



CPR highway scheme, Dudnance Lane- Wilson Way, Cornwall

Historic building record



Cornwall Archaeological Unit

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The measured building survey of Sylmar house was undertaken by the author. Photography of this building was carried out by Adam Sharpe and Eric Berry.

The views and recommendations expressed in this report are those of Cornwall Archaeological Unit and are presented in good faith on the basis of professional judgement and on information currently available.

Freedom of Information Act

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Cover illustration

Sylmar cottage, Penhellick, looking northeast, photographed in April 2013.

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Abbreviations

CAU	Cornwall Archaeological Unit
CC	Cornwall Council
CIfA	Chartered Institute for Archaeologists
CRO	Cornwall Record Office
DSLR	digital single lens reflex (camera)
GIS	Geographical Information System (electronic mapping datasets)
HER	Cornwall and the Isles of Scilly Historic Environment Record
NGR	National Grid Reference
OS	Ordnance Survey
SLR	single lens reflex (camera)
WSI	Written Scheme of Investigation

1 Summary

Planning application NR/08/00355/CC ENV was submitted on the 23rd July 2008 and was to undertake Phase 1 of highway improvement works (including widening) on Dudnance Lane, Station Road and Wilson Way and adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane.

Consent for the new road scheme was subject to Planning Conditions, including the requirement for historic building recording along the Wilson Way-Dudnance Lane road. This was an area covered by a previous archaeological assessment, the key finding of which was to record the historic settlement of Penhellick prior to its demolition.

Although the place-name of Penhellick can be traced back to the 14th century (1314) the site investigation revealed no traces of any medieval or early post-medieval remains. What was discovered, however, was the substantial survival of a late 18th century house, clearly carefully designed for a middle class family and their servants. The exterior of this early house was largely disguised beneath a painted cement render, modern windows and doors, and re-roofing with modern artificial slates. This principal house was accompanied by remains of another stone-built dwelling, of most likely early 19th century date, plus outbuildings dating from the middle years of the 19th century.

Mid-19th century Census Returns for the area revealed the names of the families living here. The association of the principal house with the development of the West Cornwall Railway to Carn Brea Station is of note, as the head of the household in 1851 was described as a Railway Engine Maker.

All historic buildings in this complex were eventually demolished as part of the development.

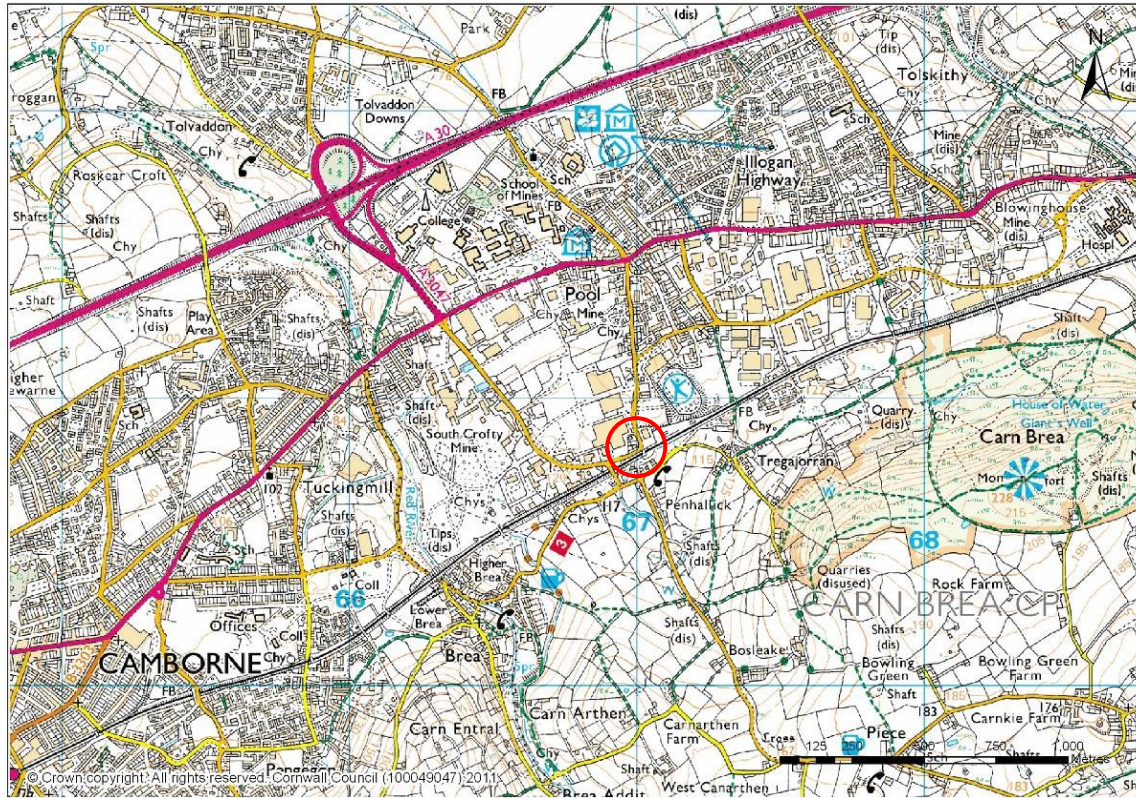


Fig 1 Location map.

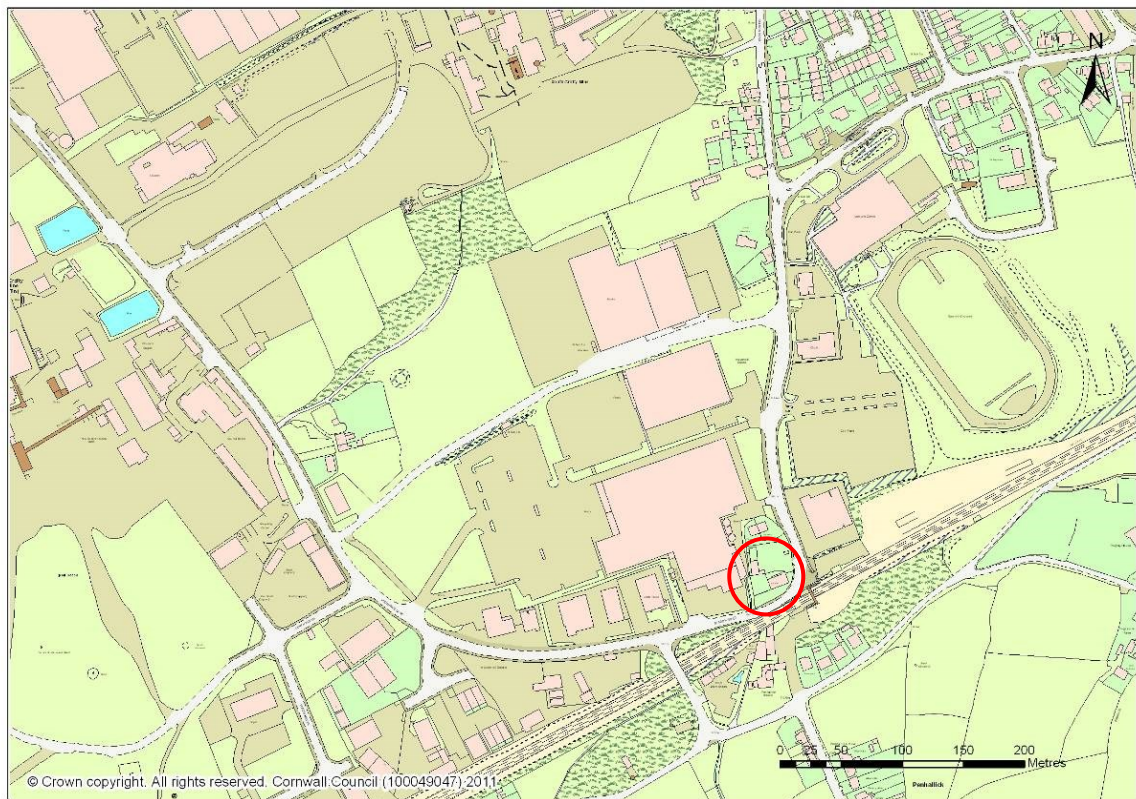


Fig 2 Site extent.

2 Introduction

2.1 Project background

For several years Cornwall Council's Strategic Planning and Transport team have been in the process of designing a scheme to upgrade and improve the road network around Pool and create a new link to Dolcoath. This scheme which has now secured government funding, is known as the CPR Link Road.

Planning application NR/08/00355/CC ENV was submitted on the 23rd July 2008 and was to undertake Phase 1 of highway improvement works (including widening) on Dudnance Lane, Station Road and Wilson Way and adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane.

Following this Planning application PA09/01295/F was submitted on the 2nd October 2009 for the Phase 2 construction a new highway between Dolcoath Avenue and Dudnance Lane and to undertake highway works (and highway modification and improvement works) on Dudnance Lane, Chapel Road, Dolcoath Road, Dolcoath Avenue and adjacent side road.

Both applications were approved subject to conditions that required that:

'No development shall commence until the applicant has secured and implemented a programme of archaeological work in accordance with a written scheme of investigation to be submitted to and approved by the local planning authority. The approved road shall be implemented in accordance with the approved archaeological work.'

A programme of archaeological assessment was carried out to examine the likely impacts of the road on the historic environment (Parkes 2007). This study identified sites of potential historic environment interest within the projected road corridor. The likely impacts and potential mitigation measures were assessed.

Following the announcement of government backing for the road scheme early in 2013, preparations were put in hand by CC to start work on the project, including mitigation for historic environment sites. For the purposes of scheme management the overall project has been split into the following elements:

- Red River and western section.
- South Crofty mine.
- Bartles Foundry.
- Dudnance Lane-Wilson Way.

A series of planning briefs outlining the required historic building and archaeological recording works were prepared by Philip Markham, Historic Environment Planning Advice Officer (HEPAO) (Appendix 1).

Historic Environment Projects (HEP, now renamed CAU) was subsequently contacted by John Foskett (of Parsons Brinckerhoff, acting for CC). Following agreement of initial costs for recording above-ground structures, HEP prepared individual Written Scheme of Investigations for each part of the scheme. This report describes historic building recording work undertaken on the Dudnance Way-Wilson Way part of the scheme (Appendix 2).

2.2 Aims

The principal aim of the work was to gain a full archaeological record of the site and buildings. This included an historic building record and measured survey of the buildings prior to their demolition. The aim of the watching brief was to record any features of earlier origin hidden below ground. Specific aims were to:

- To record all historic buildings and structures prior to demolition.
- Establish the presence/absence of archaeological remains.

- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of the activity on the site.
- To identify any artefacts relating to the occupation or use of the site.
- To provide further information on the archaeology of the site from any archaeological remains encountered.

2.3 Methods

Full details of the methodology can be found in the WSI (see Appendix 2).

2.3.1 Desk-based assessment

Preliminary desk-based research was not needed as sites in the road corridor had been assessed as part of an earlier study (Parkes 2007). This study had also shown that the key site along the Wilson Way part of the road scheme was the settlement named Penhellick, including an extant house, the remains of another, plus related outbuildings.

Following recording of the interior of the house, searches were made of early Census information, to determine the historic occupants of Penhellick.

2.3.2 Fieldwork

Two site visits to Penhellick were made in April 2013. The first visit was undertaken by a photographic team (Adam Sharpe and Eric Berry), to record the house using archive quality monochrome film photography and colour digital imagery. Equipment used during this visit included an Olympus 35mm SLR camera (loaded with archive quality 100ASA film) set up on a tripod. Digital photographs were taken using an interchangeable-lens Olympus digital camera (with a resolution of 16 million pixels) and a Nikon D200 DSLR camera with a resolution of 10 million pixels.

Initial observation determined that the principal house was likely to be of late 18th century or very early 19th century date and contained considerable original joinery and features of interest, including a 'hidden' service stairway.

A second visit was made by the author to record a description of the house and also to accurately record its interior floor plans. These were recorded by annotated and dimensioned sketch and a short description was also made.

The outbuildings at Penhellick were also recorded but as the interiors were full of building materials and household junk (and some parts were unsafe to enter due to poor condition of roofs and floors) these were only briefly investigated.

2.3.3 Post-fieldwork

Following the site visits all the recorded data was processed and prepared for analysis and long-term storage.

Digital photos were downloaded, edited where necessary using Adobe PhotoShop Elements software and the images stored on Cornwall Council's computer network.

Monochrome photographs were processed by a professional laboratory and the negatives and contact sheet stored in accordance with HER guidelines.

The measured and sketched information was used as the basis for creation of floor plans using AutoCAD software (see Fig 9).

The results from the building recording were compiled and written up (this report).

3 Location and setting

The historic core of Penhellick settlement was, until its recent demolition as part of the road scheme, located on the north side of the former Carn Brea railway station at NGR SW 66997 40829 (Figs 1, 2 and 7). Penhellick lies to the south of Pool, in an area

historically dominated by the surface workings of Tincroft Mine, within the ecclesiastical parish of Illogan (Fig 4). The site lies on the 116m contour on a bedrock geology of undifferentiated Upper Devonian mudstone, siltstone and sandstone, this area much defined by outcrops of mineral lodes (CC GIS). Today the site of the former Tincroft Mine has been redeveloped as modern industrial estates and a large Tesco supermarket, which now borders the west side of the site. A pair of semi-detached modern houses, Treveor and Chynoweth, has been built on the northern side of Penhellick.

4 Designations

No conservation designations are directly applicable to Penhellick. The site is adjoined by the boundary of the Cornish Mining World Heritage Site, which includes a part of Dudnance Lane and Carn Brea Station.

5 Site history

The settlement name is first recorded as 'Penhelek' in 1314 (Gover 1948). The name is Cornish and contains the elements **pen** 'head or end' and **heligen** 'willow-tree, willow' (Padel 1985, 128, 177, 292).

Penhellick is named on surveys by Gascoyne (1699) and Martyn (1748). The settlement location is illustrated on the OS One Inch survey of c1809 but is unnamed (Fig 3). Illogan Tithe Map (surveyed in 1840, see Fig 4) records a dwelling (the recently extant house) with associated enclosures and other buildings, some of which may also have been dwellings. These are located on a lane immediately north of the West Cornwall Railway line that may have cut through part of the hamlet. The settlement is apparently respected by the expansion of Tincroft Mine to the west. The accompanying Tithe Apportionment recorded that the 'house and land' at Penhellick (570) had a leaseholder described as a 'tenant at rack rent' and at the time the property was occupied by John Teague.

More information is available from the mid-19th century Census Returns. In 1840 'Penallack' was occupied by the Paull family, comprising Richard Paull who was described as a Tin Mine Agent, his wife, six children (aged between 1 and 9 years) and two teenage female servants. As they were clearly a middle class family with servants it is likely that the Paulls occupied the main house at the settlement. The other house at the north end of the site may have been the one occupied in 1840 by the Hambly family. Thomas Hambly was described as a copper miner, who lived there with his wife, five children and his parents.

In 1851 the settlement is only mentioned as Penhillack Terrace and Penhallack Lane and the Paull family were no longer recorded there. By this time the West Cornwall Railway station had been developed on Carn Brea Lane and James Slater, his wife, seven children and single house-servant were recorded as living there. This is likely to be the house at Penhellick as there were no other buildings at the station at this time. Interestingly Mr Slater's occupation was recorded as a Railway Engine Maker and the family had originated in Wakefield, Yorkshire. He was most likely a senior engineer employed by the West Cornwall Railway.

The Hambly family were still recorded at Penhallack Lane in 1861 but only the children are mentioned, the grandparents had presumably passed on.

By c1880 when the area was surveyed at large scale by the OS, the Carn Brea railway station had been built (Fig 5). By this time the railway had become part of Brunel's single track broad gauge Cornwall Railway. Interestingly the buildings and associated yard on the north side of the railway appear, at least in plan, to follow the building lines of the principal dwelling at Penhellick, although the lane divided them. A yard

surrounded by buildings on the east side of the lane may have been associated with Mr Slater. The lane crossed the railway by a level crossing.

A further change had occurred by c1907 when the area was resurveyed by the OS (Fig 6). By this date the earlier yard buildings north of Carn Brea Station had been demolished and the railway track-bed had been widened with two standard gauge lines. The old lane which had crossed the railway line close to the station had been diverted westwards to cross the line by an over-bridge. This diversion cut into the front garden space at Penhellick. A (probably overhead) tramway crossed the north side of Penhellick, connecting Martins East Shaft with the rest of the Tincroft complex.

The modern settlement of Penhallick (spelt with an 'a') is located to the southeast at SW 6706 4060. At the time of the site visit, the historic part of the Penhellick settlement comprised Sylmar cottage, plus its outbuildings and the remains of another house. Two modern semi-detached houses were occupied on the north side of Penhellick.

6 Building description: Sylmar cottage

Note: For simplicity of description this and the following section are written in the present tense (reflecting observations at the time of the fieldwork), although the buildings have since been demolished as part of the road scheme.

6.1 Building type

Sylmar cottage is a gable ended and double-fronted two-and-a-half storey house (Figs 10-13). It is oriented south west – north east, with its principal rooms and front garden facing south east. It has rooms on two floors plus an attic that was once used as servants' accommodation.

6.2 Materials

Walls are constructed of local granite (moorstone) bedded in lime mortar. Dressed granite is used for quoins and other dressings. Wedge marks visible on a few of the quoin-stones indicate a quarrying (and potential build) date before 1800.

The front façade has been rendered with cement-based mortar (painted white) and other external walls have also been painted. Quarried granite is used for lintels over downstairs windows while upper floor windows have shallow brick arches.

Brickwork is also used for chimney stacks above the two gables; the easternmost chimney has three flues and its narrower proportions suggests it has been rebuilt. The western stack also has three flues and this larger chimney also once vented the kitchen hearth.

All windows (UPVC) and exterior doors (wood or UPVC) are modern replacements. Original windows are likely to have been 12-pane or 16-pane sash designs. A window opening in the lounge has been significantly widened. A window opening, now blocked with stone masonry, is visible at attic level; this once lit the service stair landing. As there is evidence that the roof was once subdivided into servants' bedroom spaces it is likely that the roof also once had small dormers. These may have been confined to the rear slope.

The roof covering is now artificial slates, probably originally scantle slates. The roof is divided into 7 bays by A-frame trusses. Use of a style of haunched tenons on the collars of the trusses suggests adherence to a traditional type of carpentry.

Original floorboards used throughout the house are simple edged boards or have loose tenons. These suggest a mid-19th century or earlier date.

The house retains many of its original internal doors; these are all six panel designs, typical of later 18th century design. Another element of surviving joinery is moulded

architraves around window reveals. Dado mouldings and panelling are extant in the hallway and traces of others are visible under layers of wallpaper.

The principal stairway is a square plan with a half landing, lit by its own rear window at mid-floor level. It has good quality painted balustrades and elaborate turned newels (Figs 20-22).

6.3 Plan and plan development

See Fig 9 for floor plans.

The house has a double-depth plan with (on the ground floor) a central front entrance hallway providing access to the principal room spaces (a dining room to the left and a lounge to the right, Fig 20). The hallway leads to the staircase.

Although substantially altered by removal of original partitions, addition of dry lining and division of the rear space the original left hand layout can still be determined (Fig 17). The front dining room space would have had a fireplace in the gable wall and direct door access (now blocked) from the central hallway. There may have also been a service doorway into the kitchen (at rear left). The kitchen was once provided with a cooking range in the gable wall and a built-in wooden dresser on the opposite wall (backing onto the staircase, Fig 15).

Leading from the kitchen is a rear external door and another (very low) doorway beneath the stairs (Fig 14) which leads into a narrow service room, perhaps originally a scullery or pantry, behind the lounge. A sealed doorway between the lounge and service room retains a later style four panel door installed 'upside-down' and therefore appears to be a secondary feature.

At the far end of the rear service room is a secondary doorway cut through the gable wall (Fig 18). This leads into another room within a single storey extension. This extension was clearly in place by the time the c1880 OS map was made. The original purpose of the extension is not entirely clear as its windows have been altered in the 20th century when the room was converted to become a kitchen/living room (Fig 19). Its access shows that it originally had a service function and may have once been a washhouse or similar.

On the first floor is a central and generous landing, with five bedrooms leading off (Figs 22-23). All bedrooms retain their original 6 panel doors and all upstairs rooms have window seats with architrave moulding detail (Figs 24-27).

One of the rear bedrooms was subdivided in the later 20th century so that part of the space could be utilised as a bathroom. As the bathroom space was towards the middle of the house (with no exterior wall window) it was lit by a 'borrowed light' panel from the original bedroom. Access to the bathroom was by the original bedroom door off the landing; this meant that a new access had to be created for the bedroom and use was made of a former service doorway connecting through the neighbouring front bedroom.

One of the most interesting aspects of Sylmar cottage is its original access and accommodation for servants. Servant's bedrooms were originally in the attic space. This was suitably floored in, and walls were created using horizontal planed boards (Figs 30, 32). As mentioned above, there are likely to have been dormer windows in the rear roof slope.

Service access to the first floor and attic rooms was by separate narrow wooden staircases. These staircases were located in a recess in the northwest corner of the house; at ground floor level the stairs rose from a corner of the kitchen to a small landing (Fig 28). From this level another flight connected to a landing in the attic (Fig 29). The attic landing was originally lit by a small window in the gable wall (Fig 31).

Twentieth century changes and additions included a long and narrow conservatory/porch along most of the rear wall of Sylmar cottage. At the north corner of the house, two toilets were added, one accessed from inside the conservatory, the

other directly from the garden. The 20th century arrangements replaced an earlier smaller central rear porch and part of an enclosing wall, visible on both early OS editions.

7 Building descriptions: outbuildings

See Fig 8 for layout/locations.

7.1 Earth closet

A small square-plan building is mapped on the west side of the Penhellick property c1880. This single storey gabled structure has dressed granite quoins and jambs in its lower masonry, with brick quoins and dark rubble higher up, probably a rebuild (Fig 34). Its roof has collapsed and, like the adjoining building range, much overgrown. It was most likely an earth closet.

7.2 House ruins

At the northern end of the Penhellick property is a ruinous two-storey stone building (Fig 36). Its front wall faces east towards what was once a yard, garden or entrance space. A building with a similar footprint is apparently shown on the c1840 Tithe Map and the whole building range (with adjoining outbuildings) is shown c1880. Interestingly the OS maps do not show any divisions between the roofs/spaces, as was depicted for the principal house and its extension.

The building was evidently a house, being a regular double-fronted two-storey building, of single-depth plan. At the time of investigation the walls of this house were very overgrown with thick ivy, but it was clear that only the original stone front and side walls survived, as the entire rear and interior had at some time been replaced with concrete blockwork. The front wall retains granite jambs and quoins.

The form of the house suggests it is of early 19th century date.

7.3 Outbuilding 1

The outbuilding range forms a long L shape (see Fig 35), and includes the ruinous house at its northern end. At the south end of the range (and forming the short end of the L) is a single-storey building. This has a rear wall of stone masonry but the remainder has been rebuilt in blockwork, under a single pitch corrugated sheet roof. The building is heavily overgrown and the interior full of junk/materials so it was not accessible to be photographed.

It more recently served as a general outhouse/shed but its size and position closer to the rear door of the house suggests it may have originally been a wash house or pump house.

7.4 Outbuilding 2

Adjoining the rear of the building just described and forming the corner of the L plan range is another single-storey building that has a large double doorway with wooden doors to the front and a small window near the angle. Like the other older walls in this range, it has granite jambs to its doorways. The roof is heavily overgrown but at least partially comprises scantle slate, with other parts replaced with corrugated sheet.

Inside there is a vehicle inspection pit in the floor, plus a workbench and shelving against the rear wall. It has therefore served in more recent times as a garage/workshop but was most likely originally a cart-house.

7.5 Outbuilding 3

Outbuilding 3 has a lower roofline and appears to be an infill structure between the ruinous house and Outbuilding 2. Like Outbuilding 2, it also has a wide doorway to the front wall and shelves to the rear. Its original purpose is not known.

7.6 Gardens and dividing walls

The garden layout at Penhellick can be seen from the early OS editions and surviving evidence. The principal garden comprised a lawn immediately in front of the house with a path leading in from a gateway on the road. To the west was another garden space enclosed by a masonry wall to the rear (north) side (Fig 33). This part of the front garden was probably originally a shrub/flower space, long since overgrown. The early OS editions show a small square building at the extreme end of this garden; this has since disappeared but is likely to have been another earth closet reserved for the use of members of the family and their guests. The other extant earth closet was nearer the rear of the house and therefore for originally for servants' use.

The masonry wall to the west of the house also divided off another outdoor space, probably originally a laundry drying garden.

7.7 Late 20th century additions

Recent aerial photographs show two static caravans in the former gardens of Penhellick. One of these was still extant at the time of the site visit. Another late feature was the remains of an aluminium framed greenhouse closer to the site entrance.

8 Chronology/dating evidence

Sylmar cottage contained features which included six-panel type internal doors and stairway. These, when taken together with the evidence from historic mapping, strongly suggest the house has origins in the late 18th century.

Although in much poorer condition, the ruinous house at the northern end of the settlement appeared to be of later construction than Sylmar cottage but pre-dating the Tithe Map survey of 1840. The associated outbuildings are first depicted on the earliest large scale OS map and are likely to have origins in the mid-19th century. The extension on the north east side of Sylmar cottage is also mapped c1880 and is likely to be of mid-19th century date.

All the buildings in the settlement have had subsequent modifications, rebuilds and repairs, as would be expected of buildings of their period.

9 Significance

Sylmar cottage represented a relatively unusual survival of a late 18th century house which demonstrated clear design for accommodation for its middle class owners and their servants. The almost 'hidden' aspect of the service stairway linking the corner of the ground floor kitchen with the servants' bedrooms in the attic space suggests the house was carefully designed, probably the work of some now forgotten architect.

The survival of buildings at Penhellick into the later 20th and beginning of the 21st century also represented a small island of older settlement within a landscape that had seen a much greater degree of change. The development of Tincroft Mine through the 19th century practically surrounded Penhellick. Another significant mid-19th century change was the cutting through of the railway, and development of what became Carn Brea Station, now part of the Cornwall main line. It is especially interesting that the occupants of Sylmar cottage had a direct link with the railway.

Later, the surrounding mines closed down and the redundant land was eventually reused and redeveloped in the late 20th century as industrial estates. Around the same time the exterior of this early house was modernised with painted cement render, modern windows and doors, and re-roofing with modern artificial slates. It therefore (and perhaps like many others) escaped gaining Listed Building status. The need for a wider modern road signalled its final days.

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Cornwall Online Census Project

<http://www.heritagegateway.org.uk/gateway/>

English Heritage's online database of Sites and Monuments Records, and Listed Buildings

11 Project archive

The CAU project number is **146242**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY.

English Heritage/ADS OASIS online reference: cornwall2- 206689



Fig 3 Extract from the OS First Edition One Inch Map c1809.



Fig 4 Extract from Illogan Tithe Map, 1840.

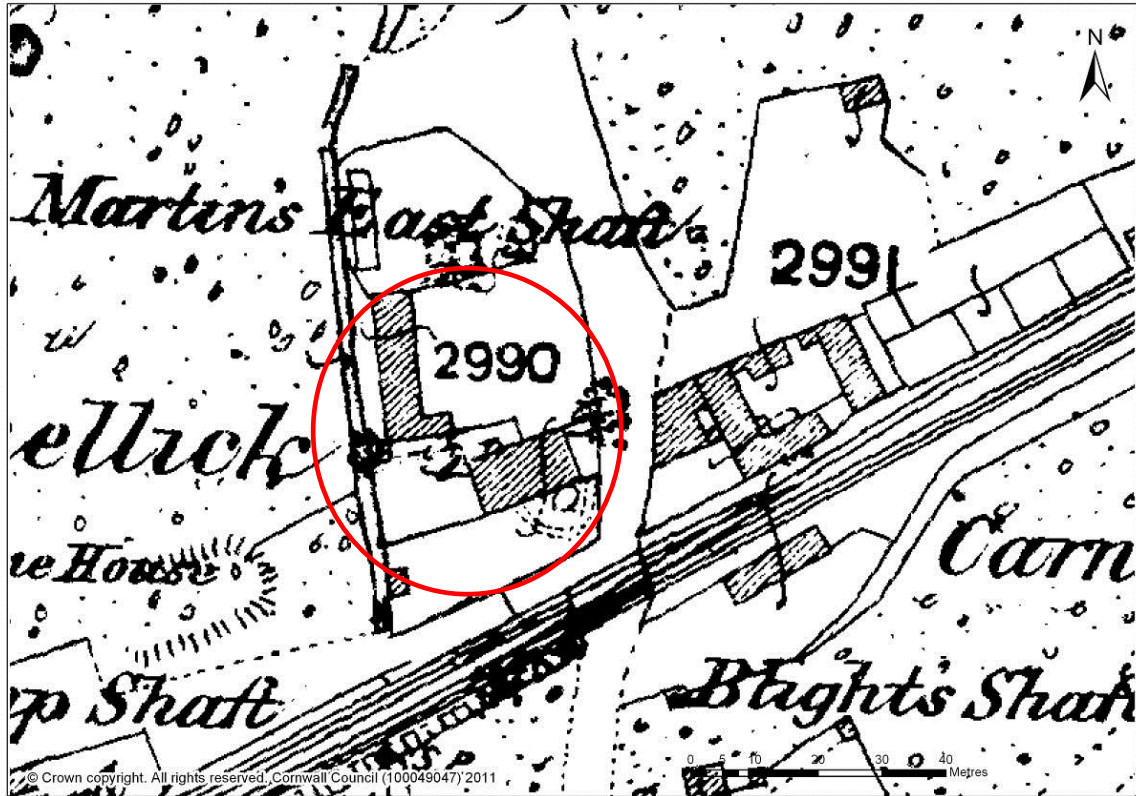


Fig 5 First Edition of the Ordnance Survey 25 Inch Map (c1880), showing Penhellick and Carn Brea Station.

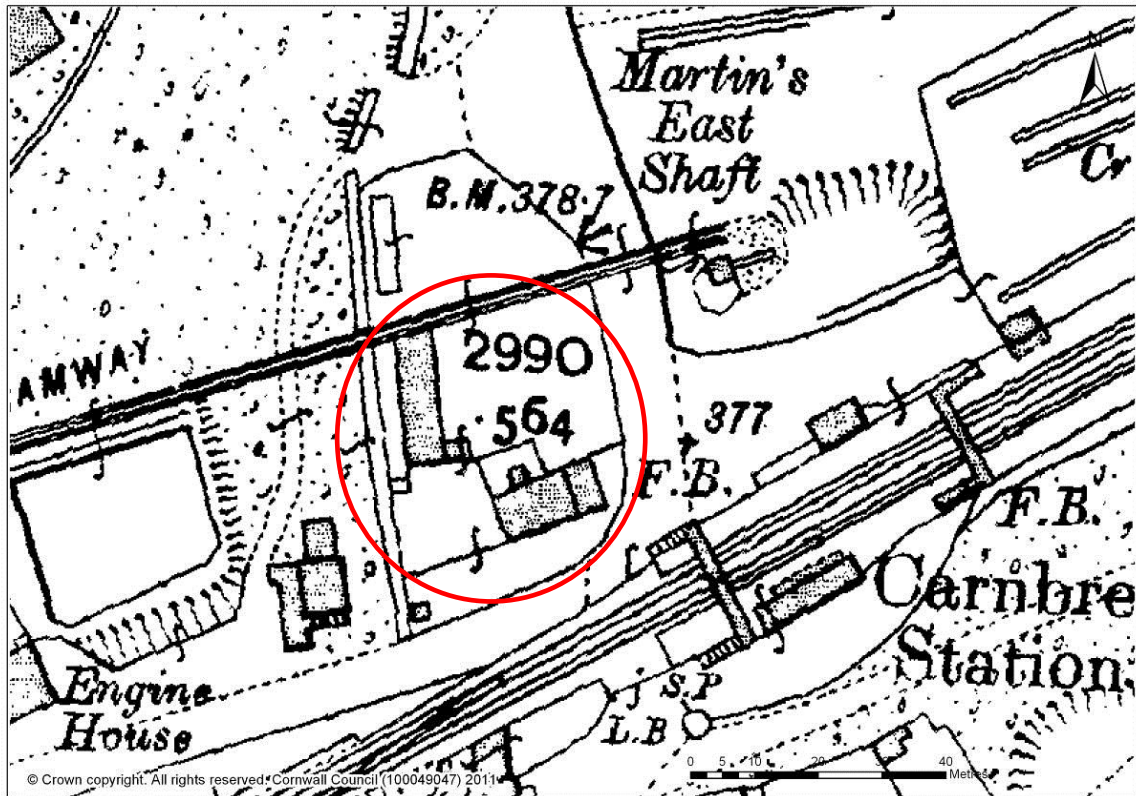


Fig 6 Second Edition of the Ordnance Survey 25 Inch Map (c1907), showing Penhellick and Carn Brea Station.



Fig 7 Air photo of Penhellick/Carn Brea Station.

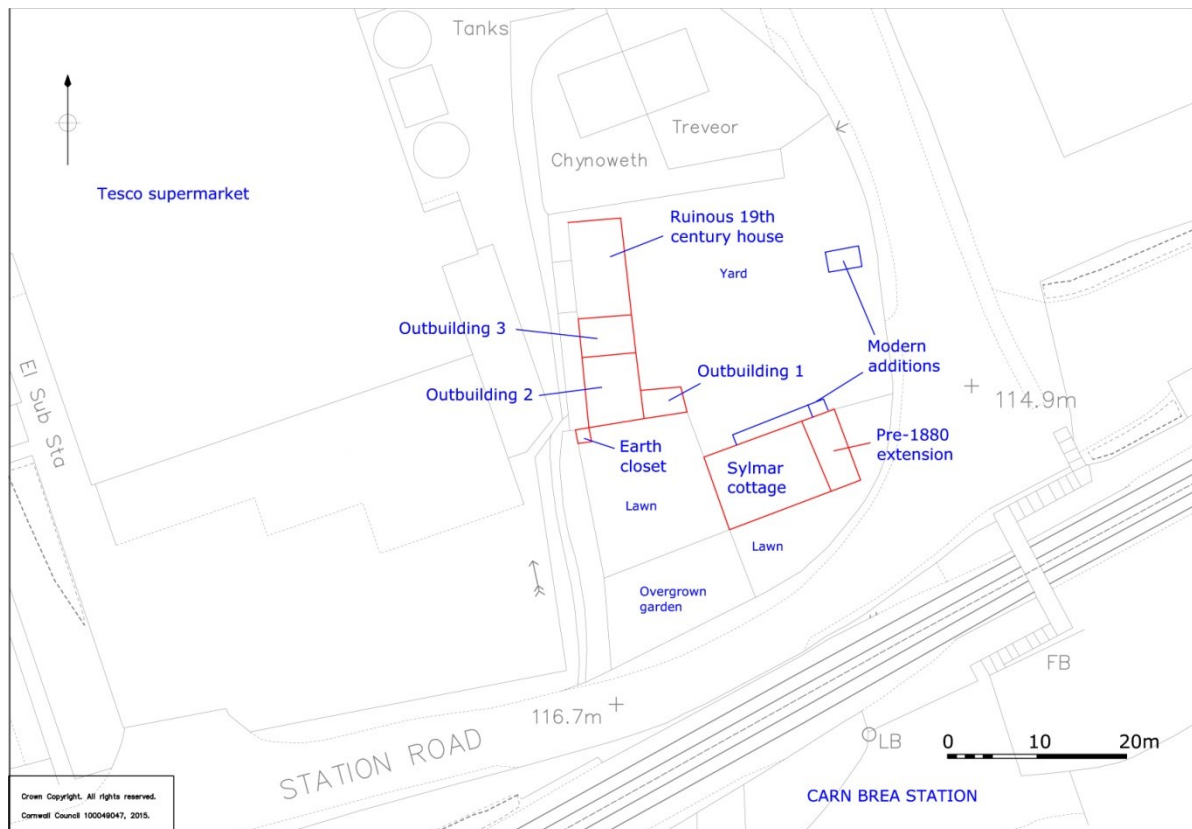


Fig 8 Locations of buildings mentioned in the text.

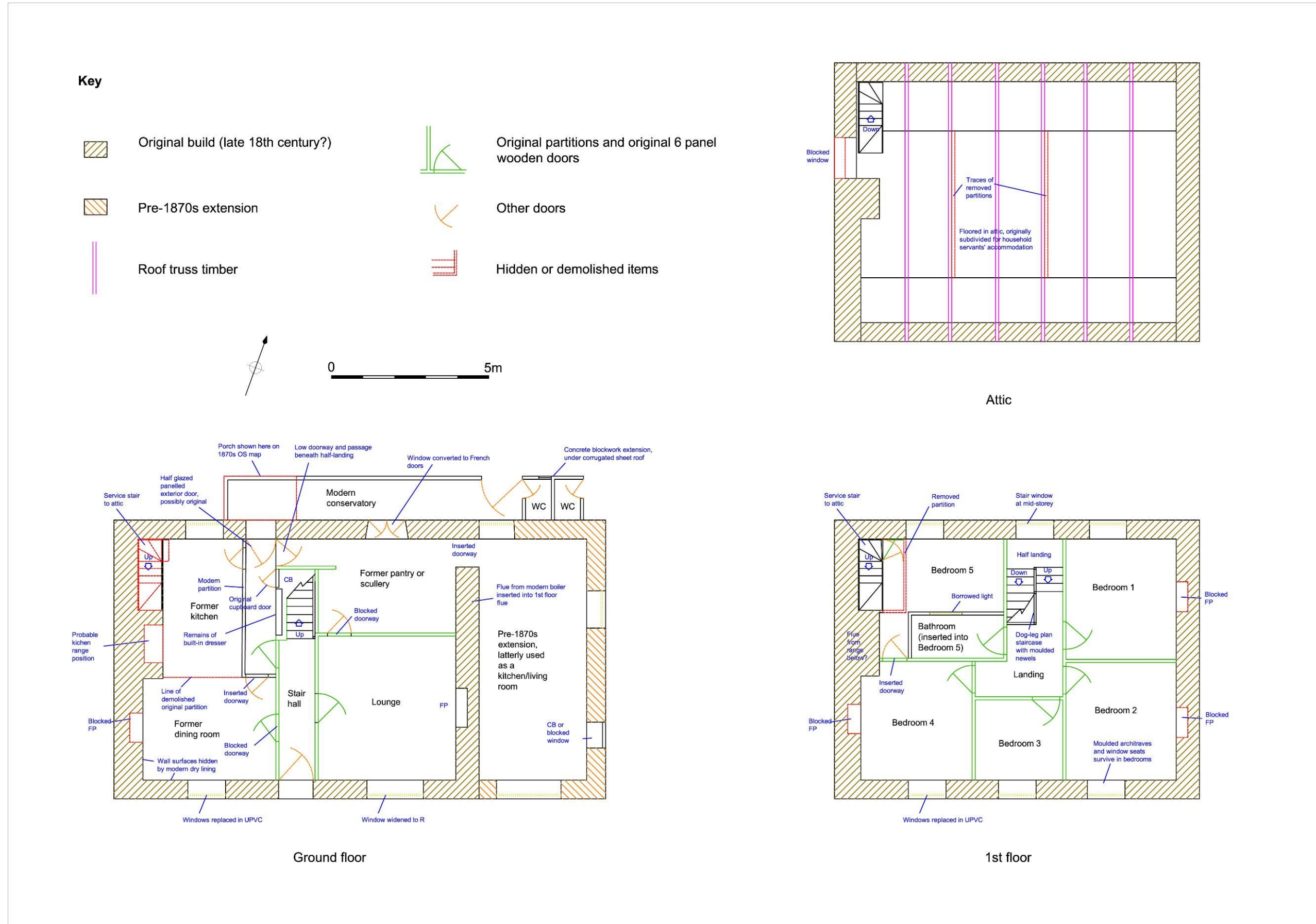


Fig 9 Floor plans of Sylmar cottage, Penhellick.



Fig 10 Front (south) elevation of Sylmar cottage, Penhellick.



Fig 11 Rear (north) elevation of Penhellick.



Fig 12 Penhellick, looking northwest.



Fig 13 Penhellick, looking northeast.



Fig 14 Rear hallway, with low doorway to former service room to left.



Fig 15 Rear hallway, showing the frame and shelving of the built-in dresser.



Fig 16 View of lounge, with hallway beyond.



Fig 17 View into original kitchen space, now sub-divided by modern passageway partition.



Fig 18 Rear service room.



Fig 19 Replacement kitchen, built into extension.



Fig 20 Hallway and stairwell.



Fig 21 Stairs and landing.



Fig 22 Landing, with bathroom to left.

The 1950s bathroom space was taken from part of Bedroom 5



Fig 23 Original 18th century 6-panel bedroom doors, viewed from the landing.



Fig 24 Doorway of bedroom 1.



Fig 25 Original window seat and moulded architrave in window of Bedroom 1.



Fig 26 Bedroom 4, showing doorway (left) to Bedroom 5.



Fig 27 Window seat in Bedroom 5 and service stairwell to attic level.



Fig 28 View downwards into blocked service stairway formerly connecting ground and first floors.



Fig 29 Service stairway to attic.



Fig 30 Attic level, showing horizontal boarding which once formed walls of service bedrooms.



Fig 31 A window (subsequently blocked) originally lit the landing area of the attic stairs. There are also likely to have been small dormer windows in the rear roof slope.



Fig 32 Attic level. The roof bays once formed divisions between service bedrooms.



Fig 33 Former front gardens of Penhellick, looking northeast.



Fig 34 Former earth closet in the garden west of the house.



Fig 35 Three outbuildings at Penhellick.



Fig 36 The remains of a former house at Penhellick.

Only the original front and side walls survived; the remainder (and interior) had been rebuilt in modern blockwork.

Appendix 1: Planning brief

BRIEF FOR THE EAST-WEST LINK ROAD, DUDNANCE LANE TO WILSON WAY, POOL FOR BUILDING RECORDING, ARCHAEOLOGICAL RECORDING, INVESTIGATION, AND EXCAVATION AS APPROPRIATE

Date: 28th November 2012

Scheme: CPR East - West Link Road, Camborne & Pool

Site: Dudnance Lane to Wilson Way, Pool

Application: PA09/01295/F & NR/08/00355/CC ENV

HBSMR: CCO5347, CCO3569, CCO3570

Applicant: Cornwall Council, County Hall, Truro

Agent: John Foskett, Parsons Brinckerhoff, 11 High Cross, Truro, Cornwall TR1 2AJ

Historic Environment Planning Advice Officer: Phil Markham, Cornwall Council, Historic Environment Service, Dolcoath Avenue, Camborne TR14 8SX

Local Planning Authority Officer: Chantal McIennan, Cornwall Council, Planning & Regeneration, Dolcoath Avenue, Camborne TR14 8SX

This brief is only valid for six months. After this period the Historic Environment Planning Advice Officer (HEPAO) should be contacted. Any written scheme of investigation (WSI) resulting from this brief shall only be considered for the same period. The contractor is strongly advised to visit the site before completing their WSI as there may be implications for accurately costing the project.

Contractors Written Scheme of Investigation (WSI)

No ground works are to be undertaken until the HEPAO and the Local Planning Authority (LPA) have approved the archaeological contractor's WSI.

1 Introduction

- 1.1 This brief has been written by the HEPAO and sets out the minimum requirements for archaeological works at the above site.

2 Site Location and Description

- 2.1 There are improvements to the urban road network in Pool as part of the East-West Link Road, namely Dudnance Lane and a new road linking this to Wilson Way roundabout.

3 Planning Background

- 3.0 There have been a number of planning applications for Phase 1 and Phase 2 of for the East-West Link Road for Camborne and Pool and the current scheme does not include all of the consented elements.
- 3.1 Planning application NR/08/00355/CC ENV was submitted on the 23rd July 2008 and was to undertake Phase 1 of highway improvement works (including widening) on Dudnance Lane, Station Road and Wilson Way and adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane.
- 3.2 This application has been approved subject to a number of conditions. Condition 6 states:

- 3.3 Prior to the commencement of development (including any site preparation works), the applicant shall have submitted to and had approved in writing by the LPA a programme of archaeological recording in accordance with a written scheme of investigation within the area of the approved site (to include details of the identification and method of recording of any sites and features of archaeological interest).
- 3.3 Planning application PA09/01295/F was submitted on the 2nd October 2009 and was for the Phase 2 construction a new highway between Dolcoath Avenue and Dudnance Lane and to undertake highway works (and highway modification and improvement works) on Dudnance Lane, Chapel Road, Dolcoath Road, Dolcoath Avenue and adjacent side road.
- 3.4 This application has been approved subject to a number of conditions. Condition 7 states:
- 3.5 No development shall commence until the applicant has secured and implemented a programme of archaeological work in accordance with a written scheme of investigation to be submitted to and approved by the local planning authority. The approved road shall be implemented in accordance with the approved archaeological work.
- 3.6 The applicant, their agents and any subcontractors should note that where there are other conditions requiring satisfaction in advance of the commencement of works on site; it is the responsibility of the applicant to liaise with the planning officer concerned to ensure that the timetabling of these works is managed.

4 Previous Archaeological Work

- 4.1 Previous archaeological work for this road scheme includes an archaeological assessment of phase 2 of the road scheme undertaken during 2009, 'Phase 2 Camborne, Pool and Redruth Road Scheme, Cornwall, Archaeological Assessment Report 2009R033 Cornwall Council Historic Environment Projects', and 'Basset (Bartles) Foundry, Dudnance Lane, Pool, Cornwall Archaeological Assessment Report 2008R047 Cornwall Council Historic Environment Projects'. Other archaeological assessments have been conducted in the areas of this road scheme and are available at the Cornwall and Scilly Historic Environment Record in Truro. The application documents also contain pertinent archaeological material and these are available from the agent.

5 Requirement for Work

- 5.1 The road scheme from Dudnance Lane to Wilson Way roundabout will require a controlled archaeological 'strip and record' of new road sections and an archaeological 'watching brief' on ground works as required. English Heritage level 2– 4 building recording will also be required, to include the Tincroft Mine smithy building and yard on the south side of Dudnance Lane/Station Road.

6 Building Recording Methodology

6.1 The present proposals will culminate in the destruction of historic environment assets. It is therefore important that these are recorded to an appropriate level; and that the results are made available to interested parties. An English Heritage level 2-4 record for all sites, buildings of historic merit or add character to the area will be required. Any architect/applicant drawings may be used or adapted as required. The recorder(s) will need to consider the following as a minimum:

- Site layout and organisation
- Ground make up of the surface (concrete, foundation remains, stub walls, metal, ceramic etc.) and dumped material.
- Character
- Function
- Materials, methods of construction
- Internal arrangement details of any foundations
- Fenestration
- Original fixtures and fittings
- Subsequent fixtures and fittings
- Evidence of use and status
- Relationship/relevance to the Outstanding Universal Value (OUV) of the Mining World Heritage Site
- Date/period of initial builds and subsequent alterations
- The mapped recorded features will be linked to earlier mapped features and photographic evidence where possible.

6.2 The photographic record shall be a comprehensive record to archive standard of the existing buildings and structures, both externally and internally. The photographs will be taken with black and white 35mm or medium format film producing archive quality prints and negatives. Colour photography may be utilised for general shots and where it is appropriate for detail shots. For both general and specific photographs, a photographic scale shall be included.

6.3 The drawn record will be comprehensive where required and act principally to support the photographic and written descriptive record. Where appropriate it should include measured plans of all floors, a site plan at 1:500, a phased plan if the buildings constructional complexity warrants this and a plan annotated to show the location, shot number and direction of all photographs. If the building displays evidence more than two building phases then a phased plan should be produced.

6.4 Plans may be based on existing architectural drawings where these exist but these must be checked in the field to ensure acceptable accuracy and should be recast where necessary to standard archaeological conventions.

7 Building Recording Results

7.1 The full report shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the historic building contractor, Cornwall Council Historic Environment Service and the Cornwall Records Office. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.

- 7.2 The archaeological contractor will undertake the English Heritage/ads online access to the index of archaeological investigations (OASIS).
- 7.3 This report will be held by the Cornwall and Scilly Historic Environment Record (HER) and made available for public consultation.
- 7.4 The report must contain:
- A table of contents.
 - The building's precise location in National Grid and address form.
 - A brief history of the site.
 - A concise non-technical summary of the project results.
 - The aims and methods adopted in the course of the investigation.
 - The date of the record, name of recorder(s) and the location and contents of the deposited archive.
 - A location map, copies of any plans/drawings and copies of such photographs as necessary to illustrate the written description with appropriate annotation.
 - A written description of the building and its structure, materials and layout.
 - A full bibliography where external sources have been used.
 - A copy of the brief and approved written scheme of investigation (WSI) will be included as an appendix.
 - A digital copy of all photographs (in .TIFF format) making up the archive record to be bound into the rear cover of the HER / HEPAO copy of the report on CDR or DVDR.
- 7.5 The archive should follow that for the archaeological recording.

8 Archaeological Recording

- 8.1 Ground works associated with the development may disturb buried archaeological remains. It is therefore important that a suitably qualified archaeologist(s) is/are present during these works in order to identify and record any features of interest.
- 8.2 The site specific aims are to:
- Establish the presence/absence of archaeological remains
 - Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered
 - To establish the nature of the activity on the site
 - To identify any artefacts relating to the occupation or use of the site
 - To undertake palaeo-environmental sampling and analysis as appropriate
 - To provide further information on the archaeology of the site from any archaeological remains encountered

9 General Methodology

- 9.1 All stages of the investigation shall be supported by a written scheme of investigation (WSI).
- 9.2 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA).

- 9.3 Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.
- 9.4 All of the latest Health and Safety guidelines shall be followed on site.
- 9.5 The IfA's Standards and Guidance should be used for additional guidance in the production of the WSI, the content of the report and the general execution of the project.
- 9.6 Terminology will be consistent with the English Heritage Thesaurus.

10 Archaeological Recording Methodology

- 10.1 Prior to the commencement of on site works the archaeological contractor should familiarise themselves with the site by examining the information held by the Cornwall and Scilly Historic Environment record (HER), the Cornwall Records Office at Truro and the Cornwall Centre at Redruth, where appropriate.
- 10.2 An archaeologist shall be present during all ground works associated with the development, unless circumstances dictate a different approach. A toothless ditching bucket can be used for the removal of any overburden until the first archaeological horizon is exposed. This will then be hand cleaned as appropriate.
- 10.3 Any surviving remains which will be disturbed or destroyed by the development shall be archaeologically excavated and recorded.
- 10.4 Details of how all archaeological contexts and artefacts will be excavated, surveyed, recovered and recorded shall be provided. The site will be tied into the national grid.
- 10.5 Details of the site planning policy shall be given in the WSI. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections 1:10, unless circumstances indicate that other scales would be more appropriate.
- 10.6 The photographic record shall consist of prints in both black and white and colour together with the negatives. Digital photography may be used for report illustration. For both general and specific photographs, a photographic scale shall be included. In the case of detailed photographs it may be appropriate to include a north arrow. The photographic record shall be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.
- 10.7 If significant archaeological deposits are exposed, all works must cease and a meeting convened with the client and the HEPAO to discuss the most appropriate way forwards.

11 Finds

- 11.1 All finds, where appropriate, will be retained from each archaeological context excavated.

- 11.2 All finds, where appropriate, shall be washed.
- 11.3 All pottery, and other finds, where appropriate, shall be marked with the site code and context number.
- 11.4 The WSI shall include an agreed list of specialist consultants, who may be required to conserve and/or report on finds, and advise or report on other aspects of the work including environmental sampling.
- 11.5 The requirements for conservation and storage shall be agreed with the appropriate museum prior to the start of work, and confirmed in writing to the HEPAO.
- 11.6 Finds work should be to accepted professional standards and adhere to the Institute for Archaeologists *Guidelines for Finds Work*.
- 11.7 Environmental sampling should be guided by *Environmental Archaeology* (English Heritage Centre for Archaeological Guidelines. 2001/02).
- 11.8 Further English Heritage guidance that may be helpful includes *Geoarchaeology* (2004) and *Archaeometallurgy* (2001).
- 11.9 The English Heritage Advisor for Archaeological Science will be able to provide archaeological science advice if required (Vanessa Straker 0117 975 0689).

12 Human Remains

- 12.1 Any human remains which are encountered must initially be left in situ and reported to the HEPAO and the appropriate authorities (the Coroner), where appropriate. If removal is necessary this must comply with the relevant Government regulations. If burials are encountered their legal status must be ascertained and recording and/or removal must comply with the legal guidelines.
- 12.2 If human remains are not to be removed their physical security must be ensured, preferably by back filling as soon as possible after recording.
- 12.3 If human remains are to be removed this must be done with due reverence and in accordance to current best practice and legal requirements. The site must be adequately screened from public view. Once excavated human remains must not be exposed to public view.

13 Results Archaeological Recording

- 13.1 The full report including all specialist assessments of artefact assemblages shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the archaeological contractor, Cornwall County Council Historic Environment Service and the appropriate museum. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.
- 13.2 This report will be held by the Cornwall and Scilly Historic Environment Record and made available for public consultation.

13.3 The report must contain:

- A concise non-technical summary of the project results.
- The aims and methods adopted in the course of the investigation.
- A discussion of the archaeological findings in terms of both the site specific aims and the desk based research.
- A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.
- All specialist reports and assessments.
- A summary of the archive contents and date of deposition.
- A context register with brief descriptions shall be included as an appendix.
- A copy of the brief and the approved WSI will be included as an appendix.

13.4 A contingency shall be made within the costs for full publication in an appropriate journal. The HEPAO will notify the contractor of such a need within four weeks of the receipt of the report.

14 Archive Deposition

14.1 An ordered and integrated site archive will be prepared in accordance with: *Management of Research Projects in the Historic Environment (MoRPHE) English Heritage 2006* upon completion of the project. The requirements for archive storage shall be agreed with the Royal Cornwall Museum. Please check the accessioning and deposition information on the Royal Cornwall Museum website and fill in the 'Notification of Fieldwork' form. Once this has been accepted an accession number will be provided by the museum.

<http://www.royalcornwallmuseum.org.uk/policies/>

14.2 If the finds are to remain with the landowner a full copy of the documentary archive shall be housed with the Cornwall County Record Office.

14.3 The archive including a copy of the written report shall be deposited with the Royal Cornwall Museum within two months of the completion of the full report and confirmed in writing with the HEPAO.

14.4 Where there is only a documentary archive this will be deposited with the Cornwall Record Office as well as the Courtney Library of the Royal Institution of Cornwall.

14.5 A copy of the report will be supplied to the National Monuments Record (NMR) in Swindon.

14.6 A summary of the contents of the archive shall be supplied to the HEPAO.

14.7 Only on completion of 14.1 to 14.5 (inclusive) will there be a recommendation for the discharge of any archaeological recording condition.

15 Monitoring

15.1 The HEPAO will monitor the work and should be kept regularly informed of progress.

- 15.2 Notification of the start of each stage of work shall be given preferably in writing to the HEPAO at least one week in advance of its commencement.
- 15.3 Requests for recording from the road scheme manager will be forwarded to the HEPAO and the HEPAO will be informed when the recording takes place.
- 15.4 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.

Appendix 2: Written Scheme of Investigation

Dudnance Lane to Wilson Way: Written Scheme of Investigation for historic building record, archaeological watching brief and controlled strip

Client: Cornwall Council (Strategic Planning and Transportation)

Client contact: John Foskett, Parsons Brinckerhoff

Client tel:

Client email:

Project background

Improvements are to be made to the urban road network in Pool as part of the East-West Link Road, namely Dudnance Lane and a new road linking this to Wilson Way roundabout.

The road scheme from Dudnance Lane to Wilson Way roundabout will require a controlled archaeological 'strip and record' of new road sections and an archaeological 'watching brief' on groundworks as required. An English Heritage level 2- 4 building recording is also required, to include the Tincroft Mine smithy building and yard on the south side of Dudnance Lane/Station Road and Penhellick settlement at approximately NGR: SW 6700 4080.

Planning application NR/08/00355/CC ENV was submitted on the 23rd July 2008 and was to undertake Phase 1 of highway improvement works (including widening) on Dudnance Lane, Station Road and Wilson Way and adjacent side roads and to construct a new road between Station Road and Wilson Way at Carn Brea Lane.

Following this Planning application PA09/01295/F was submitted on the 2nd October 2009 for the Phase 2 construction a new highway between Dolcoath Avenue and Dudnance Lane and to undertake highway works (and highway modification and improvement works) on Dudnance Lane, Chapel Road, Dolcoath Road, Dolcoath Avenue and adjacent side road.

Both of these applications were subject to conditions that required that:

'No development shall commence until the applicant has secured and implemented a programme of archaeological work in accordance with a written scheme of investigation to be submitted to and approved by the local planning authority. The approved road shall be implemented in accordance with the approved archaeological work'

A brief outlining the required recording works was prepared by Philip Markham, Historic Environment Planning Advice Officer (HEPAO) (28/11/2012). This brief sets out the requirements for a controlled archaeological strip, an archaeological watching brief and the production of a 'Level 2-4 building record' as defined by English Heritage in *Understanding Historic Building: A guide to good recording*

practice (2006). Historic Environment Projects was subsequently contacted by John Foskett and an estimate of costs was prepared and submitted to the client. This Written Scheme of Investigation (WSI) sets out the intended works, the methodology to be employed and arrangements for project monitoring.

Site history

Most of the features identified during the assessment of this area were associated with the tin and copper mines forming a belt of intensively used mining landscape across the Camborne-Pool-Redruth (CPR) area. These included surface remains (predominantly 19th and 20th century), with extensive areas of mine spoil, tracks and tramways, a well-preserved small foundry, and components of a 20th century mining complex at South Crofty, as well as industrial housing (Parkes 2007).

Buried industrial sites include leats, shafts, engine houses, mine service buildings, tramways, and quarries. Perhaps the most important buried mining sites are those with evidence for working in the early 18th century or before. The east-west line of the scheme (coinciding with the strike of the mineral lodes along the edge of the Carn Brea granite) means that it intersects many of the known early workings in the vicinity, and is likely to encounter others as yet unrecorded. For the later prehistoric period, place-name and map evidence indicate possible sites of a Bronze Age barrow and an Iron Age to Roman period round or enclosed settlement. The medieval rural landscape from which the mines and towns here developed is represented by remains of field systems derived from medieval 'open' or subdivided fields; one of these survives unusually well for this area. The scheme affects a settlement of medieval origin, continuously occupied but where buried artefacts or deposits are likely. Later field systems, adapting or extending the medieval farmland, are also represented (Parkes 2007).

Project extent

This comprises the proposed East-West Link Road, namely Dudnance Lane and a new road linking this to Wilson Way roundabout.

Aims and objectives

The principal aim of the study is to gain an archaeological record of the site prior to and during alterations.

The site specific aims are to:

- To record all historic buildings and structures prior to demolition.
- Establish the presence/absence of archaeological remains.
- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of the activity on the site.
- To identify any artefacts relating to the occupation or use of the site.
- To undertake palaeo-environmental sampling and analysis as appropriate.
- To provide further information on the archaeology of the site from any archaeological remains encountered.

Working methods

All recording work will be undertaken according to the Institute for Archaeologists *Standards and Guidance for Archaeological Investigation and Recording*. Staff will follow the IfA *Code of Conduct* and *Code of Approved Practice for the Regulation of Contractual Arrangements in Archaeology*. The Institute for Archaeologists is the professional body for archaeologists working in the UK.

Historic building record

An English Heritage level 2-4 record of the Tincroft Mine smithy building and yard and a single cottage relating to Penhellick settlement will be undertaken.

As part of the building record the following aspects will be considered:

- Site layout and organisation.
- Ground make-up of the surface (concrete, foundation remains, stub walls, metal, ceramics, etc.) and dumped material.
- Character.
- Function.
- Materials, methods of construction.
- Internal arrangement details of any foundations.
- Fenestration.
- Original fixtures and fittings.
- Subsequent fixtures and fittings.
- Evidence of use and status.
- Relationship/relevance to the Outstanding Universal Value (OUV) of the Mining World Heritage Site.
- Date/period of initial builds and subsequent alterations.
- The mapped recorded features will be linked to earlier mapped features and photographic evidence where possible.

As part of the building record measured floor plans of the two buildings will be created. Analysis of the buildings and structures will be undertaken on site (recorded as notes) to allow a description to be written up at the archive stage and photographs of building elevations will be annotated to allow interpretation.

Photographic recording

To include:

1. Black and white photographs using a 35mm camera on fine grain archive quality film.
2. Supporting colour photographs taken with a digital camera (with a resolution of 5MP or higher), to be used to illustrate the report and for possible presentation purposes.

The photo record will comprise:

- general views
- building elevations
- Interiors
- examples of structural, industrial and architectural detail

Methodology for the archive standard photography is set out as follows:

- Photographs of details will be taken with lenses of appropriate focal length.
- A tripod will be used to take advantage of natural light and slower exposures.

- Difficulties of back-lighting will be dealt with where necessary by balancing the lighting by the use of flash/halogen lights.
- A metric scale will be included in all views, except where health and safety considerations make this impractical.

Controlled archaeological strips and watching brief

Ground works associated with the development may disturb buried remains of 18th 19th and 20th century industrial activity and there may also be traces of prehistoric/Romano-British activity.

The archaeological investigation will comprise a controlled strip in areas of proposed groundworks that extend beyond the existing road layout and also an archaeological watching brief along the remaining sections of existing road corridor (neither are included in the supplied estimate – Thomas 23/1/2013).

The archaeological programme will follow three stages: fieldwork; archiving, and archive report production. Where significant deposits are encountered further stages of assessment; analysis; final publication may be required.

Archaeological Recording

The site works in the area of the controlled soil strip should be carried out under archaeological supervision. A mechanical excavator will be used to strip the site. Modern deposits (for example, concrete or hard standing) may be removed by a toothed bucket. Once the overburden has been removed a toothless bucket will be used. Any significant archaeological features exposed will be carefully excavated by hand and archaeologically recorded by written description, plan, section and photographic record as appropriate by an HE Projects archaeologist.

During the archaeological recording the archaeologist will identify and record any archaeological features that are revealed in the excavated area; the level of recording will be appropriate to the character/importance of the archaeological remains.

Where necessary the detailed archaeological recording may include:

- Excavation of archaeological features exposed and plotting them onto a base map.
- Production of plans and section drawings of the excavated features and recording of features using a continuous numbering system.
- Retrieval of artefacts.

Recording: general

- A location plan will be made, plotting the excavated areas/features onto the existing plan.
- The location of features recorded during the excavation will be plotted on drafting film. Plans and sections will be created where appropriate.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence. All contexts recorded will be recorded via the medium of HE pro forma context recording sheets.
- Registers of drawings, photographs, finds and contexts, samples will be maintained during the fieldwork.
- The excavated spoil will be carefully inspected for finds.

Site planning policy

- Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the prepared location map

and to the national grid; all drawings will include standard information: site details, personnel, date, scale and north-point.

- Site plans will be drawn at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.
- Site drawings (plans and sections) will be digitised and converted into AutoCAD drawings.

Photographic record: excavation

- The photographic record will consist of prints in black and white together with the negatives. Digital photography will be used for report illustration.
- For both general and specific photographs, a photographic scale will be included.
- In the case of detailed photographs a north arrow will be included if appropriate.
- The photographic record will be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.

Finds

- Significant finds will be retained (all finds pre dating 1800 and diagnostic modern find, for example pottery with makers marks, etc) from each archaeological context excavated. The collection policy will be reviewed during the excavation.
- All retained finds, where appropriate, will be washed.
- Retained finds where appropriate, will be marked with the site code and context number.
- The requirements for conservation and storage will be agreed with the appropriate museum.
- Finds work will be to accepted professional standards and adhere to the Institute for Archaeologists' *Guidelines* (IFA 2001b).

Sampling

There may be some opportunity for environmental sampling during the course of the work.

- The English Heritage Advisor for Archaeological Science will be consulted for advice if required (Vanessa Straker 0117 975 0689).
- Environmental sampling will be guided by *Environmental Archaeology* (English Heritage 2004).
- The archaeologist undertaking the excavation will assess the potential for environmental sampling.
- If suitable deposits are identified the following types of sample may be taken as appropriate:
 - Bulk sampling
 - Monolith sampling
 - Macro & Micro Flora Analysis (including pollen analysis)
 - Macro & Micro Fauna Analysis
 - Radio-carbon dating for artefact analysis

Creation of site archive

To include:

- Archiving of black and white photographs to HER standards. All monochrome photographs will be archived using the HE photo database.
- Digital colour photographs (stored according to HER guidelines and copies of images made available to the client).
- A detailed site/building descriptions.
- Preparation of finished drawings.
- Completion of the English Heritage/ADS OASIS online archive index.

Archive report

A written report will include:

- Summary
- Project background
- Aims and objectives
- Methodology
- Location and setting
- Designations
- Site history
- Archaeological results
- Chronology/dating evidence
- Significance
- Conclusions
- References
- Project archive index
- Supporting illustrations: location map, historic maps, plans, elevations/sections, photographs

A paper copy and a digital (PDF) copy of the report, illustrations and any other files will be held in the Cornwall HER. Paper copies of the report will be distributed to the client, to local archives and national archaeological record centres.

Archive deposition

An index to the site archive will be created and the archive contents prepared for long term storage, in accordance with HE standards.

The archiving will comprise the following:

1. All correspondence relating to the project, the WSI, a single paper copy of the report together with an electronic copy on CD, stored in an archive standard (acid-free) documentation box
2. A2 drawn archive storage (plastic wallets for the annotated record drawings)
3. Archive standard negative holders and archive print holders, to be stored in the HE Projects system until transferred to the Royal Cornwall Museum.
4. The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.

Timetable

The first stage building recording is anticipated to be commenced during March 2013 and this will be followed by a second stage which will include the controlled soil and watching brief. HE will require at least two weeks notice before commencement of work, in order to allow to allocate field staff time and arrange other logistics.

The archive report will be completed within 3 months of the end of the fieldwork. The deposition of the archive will be completed within 3 months of the completion of the archive report.

Monitoring and Signing Off Condition

Monitoring of the project will be carried out by Phil Markham, Historic Environment Planning Advice Officer. Where the Historic Environment Planning Advice Officer is satisfied with the archive report and the deposition of the archive written discharge of the planning condition will be expected from the local planning authority (LPA).

Monitoring points during the study will include:

- Approval of the WSI
- Completion of fieldwork
- Completion of archive report
- Deposition of the archive

Historic Environment Projects

Historic Environment Projects is the contracting arm of Historic Environment, Cornwall Council (HE). HE employs some 20 project staff with a broad range of expertise, undertaking around 120 projects each year.

HE is committed to conserving and enhancing the distinctiveness of the historic environment and heritage of Cornwall and the Isles of Scilly by providing clients with a number of services including:

- Conservation works to sites and monuments
- Conservation surveys and management plans
- Historic landscape characterisation
- Town surveys for conservation and regeneration
- Historic building surveys and analysis
- Maritime and coastal zone assessments
- Air photo mapping
- Excavations and watching briefs
- Assessments and evaluations
- Post-excavation analysis and publication
- Outreach: exhibitions, publication, presentations

Standards



HE is a Registered Organisation with the Institute for Archaeologists and follows their Standards and Code of Conduct.

As part of Cornwall Council, the HES has certification in BS9001 (Quality Management), BS14001 (Environmental Management), OHSAS18001 (Health, Safety and Welfare), Investors in People and Charter Mark.

Terms and conditions

Contract

HE Projects is part of Historic Environment, Cornwall Council. If accepted, the contract for this work will be between the client and Cornwall Council.

The views and recommendations expressed will be those of the HE projects team and will be presented in good faith on the basis of professional judgement and on information currently available.

Project staff

The project will be managed by a nominated Senior Archaeologist who will:

- Discuss and agree the detailed objectives and programme of each stage of the project with the client and the field officers, including arrangements for health and safety.
- Monitor progress and results for each stage.
- Edit the project report.
- Liaise with the client regarding the budget and related issues.

The project team is expected to include the following:

Nigel Thomas BA MIFA

Senior Archaeologist responsible for management of projects relating to historic building recording and surveys of historic landscapes. Past work has included recording and structural analysis at Launceston and Restormel Castles, medieval chapels at Rame, Bodmin and Hall (Bodinnick), as well as landscape surveys at Lanhydrock park and Godolphin gardens. Project manager for historic building analyses at Tintagel Old Post Office, Cotehele House, St Michael's Mount summit complex and Trevice for the National Trust. Project team leader for the Lostwithiel Town Characterisation Study. Member of the IfA Buildings Group and Survey and Illustration Group.

Joanna Sturgess BA

Archaeologist with HE, responsible for undertaking the Basset (Bartle's) Foundry Archaeological assessment (Sturgess 2008) with a wide range of experience in recording historic buildings, landscapes, excavation and post-excavation. Past historic building works have included Cutmadoc Farmhouse, Lanhydrock; City Wharf, Truro; Harvey's Foundry, Hayle; Boswednack Serpentine works, Porthmeor farm and various mining sites. Other projects include Gwithian's past excavations, Lemon Quay excavation, Goonhilly Earth Station survey, Lower Boscaswell and

Trevesa in West Penwith landscape surveys. Expertise includes archaeological use of CAD software and survey.

Specialists (may include one or more of the following)

John Allan MPhil – Medieval/post-medieval pottery specialist: John is the leading authority on medieval and post-medieval pottery in south- west England and author of many publications. He will carry out the pottery assessment and analysis in the event of medieval or post-medieval pottery being recovered

Henrietta Quinnell BA, MIFA, FSA – Prehistoric, Roman, post-Roman pottery: Henrietta is a freelance pottery specialist and the leading authority on prehistoric pottery in the south-west. She will carry out the pottery assessment and analysis in the event of prehistoric pottery being recovered.

Julie Jones BA – Archaeobotanist: An experienced freelance archaeobotanical specialist based in Bristol, Julie has carried out palaeoenvironmental assessments and analyses for numerous HES projects.

Dana Challinor MA, MSc – Freelance Charcoal Specialist: Dana's main area of expertise is charcoal analysis and wood species identification, but she also has experience with charred plant remains. For her Masters degree she specialised in Archaeobotany and received a distinction for her dissertation on charcoal in Bronze Age cremation burials. She has produced numerous assessment and evaluation reports, as well as reports for publication in journal and monograph formats and was formerly Head of the Environmental Department at Oxford Archaeology. She will undertake assessment and analysis of any suitable charcoal samples, including identification of samples suitable for radiocarbon dating.

Ralph Fyfe, PhD, Palynologist: Ralph is lecturer in environmental change in the School of Geography at the University of Plymouth. He has carried out numerous archaeological evaluations for a variety of organisations, including English Heritage, County Councils, National Parks and Archaeological Consultancies and will undertake assessment and analysis of pollen samples if required.

Laura Ratcliffe BSc - Conservationist: Laura graduated In Archaeological Conservation from Cardiff University in 2001. Since then she has gained a wide variety of experience both on excavations and in a lab working on a wide variety of archaeological and historical material. She was based at the Royal Cornwall Museum where she was the museum's Collections Manager. Laura is now freelance.

Radiocarbon Dating Laboratory - Scottish Universities Environmental Research Centre, Radiocarbon Dating Laboratory (University of Glasgow), Scottish Enterprise Technology Park, Rankine Avenue, East Kilbride G75 0QF

Report distribution

Paper copies of the report will be distributed to the client, to local archives and national archaeological record centres.

A digital copy of the report, illustrations and any other files will be held in the Cornwall HER and also supplied to the client on CD or other suitable media.

Copyright

Copyright of all material gathered as a result of the project will be reserved to the Historic Environment, Cornwall Council. Existing copyrights of external sources will be acknowledged where required.

Use of the material will be granted to the client.

Freedom of Information Act

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

HE will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received HE may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Health and safety statement

HE follows the Council's *Statement of Safety Policy*. For more specific policy and guidelines HE uses the manual *Health and Safety in Field Archaeology* (2002) endorsed by the Standing Conference of Archaeological Unit Managers and also the Council for British Archaeology's Handbook No. 6 *Safety in Archaeological Field Work* (1989).

Prior to carrying out on-site work HE will carry out a Risk Assessment.

Insurance

As part of Cornwall Council, HE is covered by Public and Employers Liability Insurance, with a policy value of £50m. The Council also has Professional Negligence insurance with a policy value of £5m.

Jo Sturgess

Archaeologist

18/2/2013

Historic Environment Projects

Cornwall Council