded to the west by open pastoral fields, though in all other directions is modern residential development.	
<i>Contribution of Setting to Significance of Asset:</i> Paramount. Barrows and round cairns formed part of a wider landscape of ceremony and ritual incorporating many other monuments and intended to be intervisible, of as part of a wider funerary landscape as a means of memorializing the dead. The lack of a shared ritual culture with our ancestors does not detract from our own appreciation of a setting and/or its use. The siting of this asset down from the summit of the hill on which it sits means that views are focused to the west, those to the east and south-east restricted by topographic screening.	
<i>Magnitude of Impact and Effect:</i> The proposed development is located a distance from the monument, and would form an intrusive element into what would originally have been an open landscape, though this landscape has already been significantly and more prominently impacted. The proposal site would be screened in the first	

instance by the topography immediately surrounding the asset, and by structural and woodland blocking around the proposal site. Indirect effects would be an increase in traffic with resultant audio-visual pollution, particularly larger vehicles during the construction phases, though this would be temporary and distance from the asset minimizes this.

Magnitude of Impact: High value asset + Negligible effect = **Slight** impact

Overall Impact Assessment: **Negligible impact.**

4.3.5 HISTORIC LANDSCAPE

General Landscape Character

The landscape of the British Isles is highly variable, both in terms of topography and historical biology. Natural England has divided the British Isles into numerous 'character areas' based on topography, biodiversity, geodiversity and cultural and economic activity. The County Councils and AONBs have undertaken similar exercises, as well as Historic Landscape Characterisation.

Some character areas are better able to withstand the visual impact of development than others. Rolling countryside with wooded valleys and restricted views can withstand a larger number of sites than an open and largely flat landscape overlooked by higher ground. The English landscape is already populated by a large and diverse number of intrusive modern elements, e.g. electricity pylons, factories, modern housing estates, quarries, and turbines, but the question of cumulative impact must be considered. The aesthetics of individual developments is open to question, and site specific, but as intrusive new visual elements within the landscape, it can only be **negative**.

The proposed site would be constructed within the *Newlyn Downs* Landscape Character Area (LCA): The *Newlyn Downs* LCA is characterized as an open and exposed gently-undulating plateau landscape with extensive views. The field-systems are dominated by medieval or derived strip-fields, with a mixture of arable and pastoral use. Stone-faced Cornish hedgebanks are common, but mature hedgerow trees are rare. Settlement tends to be small and scattered, with some larger churchtown settlements.

The area attracts large numbers of tourists and surfers and this has led to a proliferation of holiday accommodation especially in association with the holiday resort of Newquay and settlements such as Perranporth. Caravan and camp sites and associated roadside development have a major impact on the landscape character especially during the summer months. Newquay Cornwall Airport and RAF St Mawgan lie to the north on the coastal plateau.

The development of the proposal site will be consistent with the development of towns and villages in this LCA, rapid modern expansion, but not impacting the coast or having an appreciable impact on the pastoral landscape; occupying a small area between modern developments and adjacent to existing holiday accommodation on the eastern fringes of Goonhavern. On that basis the impact is assessed as **negligible**

4.3.6 AGGREGATE IMPACT

The aggregate impact of a proposed development is an assessment of the overall effect of a single development on multiple heritage assets. This differs from cumulative impact (below), which is an assessment of multiple developments on a single heritage asset. Aggregate impact is particularly difficult to quantify, as the threshold of acceptability will vary according to the type, quality, number and location of heritage assets, and the individual impact assessments themselves.

Based on the restricted number of assets where any appreciable effect is likely, the aggregate impact of this development is **negligible**.

4.3.7 CUMULATIVE IMPACT

Cumulative impacts affecting the setting of a heritage asset can derive from the combination of different environmental impacts (such as visual intrusion, noise, dust and vibration) arising from a single development or from the overall effect of a series of discrete developments. In the latter case, the cumulative visual impact may be the result of different developments within a single view, the effect of developments seen when looking in different directions from a single viewpoint, of the sequential viewing of several developments when moving through the setting of one or more heritage assets.

The Setting of Heritage Assets 2011a, 25

*The key for all cumulative impact assessments is to focus on the **likely significant** effects and in particular those likely to influence decision-making.*

GLVIA 2013, 123

An assessment of cumulative impact is, however, very difficult to gauge, as it must take into account existing, consented and proposed developments. The threshold of acceptability has not, however, been established, and landscape capacity would inevitably vary according to landscape character. The principal issue for this development is the effect on the adjacent Wheal Albert Mine and the Scheduled bowl barrow at Treworthal Farm. The proposed development would have a negative impact on their settings. Additional development proposals in close proximity to the current proposal site appear very limited, and include alterations to existing holiday accommodation sites (PA21/12711, PA21/0607), small scale extensions (PA21/09209), and the creation of a multi-use trail (PA21/11632, PA21/04759) along the former railway line each of which would have a neutral to negligible impact. Visibility of the existing proposal would be limited and part of an existing intrusion. With this in mind, an assessment of **neutral to negligible** is appropriate.

TABLE 7: SUMMARY OF IMPACTS.

Asset	Type	Distance	Value	Magnitude of Impact	Assessment	Overall Assessment
Indirect Impacts						
Bowl Barrow 150m south of Treworthal Farm	SAM	1km	High	Negligible	Slight	Negligible
Engine Houses at North Chiverton Mine	Undesignated	0.85km	Low	No change	Neutral	Neutral
Engine Houses at Wheal Albert	Undesignated	0.125km	Low	Minor	Neutral/Slight	Negligible
Goonhavern County Primary School	GII	0.65km	Medium	No change	Neutral	Neutral
Goonhavern Methodist Church	GII	0.55km	Medium	No change	Neutral	Neutral
Wheal Anna House	GII	0.85km	Medium	No change	Neutral	Neutral
Temple House, Tremorna, Moorlands and Belmont	Undesignated	0.1km	Low	Negligible	Slight	Neutral to Negligible
Little Water	Undesignated	0.1km	Low	Negligible	Slight	Neutral to Negligible
Landscape Character						
Historic Landscape	n/a	n/a			Negative	Negligible
Aggregate Impact	n/a	n/a				Negligible
Cumulative Impact	n/a	n/a				Neutral to Negligible

5.0 CONCLUSION

This report presents the results of a heritage assessment carried out by South West Archaeology Ltd. (SWARCH) for land at Perran Springs Holiday Park, Goonhavern, Perranzabuloe, Cornwall. This work was undertaken in advance of a planning application.

The site comprises five fields currently in use as part of the existing Perran Springs Holiday Park and as fishing lakes at the western edge of the settlement of Goonhavern in the parish of Perranzabuloe in the deanery and hundred of Pyder. The proposal site falls within land designated on the Historic Landscape Characterization as 'Post-medieval Enclosed Land' and 'Modern Enclosed Land', enclosed from common rough grazing in the 19th century. There is clear evidence for prehistoric funerary activity and settlement within the surrounding landscape; though much of the evidence relates to historic medieval and post-medieval settlement and field-systems, and more immediately post-medieval mining.

Cornwall has a rich mining history, and whilst falling outside of the designated World Heritage Site areas for the region, Goonhavern and its environs form part of this, assessment of the historic and cartographic sources indicating that the site sits on the edge of the former Wheal Albert mine and is likely to have previously been common land open as grazing. Whilst medieval settlement is recorded in the area, including at Tywarnhale, Goonhavern did not begin to expand until the post-medieval period as a result of the mining in the area, though it has only grown significantly during the 20th and 21st centuries as a holiday destination.

The geophysical survey identified five groups of anomalies. The anomalies identified include: possible removed field boundaries or drains (Group 1), modern disturbance (Groups 2, 3 and 4) and possible agricultural activity (Group 5).

Whilst all of the features at this stage are inherently undated, the site is situated adjacent to an area of 19th century mining, and whilst there may be earlier origins to some of the features, the presence of Wheal Albert mine and the significant disturbance caused by the modern development of the existing holiday park and leisure facilities suggest that surviving features are unlikely to predate this.

The degree of preservation of the identified features is likely to be poor. Many of the anomaly responses are weak and/or are masked by modern disturbance caused by landscaping activity during the creation of the holiday park and fishing grounds.

Any development of the site is likely to encounter and destroy the buried archaeological resource, and whilst there is a *high* potential suggested by the surrounding prehistoric and post-medieval mining landscape, the results of the geophysical survey would suggest that the archaeological potential for the site is *low*, the identified anomalies likely reflecting post-medieval or modern disturbance, though earlier prehistoric features cannot be ruled out. Given the results of this assessment further archaeological mitigation is not likely to be required in this instance.

In terms of direct impacts, most of the designated heritage assets in the wider area are located at such a distance as to minimize the impact of the proposed development, or else the contribution of setting to overall significance is less important than other factors. The landscape context of many of these buildings and monuments is such that they would be partly or wholly insulated from the effects of the proposed development by a combination of local blocking from trees, topography or buildings, or that other modern intrusions have already impinged upon their setting. The only sites where there might be the potential for an appreciable impact are the Undesignated Wheal Albert mine and the Scheduled bowl barrow south of Treworthal Farm (both **negligible**). In the case of

Wheal Albert mine, the location of the proposed development means that an impact is unavoidable, though is restricted by local screening and the fact that half of the proposal site already contains the existing holiday park. The proposal site is not clearly visible from the Scheduled barrow at Treworthal, largely being screened by local topography and surrounding woodland screening, and whilst its location puts it in the wider landscape context of such a monument, this landscape has already been significantly altered and if visible through the screening the proposals would not be discernible from the existing holiday park of which it would form part.

With this in mind, the overall impact of the proposed development can be assessed as **neutral** to **negligible**. The impact of the development on any buried archaeological resource may be **permanent** and **irreversible** but the archaeological potential of the site appears **low** and it is unlikely that there will be need for any archaeological mitigation in this instance.

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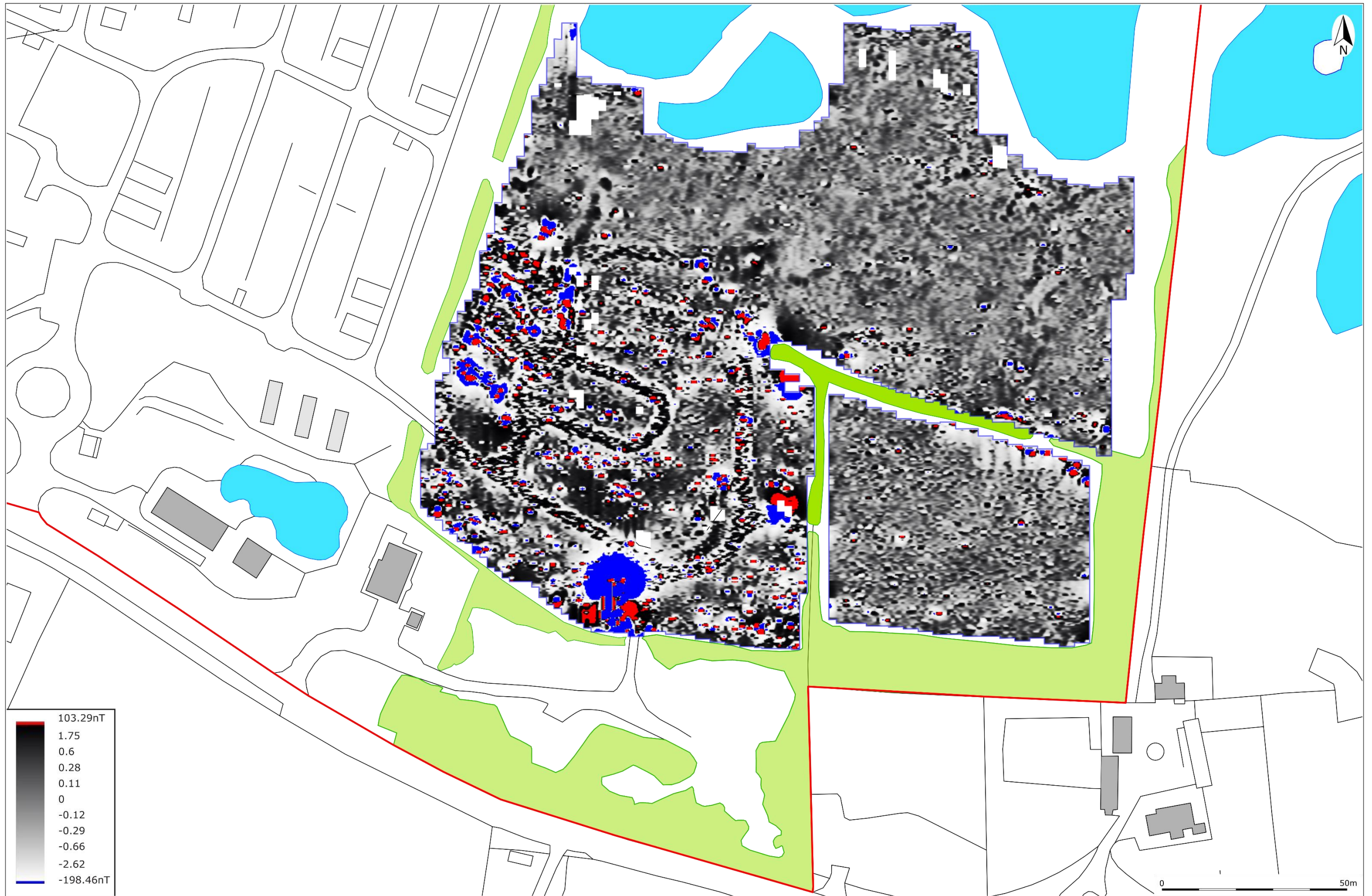
APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY



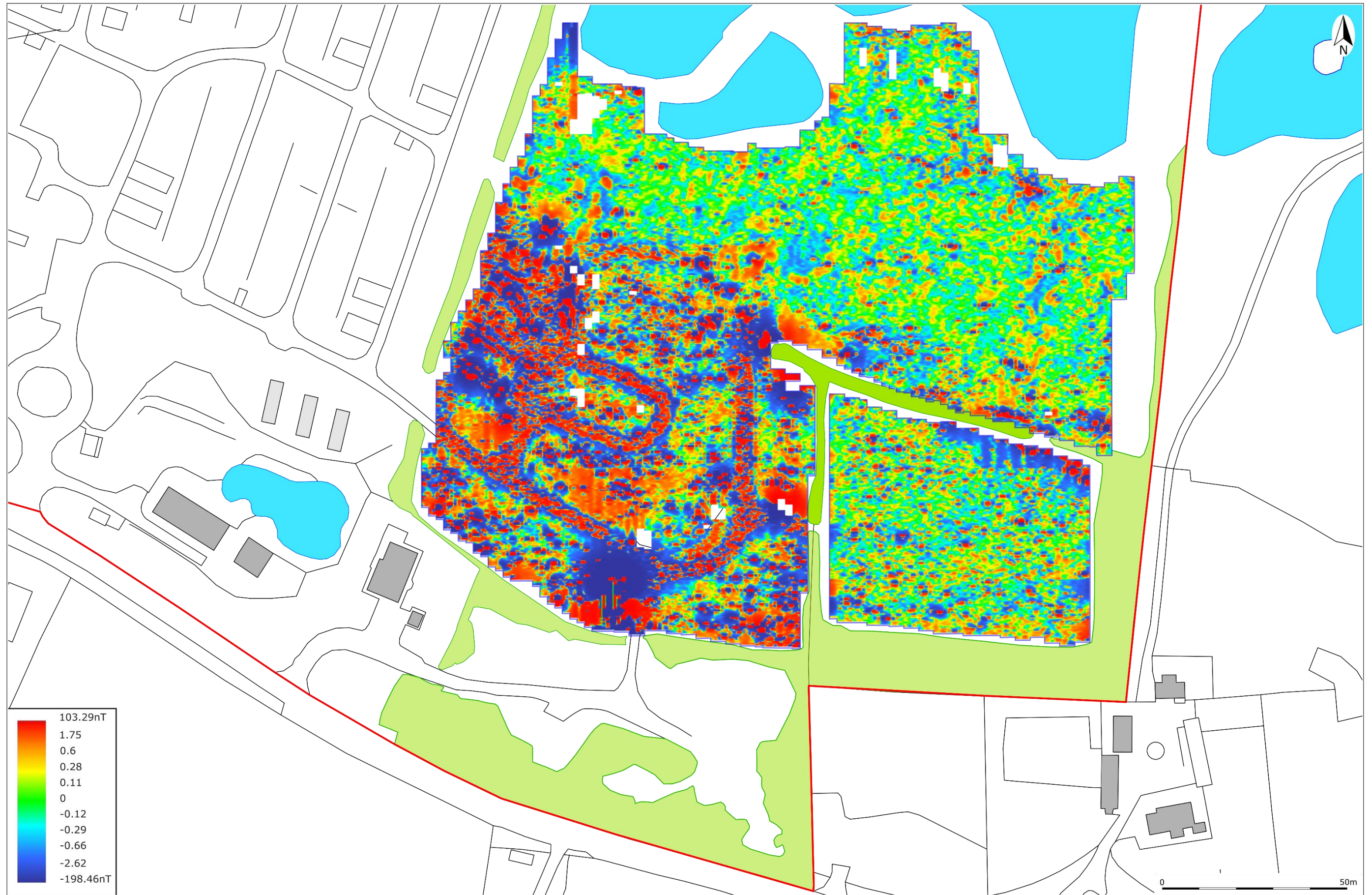
1. GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING.



2. GREYSKALE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALIZED; GRADIATED SHADING.



3. RED GREYSCALE BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALIZED; GRADIATED SHADING.



4. RED-GREEN-BLUE (2) SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALIZED; GRADIATED SHADING.

APPENDIX 2: SUPPORTING PHOTOGRAPHS: SITE INSPECTION



1. F1, VIEW ACROSS THE FIELD; VIEWED FROM THE EAST (NO SCALE).



2. F1, VIEW ACROSS THE FIELD; VIEWED FROM THE SOUTH-SOUTH-WEST (NO SCALE).



3. F1, VIEW ALONG THE NORTHERN BOUNDARY; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).



4. F1, DETAIL OF THE SOUTHERN BOUNDARY (EAST END); VIEWED FROM THE EAST-NORTH-EAST (1M SCALE).



5. F1, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE NORTH-EAST (1M SCALE).



6. F1, VIEW OF THE PONDS/LAKES AT THE NORTHERN END; VIEWED FROM THE SOUTH-EAST (NO SCALE).



7. F1, DETAIL OF THE PONDS/LAKES AND DIVIDING PATHWAYS; VIEWED FROM THE NORTH-EAST (NO SCALE).



8. F1, DETAIL OF THE SOUTH-WESTERN POND/LAKE; VIEWED FROM THE NORTH-WEST (NO SCALE).



9. F1, DETAIL OF THE LINEAR WATERLOGGED HOLLOW; VIEWED FROM THE NORTH (1M SCALE).



10. F1, DETAIL OF THE REMOVED SOUTHERN BOUNDARY; VIEWED FROM THE EAST (1M SCALE).



11. F1, DETAIL OF THE MOUND ALONG THE EASTERN BOUNDARY; VIEWED FROM THE SOUTH-WEST (NO SCALE).



12. F2, VIEW ACROSS THE FIELD; VIEWED FROM THE NORTH-EAST (NO SCALE).



13. F2, VIEW ACROSS THE FIELD; VIEWED FROM THE SOUTH-EAST (NO SCALE).



14. F2, DETAIL OF THE EASTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-WEST (1M SCALE).



15. F2, DETAIL OF THE SOUTHERN BOUNDARY; VIEWED FROM THE EAST-SOUTH-EAST (1M SCALE).



16. F2, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-EAST (1M SCALE).



17. F2, DETAIL OF THE REMOVED NORTHERN BOUNDARY; VIEWED FROM THE WEST (NO SCALE).



18. F2, DETAIL OF THE DRAINAGE CHANNEL NEAR THE CONCRETE PADS; VIEWED FROM THE SOUTH-SOUTH-EAST (1M SCALE).



19. F2, DETAIL OF A MODERN CONCRETE PAD; VIEWED FROM THE NORTH (1M SCALE).



20. F2, DETAIL OF MODERN CONCRETE PADS; VIEWED FROM THE SOUTH-EAST (NO SCALE).



21. F2, DETAIL OF WESTERN MOUND; VIEWED FROM THE SOUTH-WEST (1M SCALE).



22. F2, DETAIL OF THE EASTERN MOUND; VIEWED FROM THE SOUTH-EAST (1M SCALE).



23. F3, VIEW ACROSS THE FIELD; VIEWED FROM THE NORTH-EAST (NO SCALE).



24. F3, VIEW ALONG THE NORTHERN BOUNDARY; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).



25. F3, DETAIL OF THE EASTERN; VIEWED FROM THE NORTH-NORTH-WEST (1M SCALE).



26. F3, VIEW ALONG THE SOUTHERN BOUNDARY; VIEWED FROM THE WEST-NORTH-WEST (NO SCALE).



27. F3, DETAIL OF THE WESTERN BOUNDARY; VIEWED FROM THE SOUTH-SOUTH-EAST (1M SCALE).



28. F3, DETAIL OF THE TIGHTLY SPACED RIDGES; VIEWED FROM THE NORTH-WEST (1M SCALE).



29. F4, VIEW ACROSS THE FIELD; VIEWED FROM THE WEST (NO SCALE).



30. F4, DETAIL OF THE SOUTHERN BOUNDARY; VIEWED FROM THE NORTH-EAST (1M SCALE).



31. F4, DETAIL OF THE STONED TRACK/SURFACE; VIEWED FROM THE NORTH-NORTH-WEST (NO SCALE).



32. F4, DETAIL OF SPOIL/STORAGE ACROSS THE AREA; VIEWED FROM THE EAST-NORTH-EAST (NO SCALE).



33. F5, VIEW ACROSS THE EXISTING HOLIDAY PARK; VIEWED FROM THE SOUTH-EAST (NO SCALE).



34. F5, VIEW ACROSS THE EXISTING HOLIDAY PARK; VIEWED FROM THE EAST-NORTH-EAST (NO SCALE).

APPENDIX 3: IMPACT ASSESSMENT METHODOLOGY

Heritage Impact Assessment - Overview

The purpose of heritage impact assessment is twofold: Firstly, to understand – insofar as is reasonably practicable and in proportion to the importance of the asset – the significance of a historic building, complex, area or archaeological monument (the ‘heritage asset’). Secondly, to assess the likely effect of a proposed development on the heritage asset (direct impact) and its setting (indirect impact). This methodology employed in this assessment is based on the staged approach advocated in *The Setting of Heritage Assets* (GPA3 Historic England 2015), used in conjunction with the ICOMOS (2011) and DoT (DMRB vol.11; WEBTAG) guidance. This Appendix contains details of the methodology used in this report.

National Policy

General policy and guidance for the conservation of the historic environment are now contained within the *National Planning Policy Framework* (Department for Communities and Local Government 2012). The relevant guidance is reproduced below:

Paragraph 189

In determining applications, local planning authorities should require the applicant to describe the significance of any heritage assets affected, including the contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should be consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which a development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Paragraph 190

Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset’s conservation and any aspect of the proposal.

A further key document is the Planning (Listed Buildings and Conservation Areas) Act 1990, in particular section 66(1), which provides *statutory protection* to the setting of Listed buildings:

In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Cultural Value – Designated Heritage Assets

The majority of the most important (‘nationally important’) heritage assets are protected through *designation*, with varying levels of statutory protection. These assets fall into one of six categories, although designations often overlap, so a Listed early medieval cross may also be Scheduled, lie within the curtilage of Listed church, inside a Conservation Area, and on the edge of a Registered Park and Garden that falls within a world Heritage Site.

Listed Buildings

A Listed building is an occupied dwelling or standing structure which is of special architectural or historical interest. These structures are found on the *Statutory List of Buildings of Special Architectural or Historic Interest*. The status of Listed buildings is applied to 300,000-400,000 buildings across the United Kingdom. Recognition of the need to protect historic buildings began after the Second World War, where significant numbers of buildings had been damaged in the county towns and capitals of the United Kingdom. Buildings that were considered to be of ‘architectural merit’ were included. The Inspectorate of Ancient Monuments supervised the collation of the list, drawn up by members of two societies: The Royal Institute of British Architects and the Society for the Protection of Ancient Buildings. Initially the lists were only used to assess which buildings should receive government grants to be repaired and conserved if damaged by bombing. The *Town and Country Planning Act 1947* formalised the process within England and Wales, Scotland and Ireland following different procedures. Under the 1979 *Ancient Monuments and Archaeological Areas Act* a structure cannot be considered a Scheduled Monument if it is occupied as a dwelling,

making a clear distinction in the treatment of the two forms of heritage asset. Any alterations or works intended to a Listed Building must first acquire Listed Building Consent, as well as planning permission. Further phases of 'listing' were rolled out in the 1960s, 1980s and 2000s; English Heritage advise on the listing process and administer the procedure, in England, as with the Scheduled Monuments. Some exemption is given to buildings used for worship where institutions or religious organisations (such as the Church of England) have their own permissions and regulatory procedures. Some structures, such as bridges, monuments, military structures and some ancient structures may also be Scheduled as well as Listed. War memorials, milestones and other structures are included in the list, and more modern structures are increasingly being included for their architectural or social value.

Buildings are split into various levels of significance: Grade I (2.5% of the total) representing buildings of exceptional (international) interest; Grade II* (5.5% of the total) representing buildings of particular (national) importance; Grade II (92%) buildings are of merit and are by far the most widespread. Inevitably, accuracy of the Listing for individual structures varies, particularly for Grade II structures; for instance, it is not always clear why some 19th century farmhouses are Listed while others are not, and differences may only reflect local government boundaries, policies and individuals. Other buildings that fall within the curtilage of a Listed building are afforded some protection as they form part of the essential setting of the designated structure, e.g. a farmyard of barns, complexes of historic industrial buildings, service buildings to stately homes etc. These can be described as having *group value*.

Conservation Areas

Local authorities are obliged to identify and delineate areas of special architectural or historic interest as Conservation Areas, which introduces additional controls and protection over change within those places. Usually, but not exclusively, they relate to historic settlements, and there are c.7000 Conservation Areas in England.

Scheduled Monuments

In the United Kingdom, a Scheduled Monument is considered an historic building, structure (ruin) or archaeological site of '**national importance**'. Various pieces of legislation, under planning, conservation, etc., are used for legally protecting heritage assets given this title from damage and destruction; such legislation is grouped together under the term 'designation', that is, having statutory protection under the *Ancient Monuments and Archaeological Areas Act 1979*. A heritage asset is a part of the historic environment that is valued because of its historic, archaeological, architectural or artistic interest; those of national importance have extra legal protection through designation. Important sites have been recognised as requiring protection since the late 19th century, when the first 'schedule' or list of monuments was compiled in 1882. The conservation and preservation of these monuments was given statutory priority over other land uses under this first schedule. County Lists of the monuments are kept and updated by the Department for Culture, Media and Sport. In the later 20th century sites are identified by English Heritage (one of the Government's advisory bodies) of being of national importance and included in the schedule. Under the current statutory protection any works required on or to a designated monument can only be undertaken with a successful application for Scheduled Monument Consent. There are 19,000-20,000 Scheduled Monuments in England.

Registered Parks and Gardens

Culturally and historically important 'man-made' or 'designed' landscapes, such as parks and gardens are currently "listed" on a non-statutory basis, included on the 'Register of Historic Parks and Gardens of special historic interest in England' which was established in 1983 and is, like Listed Buildings and Scheduled Monuments, administered by Historic England. Sites included on this register are of **national importance** and there are currently 1,600 sites on the list, many associated with stately homes of Grade II* or Grade I status. Emphasis is laid on 'designed' landscapes, not the value of botanical planting. Sites can include town squares and private gardens, city parks, cemeteries and gardens around institutions such as hospitals and government buildings. Planned elements and changing fashions in landscaping and forms are a main focus of the assessment.

Registered Battlefields

Battles are dramatic and often pivotal events in the history of any people or nation. Since 1995 Historic England maintains a register of 46 battlefields in order to afford them a measure of protection through the planning system. The key requirements for registration are battles of national significance, a securely identified location, and its topographical integrity – the ability to 'read' the battle on the ground.

World Heritage Sites

Arising from the UNESCO World Heritage Convention in 1972, Article 1 of the Operational Guidelines (2015, no.49) states: 'Outstanding Universal Value means 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'. These sites are recognised at an international level for their intrinsic importance to the story of humanity, and should be accorded the highest level of protection within the planning system.

Value and Importance

While every heritage asset, designated or otherwise, has some intrinsic merit, the act of designation creates a hierarchy of importance that is reflected by the weight afforded to their preservation and enhancement within the planning system. The system is far from perfect, impaired by an imperfect understanding of individual heritage assets, but the value system that has evolved does provide a useful guide to the *relative* importance of heritage assets. Provision is also made for heritage assets where value is not recognised through designation (e.g. undesignated 'monuments of Schedulable quality and importance' should be regarded as being of *high* value); equally, there are designated monuments and structures of *low* relative merit.

TABLE 1: THE HIERARCHY OF VALUE/IMPORTANCE (BASED ON THE DMRB VOL.11 TABLES 5.1, 6.1 & 7.1).

Hierarchy of Value/Importance	
Very High	Structures inscribed as of universal importance as World Heritage Sites; Other buildings of recognised international importance; World Heritage Sites (including nominated sites) with archaeological remains; Archaeological assets of acknowledged international importance; Archaeological assets that can contribute significantly to international research objectives; World Heritage Sites inscribed for their historic landscape qualities; Historic landscapes of international value, whether designated or not; Extremely well-preserved historic landscapes with exceptional coherence, time-depth, or other critical factor(s).
High	Scheduled Monuments with standing remains; Grade I and Grade II* (Scotland: Category A) Listed Buildings; Other Listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the Listing grade; Conservation Areas containing very important buildings; Undesignated structures of clear national importance; Undesignated assets of Schedulable quality and importance; Assets that can contribute significantly to national research objectives. Designated historic landscapes of outstanding interest; Undesignated landscapes of outstanding interest; Undesignated landscapes of high quality and importance, demonstrable national value; Well-preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factor(s).
Medium	Grade II (Scotland: Category B) Listed Buildings; Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations; Conservation Areas containing buildings that contribute significantly to its historic character; Historic Townscape or built-up areas with important historic integrity in their buildings, or built settings (e.g. including street furniture and other structures); Designated or undesignated archaeological assets that contribute to regional research objectives; Designated special historic landscapes; Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value; Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor(s).
Low	Locally Listed buildings (Scotland Category C(S) Listed Buildings); Historic (unlisted) buildings of modest quality in their fabric or historical association; Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures); Designated and undesignated archaeological assets of local importance; Archaeological assets compromised by poor preservation and/or poor survival of contextual associations; Archaeological assets of limited value, but with potential to contribute to local research objectives; Robust undesignated historic landscapes; Historic landscapes with importance to local interest groups; Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.
Negligible	Buildings of no architectural or historical note; buildings of an intrusive character; Assets with very little or no surviving archaeological interest; Landscapes with little or no significant historical interest.
Unknown	Buildings with some hidden (i.e. inaccessible) potential for historic significance; The importance of the archaeological resource has not been ascertained.

Concepts – Conservation Principles

In making an assessment, this document adopts the conservation values (*evidential, historical, aesthetic and communal*) laid out in *Conservation Principles* (English Heritage 2008), and the concepts of *authenticity* and *integrity* as laid out in the guidance on assessing World Heritage Sites (ICOMOS 2011). This is in order to determine the relative importance of *setting* to the significance of a given heritage asset.

Evidential Value

Evidential value (or research potential) is derived from the potential of a structure or site to provide physical evidence about past human activity, and may not be readily recognised or even visible. This is the primary form of data for periods without adequate written documentation. This is the least equivocal value: evidential value is absolute; all other ascribed values (see below) are subjective. However,

Historical Value

Historical value (narrative) is derived from the ways in which past people, events and aspects of life can be connected via a place to the present; it can be *illustrative* or *associative*.

Illustrative value is the visible expression of evidential value; it has the power to aid interpretation of the past through making connections with, and providing insights into, past communities and their activities through a shared experience of place. Illustrative value tends to be greater if a place features the first or only surviving example of a particular innovation of design or technology.

Associative value arises from a connection to a notable person, family, event or historical movement. It can intensify understanding by linking the historical past to the physical present, always assuming the place bears any resemblance to its appearance at the time. Associational value can also be derived from known or suspected links with other monuments (e.g. barrow cemeteries, church towers) or cultural affiliations (e.g. Methodism).

Buildings and landscapes can also be associated with literature, art, music or film, and this association can inform and guide responses to those places.

Historical value depends on sound identification and the direct experience of physical remains or landscapes. Authenticity can be strengthened by change, being a living building or landscape, and historical values are harmed only where adaptation obliterates or conceals them. The appropriate use of a place – e.g. a working mill, or a church for worship – illustrates the relationship between design and function and may make a major contribution to historical value. Conversely, cessation of that activity – e.g. conversion of farm buildings to holiday homes – may essentially destroy it.

Aesthetic Value

Aesthetic value (emotion) is derived from the way in which people draw sensory and intellectual stimulation from a place or landscape. Value can be the result of *conscious design*, or the *fortuitous outcome* of landscape evolution; many places combine both aspects, often enhanced by the passage of time.

Design value relates primarily to the aesthetic qualities generated by the conscious design of a building, structure or landscape; it incorporates composition, materials, philosophy and the role of patronage. It may have associational value, if undertaken by a known architect or landscape gardener, and its importance is enhanced if it is seen as innovative, influential or a good surviving example. Landscape parks, country houses and model farms all have design value. The landscape is not static, and a designed feature can develop and mature, resulting in the 'patina of age'.

Some aesthetic value developed *fortuitously* over time as the result of a succession of responses within a particular cultural framework e.g. the seemingly organic form of an urban or rural landscape or the relationship of vernacular buildings and their materials to the landscape. Aesthetic values are where a proposed development usually have their most pronounced impact: the indirect effects of most developments are predominantly visual or aural and can extend many miles from the site itself. In many instances the impact of a development is incongruous but that is itself an aesthetic response, conditioned by prevailing cultural attitudes as to what the historic landscape should look like.

Communal Value

Communal value (togetherness) is derived from the meaning a place holds for people, and may be closely bound up with historical/associative and aesthetic values; it can be *commemorative*, *symbolic*, *social* or *spiritual*.

Commemorative and symbolic value reflects the meanings of a place to those who draw part of their identity from it, or who have emotional links to it e.g. war memorials. Some buildings or places (e.g. the Palace of Westminster) can symbolise wider values. Other places (e.g. Porton Down Chemical Testing Facility) have negative or uncomfortable associations that nonetheless have meaning and significance to some and should not be forgotten.

Social value need not have any relationship to surviving fabric, as it is the continuity of function that is important. *Spiritual value* is attached to places and can arise from the beliefs of a particular religion or past or contemporary perceptions of the spirit of place. Spiritual value can be ascribed to places sanctified by hundreds of years of veneration or worship, or wild places with few signs of modern life. Value is dependent on the perceived survival of historic fabric or character, and can be very sensitive to change. The key aspect of communal value is that it brings specific groups of people together in a meaningful way.

Authenticity

Authenticity, as defined by UNESCO (2015, no.80), is the ability of a property to convey the attributes of the outstanding universal value of the property. 'The ability to understand the value attributed to the heritage depends on the degree to which information sources about this value may be understood as credible or truthful'. Outside of a World Heritage Site, authenticity may usefully be employed to convey the sense a place or structure is a truthful representation of the thing it purports to portray. Converted farm buildings, for instance, survive in good condition, but are drained of the authenticity of a working farm environment.

Integrity

Integrity, as defined by UNESCO (2015, no.88), is the measure of wholeness or intactness of the cultural heritage and its attributes. Outside of a World Heritage Site, integrity can be taken to represent the survival and condition of a structure, monument or landscape. The intrinsic value of those examples that survive in good condition is undoubtedly greater than those where survival is partial, and condition poor.

Summary

As indicated, individual developments have a minimal or tangential effect on most of the heritage values outlined above, largely because almost all effects are indirect. The principle values in contention are aesthetic/ designed and, to a lesser degree aesthetic/fortuitous. There are also clear implications for other value elements (particularly historical and associational, communal and spiritual), where views or sensory experience is important. As ever, however, the key element here is not the intrinsic value of the heritage asset, nor the impact on setting, but the relative contribution of setting to the value of the asset.

Setting – The Setting of Heritage Assets

The principle guidance on this topic is contained within two publications: *The Setting of Heritage Assets* (Historic England 2015) and *Seeing History in the View* (English Heritage 2011). While interlinked and complementary, it is useful to consider heritage assets in terms of their *setting* i.e. their immediate landscape context and the environment within which they are seen and experienced, and their *views* i.e. designed or fortuitous vistas experienced by the visitor when at the heritage asset itself, or those that include the heritage asset. This corresponds to the experience of its wider landscape setting.

Where the impact of a proposed development is largely indirect, *setting* is the primary consideration of any HIA. It is a somewhat nebulous and subjective assessment of what does, should, could or did constitute the lived experience of a monument or structure. The following extracts are from the Historic England publication *The Setting of Heritage Assets* (2015, 2 & 4):

The NPPF makes it clear that the setting of a heritage asset is the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve.

Setting is not a heritage asset, nor a heritage designation. Its importance lies in what it contributes to the significance of the heritage asset. This depends on a wide range of physical elements within, as well as perceptual and associational attributes, pertaining to the heritage asset's surroundings.

While setting can be mapped in the context of an individual application or proposal, it does not have a fixed boundary and cannot be definitively and permanently described for all time as a spatially bounded area or as lying within a set distance of a heritage asset because what comprises a heritage asset's setting may change as the asset and its surroundings evolve or as the asset becomes better understood or due to the varying impacts of different proposals.

The HIA below sets out to determine the magnitude of the effect and the sensitivity of the heritage asset to that effect. The fundamental issue is that proximity and visual and/or aural relationships may affect the experience of a heritage asset, but if setting is tangential to the significance of that monument or structure, then the impact assessment will reflect this. This is explored in more detail below.

Landscape Context

The determination of *landscape context* is an important part of the assessment process. This is the physical space within which any given heritage asset is perceived and experienced. The experience of this physical space is related to the scale of the landform, and modified by cultural and biological factors like field boundaries, settlements, trees and woodland. Together, these determine the character and extent of the setting.

Landscape context is based on topography, and can vary in scale from the very small – e.g. a narrow valley where views and vistas are restricted – to the very large – e.g. wide valleys or extensive upland moors with 360° views. Where very large landforms are concerned, a distinction can be drawn between the immediate context of an asset (this can be limited to a few hundred metres or less, where cultural and biological factors impede visibility and/or experience), and the wider context (i.e. the wider landscape within which the asset sits).

When new developments are introduced into a landscape, proximity alone is not a guide to magnitude of effect. Dependant on the nature and sensitivity of the heritage asset, the magnitude of effect is potentially much greater where the proposed development is to be located within the landscape context of a given heritage asset. Likewise, where the proposed development would be located outside the landscape context of a given heritage asset, the magnitude of effect would usually be lower. Each case is judged on its individual merits, and in some instances the significance of an asset is actually greater outside of its immediate landscape context, for example, where church towers function as landmarks in the wider landscape.

Views

Historic and significant views are the associated and complementary element to setting, but can be considered separately as developments may appear in a designed view without necessarily falling within the setting of a heritage asset *per se*. As such, significant views fall within the aesthetic value of a heritage asset, and may be *designed* (i.e. deliberately conceived and arranged, such as within parkland or an urban environment) or *fortuitous* (i.e. the graduated development of a landscape ‘naturally’ brings forth something considered aesthetically pleasing, or at least impressive, as with particular rural landscapes or seascapes), or a combination of both (i.e. the *patina of age*, see below). The following extract is from the English Heritage publication *Seeing History in the View* (2011, 3):

Views play an important part in shaping our appreciation and understanding of England’s historic environment, whether in towns or cities or in the countryside. Some of those views were deliberately designed to be seen as a unity. Much more commonly, a significant view is a historical composite, the cumulative result of a long process of development.

The Setting of Heritage Assets (2015, 3) lists a number of instances where views contribute to the particular significance of a heritage asset:

- Views where relationships between the asset and other historic assets or places or natural features are particularly relevant;
- Views with historical associations, including viewing points and the topography of battlefields;
- Views where the composition within the view was a fundamental aspect of the design or function of the heritage asset;
- Views between heritage assets and natural or topographic features, or phenomena such as solar and lunar events;
- Views between heritage assets which were intended to be seen from one another for aesthetic, functional, ceremonial or religious reasons, such as military or defensive sites, telegraphs or beacons, Prehistoric funerary and ceremonial sites.

On a landscape scale, views, taken in the broadest sense, are possible from anywhere to anything, and each may be accorded an aesthetic value according to subjective taste. Given that terrain, the biological and built environment, and public access restrict our theoretical ability to see anything from anywhere, in this assessment the term *principal view* is employed to denote both the deliberate views created within designed landscapes, and those fortuitous views that may be considered of aesthetic value and worth preserving. It should be noted, however, that there are distance thresholds beyond which perception and recognition fail, and this is directly related to the scale, height, massing and nature of the heritage asset in question. For instance, beyond 2km the Grade II cottage comprises a single indistinct component within the wider historic landscape, whereas at 5km or even 10km a large stately home or castle may still be recognisable. By extension, where assets cannot be seen or recognised i.e. entirely concealed within woodland, or too distant to be distinguished, then visual harm to setting is moot. To reflect this emphasis on recognition, the term *landmark asset* is employed to denote those sites where the structure (e.g. church tower), remains (e.g. earthwork ramparts) or – in some instances – the physical character of the immediate landscape (e.g.

a distinctive landform like a tall domed hill) make them visible on a landscape scale. In some cases, these landmark assets may exert landscape *primacy*, where they are the tallest or most obvious man-made structure within line-of-sight. However, this is not always the case, typically where there are numerous similar monuments (multiple engine houses in mining areas, for instance) or where modern developments have overtaken the heritage asset in height and/or massing.

Yet visibility alone is not a clear guide to visual impact. People perceive size, shape and distance using many cues, so context is critically important. For instance, research on electricity pylons (Hull & Bishop 1988) has indicated scenic impact is influenced by landscape complexity: the visual impact of pylons is less pronounced within complex scenes, especially at longer distances, presumably because they are less of a focal point and the attention of the observer is diverted. There are many qualifiers that serve to increase or decrease the visual impact of a proposed development (see Table 6), some of which are seasonal or weather-related.

Thus, the principal consideration of assessment of indirect effects cannot be visual impact *per se*. It is an assessment of the likely magnitude of effect, the importance of setting to the significance of the heritage asset, and the sensitivity of that setting to the visual or aural intrusion of the proposed development. The schema used to guide assessments is shown in Table 6 (below).

Type and Scale of Impact

The effect of a proposed development on a heritage asset can be direct (i.e. the designated structure itself is being modified or demolished, the archaeological monument will be built over), or indirect (e.g. a housing estate built in the fields next to a Listed farmhouse, and wind turbine erected near a hillfort etc.); in the latter instance the principal effect is on the setting of the heritage asset. A distinction can be made between construction and operational phase effects. Individual developments can affect multiple heritage assets (aggregate impact), and contribute to overall change within the historic environment (cumulative impact).

Construction phase: construction works have direct, physical effects on the buried archaeology of a site, and a pronounced but indirect effect on neighbouring properties. Direct effects may extend beyond the nominal footprint of a site e.g. where related works or site compounds are located off-site. Indirect effects are both visual and aural, and may also affect air quality, water flow and traffic in the local area.

Operational phase: the operational phase of a development is either temporary (e.g. wind turbine or mobile phone mast) or effectively permanent (housing development or road scheme). The effects at this stage are largely indirect, and can be partly mitigated over time through provision of screening. Large development would have an effect on historic landscape character, as they transform areas from one character type (e.g. agricultural farmland) into another (e.g. suburban).

Cumulative Impact: a single development will have a physical and a visual impact, but a second and a third site in the same area will have a synergistic and cumulative impact above and beyond that of a single site. The cumulative impact of a proposed development is particularly difficult to estimate, given the assessment must take into consideration operational, consented and proposals in planning.

Aggregate Impact: a single development will usually affect multiple individual heritage assets. In this assessment, the term aggregate impact is used to distinguish this from cumulative impact. In essence, this is the impact on the designated parts of the historic environment as a whole.

Scale of Impact

The effect of development and associated infrastructure on the historic environment can include positive as well as negative outcomes. However, all development changes the character of a local environment, and alters the character of a building, or the setting within which it is experienced. change is invariably viewed as negative, particularly within respect to larger developments; thus while there can be beneficial outcomes (e.g. positive/moderate), there is a presumption here that, as large and inescapably modern intrusive visual actors in the historic landscape, the impact of a development will almost always be **neutral** (i.e. no impact) or **negative** i.e. it will have a **detrimental impact** on the setting of ancient monuments and protected historic buildings.

This assessment incorporates the systematic approach outlined in the ICOMOS and DoT guidance (see Tables 6-8), used to complement and support the more narrative but subjective approach advocated by Historic England (see Table 6). This provides a useful balance between rigid logic and nebulous subjectivity (e.g. the significance of effect

on a Grade II Listed building can never be greater than moderate/large; an impact of negative/substantial is almost never achieved). This is in adherence with GPA3 (2015, 7).

TABLE 2: MAGNITUDE OF IMPACT (BASED ON DMRB VOL.11 TABLES 5.3, 6.3 AND 7.3).

Factors in the Assessment of Magnitude of Impact – Buildings and Archaeology	
Major	Change to key historic building elements, such that the resource is totally altered; Change to most or all key archaeological materials, so that the resource is totally altered; Comprehensive changes to the setting.
Moderate	Change to many key historic building elements, the resource is significantly modified; Changes to many key archaeological materials, so that the resource is clearly modified; Changes to the setting of an historic building or asset, such that it is significantly modified.
Minor	Change to key historic building elements, such that the asset is slightly different; Changes to key archaeological materials, such that the asset is slightly altered; Change to setting of an historic building, such that it is noticeably changed.
Negligible	Slight changes to elements of a heritage asset or setting that hardly affects it.
No Change	No change to fabric or setting.
Factors in the Assessment of Magnitude of Impact – Historic Landscapes	
Major	Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit.
Moderate	Changes to many key historic landscape elements or components, visual change to many key aspects of the historic landscape, noticeable differences in noise quality, considerable changes to use or access; resulting in moderate changes to historic landscape character.
Minor	Changes to few key historic landscape elements, or components, slight visual changes to few key aspects of historic landscape, limited changes to noise levels or sound quality; slight changes to use or access: resulting in minor changes to historic landscape character.
Negligible	Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.
No Change	No change to elements, parcels or components; no visual or audible changes; no changes arising from in amenity or community factors.

TABLE 3: SIGNIFICANCE OF EFFECTS MATRIX (BASED ON DRMB VOL.11 TABLES 5.4, 6.4 AND 7.4; ICOMOS 2011, 9-10).

Value of Assets	Magnitude of Impact (positive or negative)				
	No Change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate/Large	Large/Very Large	Very Large
High	Neutral	Slight	Moderate/Slight	Moderate/Large	Large/Very Large
Medium	Neutral	Neutral/Slight	Slight	Moderate	Moderate/Large
Low	Neutral	Neutral/Slight	Neutral/Slight	Slight	Slight/Moderate
Negligible	Neutral	Neutral	Neutral/Slight	Neutral/Slight	Slight

TABLE 4: SCALE OF IMPACT.

Scale of Impact	
<i>Neutral</i>	No impact on the heritage asset.
<i>Negligible</i>	Where the developments may be visible or audible, but would not affect the heritage asset or its setting, due to the nature of the asset, distance, topography, or local blocking.
<i>Negative/minor</i>	Where the development would have an effect on the heritage asset or its setting, but that effect is restricted due to the nature of the asset, distance, or screening from other buildings or vegetation.
<i>Negative/moderate</i>	Where the development would have a pronounced impact on the heritage asset or its setting, due to the sensitivity of the asset and/or proximity. The effect may be ameliorated by screening or mitigation.
<i>Negative/substantial</i>	Where the development would have a severe and unavoidable effect on the heritage asset or its setting, due to the particular sensitivity of the asset and/or close physical proximity. Screening or mitigation could not ameliorate the effect of the development in these instances.

TABLE 5: IMPORTANCE OF SETTING TO INTRINSIC SIGNIFICANCE.

Importance of Setting to the Significance of the Asset	
Paramount	Examples: Round barrow; follies, eyecatchers, stone circles
Integral	Examples: Hillfort; country houses
Important	Examples: Prominent church towers; war memorials
Incidental	Examples: Thatched cottages
Irrelevant	Examples: Milestones

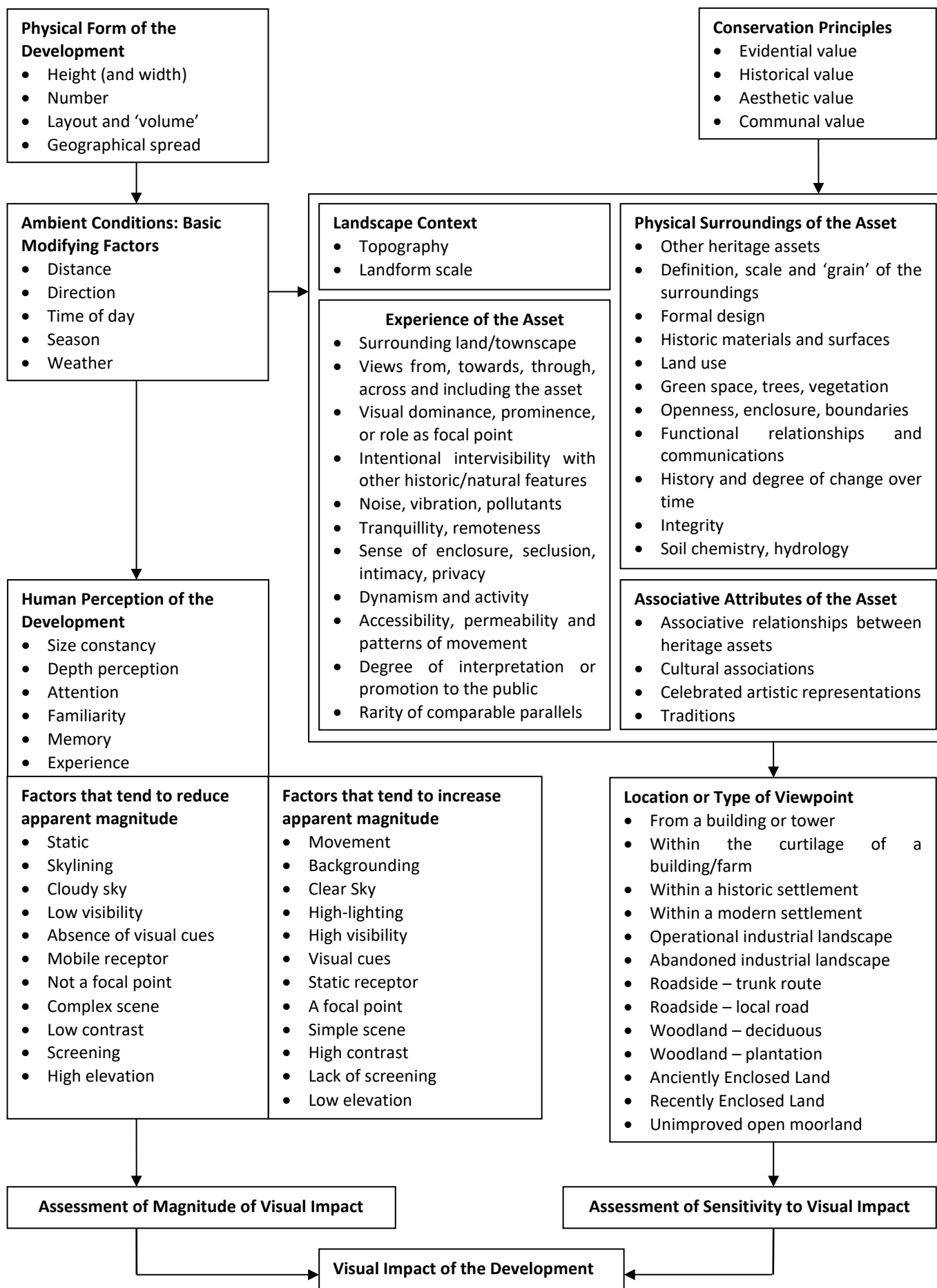


TABLE 6: THE CONCEPTUAL MODEL FOR VISUAL IMPACT ASSESSMENT PROPOSED BY THE UNIVERSITY OF NEWCASTLE (2002, 63), MODIFIED TO INCLUDE ELEMENTS OF ASSESSMENT STEP 2 FROM THE SETTING OF HERITAGE ASSETS (HISTORIC ENGLAND 2015, 9).

APPENDIX 4: SUPPORTING PHOTOGRAPHS – HVIA



1. VIEW TOWARDS THE PROPOSAL SITE (THE APPROXIMATE LOCATION IS INDICATED) FROM THE BOWL BARROW SOUTH OF TREWORTHAL FARM, DEMONSTRATING TOPOGRAPHIC AND WOODLAND SCREENING; VIEWED FROM THE WEST.



2. VIEW TOWARDS THE AREA OF THE MAPPED NORTH CHIVERTON ENGINE HOUSES, THOUGH NO REMAINS WERE VISIBLE, DEMONSTRATING SPOIL MOUNDS AND CAPPED SHAFT AS WELL AS SCRUB REGENERATION; VIEWED FROM THE SOUTH-SOUTH-EAST.



3. VIEW TOWARDS THE PROPOSAL SITE (THE APPROXIMATE LOCATION IS INDICATED) FROM THE NORTH CHIVERTON MINE, DEMONSTRATING WOODLAND AND SCRUB LOCAL BLOCKING; VIEWED FROM THE SOUTH-SOUTH-EAST.



4. DETAIL OF THE SPOIL HEAPS AT THE NORTH CHIVERTON MINE SITE, DEMONSTRATING SCRUB REGENERATION; VIEWED FROM THE SOUTH-SOUTH-EAST.



5. DETAIL OF THE SPOIL MOUND AT THE APPROXIMATE LOCATION OF THE WESTERNMOST MAPPED ENGINE HOUSE AT NORTH CHIVERTON MINE, DEMONSTRATING EXISTING MODERN STRUCTURAL INTRUSIONS; VIEWED FROM THE NORTH-EAST.



6. WIDER LANDSCAPE VIEW OF SURVIVING WHEAL ALBERT ENGINE HOUSE, DEMONSTRATING MIXED OPEN AND SCRUB REGENERATION; VIEWED FROM THE SOUTH-WEST.



7. VIEW TOWARDS THE PROPOSAL SITE (THE APPROXIMATE LOCATION IS INDICATED BEHIND THE SCRUB) FROM THE SURVIVING WHEAL ALBERT ENGINE HOUSE, DEMONSTRATING WOODLAND AND SCRUB LOCAL BLOCKING; VIEWED FROM THE NORTH-NORTH-EAST.



8. VIEW TOWARDS THE AREA OF THE WESTERNMOST MAPPED WHEAL ALBERT ENGINE HOUSE, THOUGH NO REMAINS WERE VISIBLE, DEMONSTRATING MIXED OPEN AND SCRUB REGENERATION; VIEWED FROM THE SOUTH-EAST.



9. VIEW TOWARDS THE PROPOSAL SITE (THE APPROXIMATE LOCATION IS INDICATED BEHIND THE SCRUB) FROM THE LOCATION OF THE WESTERNMOST MAPPED WHEAL ALBERT ENGINE HOUSE, DEMONSTRATING WOODLAND AND SCRUB LOCAL BLOCKING; VIEWED FROM THE NORTH.



10. ROADSIDE VIEW FROM GOONHAVERN COUNTY PRIMARY SCHOOL TOWARDS THE PROPOSAL SITE (THE APPROXIMATE LOCATION IS INDICATED), DEMONSTRATING LOCAL SCREENING; VIEWED FROM THE NORTH-WEST.



11. ROADSIDE VIEW OF GOONHAVERN METHODIST CHURCH, DEMONSTRATING LOCAL SCREENING; VIEWED FROM THE WEST-SOUTH-WEST.



12. VIEW OF WHEAL ANNA HOUSE, LOOKING TOWARDS THE PROPOSAL SITE, DEMONSTRATING EXISTING LOCAL WOODLAND SCREENING; VIEWED FROM THE WEST-SOUTH-WEST.



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