

BARN AT LOWER RIXDALE FARM

DAWLISH

TEIGNBRIDGE

DEVON

Historic Building Recording



South West Archaeology Ltd. report no. 260620



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Barn at Lower Rixdale Farm, Dawlish, Teignbridge, Devon

Results of historic building recording

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Work undertaken by SWARCH on behalf of a Private Client

SUMMARY

This report presents the results of historic building recording carried out by South West Archaeology Ltd. (SWARCH) for the Barn at Lower Rixdale Farm, Dawlish in advance of its restoration and conversion to a dwelling.

Lower Rixdale Barn is Grade II Listed; acknowledged as of architectural and historical importance. Its Listing text is limited in its scope however and notes the barn as having six jointed-cruck trusses, when the barn is in fact of six bays and would appear to have only ever had five historic trusses.

It is also to be noted that the barn is recorded as being Listed, 'for group value', which it is felt poorly reflects the actual value of this building; particularly with the presence of a jointed-cruck roof, which is part of a rapidly diminishing and rare group of medieval farm buildings. The building likely dates from the later 15th or 16th century and contains a later phase of trusses likely of later 16th or 17th century date, designed to mimic the earlier medieval trusses, another interesting historic detail and indicative of a phase of extension.

As one of only two surviving traditional farm building on the entire holding, (the other being the shippon attached to the upper part of the farmhouse), it is felt the value of the barn within the group rises exponentially on the farm. Although it is the roof which holds primary value, the building is built of traditional local vernacular materials and is visually dominant within the farmyard views and from the road. It frames the Grade II and Grade II elements of the farmhouse in all views.*

The conversion of this building will ensure its long-term survival, as a lack of maintenance in the last decades of the 20th century and poor-quality modern repairs and additions have led to significant risk to its historic integrity and structural cohesion.



June 2020

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ACKNOWLEDGMENTS

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 THE AGENT (FOR SUPPLYING DOCUMENTATION)

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1.0 INTRODUCTION

LOCATION: LOWER RIXDALE FARM
PARISH: DAWLISH
DISTRICT: TEIGNBRIDGE
COUNTY: DEVON
NGR: SX 94349 77680
SWARCH REF. DLR20
PLANNING REF. 18/01787/LBC AND 18/01786/FUL
DCHET REFERENCE: ARCH/DM/TE/33337A
OASIS NUMBER: SOUTHWES1-394011

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by a Private Client (the Client) to undertake a desk-based assessment and historic building recording for Lower Rixdale Farm Barn, Dawlish, Devon. This work was undertaken in accordance with a written scheme of investigation (WSI) drawn up in consultation with the Devon County Historic Environment Team.

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

Lower Rixdale Farm is located approximately 2.17km from the centre of Dawlish, in the Luscombe Valley above Dawlish Water. To the south along Lower Dawlish Water Road is a small unnamed hamlet of medieval thatched cottages and post-medieval farms and some brick Victorian cottages (see Figure 1). The site lies at a height of approximately 49m (AOD). The farm sits on the west slopes of a stream valley, less than 100m from the watercourse and is 4km from the estuary of the River Exe at Dawlish Warren. The soils of this area are part of the Crediton Association; well drained gritty, locally stony, reddish loamy soils over breccia deposits (SSEW 1984). These overlie the inter-bedded sedimentary, sandstone and conglomerate Permian bedrock (BGS 2020).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Lower Rixdale Barn is itself on the Devon HER (MDV84171), as is the farmstead settlement (MDV16816) and Listed Grade II* and Grade II parts of the farmhouse (MDV84170) and (MDV84390). There is a further record for a barn with a jointed cruck recorded, it is not clear if this references the barn which is the subject of this study or another barn (MDV22147) consequently demolished. Wider afield on the holding and surrounding landscape; the established orchards south (MDV124683) and west (MDV124640) of the farmstead, with drainage features are also recorded as potentially being pre-1800 in date. There are also curvilinear boundaries and ditches, evidence of early strip fields and therefore medieval field systems south of the southern orchard on the farm, on the west side of Lower Dawlish Water Road (MDV124580). There is a historic ford just to the east of the farm along the access parish lane (MDV51032).

On the slope of the valley just above Rixdale, looking south-east across the farmstead there is an identified oval enclosure, evidence of possible Prehistoric or Romano-British settlement (MDV29737). There is also a further rectilinear enclosure further north along the valley on the same side as the farm-holding (MDV124646), also evidence of potential Prehistoric settlement. Further north at Weston Farm there are further historic orchards recorded, with potential pre-1800 drainage (MDV124643). There are also further historic orchards near Shiverstone Farm (MDV124637) south of Rixdale. The Devon Historic Landscape Characterisation defines the mid and upper slopes west, north and east of the farm as '*Medieval Enclosures*' and the lower valley to the south-east as '*Post-medieval*

strip fields and enclosures and to the south and west, historic *'Orchards'*. There is no archaeological fieldwork recorded on the Devon Historic Environment Record within a 1km radius of the property.

Interestingly in these HER records the farm as being 17th century, presumably based upon the documentary evidence; but the presence of other jointed-cruck roofs in extensions to the rear and former detached kitchen and bake house, as well as the jointed-cruck roof in the barn would identify this farmstead as in fact having an earlier, medieval origin. The HER records the holding as being documented in early church warden records and been recognised in the 17th century as the home of a locally notable Tripe/Trape family.

Rixdale was a large middle to higher status farmstead divided in the 19th century which sits just north of a small farming hamlet. It is within the parish of Dawlish, in the *historic hundred of Exminster and deanery of Kenne*. Early Saxon records show King Edward gifted Leofric his chaplain an estate at Dawlish in 1044. Three years later Edward made Leofric Bishop of Devon and Cornwall and he moved to Crediton. Leofric retained his Dawlish holdings and left them to the church on his death in 1072. Dawlish (Doules?) appears in the Domesday book as being in the land holdings of the Bishopric of Exeter in 1086. There is a supposed saxon preaching cross (remains of) in the churchyard and documentary references to a church in the 12th century. Dawlish parish was retained by the Office of the Dean and Chapter until 1802, the land holdings administered by a Reeve. Lysons (1814) records details on the manor of Dawlish (Daulish) the principle villages in the parish to be Cockwood, Holcomb, Higher and Lower and hamlets East Town, Middlewood, Shattern, Westwood and Lithwell. There is a fair held on Easter Monday in the town. The manor was held by the Balles of Mamhead, then the Vernons. When the lands of the parish were sold in 1802 they went to a Richard Eales Esq. Lysons also record the Manor House was new-built as a mansion in the early 19th century, as they were undertaking their survey. Luscombe is noted as the seat of landed gentry Hoare family, of which Rixdale is part of their estate.

The farmhouse on the site at Rixdale was divided in the 19th century and due to their historically-established division and a fire in the eastern part they have different designations. To the west the main part of the house and attached barn are Grade II* Listed (IUD: 1096657):

"C17. Seat of the Trape family. East part burnt down and rebuilt. South front of original house has new doors and windows, but retains two large external chimneys. 5 windows, mainly sashes. Interior has 3 fine C17 ceilings and chimney pieces, one of the latter dated 1669, with the initials TT. Parlour ceiling is plastered with 4 lions and unicorns and a cornice of fleur de lys."

To the east it is Grade II Listed (IUD: 1164279):

"This adjoins Rixdale. Early C19. Rebuilding of C17 or earlier building. 3 storeys cob. Slate roof. 3 sashes. Interior contains ogee headed window."

The barn onsite, the subject of our study is itself Grade II Listed (IUD: 1096658) in its own right:

"C18 or earlier. Base of stone, above cob. Roof now covered in corrugated iron sheeting and roof timbers renewed. 6 pairs of jointed cruck trusses. Cross shaped iron tie. Included for group value."

1.4 METHODOLOGY

The building recording was conducted by Emily Wapshott in May 2020 in accordance with a Written Scheme of Investigation (WSI) drawn up in consultation with the Devon County Historic Environment Team (DCHET). The work was undertaken in line with best practice and follows the guidance outlined in: ClfA's *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (2014) and Historic England's *Understanding Historic Buildings: A Guide to Good Recording Processes* (2016). The discussion of the buildings' setting follows the approaches outlined in the appropriate guidance (DoT guidance and Historic England 2015).

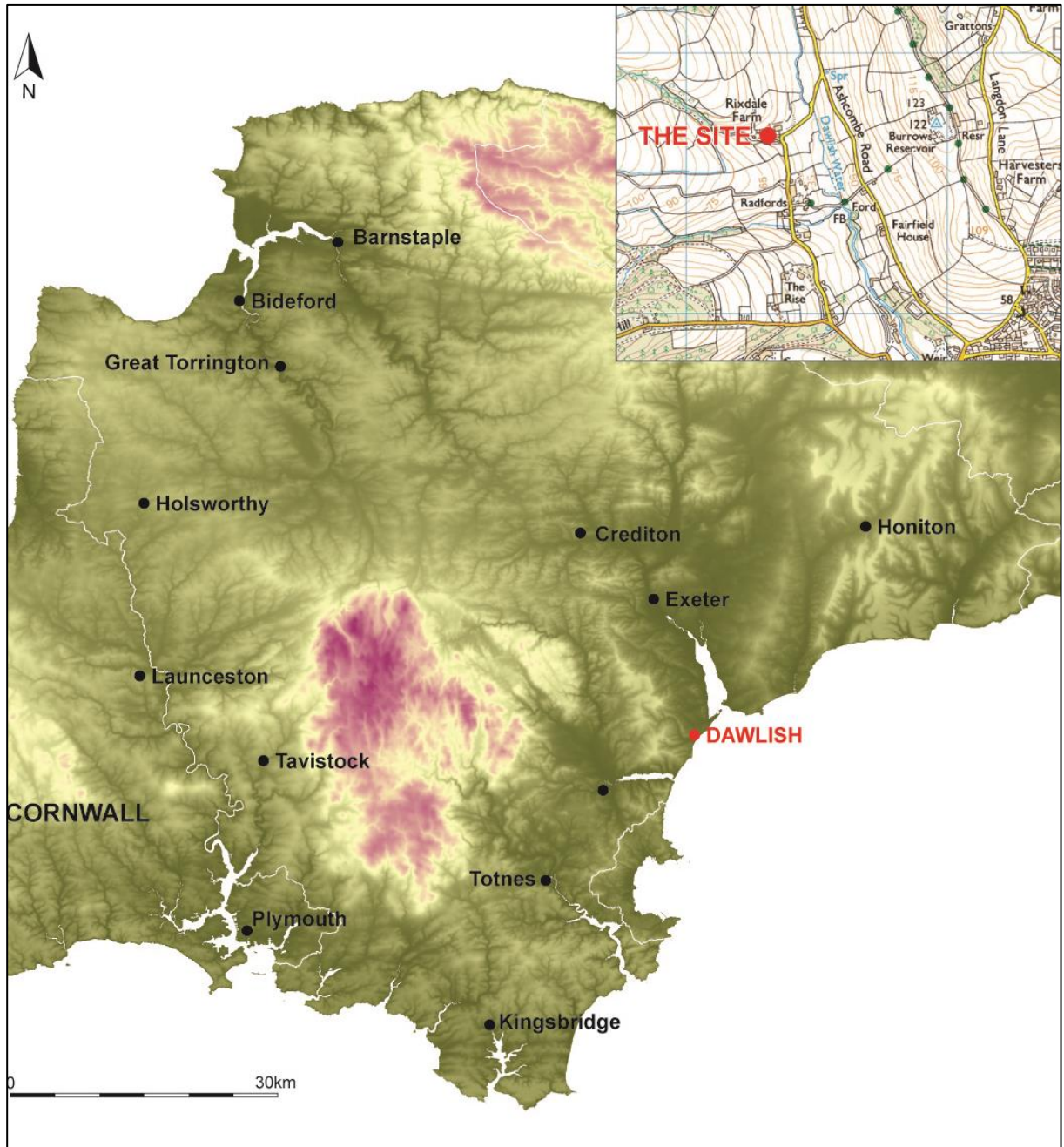


FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

2.0 CARTOGRAPHIC RECORD

The 1839 tithe map of Dawlish (Figure 3) records the farm as *Rixtail*, occupying the bottom of the Rix coombe valley, with another farm called Rixdale further up on the high unenclosed heathland to the east. Rixtail is shown as already divided by this period into 'Lower' and 'Higher'. Lower Rixtail is shown as owned and occupied by James Brock.

The main barn (B1.1) is shown as a long rectangular range, the upper set of threshing doors marked as openings, with the lower set blocked or not in use/present, with a large round horse engine on the north rear elevation, within the yard. Interestingly the vernacular cob and stone outshut on the south-east corner has not yet been built, the road running right up to the farmyard wall and of course the later brick outshuts on the north-west corner have also not been constructed. The barn is framed on the north side by a large L-shaped range of farm buildings. The barn and other farm buildings are shown as within a walled rectangular yard, marked plot **166**. It is described as 'House, Offices & Yard'. In total James had 107 acres, 2 rods and 15 perches of land within the larger Rixtail holding.

The farmhouse can also be seen to be dramatically different, clearly a lot has been demolished in the 19th century, with a large east end returning wing and north wing, which form a courtyard, now only the south range of which is present. The division between the two ends of the farmhouse is clearly marked by a narrow projecting outshut on the south front of the building. There are walled or fenced separate yards, gardens and compounds to north south and west of the farmhouse and a series of large detached farm buildings and possibly early detached service buildings to the west and south-west and a large barn directly opposite the house to the south. Higher Rixtail is shown as owned and occupied by William Brock. Clearly despite its divisions this holding was still in single family or wider extended family ownership.

The 1841 census records James Brock (Brook) as being the 'farmer' at Rixtail Farm. James is 50 years old and his wife Elizabeth is 45. They have a son John, who is 20 and two daughters Elizabeth (15) and Ann (10). Joseph Bowden appears to be their employed agricultural labourer, he is 14; there is also a John Lewis who is a worker on the farm, who is 20. Mary Charity Rich (21) appears to be a farm servant and Catherine Moor who is 70 is 'independant', possibly a relative. William Brock who owns Higher Rixtail appears to be James' older brother or cousin, he is 65, he is a 'farmer' of 170 acres. There is also another John Brock or Brook (65), who is also marked down as living at Rixtail Farm who is an agricultural labourer and a Mary Brock (Brook) who is 90 and of 'independant means', presumably the matriarch of the family.

The 1851 census records the farm as *Rixtyle* and shows The Brock family still in residence. James is now marked down as 64(?) and the head of the household but is no longer classified as a 'farmer'. John his son is now marked as a 'farmer of 107 acres' and aged 30. Two daughters, John's sisters, are noted as Mary (25) and Anna Maria (21).

The 1861 census records the farm as *Raxtayls* and shows John (40) still living on the farm, as a 'farmer of 107 acres, now with his wife Jane (40). Fanny Campbell who is 20, is an indoor servant. They have one boy agricultural labourer in their employ and two adult male labourers, not resident on the farm. Henry Howards, who is 18 is also marked as a farm servant, a 'carter' as is Elizabeth Wilcocks, 15, both are resident on the farm. Higher Raxtayls Farm is by now owned by a James Carpenter, 33 and his wife Elizabeth, 36 and they farm 90 acres. Marriage records show this Elizabeth Carpenter is James Brock's daughter (and therefore John's sister) and they have four children. Both farms are therefore still held within the extended family, although a lot of land has been sold away from the Higher Rixtayls holding.

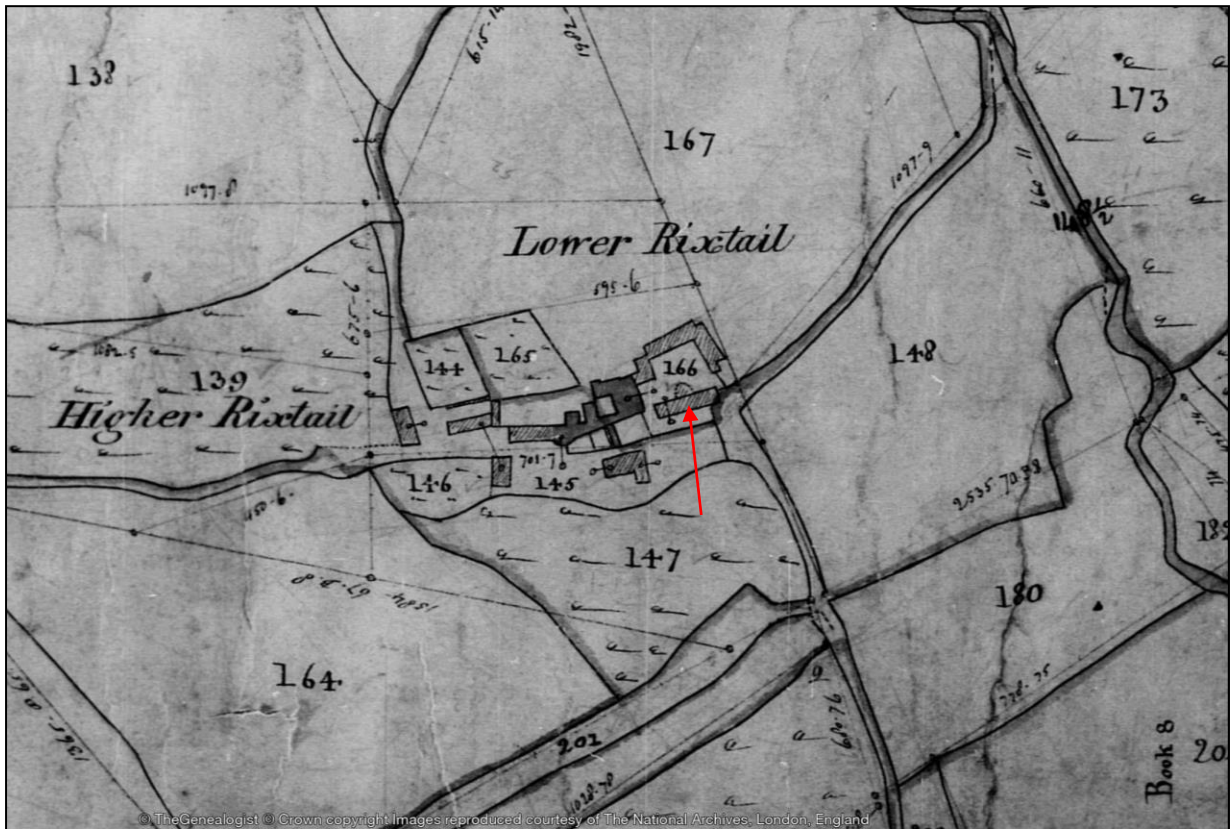


FIGURE 2: EXTRACT OF THE DAWLISH TITHE MAP OF C.1839. RIXTAIL FARM IS INDICATED.

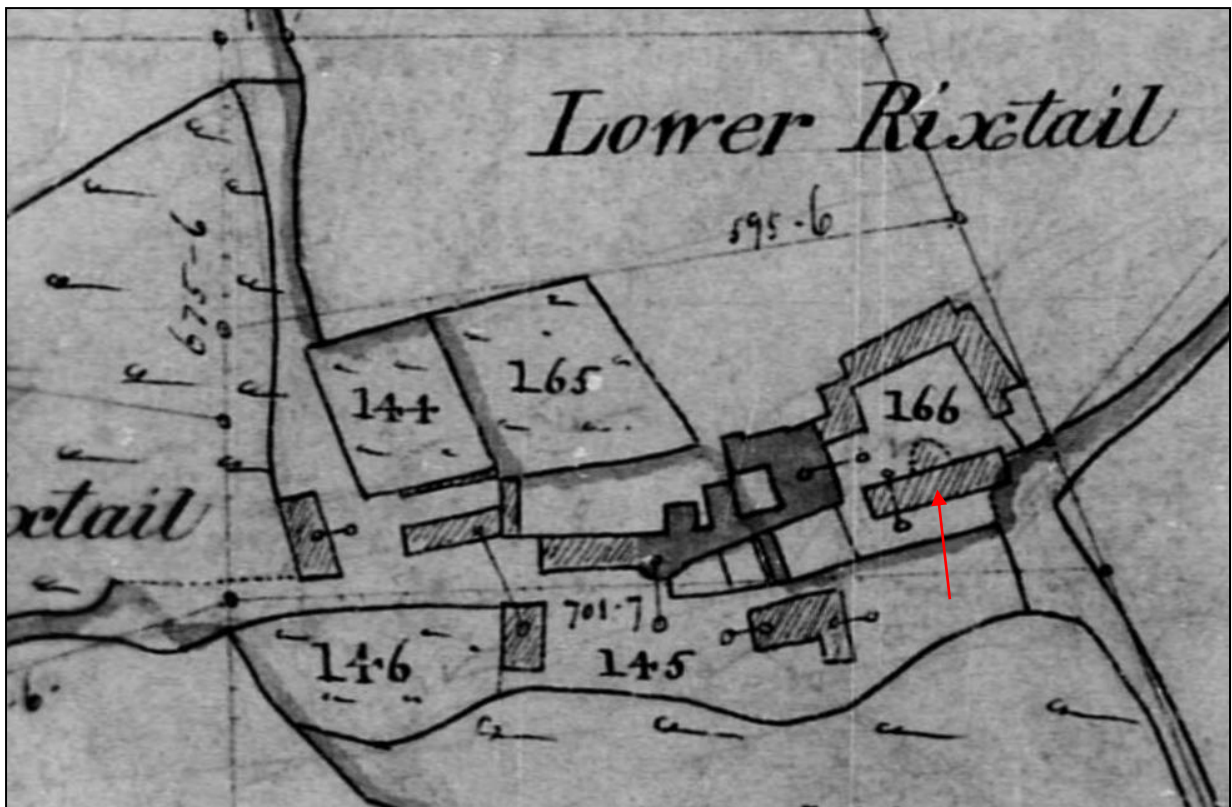


FIGURE 3: DETAIL OF THE TITHE MAP OF 1839, SHOWING THE COMPLEX SERIES OF BUILDING RANGES ON RIXTAIL FARM, DIVIDED INTO LOWER AND HIGHER SUB-HOLDINGS. LOWER RIXTAIL BARN IS INDICATED (FROM THE GENEALOGIST).

The 1871 census records John Brock and his wife Jane still at the farm which is now referred to as *Nixtail Farm* and appears to have been further compartmentalised, as their address is now given as

No.2 Lower Nixtail Farm, but they are still shown as ‘farmers’ and still have 107 acres. They employ three agricultural labourers who live offsite and one farm boy, who also lives offsite. Jane’s mother Jane Adams lives with them and they have one domestic servant Julia Tremlett (25) and one general farm domestic servant, Eliza Stocker (20) who are also resident at the farm. James Carpenter and Elizabeth are still at the other farm, now called in this census *No.1 Lower Nixtail Farm*. The name element has presumably been misunderstood by the census data collectors.

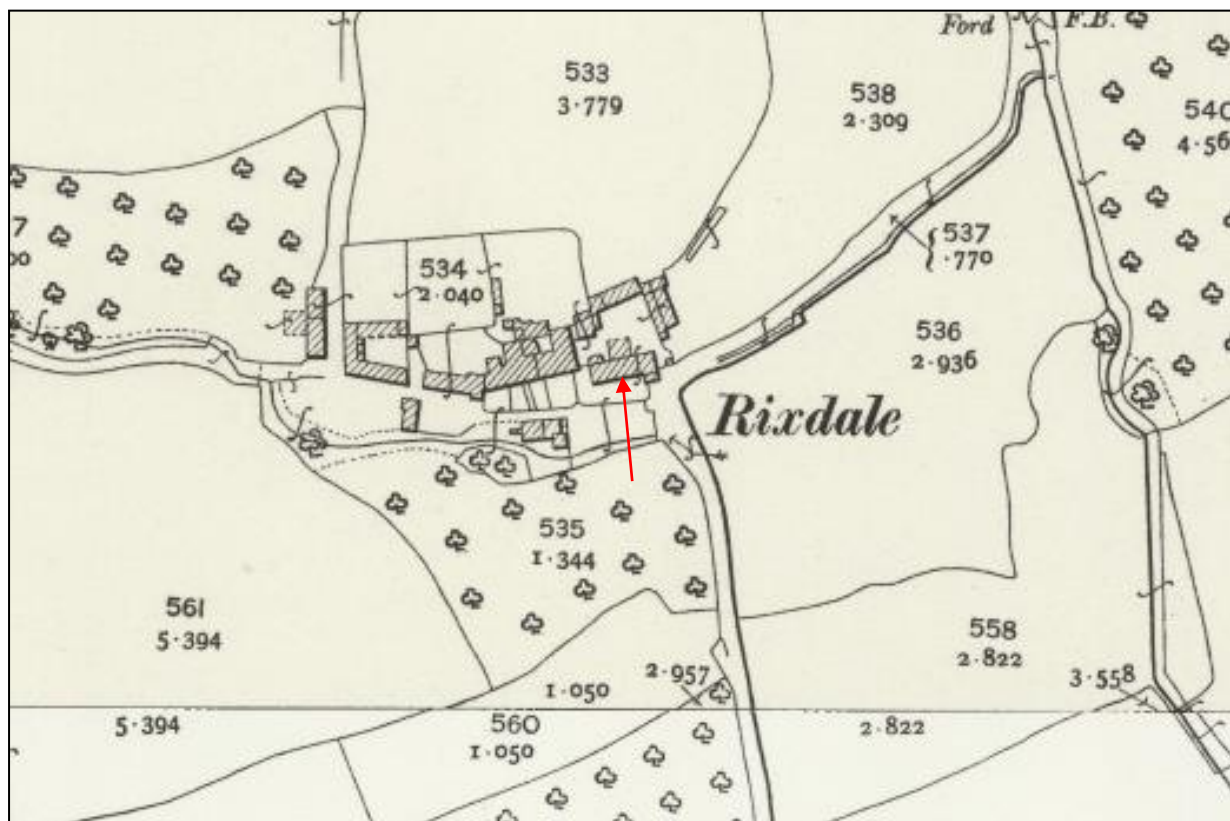


FIGURE 4: FIRST EDITION TWENTY-FIVE INCH OS MAP, THE BARN IS INDICATED; PUBLISHED 1886 (NLS).

By the 1880s OS Map (Figure 4) the barn appears to have developed from its rectangular footprint recorded in the tithe map and includes the small outbuildings we see today; the equipment shed to the south-east (B1.2) and brick outshut to the north (B1.3). A horse engine is also still present, but more centralised in position. What is interesting is that the lower eastern set of threshing doors are now marked as the openings, immediately next to the horse engine building which is also shown to now be rectangular and much larger. This change in the uses of the openings would appear to suggest they were contemporary, but are different adaptations, possibly associated with the development of farm machinery and processing equipment.

The 1881 census records revert to the name Rixtail for the farm holding. Lower Rixtail is still owned and farmed by John Brock, now 60 and his wife Jane; they now are marked down as farming 115 acres and employ 3 men and 1 boy. They have one general servant Susan Yolland, 30 and one farm servant Rosina R Boach, 16. At Higher Rixtail, Elizabeth Carpenter (Brock) is also shown to be still at the farm, now 58 and the head of the household. She is shown as a ‘farmer of 90 acres, with 3 labourers and 1 boy’. Her sons, William 24 and John 19 noted as farmers sons, likely also work on the farm.

We can see from the 1944 OS Map (Figure 5) that the farm changed very little between the later 19th century and mid-20th century. Whilst the map is nowhere near as detailed as that of the 1880s, we can see the main range and horse engine. It is also interesting to see the larger north courtyard of barns frames the barn and were therefore presumably only lost in the later 20th century, replaced by the large agricultural shed. It is also interesting to see the small garden plots behind the farmhouse and

walled yards and mowhays, or in-bye fields also still survive, the careful division and interlace of plots between the split households, representative of this ultimately still being a single extended-family holding.

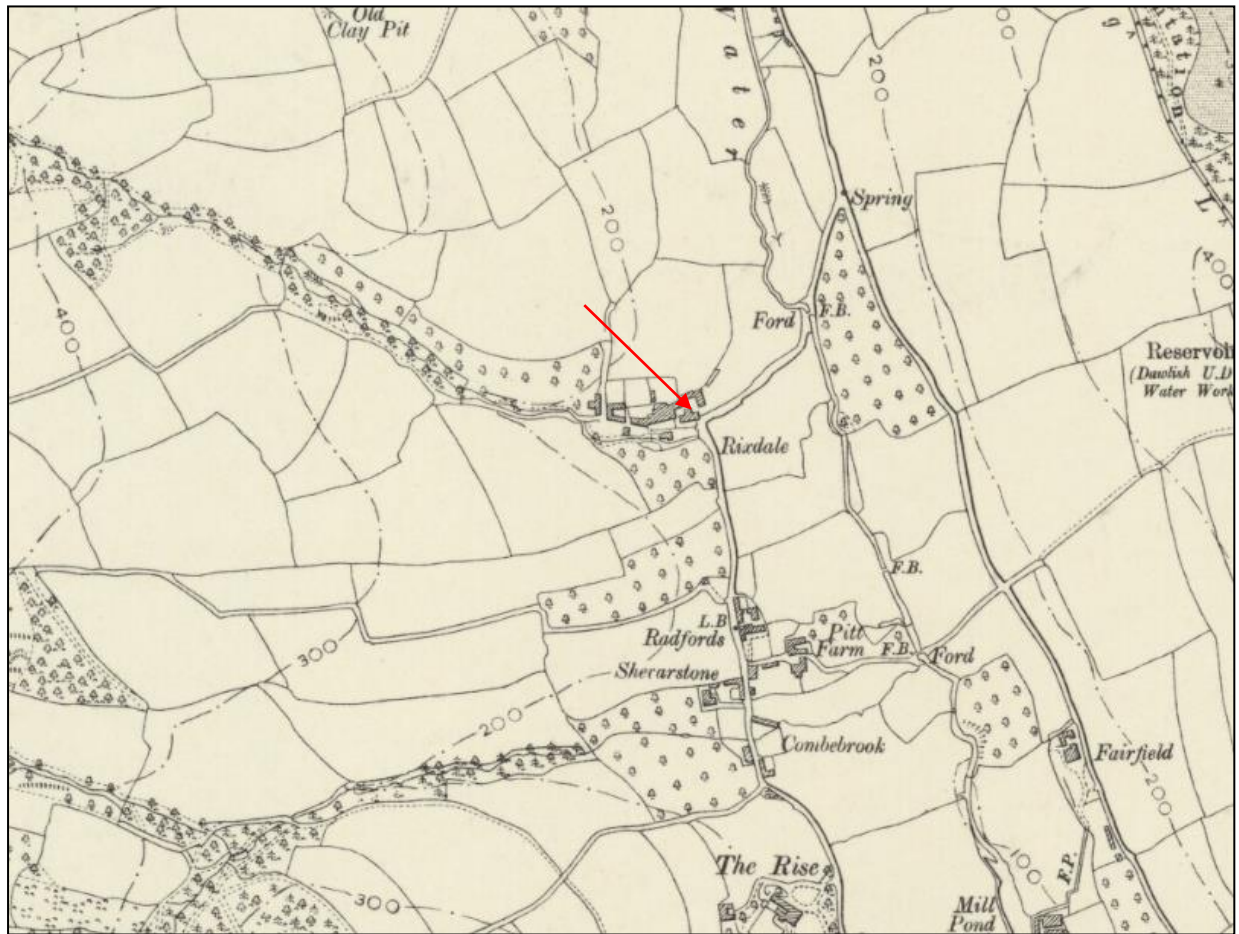


FIGURE 5: 1944 OS MAP, SHOWING THE HISTORIC COURTYARD OF BARNs AND DETACHED RANGES TO WEST, SOUTH-WEST AND SOUTH SURVIVED TO AT LEAST THE MID-20TH CENTURY; THE BARN IS INDICATED (NLS).

3.0 HISTORIC BUILDING RECORDING

3.1 SITE DESCRIPTION

Lower Rixdale Farm lies within the verdant Luscombe valley, next to the Lower Dawlish Water river course, north-north-east of the town of Dawlish. It stands in a block of agricultural land and is surrounded by working farms, although both the multi-occupancy farmhouse and barn are all now merely residential. The wider area retains a working agricultural character, but is within the commuter belt for Exeter, Plymouth and Torquay etc.

The barn stands to the east-south-east of the farmhouse, between it and the historic lane, which turns sharply east, respecting the ring-fence of the historic Rixdale holding. The barn is the more visually dominant building on the approach from both sides along the lane, framing the farmhouse beyond in all views. Both the farmhouse and barn are painted in the rose-pink of the Hoare estate colours, but since its sale to the new owners and planned conversion, the barn is expected to be restored and repainted; the sense of immediate cohesion and inference of single occupancy on the farmstead will be altered by this. At present despite being split between three owners the farm still presents as fairly authentic, in a historical aesthetic; the large rough stoned yard, enclosed by low walls left simple and unadorned.

The barn is framed on the south side by this farmyard, to the north is another concrete yard and a large steel framed animal shed has been removed here. A series of haphazard structures of modern construction, which abutted the barn on its north wall have also been cleared. The barn is now divided from the farmhouse and gardens behind by a concrete block wall and a significant terraced drop of c.10ft. It is open to the fields to the east and north-east. There is an access gate into the separate holding of the barn and fields immediately next to the east gable of the barn; this is currently framed by two round-headed square profile granite piers, which may be 19th century, although the timber gate is modern.



FIGURE 6: THE RELATIONSHIP OF THE HISTORIC BUILDINGS ON THE FARMSTEAD AT RIXDALE; FROM THE NORTH-EAST.

3.2 BUILDING DESCRIPTION

3.2.1 B1.1

The main barn survives as a tall single storey structure on an east-west alignment, terraced into the rising slope to the west. It has a steep roofed pitch, now of replacement corrugated concrete fibre sheeting and is gabled to east and west ends. The walls are externally cement rendered and painted in a bright rose-pink colour. The barn had already been scaffolded when the recording survey occurred.

The south 'front' elevation faces out across the south farmyard, it is six bays in length, with the second and fifth bays being occupied by large double width threshing door openings; that to the west end much larger than that to the east. The walls are slightly battered, with a heavy stone rubble base, with clay bond and clay and lime mixed mortar, incorporating local conglomerate and trap and sandstone varieties.

There is a light change in the form of the stonework in bay three between the two threshing doors, to the south end, for half of bay 3, then bays 4-6 it is a little looser and more irregular but the stones used are larger, there are river pebbles included in this build. The stonework for bays 1,2 and half of bay 3 is tighter packed, showing a more careful selection of stones and the dressed stones to the corners and west threshing opening are faced to a neater grade. There are roughly dressed and faced quoins however, within the stonework to both doorways. The stonework to the west end, as far as bay three is 0.5 -1m high, it then deepens to 1.25m, rising to 1.3m to the south-east corner. Above is cob, it is externally rendered but cracked in places, where visible the cob is a pale brown colour, very clean in its consistency, with neatly chopped organic matter, likely straw and fragments of crushed stone. It is densely packed, with tamping layers visible in places. Within the abutting equipment shed the wall can be seen to have been externally lime plastered and whitewashed, before the modern render coating, with a thick lime pointing to the stonework.



FIGURE 7: THE SOUTH ELEVATION OF LOWER RIXDALE BARN; FROM THE SOUTH.

The east gable end has been wholly rebuilt in concrete blocks; this appears to be a fairly recent repair, within the last decade; it is externally rendered and a skim of modern stone rubble has been added to the base of the wall to mimic the traditional build; a low stub of original stonework survives at the base

on the interior face, c.0.3m, plastered in lime. The building was Listed in 1985, and it is felt this has probably happened since the listing process, which has led to a damaging loss of historic fabric and integrity and has destabilized the barn. There is a loading door in the elevation at loft height and another opening has since been cut beneath. The concrete block rebuild wraps around the north-east corner of the barn, but the base of the corner of the wall survives, with good roughly dressed quoins of volcanic trap.



FIGURE 8: THE EAST REBUILT AND RENDERED GABLE OF THE BARN, WITH 2M SCALE; FROM THE EAST-NORTH-EAST.

The rear, north elevation, facing the former modern cattle shed (the former north farmyard) is the most interesting from a historical perspective as we can see farm more detail of alteration and repair to the cob. To the east end the stone rubble base is battered, rising 1.3m up the elevation, it is bonded in reddish-brown clay and lime, with a lot of beige cement mortar re-pointing. Bay 5, around the eastern threshing opening, shows considerable under-building and re-facing in rubble stonework in a pale red-brown clay and lime bond. The character of this repair is very clearly post-medieval, including quartz in the build and the cob survives to the interior faces of the wall at this point. There are heavy weathered timber lintels with chamfers and run out stops to the eastern threshing opening, but there is also some patching in cream ceramic brick, which would be 19th or even 20th century in date, as it is a later material. The cob then resumes but is braced by a massive concrete block buttress, where the wall is dropping outward at first floor level.

Bays 3 and 4 have had all cob replaced in under-built rubble, as to bay 5. There is scarring and patching here in concrete block and render which suggests a building has been removed, hence the structural weakness. We know from the mapping that this was the location of the former horse engine house. Interestingly the truss foot between bays 3 and 4 is exposed here, partly rendered over showing it sitting on a horizontal thick pad of wood about 2m above the external ground level. The winnowing door occupies bay 2 of the barn, it has fine shaped oak jambs, with wide chamfers ending in run out stops c.0.3m above the ground; these are undoubtedly medieval and of high quality finish. The lintel is

much rougher, with a crude attempt to chamfer and shape a larger beam, with the distinctive pattern of charring 'crackle' on it. The jambs are mortice and tenon jointed into the lintel and the corners pegged, of good vernacular construction but the quality of the jambs in contrast to the lintel would suggest this is a composite door and may have been moved within the structure or wider farmstead. The timber is painted in a weatherproof back tar. A fine chamfered lintel braces the opening, much wider than the current doorframe, c1.5m wide, the opening blocked to the east side. There are good shaped quoins to the west side of the doorway, more loosely set to the east, within the infill. The west end of the barn part of bay 2 and bay 1 are obscured externally by B1.3, the brick outshut.

The west gable of the barn has also been rebuilt in concrete block and externally rendered, but its stone base, deeply terraced into the ground remains partly intact to c.0.75m on the exterior and 1.5m on the inside face, although obscured by render. The south-west and north-west corners have also retained their integrity too; it is only the central portion of the elevation which is rebuilt. The north-west corner is now built of stone rubble it is angled and relieved, mortared in lime; this is likely a 19th century repair associated with works to the farmhouse which stands within 2m of the corner of the barn. There is also a loading door cut into the concrete block at loft height here too. This work is contemporary to that undertaken on the east gable and most likely within the time the building was listed. This has led to a damaging loss of historic fabric and integrity, however different from the east end, there is a middle phase of iron braces holding the barn and gable together on the corners; these x-ties come across the south-west and north-west corners, at an angle. Clearly before the rebuild there were significant stresses on the barn structure at this end; bearing in mind how close the house now is and its rebuilding or remodeling in the 19th century after a major fire, this may not be a surprise.

Accessed at the former winnowing door, this opening is low and wide, just offset from the threshing doors slightly; the door itself is a replacement, fairly thin planks, ledged and braced on modern hinges, although they sit on massive iron pintles. The barn is stripped of any historical fittings, but there are a few broken timbers between bays four and five spiked with nails and clench nails to the truss feet, suggestive of a partition or fitment. The south-west threshing door is partnered by the winnowing door, now the entrance, the south-east threshing door has an opposing double doorway; all three of these larger openings have had their doors removed and are boarded over, although the north-east door has the remains of a thick pegged plain doorframe, with iron pintles. The floor of the barn has been concreted and stepped down the slope at different leveled terraces; in bay four between the threshing doors there is a large sloping drain cut into the floor. A small section of threshing floor, suspended thick planks survives to the south-west threshing door, c.1.5x4m in bay 2. It was not immediately clear if the poured concrete inserted into the building has been laid on top of older cobbled surfaces or if the barn was excavated before being filled with concrete.

The internal faces of the barn walls have largely been rendered in modern cement, but sections of cob, with lime plaster survive. Where they do, there are distinctive layers, the cob is pale brown, as noted on the outer face of the south elevation, the lime plaster is grey coloured and mixed with horse hair, then topped with a thin coat of white lime and then lime washed. A section survives to the west end, bay 1, to both north and south walls; a section to bays 3 and 4 on the south wall; to bay 4 on the north wall and to bay 6 on the south wall. It is noted that the cob to the east end of the barn, most clear in bays 4-6 is of a slightly darker reddish-brown colour and denser in quality than to the west end. Trusses 3, 4 and 5 to this east end have exposed feet in places, the cement render cut around them; it can be seen that they project at least 2-2.5m down from the wall-plate and finish c.0.65m above the current floor level, where the timber pads have rotted they have been under-built with bricks slotted into the stonework. The end three trusses, 3, 4 and 5 were obviously intended to sit onto the stonework plinth on the inner face. There is some further internal patching in concrete block and brick where cob has fallen out, particularly to the east end of the north wall. There is a small rendered over square hollow in the wall, east of the north-east threshing door, with a chunky rendered lintel; this has been interpreted as a blocked 'keeping place' alcove for light.

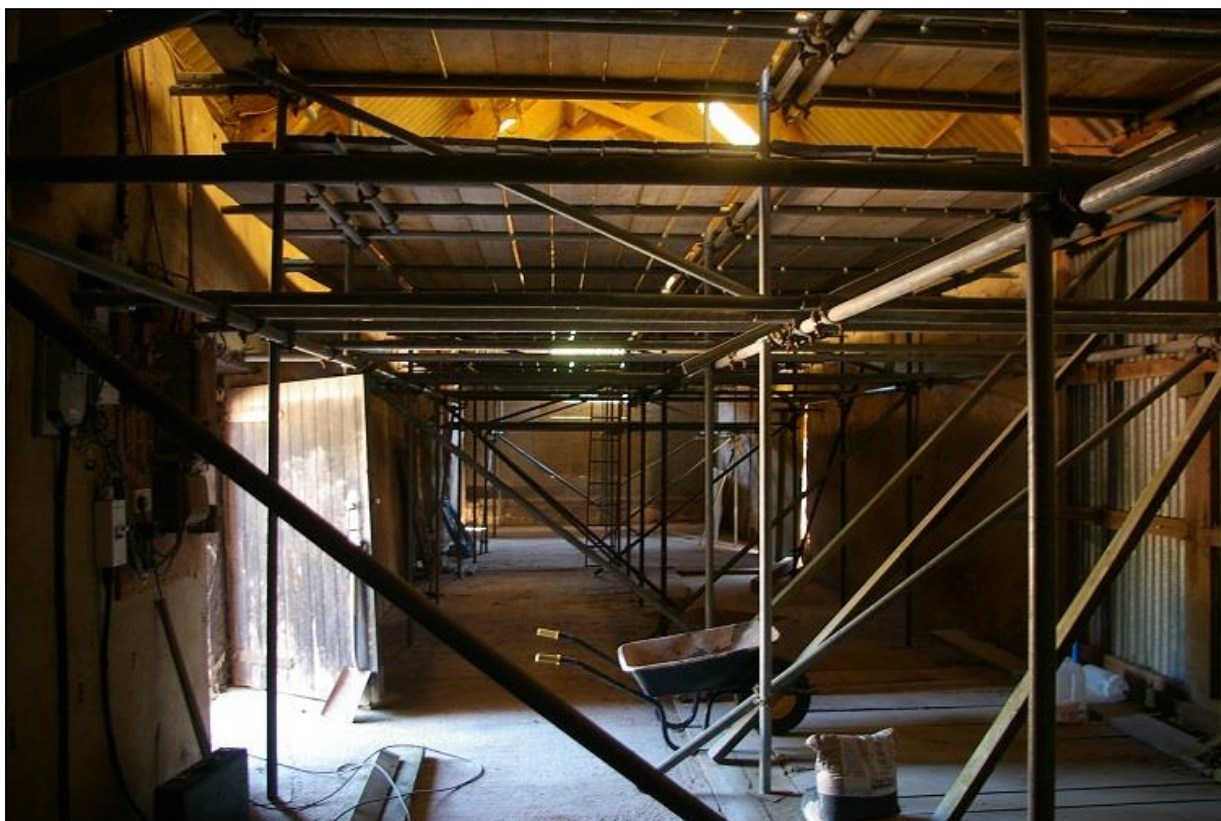


FIGURE 9: THE INTERIOR OF THE MAIN BARN (B1.1), PHOTOGRAPHED FROM THE WEST END; WEST-NORTH-WEST.

The roof comprises five jointed cruck-trusses, with an additional modern A-frame inserted into bay 1, at the west end, resting on bricks sat on the wall plate, of no clear structural function and probably installed to brace the gable end of the roof when the west gable was demolished and rebuilt. Trusses 1 and 2, to the west end of the barn are lighter in weight than those to the east and on rather than into the walls; they have a much darker patina than the three trusses to the east and a smoother straighter grain, likely oak. Their blades are chunkier and squarer in profile and Truss 1 has a mortice and tenon collar and Truss 2 has sockets for a former mortice collar, although it has a half-lapped replacement. Truss 1 and 2 also have two sets of trench sockets for purlins.

Trusses 3, 4 and 5 are broadly identical, these have not got a darkened patina, despite their age and are a rich yellow-toned wood, with a swirling grain; these may well be elm, not oak. They have threaded purlin sockets within the narrow but deep tapering blades, they have mortice and tenon ridge joints, but their collars are dovetailed half-lapped. The feet of these trusses sit far deeper into the walls and appear more integral to the structure. Bays 3, 4 and 5 retain massive base purlins, each with six pegs for rafters. Trusses 2, 3 and 5 have later nailed scissor braces, from the 19th century and all five trusses have a later iron bar tie, 1/3 of the way up the truss blade. It also becomes clear on the scaffolding at roof level that there is a marked crank in the alignment of the barn between bays 3 and 4, which is not merely due to wall droppage on the north side. Trusses 3 and 4, between bays 3, 4 and 5 also have a pair of large peg holes about c.0.2m above the in situ base purlin on both blades, evidence of a possible later phase of removed face-pegged tie beams, addressing the imbalance caused by the barns extension at bay 3, to the west. Truss 3 also exhibits distinctive notches high up under the ridge, evidence of having been propped or jacked up in the past, again likely supportive of an extension at this end and the removal of a gable wall between bays 2 and 3.

The current roof covering is of corrugated pressed fibre sheeting, with regular clear plastic corrugated panels as roof lights. All the rest of the purlins in the roof and the double ridge poles are mid to late 20th century tanted pine; there are no rafters.



FIGURE 10: THE ROOF OVER B1.1 IS OF FIVE JOINTED CRUCK TRUSSES; SOME OF THESE HAVE LATER SCISSOR BRACES ATTACHED; THERE IS ONE ADDITIONAL MODERN A-FRAME TO THE WEST END.

3.2.2 B1.2

Open-fronted single storey equipment shed/cart shed, facing west. Open to west with later inserted timber frame with some plank boarding surviving above and evidence of timber plank doors having been removed. Thick cob wall to the south, set on a low stone rubble plinth. The cob is crude and loose reddish-brown colour, with lots of chopped straw. The wall returns to the north at the east end and there is a clear build line between the shed and the barn's south-east corner. The floor of this building appears to be of tamped clay; the wall of barn 1.1 is plastered within the shed but the shed walls are of exposed cob, there is some evidence of them having been lime plastered however. No fittings or fixtures of historic interest survive and it is unlikely to have ever been used for anything except sheltering valuable machinery such as carts or traps, ploughs etc. The roof is of quite a steep pitch, replaced with corrugated cement-fibre sheeting, as on the main barn; it is supported on heavy tapering pine rafters, which are still quite vernacular in form.

3.2.3 B1.3

Part of this building is a small shed with three brick walls, to the east, west and north; there is a window to the east and a window and door opening to the north. There are remnants of timber frame in both windows and despite a gate now closing the doorway it has a doorframe for a generic-style door. The brick bond appears to be Flemish bond, but repaired later in patches of stretcher-bond, all mortared in white lime; the west wall has been externally treated with unpainted cement render. The walls are whitewashed brick and the wall of the barn seen within this space is loosely lime plastered and whitewashed, modern render stands to half-height on the walls. The floor is concrete. To the west end there is a further angled wall of brick, unpainted, with a dark wedge-shaped space with a small air vent in the west wall; this is full of debris and former farm waste. The roof covering has been removed, but the roof structure is fairly modern lightweight 20th century pine timbers.

3.3 FUNCTIONS OF THE BUILDINGS WITHIN THE RANGE

B1.1, the main barn is the former principle farm barn for Rixdale Farm holding; it presents as a threshing barn, but it is clear that the double threshing function maybe a later adaption, as farming changed or production increased. The barn probably held a mixed threshing and storage function originally.

B1.2, is open fronted and not set up as an animal house, its proximity and character facing into the yard would suggest an equipment shed, most likely a cart house/trap house.

B1.3, has windows and plastered walls to the larger compartment, this may have housed a generator, or early milking machinery, or been a dairy, before the large shed to the north replaced that function. It is clear it has been used for animal housing in the past. The smaller angled compartment must have been used for storage of equipment, or again perhaps housed a piece of machinery, as it is narrow and dark, with restricted access.

3.3.1 RELATIONSHIPS OF SPACES WITHIN BUILDING 1.1

The barn is of course one large open space, but there is evidence of historic partitioning or framing within the building, as there are linear scars in some of the areas of original plasterwork. There is also a small area, 1.5x4m of suspended thick planks for the threshing floor respecting the western set of threshing doors, at the south side. So despite its large open character the barn would have had zones and sections of activity, which were specific to a task.

3.3.2 RELATIONSHIPS OF STRUCTURAL ELEMENTS WITHIN THE BARN RANGE

The main range, B1.1 lies on an east west alignment. There is a small historic equipment shed (B1.2) attached to the south-east corner, on the south face of the building; this clearly abuts the main range and does not appear on the tithe map of 1839. There is then a much later outshut on the north-west corner of the barn, on the north face, built in brick (B1.3). This appears on the Second Edition OS Map.



FIGURE 11: LEAN-TO EQUIPMENT SHED (B1.2), FACING INTO THE FARMYARD, ADDED ONTO THE FRONT OF THE BARN (B1.1)



FIGURE 12: B1.3, RECTANGULAR BRICK OUTSHUT ADDED TO BARN AND ADDITIONAL SPACE FORMED IN ANGLE WITH BANK, WITH ADDITIONAL BRICK WALL, FOR STORAGE AND HOUSING MACHINERY; VIEWED FROM THE NORTH-WEST.

3.4 SIGNIFICANT FEATURES WITHIN THE BARN RANGE

The features of significance in the barn are fundamentally the five jointed cruck trusses, a structural feature. In addition, any of the sections of cob walling which are less altered, especially any retaining fragile lime plaster are also of some value. There is also a potential piece of historic graffiti, an attempt to produce a daisy-wheel, an apotropaic fertility/harvest mark, on the north wall, at the west end, c.2m west of the winnowing door, about 1.5m above the current floor level. Other more general scratched tallies were also spotted wherever the lime plaster survived. The doorframe of the winnowing door, with potential reused jambs is the only other significant feature.

TABLE 1: TRUSS DESCRIPTIONS

Truss Number (counted from west end of barn B1.1)	Truss Type	Description of Truss
	Modern A-frame	Modern <i>additional</i> truss. Plain A-frame. Surface mounted nailed collar. Resting on bricks on walls to north and south. Lightweight pine, tannalised. Late 20 th or 21 st century. Installed to carry roof when end gable was rebuilt in concrete block?
1	Jointed Cruck	Oak Truss. Truss blades almost square in profile, very chunky; the south blade is tapered and much smaller than the one to the north. Neatly planed sides; the north blade is rougher. Morticed ridge, two pegs. Morticed collar, lower set, three pegs to each side. Two sets of deeply trenched sockets in the back of the blades. Modern bracing timber added to west face of south blade. Iron tie 1/3 down the truss. Much smaller shallower sharply curved feet, lightweight scantling, six pegs to north, seven pegs to south. Feet are much shorter only run c.1.5m down the wall, sit on pads set high in the walls.

2	Jointed Cruck	Oak Truss. Blades much rougher than the other trusses. Narrower almost square profile blades. Two sets of deeply trenched sockets in the back of the blades. Much smaller shallower sharply curved feet, lightweight scantling, six pegs to north, seven pegs to south. Feet are much shorter only run c.1.5m down the wall, sit on pads set high in the walls. Knotches at different heights of both blades and one to the back side of the oak blade, suggestive of this being a reused timber?
3	Jointed Cruck	Elm Truss. Deep, but narrow tapered blades, very heavy scantling. Wide slightly curved feet, deeply set down into the walls, c2.5m from the wall-plate. Feet rise 0.5m up from the top of the barn walls. Four pegs to either side. Narrow rectangular sockets cut into blades for two threaded purlins to each pitch. Purlins, where they survive, pegged together, tapered to overlap/butt in socket. Knotches to north blade, suggesting this has been propped – associated with an extension of the barn at some stage? The full square socket for treaded ridge survives to the top blade here.
4	Jointed Cruck	Elm Truss. Deep, but narrow tapered blades, very heavy scantling. Wide slightly curved feet, deeply set down into the walls, c2.5m from the wall-plate. Feet rise 0.5m up from the top of the barn walls. Four pegs to either side. Narrow rectangular sockets cut into blades for two threaded purlins to each pitch. Purlins, where they survive, pegged together, tapered to overlap/butt in socket.
5	Jointed Cruck	Elm Truss. Deep, but narrow tapered blades, very heavy scantling. Wide slightly curved feet, deeply set down into the walls, c2.5m from the wall-plate. Feet rise 0.5m up from the top of the barn walls. Four pegs to either side. Narrow rectangular sockets cut into blades for two threaded purlins to each pitch. Purlins, where they survive, pegged together, tapered to overlap/butt in socket.



FIGURE 13: THE POTENTIAL DAISY-WHEEL ON THE NORTH WALL OF THE BARN, AT THE WEST END, WEST OF THE WINNOWING DOOR; FROM THE SOUTH.

3.5 HISTORIC PHASING

3.5.1 PHASE 1 – LATE MEDIEVAL (15TH OR 16TH CENTURY)

The earliest fabric in the building is contained in the north and south walls within the surviving cob at the east end of the barn within bays 4, 5 and 6; part of bay three also dates to this first phase. Within the roof structure, the jointed cruck trusses 3, 4 and 5 relate to this period and are a matched set.

The jointed crucks, with their slightly cranked collars with dovetailed half-lapped joints and original threaded ridge, threaded purlins, scantling and fine adze planed faces are typical of a late medieval roof and would broadly signify a date from the mid to later 15th century, through to the mid 16th century, c.1450-1550.

3.5.2 PHASE 2 – LATE MEDIEVAL (LATER 16TH OR 17TH CENTURY)

The western two trusses of the five (Truss 1 & 2) jointed crucks are different in form. They have more markedly cranked chamfered collars, which are, or were, morticed into the blades. The patina of these trusses is also much darker than those to the east, potentially being oak, not elm like the others. The trusses appear to have been made to mimic the earlier three to the east and whilst being later in date reflect continuing knowledge of traditional building methods.

We know the farmhouse was in the ownership of the notable Trape (Tripe) family in the 17th century and the fine plasterwork to the interior reflects considerable investment in the farm. If this was a time of prosperity, it may well be appropriate that we loosely tie this clear expansion of one of the main barns on the holding to this same period.

3.5.3 PHASE 3 – POST MEDIEVAL (LATER 18TH CENTURY - 1839)

The barn received the addition of a horse engine, as the mechanization of farming developed in response to the industrial revolution. The horse engine seems to have braced the north side of the central portion of the barn, possibly set a little to the eastern end. The vibrations caused by such machinery could certainly be expected to cause some concern to such an ancient building so it is no surprise that the farm carpenters considered it necessary to add extra scissor braces to the trusses.

3.5.4 PHASE 4 – LATER 19TH CENTURY OR EARLY 20TH CENTURY

As the horse engine developed and modernised, becoming more powerful and extra out-shuts were added additional iron tie braces were added to the barns trusses and to the corners, at least to the west end. A long period of shaking and the pull of an attached structure had caused the north wall to bow, pulling on the ancient pegged joints of the trusses, as the feet dropped with the moving wall.

3.5.5 PHASE 5 – LATE 20TH CENTURY (POST 1944)

The barn received no maintenance after its last bracing and due to its complex early phasing, significant pressure was laid on the two end gables. Both were knocked out and crudely rebuilt, likely at a similar time to the rest of the historic farm buildings being demolished. The thatched roof was also lost, with all the pegged rafters, all the battens and the rest of the purlins. There is little evidence of obvious water damage on the surviving trusses and the purlins were clearly cut off in the sockets where they remain pegged, not having failed and fallen free. Considerable work would have been needed to remove this roof and replace it in corrugated sheeting. Lots of additional bracing was added to the truss blades, surprising perhaps that they were left at all. The floor of the barn was either obscured by concrete or dug up and wholly replaced.



FIGURE 14: DETAIL OF ONE OF THE DOVETAILED COLLAR JOINTS AND THREADED PURLINS SOCKETS; FROM THE EAST.

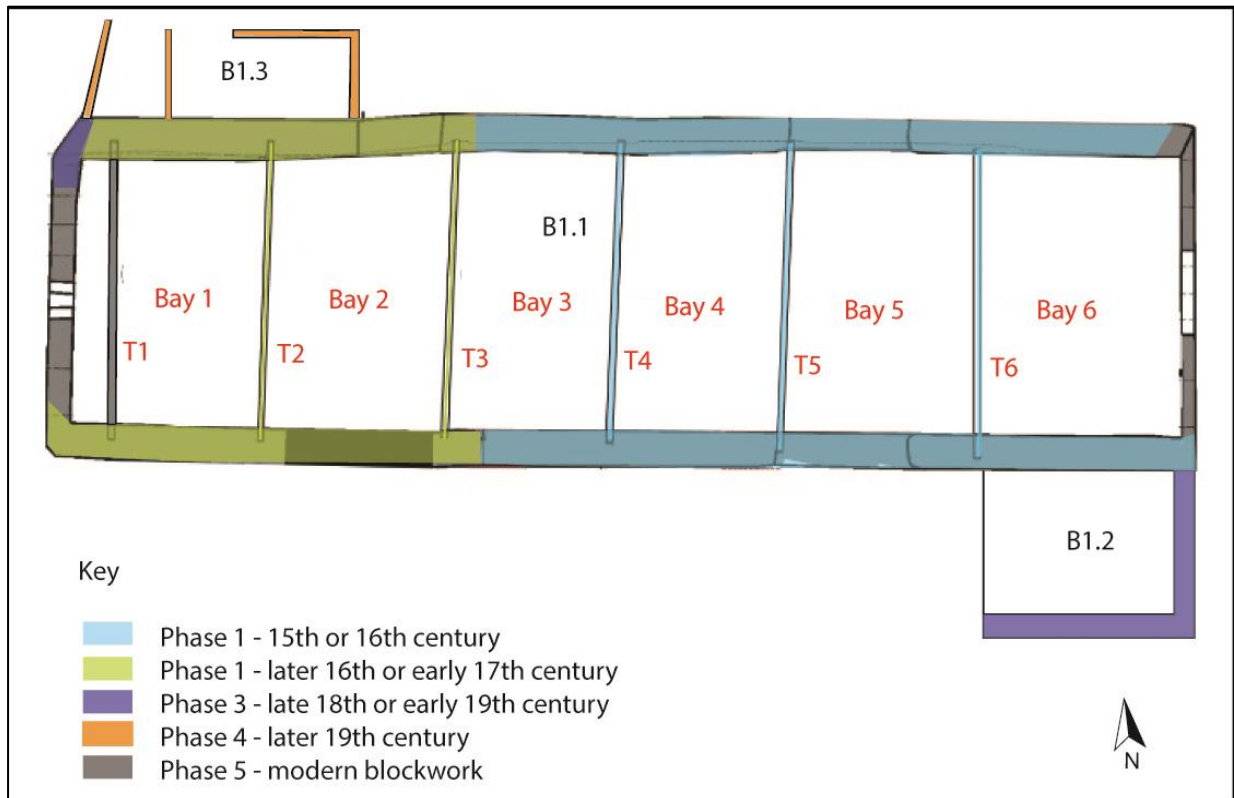


FIGURE 15: PROVISIONAL PHASED PLAN (BASED ON PLANS PROVIDED BY ARCHITECTS AT TIME OF SURVEY).

3.6 STATEMENT OF SIGNIFICANCE

Lower Rixdale Barn is Grade II Listed; acknowledged as of architectural and historical importance. Its Listing text is limited in its scope however and notes the barn as having six jointed-cruck trusses, when the barn is in fact of six bays and would appear to have only ever had five trusses. It is also to be noted that the barn is recorded as being Listed, 'for group value', which it is felt poorly reflects the actual value of this building; particularly with the presence of a jointed-cruck roof, which is part of a rapidly diminishing and rare group of assets. The building likely dates from the later 15th or 16th century and contains two later trusses likely of 17th century date, designed to mimic the medieval trusses, another interesting historic detail and evidence of a time of expansion, echoed in the farmhouse architectural phasing. As the only surviving traditional farm building on the entire holding, apart from the shippon attached to the upper part of the farmhouse, it is felt the value of the barn rises exponentially within the building group.

If we apply the Historic England classifications of value to the building, to explain the level of significance applied;

3.6.1 EVIDENTIAL VALUE

High. The site at Rixdale (earliest references seem to be Rixtail) is medieval in origins and probably earlier; the barn will at least seal evidence of its 15th or 16th century construction beneath its footprint, although it is acknowledged that these deposits may have been damaged by the installation of the concrete floors. The barn will also inherently contain under the various exterior or interior treatments of render further evidence of repair or alterations and possibly even build lines within the cob. More detailed study of the trusses and carpentry techniques are sure to bring more information to light on its construction.

3.6.2 HISTORICAL VALUE

Medium. The farmstead is clearly one of the oldest within the valley and is associated in the modern day with the estate of the notable Hoare banking family/dynasty. No other historical value is known, but it must be acknowledged that the desk-based assessment here is focussed on the fairly recent mapping evidence of the building and there may well be a wealth of earlier information which would highlight a historical element of value. For example, in the Devon HER it notes the farm being the seat of the Tripe (Trape) family, who were notable in the 17th century.

3.6.3 AESTHETIC VALUE

High. The barn is traditional in appearance, although its current roof covering affects its aesthetics; it provides an important visual setting to the Listed farmhouse. The sheer scale of the barn is an important signifier of the former historical importance and relatively high status of this holding in the past.

3.6.4 COMMUNAL VALUE

None. The buildings have no known communal value.



FIGURE 16: DETAIL OF PART OF THE ROOF OVER B1.1, THE JOINTED CRUCKS, SHOWING THE SHAPED FOOT PEGGED TO THE CRUCK BLADE AND ONE OF THE SURVIVING HEAVY PURLINS; FROM THE EAST.

3.6.5 AUTHENTICITY & INTEGRITY

The barn is authentic in the sense that it is a working agricultural building, much compromised visually by relatively poor maintenance in the last century. Within the interior the barn is not particularly authentic as no fittings survive and the floor has been replaced or covered with concrete. Substantively 25% of the barn's historical structure was lost when the two end gables were removed and important historical details such as air vents may have been contained within these elevations. The buildings integrity has therefore received lasting damage; however, what survives does so in quite good condition considering the age of the building and the nature of its working life. In contrast 65% of the roof survives, the trusses, all survive, but are altered, several purlins survive, the rafters and battens do not. The trusses instead of being replaced have been adapted and added to, in later post medieval phases, a treatment that has led to a very high level of integrity in this medieval roof and which forms the principle value in the building.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Lower Rixdale (Rixtail) Barn is a large traditional cob-built Devon barn and is considered to be of considerable architectural and historical interest, for its surviving jointed-cruck roof, indicating an initial construction date in the later 15th or 16th century and extension in the 17th century.

The barn is built of local vernacular materials and displaying historic features indicative of an involved development. It has been compromised by late 20th or early 2000s works, including the loss of both end gables but still retains a significant proportion of complex phased historic built fabric. It is of pleasing traditional appearance and holds a lot of visual dominance over the experience of the farm for a visitor.

The barns phasing, particularly the two later jointed crucks (Truss 1 and 2, as counted from west) echoes that of the farmhouse, tying together the shared history of the holding and adding narrative depth to the story of the farm.

The Listing of the barn erroneously refers to six jointed cruck trusses, but in the fact the barn is of six equal bays and has five trusses. The end truss is a modern plain A-frame of no meaningful structural value, merely resting on bricks on the top of the wall. The Listing text also refers to the barn being listed for group value, which significantly understates the value of the building, as being medieval in origin with substantive surviving roof structure.

4.1.1 RECOMMENDATIONS

It is recommended that the condition within the planning permission to replace the modern A-frame with a new oak jointed cruck is reviewed in light of this report and a structural engineer and the architect examine in more detail the structural role of the modern A-frame within the barn. It appears to merely be propping the end of the roof, for when the gable was demolished and rebuilt in concrete block. Certainly, from a historical perspective a jointed cruck there would be meaningless so close to a gable and would throw off the balanced widths of the bays. It is important that the barn is read correctly historically; only bay 3 is slightly wider, as that is the point the barn was extended in the 17th century. There is no evidence in the first bay of the barn at the west end of truss feet being removed from the wall at this point and on the south side there is a good expanse of surviving cob and lime plaster which would show if modern repair had occurred. While it is clear the barn has been historically extended up the slope, closer to the house, by installing a truss here, where there wasn't one, would further change the story in future assessments and would lead people to question is the barn had been indeed extended again or even truncated.

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APPENDIX 1: ROOF BAY DESCRIPTION TABLE

Bay No: (counted from west end of B1.1)	Details of Bay – North Face	Details of Bay – South Face
1	Three modern lightweight purlins. Braced by modern A-frame at half-point of bay.	Four modern lightweight tanalised purlins (two paired to base of pitch). Braced by modern A-frame at half-point of bay.
2	Three modern tantalised purlins.	Three modern tantalised purlins. Clear corrugated roof light.
3	Bottom purlin is historic, not original, likely 18 th or 19 th century, clenched nails for removed rafters, repegged into back of medieval purlin to Bay 4 to east. Modern tantalised purlin behind. Two modern tantalised purlins above. Clear corrugated roof light.	Three modern tantalised purlins. Clear corrugated roof light.
4	Bottom purlin survives, tapered end, pegged to next purlin within socket in truss blade. Purlins are threaded. Two modern tantalised purlins above. Modern tantalised purlin behind. Clear corrugated roof light.	Three modern tantalised purlins. Clear corrugated roof light.
5	Bottom purlin survives, tapered end, pegged to next purlin within socket in truss blade. Purlins are threaded. Two modern tantalised purlins above. Modern purlin behind historic timber with brace, taking weight off. Clear corrugated roof light.	Three modern tantalised purlins. Clear corrugated roof light.
6	Three modern lightweight tantalised purlins.	Three modern lightweight tantalised purlins.

APPENDIX 2: PHOTOGRAPHIC ARCHIVE



1. THE WEST GABLE ELEVATION OF THE MAIN BARN (B1.1) WITH 2M SCALE; FROM THE SOUTH-WEST.



2. LOWER RIXDALE BARN; FROM THE SOUTH-WEST.



3. THE MOUNTING BLOCK ON THE SOUTH-WEST CORNER OF THE BARN, WITH 2M SCALE; FROM THE SOUTH.



4. THE WESTERN END OF THE BARN (B1.1), WITH LARGER, BUT ALTERED THRESHING OPENING, WITH 2M SCALE; FROM THE SOUTH.



5. LEFT: THE WESTERN THRESHING OPENING HAS A CONCRETE REPLACEMENT LINTEL.
6. RIGHT: THE EASTERN THRESHING OPENING HAS HEAVY OAK CHAMFERED LINTELS; BOTH FROM THE EAST.



7. EXAMPLE OF THE SHAPED BLOCKS WHICH FRAME THE THRESHING OPENINGS ON THE SOUTH ELEVATION OF B1.1; FROM THE SOUTH-WEST.



8. THE EASTERN THRESHING OPENING, WITH 2M SCALE; FROM THE SOUTH.



9. THE INTERIOR OF B1.2, THE EQUIPMENT SHED, WITH 2M SCALE; FROM THE SOUTH-WEST.



10. THE EQUIPMENT SHED, WITH 2M SCALE; FROM THE SOUTH.



11. THE EQUIPMENT SHED (B1.2), WHERE IT ABUTS THE MAIN BARN (B1.1), WITH 2M SCALE; FROM THE EAST.



12. THE EAST GABLE OF B1.1, THE MAIN BARN, WITH 2M SCALE; FROM THE EAST-SOUTH-EAST.



13. LOWER RIXDALE BARN, WITH 2M SCALE; FROM THE NORTH-EAST.



14. LEFT: DETAILED VIEW OF THE NORTH-EASTERN THRESHING OPENING, WITH HEAVY WEATHERED OAK LINTELS, BUT RAISED THRESHOLD IN CONCRETE BLOCKS; FROM THE WEST-NORTH-WEST.
15. RIGHT: THE LARGE CONCRETE BUTTRESS WHICH BRACES THE BARN, WHERE THE WALL HAS BEEN PATCHED IN STONE RUBBLE AND BRICK AND CONCRETE BLOCKS; FROM THE NORTH-WEST.



16. THE NORTH ELEVATION OF B1.1, THE MAIN BARN, WITH THE BRICK OUTSHUT, B1.3, ADDED TO THE NORTH-WEST END; FROM THE NORTH



17. THE NORTH ELEVATION OF B1.1, THE MAIN BARN, WITH 2M SCALE; FROM THE NORTH-WEST.



18. THE EAST WALL OF B1.3, THE BRICK OUTSHUT; FROM THE NORTH-EAST.



19. THE EASTERN PART OF B1.3; FROM THE NORTH.



20. THE WEST SIDE OF B1.3; FROM THE NORTH.



21. THE INSIDE OF B1.3; FROM THE NORTH.



22. LEFT: THE NORTH-WEST CORNER OF THE BARN, RELIEVED AND REBUILT IN RENDERED STONE RUBBLE, ABUTTED BY THE BRICK OUTSHUT B1.3; FROM THE SOUTH-WEST.

23. RIGHT: THE WEST GABLE, REBUILT IN CONCRETE BLOCK WITH SMALL LOADING DOOR AT APEX; FROM THE SOUTH-WEST, WITH 2M SCALE.



24. LARGE WEATHERED OAK LINTEL, OVER OPENING REDUCED IN SIZE, WITH INFILL OF RUBBLE STONE, WITH A RESET DOORFRAME, WITH VERY FINE CHAMFERED JAMBS, BUT CRUDELY CHAMFERED ROUGH LINTEL, WITH CHARRING FROM A FIRE AND DIFFERENT LEVELS OF WEATHERING, FORMING A WINNOWING DOOR FOR THRESHING; FROM THE



25. THE INTERIOR OF THE MAIN BARN B1.1, WITH IN SITU SCAFFOLDING; FROM THE EAST.



26. THE JOINTED CRUCK ROOF STRUCTURE OF B1.1, THE MAIN BARN; FROM THE SOUTH-EAST CORNER, BAY 6.



27. THE JOINTED CRUCK ROOF OF THE BARN, B1.1; FROM THE WEST, BAY 1, SHOWING THE DIFFERENT TRUSS TYPE FOR TRUSS 1 AND 2.



28. UNALTERED RIDGE, SHOWING THE RIDGE POLE WAS ORIGINALLY THREADED; FROM THE WEST, TRUSS 4.



29. DETAIL OF THREADED BUTT PURLINS, FOR TRUSSES 3 AND 4, PEGGED TOGETHER IN THE SOCKET, FOR BAYS 4 AND 5; FROM THE SOUTH-EAST.



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