



Enys Farm Buildings, Penryn, Cornwall  
Historic Building Record

Cornwall Archaeological Unit

Report No: 2016R066



# **Enys Farm Buildings, Penryn, Cornwall**

## **Historic Building Record**

<b>Client</b>	Enys Estate
<b>Report Number</b>	2016R066
<b>Date</b>	December 2016
<b>Status</b>	Final
<b>Report author(s)</b>	Nigel Thomas and Peter Dudley
<b>Checked by</b>	Jo Sturgess
<b>Approved by</b>	Jo Sturgess

### **Cornwall Archaeological Unit**

Cornwall Council

Fal Building, County Hall, Treyew Road, Truro, Cornwall, TR1 3AY

Tel: (01872) 323603

Email: [enquiries@cau.org.uk](mailto:enquiries@cau.org.uk) Web: [www.cau.org.uk](http://www.cau.org.uk)

## **Acknowledgements**

This study was commissioned by Tim Vian of Savills UK Limited (Truro branch) and carried out by Cornwall Archaeological Unit, Cornwall Council.

The Project Manager was Jo Sturgess with the historic building recording undertaken by Nigel Thomas and Peter Dudley.

Plans and elevations of the farm buildings were supplied by Savills.

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**

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.



Cornwall Archaeological Unit is a Registered Organisation with the  
Chartered Institute for Archaeologists

Cover illustration

The principal barn at Enys, viewed from the farmyard.

© **Cornwall Council 2016**

No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the prior permission of the publisher.

## Contents

<b>1</b>	<b>Summary</b>	<b>1</b>
<b>2</b>	<b>Introduction</b>	<b>2</b>
2.1	Project background	2
2.2	Aims	2
2.3	Methods	2
2.3.1	Desk-based assessment	2
2.3.2	Historic Building Recording	2
<b>3</b>	<b>Location and setting</b>	<b>3</b>
3.1	Geology	3
<b>4</b>	<b>Designations</b>	<b>3</b>
<b>5</b>	<b>Historical overview</b>	<b>4</b>
<b>6</b>	<b>Historic building record</b>	<b>6</b>
6.1	General plan	6
6.2	Stables Range	6
6.2.1	Materials	6
6.2.2	Plan and functions	6
6.2.3	Historic development	7
6.3	Farmyard Range	7
6.3.1	Materials	7
6.3.2	Plan and functions	7
6.4	South-west Range	8
6.4.1	Materials	8
6.4.2	Plan and functions	8
6.4.3	Interior – ground floor	9
6.4.4	Interior – upper floor	9
6.5	Horse-engine house	10
6.5.1	Materials	10
6.5.2	Plan and functions	10
6.6	North-west Range	11
6.6.1	Materials	11
6.6.2	Plan and functions	11
6.7	North-east Range	12
6.7.1	Materials	12
6.7.2	Plan and functions	12
6.8	Farmyard	12
6.9	Discussion	13
6.10	Significance	14
6.10.1	Definitions of significance	14
6.10.2	Significance criteria	15
6.10.3	Assessment of significance	15
6.11	Recommendations	16

<b>7</b>	<b>References</b>	<b>17</b>
7.1	Primary sources	17
7.2	Publications	17
7.3	Websites	17
	<b>Appendix 1: Written Scheme of Investigation</b>	<b>66</b>

## List of Figures

- Figure 1 Location map
- Figure 2 Detail of assessment area with main buildings and areas named.
- Figure 3 1779 Map of Enys (Reproduced from Wessex Archaeology, 2015, fig 5).
- Figure 4 1798-1826 (1799?) Map of Enys (Reproduced from Wessex Archaeology, 2015, fig 5).
- Figure 5 Tithe Map, 1841.
- Figure 6 Plan of Enys and Gwarder in St Gluvias, Cornwall 1841.
- Figure 7 First Edition of the Ordnance Survey 25 Inch Map, 1880.
- Figure 8 Second Edition of the Ordnance Survey 25 Inch Map, 1907.
- Figure 9 Stables Range - looking north along south-east elevation.
- Figure 10 South-west Range - farmyard elevation.
- Figure 11 Farmyard - View looking north-east across farmyard to North-east Range (central).
- Figure 12 Farmyard Range - south-west end of farmyard elevation.
- Figure 13 A concrete pump or flagpole base within the farmyard.
- Figure 14 North-west Range – farmyard elevation of the three pigsties at the north-east end [19].
- Figure 15 North-west Range - Looking north to farmyard elevation of central block (originally a linhay).
- Figure 16 North-east Range - farmyard elevation.
- Figure 17 Exposed granite cobbles in farmyard.
- Figure 18 Implement shed, adjoining the north side of the rickyard.
- Figure 19 Stables Range – later garage/game larder [7] lean-to added to range by 1907.
- Figure 20 Stables Range – iron hooks within garage/game larder [7].
- Figure 21 Stables Range - south-east elevation of the lower end of the stables with garage/game larder to right. Blocked ground floor and first floor windows indicate the upper floor once extended further left. Note also the bell on the roof of the range.
- Figure 22 Stables Range - middle part of the range showing later principal doorway and windows. Note the blocked slit ventilator between the scale pole and the RH window.
- Figure 23 Stables Range – upper end of the south-east elevation of the stables, showing a later lean-to addition [1] to left of the coach house [2].
- Figure 24 Stables Range – stables [5], showing stall and corridor detail.

- Figure 25 Stables Range – stables [5], showing interior stall detail, drain and hay rack.
- Figure 26 Stables Range – entrance corridor [4], showing details of woodwork. Although they were originally built as separate entities this corridor now links the stables to the Farmyard Range.
- Figure 27 Stables Range – interior of former first floor tack room [8] with saddle rests visible on panelled wall.
- Figure 28 Stables Range – stove within former tack room [8].
- Figure 29 Rear wall of the Stables Range – viewed from inside room [10] of the Farmyard Range; old doorway blocked before lean-to roof of Farmyard Range was added, and masonry underpinning inserted at base of the wall to deal with change of level.
- Figure 30 Farmyard Range – former working horse tack room (and later farm office or crib room [12])
- Figure 31 Corner between North-east (right), Stables (left) and Farmyard Ranges (centre) - exterior of the former working horse tack room and later farm office/crib room [12]. The left hand window is a converted doorway that once probably connected with an extension mapped here on the 1841 and 1880 maps.
- Figure 32 Farmyard Range – interior of working horse stable [11] showing cobbling, stalls (right) and doorway to former working horse tack room.
- Figure 33 Farmyard Range – displaced wooden cupboard with Dutch labels located in the working horse stables [11].
- Figure 34 Farmyard Range – interior of former cow-house [9] with inserted (and later blocked) doorway to South-west Range to rear left.
- Figure 35 Farmyard Range – later partition and feeder within former cow-house [9].
- Figure 36 South-west Range – the rickyard elevation with the loft over the horse-engine house (centre).
- Figure 37 South-west Range – rickyard elevation, first floor; masonry detail of wall and window opening with the wood ventilators and internal shutters.
- Figure 38 South-west Range - subdividing wall in the ground floor at the south-east end of the range [28].
- Figure 39 South-west Range – the north-west ground floor room space of the barn [24], with later adaptation in the Second World War.
- Figure 40 South-west Range – the north-west ground floor room space of the barn [24], with Dutch painted sign and traces of removed stove pipes.
- Figure 41 South-west Range – the north-west ground floor room of the barn [24] with Dutch painted signs on beam and supporting brick pillar.
- Figure 42 South-west Range – ground floor, central room space of barn [25] showing gear recesses (right of centre), inserted brick wall and raised floor level.
- Figure 43 South-west Range - bearing support for vertical axle within ceiling of room [25].
- Figure 44 South-west Range – first floor, north-west room space [31] with roof trusses showing recent repair and damage to roof covering visible.
- Figure 45 South-west Range – first floor, north-west room space [31], grain bin, partition wall with doorway to south-eastern part [29]/[30] and chute leading to ground floor (right).

- Figure 46 South-west Range - original threshing doorway (within red rectangle) blocked when horse-engine was added outside, new doorway to right, and machinery bearing support included in masonry (arrowed).
- Figure 47 South-west Range - detail of a king post roof truss. Note also the cut-out for a machinery bearing to the right.
- Figure 48 South-west Range - detail of roof collar joint.
- Figure 49 South-west Range - carpenter's marks on roof trusses.
- Figure 50 South-west Range – looking east to the exterior of the horse engine house, showing first floor addition [33].
- Figure 51 South-west Range - inside the horse-engine house [32].
- Figure 52 South-west Range - horse engine house [32]: looking down from first floor towards in situ lower bearing (arrowed).
- Figure 53 South-west Range - horse engine [32] upper bearing location, timberwork and added upper floor.
- Figure 54 South-west Range – looking south-west to the rear wall of the upper floor extension to the horse-engine house [33].
- Figure 55 South-west Range - passage along the back of the range to the horse-engine house.
- Figure 56 North-east Range – very finely jointed ashlar slate masonry on farmyard elevation.
- Figure 57 North-east Range - location of former farmyard gateway (within red rectangle).
- Figure 58 North-east Range - exterior view showing location of original farmyard gateway.
- Figure 59 North-east Range - pair of later lean-to buildings (rooms [17] and 18]) added to the rear elevation.
- Figure 60 North-east Range - interior of room [15] showing recesses 'keeping places' in dividing wall and original feed passage door to left.
- Figure 61 North-east Range - interior of room [16].
- Figure 62 North-east Range - swill boilers in room [16].
- Figure 63 North-west Range – rear view, showing the inserted farmyard gateway and rebuilt gable of the adjoining pigsties.
- Figure 64 North-west Range - loft opening in central block, showing reused dressed masonry window parts.
- Figure 65 North-west Range - stalls within later cow-house in ground floor of central block [21].
- Figure 66 North-west Range - tiled drain within cow-house [21].
- Figure 67 North-west Range - lintelled recesses or 'keeping places' within the central block.
- Figure 68 North-west Range - Loft within central block [23].
- Figure 69 North-west Range - pigsty doorway and run.
- Figure 70 North-west Range - granite trough in pigsty run wall.
- Figure 71 Schematic phase plan, largely based on mapped data. Note that this does not show Second World War features or other internal alterations.



Figure 72 Ground floor room numbers and functions (where known).

Figure 73 First floor room numbers and functions (where known).

Figure 74 Ground floor plan.

Figure 75 First floor plan.

Figure 76 Elevation of the Stables Range.

Figure 77 Elevation of the Farmyard Range.

Figure 78 Elevation of the South-west Range (the principal barn), facing the farmyard.

Figure 79 Elevation of the South-west Range, facing the rickyard. The horse-engine (below ground) is shown in outline only.

Figure 80 Elevation of the North-west Range, facing the farmyard.

Figure 81 Rear elevation of the North-west Range.

Figure 82 Elevation of the North-east Range, facing the farmyard.

Figure 83 Rear elevation of the North-east Range.

## **Abbreviations**

CAU	Cornwall Archaeological Unit
CIfA	Chartered Institute for Archaeologists
CRO	Cornwall Record Office
HE	Historic England
HER	Cornwall and the Isles of Scilly Historic Environment Record
HIA	Heritage Impact Assessment
MCO	Monument number in Cornwall HER
NGR	National Grid Reference
NHLE	National Heritage List England
OD	Ordnance Datum – height above mean sea level at Newlyn
OS	Ordnance Survey
RNN	Royal Netherlands Navy
WSI	Written Scheme of Investigation

## **1 Summary**

Proposals to renovate and convert a group of Grade II listed farm buildings at Enys prompted a programme of survey and recording in advance of alterations.

The subject farm buildings are located north of Enys House near Penryn. They are shown on estate plans and the oldest range closest to the main house dates from the late 18<sup>th</sup> century. An elaborate two-storey barn was added c1800 and very soon afterwards three other building ranges were completed to create a large quadrangular farmyard. The north-west range within the farmyard was originally built with an open-fronted linnhay as an imposing central block with three pigsties on each side. The other ranges included spaces to accommodate other farm animals including cattle and working horses.

With the exception of the oldest range all the principal buildings incorporate very high quality ashlar masonry and other fine architectural details. The close contemporaneity of the main ranges indicates that this is a rare surviving Cornish example of a model farm, where wealthier families were able to create exemplar farmsteads incorporating the latest agricultural developments.

Before the 1840s a horse-engine house had been added to the barn (to power mechanised threshing and processing equipment) and the central block of the north-west range had been converted to become a cow-house. By the later 19<sup>th</sup> century the oldest range was refitted as a specialised stables and coach house block.

The Enys estate was requisitioned by the British Admiralty during the Second World War and was temporarily used by the Royal Netherlands Navy as a training establishment. A group of Nissen huts were constructed in the adjoining rickyard, within the centre of the farmyard and parts of the barn appear to have been converted to a mess and shower block.

After the war the farm buildings appear to have gradually fallen into disuse and many were used for storage.

## 2 Introduction

### 2.1 Project background

Cornwall Archaeological Unit (CAU) was commissioned by Savills (UK) Ltd on behalf of the Enys Estate to carry out a historic building record prior to the conversion of the farm buildings and to undertake a watching brief during any groundworks associated with the development.

This report presents the results of the historic building record. The watching brief is ongoing and the results will be published in a separate report by CAU.

The farm buildings are Grade II Listed (Designation ID 1142672) and are located at the heart of the Enys estate, near Penryn, Cornwall (SW 79127 36420; Fig 1). The buildings complex consists of a 'model' arrangement of farm buildings around a central farmyard with a large rickyard (mowhay) to the rear of the south-west range. In total the recording work covered an area of 0.5 hectares (Fig 2).

Much of the estate is now run as a garden by the Enys Garden Trust. The garden is a popular visitor attraction open to the public for much of the year and is known for its bluebells in spring and the restoration of its New Zealand inspired plant collection (Enys Gardens website).

For many years the buildings have been unused and in order to secure their long-term future planning permission was granted for their conversion into nine residential units and a cafe with interpretation area (Planning Application - PA16/01655). A garage with bat habitat area is to be built in the rickyard as part of the scheme. A separate biomass outbuilding will be built to the northern edge of the yard (in the area of building 4; see Fig 2).

Listed Building consent required a Level 3 historic building record as defined by Historic England prior to the commencement of work on the buildings (Historic England 2016).

Little previous archaeological work has been undertaken on the estate but a Heritage Impact Assessment was completed by Wessex Archaeology in 2015 to support the planning application.

### 2.2 Aims

- Record the historic buildings and structures prior to conversion.
- Understand the function and historic development of the farm buildings.
- Identify any below-ground archaeological remains uncovered during groundworks associated with the development.

### 2.3 Methods

The recording work was undertaken in accordance to the Written Scheme of Investigation (WSI; Appendix 1 at the end of this report).

#### 2.3.1 Desk-based assessment

During the desk-based research 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 Historic Environment Record (HER)
- Early maps and photographs (see Section 7.1)
- Previous archaeological and historical work (see Section 7.2)

#### 2.3.2 Historic Building Recording

The Level 3 historic building survey was undertaken in accordance with guidelines recommended by Historic England (2016) and included:

- Photographic recording (digital colour photography with supporting black and white photographs taken on film to form a stable archive; both utilised Single Lens Reflex cameras).
- Existing measured floor plans and elevations of the buildings (supplied by Savills UK Ltd) were annotated to show phased development and architectural detail (see Figs 71-83).

The photo record comprises:

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

A tripod was used to take advantage of natural light and to enable slower exposure rates. Difficulties with lighting were dealt with where necessary by the use of flash and portable LED lighting.

A metric scale was included in all detailed views, except in the loft space of the north-west range and the first floor of the south-west range where health and safety considerations made this impractical.

Historic building recording was undertaken on Tuesday 2nd and 23rd August in dry and sunny conditions. Further recording (to record the barn following removal of the upper floor and roof covering) was undertaken on 23/24<sup>th</sup> November and 5<sup>th</sup> December in dry conditions.

### **3 Location and setting**

Enys is situated at approximately 44m OD on a gently sloping spur of land overlooking a shallow valley and stream that flows to the head of Mylor Creek at Mylor Bridge, a kilometre to the east. The building complex is situated at the core of the Enys estate to the north-west of the house, service wing and clock tower. Together these buildings form an intimate cluster in a secluded position surrounded by formal gardens, parkland and shrouded by plantations of mixed woodland.

The main approach to Enys is currently via a drive from the Penryn – Barras Moor road. The drive crosses a parkland enclosure dotted with parkland trees before passing through a mature plantation until it reaches the edge of a large rectangular rickyard, a gentle sloping area enclosed by a granite stone wall, to the west of the farm buildings. Here the drive splits, looping around the buildings complex.

The farm buildings complex has limited access and its four ranges are arranged to be inward looking, ensuring a feel of separation between the inner farmyard and surrounding grounds.

#### **3.1 Geology**

The estate is underlain by Upper Devonian mudstone, siltstone and sandstones. It is probable that these rocks have been altered by metamorphism in some way as the large intrusion of the Carnmenellis granite is located 2km to the west. To the south-east of Enys near Trevisson, Landerio and Little Tregew Farm is a dyke of mafic igneous rock, most probably a form of elvan.

### **4 Designations**

(All Designation ID numbers relate to National Heritage List England - NHLE)

The buildings complex is a Grade II Listed Building (Designation ID 1142672). The NHLE description is as follows:

*'Barn, coach-house and stables immediately north-west of Enys 10.7.57 GV II Barn, coach-house and stables. Circa 1840s. Killas and granite rubble with granite dressings. Dry Delabole slate hipped roof over coach-house, otherwise*

*scantle slate hipped roofs. Louvered ventilators over right-hand (east) range and brick chimney over rear right-hand corner. Plan: 4 ranges of buildings around a rectangular yard; coach-house and stables at the front (south); bank barn on the left (west), built into a bank on the left; probable stables in single-storey ranges on the right (east) and at the rear. Wide gateway at rear towards the left. Exterior: 2-storey (including loft) coach-house, 2-storey barn (east front), otherwise single storey. Virtually unaltered elevations (some of the original openings are blocked). South front has coach-house with wide doorway, on the left, 4 small doorways flanked by small windows on the ground floor and 2 first floor windows on the right. Mounting block under blocked doorway towards the left. Old doors and windows. Barn has 2-storey east front with shallow arches with key blocks over the openings. Old doors and windows (yard inaccessible for detailed inspection of inner elevations at time of survey. Rear of barn has wide doorways towards left and right (to probably threshing floors and original barred windows with shutters). Interior not inspected.'*

To the south-east of the farm buildings complex is the Grade II Listed Enys House and its adjoining service wing and clock tower (Designation ID 1328147).

The gardens (which include the area of the site) are Grade II on Historic England's Register of Historic Parks and Gardens, designated for its early 19<sup>th</sup> century park and remains of late 17<sup>th</sup>/early 18<sup>th</sup> century formal gardens (Designation ID 1001295).

## 5 Historical overview

The settlement of Enys was first recorded in 1301. It is a Cornish place-name meaning 'island' but in the inland sense, 'land beside a river' or 'isolated, remote spot' (Padel 1985; MCO 18483).

The Enys family have held the estate from the early 14<sup>th</sup> century and were an important family in medieval Cornwall, with considerable influence and wealth continuing through to the early 19<sup>th</sup> century (Enys family archive website). The location of the medieval manor house is uncertain but it is probable that it was in the vicinity of the 16<sup>th</sup> century house, near the present location of Enys House.

A 1779 estate map recorded the site of the farm buildings complex as a series of small enclosures to the rear of the house including a hay meadow, a mowhay (an enclosure for ricks or mows of hay and straw: in essence a rickyard) and a hop garden. It also recorded three small rectangular buildings which could have been storehouses and/or calf houses. The function of the small circular feature in the mowhay is uncertain but it may have been a threshing floor or stand of some kind (Fig 3; fig 5A, Wessex Archaeology 2015).

Estate accounts dating to 1799 and 1800 record the construction of farm buildings at Enys and it is probable that the initial phase of the model farm building complex dates to this time. The records refer to a 'Barne House' and 'hoghouses', a 'cattle feeding house', 'cart house' and a 'feeding house' (Wessex Archaeology 2015, 8).

A late 18<sup>th</sup> or early 19<sup>th</sup> century plan of Enys, Gwarder and Pencoose, on paper watermarked 1798 is the first to clearly record the farm building complex. It is a rectangular arrangement of four ranges around a central farmyard with the south-eastern ranges forming a double depth plan. The rickyard is shown at its full extent to the west of the complex. However, there are key differences to the present arrangement: the main entrance to the farmyard is located in the south-east corner of the complex; a linhay forms the main building in the north-west range and its rear wall is flush with the flanking pigsties; there is a different room plan in the north-east range; a dotted circular feature in the central part of the south-west range may represent a horse engine (Fig 4; fig 5B, Wessex Archaeology 2015).

To the south of the complex the map records the E-shaped 16<sup>th</sup> century house and its rear range of buildings, most probably service buildings. In 1826 the earlier house was

destroyed by fire and between 1830 and 1832 the new and present Enys House was built, incorporating elements of the earlier rear service wing. Landscaping was also undertaken to the gardens at this time, with the parkland developed and the existing kitchen garden reduced in size. Tax accounts from 1830 record hay, wheat, barley oats, beans and peas being stored in the rickyard (Wessex 2015).

The 1841 Tithe map for St Gluvias recorded the buildings and rickyard as part of TA 488, the 1844 apportionment recording this as 'Coach House, Stable, Yard and Mowhay' owned by John Samuel Enys (Fig 5). The plan of the farm buildings complex had been altered: the linhay in the North-west Range deepened (and reorganised), the north-east range extended in places including the closure of the original farmyard entrance; a new gateway inserted in the north-west corner of the North-west Range with the removal of a pig sty; the addition of a horse engine house to the rear of the South-west Range.

To the south of the complex the new Enys House is recorded with the surviving elements of the service wing to the rear whilst to the east, are two small buildings and boundary wall.

An estate plan of Enys and Gwarder (dated 1841, Fig 6) shows similar detail to the Tithe Map but is slightly clearer. The horse-engine house on the side of the barn is shown with a typical polygonal outline; this footprint is also borne out by the existing structure. Both this plan and the contemporary Tithe Map show an extension on the east side of the complex (added to the Stables Range), which juts out as a rectangle on the opposite side of the lane close to the present tea room building.

Further additions of buildings had taken place by the time the 1880 Ordnance Survey (OS) map was surveyed (Fig 7). This included the addition of a cart or coach house in the south-west corner of the complex; the construction of a linhay or cart shed abutting the northern, external, side of the rickyard; and a small rectangular building abutting the western internal wall of the rickyard. The OS map recorded the landscape in considerable detail including the yards to the front of the pigsties and the revetted walkway leading to the horse engine house, including the ramp above it. Meanwhile, the two small buildings and boundary wall to the east of the farm buildings complex had been extended to form much of their present extent.

The 1907 OS map recorded the landscape in similar detail but also shows the potential building components and dividing walls, although this should be treated with some caution as it does not show the long division in the south-eastern ranges, a principal feature of the building (Fig 8). Within the central farmyard a rectangular feature is shown, probably a muck collection area. A major change since 1880 is that the horse engine house is now rectangular in plan with no rounded corners to its western side. At the eastern corner of the complex the rectangular extension visible in 1841 and 1880 had disappeared, to be replaced by a shorter and narrower building, with a chamfered corner beside the lane. Opposite the linhay/cart shed recorded on the 1880 OS map a further rectangular building had been added, possibly another linhay or cart shed. Opposite the main external door in the Stables Range the clock tower had been built.

Early in the Second World War, the Enys estate was requisitioned by the British Admiralty for the Royal Netherlands Navy to train officer cadets. They occupied the estate from 1941 until 1946. Five temporary buildings, presumably dormitories and classrooms, were constructed around the periphery of the rickyard and yard surfaced with shuttered concrete, probably to act as a small parade ground. The farm buildings complex became part of the training college with at least two temporary buildings (possibly Nissen huts) built in the centre of the farmyard.

Several of the farm buildings have apparently not been used for farm work for several decades, however, some have certainly seen reuse for storage and wood working more recently. In the past ten years attempts have been made to secure several of the buildings, in particular the western range, with temporary roofing. The rickyard was used for the storage of timber.

## 6 Historic building record

*Nigel Thomas*

### 6.1 General plan

The site comprises a group of farm buildings built in ranges around a rectangular farmyard with its longer axis oriented south-west to north-east. The farmyard is separated from a higher yard to the south-west (the rickyard or mowhay) by an imposing and finely built two-storey barn (the South-west Range). On the south-east side of the farmyard there are two back-to-back parallel ranges that were once independent entities, one now containing stables that face outwards towards the service wing of the house – referred to in this study as the Stables Range, and another range behind it facing inwards towards the farmyard – here called the Farmyard Range. The North-west and North-east Ranges enclose the other two sides of the farmyard.

Throughout the following section individual rooms or functional spaces within the building ranges are allocated numbers, shown in square brackets. A key to these numbers is given in Figs 72 and 73.

### 6.2 Stables Range

*Includes rooms [1] – [8].*

#### 6.2.1 Materials

The Stables Range is built of semi-coursed masonry of local slate rubble, bedded in lime mortar. Original door and window heads are shallow arches with wide angled slate springers and voussoirs, typical in style of local 18<sup>th</sup> century vernacular and town buildings. Later openings also have shallow arched heads but these have granite springers and voussoirs.

Roof timbers in the main part of this range are not accessible to view, as all interior spaces have lath-and-plaster ceilings. The roof covering is sized slates with red clay ridge tiles, most likely a replacement for original scantle slates.

#### 6.2.2 Plan and functions

The Stables Range comprises coach houses and stables, opening south-eastwards onto a cobbled frontage facing the clock tower and the rear service wing of Enys House. Within the main part of the range there are four spaces, two on each side of a central entrance passage. The ground level rises from north-east to south-west and there is a heated former tack room on the first floor at the north-east end.

The principal part of the range appears on the 1826 estate plan (Fig 4) and there are two later lean-to extensions. That at the south-west end was added before 1880 and the other, at the north-east end, was mapped in 1907. The 1907 extension replaced an earlier outshut, viewed as a rectangular footprint on the 1841 and 1880 mapping (Figs 5, 6 and 7).

At the far north-eastern end is a lean-to (built at some point between 1880 and 1907) with a wide wooden front door [7]. Its original purpose was probably a garage, built when a motor car was first acquired by the Enys family. This space is now fitted with abundant iron hooks on wooden battens affixed to the roof timbers and walls, and may therefore have been converted to a game larder.

The principal building range has a central bay containing an entrance corridor with a small loft above [4]. The corridor is lined with vertical tongue and groove boarding and there are lines of wooden hooks for harnesses and equipment. A doorway at the rear leads now into the Farmyard Range. However this doorway is a late feature, as the space beyond was originally designed as a cow-house and the present doorway opens into where the original cow-stalls would have stood.

To the right (north-east) side is a stable still containing its three panelled stalls with mangers, hay racks and drains [5] (Figs 24 and 25). Beyond it is another stable built at a lower level (following the ground level) with two further stalls [6].

On the first floor at the east end of this range is a former tack room [8], now used as the head gardener's office and an archive store. This room is lit by two windows to the front. Its interior is panelled throughout and has hooks for bridles, saddle rests and other tack (Fig 27). A cast-iron stove central to the rear wall is labelled 'The Rotherham' and is probably late 19<sup>th</sup> century (Fig 28).

Left (south-west) of the entrance passage is another stable [3] with all its fittings now removed. The principal longitudinal drain can still be seen and there are traces in the flooring of five separate stalls. Beyond this stable, to the south-west, is a coach house [2], three bays wide, with pairs of double doors to the front. In front of this section is an area paved with squared granite blocks. The central bay has a rectangular vehicle maintenance pit in its floor, probably added when the building later became a garage. This room space is now used as a History Room with display boards for visitors to Enys Gardens.

At the far south-west end is another lean-to [1], also with double wooden doors to the front and projecting beyond the front of the rest of the range. As it was built before 1880 it is probably an additional coach house.

The three stables in this range are likely to represent different categories of the family's horses, some used for pulling carriages, others as principal riding horses and a third group probably ponies or other horses ridden by children or for pulling traps. Working (farm) horses were stabled separately adjoining the farmyard.

### **6.2.3 Historic development**

Blocked windows, doorways and other features indicate this range has undergone several changes to its plan and functions. Several blocked and altered openings are visible in the front wall and it appears that an earlier arrangement included a longer first floor space (i.e. extending south-westwards by several bays), with a similar sized space on the ground floor. A blocked slit ventilator in the front wall also hints that this range once housed several different types of animals, not just horses.

There are also blocked openings on the north-west side of this range, visible in the rear of the parallel Farmyard Range. Several former wide openings indicate that the area that is now predominantly stables included room spaces that also opened towards the farmyard. As the stables range is built at a higher level than its neighbour, the thresholds of the blocked doorways are higher than the floor of the Farmyard Range. In places it can be seen that the base of the Stables Range wall has been underpinned to cope with the change in level (Fig 29).

## **6.3 Farmyard Range**

*Includes rooms [9] – [12].*

### **6.3.1 Materials**

The Farmyard Range is constructed of fine quality ashlar masonry, bedded in lime mortar. Its lean-to roof has single sided trusses that do not respect the earlier Stables Range behind, instead its roof bay structure cuts across former rear openings (Fig 29). The present roof covering is modern corrugated steel sheets, probably replacing scantle slate.

### **6.3.2 Plan and functions**

This range faces north-west towards the farmyard and is built as a long lean-to structure. The 1826 plan (Fig 4) and the present structure show that two of its four room spaces ([9] and [10] at the south-west end) were once cow-houses. These still have a typical cow-house arrangement of central wide doorway with feed passages at each end, indicating that the stalls were oriented parallel with the long walls. All the original stalls have been removed and the room spaces reused with some of the doorways blocked off. Room space [9] at the west end has been subdivided with a plank screen, and a feed manger and shelf added at one end.

To the east of these is a stable [11] with extant wooden stalling (most likely for working horses on the estate). Leading off this stable (through an inserted doorway) is



an adjoining smaller room [12], labelled as a bothy in the Wessex Archaeology assessment report (2015, p11, 5.2.5). This latter room has an added fireplace and chimney (Fig 30). There is an exterior doorway and window overlooking the adjoining lane. This room has changed functions over time, as the window is a partially infilled doorway that probably once led into the rectangular extension that was mapped here in the mid-19<sup>th</sup> century. Following the addition of the connecting doorway from the stables it was probably used as a tack room but, following the departure of working horses, was more recently a farm office or crib room.

## **6.4 South-west Range**

*Includes rooms [24] – [31].*

### **6.4.1 Materials**

The principal barn is a two-storey structure which forms the entire south-west side of the farmyard.

The barn is a very imposing building constructed of high quality ashlar slate masonry bedded in lime mortar. All original openings have shallow granite arches and springer stones, with distinctive projecting keystones. Windows/ventilators have granite sills. Inside, the ground floor window openings have granite lintels while those upstairs have shallow brick arches. Several windows/ventilators retain what is probably original woodwork, comprising vertical timber louvres, with inward opening wooden shutters within their reveals.

The roof structure is of king post trusses supporting purlins and rafters. The roof covering is of scantle slate (with some lime mortar 'torching' surviving beneath) although at the time of investigation the covering was heavily decayed and holed in several places. Attempts have been made to secure the roof trusses with additional bolted timbers, and considerable parts of the roof slopes have been re-raftered and covered with felt.

Within the barn the first floor is supported on very substantial original timber beams (each having a section of c300mm by 300mm) that separate the bays. Secondary joists are mortised to these (so these smaller timbers run parallel to the long walls). The plank flooring is attached to the secondary beams so the planks run across the width of the barn.

### **6.4.2 Plan and functions**

The barn has a symmetrical layout and (on the ground floor) comprises three equal sized original room spaces with a total of 12 bays. The central ground floor space is entered by four arched granite framed doorways, giving a piers appearance from the farmyard. To each side the neighbouring rooms each have a central doorway with windows/ventilators to each side (Note that the symmetry is less noticeably broken at the southern end as there is only one front window to this room, and the walling of the Farmyard Range covers this part of the barn elevation).

On the upper floor the symmetry is again apparent; with a tripartite arrangement of three threshing floor/winnowing doorways, each flanked by a pair of windows/vents. The roof structure is also hipped at both ends.

On the rear (rickyard facing, south-west) side of the barn the original symmetry is also evident. Here only the upper floor is visible, as the barn is partially built into the slope. The threshing floor/winnowing doorways are dominant, flanked by windows/vents. At the centre of the range on this side the symmetry has seen some alteration due to the horse-engine house, which was added slightly off-centre to the range before 1841. The only ground floor windows on this side of the barn are toward the north end. Here a passage provides access to the horse-engine house and would have been the route that the working horses were brought in. The passage is crossed by a shallow arched bridge, to allow access to the northernmost threshing floor doorway from the mowhay. This also indicates the barn was once loaded from this side. At the south-eastern end of the building the threshing floor doorway is close to the adjacent ground level. All the

threshing floor doorways include granite sills with moulded semi-circular ribs across the thresholds, to prevent ingress of water.

#### **6.4.3 Interior – ground floor**

The original layout of the ground floor was divided into three equal sized room spaces, each of four bays. The central and southernmost spaces have since been subdivided by additions of further walling.

The original southernmost room had been subdivided by a stone masonry wall containing two slit windows, and a curved section built inside the doorway (to create rooms [27] and [28]). Within [28] a high level window has been added at the south end. A wide doorway (now blocked) has been cut through to connect to the Farmyard Range (Note: by implication, the creation of an 'animal width' doorway clearly post-dates the original feeding passage access in the neighbouring range, indicating this doorway was added after the original stalls here had been removed).

The remaining space in the original southern room of the barn [27] retains mangers and stalls, indicating that cattle were once housed here, although that may not have been its original purpose. A wide inserted doorway connects this space to the original central room.

Within the central room space the primary design feature is the line of granite arches to the front. An inserted and rather crudely built central brick wall subdivides the original space into [25] and [26]. The southern two bays (room [26]) have recently been used as a woodworking workshop (with a large workbench to the rear and a circular saw towards the front. The northern two bays (room [25]) are of unknown function, although the drive from the horse-engine would have been central to this space and drove machinery here (and on the upper floor). There are two curved cut-outs in the rear wall representing clearances for gear wheels in one corner and timberwork at first floor joist level once supported a bearing (Figs 42 and 43). The present floor within room [25] is of modern cement screed and is raised c250mm above the original level. A timber and kerbed foundation alongside the brick wall may have been associated with a hopper. A painted sign in Dutch on the wall reads 'VASTE BEHANNING' (trans. 'permanent crew').

At the north end of the range is another room space [24] entered by a doorway to the front and lit by two original windows in the front wall and two secondary windows to the rear. The floor of the room is of concrete and cement screed and there are two drain gullies sloped toward the front doorway. Brick piers have been added to provide additional support to the timber first floor joists. A feature of this space is four circular drum shaped foundations built of concrete blockwork just less than 1m in diameter and approx. 0.5m high. This room was used by the Royal Dutch Navy when stationed at Enys and a painted sign in Dutch reads: 'KETELS NIET LEEG LATEN STAAN SVP' (trans. 'Do not leave kettles/boilers empty'). This is affixed to a lintel in one of the (blocked) rear windows. There are also scars of two iron stove pipes which vented through holes in the blocking, as if two stoves stood close by (Fig 37). Painted on an original beam is 'NIET MET SCHOENEN OP..... ONEN SVP' with the middle part now illegible (trans. 'Not with shoes on....'). A painted arrow on the brick pier beneath the beam points to the sign (Fig 41). A pierced and now very rusted tin (resembling a spraying rose) supported on wires from first floor joists is reputedly a shower head used by Royal Netherlands Navy (RNN) personnel based here (estate staff, pers. comm.). If this was used as a shower then a poured or piped water supply would have come from above. This is feasible, given that the first floor space above this room was also used by the RNN. At the northern end of the room is a short concrete blockwork partition that divides the space in half. Surviving coat hooks on the wall suggest these spaces were changing areas.

#### **6.4.4 Interior – upper floor**

The upper storey of the barn was examined in less detail due to the dangerous condition of the wooden floor. Plank partitions on the first floor divide off the south-eastern end into two room spaces ([29] and [30]) and there are extant wooden grain

storage bins within this part (Fig 45). There is a chute within the floor (for fodder distribution) connecting to the ground floor.

The northern part (approximately two thirds of the total floor area, room [31]) is now a single space open to the roof. This space was once subdivided as there are traces of a wooden partition built directly above the original masonry dividing wall on the ground floor.

Within the present enlarged room space, rectangles of thin concrete floor plinth have been added to parts of the floor. There is also a long concrete shelf running partway along the inside of the front wall, and a raised basin or trough built on a wooden frame within a threshing doorway recess. It is possible that all these features relate to use of the barn by the RNN during the Second World War. A disused oil-fired range cooker stands centrally on a plinth near one end of the building, although this may be a post-war addition.

## **6.5 Horse-engine house**

*Includes rooms [32] and [33].*

A viable mechanical threshing machine was first invented by Scottish engineer Andrew Meikle in 1786. Creation of this device enabled simpler and quicker separation of grain from stalks and chaff, formerly a very labour-intensive manual process. Mechanical threshing machines had become relatively commonplace on farmsteads by the early 19<sup>th</sup> century; these smaller threshing machines were fixed in barns. Barns were therefore developed to accommodate mechanical threshers, so horse-engines and other forms of power such as waterwheels were harnessed to drive them. Nevertheless by the later 19<sup>th</sup> century these fixed devices had already been superseded by bigger portable threshing machines that could be hauled from farm to farm and driven by steam power.

### **6.5.1 Materials**

The horse-engine house [32] at Enys is a lean-to structure adjoining the rickyard side of the South-west Range. The original parts of the horse-engine house are three large slate masonry piers that define the plan limits of the structure. Two very large timbers (c300mm square) run the length of the building from the outermost masonry pier to the barn wall. Mortised into these are further smaller beams that supported the primary vertical axle and its bearing (Fig 53). In the floor below is a distinct circular trough running around the inside of the building, the horse track (Fig 51). Inside this is a further circular depression and the base bearing for the horse-engine is still present at its centre (Fig 52).

The three masonry piers define the original polygonal form of the horse-engine house roof. This earlier roofline can still be traced in places on the side of the barn wall. It is likely that the original roof covering was of scantle slate.

### **6.5.2 Plan and functions**

The horse-engine house was first mapped in 1841 and appears on the Tithe Map and contemporary estate plan (Figs 5 and 6). Originally it had a polygonal plan but by 1907 had been altered to a square footprint (Fig 8). This horse-engine house is very unusual partly due to its large size and also due to later alterations that included creation of a first floor room above the machinery.

This building once contained gearing and an axle drive to various belt-driven machines that were once utilised in the adjoining barn. This would have included a threshing machine, winnower and probably also other machines that could be used for processing animal feed, such as oat crushers for horse feed. Power was derived from horses walking a circle, turning an axle.

Sometime between 1880 and 1907 the Enys horse-engine house was further adapted to create a first floor room [33]. Additional walling was built at the ground floor level to create a square plan. The upper room was built with a new floor added to the horse-engine timberwork (although the machine could still be worked below). Walls were built

of timber planking and incorporate small pane casement windows. At the outer corners curved masonry piers were built to carry the wall-plates. A completely new roof was built (at a higher level than the older one), and the present structure has a lightweight corrugated iron sheet roof. It is likely that this extension originally formed a loft for grain storage. A central double doorway now faces the mowhay with a window to each side. A ceiling of fibreboard was added and a half-glazed door leading into the first floor of the barn. Some of these later modifications are likely to be associated with use of the building (perhaps as a mess room) by the RNN.

## **6.6 North-west Range**

*Includes rooms [19] – [23].*

### **6.6.1 Materials**

The North-west Range originally comprised a central block with three pigsties to each side of it. The side walls of the central block have fine ashlar slate masonry with granite quoin-stones to the front, bedded in lime mortar. However the rear of the building (which is a later extension) is of lesser quality masonry, being semi-coursed slate rubble. The front wall and interior dividing wall are also of slate rubble masonry.

The roof timbers are king post trusses (to cover the relatively wide span) and the roof is hipped at both ends. The present roof is of sized slate with red clay ridge tiles and hip tiles, probably a replacement for an earlier scantle slate covering.

The pigsty front walls (facing the farmyard) are of fine ashlar masonry but above each doorway is a panel of brown slate rubble masonry, which may indicate alterations. Brick arched low doorways lead into each of the sties (Fig 69). The pigsties have individual runs in front, each provided with a granite feed trough (Fig 70). Dressed granite copings finish the walls.

The south-westernmost pigsty, altered to insert a gateway before 1841, has a replacement gable wall built in slate ashlar (Fig 63) and a narrowed and angled run in front. The granite coping stones on its run have been reshaped and joined with iron cramps.

### **6.6.2 Plan and functions**

The North-west Range originally comprised a central block (now rooms [21 and 20]) with three pigsties (and their runs, rooms [19] and [22]) to each side. This plan was altered before 1841 due to creation of a new gateway into the farmyard adjoining the barn. One of the pigsties was demolished and its neighbour narrowed to accommodate the new gateway. The central block was also considerably altered. It appears on the 1826 plan as an open-fronted building, probably a linhay. By 1841 it had been increased in depth by adding a new rear wall (and was re-roofed at the same time). The front of the building was enclosed by walling with a typical cow-house arrangement of a central wide doorway and feed passage entrances at the ends [21]. The north-east section of the block was also divided off [20]; it has not been established in this study what purpose this narrow space may have served and the double doorway in its rear wall is modern.

This building also has a shallow first floor space [23], partially within the roof (Fig 68), now reached by a steep ladder/stairway at the rear of the cow-house, and was likely a loft for fodder. The upper floor also has a loading doorway and three slit windows/vents in the front wall. Interestingly the vents are created from dressed masonry i.e. chamfered window elements reused from elsewhere, most likely after replacement of the Elizabethan main house in 1826 (Fig 64).

Inside room [21] the stalling was later changed with a new layout parallel to the front and rear walls (Fig 65). This comprised slate mangers, double stalls and a drain lined with distinctive decorative tiles (Fig 66). These tiles date to c1900 and are more usually found in town pavements (e.g. Truro terraces).

## 6.7 North-east Range

*Includes rooms [16] – [18].*

### 6.7.1 Materials

Walling facing the farmyard is of fine quality ashlar slate masonry with very narrow joints, bedded in lime mortar (Fig 56). On the rear side (i.e. facing the lane) the wall masonry is of lesser quality comprising semi-coursed slate rubble.

The roof structure of this range is of kingpost trusses supporting purlins and rafters. The covering facing the farmyard is now modern corrugated steel sheet, a replacement for original scantle slate, whilst on the rear side the roofing has been replaced in new scantle. There are two wooden louvered ventilators on the roof ridge serving the two northernmost room spaces. These vents have been recently repaired or replaced, probably when the present roof coverings were added.

### 6.7.2 Plan and functions

The main part of this single-storey range now contains four spaces. A pair of symmetrical plan lean-to outshuts is attached on the rear side (rooms [17] and [18]; Fig 59). These have original doorways facing outward to the lane; one is now blocked with stone masonry and replaced with a newer doorway on the side of the structure. It is not certain what functions these lean-tos originally served; they may have been tool sheds or perhaps small animal houses.

Within the main range the northernmost room [16] has an inserted doorway on the rear side, with another (original) door and window facing the farmyard. Inside, at one corner are boilers, most likely for pigswill, and the boilers share a short brick chimney stack emerging at the roofline (Fig 62).

The next room space [15] has been foreshortened by an inserted wall but its original plan can be seen to have been a typical cow-house arrangement with three doorways from the farmyard; a central wide one for animal access and a feed passage at each end. There are lintelled recesses or 'keeping places' within the northern wall (Fig 60).

The 'middle' room of the range [14] is a narrowed space due to the inserted wall now comprising an exterior doorway (with a granite kerbed ramp) and a (blocked former feed passage) doorway to the farmyard.

The southernmost room space [13] has been considerably altered, as in 1826 the farmyard entrance was at this corner. Originally the room at this end would have been almost square in plan. Two blocked square features (each roughly 300mm square) are visible in the middle of the interior wall. These are blocked 'keeping places' similar to those in Room [15].

Walling has since been added, in matching masonry styles, to both interior and exterior sides to link this room to the adjoining Farmyard Range. The room is now a substantial rectangular space but there are few clues as to its more recent use. It seems likely to have been a calves' house.

## 6.8 Farmyard

When visited in August 2016 the Enys farmyard was largely covered with weed growth yet the majority of the farmyard still retains its granite cobbled surface. This is more clearly visible where roof downpipes from the building ranges empty onto the surface and the water flow has washed the stonework clear (Fig 17).

All the cobbled surfaces drain towards the centre of the yard where there are the demolished remains of a low masonry wall (c500mm wide) enclosing a rectangular space. The visible base of the wall is built of slate stone bedded in lime mortar. The feature clearly underlies the later concrete building platforms that were recorded as part of the watching brief in April 2016 (Building platforms 1, 2 and 3; see watching brief report).

The rectangular feature was mapped in 1907. Its location, as well as its relation to the yard drainage, suggests it was a dung storage area, the material periodically cleared

and spread on the fields when required. A rectangular brick-lined sump covered by large blocks of granite survives to the north-western corner of the rectangular feature.

A small square concrete base (280mm by 280mm wide and 80mm high, with a moulded central hole 100mm diameter) is located centrally within the farmyard nearer the barn end. This comparatively late feature may be the base of a pump or similar facility or could represent a flagpole base for a parade ground used by the RNN (Fig 13).

## **6.9 Discussion**

Figure 71 provides an outline chronology of the Enys buildings as they appear on historic mapping, supplemented by information drawn from fieldwork. The 1826 estate plan (Fig 4) shows all the principal building ranges in place, but there are some differences in phasing/construction that have been revealed by detailed examination of the buildings. The Stables Range is the earliest range, and appears to roughly correspond with a long rectangular structure mapped in 1779 (Fig 3). Blocked openings in its rear wall show that before the Farmyard Range was added, room spaces in this older range opened into the farmyard. There is also a hint of the early farmyard on the 1779 map, with rectangular and circular dotted structures most likely representing hayricks. The structural evidence of the Stables Range (which includes blocked ventilator slits) indicates that in its first phase it accommodated a wider range of farm animals than horses.

The distinctive two-storey barn in the South-west Range is, at least in a constructional sense, the next building that was added to the farmstead. The barn has symmetry in its design from the front and rear elevations and its original internal layout was three equal sized rooms on the ground floor and three lofts, each with their own threshing floors, above. The three lofts may simply reflect three grain types of wheat, barley and oats.

The barn was clearly originally designed to have another range joined to it as at the south-east end, a window opening was deliberately omitted on the ground floor. It is likely that the other three ranges (North-west Range, North-east Range and Farmyard Range) were built very soon after the barn. Supporting evidence for this near-contemporaneity is the range of types of animal housing provided, which created a complete farmstead. Architecturally too the farmyard buildings complement each other, with extensive use of fine slate ashlar masonry for all the inner elevations.

When originally constructed the central block of the North-west Range (rooms [20], [21] and loft [23]) was an open-fronted building, probably a lincage, and appears to have had four bays as shown on the 1826 estate plan.

By 1841, the St Gluvias Tithe Map and contemporary estate plan show some alterations to the earlier farm plan (Figs 5 and 6). An original gateway between the Farmyard and North-east Ranges was infilled and succeeded by a new gateway adjoining the north-west end of the barn. The lincage was deepened and a front wall added, and most of this space became a cow-house with a typical 3-door arrangement. The reuse of dressed masonry in its upper floor ventilators is of particular interest, as it suggests the alteration followed the destruction of the Elizabethan main house at Enys, and some materials were being recycled within the farmyard.

Within the barn there were also considerable changes occurring with the addition of the horse-engine house. The Wessex Archaeology HIA report refers to these as 'wheels' and also suggests from the 1826 plan that there may have been a similar drive housed within the central ground floor room of the barn (2015 p9, 4.4.3). The arched (and therefore well-ventilated) room space (now [25] and [26]) may also suggest the presence of an early horse-engine, although the internal width of the building (5.7m) would restrict its size. Alternatively it is possible that the map conventions show a circular feed trough or hay rack, as dots are also used as a convention to show cow-stalls in the Farmyard Range. The presence of gates and gate-hangings (pintles) added to the granite piers in front of Room 25 would indicate that this part of the building was at least converted to an animal enclosure.

A lean-to extension at the south-west end of the Stables Range [1] was mapped by 1880. Inside the end of the adjoining barn the ground floor room space [28] was lit by an inserted window that respects the location of the lean-to. It is likely that the curved dividing wall between [27] and [28] was added around the same time, and a wide doorway cut through from the central room [26], to give access to [27]. A brick wall between [25] and [26] on the ground floor may be associated with drive from the adjoining horse-engine house, or may be a later feature.

The 1841 and 1880 maps show a rectangular extension, now disappeared, at the eastern external corner of farmstead, butting onto the Stables and Farmyard Ranges (Figs 5, 6 and 7). This may have been a trap-shed, functionally replaced by the garage [7] by 1907. The 1907 map also shows the altered footprint of the horse-engine house, which had become almost square in plan following construction of a loft on the first floor (Fig 8). Although by 1900 the horse-engine was technologically superseded, construction of the loft did not interfere with operation of the horse-engine itself, which could still be used when needed.

A rectangular outline is mapped in the centre of the farmyard in 1907; this corresponds with traces of a walled structure. It is likely to have been a dung store, with sloped cobbled surfaces leading to it from all the surrounding building ranges. The extensive cobbled floor of the yard may be contemporary with the structure, or may be considerably earlier but has not been mapped.

Around the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries the cow-house within the North-west Range was considerably remodelled, with a line of double stalls and a drain built along the long axis of the building.

Considerable changes occurred within parts of the farmyard during the Second World War when Enys was requisitioned to house staff from the Royal Netherlands Navy. Concrete platforms (overlying the probable dung store) and a brick-lined sump in the centre of the farmyard probably belong to this period. Within the South-west Range the northern end of the barn (on both floors) was used by the RNN, as was the first floor loft over the horse-engine house. The northern room on the ground floor [24] appears to have been a shower/ablution block. Insertion of brick piers in this space indicate either that the barn floor was already decayed by this date or that there was a need to strengthen the first floor due to different uses. A small concrete base in the farmyard may have supported a flagpole.

Away from the farmyard an open-fronted implement shed had been built along the lane, outside the north-west side of the mowhay by 1880. Although now a roofless ruin, the granite piers of this structure are still extant (Building 5, Fig 18). Although there are no obvious signs that the farmyard was used by tractors (and that the working horse stable was never converted for any later use) the presence of a disused diesel tank in part of the implement shed suggest that later machinery was housed here. In more recent decades it is likely that farming operations for the estate have been carried out from nearby Gwarder farm, part of the Enys estate.

## **6.10 Significance**

*Peter Dudley and Nigel Thomas*

### **6.10.1 Definitions of significance**

Significance can be defined as:

“The sum of the cultural and natural heritage values of a place...” (English Heritage, 2008, 72).

“The value of a ‘heritage asset’ to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.” (National Planning Policy Framework 2012, Annex 2: Glossary).

### 6.10.2 Significance criteria

Following the guidance given in English Heritage's *Conservation Principles* document (2008), the significance of historic assets is more formally assessed in terms of four criteria:

*Evidential value* - relates to the potential of a place to yield primary evidence about past human activity.

*Historical value* - relates to the ways in which the present can be connected through a place to past people, events and aspects of life.

*Aesthetic value* – relates to the ways in which people derive sensory and intellectual stimulation from a place.

*Communal value* – relates to the meanings of a place for the people who relate to it, and whose collective experience or memory it holds.

### 6.10.3 Assessment of significance

#### *Evidential value*

The Enys farm buildings were created to a scale to suit the agricultural requirements of a wealthy estate at the turn of the 18<sup>th</sup>/19<sup>th</sup> centuries. The structures are near contemporary and represent a designed 'model farm' or demonstration farm set up by a wealthy landowner to explore and enhance the potential of agriculture on their estate.

The Stables Range dates to the late 18<sup>th</sup> century. Farm buildings of 18<sup>th</sup> century date are relatively rare in Cornwall and most surviving examples are associated with estates and higher status farmsteads (such as the principal barn at Tregarton, Gorran; Berry 2009). Within the majority of local farmsteads there is a general pattern of renewal of farm buildings (with bigger barns and more regular layouts of structures) in the middle decades of the 19<sup>th</sup> century, reflecting the piecemeal spread of agricultural technology.

The farm buildings at Enys therefore provide strong evidential value, as true model farms are rare in Cornwall. This value is enhanced by the quality of the architecture in the barn and the extensive use of ashlar masonry throughout the complex: these buildings were designed to impress, to use the latest layouts and technology to create an efficient farming unit. Once this collection of buildings was established, it has survived with relatively little alteration to the present day.

Furthermore, the functions of the majority of room spaces can be readily understood, partly due to their relative neglect in more recent decades and the relative absence of newer conversions to suit present-day agriculture. In this respect, the Stables range provides considerable evidential value as many of its internal components (tack room, stables, entrance way, coach house) and its features (cobble floors, drains, stalls, wood panelling, saddle rests, pegs, mangers) remain *in situ*. These features are likely to be a rare survival in Cornwall and this evidence ensures that the use of the building can easily be understood in relation to the use of Enys house as part of a wealthy estate.

Furthermore, the scale and surviving elements of the horse-engine house are unusual, further strengthening the strong evidential value of the Enys farm buildings complex. The scale and size of its construction is impressive, clearly demonstrating the considerable wealth invested in the farm complex at a comparatively late date for this type of technology. Its good survival adds to its value.

#### *Historical value*

The buildings complex is a good example of a model farm in Cornwall. The complex also reflects the broader development and innovation undertaken as part of the agricultural revolution in Britain. In its earliest phases this was often pioneered by the wealthiest landowners on their own home farm or barton estates.

Being a model farm complex, its building arrangement directly represents the efficient flow of resources – a core aspect promoted by agricultural commentators in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries.



In its close proximity to the core of the Enys estate the complex clearly provides valuable evidence for the use of the House, especially in the 19<sup>th</sup> century when the family were still important and influential in the area. The intimacy of the buildings complex with the surrounding gardens also ensures that visitors to Enys can understand the earlier workings of the estate and how it was not purely a place of recreation.

These buildings can also be connected to more recent history of the estate: to its interesting and valuable role in housing the Royal Netherlands Navy during the Second World War. Signs written in Dutch, dating to this period, survive within rooms in the Farmyard Range and South-west Range.

#### *Aesthetic value*

The farm buildings at Enys are particularly finely built and the predominant use of ashlar slate masonry in the major buildings makes them stand out. The architectural detailing of the barn is relatively unusual, and its original tripartite design helps to explain its functions. However, the inner farmyard part of the complex looks inward and has limited views into it, especially for the public.

Therefore, being the most visible part of the complex to the public visiting the estate, the south-east elevation of the Stables range provides significant aesthetic value. It is the predominant opportunity for them to visually understand the past significance and use of the farm buildings complex.

#### *Communal value*

The gardens and House at Enys are a valued visitor attraction, especially for the people living in the surrounding area.

Although at present the farm complex is a private element of Enys and not displayed to visitors to the gardens it is nevertheless an important part of the site for the present owners and estate staff. By providing public access, the opening up of the Stables Range within the proposed development could help to enhance the communal value of the buildings complex, especially if the historical narrative of the farm buildings is included in interpretational material as part of the visitor experience.

## **6.11 Recommendations**

*Peter Dudley and Nigel Thomas*

These recommendations are made following the current historic building record study:

1. Opportunities to undertake dendrochronological (tree-ring) dating are rare in Cornwall as the timbers usually encountered in historic buildings are not of sufficient size. The principal barn is a 12 bay structure with the majority of its bays separated by very large timber beams (of approximately 300mm square section) supporting the first floor. As the timbers are being removed consideration could be given to undertake dendrochronological dating.
2. Within room [5] of the Stables Range, the 19<sup>th</sup> century stalls of the stables survive intact and are in good condition. As they are due to be removed, reuse of them elsewhere on the site is recommended (perhaps as part of the visitor experience of Enys).
3. Likewise, interesting and unusual survivals of features in the other ranges (the slate slabs defining the feed channel in room [21] for example) should be considered for reuse elsewhere in the estate (perhaps as part of the visitor experience of Enys).
4. The proposed development of the Stables, where practicable, could seek to retain the cobbled floors and wood panelling *in situ*. The development of a visitor café in the range is an opportunity to ensure that the evidential and aesthetic value of these features is retained and celebrated in the conversion.
5. Considerable original joinery survives around the site, especially the louvres and shutters within the principal barn. These give particular character to the structures. It is therefore strongly recommended that the conversion proposals retain, utilise and replicate original joinery where practical.

## 7 References

### 7.1 Primary sources

Cornwall County Council, 2000. *Colour vertical aerial photography* (available digitally within Cornwall Council)

British Geological Survey, 2012. *1:25,000 digital geological mapping*, National Environment Research Council

Ordnance Survey, 1880. *25 Inch Map First Edition*

Ordnance Survey, 1907. *25 Inch Map Second Edition*

Ordnance Survey, 2016. *MasterMap Topography*

Royal Air Force, 1946. *Vertical monochrome photograph* (106G/UK/1663 F20 3165, 12th July 1946)

Tithe Map and Apportionment, 1841. *Parish of St Gluvias*

### 7.2 Publications

Berry, E, 2009. *Tregarton Barns, Gorran, Cornwall* Historic Environment Projects, Cornwall Council

Department for Culture, Media and Sport, 2012. *National Planning Policy Framework*

English Heritage, 2008. *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment* English Heritage, Swindon

Historic England, 2016. *Understanding Historic Buildings – A Guide to Good Recording Practice*, Historic England

Padel, OJ, 1985. *Cornish Place-Name Elements*, English Place-name Society **LVI/II**

Wessex Archaeology, 2015. *Enys Estate Agricultural Buildings, Penryn, Cornwall – Heritage Impact Assessment*, Wessex Archaeology, Salisbury

### 7.3 Websites

Enys Family Archive –

<http://enysfamilyarchive.co.uk>

Enys Gardens website –

<http://www.enysgardens.org.uk>

History of threshing machines –

[https://en.wikipedia.org/wiki/Threshing\\_machine](https://en.wikipedia.org/wiki/Threshing_machine)

## 8 Project archive

The CAU project number is **146603**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit. The archive references for the monochrome images is GBP 2391 – 94 incl.

Historic England/ADS OASIS online reference: [cornwall2-270549](https://www.historicengland.org.uk/ads/oasis/cornwall2-270549)

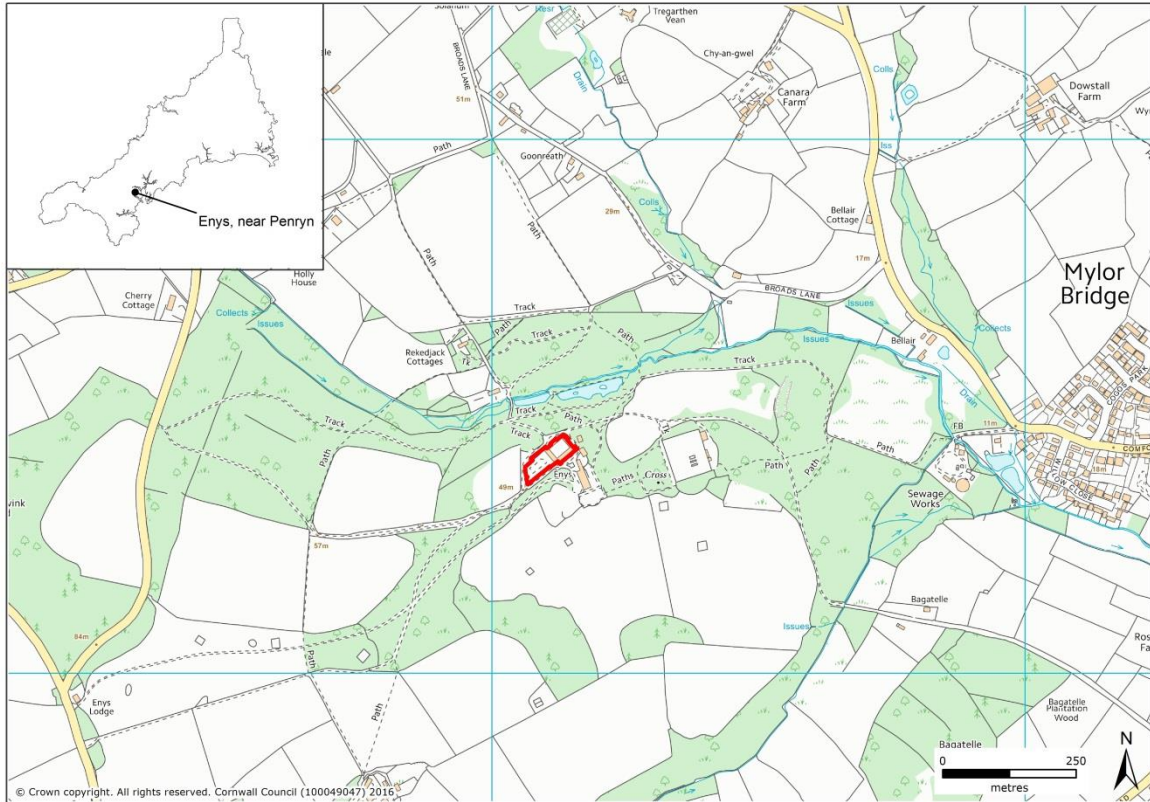


Figure 1 Location map



Figure 2 Detail of assessment area with main buildings and areas named.

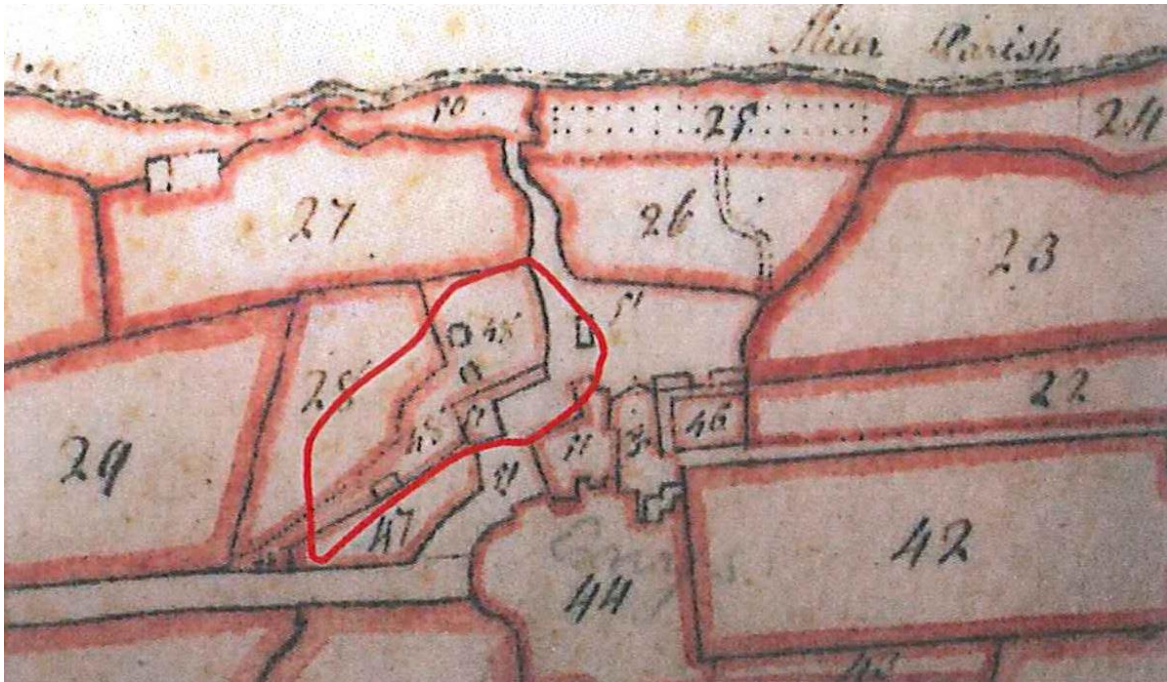


Figure 3 1779 Map of Enys (Reproduced from Wessex Archaeology, 2015, fig 5).

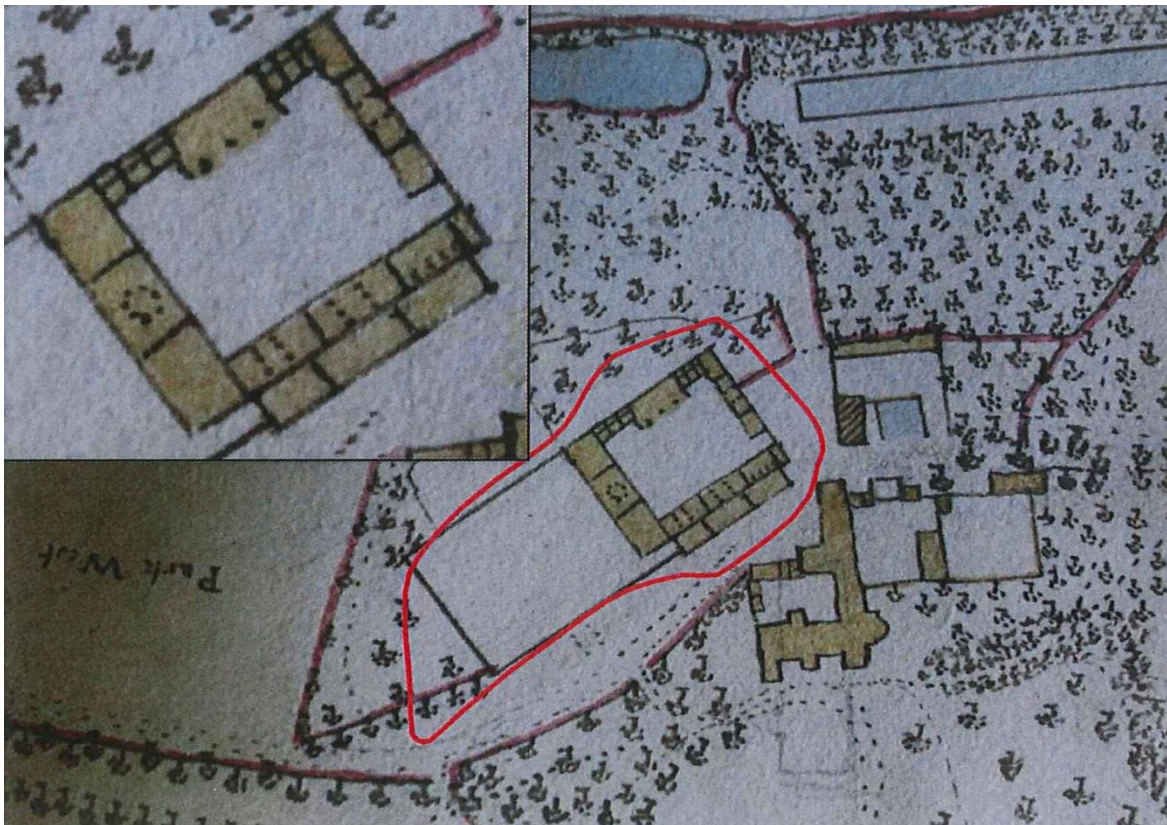


Figure 4 1798-1826 (1799?) Map of Enys (Reproduced from Wessex Archaeology, 2015, fig 5).



Figure 5 Tithe Map, 1841.



Figure 6 Plan of Enys and Gwarder in St Gluvias, Cornwall 1841.

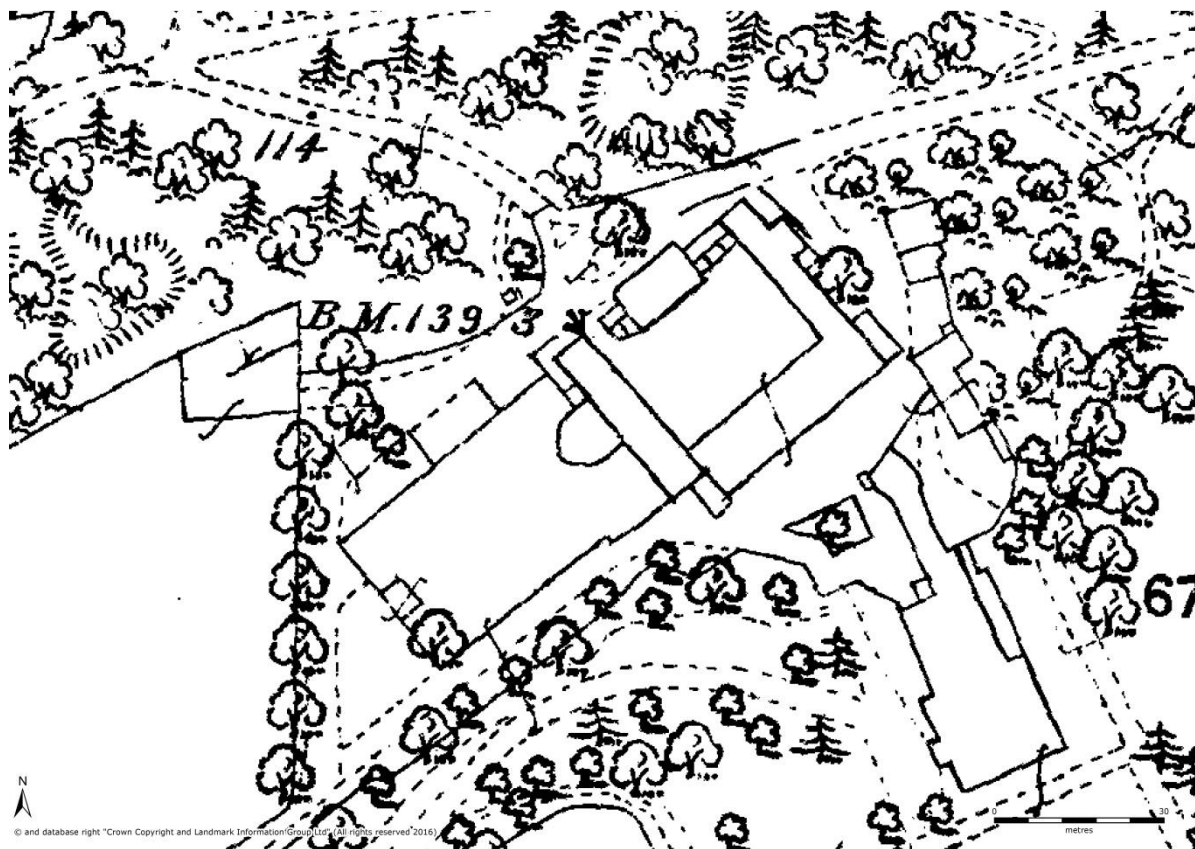


Figure 7 First Edition of the Ordnance Survey 25 Inch Map, 1880.

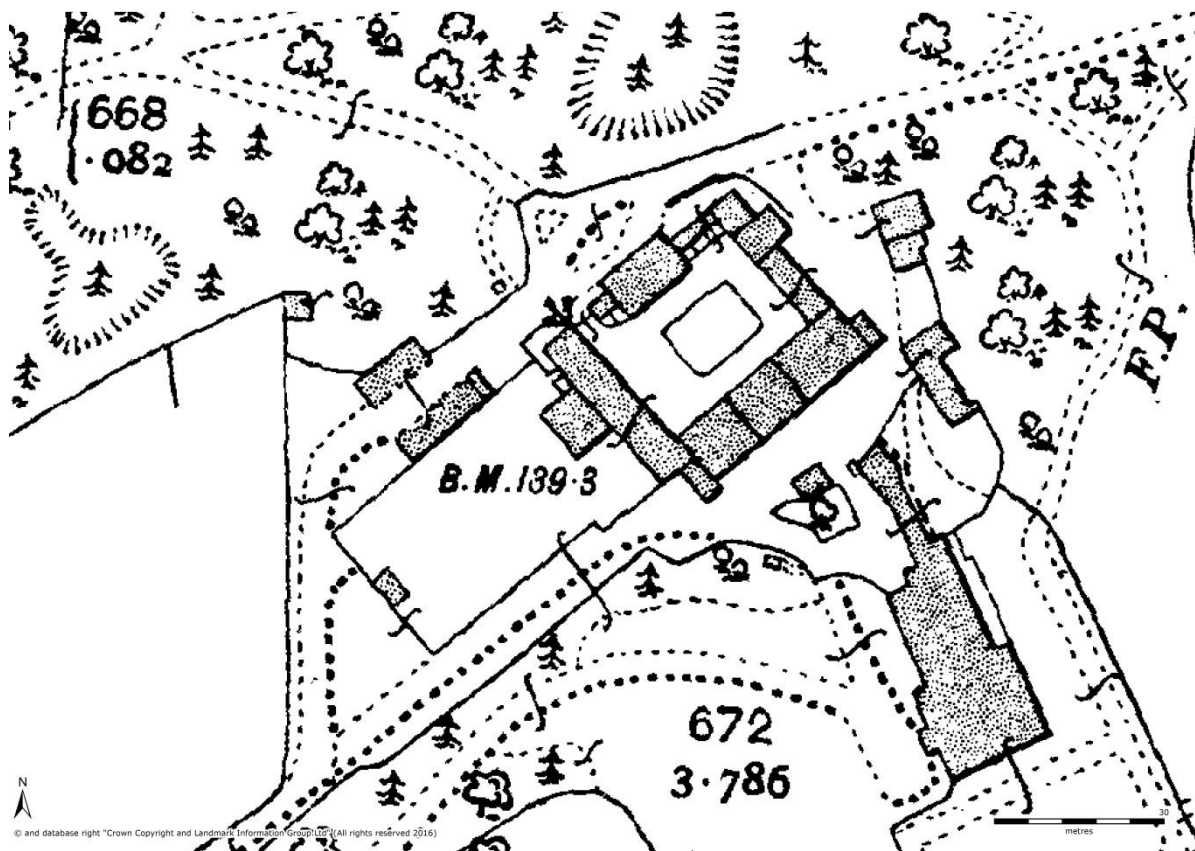


Figure 8 Second Edition of the Ordnance Survey 25 Inch Map, 1907.



*Figure 9 Stables Range - looking north along south-east elevation.*



*Figure 10 South-west Range - farmyard elevation.*



*Figure 11 Farmyard - View looking north-east across farmyard to North-east Range (central).*



*Figure 12 Farmyard Range - south-west end of farmyard elevation.*





*Figure 13 A concrete pump or flagpole base within the farmyard.*



*Figure 14 North-west Range – farmyard elevation of the three pigsties at the north-east end [19].*



*Figure 15 North-west Range - Looking north to farmyard elevation of central block (originally a linhay).*



*Figure 16 North-east Range - farmyard elevation.*



Figure 17 Exposed granite cobbles in farmyard.



Figure 18 Implement shed, adjoining the north side of the rickyard.



Figure 19 Stables Range – later garage/game larder [7] lean-to added to range by 1907.



Figure 20 Stables Range – iron hooks within garage/game larder [7].



Figure 21 Stables Range - south-east elevation of the lower end of the stables with garage/game larder to right. Blocked ground floor and first floor windows indicate the upper floor once extended further left. Note also the bell on the roof of the range.



Figure 22 Stables Range - middle part of the range showing later principal doorway and windows. Note the blocked slit ventilator between the scale pole and the RH window.



Figure 23 Stables Range – upper end of the south-east elevation of the stables, showing a later lean-to addition [1] to left of the coach house [2].



Figure 24 Stables Range – stables [5], showing stall and corridor detail.



Figure 25 Stables Range – stables [5], showing interior stall detail, drain and hay rack.



Figure 26 Stables Range – entrance corridor [4], showing details of woodwork. Although they were originally built as separate entities this corridor now links the stables to the Farmyard Range.



Figure 27 Stables Range – interior of former first floor tack room [8] with saddle rests visible on panelled wall.



Figure 28 Stables Range – stove within former tack room [8].





Figure 29 Rear wall of the Stables Range – viewed from inside room [10] of the Farmyard Range; old doorway blocked before lean-to roof of Farmyard Range was added, and masonry underpinning inserted at base of the wall to deal with change of level.



Figure 30 Farmyard Range – former working horse tack room (and later farm office or crib room [12])



Figure 31 Corner between North-east (right), Stables (left) and Farmyard Ranges (centre) - exterior of the former working horse tack room and later farm office/crib room [12]. The left hand window is a converted doorway that once probably connected with an extension mapped here on the 1841 and 1880 maps.



Figure 32 Farmyard Range – interior of working horse stable [11] showing cobbling, stalls (right) and doorway to former working horse tack room.



Figure 33 Farmyard Range – displaced wooden cupboard with Dutch labels located in the working horse stables [11].



Figure 34 Farmyard Range – interior of former cow-house [9] with inserted (and later blocked) doorway to South-west Range to rear left.



*Figure 35 Farmacyard Range – later partition and feeder within former cow-house [9].*



*Figure 36 South-west Range – the rickyard elevation with the loft over the horse-engine house (centre).*



*Figure 37 South-west Range – rickyard elevation, first floor; masonry detail of wall and window opening with the wood ventilators and internal shutters.*



*Figure 38 South-west Range - subdividing wall in the ground floor at the south-east end of the range [28].*



Figure 39 South-west Range – the north-west ground floor room space of the barn [24], with later adaptation in the Second World War.



Figure 40 South-west Range – the north-west ground floor room space of the barn [24], with Dutch painted sign and traces of removed stove pipes.



Figure 41 South-west Range – the north-west ground floor room of the barn [24] with Dutch painted signs on beam and supporting brick pillar.



Figure 42 South-west Range – ground floor, central room space of barn [25] showing gear recesses (right of centre), inserted brick wall and raised floor level.



*Figure 43 South-west Range - bearing support for vertical axle within ceiling of room [25].*



*Figure 44 South-west Range – first floor, north-west room space [31] with roof trusses showing recent repair and damage to roof covering visible.*





Figure 45 South-west Range – first floor, north-west room space [31], grain bin, partition wall with doorway to south-eastern part [29]/[30] and chute leading to ground floor (right).



Figure 46 South-west Range - original threshing doorway (within red rectangle) blocked when horse-engine was added outside, new doorway to right, and machinery bearing support included in masonry (arrowed).



Figure 47 South-west Range - detail of a king post roof truss. Note also the cut-out for a machinery bearing to the right.



Figure 48 South-west Range - detail of roof collar joint.



*Figure 49 South-west Range - carpenter's marks on roof trusses.*



*Figure 50 South-west Range – looking east to the exterior of the horse engine house, showing first floor addition [33].*



Figure 51 South-west Range - inside the horse-engine house [32].



Figure 52 South-west Range - horse engine house [32]: looking down from first floor towards in situ lower bearing (arrowed).



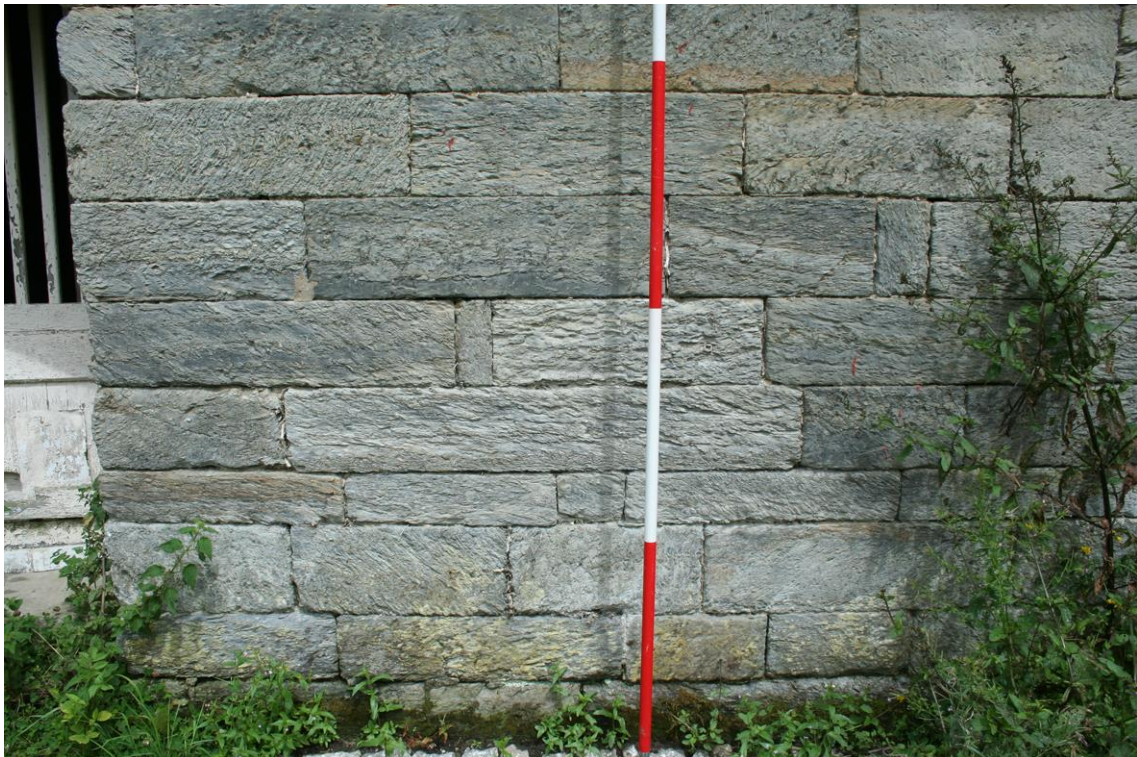
Figure 53 South-west Range - horse engine [32] upper bearing location, timberwork and added upper floor.



Figure 54 South-west Range – looking south-west to the rear wall of the upper floor extension to the horse-engine house [33].



*Figure 55 South-west Range - passage along the back of the range to the horse-engine house.*



*Figure 56 North-east Range – very finely jointed ashlar slate masonry on farmyard elevation.*

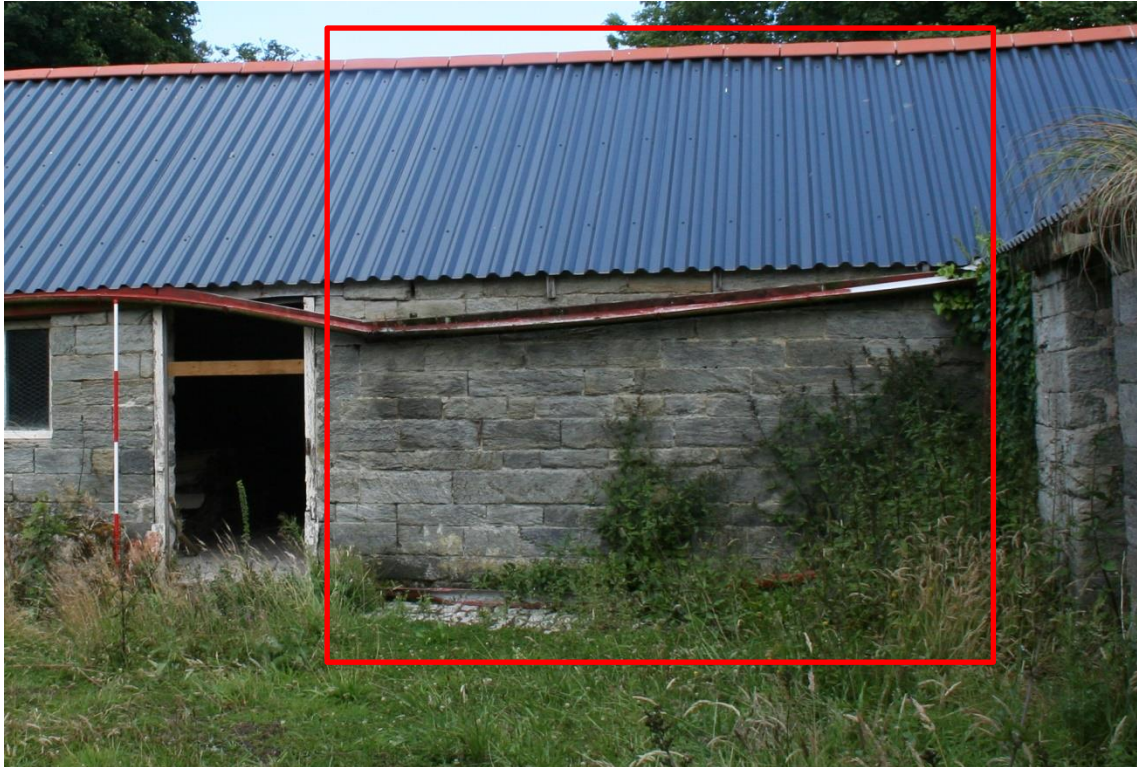


Figure 57 North-east Range - location of former farmyard gateway (within red rectangle).



Figure 58 North-east Range - exterior view showing location of original farmyard gateway.



Figure 59 North-east Range - pair of later lean-to buildings (rooms [17] and 18]) added to the rear elevation.



Figure 60 North-east Range - interior of room [15] showing recesses 'keeping places' in dividing wall and original feed passage door to left.





*Figure 61 North-east Range - interior of room [16].*



*Figure 62 North-east Range - swill boilers in room [16].*



Figure 63 North-west Range – rear view, showing the inserted farmyard gateway and rebuilt gable of the adjoining pigsties.



Figure 64 North-west Range - loft opening in central block, showing reused dressed masonry window parts.



Figure 65 North-west Range - stalls within later cow-house in ground floor of central block [21].



Figure 66 North-west Range - tiled drain within cow-house [21].



*Figure 67 North-west Range - lintelled recesses or 'keeping places' within the central block.*



*Figure 68 North-west Range - Loft within central block [23].*



*Figure 69 North-west Range - pigsty doorway and run.*



*Figure 70 North-west Range - granite trough in pigsty run wall.*

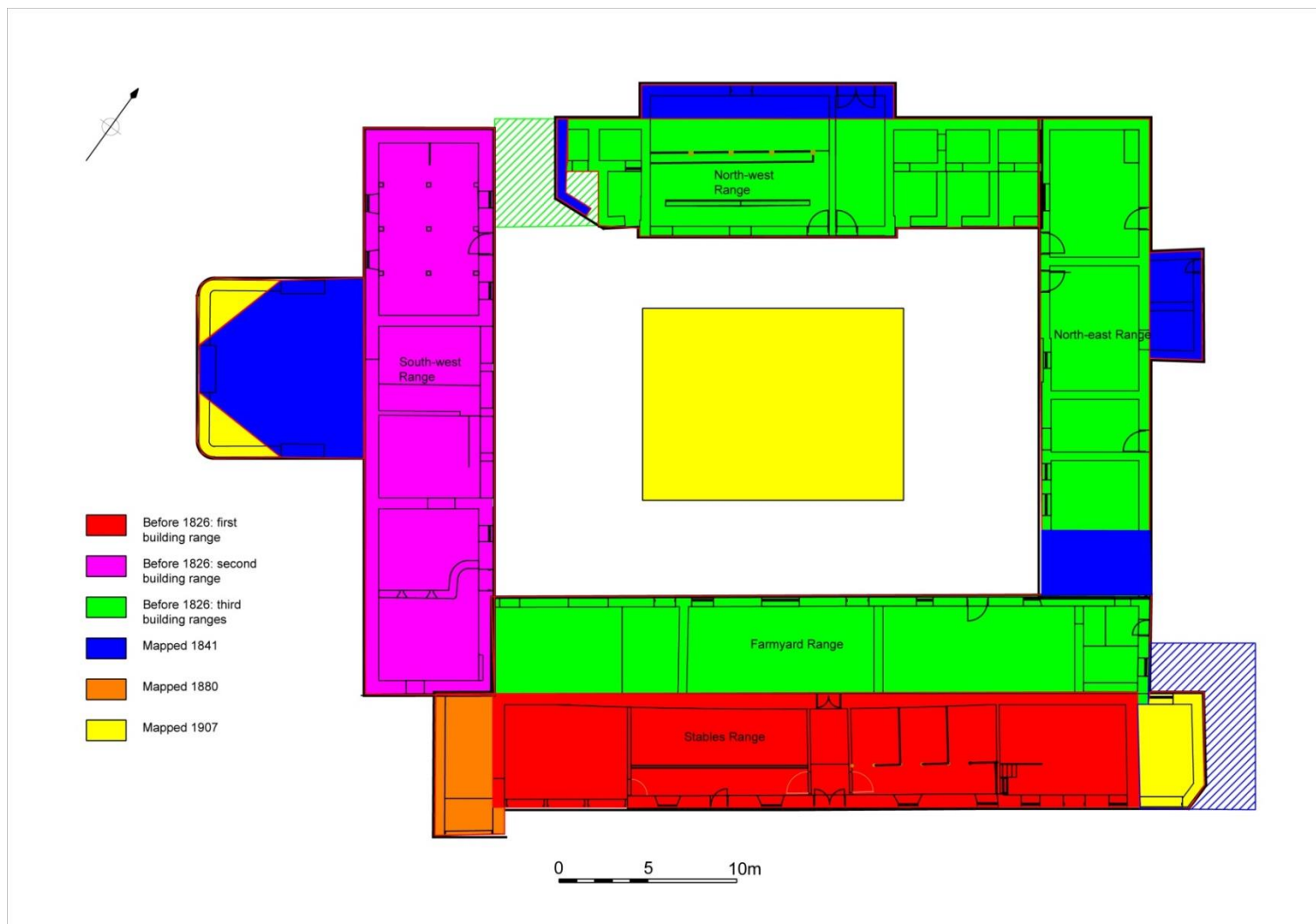


Figure 71 Schematic phase plan, largely based on mapped data. Note that this does not show Second World War features or other internal alterations.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

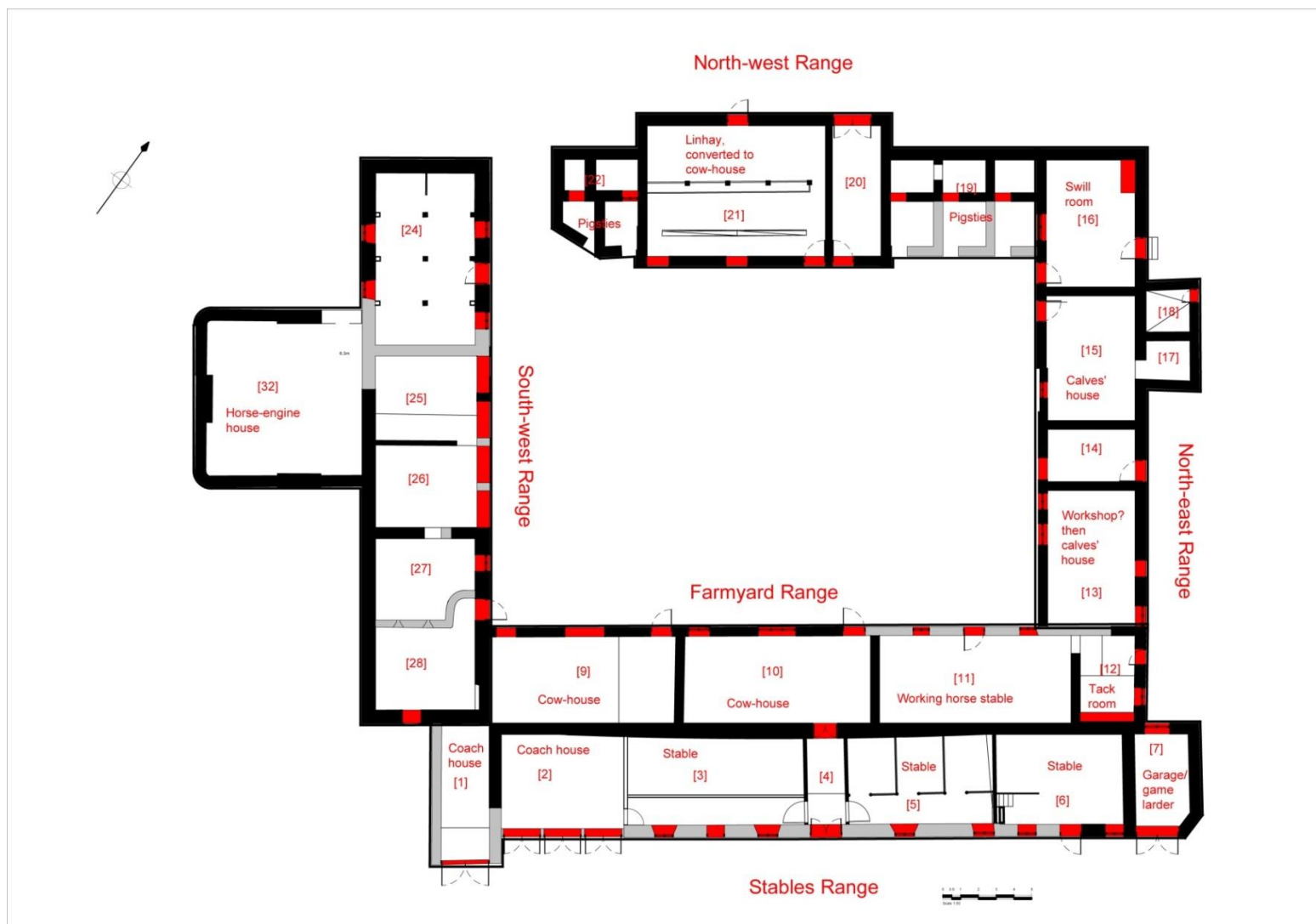


Figure 72 Ground floor room numbers and functions (where known).

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

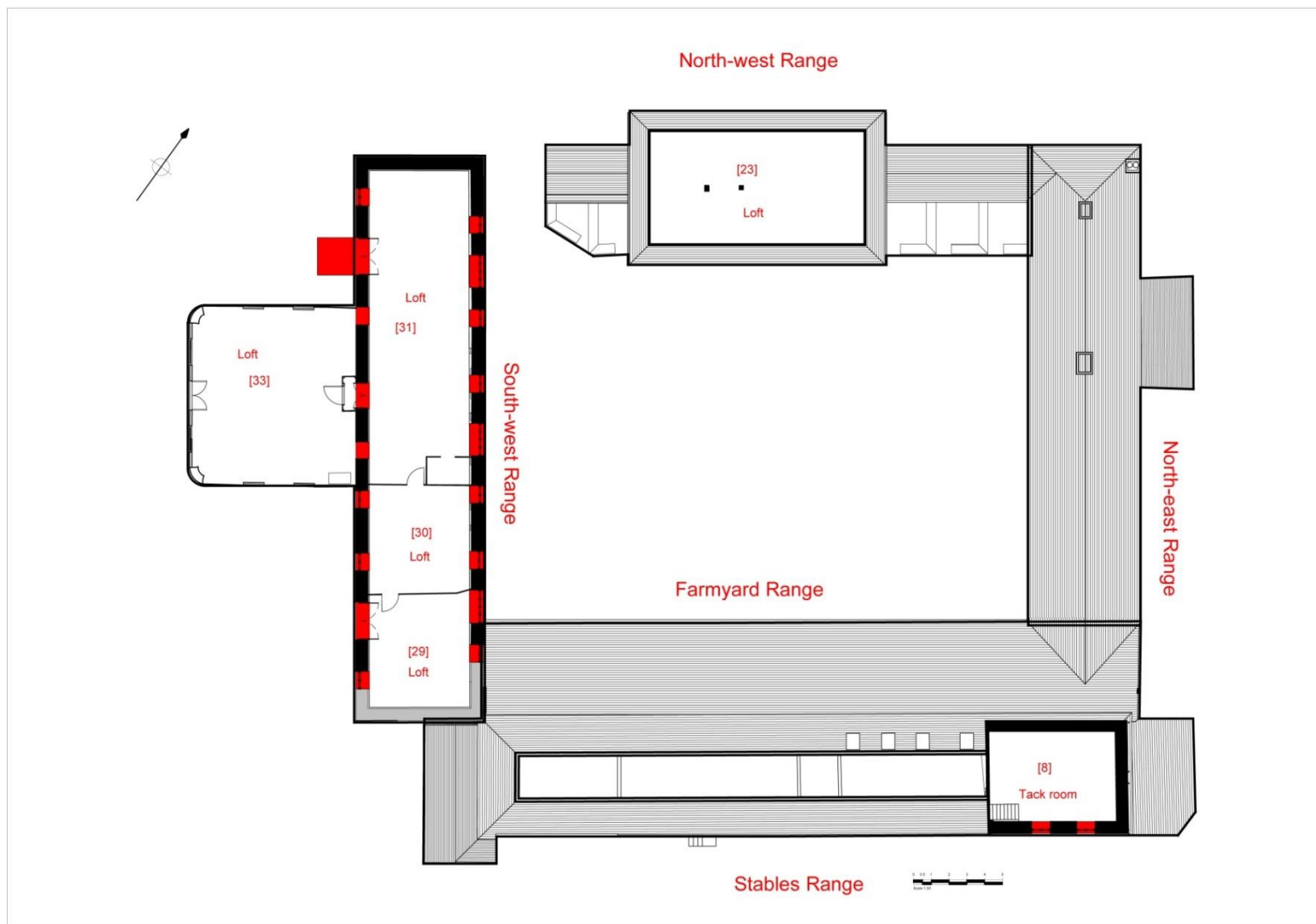


Figure 73 First floor room numbers and functions (where known).

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.



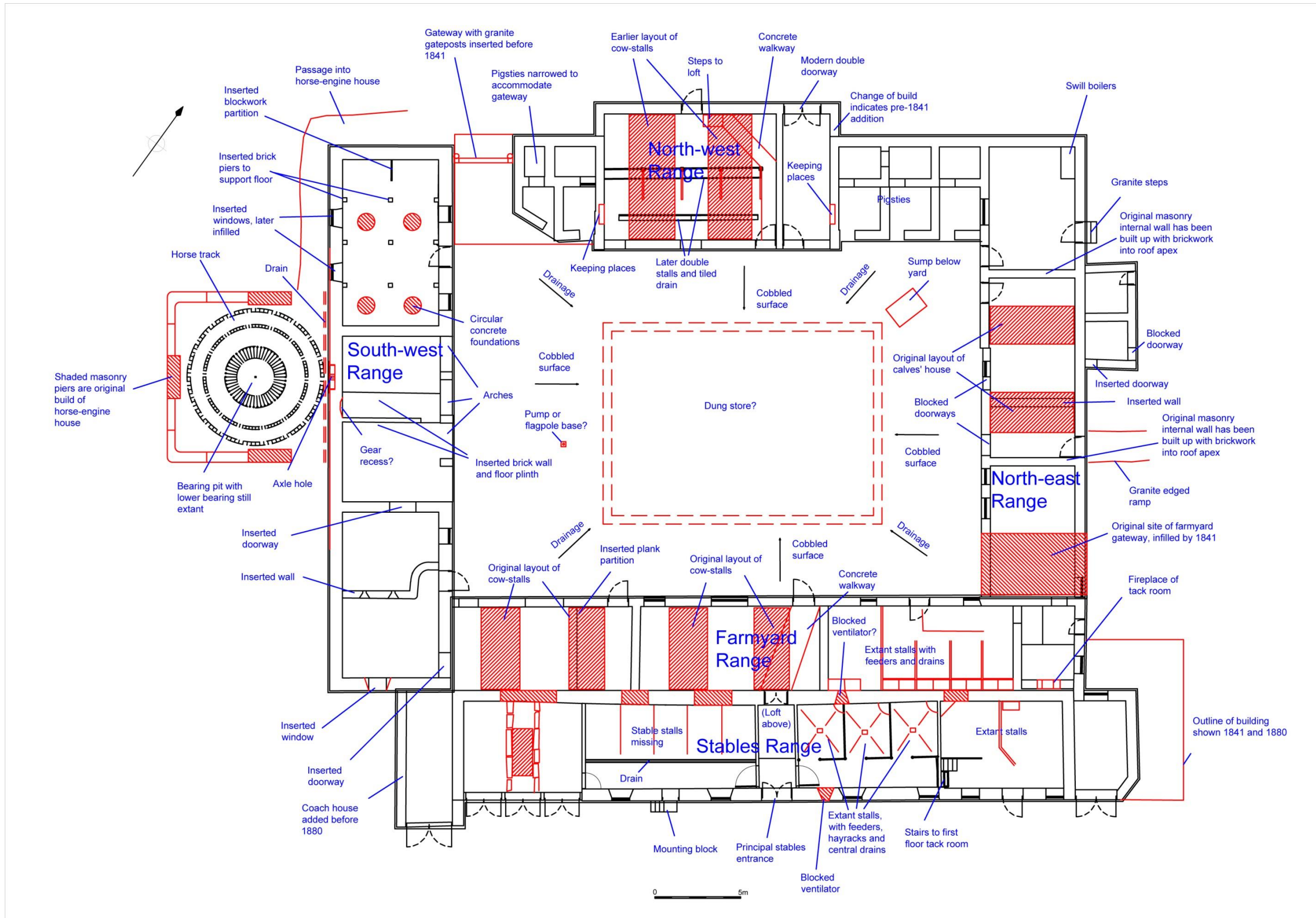


Figure 74 Ground floor plan.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

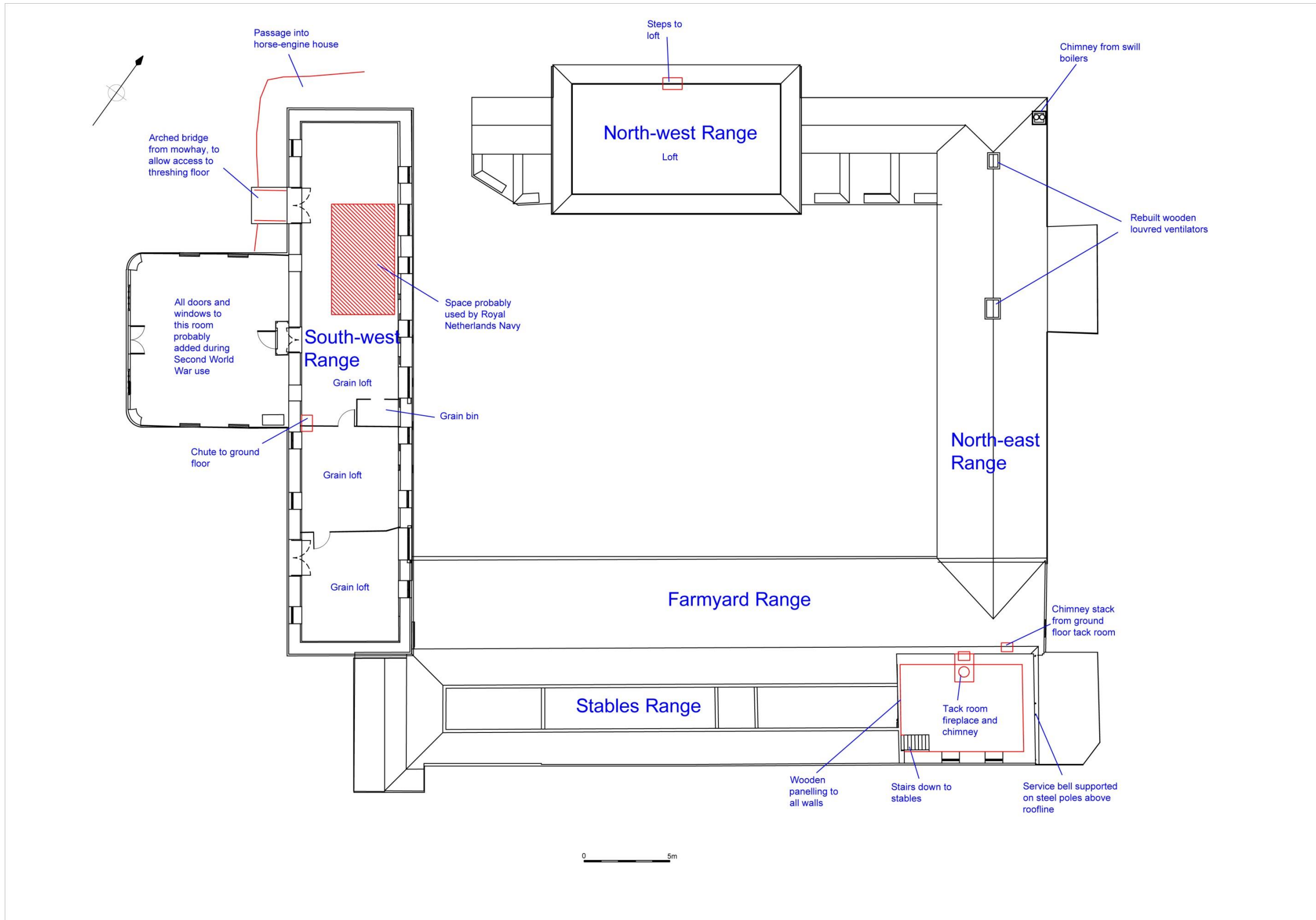


Figure 75 First floor plan.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

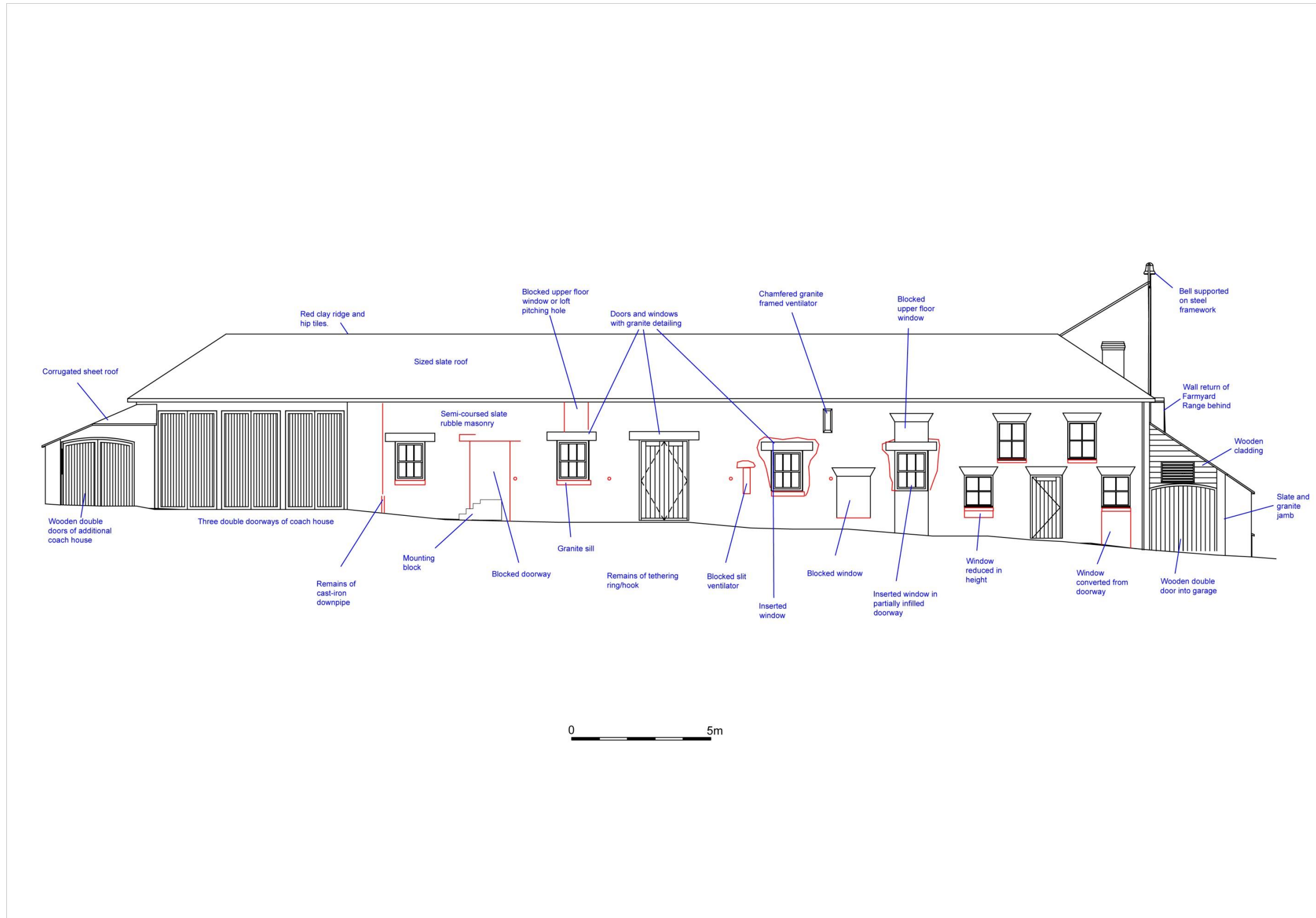


Figure 76 Elevation of the Stables Range.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

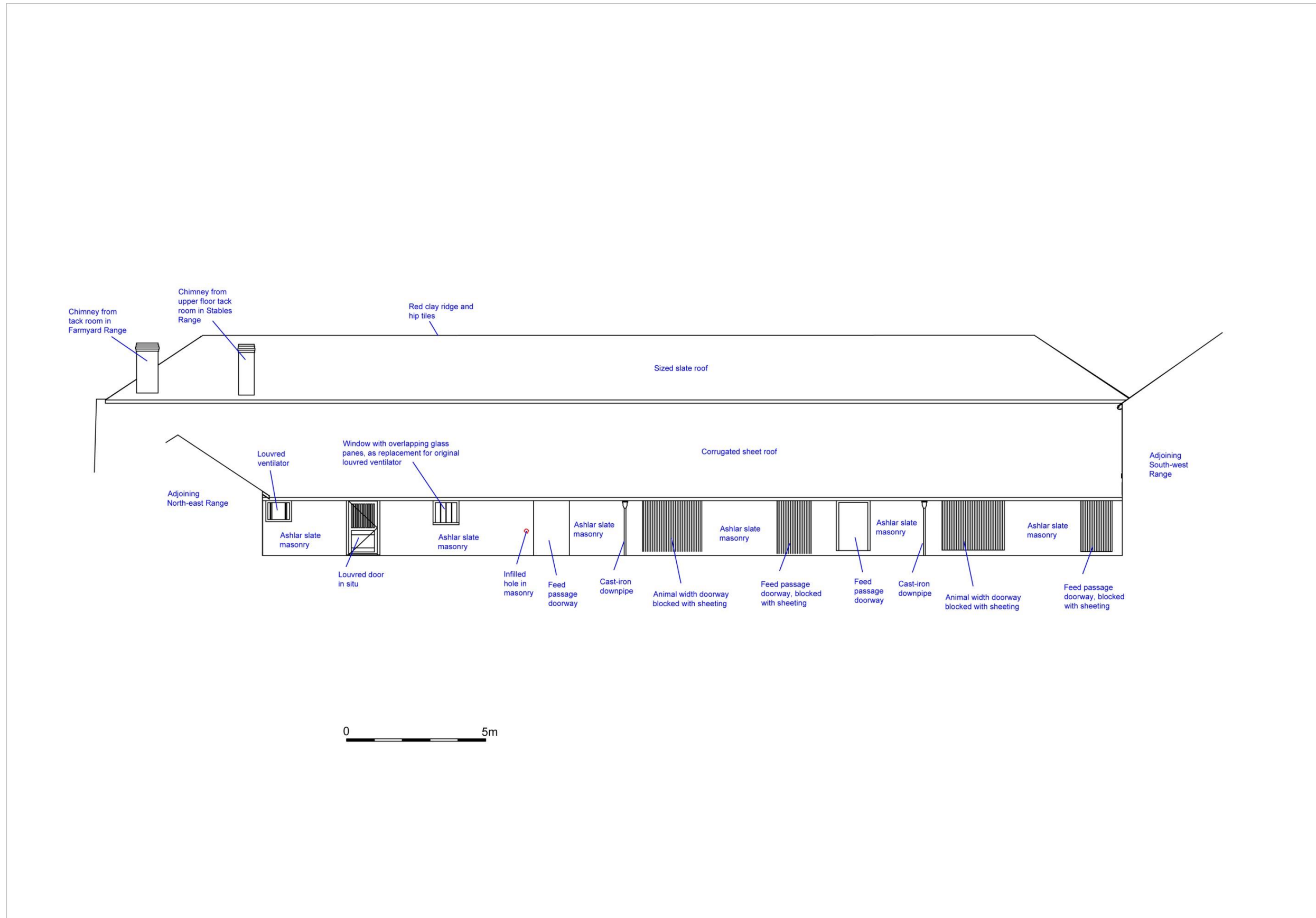


Figure 77 Elevation of the Farmyard Range.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

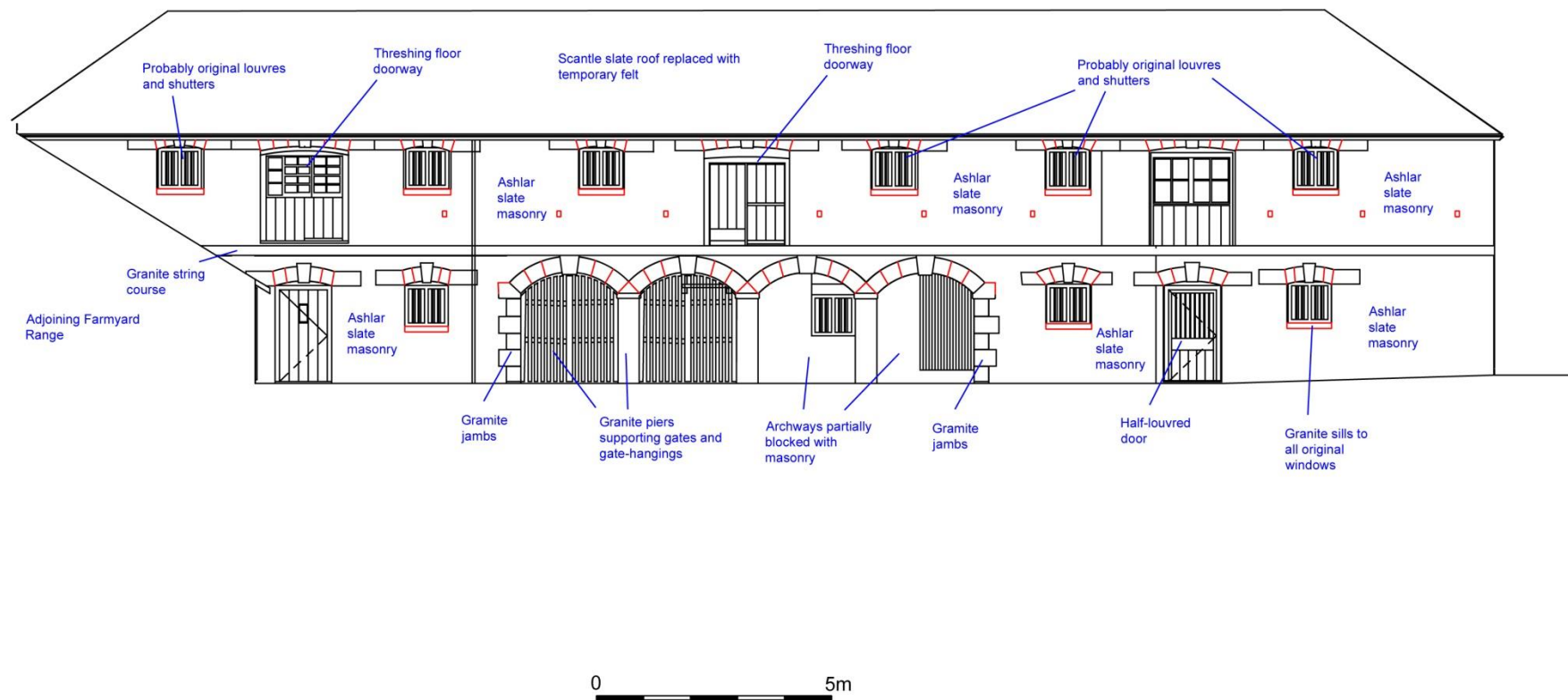


Figure 78 Elevation of the South-west Range (the principal barn), facing the farmyard.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

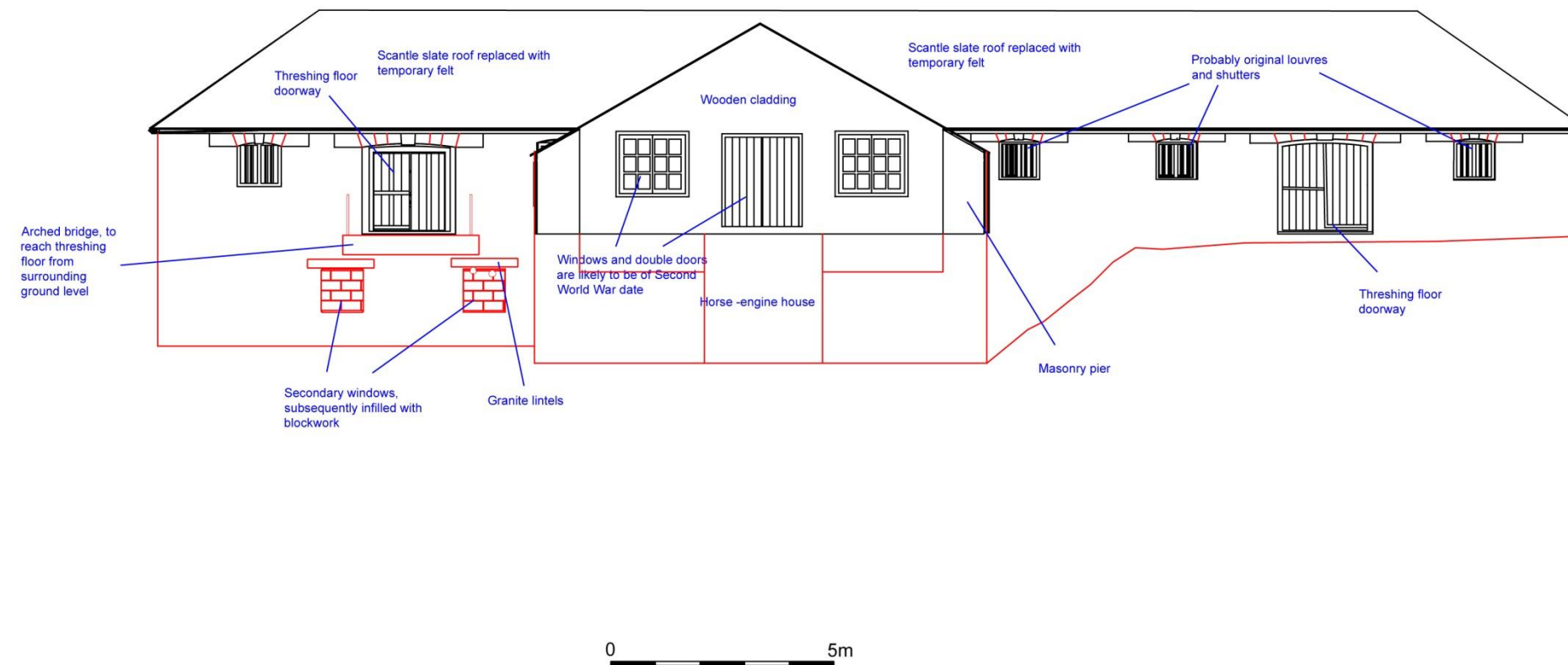


Figure 79 Elevation of the South-west Range, facing the rickyard. The horse-engine (below ground) is shown in outline only.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

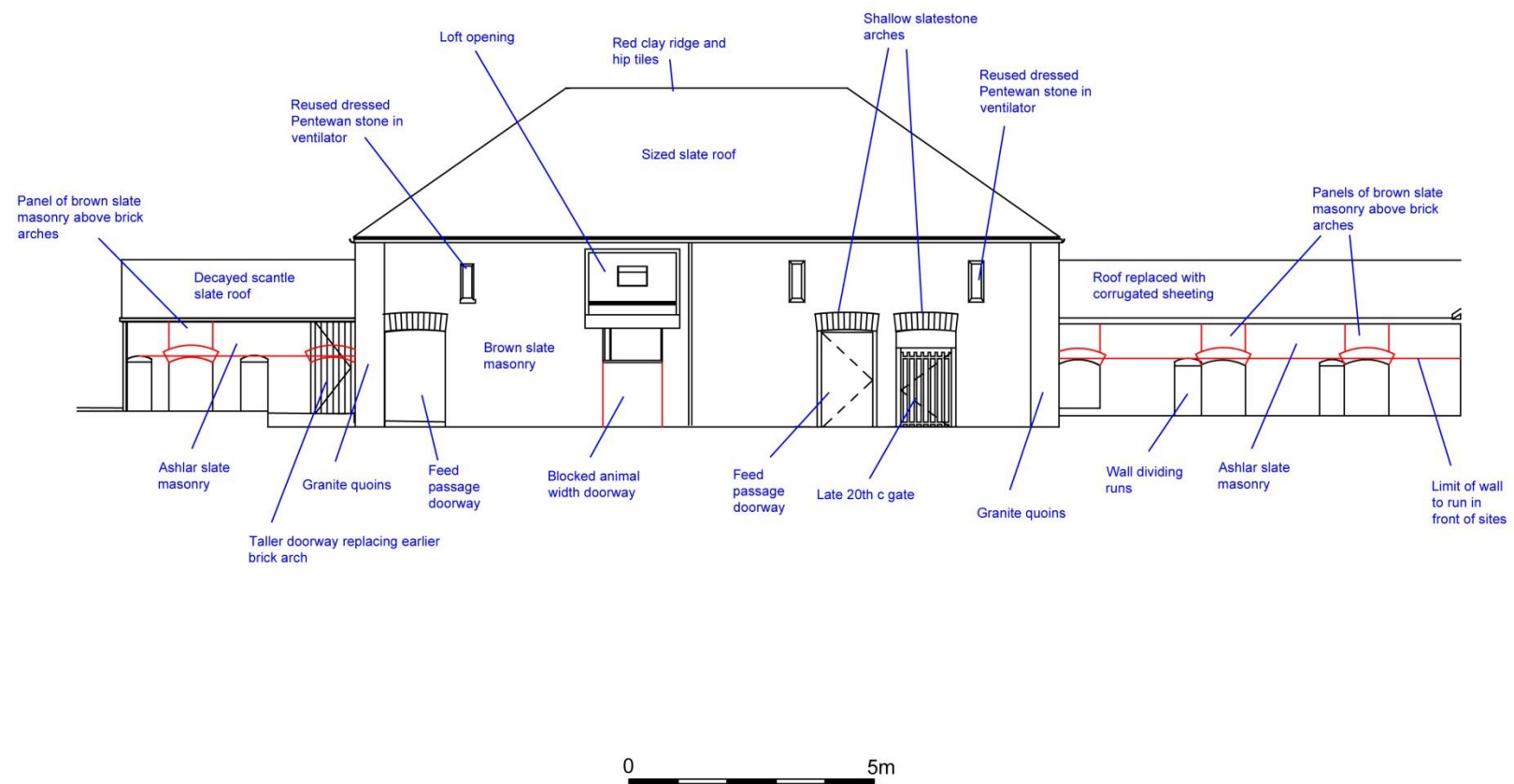


Figure 80 Elevation of the North-west Range, facing the farmyard.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

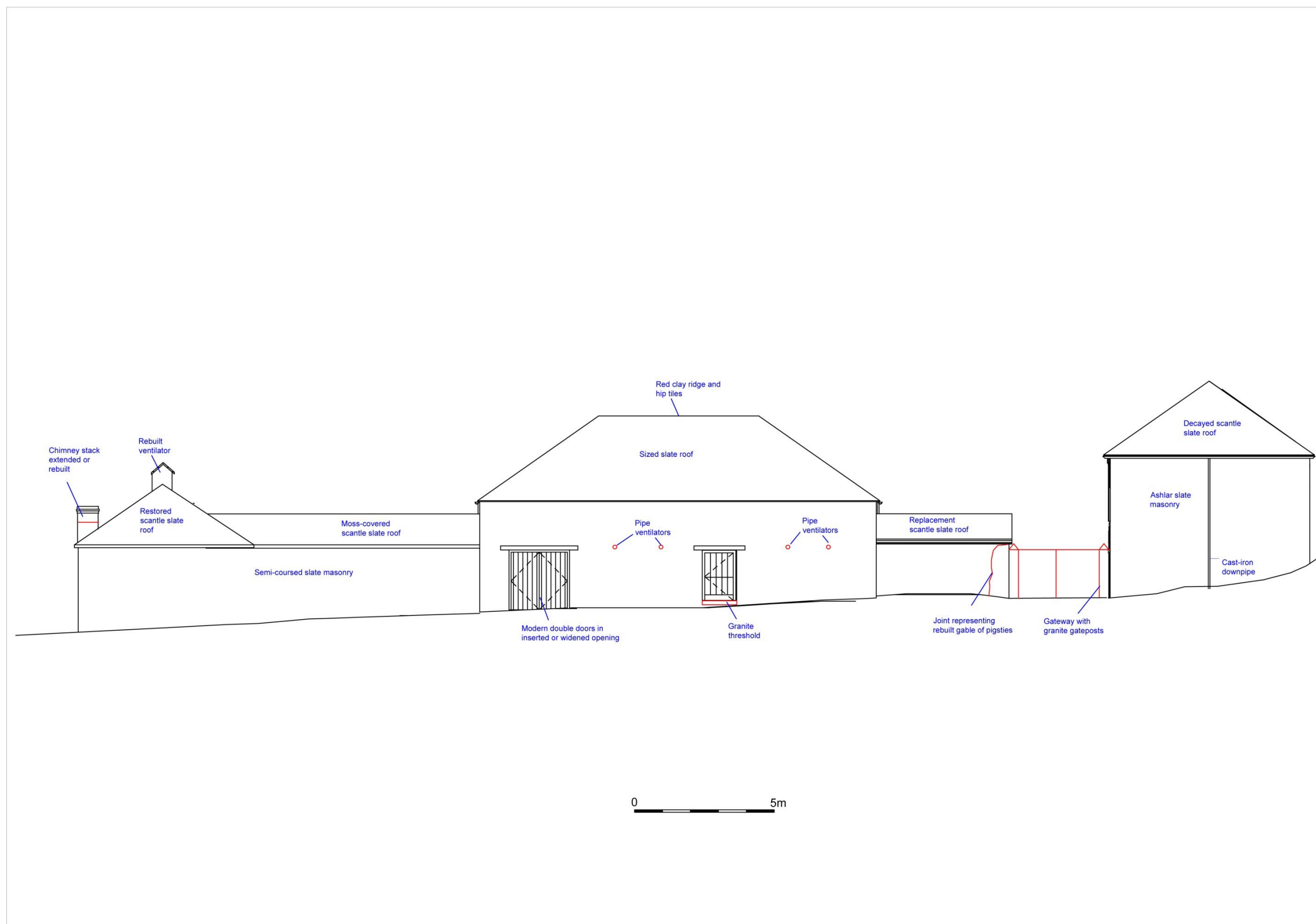


Figure 81 Rear elevation of the North-west Range.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.



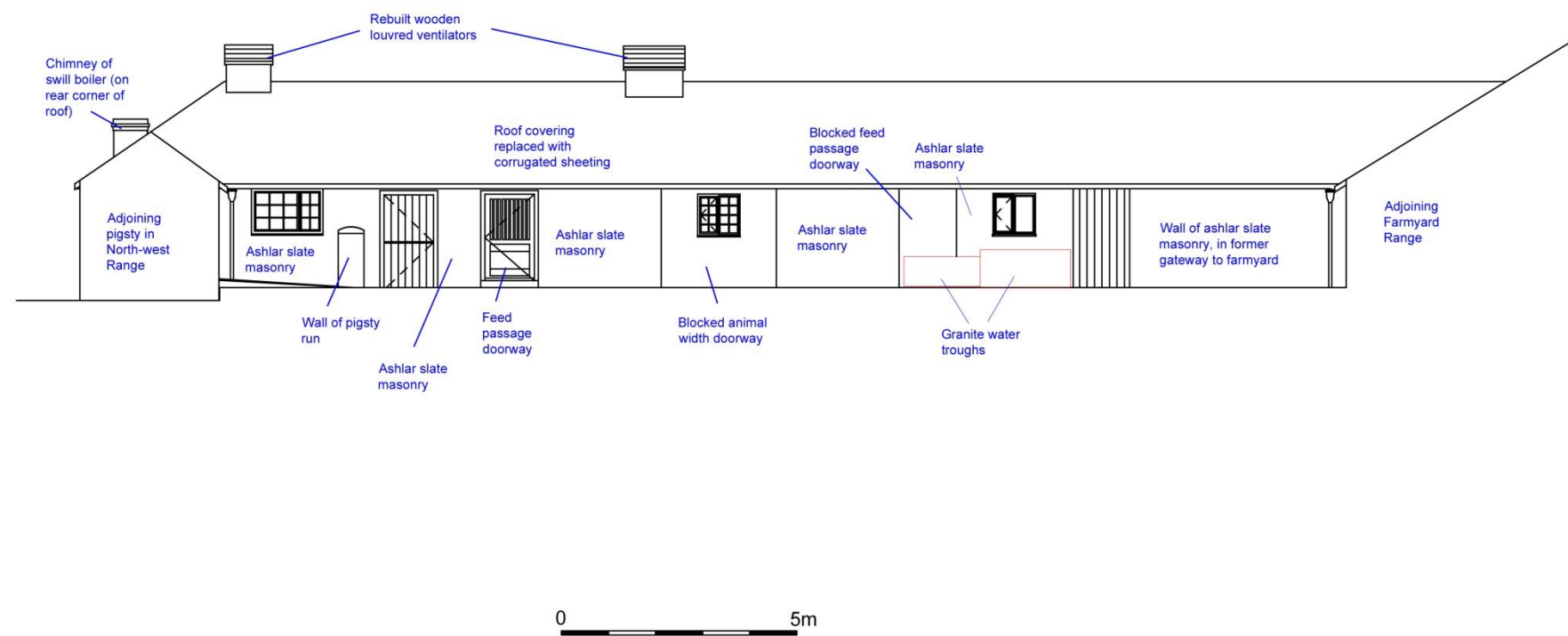


Figure 82 Elevation of the North-east Range, facing the farmyard.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

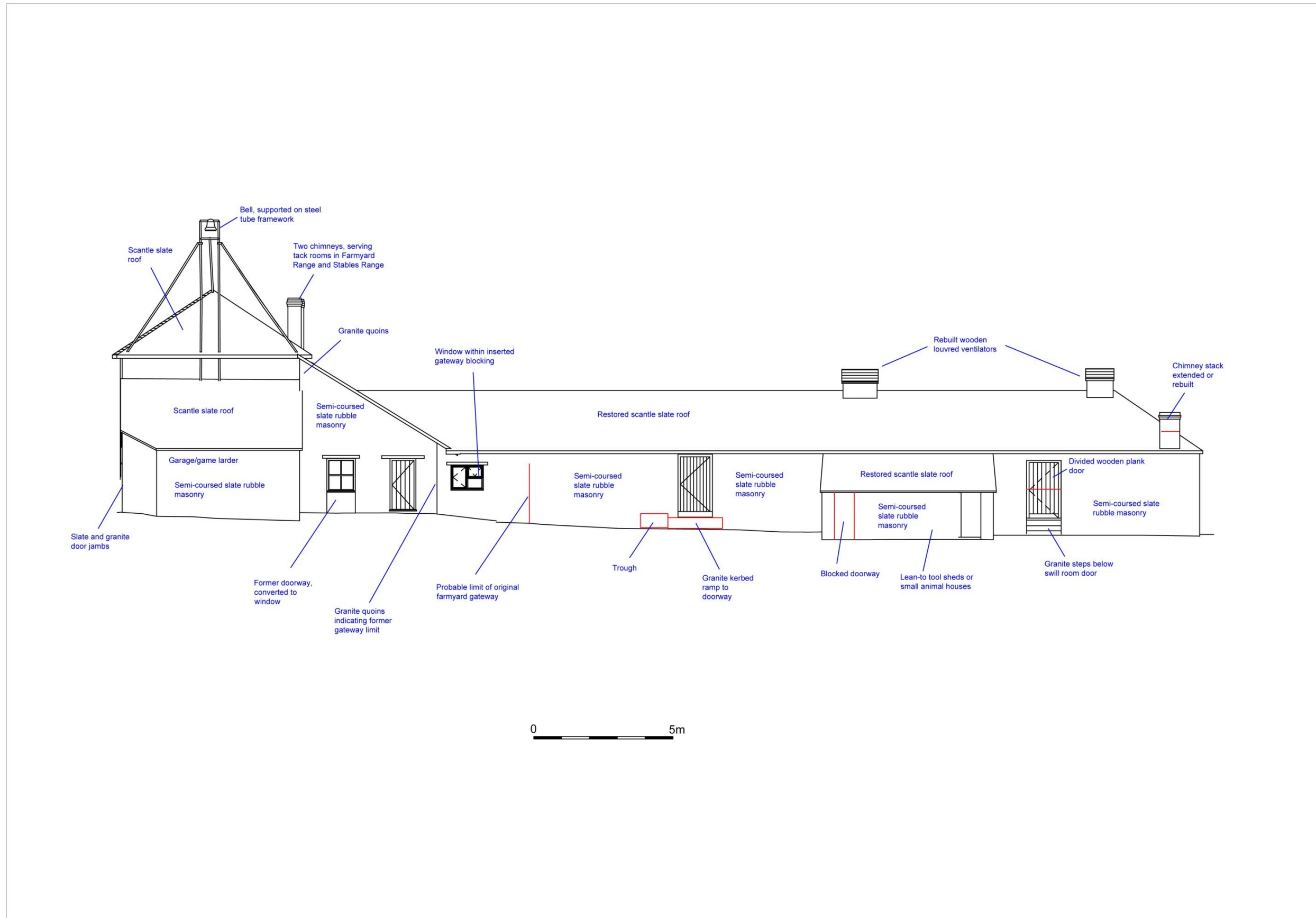


Figure 83 Rear elevation of the North-east Range.

Survey drawings provided by Savills UK Ltd, with sketched additions and annotation by CAU.

## **Appendix 1: Written Scheme of Investigation**

### **Enys Estate farm building complex, Penryn: Written Scheme of Investigation for historic building record and archaeological watching brief**

#### **Project background**

Within the Enys Estate the house along with its farm building complex is situated approximately 1.5km to the north-east of Penryn, adjacent to a tributary leading to Mylor Creek and Carrick Roads on the south coast of Cornwall. The buildings lie on north and east facing slopes overlooking the river valley at NGR SW 79127 36421 and at a height of 45m OD in the south-west dropping down to 40m in the north-east. The farm buildings at Enys lie immediately north-west of the house, and collectively form a model farm set around a central yard. They are Grade II listed buildings which were originally built during the late 18<sup>th</sup> and early 19<sup>th</sup> century. Having lain empty and unused for some time, Listed Building Consent is now being sort to convert the buildings into nine residential units and a cafe with interpretation area and also to construct a garage with bat habitat area and a biomass outbuilding (planning application PA16/01655). A Heritage Impact Assessment was completed by Wessex Archaeology in 2015 in which recommendations were made for the completion of a Level 3 historic building record as defined by Historic England prior to the commencement of work on the buildings.

Cornwall Archaeological Unit has been commissioned by Savills (UK) Ltd on behalf of the Enys Estate to carry out a historic building record (equivalent to a Historic England level 3 building survey) prior to conversion and alterations and also to carry out a watching brief during any groundworks associated with the development.

#### **Site history**

(Taken from Wessex Archaeology's Heritage Impact Assessment)

The estate developed around Enys in the parish of St Gluvias in the early 14<sup>th</sup> century. The Enys family have held the estate since this time. A medieval manor house is known to have been constructed on the estate but it was not on the site of the existing house and its exact location is unknown ([http://enysfamilyarchive.co.uk/?page\\_id=1021](http://enysfamilyarchive.co.uk/?page_id=1021)).

Prior to the existing Enys House there was an Elizabethan property built in a traditional E-plan. Although destroyed by fire in 1826, undamaged elements of this structure have been incorporated into the existing house.

The earlier house was enlarged and the gardens redesigned in 1709 by Samuel Enys with additional improvements to the house over several years until 1745 ([http://enysfamilyarchive.co.uk/?page\\_id=1021](http://enysfamilyarchive.co.uk/?page_id=1021)).

A 1779 estate map appears to show that the south-east range of the farm buildings had already been constructed by this date. The rest of the site is subdivided into several plots, namely a hay meadow (plot 28– mowhay meadow) and a mowhay (plot 48). The mowhay plot includes a couple of rectangular plan buildings. Other plots that may overlap the development area are a hop garden (plot 47) to the south and part of plot 91 labelled as 'House and townplat'.

The Elizabethan Enys House burned down in 1826. A late 18<sup>th</sup> or early 19<sup>th</sup> century map of Enys Gwarder and Pencoose Etc. is watermarked 1798 and is the first to show the model farm planned in a quadrangle around a central yard. The map also shows the Elizabethan Enys House, extended from its original E-plan, which indicates that the map dates to 1798-1826. Therefore the farm buildings must date to the very late 18<sup>th</sup> or early 19<sup>th</sup> century.

Estate accounts indicate that a 'Barne House' was constructed by John Treloar between 1799 and January 1800 ([http://enysfamilyarchive.co.uk/?page\\_id=1021](http://enysfamilyarchive.co.uk/?page_id=1021)), which probably refers to the south-west farm building range. Further entries state that in June 1800 John Enys paid Wm. Harvey & Son of Falmouth for work and supplies to farm buildings. This included "roofing hogshouses, a cattle feeding house, balk for the cart house, 4 gates to feeding house, 1 large window frame with oak cill, a 1½ inch fine plate lock, and another with the key cut to turn down." ([http://enysfamilyarchive.co.uk/?page\\_id=1021](http://enysfamilyarchive.co.uk/?page_id=1021)). This indicates that as well as a 'Barne House' there was also hoghouses, a cattle feeding house and cart house, all of which are represented in the existing farm buildings indicating they were constructed *circa* 1800.

During the 19<sup>th</sup> and early 20<sup>th</sup> century further buildings were added to the farm building complex. Other structures were also added during WWII when the Royal Netherlands Navy were stationed/trained here.

### **Project extent**

The study area covers approximately 0.5 HA and consists of ranges of buildings set around a square yard and a concrete yard area to the south-west.

### **Aims and objectives**

The principal aim of the study is to gain a better understanding of the function and historic development of the farm buildings and identify any below-ground archaeological remains. The objectives are to obtain a record of the buildings and structures prior to alterations and obtain a record of any archaeological features uncovered during groundworks associated with the development.

The equivalent of a Level 3 building survey (as defined by Historic England 2006) will be produced.

### **Working methods**

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

### **Desk-based assessment**

A heritage impact assessment was carried out in 2015 (Wessex 2015) which will be used to inform the fieldwork stage. Historic maps and archives will be studied to be used as supporting information.

### **Fieldwork: historic building record**

The equivalent of a Level 3 building survey (as defined by Historic England 2006) will be produced.

Archaeological recording will include architectural features and details of sub-surface elements. Measured information and detail, as appropriate, will be added to copies of existing drawings supplied by the client.

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

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

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 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.
- 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.

### **Fieldwork: Watching brief**

The watching brief will be carried out during groundworks associated with the new build. Measured information and detail, as appropriate, will be added to copies of existing contractors drawings.

Any archaeological remains encountered will be archaeologically excavated and recorded.

### *Recording methodology - general*

- Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the Ordnance Survey landline map; all drawings will include standard information: site details, personnel, date, scale, north-point.
- Plans and sections will be made of significant features, at an appropriate scale (preferably 1:20 or 1:10).
- All areas excavated as part of the groundworks will be accurately located on a site location plan at an appropriate scale.
- All finds from significant stratified contexts will be collected.
- 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, samples and contexts will be maintained during the fieldwork.
- The excavated spoil will be carefully inspected for finds.

**Note:** If significant archaeological deposits are exposed, works will be temporarily halted and a meeting will be convened with the client to discuss the most appropriate way forward.

In the event of significant archaeological features being discovered a further stage of post excavation analysis and publication may be required. The scope of any such recording would first need to be agreed between CAU, the Client and the Local Planning Authority.

### *Photography*

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 of significant archaeological features and / or structures will be taken to form a long term, stable archive.

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

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.

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

#### *Finds*

- All finds will be retained from each archaeological context excavated.
- All finds, where appropriate, shall be washed.
- All pottery, and other finds where appropriate, shall be marked with the site code and context number.
- Finds work will be to accepted professional standards and adhere to the Chartered Institute of Field Archaeologists' Guidelines.

#### *Sampling*

- The archaeologist undertaking the watching brief will assess the potential for environmental sampling.
- Environmental sampling will be guided by Environmental Archaeology (English Heritage 2001/02)
- Other Historic England guidance such as Geoarchaeology (2004) and Archaeometallurgy (2001) will be consulted if required.

#### **Creation of site archive**

To include:

- Digital colour photographs (stored according to HER guidelines and copies of images made available to the client).
- Black and white negatives (stored according to HER guidelines)
- A detailed site/building description.
- Preparation of finished drawings.
- Processing and cataloguing of finds and samples.
- Completion of the Historic England/ADS OASIS online archive index.
- Completion of paper, digital, photographic and artefactual archive.

#### **Archive report**

A written report will include:

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

A digital (PDF) copy of the report, illustrations and any other files will be held in the Cornwall HER. Digital and 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 CAU 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. The project archive will be deposited initially at ReStore PLC, Liskeard and in due course (when space permits) at Cornwall Record Office.
4. Digital data 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

### **Timetable**

The study is anticipated to be commenced during July 2016. CAU will require at least one weeks' notice before commencement of work, in order to allocate field staff 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**

Monitoring of the project will be carried out by the Senior Development Officer (Historic Environment). Where the SDOHE is satisfied with the archive report and the deposition of the archive written discharge of the corresponding planning condition will be expected.

1. The SDOHE will monitor the work and should be kept regularly informed of progress.
2. Notification of the start of work shall be given preferably in writing to the SDOHE at least one week in advance of its commencement.
3. Any variations to the WSI will be agreed with the SDOHE, in writing, prior to them being carried out.
4. 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

English Heritage, 2006. *Understanding Historic Buildings: A guide to good recording practice*. English Heritage, Swindon

English Heritage, 2007. *Understanding the Archaeology of Landscapes: A guide to good recording practice*. English Heritage, Swindon

Wessex Archaeology, 2015. *Enys Estate Agricultural Buildings, Penryn, Cornwall, Heritage Impact Assessment*, Salisbury

## Cornwall Archaeological Unit

Cornwall Archaeological Unit is part of Cornwall Council. CAU employs 20 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
- Heritage Impact Assessments
- 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 by a nominated Archaeology Projects Officer 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.

Work will be carried out by CAU field staff, with assistance from qualified specialists and sub-contractors where appropriate. The project team is expected to include:

*Joanna Sturgess BA*

Project Officer at CAU with a wide range of experience in recording historic buildings, landscapes, excavation, post-excavation and characterisation. Past historic building works have included City Wharf, Truro; Harvey's Foundry, Hayle; Boswednack Serpentine works; Porthmeor farm; Bartle's Foundry, Pool; Manor Tannery, Gram-pound; Duchy Palace, Lostwithiel, Cutmadoc Farmhouse, Lanhydrock, the Piggery and Cider House at Godolphin, Poltesco Mill House and variety of domestic buildings, mine sites, farm buildings and industrial buildings. Other projects include Gwithian's past excavations, Lemon Quay excavation, Goonhilly Earth Station survey, Lower Boscawell 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.

*Cathy Parkes BA MCiFA*

Archaeologist Cathy Parkes has worked on a variety of projects with CAU over some 20 years and has a particular interest and experience in landscape archaeology. Projects undertaken have involved recording and assessing landscapes including coastline, ancient woodland, and ornamental parkland; among them the Fowey Estuary, Newquay Barrowfields, Trewarthenick Park, and Cornish National Trust properties such as Trerice, Dodman and St Austell Bay, and Turnaware on the Fal. Other major work carried out includes designation for the Monuments Protection Programme, scheduling sites of varied types and periods across the former Carrick district, and elsewhere in Cornwall; English Heritage's Scheduled Monuments at Risk survey for the county; and archaeological evaluations of road and pipeline schemes in varied areas - Bodmin Moor, Boscawell-Tintagel, Camborne, Pool and Redruth, St Austell-A30, and Truro. Member of the Institute for Archaeologists.

*Nigel Thomas BA MCiFA*

Independent archaeologist and historic buildings consultant. 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 Trerice for the National Trust. Project team leader for the Lostwithiel Town Characterisation Study. Member of the CifA Buildings Group and Graphic Archaeology Group.

### **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 Cornwall Archaeological Unit, 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.

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 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*

*27/6/2015*

### **Cornwall Archaeological Unit**

*Cornwall Council*

*Fal Building, County Hall,*

*Treyew Road,*

*Truro, Cornwall. TR1 3AY*

*Tel: 01872 324302*

*Email: [jsturgess@cau.org.uk](mailto:jsturgess@cau.org.uk)*

## **Cornwall Archaeological Unit**

Fal Building, County Hall, Treyew Road, Truro, Cornwall,  
TR1 3AY

(01872) 323603  
[enquiries@cau.org.uk](mailto:enquiries@cau.org.uk)  
[www.cau.org.uk](http://www.cau.org.uk)

