

Barn Range at West Penstroda,
Waterloo, Bodmin, Cornwall
Historic Building Record



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The Project Manager was Jo Sturgess.

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.

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Contents

1	Summary	1
2	Introduction	3
2.1	Project background	3
2.2	Aims	3
2.3	Methods	3
2.3.1	Desk-based assessment	3
2.3.2	Fieldwork	3
2.3.3	Post-fieldwork	4
3	Location and setting	4
4	Designations	4
5	Site history	5
6	Historic development of the building	6
7	Building description	7
7.1	Shippon and threshing barn	7
7.1.1	Front, South-east elevation	7
7.1.2	Rear North-west elevation	7
7.1.3	South-west elevation	8
7.1.4	North-east elevation	8
7.1.5	Interior	8
7.2	Store/calf house and loft	9
7.2.1	Front, South-east elevation	9
7.2.2	Rear North-west elevation	9
7.2.3	North-east elevation	9
7.2.4	Interior	10
8	References	10
8.1	Primary sources	10
8.2	Publications	10
8.3	Websites	11
9	Appendix 1: Written Scheme of Investigation	19

List of Figures

- Fig 1 Location map.
- Fig 2 Location of barn range (outlined in red) and Grade II Listed farmhouse (in yellow).
- Fig 3 Blisland Tithe Map, 1839.
- Fig 4 First Edition of the Ordnance Survey 25 Inch Map, c1880.
- Fig 5 Second Edition of the Ordnance Survey 25 Inch Map, c1907.
- Fig 6 Elevations and plans created by Mike Warne and Associates dated 1996.
- Fig 7 Ground and first floor annotated phase plans.
- Fig 8 Annotated elevations.
- Fig 9 South-east (front) elevation of barn range.
- Fig 10 South-east (front) elevation of barn range.
- Fig 11 South-east (front) elevation of shed/calf house.
- Fig 12 North-west (rear) elevation of shed/calf house.
- Fig 13 North-west (rear) elevation of shippon and threshing barn.
- Fig 14 South-west elevation of shippon and threshing barn.
- Fig 15 North-west and north-east elevations of threshing barn and shed/calf house.
- Fig 16 North-east elevation of shed/calf house.
- Fig 17 Interior of shippon and threshing barn, south-east (front) wall.
- Fig 18 Interior of shippon and threshing barn, north-west (rear) wall.
- Fig 19 Interior of shippon, slit ventilator in north-west (rear) wall.
- Fig 20 Interior of shippon and threshing barn, north-east wall.
- Fig 21 Interior of shed/calf house, south-west wall. North-east elevation of shippon and threshing barn.
- Fig 22 Interior of shed/calf house, north-west (rear) wall.
- Fig 23 Interior of shed/calf house, step in blocked door opening in north-west (rear) wall.
- Fig 24 Interior of shed/calf house, north-east wall.
- Fig 25 Interior of shed/calf house, south-east (front) wall.
- Fig 26 South-east elevation of farmhouse with barn range to rear left.

Abbreviations

CAU	Cornwall Archaeological Unit
CIfA	Chartered Institute for Archaeologists
CRO	Cornwall Record Office
HER	Cornwall and the Isles of Scilly Historic Environment Record
NGR	National Grid Reference
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey

1 Summary

Cornwall Archaeological Unit was commissioned by Tim Baker to carry out a historic building record prior to the conversion of a barn range at West Penstroda, Waterloo, Bodmin located at NGR: SX 11730 72417). Conditional planning permission for the conversion of the building to form a three bedroom dwelling (application number PA18/01039) has now been granted. Condition 3 of the planning consent required a programme of archaeological work to be undertaken which included a historic building record to be made of the building. The historic building record (equivalent to a Historic England level 2-3 building survey) has been undertaken as a mitigation measure for the impacts of the conversion on the building.

West Penstroda is a small farming settlement on Bodmin Moor which dates back to the medieval period. It lies within an Area of Outstanding Natural Beauty (AONB) and comprises a single farmhouse of probable early 17th century date surrounded by several historic farm buildings. The barn range lies immediately west of, and within the curtilage of, the farmhouse which is a Grade II Listed Building.

The barn range now comprises two adjoining buildings; a two-storey building to the south-west and a one and a half storey building to the north-east. The two-storey south-western building was built to incorporate a shippon (cow house) at ground floor level and a threshing barn at first floor level. The smaller adjoining building was designed as either a store or quite possibly a calf house with a hayloft above. This building once continued north-eastwards in the form of a lean-to and small walled yard which was most likely designed as a piggery but has since been removed.

Design and construction detail indicate that both buildings within the barn range were constructed during the early 19th century, and structural evidence suggests that the two-storey shippon and threshing barn was built first during phase 1 with the store (possible calf shed) and adjoining lean-to and yard (now removed) being added at a slightly later date during phase 2.

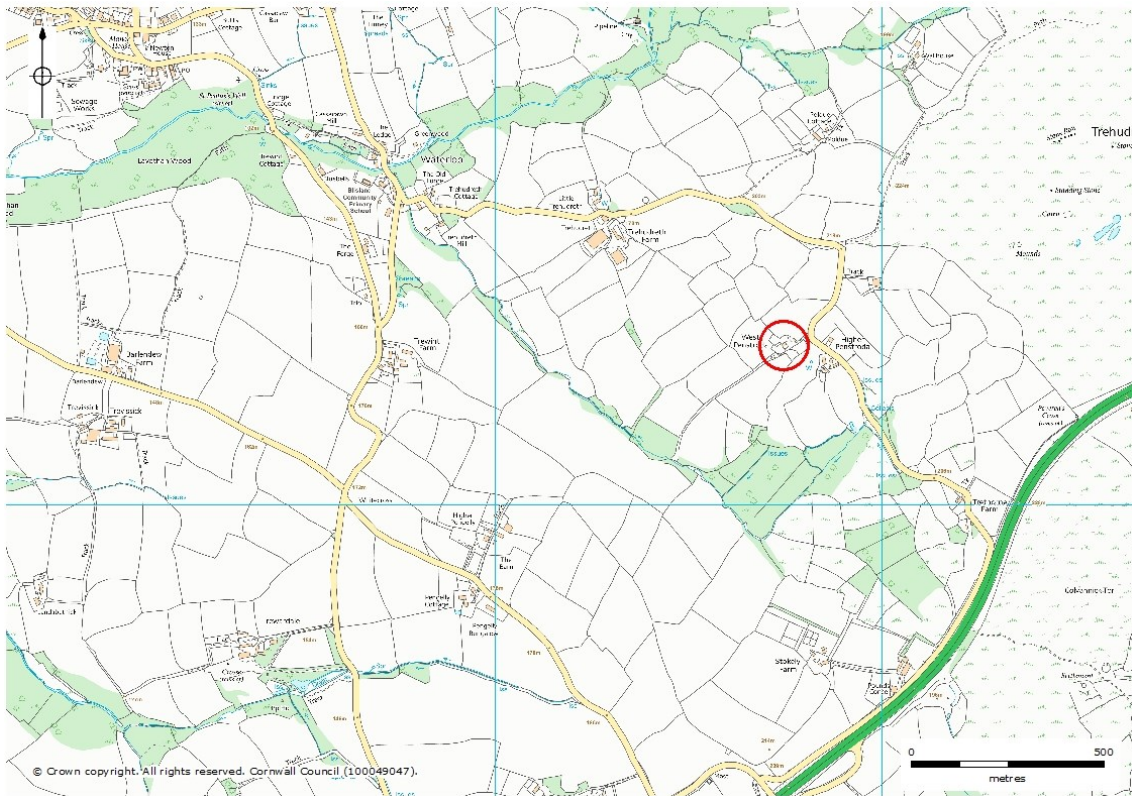


Fig 1 Location map.

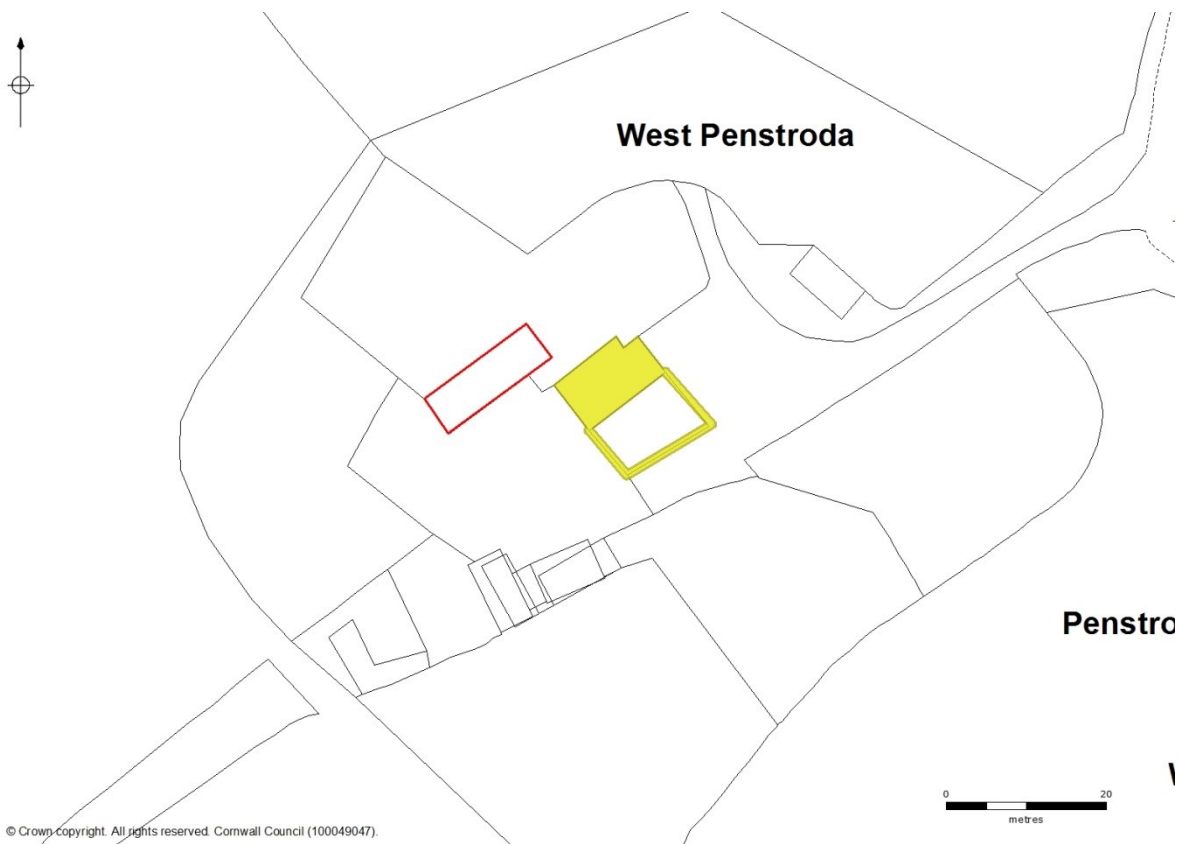


Fig 2 Location of barn range (outlined in red) and Grade II Listed farmhouse (in yellow).

2 Introduction

2.1 Project background

This Historic building record was commissioned by Tim Baker (the owner of the property) in advance of the conversion of a barn range at West Penstroda (Figs 1 and 2). Conditional planning consent for the conversion of the building (application number PA18/01039) has now been granted. Condition 3 of the planning consent required a programme of archaeological work to be undertaken. The historic building record (equivalent to a Historic England level 2-3 building survey) has been undertaken as a mitigation measure for the impacts of the conversion on the building.

The requirements for building recording were determined by Phil Copleston, Senior Development Officer (Historic Environment, Cornwall Council) and are outlined in the Written Scheme of Investigation (WSI) prepared by CAU (see Appendix 1).

2.2 Aims

The principal aim was to produce the equivalent of a Level 2-3 historic building survey, as defined by Historic England (2016).

2.3 Methods

All recording work was undertaken according to Chartered Institute for Archaeologists (CIfA 2014) and Historic England (2016) guidance.

2.3.1 Desk-based assessment

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

- Cornwall HER.
- Images of England online listed buildings database.
- Early maps and photographs (see Section 9.1).
- Published histories (see Section 9.2).

2.3.2 Fieldwork

The equivalent of a Level 2-3 Building Survey (as defined by Historic England 2016) was produced.

Recording included exterior and interior descriptions with external and internal architectural features and detail annotated to copies of existing measured external elevations and ground floor plan supplied by the client.

Analysis of the fabric was undertaken on site (recorded as notes) to allow a description to be written up at the archive report stage.

Photographic recording included colour photography using a digital SLR camera (with a resolution of 10 million pixels or higher). Black and white photographs were also taken (the negatives to form a stable archive).

CAU follows Historic England guidance on digital image capture and file storage (2014).

The photo record comprised:

- General views.
- All external elevations.
- All internal room spaces.
- Examples of structural and architectural detail.

A metric scale was included in all views, except where health and safety considerations make this impractical.

2.3.3 Post-fieldwork

All site materials were prepared for long term storage. This included:

- Finalisation of measured drawings.
- Archiving of drawings, photographs, paperwork and digital files.
- Filing of digital colour photographs and limited image editing (eg, composition, lighting) where appropriate.
- Creation of an archive report.
- Completion of the Historic England OASIS record (online access to archaeological investigations).
- Preparation of CAU archive.

3 Location and setting

West Penstroda is located approximately 1.8km to the south-east of Blisland on the edge of Bodmin Moor at NGR: SX 11730 72417 (Figs 1 and 2). The settlement originated as a small, medieval farmstead and still retains its character as such. Surrounded by farmland and other small farming settlements, West Penstroda occupies a small area of land (approximately 1 hectare in size) set on land that slopes gently down to the south-west at a height of between 200m and 210m OD. It occupies the midway point of a south-west facing slope which leads down to a river valley of a tributary of the Blisland Stream and up to the top of Trehudreth Downs to the north-east. The farmstead comprises a centrally set, Grade II Listed farmhouse of probable early 17th century date surrounded by a scattering of historic farm buildings. The barn range is the largest of these farm buildings and is located immediately to the west of the farmhouse. A grassed area enclosed by Cornish hedges which lies immediately north-west of the barn range was originally the mowhay.

The underlying bedrock at West Penstroda consists of Trevoze slate formation but lies close to the Bodmin Moor granite intrusion (British Geological Survey).

4 Designations

The farmhouse at West Penstroda is a Grade II Listed Building and the barn range which lies immediately to the west is within its curtilage (Fig 26).

The Listed Building description for the farmhouse together with its garden walls is as follows:

BLISLAND SX 17 SW 9/40 West Penstroda and garden walls to front -GV II

House and garden walls to front. Circa early 17th century, possibly with earlier origins. Granite ashlar and stone rubble with large granite quoins. Slate roof with gable ends. Moulded granite parapet coping on right hand gable end with moulded granite circa 17th century end stack. Projecting stone rubble end stack with brick shaft on left hand gable end. Plan: Original plan uncertain and the house may have once been larger. The ground slopes down to the left. 2 room and through passage plan with entrance porch near centre. The interior was not accessible at time of survey (1986) although the owner described a possibly 17th century panelled screen on the right hand (higher) side of the passage and panelling possibly reused around the stair which has probably been inserted on the left hand side of the passage. Outshot containing dairy and back kitchen added across rear in circa 18th century. Exterior: 2 storeys. Asymmetrical possibly 2 or 3 window front, the left hand side of the house covered in a vigorous growth of foliage. Single storey circa 17th century granite porch with

slate roof and chamfered segmental arch, possibly with diagonal stops. Probably 3-light mullion window with hood mould to right and 16-pane sash above. Left hand side not fully visible. Interior: not accessible at time of survey. Granite rubble garden wall to front with chamfered granite coping, ramped on the left hand side wall. An interior inspection is likely to reveal several interesting features to this particularly unaltered and fine house which was probably built for a family of at least Yeoman status.

The whole of West Penstroda lies within the Bodmin Moor Area of Outstanding Natural Beauty (AONB).

5 Site history

The settlement of Penstroda, which lies within the Manor of Trehudreth, is first recorded in the 13th century in 1244 when it is spelt *Penstradou* (Gover 1948). The name is Cornish and contains the elements *pen* meaning 'head, top, end' and a plural of *stras* meaning 'flat valley, shallow valley' (Padel 1985). The 19th century maps indicate that the settlement historically contained two separate clusters of buildings (probably two separate farmsteads) but both were contained within the settlement of Penstroda. The present 'West Penstroda' is likely to be the earliest part of the settlement, dating back to the medieval period, since it contains the main, surviving, early 17th century farmhouse. The other cluster of buildings to the east (now 'Penstroda Barn') is likely to have been added as a separate farmstead at a later date.

Little is known about the layout of the medieval settlement but by the early 17th century the present farmhouse at West Penstroda had been constructed, possibly on the site of and perhaps incorporating part of an earlier house.

At this time the Marrett family resided at Penstrode and according to John Maclean, writing in 1868, William Marrett levied a fine against Humphry Kempe in Penstrode in 1613, and probably built the farmhouse at West Penstroda at around the same time (Maclean 1868).

Land ownership within the settlement at an early date is confused and it seems likely that several owners existed. In 1696 some of the land in and around Penstroda is recorded as part of the Lahydrock estate owned by the Robartes family. The settlement appears on the Lanhydrock Estate Atlas Volume VI 1696 as 'A scheme Penstraze (Penstroda) Medland and Treswiger all three tenements in the manor of Trehudreth in the parish of Blisland' (Holden, Herring and Padel 2010). Interestingly another Lanhydrock Estate plan shows 'Penstrode' at a much later date in c1880 (CRO ref: CL/P/612).

Other estate plans held in the archives of the Tremayne family of Heligan (CRO ref: T/1034- dated 1799) and in the archives of the Gilbert family of Trelissick (CRO ref: GB/11/1- dated c1830) and (CRO ref: GB/10/4/1- dated c1874) all include land at Penstroda. Unfortunately the Cornwall Records Office is now closed until 2019 due to a relocation of premises and the plans are not available to be viewed.

In the late 18th century the manors of Barlandew, Cassacawen, and Trehudreth (within which Penstroda is situated) belonged, for several years, to the family of Treise, formerly of Castle-Milford, in the parish of Tremayne. These three manors were purchased by John Wallis, Esq. of Bodmin, in 1809 (Lysons 1814).

The Tithe map for the parish of Blisland dated 1839 (Fig 3) shows that two separate farmsteads within 'Penstrode' had been established by this date (the present West Penstroda and Penstroda Barn). The corresponding Tithe Apportionment shows that John Wallis still owned West Penstroda at this date, but that it was leased to William Axworthy and occupied by Richard Thomas. The Tithe map (Fig 3) shows that the shippon and threshing barn and adjoining store/calf house and pens had been constructed by 1839 and the Apportionment names the enclosed plot of land to the north-west of the buildings as a 'mowhay'. Both the design of shippon and threshing

barn and store/calf house and the quarry drill marks seen on some of the granite masonry indicate that these buildings date to the early 19th century and were probably built during the ownership of John Wallis. Interestingly the Tithe map shows the farmhouse on a north-south alignment with a separate building to the west. However, the farmhouse is now aligned east-west. This may suggest that a former south wing was removed and the original eastern part of the building extended westward to join the small western building shown on the Tithe map.

By the time of the first edition Ordnance Survey map of c1880 (Fig 4) the farmhouse existed on its present footprint. This map shows the barn range as two adjoining buildings with a narrow building attached to the north-east of the store/calf house and a small, yard on the north-east side of it. On the north-west side of the shippon and threshing barn the ramp is shown as a flight of steps. Symons' Gazetteer of 1884 lists 'Penstroda' as containing three tenements and a common (Symons' Gazetteer 1884 in Bond 2007).

The 1881 census returns show that at that date Richard Roose was the farmer at West Penstroda. He lived there with his wife Elizabeth, their eight children and one of his nieces. By 1891 the census records show that the house was lived in by Richard Roose's eldest daughter, employed as a housekeeper, together with two of her siblings and her two children. There was clearly no resident farmer by 1891 and it seems possible that Richard Roose was the last farmer to live at West Penstroda.

The Second Edition OS map of c1907 (Fig 5) shows that little change had been made to the barn range since c1880. The shippon and threshing barn with its external steps and adjoining store/calf house appear unchanged, but at the north-east end a small, open yard is shown.

By the mid 20th century the barn range had fallen into disrepair and the first floor had been removed. The decay of the roofs soon followed and these too were removed (Tim Baker pers. comm.).

In 1999 an extension was added to the north-west side of the farmhouse. This resulted in the removal of a lean-to structure containing pens and a small walled yard adjoining the north-east side of the store/calf house. A short section of the north-west wall of the lean-to survives, indicating that it was part of the same build and therefore contemporary with the early 19th century store/calf house. Before the removal of the lean-to and walled yard these structures along with the existing barn range were recorded in a set of drawings including plan and elevations dated 1996 by Mike Warne and Associates Architectural Services (Fig 6).

6 Historic development of the building

The present barn range dates to the early 19th century. This date fits well with the architectural style and has also been evidenced by drill marks created when the granite building stone was quarried. Prior to 1800 wedges were used to split stones in quarries but from 1800 onwards round iron drills were used. The round drill marks identified in various parts of the building are approximately 2.5cm in diameter which indicate an early 19th century date. The range comprises two adjoining structures; a two-storey shippon and threshing barn to the south-west and a store or possible calf house with former loft over to the north-east. The two-storey shippon and threshing barn is the earliest part of the building constructed during phase 1. The adjoining store/calf house to the north-east appears to have been added as a later extension during phase 2, but also dates to the early 19th century and must have been added soon after the completion of the shippon and threshing barn. When the store/calf house was added during phase 2, an existing phase 1 loading hatch/door opening in the north-east wall of the threshing barn was extended downwards to create a taller door opening into the loft space of the store/calf house. Because the loading hatch/door of the threshing barn could no longer be used for loading purposes, a set of stone steps (now a ramp) were built along the rear elevation of the threshing barn creating new access to the threshing

floor for loading. The Tithe map (Fig 3) shows that both the shippon and threshing barn and store/calf house had been constructed by 1839.

Prior to 1999 a lean-to and small, walled yard had existed adjoining the north-east side of the store/calf house. A remaining section of the north-west wall of the lean-to indicates that it was built at the same time as the store/calf house during phase 2 in the early 19th century. Studying the plan and elevation drawings created in 1996 (Fig 6) it is clear that the lean-to and walled yard had been designed for housing animals and was quite possibly used originally as a piggery.

7 Building description

(See Figs 7 and 8 for phase plans and elevations).

The existing barn range comprises a two-storey shippon with threshing barn above at the south-west end and an adjoining store, or possible calf house with former loft over at the north-east end. Neither of the buildings retain their roofs, upper floors, windows, doors or internal divisions, and both now appear as shells formed by their external walls.

7.1 Shippon and threshing barn

This two-storey building formerly had a hipped roof. It was designed as a shippon with threshing barn above and was built during phase 1 in the early 19th century, prior to the adjoining, smaller store/calf house. The walls of the shippon and threshing barn are well built and constructed from randomly coursed granite rubble with neat, slatestone snecking, and the quoins, jambs and lintels are all constructed from dressed granite blocks. The walls are bonded with soft cream/beige earth mortar and have been pointed with a cream lime mortar. Adjoining and abutting the exterior face of the rear (north-west) wall there is a granite rubble-built ramp, probably added during phase 2, which gives access to the first floor threshing door.

7.1.1 Front, South-east elevation

(Figs 8-10).

The front elevation has three original door openings at ground floor level giving access to the shippon. The two door openings at either end are standard in size but the central opening is double width and once held double doors evidenced by the surviving iron pintles hinges on both jambs. Iron pintles hinges also survive on the south-west jamb of the south-west door opening and the north-east jamb of the north-east door opening. Each of the door openings has a large, dressed granite lintel and that over the central double door opening contains quarry drill marks of c2.5cm diameter.

At first floor level there are two window openings either side of a central, wide threshing door opening. Granite lintels survive over the two window openings but the lintel and walling above the door does not. Two square recesses are located high up, to the south-west of the north-eastern window opening and another two to the north-east of it. It seems likely that these are pigeon holes.

At the north-east end of the wall the granite quoins survive from the ground up to the top of the wall, and a straight joint is visible where the top of the store/calf house wall has been built up against them. Only the granite lintel of the store/calf house door opening has been tied into the quoin of the shippon and threshing barn.

7.1.2 Rear North-west elevation

(Figs 8, 12 and 13)

The rear elevation of the shippon and threshing barn now has a granite rubble ramp built up against its lower half. As indicated by the c1880 and c1907 OS maps this was probably once steps, but now the top surface is overgrown it is difficult to say if the steps survive below the earth and vegetation. It seems possible that this feature added

at a later date since it now appears to partially cover an original slit ventilator in the shippon wall.

At ground floor level in the rear wall there are two slit ventilators, airing and lighting the shippon. That to the north-east (as described above) is partially obscured by the rubble-built ramp. At first floor level there are two window openings either side of a central, wide threshing door opening. Granite lintels survive over the two window openings but the lintel and walling above the door does not survive.

The south-west end of the wall is now obscured by ivy and the quoin here is abutted by a Cornish hedge which encloses the mowhay to the north-west.

At the north-east end of the wall the granite quoins survive from the ground up to the top of the wall, and a straight joint is visible where the top of the store/calf house wall has been built up against them. Only the granite lintel of the store/calf house door opening has been tied into the quoin of the shippon and threshing barn.

7.1.3 South-west elevation

(Figs 8 and 14).

There are no features or openings in the south-west, end elevation, but the walling survives to full height.

7.1.4 North-east elevation

(Figs 8, 15 and 21).

This elevation was constructed originally as an external elevation. There are no openings at ground floor level, but at first floor level there is an original loading hatch/door opening with dressed granite lintel and jambs. The granite jambs reach down to approximately 1.5m below the lintel, but the opening was extended downwards by another 0.5m when the store/calf house building was added to the north-east to give access from the threshing barn to the store/calf house loft. The location of pitched roof line of the store/calf house is now visible as a cement scar on the north-east elevation of the threshing barn, with its apex located at the top of lintel over the loading door/hatch. Attached to the top of the wall there are three iron brackets that once supported the guttering.

7.1.5 Interior

(Figs 7 and 17-20).

The interior of the shippon and threshing barn now stands as an open shell with no roof or first floor. The ground floor surface is now obscured by earth and grass and no evidence for the location of cattle stall divisions could be seen.

The ground floor, designed originally as a shippon, has splayed, slit ventilators in the rear (north-west) wall and three door openings in the front (south-east) wall, all with granite thresholds and iron pintles hinges on which the doors were hung. The internal timber lintels of the door openings do not survive. There are two drill holes either side of the double central door opening which presumably once held iron hooks for keeping the doors open. Between the north-eastern and central door openings there is a square recess approximately 0.15m² of unknown function. In the rear (north-west) wall and the north-east wall small iron hoops survive for tethering animals or hanging hay. In the two end walls (north-east and south-west) there are three stones that protrude from the wall surface (one to the north-east and two to the south-west). These may have been associated with securing the ends of the timber stalls.

The first floor was originally designed as a threshing floor with two opposing threshing doors in the front and rear elevations, and lit by two splayed window openings either side of the doors in both elevations. The rear threshing door was accessed via the stone ramp (formerly steps). The north-eastern window openings in both elevations retain their internal timber lintels. In the north-east end wall there is an original loading door/hatch, enlarged at during phase 2 to create a door opening when the store/calf house was added to the north-east so that access could be gained to its loft. Either side of this door opening there are two square recesses/sockets approximately 0.15m² of

unknown function. Although the threshing floor has been removed, sockets in the front and rear walls show that it was supported by 17 closely set joists, and a border of render approximately 0.25cm high in the walling immediately above indicates where the threshing skirting boards were fixed. No evidence could be seen at the tops of the walls for the location of trusses associated with the former hipped roof.

7.2 Store/calf house and loft

This one and a half storey building formerly had a gable roof over the existing structure, but it did once include a single storey lean-to against the north-east gable end with a walled yard beyond. The exact purpose of the surviving building is unclear, but it may have provided a storage area or possibly a calf house at ground floor level with a hay/fodder loft at first floor level. It seems likely that the removed lean-to and yard served as a piggery. The store/calf house was constructed during phase 2 in the early 19th century and has been added to the larger shippon and threshing barn at a slightly later date. The walls are not as well built as those of the shippon and threshing barn. They are constructed from randomly coursed granite and slatestone rubble bonded with soft cream/beige earth mortar and are pointed with a cream lime mortar. The jambs and lintels are all constructed from granite blocks but are not dressed as well as those in the shippon and threshing barn. The store/calf house abuts and has been built up against the north-east wall of the shippon and threshing barn.

7.2.1 Front, South-east elevation

(Figs 8-10 and 11).

The front elevation has an original door opening at ground floor level giving access to the store/calf house. The fact there is a blocked door opening directly opposite in the rear wall suggests that both doors may have given access to a feeding passage along the south-west side of the ground floor, which indicates its possible use as a calf house. The granite lintel over the door opening has been cut into the quoin of the shippon and threshing barn and contains quarry drill marks of c2.5cm diameter, which indicate an early 19th century date. The walling above the lintel abuts the quoin of the shippon and threshing barn and has not been tied in. There are no other openings in this wall, but a scar to the north-east of the door opening shows the location of a removed section of walling which once abutted the building. The quoin at the north-east end of the wall is constructed from random rubble.

7.2.2 Rear North-west elevation

(Figs 8, 12 and 15).

The rear elevation of the store/calf house contains a blocked door opening directly opposite that in the front wall (possibly originally giving access to a feeding passage). The granite lintel over the door opening has been cut into the quoin of the shippon and threshing barn, and the walling above the lintel abuts it. There are no other openings in this wall, but at the north-east end the walling continues as a single build beyond the gable end of the store/calf house where it has been truncated. This indicates that the former lean-to structure (possibly a piggery) beyond was part of the same construction phase.

7.2.3 North-east elevation

(Figs 8 and 15-16).

This is the gable end of the store/calf house. There are no features or openings in this elevation and the apex of the gable has collapsed. At the north-west end a section of walling which once formed the north-west wall of the lean-to extends at right angles from the gable for a distance of 1.6m, where it has been truncated.

7.2.4 Interior

(Figs 7 and 21-25).

The interior of the store/calf house now stands as an open shell with no roof or first floor. The ground floor surface is now obscured by earth and grass and no evidence for the location internal divisions could be seen.

The ground floor, possibly designed originally as a calf house, has two opposing door openings which indicate that a feeding passage along the south-west side of the room may have existed. The door opening to the front (south-east) has a granite threshold and that to the rear (north-west) also has a granite threshold which steps up from the internal ground surface by 0.25m. The rear door opening has been blocked with granite rubble bonded with cream/beige earth mortar and also has remnants of cement pointing. The internal timber lintel of the rear door opening does not survive but the timber lintel in the front door opening does. In the rear (north-west) wall to the north-east of the blocked door opening a small iron hoop survives (possibly for tethering animals). In the two side walls (north-east and south-west) there are joist sockets showing that the loft floor above was supported by seven joists.

The first floor was originally designed in phase 2 as a hay/fodder loft. When it was added as an extension to the shippon and threshing barn, the existing phase 1 loading hatch/door in the north-east wall of the threshing barn was extended downwards to create a doorway which gave access directly from the phase 1 threshing floor into the phase 2 loft space. The enlargement of the lower section of the opening is clearly identifiable by its lack of dressed granite jambs. Either side of this door opening the former, pitched roof line of the store/calf house is visible as two lines of cement, with the apex reaching the top of the lintel of the loading hatch/door. On the south-east pitch line some lead flashing survives.

At the tops of the front (south-east) and rear (north-west) walls no evidence could be seen for the location of trusses associated with the former gable roof.

8 References

8.1 Primary sources

Ordnance Survey, c1880. 25 Inch Map First Edition (licensed digital copy at CAU)

Ordnance Survey, c1907. 25 Inch Map Second Edition (licensed digital copy at CAU)

Ordnance Survey, MasterMap Topography

Tithe Map and Apportionment, 1839. Parish of Blisland (licensed digital copy at CRO)

CRO ref: T/1034 Tremayne family of Heligan, St Ewe: Survey and valuation of East Newton, West Newton, Moyse great tenement, Moyse little tenement and Penstrode, made by John Stephens in 1799.

Gilbert of Trelissick, Feock:

CRO ref: GB/11/1 Plan, lands in Blisland, Helland and St Mabyrn c1830

CRO ref: GB/10/4/1 Plan, Penstrode and Wallis' lands, Blisland c1874,

8.2 Publications

Bond, C, 2007. *An Index to the Historical Place Names of Cornwall: Vol 2 - L to Z Cornwall*.

CIfA, 2014. *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*, CIfA, Reading

Gover, JEB, 1948. *Place-Names of Cornwall* (unpublished manuscript)

Historic England, 2016. *Understanding Historic Buildings: A guide to good recording practice*. Historic England, Swindon

Holden, P, Herring P and Padel, O, 2010. *The Lanhydrock Land Atlas: A Complete Reproduction of the 17th Century Cornish Estate Maps*, Cornwall

Lysons, Daniel and Lysons, Samuel 1814 *Magna Britannia: Volume 3 Cornwall*. T Cadell and W Davies, London. <http://www.british-history.ac.uk/magna-britannia/vol3/cxviii-clxxiv>

Maclean, J, Esq, 1868. *Parochial and Family History of the Parish of Blisland in the County of Cornwall*, London and Bodmin

Padel, O J, 1985. *Cornish Place-Name Elements*, Truro

8.3 Websites

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

<https://www.bgs.ac.uk/data/mapViewers/home.html>

9 Project archive

The CAU project number is **146829**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit

Electronic data is stored in the following location:

\\CAU\Archive\Sites\W\West Penstroda Barn Waterloo HBR 146829

Black and white photographs are stored under: GBP 2417

Historic England/ADS OASIS online reference: cornwall2-328449

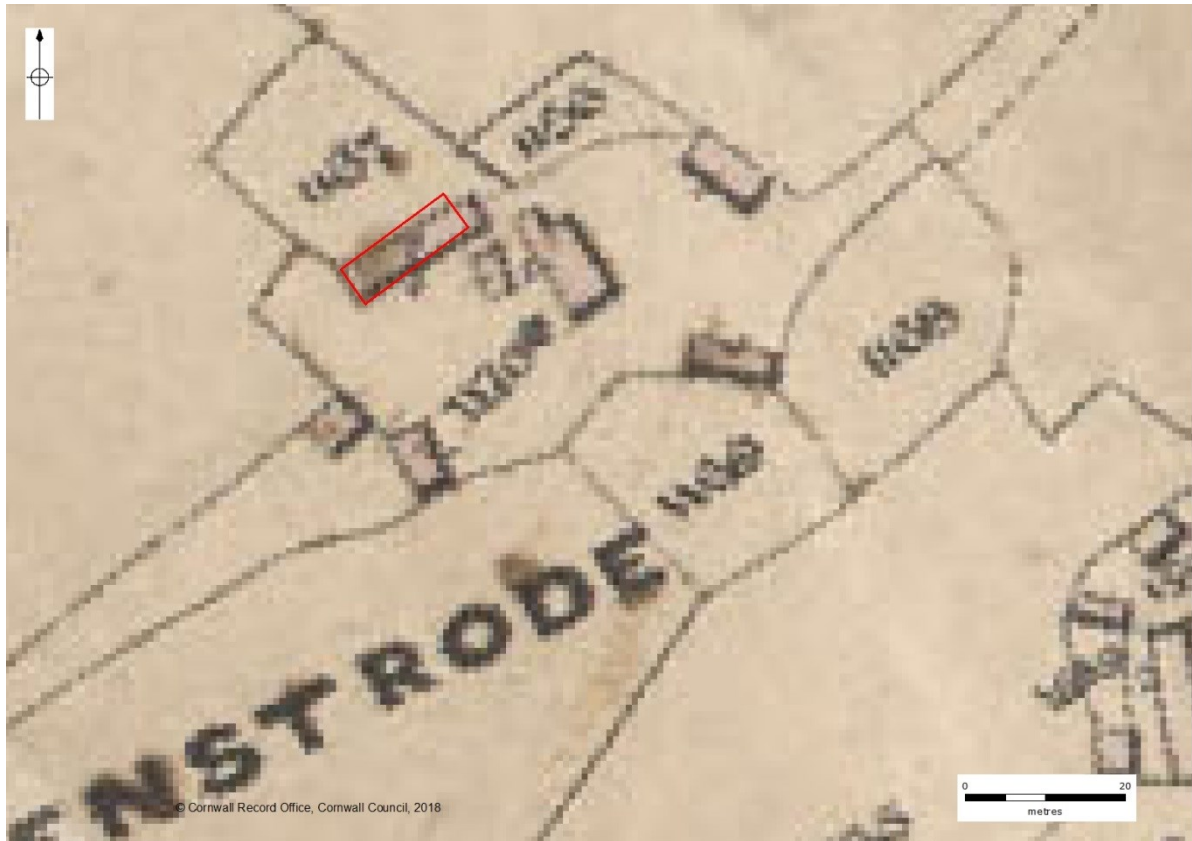


Fig 3 Blisland Tithe Map, 1839.

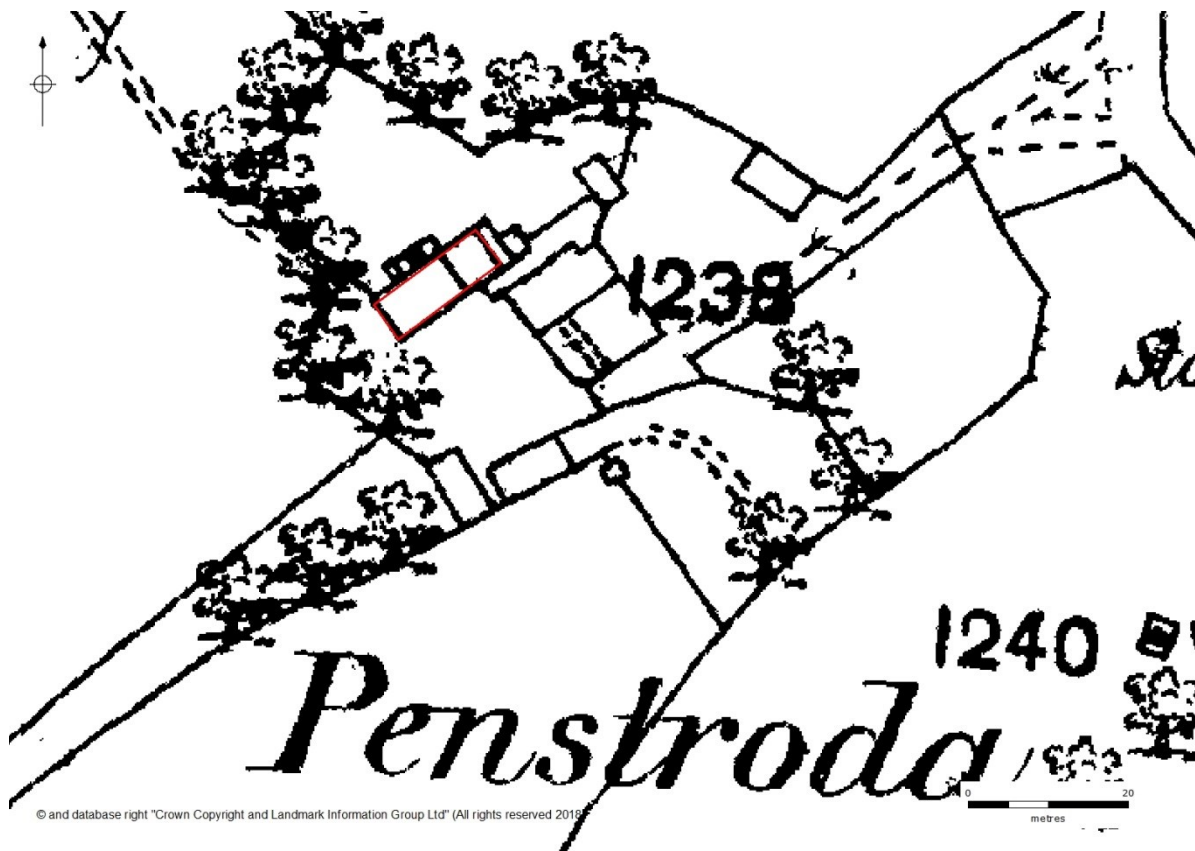


Fig 4 First Edition of the Ordnance Survey 25 Inch Map, c1880.

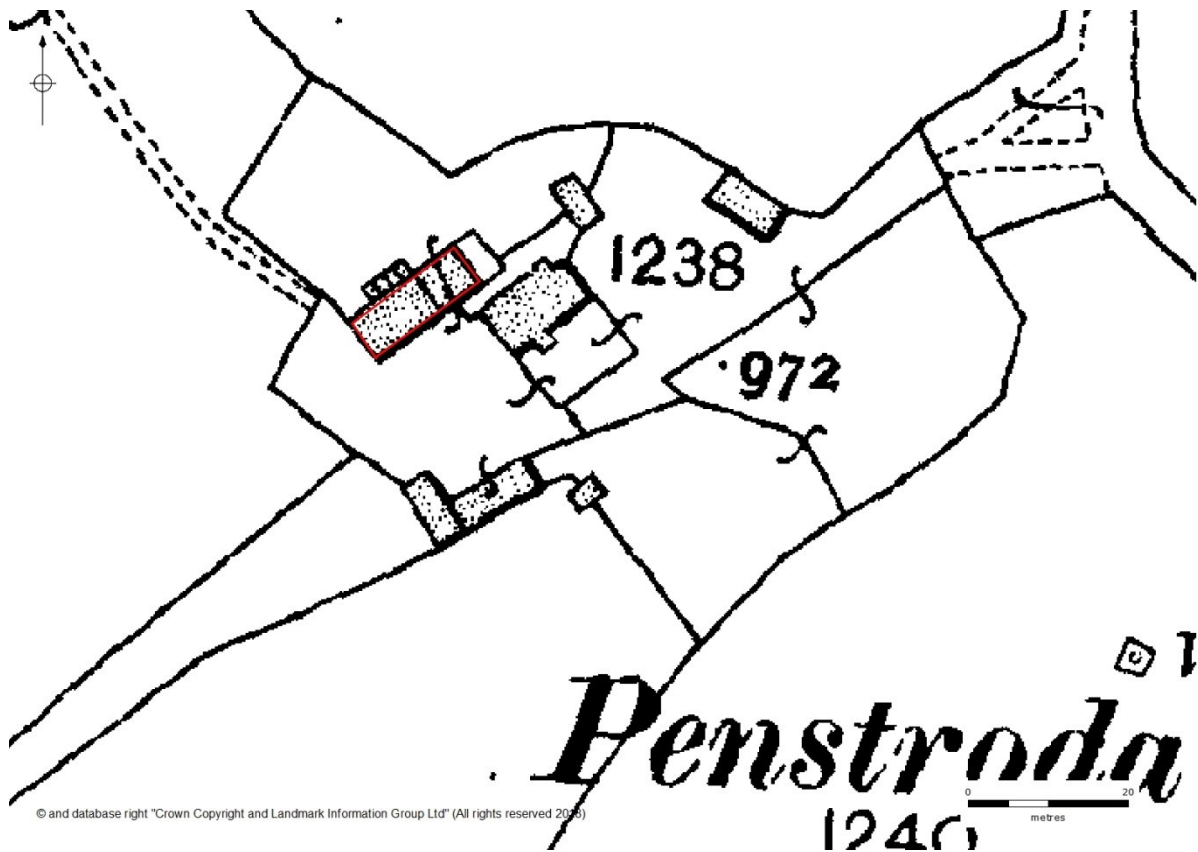


Fig 5 Second Edition of the Ordnance Survey 25 Inch Map, c1907.

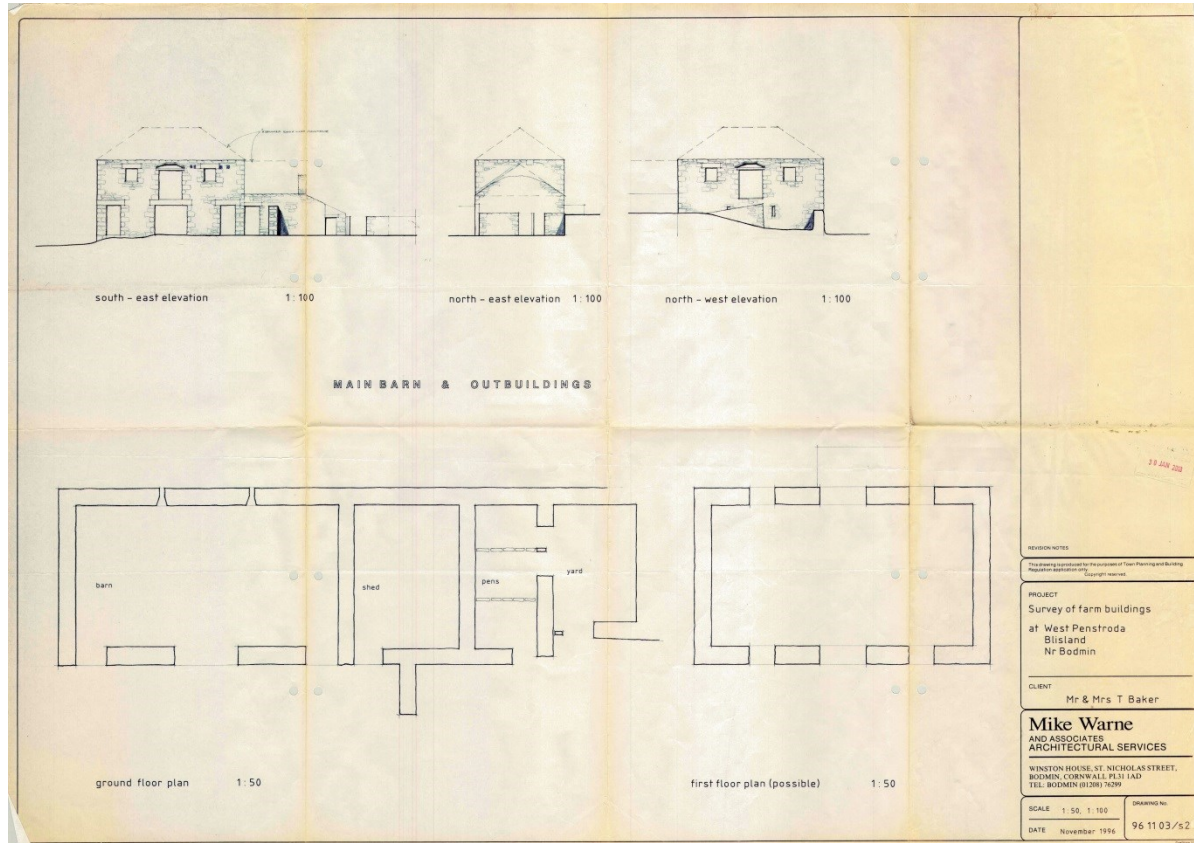
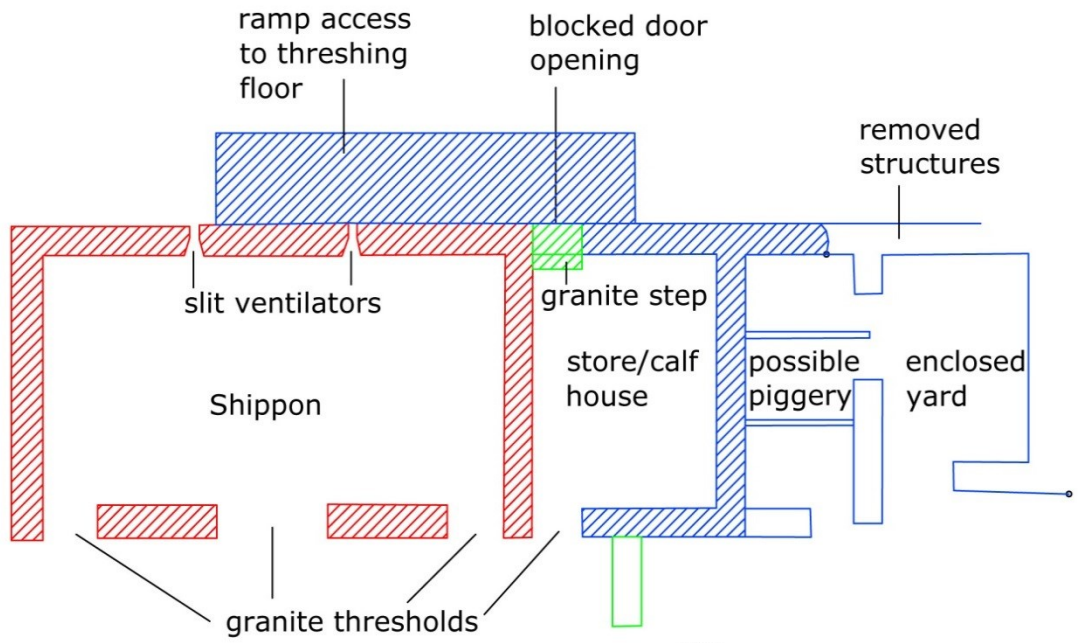


Fig 6 Elevations and plans created by Mike Warne and Associates dated 1996.

Ground Floor plan

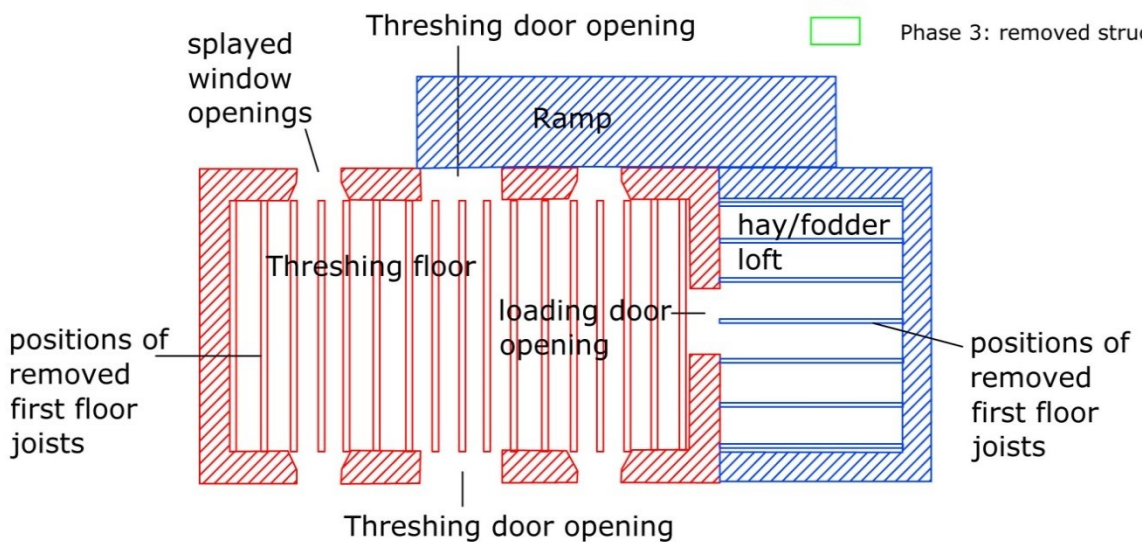


0 5m

KEY

- Phase 1: existing structure
- Phase 1: removed first floor joists
- Phase 2: existing structure
- Phase 2: removed structure
- Phase 2: removed first floor joists
- Phase 3: existing structure
- Phase 3: removed structure

First Floor plan



0 5m

Fig 7 Ground and first floor annotated phase plans.

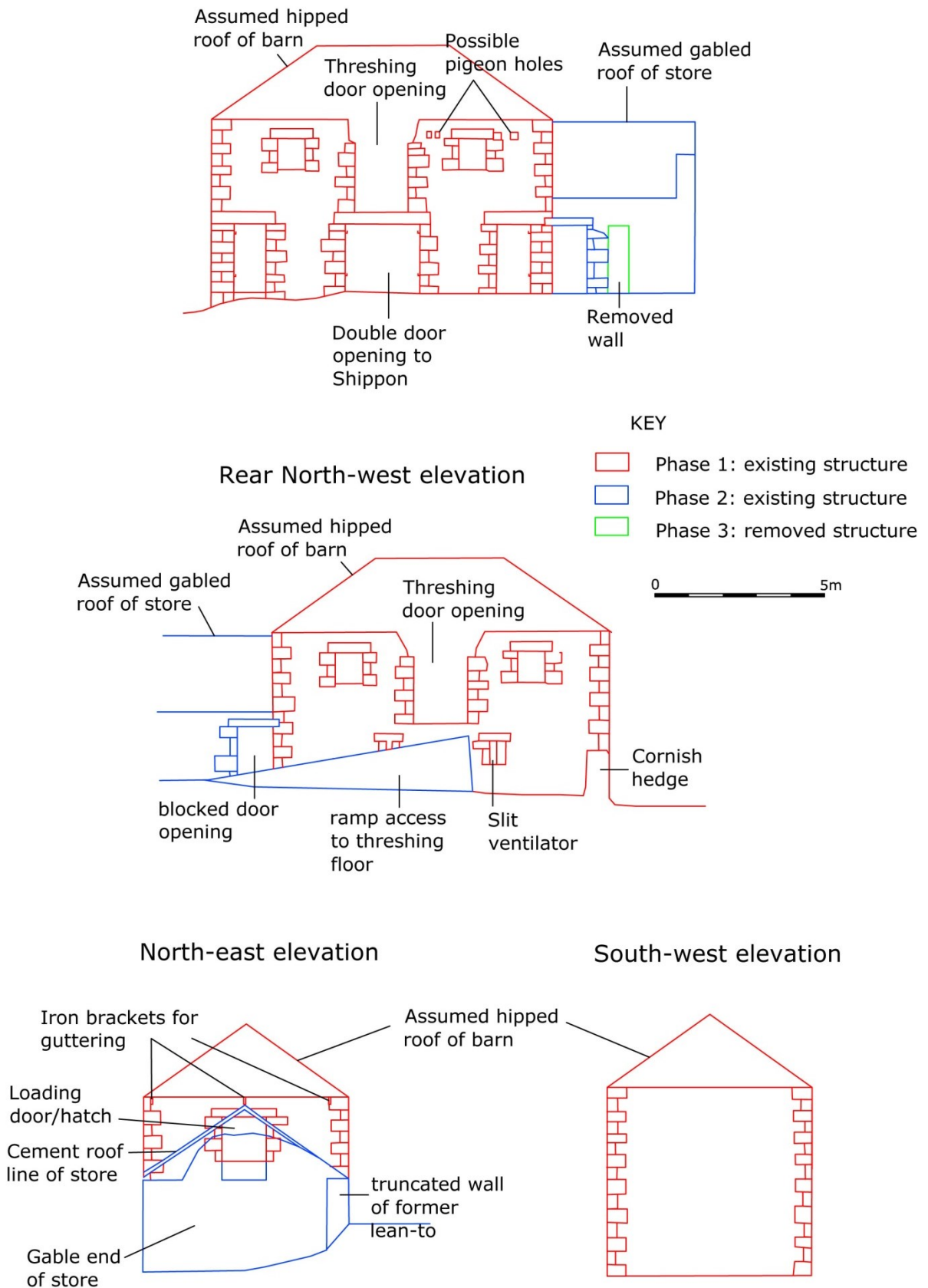


Fig 8 Annotated elevations.



Fig 9 South-east (front) elevation of barn range.



Fig 13 North-west (rear) elevation of shippon and threshing barn.



Fig 10 South-east (front) elevation of barn range.



Fig 14 South-west elevation of shippon and threshing barn.



Fig 11 South-east (front) elevation of shed/calf house.



Fig 15 North-west and north-east elevations of threshing barn and shed/calf house.



Fig 12 North-west (rear) elevation of shed/calf house.



Fig 16 North-east elevation of shed/calf house.



Fig 17 Interior of shippon and threshing barn, south-east (front) wall.



Fig 18 Interior of shippon and threshing barn, north-west (rear) wall.



Fig 19 Interior of shippon, slit ventilator in north-west (rear) wall.



Fig 20 Interior of shippon and threshing barn, north-east wall.



Fig 21 Interior of shed/calf house, south-west wall. North-east elevation of shippon and threshing barn.



Fig 22 Interior of shed/calf house, north-west (rear) wall.



Fig 23 Interior of shed/calf house, step in blocked door opening in north-west (rear) wall.



Fig 25 Interior of shed/calf house, south-east (front) wall.



Fig 24 Interior of shed/calf house, north-east wall.



Fig 26 South-east elevation of farmhouse with barn range to rear left.

10 Appendix 1: Written Scheme of Investigation

Barn at West Penstroda: Written Scheme of Investigation for historic building recording

Client: Tim Baker
Planning ref: PA18/01039

Project background

This document sets out a Written Scheme of Investigation (WSI) by Cornwall Archaeological Unit (CAU) for a historic building record of a barn at West Penstroda, Waterloo, Bodmin, Cornwall.

The barn is located within the settlement at NGR: SX 11730 72417 immediately west of, and within the curtilage of the Grade II Listed farmhouse. The farmhouse is likely to date to the early 17th century whilst the barn is probably later but had clearly been constructed by c1840 as it is shown on the Blisland parish Tithe map.

The building comprises a two-storey barn to the south-west with adjoining single-storey store and animal pens to the north-east. It has not been used as a farm building for many years and has now fallen into a state of disrepair. The roof and first floor have long since gone and the building now stands as a granite rubble-built shell.

Conditional Planning Permission has now been given for the refurbishment and conversion of the former barn to form a three bedroom dwelling (Planning Application: PA18/01039).

The recording work has been requested by Cornwall Council's Senior Development Officer Historic Environment (SDHOE) and is required to fulfil condition 3 of the planning consent granted by Cornwall Council under application number PA18/01039. The planning condition states that:

A) No demolition/development shall take place/commence until a programme of archaeological work including a Written Scheme of Investigation has been submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of significance and research questions, and:

1. The programme and methodology of site investigation and recording
2. The programme for post investigation assessment
3. Provision to be made for analysis of the site investigation and recording
4. Provision to be made for publication and dissemination of the analysis and records of the site investigation
5. Provision to be made for archive deposition of the analysis and records of the site investigation
6. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation

B) No demolition/development shall take place other than in accordance with the Written Scheme of Investigation approved under condition (A).

C) The development shall not be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition (A) and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

D) The archaeological recording condition will normally only be discharged when all elements of the WSI including on site works, analysis, report, publication (where applicable) and archive work has been completed.

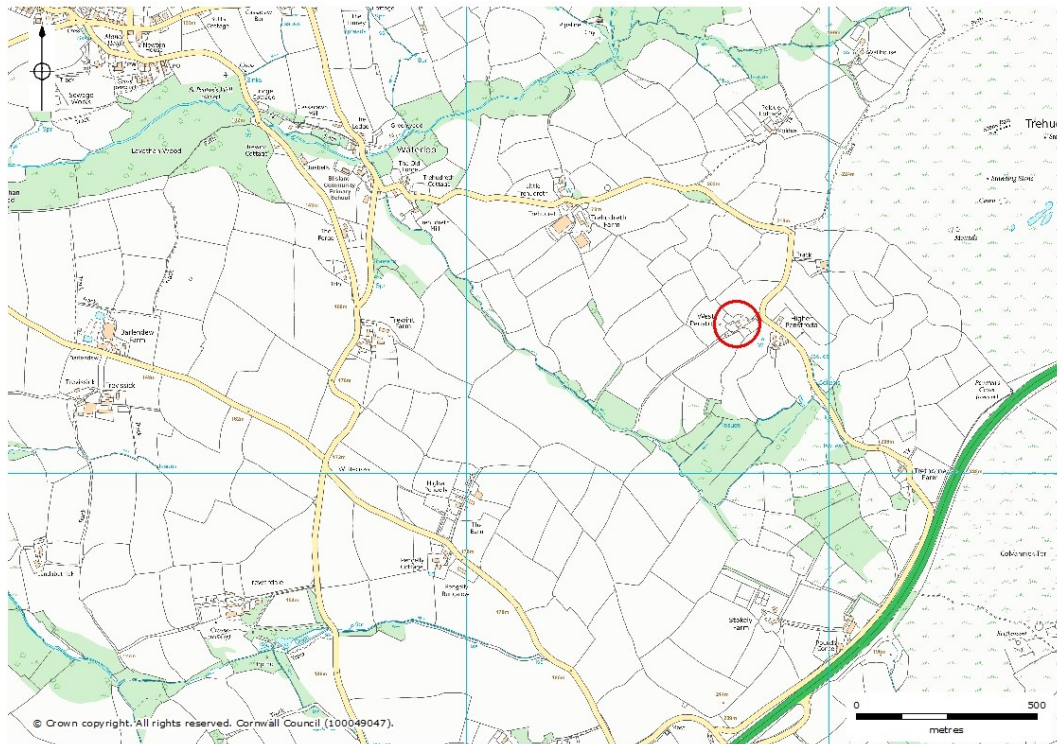


Figure 1: site location map (West Penstroda circled in red).

Site history

The historic background for the settlement of Penstroda given in Cornwall's Historic Environment Record (HER) is as follows:

The settlement of Penstroda is first recorded in 1244 when it is spelt *Penstradou* (Gover 1948). The name is Cornish and contains the elements *pen* meaning 'head, top, end' and a plural of *stras* meaning 'flat valley, shallow valley' (Padel 1985).

The Listed Building description for the farmhouse describes it as probably early 17th century in date. The barn and farmhouse are both shown on the Tithe map of c1840.

Project extent

Historic building recording will cover the building and its immediate curtilage.

Aims and objectives

The principal aim of the study is to gain a better understanding of the building.

The objectives are to:

- Produce an accurate record of the building and its external and internal features prior to alterations (Level 2-3 as defined by Historic England 2016).
- Better understand the functions and historic development of the building.
- Outline key features and fittings which are of high significance.

Working methods

All recording work will be undertaken according to the Chartered Institute for Archaeologists (CIfA) guidance (CIfA 2014; 2014a; 2014b; 2014c; 2017). Staff will follow the CIfA *Code of Conduct* (2014d). The Chartered Institute for Archaeologists is the professional body for archaeologists working in the UK.

Creation of the physical and digital archive

Following review with the CAU Project Manager the results from the fieldwork will be collated as an archive.

This will involve the following.

- All records (drawings, photographs, etc.) will be ordered, catalogued and stored in an appropriate manner (according to CAU guidelines).
- Black and white negative film will be catalogued and deposited with the site archive.
- Completion of the Historic England/ADS OASIS online archive index.
- All correspondence relating to the project, the WSI, and a single paper copy of the report, stored in an archive standard (acid-free) documentation box.
- Drawn archive storage (plastic wallets for the annotated record drawings).
- Additional digital data (survey, external reports, etc).

Archive deposition

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

- The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.
- Digital data (CAU reports, external reports, survey data, digital photographs etc) will be stored on the Cornwall Council network which is regularly and frequently backed up.

CAU uses the following file formats for stored digital data:

DOCX Word processed documents

XLSX Spreadsheets

PDF Exports of completed documents/reports/graphics

JPG Site graphics and scanned information

DNG or TIF Digital photographs

DWG AutoCAD drawings, measured surveys

MXD ArcView GIS (electronic mapping) data

AI Adobe Illustrator graphics

Desk-based assessment

A desk-based assessment will be carried out to inform the fieldwork stage. This will be guided by CIfA's guidance on undertaking desk-based assessment (CIfA 2017) and will comprise study of the following:

- Published sources
- Historic maps, including
 - Joel Gascoyne's map of Cornwall (1699)
 - Thomas Martyn's map of Cornwall (1748)
 - OS 1 inch survey (c1810)
 - Parish Tithe maps (c1840)
 - 1st and 2nd Editions of the OS 25 inch maps (c1880 and c1907)
- Modern maps
- Census returns

- Trade directories
- GIS data accessible to CAU

Fieldwork: Historic Building Record

The equivalent of a Level 2-3 Building Survey (as defined by Historic England 2016) will be produced.

Recording will include external and internal architectural features and room detail annotated to copies of existing measured external elevations and floor plans supplied by the client.

Analysis of the fabric will be undertaken on site (recorded as notes) to allow a description to be written up at the archive report stage.

Measured floor plans and elevations of the building will be annotated to show phased development and architectural detail.

Photographic recording will include colour photography using a digital SLR camera (with a resolution of 10 million pixels or higher). Supporting black and white photographs will be taken (the negatives to form a stable archive).

CAU follows Historic England guidance on digital image capture and file storage (2014).

The photo record will comprise:

- General views.
- All external elevations.
- All internal room spaces.
- Examples of structural 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.
- When necessary, 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.

A metric scale will be included in all views, except where health and safety considerations make this impractical.

Reporting

The results from the project will be drawn together and presented in a report. The scope of the report will be dependent on the scale and significance of the results from the project.

The report will include the following elements:

- Summary
- Project background
- Aims and objectives
- Methodology
- Location and setting
- Designations
- Site history
- Building description and results

- Chronology/dating evidence
- References
- Project archive index
- Supporting illustrations: location map, historic maps, plans, elevations, sections, photographs

Timetable

The study is anticipated to commence during September 2018.

The archive report will be completed within 2 weeks 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 the SDOHE. Where the SDOHE is satisfied with the archive report and the deposition of the archive, written discharge of the planning condition will be expected.

- The SDOHE will monitor the work and should be kept regularly informed of progress.
- Notification of the start of work shall be given preferably in writing to the SDOHE at least one week in advance of its commencement.
- Any variations to the WSI will be agreed with the SDOHE, in writing, prior to them being carried out.
- If significant detail is discovered, all works must cease and a meeting convened with the client and the SDOHE to discuss the most appropriate way forward.

Monitoring points during the study will include:

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

References

CIfA, 2014. *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*, CIfA, Reading

CIfA, 2014d. *Code of Conduct*, CIfA, Reading

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

Gover, JEB, 1948, *Place-Names of Cornwall*.

Historic England 2015. *Guidance note on Digital Image Capture and File Storage*. Historic England, Swindon

Historic England 2016. *Understanding Historic Buildings: A guide to good recording practice*. Historic England, Swindon

Padel, OJ, 1985, *Cornish Place-Name Elements*.

Cornwall Archaeological Unit

Cornwall Archaeological Unit is part of Cornwall Council. CAU employs 15 project staff with a broad range of expertise, undertaking around 120 projects each year.

CAU 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



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

<http://www.archaeologists.net/codes/ifa>

Terms and conditions

Contract

CAU is part of 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 CAU 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 and undertaken by Jo Sturgess:

Jo Sturgess, BA, MCIfA

Jo has a wide range of experience in recording historic buildings, landscapes, excavation, post-excavation and characterisation. Past historic building works have included Molenick Farmhouse, Tideford; Bradley Manor, Newton Abbot; City Wharf, Truro; Harvey's Foundry, Hayle; Boswednack Serpentine works; Porthmeor farm; Bartle's Foundry, Pool; Manor Tannery, Grampound; Duchy Palace, Lostwithiel, Cutmadoc Farmhouse, Lanhydrock, the Piggery and Cider House at Godolphin, Poltesco Mill House and variety of other domestic buildings, mine sites, farm buildings and industrial buildings. 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 use of Total Station, CAD software and GIS. Holder of a CSCS card and qualified first aider.

All staff follow CAU's Health and Safety Policy and work in accordance with a site-specific risk assessment.

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 in pdf. format.

Copyright

Copyright of this Written Scheme of Investigation will be reserved to Cornwall Archaeological Unit, Cornwall Council. It may only be used/ reproduced with permission from Cornwall Archaeological Unit.

Existing copyrights of external sources will be acknowledged where required.

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.

CAU 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 CAU may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

Health and safety statement

CAU follows Cornwall Council's *Statement of Safety Policy*.

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

Insurance

CAU is covered by Cornwall Council's Public and Employers Liability Insurance, with a policy value of £50m. The Council also has Professional Negligence insurance with a policy value of £10m.

Jo Sturgess

Archaeology Projects Officer

29/08/2018

Cornwall Archaeological Unit

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