

# **Proposed Sea Defences Porth Killier, St Agnes Isles of Scilly**

## **Heritage Impact Assessment**

**Council of the Isles of Scilly Planning Ref. P/22/077/FUL**



**Charlie Johns, Heritage Specialist**



# Proposed Sea Defences

**Porth Killier  
St Agnes  
Isles of Scilly**

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Distribution maps of heritage assets were prepared by Francis Shepherd, Cornwall and the Isles of Scilly Historic Environment Record, Cornwall Council, Kresen Kernow, Redruth.

The views and recommendations expressed in this report are those of Charlie Johns, Heritage Specialist, and are presented in good faith on the basis of professional judgement and on information currently available.

*Charlie Johns is a Member of the Chartered Institute for Archaeologists (MCI(A) no. 381).*

Front cover: *Looking south-west across the existing sea defences at Porth Killier (Photo: Katharine Sawyer).*

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## Abbreviations and acronyms

AONB	Area of Outstanding Natural Beauty
CEMP	Conservation Environmental Management Plan
CIfA	Chartered Institute for Archaeologists
CAU	Cornwall Archaeological Unit
HE	Historic England
HER	Cornwall and the Isles of Scilly Historic Environment Record
HIA	Heritage Impact Assessment
HLC	Historic Landscape Character
LPA	Local Planning Authority
MCO	Monument number in Cornwall HER
NGR	National Grid Reference
NHLE	National Heritage List Entry
OS	Ordnance Survey
RLB	Red Line boundary
SM	Scheduled Monument
SMC	Scheduled Monument Consent

# 1 Summary

In November 2022, Charlie Johns, Heritage Specialist, was commissioned by the Council of the Isles of Scilly, to carry out a Heritage Impact Assessment (HIA) to support applications for Scheduled Monument Consent and Planning Permission for construction of sea defences at Porth Killier, St Agnes (NGR SV 88227 08503).

The HIA was focussed on heritage assets identified within the area of the Red Line Boundary of the proposed sea defences, but also identified relevant heritage assets within a wider 0.3km radius study area and considered potential impacts upon those assets.

Porth Killier has two areas where work is proposed, the seawall and a small area of rock armour to the east of the existing seawall. Along the seawall there is significant erosion at the toe of the wall. The wall could be undermined and fail. A small rocky beach east of the seawall has localised ram erosion. Here this risks the road being undercut, as well as waves overtopping the road and flowing into the fields behind. To protect the stability of the wall, rock armour will be installed along part of its length. To protect the *ram* from erosion at the eastern end, a rock armour revetment is proposed. Some small scale excavations will be required to install the rock armour.

The only heritage asset which will be directly impacted by these proposals is the scheduled *prehistoric settlement and field system at Porth Killier, St Agnes* (NHLE 1014998). Here, the low cliff constitutes arguably the most archaeologically-rich length of cliff face in Scilly. Documented for over 60 years, it comprises extensive limpet middens and Bronze Age settlement remains. An archaeological watching brief during the 1996 Coast Protection Scheme recorded prehistoric stone structures, a series of pits and the remains of a probable burial cairn.

If the only excavations are small the impact of the proposals on this monument is assessed as **Minor (Less than Substantial) Harm** meaning that, while some heritage values are harmed, these do not contribute a major element of the significance of the asset, and the change will be offset by enhancement or revelation of other heritage values. It should be noted that if the new sea defences are not built coastal erosion processes will cause further damage to the site.

The works propose to use haul route over an existing unmetalled coastal track which runs through *scheduled monument*. This has potential to inadvertently cause harm to the monument through the repeated movement of heavy plant and vehicles along the trackway. This impact is assessed as **Minor (Less than Substantial) Harm**.

A Construction Environment Management Plan (CEMP) should be required as a condition of planning permission, if granted, in order for potential impacts upon the scheduled site to be avoided. The CEMP should show how vehicle movements will be managed on the track crossing scheduled monument to avoid harm being caused to the monument and how plant or vehicle operators will be informed of the presence of the monument together with the measures being implemented to avoid harm being caused (as advised by Historic England in their consultation response to P/22/077/FUL).

There is very high potential for further archaeological remains to be revealed by the proposed works. An archaeological watching brief should be required as a condition of planning permission, if granted, out to monitor excavations for the sea defences as they proceed. Time should be allowed for archaeological excavation and recording at an appropriate level and the recovery of any artefacts or samples.

The watching brief should be carried out according to a Written Scheme of Investigation approved by the Local Planning Authority.



**LOCATION PLAN - SA2500**  
**St Agnes**

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By Lisa Walton at 3:53 pm, Oct 31, 2022

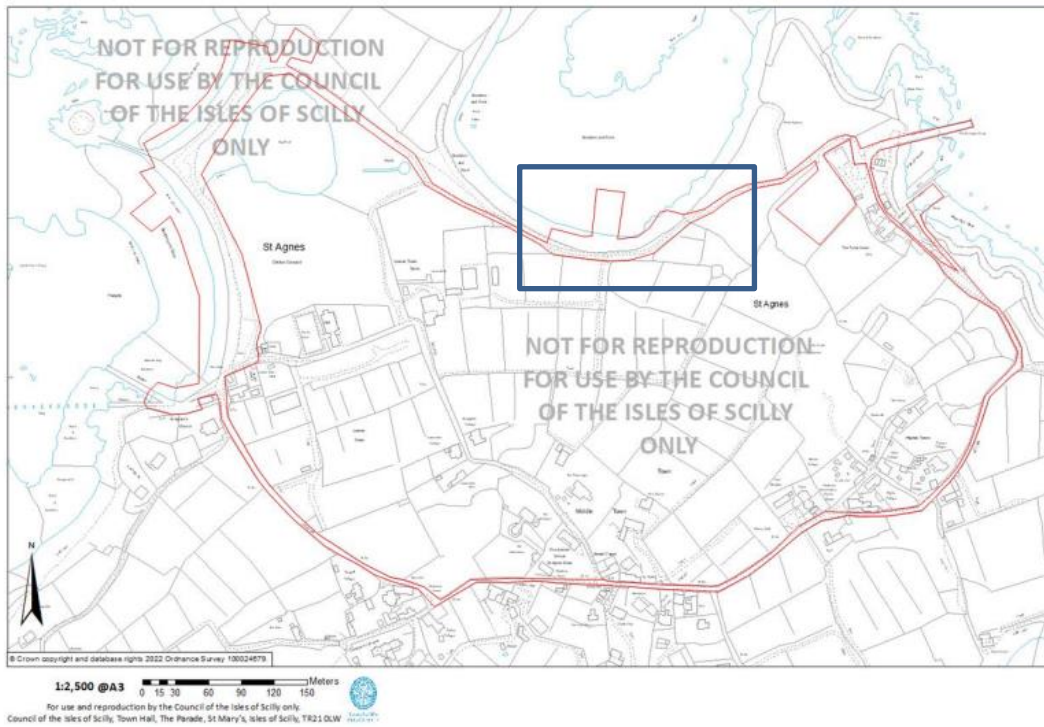
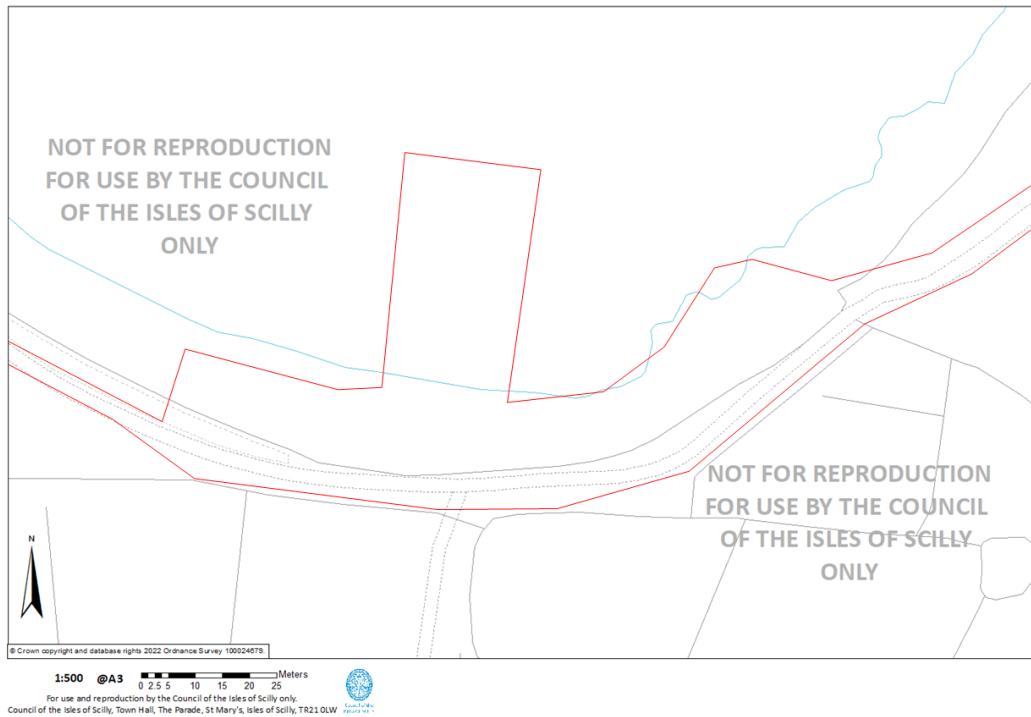


Fig 1 Location plan.

**BLOCK PLAN - SA3**  
**Porth Killier, St Agnes**



2 Block plan for the Porth Killier proposal showing the Red Line Boundary.

Fig

## 2 Introduction

### 2.1 Project background

In November 2022, Charlie Johns, Heritage Specialist was commissioned by Dr Stephen Swabey, Project Director – Climate Adaptation Scilly, Council of the Isles of Scilly, to carry out a Heritage Impact Assessment to support applications for Scheduled Monument Consent and Planning Permission for the proposed construction of sea defences at Porth Killier, St Agnes (Figs 1 and 2).

### 2.2 Methodology

#### 2.2.1 Policy and guidance

This report takes account of various relevant aspects of national and local planning policies and guidance including:

- Guidance for Scheduled Monument Consent applications
- Government guidance on conserving and enhancing the historic environment;
- The National Planning Policy Framework (NPPF) (2021) – specifically policies for ‘conserving and enhancing the historic environment’ (paragraphs 184-202) (see Appendix 1);
- The Isles of Scilly Local Plan (2015–2030);
- ‘A Heritage and Cultural Strategy for the Isles of Scilly’ (2004) and ‘Historic Environment Historic Topic Paper: Enhancing the historic environment of the Isles of Scilly’ (2017)’, this supports Local Plan 2015-2030 and sets out a positive strategy for the protection of the islands important historic environment.
- Ancient Monuments and Archaeological Areas Act (1979); and
- Planning (Listed Buildings and Conservation Areas) Act (1990).

#### 2.2.2 Scope

This assessment is focussed on heritage assets identified within the area of the Red Line Boundary (RLB) of the proposed sea defences (hereafter referred to as the ‘proposal site’) (Fig 2). The assessment also identifies relevant heritage assets within a wider 0.3km buffer around the proposal site and considers potential impacts upon the assets within this wider area (hereafter referred to as the ‘study area’).

#### 2.2.3 Aims

The primary aims of this study are to assess the following:

- The resource of identified heritage assets, both designated and non-designated, within the study area that are relevant to the proposal site;
- The significance of the identified and potential heritage assets and resource within the proposal site;
- The impacts of the proposal upon the significance of heritage assets and the settings of designated heritage assets within the study area;
- Appropriate measures for mitigating impacts upon the heritage assets and resource within the study area.

#### 2.2.4 Desk-based assessment

This study was undertaken in accordance with the Chartered Institute for Archaeologist’s (CIfA) guidance on undertaking desk-based assessment (CIfA 2017).

#### **Significance**

Determination of the significance of heritage assets has followed guidance issued by English Heritage (now Historic England) in 2008. The following criteria have been used to measure significance:

- Evidential – ‘the potential of a place to yield evidence about past human activity’;
- Historical – ‘derives from the ways in which past people, events and aspects of life can be connected through a place to the present’;
- Aesthetic – ‘derives from the ways in which people draw sensory and intellectual stimulation from a place’;

- Communal- 'derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory'.

### **Settings**

In evaluating aspects of the settings of heritage assets the assessment followed Historic England's guidance on the subject (2017).

### **Sources**

During the desk-based assessment historical databases and archives were consulted in order to obtain information about the history of the site and study area and the structures and features that were likely to survive. The main sources consulted were as follows:

- Cornwall and Scilly Historic Environment Record (HER);
- the National Heritage List for England (a searchable database of designated heritage assets, excluding conservation areas);
- Cornwall Council's mapping service for Conservation Areas;
- Accessible GIS data;
- early maps, records, and photographs (see Section 7.1).
- published histories (see Section 7.2).

### 3 Heritage resource

This section presents a summary of the historical development of the study area, provides detail of designated and non-designated heritage assets that have been identified, identifies potential heritage assets that may lie within the proposal site, and reports on previous archaeological and historical work in the study area.

#### 3.1 Location, setting and geology

The proposal site is located on the north side of the island of St Agnes in the Isles of Scilly (NGR SV 88227 08503) (Figs 1 and 2). Facing NNE, Porth Killier is the largest and most rugged of the three bays on this side of the island, with a steep beach of sand, shingles, and cobbles, giving way to an expanse of bedrock and boulders. Prior to the 1996 coast protection scheme (Johns *et al* 2021), the bay was enclosed by a dune bank (on its west and south side) and a low, crumbling, vertical cliff. The latter, comprised soil layers (containing archaeological features and artefacts) overlying the natural granite subsoil (*ram*) and raised beach deposits, extending along the eastern side of Porth Killier, out to the scrub-covered, rocky headland of Kallimay Point.

The geology of St Agnes is granite, with weathered periglacial head, known locally as *ram*, covering the lower hill slopes and valley floors; the geology supports soils suitable for cultivation and pasture (Geological Survey of Great Britain, 1975, Isles of Scilly, Sheets 357 and 358).

#### 3.2 Historic Landscape Character

The study area is characterised as 'Foreshore: sandy foreshore (beach/intertidal flats)' and 'Rough Ground: blown sand/dunes) in the Isles of Scilly Historic Landscape Assessment (Land Use Consultants 1996).

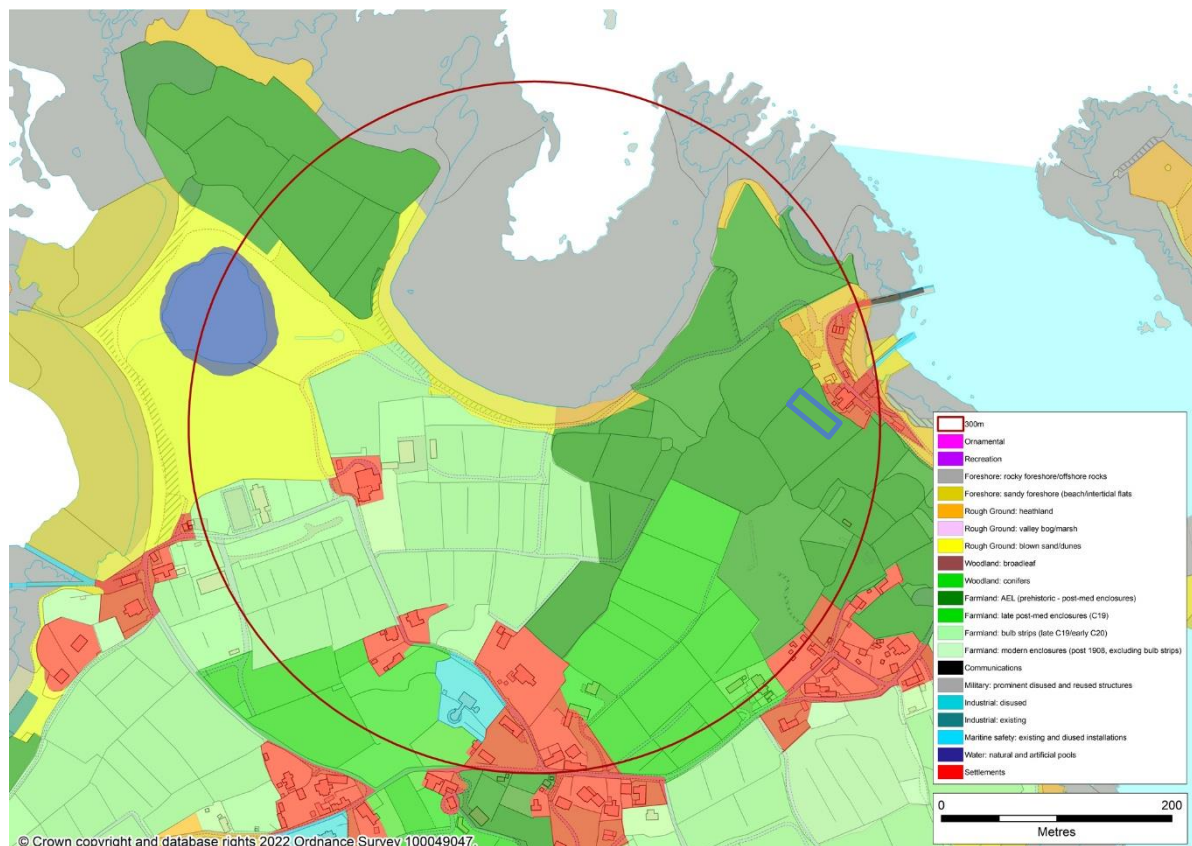


Fig 3 Historic Landscape Characterisation of the study area.

### **3.3 Designations**

#### **3.3.1 Conservation Area**

In 1975 the islands were designated as a Conservation Area, under Section 277(1) of the Town and Country Planning Act 1971. The Planning (Listed Buildings and Conservation Areas) Act 1990 imposes a duty on Local Authorities to designate as conservation areas "any areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance". This duty extends to publishing proposals for the preservation and enhancement of Conservation Areas. Since its designation in 1975 no comprehensive appraisal of the Isles of Scilly Conservation Area has been undertaken. In 2015 the Local Planning Authority consulted on a Draft Conservation Area Character Statement for the Isles of Scilly as a Supplementary Planning Document.

#### **3.3.2 Area of Outstanding Natural Beauty and Heritage Coast**

Since 1976 the islands have been designated an Area of Outstanding Natural Beauty (AONB) and defined as a Heritage Coast. The quality of the environment of Scilly for designation as an AONB was first recognised in a report of the National Parks Committee in July 1947 (the Hobhouse Report).

The Heritage Coast definition protects 64 km<sup>2</sup> of coastline around the islands which is 23 km<sup>2</sup> of foreshore, cliff and dune environments. The management of the heritage coast was originally undertaken by a non-governmental organisation: The Isles of Scilly Environmental Trust. It is now managed by the Isles of Scilly Wildlife Trust through the AONB Partnership and Management Plan, which is updated every five years. The Conservation Area, AONB and Heritage Coast all overlap and cover all of the islands and the heritage coast occupies a substantial portion of the AONB.

#### **3.3.3 Archaeological Constraint Areas**

The Isles of Scilly Archaeological Constraint Maps were compiled during February and March 1995 by Cornwall Archaeological Unit (CAU) with funding from English Heritage and the Council of the Isles of Scilly. The maps were drawn to indicate the location of recorded archaeological and historic sites and structures in order to make an initial assessment of the impact of any proposed development on these remains, and if necessary, archaeological consultation carried out prior to any planning decision being made. They are non-statutory were intended to serve as a graphic aid to planning officers and others dealing with the management of the environment.

Porth Killier is an Archaeological Constraint Area

### **3.4 Scheduled Monuments (SM)**

#### **3.4.1 The proposal site**

There is one Scheduled Monument within the proposal site (Fig 4):

- *Prehistoric settlement and field system at Porth Killier, St Agnes* (NHLE 1014998). The SM includes a prehistoric hut circle settlement on the south east of Porth Killier. Extending east from the settlement the SM also includes a broadly contemporary prehistoric field system, behind Kallimay Point.

The prehistoric settlement contains at least three stone hut circles, spaced 1m-2m apart and exposed in an ENE-WSW row along the low coastal cliff face of south eastern Porth Killier. The hut circles have rounded internal areas, up to 5m across at their line of truncation by the cliff face and defined by inner facing walls of granite slabs, largely coursed but incorporating some edge-set slabs, surviving up to four courses and 0.9m high. The facing in the central hut circle includes a reused hollowed slab from an early type of millstone called a saddle quern. The facing walls are backed by layered soil deposits and middens of occupation debris. Detailed recording of the central hut circle revealed a floor partly built up of redeposited subsoil and crossed by a slab-lined and covered drain. Over the floor lay a deep midden deposit containing a rich assemblage of occupation debris including sherds of Bronze Age pottery, broken and burnt saddle quern rubber-stones, charcoal, fragments of limpet shells, fish, bird and sheep or goat bones

and charred cereal grains. The cliff section also reveals that the hut circles are accompanied by deposits, generally totalling 1m thick, comprising dumped material contemporary with the settlement and later gradual accumulations. Such deposits have been recorded at various times over at least 50m of the cliff face, their south-western limit being unknown due to masking by early coastal defence works. Towards their north east end these deposits include rubble spreads considered to denote former locations of further hut circle sites; a saddle quern is known to have eroded from one of these sites onto the upper shore. In the immediate vicinity of the hut circle settlement, at least eight further middens have been recorded among the adjacent dumped deposits. Most comprise small accumulations of limpet shells and bone but the largest extends over 4.5m long and 0.6m deep beside the facing wall of the north east hut circle. These middens have also produced Bronze Age pottery sherds, both decorated and plain, and environmental analysis of the midden deposits has revealed bones of ox, sheep/goat, deer, pig, whale and grey seal, a range of bird and fish species and the visually dominant limpets. Charred and mineralised plant remains include wheat and barley, celtic bean and various weeds typical of arable land. Radiocarbon dating of charred grain from the largest midden gave an overall date range of 1680-1310 BC, in the Middle Bronze Age, while charcoal from middens to the north east of the hut circles gave a Late Bronze Age range of 1375-995 BC. Plant remains from the middens also included indicators of the wider environmental context contemporary with the settlement. Behind the cliff face, the inland extent of stratified settlement remains has been gauged by archaeological prospecting techniques, indicating that the settlement occupies a large bedrock depression, with sufficient depth of soil consistent with surviving stratified deposits mapped up to 20m behind the cliff edge of the settlement.

Besides the Bronze Age settlement remains, prehistoric flint artefacts indicating earlier settlement have been found eroding from an early soil layer exposed along much of the south east cliff of Porth Killier up to Kallimay Point. Finds later than the Bronze Age settlement have also been recovered from the Porth's eroding cliff, notably sherds of Iron Age pottery, a Roman copper-alloy brooch and an early medieval sherd. Few such later period finds were found during recording of the Bronze Age settlement, suggesting a different focus for the later settlement activity.

All modern sea defence structures are excluded from the scheduling but the ground beneath them is included.

### **3.4.2 The study area**

There are two Scheduled Monuments within the wider study area:

- *Prehistoric to Romano-British field system and settlement at Higher Town, St Agnes* (NHLE 1015003); and
- *Nineteenth century horse engine and threshing machine at Lower Town Farm, St Agnes* (NHLE 1015000) (Fig 4).

### **3.5 Listed Buildings (LB)**

There are no Listed Buildings within the proposal site. Within the study area there is one Grade II\* Listed Building - *St Agnes Lighthouse*, NHLE 1014999 - and four Grade II listed buildings:

- *The Parsonage*, NHLE1141240.
- *House attached to the north-east of the Lighthouse*, NHLE1218288.
- *Farmbuilding approximately 20 metres NNE of Annet Farmhouse*, NHLE1292064.
- *Building to the south east of the Lighthouse*, NHLE1141239 (Fig 4).



Fig 4 Designated and undesignated heritage assets within the study area.

### 3.6 Undesignated heritage assets

There are no undesignated heritage assets within the proposal site. The HER records ten undesignated heritage assets within the study area (Fig 4).

- Extant pond, dating to at least the Romano British period. Known as Big Pool, MCO64518.
- Post-medieval pit at Higher Town, MCO41983.
- Turks Head, post-medieval coastguard station, MCO31734
- Turks Head public house, MCO31735
- Turks Head, boat houses, MCO31738
- Higher Town, post-medieval pit, MCO41984
- St Agnes, post-medieval school, MCO31433
- St Agnes Lighthouse, medieval findspot, MCO31497
- Lower Town, undated wall, MCO30809
- Lower Town, post-medieval nonconformist chapel, MCO 30819

### 3.7 Previous archaeological and historical work

The low crumbling cliff in the south-east corner of Porth Killier, constitutes arguably the most archaeologically-rich length of cliff face in Scilly. Documented for over 60 years, it is best known for its extensive limpet middens, which over this time have yielded a significant amount of artefactual and palaeoenvironmental material. Together with the walls of stone roundhouses, they represent the remains of a Bronze Age settlement whose inhabitants exploited marine resources (fish, seals, shellfish, and seabirds), as well as, to a lesser extent, practising farming and other land-based activities. Prior to 1996, there was nothing about the site to suggest that it was anything more than a domestic settlement, but the CPS work exposed a series of pits, which may have had a semi-industrial function, together with what appears to be the remains of a burial cairn (with a stone-lined cist or chamber).

The site was first recorded by amateur archaeologist Alec Gray in 1936, at which time the only recognisable feature was a midden yielding Bronze Age pottery (Gray 1972, 43). The only bones found were seal, leading Gray to suggest this was a seasonal habitation site where seal and fish meat was preserved. After 1936 more remains were exposed and destroyed by coastal erosion, and quantities of pottery, flint, animal bone, charcoal and unfired clay, and a granite quern rubber were collected from the cliff face, together with what was thought to be a fragment of a Bronze knife (now lost). The animals species identified were sheep, ox and cetacean, the last probably a porpoise (Turk 1968, 78).

During October 1985 archaeologists from the Institute of Cornish Studies (ICS) made a sketch section drawing of the (three?) roundhouses and four limpet middens then visible (Ratcliffe and Thorpe 1991, 12). Numerous sherds of Bronze Age pottery (and several Iron Age/ Romano-British and early medieval) were retrieved from the cliff face, together with a couple of flint flakes and animal bone representing the remains of a variety of mammals (ox, sheep, red deer, horse and dolphin), birds (domestic fowl, razorbill, stone curlew, coot, and corncrake), fish (red gurnard, coalfish, grey mullet and pollack) (*ibid*, 71, 82, 105).

CAU started monitoring the site in 1988 and in March 1989 English Heritage's Ancient Monuments Laboratory carried out resistivity and magnetometer surveys in the field behind the cliff exposure to detect the presence of buried archaeological remains. The survey results suggested that the settlement extended inland for a distance of up to 12m (Jordan 1989; Ratcliffe and Parkes 1989, 9–11).

During September 1989 a detailed record was made of a 28m length of cliff face (Ratcliffe and Parkes 1990, 27–32), which identified: the eroding remnant of a substantial circular stone building, a second structure comprising two pieces of walling, nine limpet middens, two layers of dark humic material apparently representing a limpet-free midden from which (unusually) limpets were absent; a buried land surface(s) predating the use of the settlement and post-occupation layers that had accumulated since its abandonment.

Numerous sherds of second millennium BC pottery were collected and bulk samples were taken for environmental analysis. The bones of a wide range of domestic and wild animals were identified, including seven fish and 10 bird species not previously recorded from the site. Cultivated plants (barley, emmer wheat and celtic bean) were identified amongst the plant macrofossils, which suggested that the settlement was set in a coastal environment which included blown sand, grassland and boggy areas, as well as arable fields and heathland.

Radiocarbon dating revealed that the most extensive limpet midden had formed during the Middle Bronze Age, while the non-limpet midden was of Late Bronze Age date (Ratcliffe and Straker 1996, 62–73). Over the following four years (1990–1993) the site was revisited as part of CAU's annual coastal monitoring programme (Ratcliffe and Sharpe 1991, 48–50; Ratcliffe 1993, 33, 40; Ratcliffe 1994, 11–12). Several newly exposed features were recorded in the cliff section drawn in 1989 and settlement remains were also recorded to the north-east. Numerous artefacts were retrieved, including a Romano-British brooch found by amateur archaeologist, Michael Tangye.

In 1996 CAU carried out a programme of archaeological recording associated with a Coast Protection Scheme at Porth Killier, where building the new sea wall had an impact on the nationally important Bronze Age remains exposed in the low cliff face. The results fell into four zones. Working from east to west along the cliff face, these can be summarized as follows: Zone A, Bronze Age buildings, midden and a wall; Zone B, a series of Bronze Age pits, Zone C, an Early Bronze Age cairn or entrance grave and a prehistoric wall, Zone D, marine sand with no archaeological remains.

### **3.8 Archaeological potential**

There is very high potential for further archaeological remains to be revealed by excavations for the new sea defences which can be tied in with the features found in 1996.





Fig 5 Archaeological recording during the 1996 Coast Protection Scheme (photo: CAU).

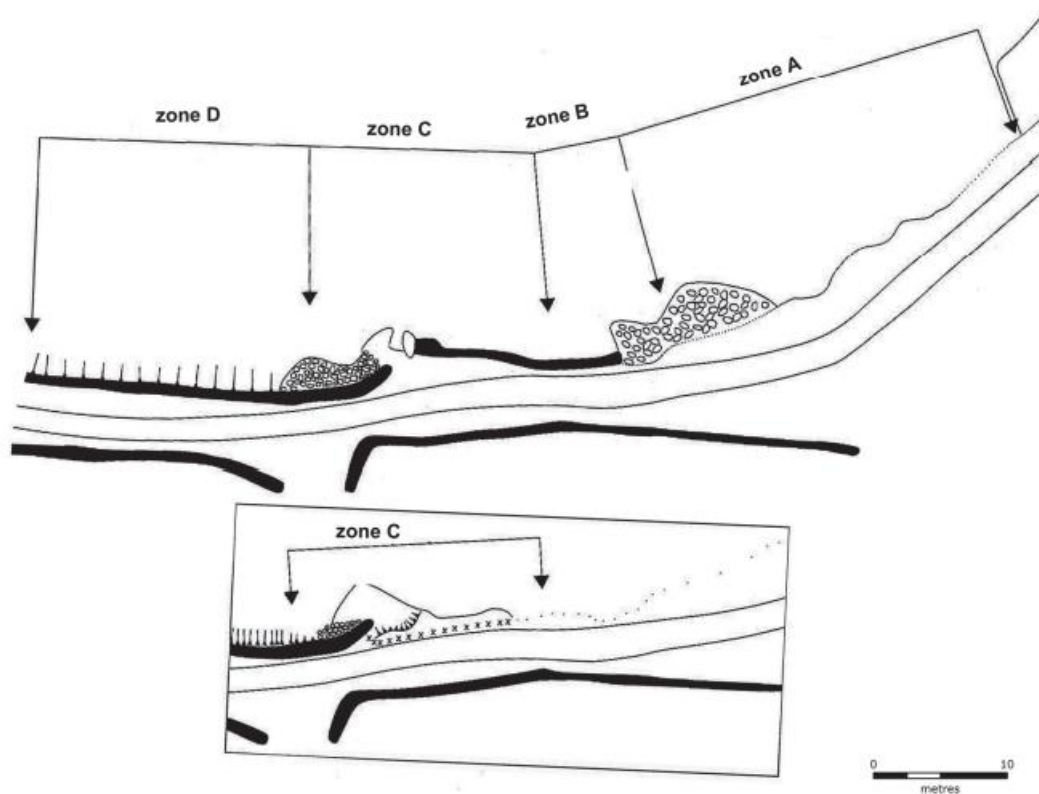


Figure 2.4 Plan of the cliff edge showing the location of Zones A, B, C and D.

Fig 6 The results of the 1996 watching brief fell into four zones. Working from east to west along the cliff face, these can be summarized as follows: Zone A, Bronze Age buildings, midden and a wall; Zone B, a series of Bronze Age pits, Zone C, an Early Bronze Age cairn or entrance grave and a prehistoric wall, Zone D, marine sand with no archaeological remains (from Johns et al 2021).

## 4 Assessment of Significance

### 4.1 Basis for assessing significance

'Significance' is 'the value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting' (NPPF 2019).

#### 4.1.1 Cultural heritage value

Significance means the sum of the cultural heritage values of a place as set out in Historic England's 'Conservation Principles' (English Heritage 2008). Cultural heritage value has many aspects, including:

- Evidential value (includes archaeological value) — the potential of a place to yield primary information about past human activity. This means that there is potential, but its full extent is not yet known, e.g., below-ground archaeology before it is excavated. Once excavated it becomes historic, as we know what it can tell us about the past. In a building, an example might be when there is potential to uncover a blocked doorway hidden by plaster. Once discovered it would become historic.
- Historical value — the ways in which it can provide direct links to past people, events and aspects of life. This can be broken down into 'illustrative' and 'associative value.' Historic is an example of how the site works and what that tells us about the time.
- Aesthetic value (includes architectural value) — the ways in which people respond to a place through sensory and intellectual experience of it. This can be designed or fortuitous – the outcome of the way in which a place has evolved and been used over time.
- Communal value — the meanings of a place for the people who identify with it, and communities for whom it is part of their collective memory. Tends to be a more recent history rather than historic e.g., recent social history and current art connections etc.

In addition, the historic environment is a cultural heritage resource shared by communities characterised not just by geographical location but also by common interests and values. As such, emphasis may be placed upon important consequential benefits or potential, for example as an educational, recreational, or economic resource, which the historic environment provides.

The seamlessly linked cultural and natural strands of the historic environment are a vital part of everyone's heritage, held in stewardship for the benefit of future generations.

#### 4.1.2 Setting

The NPPF defines setting of a heritage asset as: 'The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral'.

Historic England (2017) has published good practice advice on the setting of heritage assets which provides guidance on setting and development management, including assessment of the implications of development proposals on the setting and significance of designated heritage assets.

#### 4.1.3 Degrees of Significance

- Outstanding Significance: elements of the place which are of key national or international significance, as among the best (or the only surviving example) of

an important type of monument, or outstanding representatives of important social or cultural phenomena, or are of very major regional or local significance.

- Considerable Significance: elements which constitute good and representative examples of an important class of monument (or the only example locally), or have a particular significance through association, although surviving examples may be relatively common on a national scale, or which make major contributions to the overall significance of the monument.
- Moderate Significance: elements which contribute to the character and understanding of the place, or which provide an historical or cultural context for features of individually greater significance.
- Low Significance: elements which are of individually low value in general terms or have little or no significance in promoting understanding or appreciation of the place, without being actually intrusive.
- Uncertain Significance: elements which have potential to be significant (e.g., buried archaeological remains) but where it is not possible to be certain on the evidence currently available.
- Intrusive: items which detract visually from or which obscure understanding of significant elements or values of the place. Recommendations may be made on removal or other methods of mitigation.

## 4.2 Statement of significance

The *Prehistoric settlement and field system at Porth Killier, St Agnes* (NHLE 1014998) is a Scheduled Monument and thus by definition a monument of National Importance.

- Evidential – the prehistoric settlement site at Porth Killier contains an unusually good survival of Bronze Age structural remains in direct association with extensive and undisturbed contemporary occupation layers. From a programme of detailed recording, sampling and analysis, this settlement is known to be a particularly rich and closely datable source of economic, environmental and artefactual information of national significance for studies of this period; its faunal assemblage also includes many species not previously recorded in Bronze Age deposits on Scilly and it forms one of the main sites quoted in palaeo-environmental assessments of the Isles of Scilly. Despite encroachment of the coastal cliff, archaeological prospecting has indicated the considerable area behind the cliff face in which these buried stratified deposits will survive and has thereby confirmed the long term presence of important prehistoric settlement remains at this location.
- Historical – The prehistoric field system in this monument shows clearly the manner of prehistoric land division employed, and its proximity to similar remains beyond the monument near Higher Town demonstrate the broader context in which the settlement focus developed. The lynchetting associated with parts of the field system will also preserve important information on the development of prehistoric land use, complementing the data from the settlement.
- Aesthetic – The whole of the Isles of Scilly has been designated as an Area of Outstanding Natural Beauty. Located on the northern side of St Agnes, Porth Killier has spectacular views across St Mary's Sound and The Road to the uninhabited island of Samson.
- Communal – Today, Porth Killier appeals mainly for its recreational value for people walking around the coast of St Agnes.

## 5 Assessment of potential impacts

### 5.1 Details of the proposed sea defences for Porth Killier

The scope of the proposed sea defences for Porth Killier are summarised and illustrated on the Council of the Isles of Scilly's website.

[St Agnes Sea Defence Proposals | Council of the ISLES OF SCILLY](#)

#### 5.1.1 Current situation

Porth Killier has two areas where work is proposed, the seawall and a small area of rock armour to the east of the existing seawall. Along the seawall there is significant erosion at the toe of the wall. The wall could be undermined and fail. A small rocky beach east of the seawall has localised ram erosion. Here this risks the road being undercut, as well as waves overtopping the road and flowing into the fields behind.



*Fig 7 Two views of the existing sea defences: a) looking south west from the northern end; and b) looking north east from the southern end (photos: Katharine Sawyer).*

#### 5.1.2 The proposed sea defences

To protect the stability of the wall, rock armour will be installed along part of its length. At the western end of this, cobbles and sand from the beach will be added to blend the work into the beach. At the eastern end, where the most damage is, rock armour will provide additional protection. Along the wall the rock armour will rise to approximately 1.1m and extend 3m from the existing seawall towards the sea. To protect the ram from erosion at the eastern end, a rock armour revetment is proposed. The rock would be placed up to the crest of the underside of the ram in order to reduce the cutback occurring towards the road. This would extend the width of the crest by a minimum of 2.7m and the bottom of the rock armour would be covered using cobbles and sand sourced from the beach.

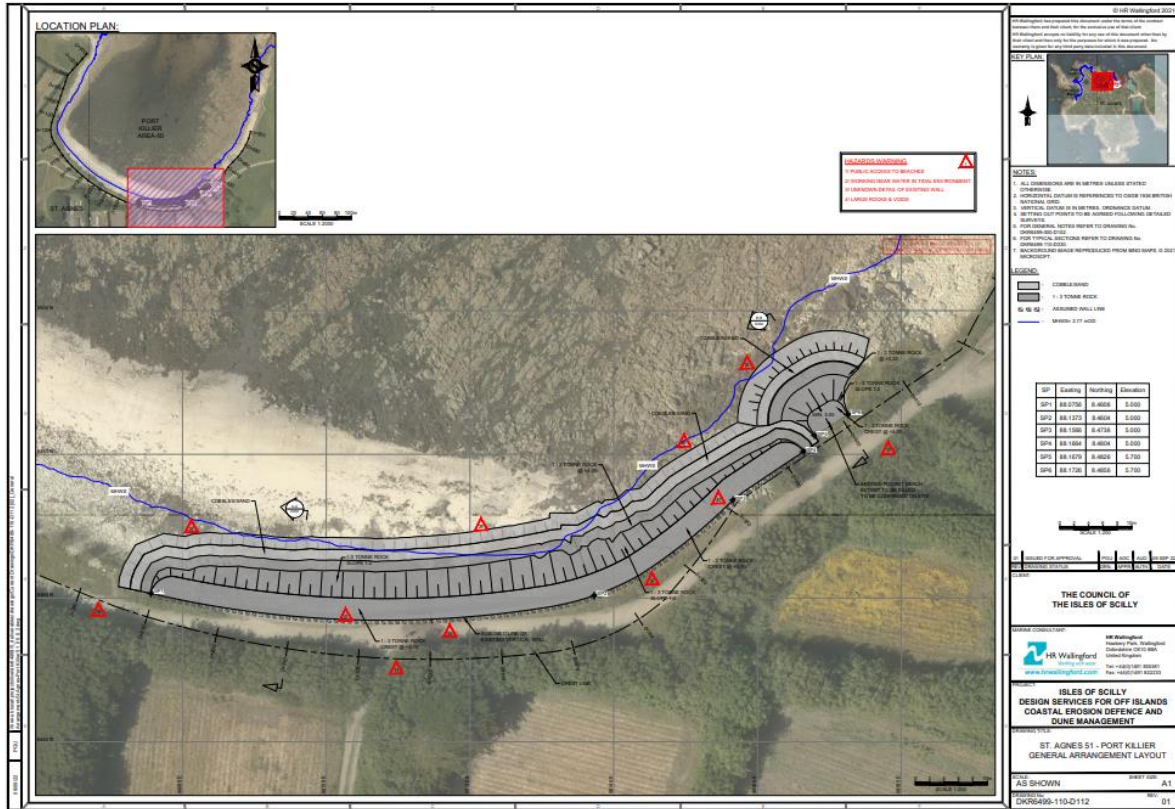


Fig 8 Porth Killier general arrangement of proposed sea defences.

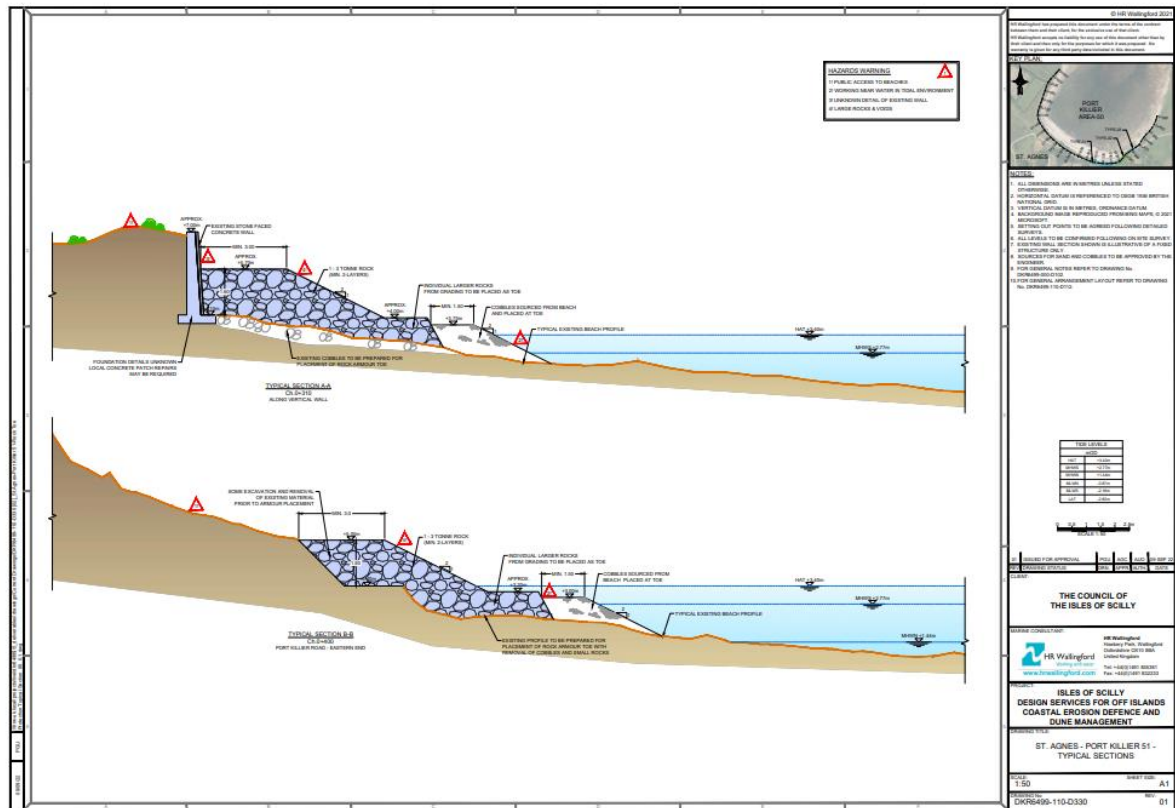


Fig 9 Porth Killier typical section.

## 5.2 Criteria for grading of harm

The impacts of development on the historic environment may include positive as well as adverse effects. For the purposes of assessment these are evaluated on an eight-point scale:

**Positive/Substantial Benefit**

**Positive/Moderate Benefit**

**Positive/Minor Benefit**

**Neutral**

**Negative/Negligible (Less than Substantial) Harm**

**Negative/Minor (Less than Substantial) Harm**

**Negative/Moderate (Less than Substantial) Harm**

**Negative/Substantial Harm**

with the additional **Negative/Unknown** used where an adverse impact is predicted or **Positive/Unknown** where a beneficial impact is predicted but where, at the present state of knowledge, its degree cannot be evaluated satisfactorily.

The assessment also distinguishes where possible between permanent and temporary effects, or between those that are reversible or irreversible, as appropriate, in the application of the scale of impacts.

To ensure that the judgements given in this report are as clear as possible this assessment uses the following definitions to develop a four step grading of harm.

Substantial Harm	The change seriously affects a key element contributing to the significance of the asset, going to the heart of its significance.
Moderate (Less than Substantial) Harm	A major element of the heritage value of the asset is harmed whilst retaining enough value to justify identification as a heritage asset.
Minor (Less than Substantial) Harm	Some heritage values are harmed but these do not contribute a major element of the significance or its asset, and/or the change is offset of by enhancement or revelation of other heritage values.
Negligible (Less than Substantial Harm)	Minor negative harm to the heritage values of a place that are neither substantive or primary to its overall significance.

## 5.3 Summary of potential impacts

### 5.3.1 Physical (direct) impacts

The only heritage asset which will be directly impacted by the proposed sea defences is the scheduled *prehistoric settlement and field system at Porth Killier, St Agnes* (NHLE 1014998) where small-scale excavation will be required to install rock armour. If the excavations remain small scale the impact on this monument is assessed as **Minor (Less than Substantial) Harm**.

The works propose to use a haul route over the existing unmetalled coastal track which runs through *the prehistoric settlement and field system at Porth Killier, St Agnes* (NHLE 1014998). This has potential to inadvertently cause harm to the monument through the repeated movement of heavy plant and vehicles along the trackway. This impact is assessed as **Minor (Less than Substantial) Harm**.

### 5.3.2 Visual and other non-direct impacts

The sea defences will not impact directly, visually or non-directly with any of the other heritage assets identified in the study area.

## **6 Concluding remarks**

This section offers options to reduce or mitigate adverse impacts on the historic resource expected to result from the proposed development. These options are provided for guidance and the actual requirements for archaeological recording will be set by the Local Planning Authority.

### **6.1 Mitigation by design**

A Construction Environment Management Plan (CEMP) should be required as a condition of planning permission, if granted, in order for potential impacts upon the scheduled site to be avoided. The CEMP should show how vehicle movements will be managed on the track crossing *the prehistoric settlement and field system at Porth Killier, St Agnes* (NHLE 1014998) to avoid harm being caused to the monument and how plant or vehicle operators will be informed of the presence of the monument together with the measures being implemented to avoid harm being caused (as advised by Historic England in their consultation response to P/22/077/FUL).

### **6.2 Mitigation by record**

#### **6.2.1 Archaeological watching brief**

If planning permission is granted an archaeological watching brief should be required as a condition out to monitor excavations as they proceed. Time should be allowed for the project archaeologist to carry out excavation, recording (at an appropriate level which may include description, photography, drawing in plan or section) and the recovery of any artefacts or samples.

The watching brief should be carried out according to a Written Scheme of Investigation (WSI) approved by the Local Planning Authority.

#### **6.2.2 Analysis and publication**

Should the results merit it a programme of post-excavation analysis and publication may be required by the Local Planning Authority.

## 7 References

### 7.1 Primary sources (in chronological order)

Graeme Spence's chart of St Mary's Pool, 1792 (sourced from the UK Hydrographic Office, Taunton, [www.ukho.gov.uk](http://www.ukho.gov.uk)).

An original water colour in naïve style annotated 'A view of St Mary's Island (Scilly)', (discovered bound into a copy of Troutbeck's 'Survey of the ancient and present state of the Scilly Isles (published c1794) held at Kresen Kernow, Redruth.

Plan of Hugh Town by Captain George Williams and Mr S J Wells, 1862 (Sourced from the UK Hydrographic Office, Taunton, [www.ukho.gov.uk](http://www.ukho.gov.uk)).

Ordnance Survey, c1880. 25 Inch Map First Edition

Ordnance Survey, c1907. 25 Inch Map Second Edition

Ordnance Survey, MasterMap Topography

### 7.2 Publications

CIfA, 2017. Standard and guidance for historic environment desk-based assessment, CIfA, Reading

English Heritage, 2008. *Conservation Principles, Policies and Guidance*. Swindon: English Heritage

Gray, A, 1972. Prehistoric Habitation Sites on the Isles of Scilly, *Cornish Archaeol*, **11**, 19–49

Johns, C, Ratcliffe, J, and Young, A, 2021. Results of archaeological recording during the Coast Protection Scheme at Porth Killier and Porth Coose, St Agnes, Isles of Scilly, 1996, in A M Jones, ed, 2021. *Later prehistoric settlement in Cornwall and the Isles of Scilly: Evidence from recent excavations*, Oxford

Jordan, D, 1989. *Geophysical survey at Porth Killier, St Agnes, Isles of Scilly*, Portsmouth (Ancient Monuments Laboratory archive)

Ratcliffe, J, 1993. *Fieldwork in Scilly: 1991 and 1992*, Truro (Cornwall Archaeological Unit, Cornwall County Council)

Ratcliffe, J, 1994. *Fieldwork in Scilly: July 1993*, Truro (Cornwall Archaeological Unit, Cornwall County Council)

Ratcliffe, J, and Parkes, C, 1989. *Fieldwork in the Isles of Scilly: March 1989*, Truro (Cornwall Archaeological Unit, Cornwall County Council)

Ratcliffe, J, and Parkes, C, 1990. *Archaeological Fieldwork in the Isles of Scilly: September 1989*, Truro (Cornwall Archaeological Unit, Cornwall County Council)

Ratcliffe, J, and Sharpe, A, 1991. *Fieldwork in Scilly, Autumn 1990*, Truro (Cornwall Archaeological Unit, Cornwall County Council)

Ratcliffe, J, and Straker, V, 1996. *The Early Environment of Scilly*, Truro (Cornwall Archaeological Unit, Cornwall County Council)

Ratcliffe, J, and Thorpe, C, 1991. Archaeological recording at Porth Killier, St Agnes, Isles of Scilly (Cornwall Archaeological Unit, Cornwall County Council)

### 7.3 Websites

<http://www.heritagegateway.org.uk/gateway/> Online database of Sites and Monuments Records, and Listed Buildings

[St Agnes Sea Defence Proposals | Council of the ISLES OF SCILLY](#)

[National Planning Policy Framework - GOV.UK \(www.gov.uk\)](#) NPPF 2021





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