BAMBURGH RESEARCH PROJECT

WHITTINGTON MILL NORTHUMBERLAND



HISTORIC BUILDING RECORDING AND ARCHAEOLOGICAL TRIAL TRENCH REPORT

Compiled on behalf of Mrs Cilla Wood by the Bamburgh Research Project: Commercial Projects Section

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SUMMARY

This document has been compiled by The Bamburgh Research Project Limited (BRP) for Mrs Cilla Wood during February 2018 and comprises a report on historic building recording and the excavation of a modest trial trench intended to identify if further monitoring was required. The work was undertaken in advance of the conversion of the former mill building and construction of a structural link between the mill and the existing house at Whittington Mill, Whittington, Northumberland (Figures 1 and 2). The work has been undertaken in line with the Written Scheme of Investigation compiled by The Bamburgh Research Project and based on the brief issued by the County Council Conservation Team. The Northumberland County Council planning reference number is: 17/03271/FUL and the OASIS reference no. is: bamburgh1-310518.

The townships of Halton Clarewood and Great Whittington were held in thegnage by William de Halton in AD 1212 for 40 shillings a year. Except for a brief period in the 14th century when Great Whittington was in the ownership of the Lords of Halton. A survey taken in 1299 lists two water mills in Great Whittington (Craster 1914, 420). In 1687 the township was surveyed and 10 acres were noted for the mill grounds (ibid 424-5). A later map for a survey of the township of Clarewood, south of the Pont, drawn in AD 1677, has text marking the general site of the mill on the north of the river in what appears to be its current location (ibid 388).

The mill and house are depicted on the 1st Edition Ordnance Survey map of c.1870 (Figure 6). The site of the mill damn and pond is shown immediately to the north of the mill building and stored water from the Bowbridge Burn. It can be speculated, from the modest size of the burn and the height of the stone wall that still demarks the position of the damn, that in its developed form the arrangement allowed sufficient head of water for an overshot wheel.

The standing building assessment was undertaken by Graeme Young and Cole Kelly on the 17th January 2018 and a modest trial trench excavated by machine at the same time. The structure of Whittington Mill displays a number of phases of construction. The core of the structure is a rectangle, measuring 6.3m north-south by 13.6m east-west, externally, onto which additions to the north, south and west have been added. The rectangular core of the structure is three storeys high, though the floor of the upper storey is not currently present. The additions to the core building are all of single storey construction. It is constructed form a variety of masonry and styles but is mortar bonded throughout. Roofs of the western and southern extensions were pitched and covered with slate, the main roof was of asbestos and the northern extension was of modern metal. The rooms were recorded in detail and have been delineated by letter codes from A to F on Figure 3 in order to allow for easy reference within the text.

Room A measured 8m by 5m internally and was the ground floor core of the mill structure. At the western extent of the south wall a series of very large square cut masonry blocks formed what is likely to be the earliest part of the mill. These blocks c.0.6m by 0.3m and with a crude chisel-tooled finish are the best candidate for surviving elements of the medieval mill. Their finish and scale are consistent with a medieval date, but sadly by no means certainly diagnostic of such a date. Three courses of this masonry survived in this area and other examples were present in the western extent of the north wall as well. A large timber set into the south wall above the masonry very likely represents surviving elements of the hurst cradle for the wheel axle and gears to the millstone. Traces of less substantial timbers

were also seen inset into the west wall nearby, leaving little doubt, despite the obscuring plaster and whitewash, that these walls, forming the three sides of the western part of the room, represent the core of the early mill structure.

Room B measured 3.8m east to west by 4.8m north to south. It was constructed from large blocks with a distinctive pecked tooling of apparently post-medieval character. No large and potentially early masonry blocks were apparent from the internal surfaces nor was any such material apparent form the external walls. Some of the lower courses did have a square cut regularity that was indicative of more than one build phase to this end of the structure. This view was further reinforced by a distinctive colour differential between some of the lowest courses in the south wall, being of a yellow sandstone, and the upper part of the lower storey and upper storey, being comprised of a pinkish sandstone.

Room C measured 8m, north to south, by 2.4m, east to west, and clearly contained two phases of build. The main part of the east wall comprised large, coursed, square cut masonry blocks, as did some elements of the south wall, and the remaining elements were of a later cruder build with smaller blocks and irregularly coursed. There were indications within the early build of the south wall that a blocked feature was present. The large, square cut regularly coursed blocks that formed the base of the east wall are almost certainly elements of the Room A structure. The basal blocks were of similar scale to those seen immediately inside at the base of Room A and although the block sizes diminished further up the wall they exhibited the same chisel tooling throughout. This is likely the best indication of the form of the primary build of the mill. It is significant that they stopped at a consistent line, some 3m above ground level, indicating that the original mill structure was of a single storey, or that the upper element was of timber. No clear trace of where timbers leading to the hurst on the far side of this wall would have penetrated was present, but a coal storage bin may well cover the critical spot.

Room D represented a south-east extension to the core building represented by Room A. It was L-shaped in plan and measuring 5.8m north-south and 6.4m east-west internally. It is clear that there are at least two main phases of construction, a lower phase, clearly visible in the exterior east wall, composed of larger square cut regular blocks of masonry. It was only really apparent in this one wall, so no clear indication survives as to whether the early phase structure was also L-shaped or even of a similar scale. A low arched opening some 1.7m high was present in this wall. The voussoirs of the arch were formed of mould cast bricks of likely 19th century date, suggesting that either the opening was a later addition or had been rebuilt. Two square opening were present, blocked by similar bricks, either side of the springing of the arch and a small rectangular opening was present above the arch and offset to the south.

Room E represents an additional structure to the north side of the main building extending from the east end two thirds the way along the structure on the north side. It measures 8m east-west and 4m north-south internally.

Room F is reached from a short flight of stairs up to a door at the west end of the north wall. The room measured 12.5m east-west by 4.8m north-south and was constructed from a mixture of squared and irregular masonry blocks, mostly of small to medium size, that were irregularly coursed. The build of the upper two storeys appeared to be relatively homogeneous inside and out, suggesting a single phase, with some patching in brick in places internally. The level of the floor for the upper storey could be reconstructed from

timber sockets set into the walls at about 2m in height above the surviving floor. A short door, blocked by timber, was present at the west end of the north wall, some 1.5m high and was mirrored by a similar door on the opposite wall. A series of windows in the north and south walls were placed to light the two floors. A consistent vertical patch in-filled with brick, c. 0.4m wide, extended up the full height of the east wall from floor level just to the south of the door, sloping slightly to the north as it ascended. The bricks were somewhat shallow in depth compared to modern standards and are likely 18th century in date, though potentially re-used. It seems likely that this represents the chimney for the Room B fireplace inserted into the wall, or patching following its removal.

Examination of the building fabric makes it apparent that a number of phases of construction activity are represented. It is possible to divide these tentatively into five phases:

- 1. The west end of Room A forms the early core of the structure and its large masonry blocks could be of medieval date and would not be inconsistent with 13 century styles.
- 2. Squared regular masonry blocks at the base of the east wall Room D, clearly different from the main build of irregular blocks
- 3. Lower yellow sandstone elements at the base of the south wall of Room B, different from (1) and also clearly earlier than (4).
- 4. The main re-building event, likely to be later 18th century and characterised by small irregular stone blocks that are irregularly coursed. Conversion of earlier structures to a three storey mill building.
- 5. Construction of Room E and later alterations.

Room A represents the heart of the mill building with traces of the location of the hurst being present. This together with the location of the mill damn relative to the River Pont into which the water from the mill-wheel would have drained makes Room C the site of the mill-wheel itself. It is clear from the number of variations seen in the fabric of the present structure, particularly low in the walls of the ground floor, that the standing building contains a number of phases. The possible presence of medieval fabric is intriguing as is the elaborate arrangements to route water to the mill dam. That the structure could represent an overshot mill, whose origins might be traced back to the 13th century is significant.

WHITTINGTON MILL NORTHUMBERLAND REPORT OF THE RECORDING OF HISTORIC STANDING BUILDINGS AND ARCHAEOLOGICAL TRIAL TRENCHING

1.0 INTRODUCTION

- 1.0.1 This document has been compiled by The Bamburgh Research Project Limited (BRP) for Mrs Cilla Wood during February 2018 and comprises a report on historic building recording and a modest trial trench intended to identify if further monitoring was required. The work was undertaken in advance of the conversion of the disused mill building and construction of a structural link between the mill and the existing house at Whittington Mill, Whittington, Northumberland.
- 1.0.2 The work has been undertaken in line with the Written Scheme of Investigation compiled by The Bamburgh Research Project and based on the brief issued by the County Council Conservation Team. The Northumberland County Council planning reference number is: 17/03271/FUL and the OASIS reference no. is: bamburgh1-310518.

1.1 Location

1.1.1 The proposed development area at Whittington Mill lies 6.5 km north-north-east of Corbridge and 2 km south-west of Matfen in central-south Northumberland, centred on grid reference NZ 0141 7037 (Figures 1 and 2). The development lies in a rural setting, 1 km from the nearest settlement of Great Whittington and comprises the former mill building and house immediately north of the River Pont (Figure 3).

2.0 METHODOLOGY

- 2.0.1 The building recording was undertaken in line with the WSI produced by BRP based on the brief issued by Northumberland County Council Conservation Team for the recording of standing buildings and archaeological monitoring. In advance of the work commencing it was agreed with the Assistant County Archaeologist that a test trench would be conducted at the same time of the building recording in order to define if the proposed monitoring would go forward at the time of the construction work. In this case the test trench proved to be sterile and the monitoring was dropped from the future programme.
- 2.0.2 The building recording also conformed, as far as possible, with Level 2 of the Historic England Guidelines (HE 2016). All work was carried out in compliance with the codes of practice of the certified Institute of Field Archaeologists (CifA 2014) and also complied with the CifA Standard and guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures (CifA 2014) as well as the aforementioned Historic England standard.

2.1 Building Recording

- 2.1.1 The building recording will evaluate the archaeological potential and significance of the buildings in the development area with particular reference to:
 - Historic openings, both open and blocked up, particularly in the ground floor/basement which appears to be earlier than 18th century in date
 - Any surviving timber or openings associated with the building's function as a mill
- 2.2.2 The detailed recording with follow Level 2 of the Historic England guidelines with additional elements as listed below:
 - 1. A written accountant.
 - Precise details of the location of the building, by name or street number, civil parish or town.
 - The National Grid reference of the building and details of listing or scheduling
 - The date when the record was made and the name of the recorder
 - A summary of the building's plan, type and purpose, materials used in construction and so far as is possible, the date of construction
 - The names of architects, builders, patrons and owners (if known)

2 Drawn Record

• A scale plan of all floors as existing, showing the form and location of any structural features of historic significance (including blocked windows and doors, former fireplace openings, masonry joints, changes in internal levels, internal fixtures and fittings)

3. Photographic Record

A photographic record should be taken in colour transparency, black and white print and digital will be made and should include a clearly visible metric scale in each frame.

- · General views of the exterior of the building, from all angles
- The overall appearance of the principal rooms and circulation areas
- Detailed photography of internal and external fixtures and fittings

2.3 General Standards

- 2.3.1 All staff will be suitably qualified and experienced and a brief CV will be included in this WSI and will be familiar with the archaeological background to the site. In addition they will be aware of the work to be undertaken.
- 2.2.2 A full and proper record (written, graphic and photographic as appropriate) should be made for all work, using *pro forma* record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings should be drawn at 1:50, 1:20 and 1:10 scales as appropriate.
- 2.2.3 The recorded features and buildings should be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area.

2.4 Archive Deposition

2.4.1 Archiving work will be carried out in compliance with the CiFA Guidelines for Archiving and submitted in line with Historic England's Management of Research Projects in the Historic Environment to the appropriate museum and digital photographs (including RAW files) deposited with the ADS.

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.0.1 Great Whittington township lies within the parish of Corbridge, separated from Halton and Clarewood by the River Pont. Medieval villages and hamlets are known from the Whittington estate at: Whittington, Little Groton, Bingfield, Clarewood and Halton. The remains of these former settlements can be seen as earthworks together with remains of their field systems that survive as ridge and furrow. In the 18th and 19th centuries as farming and industry developed a windmill was built and the watermill likely rebuilt on the site of a preceding medieval mill, at Great Whittington (Craster 1914, 420).
- 3.0.2 The townships of Halton Clarewood and Great Whittington were held in *thegnage* by William de Halton in AD 1212 for 40 shillings a year. Except for a brief period in the 14th century, great Whittington township was in the ownership of the Lords of Halton. A survey taken in AD 1299 lists two water mills in Great Whittington and the Lay Subsidy Roll, of AD 1296, lists 17 tenants (ibid 420). In 1687 the township was surveyed and 10 acres were noted for the mill grounds (ibid 424-5). A later map drawn as part of a survey of the township of Clarewood, south of the Pont, in AD 1677 has text marking the general site of the mill on the north of the river in what appears to be its current location (ibid 388).
- 3.0.3 The mill and house are depicted on the 1st Edition Ordnance Survey map of c.1870 (Figure 6). The site of the mill damn and pond is shown immediately to the north of the mill building and stored water from the Bowbridge Burn. The water discharged from the mill wheel would have drained in the Pont. It can be speculated, given the height of the stone wall that still demarks the position of the damn, that in

- its developed form, the arrangement allowed a sufficient head of water for an overshot wheel.
- 3.0.4 The current mill comprises a three storey mill building and mill house, believed to be of later 18th century date. It was recorded in 1964 as having been gutted and converted to a farm store with only the hurst surviving for two pairs of millstones. Inspection by Northumberland County Council Conservation Team notes that the building appears to be in at least two phases, with the lower basement and ground floor being potentially earlier than the main building and that substantial rebuilding of the structure has occurred.
- 3.0.5 A number of types of watermill are known from the medieval period. The earliest examples in the British Isles, are early medieval in date, and are horizontal mills. Such mills reached Northumberland in the Middle Saxon period and one is known from Corbridge (Snape 2003). Mills became commonplace by the 11th century, over 6000 are recoded by the Domesday survey, and were increasingly of the vertical wheel type. Vertical wheels were of three types, undershot, the most common, together with overshot and the rare breast shot mills. The undershot mill was the simplest in engineering terms and required only a flowing stream into which the millwheel extended and was turned by the flow of the water passing by it. Overshot mills required a head of water as great as the height of the wheel and were more common when modest streams were available as a water source as they utilized gravity to turn the wheel more than the power of the water stream. Given the modest nature of the Bowbridge Burn it is quite conceivable that Whittington Mill was of the overshot type from the medieval period (Figure 5). A breastshot mill is know from Barrowburn in the Coquet Valley and has been dated to the 13th century demonstrating that such technology for gravity fed mills was present in Northumberland from this time (Carlton 2015, 103).

4.0 RECORDING OF THE STANDING BUILDINGS

4.0.1 The standing building assessment was undertaken by Graeme Young and Cole Kelly on the 17th January 2018. The mill was a single building formed of a rectangular core with additions. The rooms were recorded in detail and have been delineated by letter codes from A to F on Figure 3 in order to allow for easy reference within the text.

4.1 The Mill structure

4.1.1 The structure of Whittington Mill displays a number of phases of construction, The core of the structure is a rectangle, 6.3m north-south by 13.6m east-west, externally, onto which additions to the north, south and west have been added. The rectangular core of the structure is three storeys high, though the floor of the upper storey is not currently present. The additions to the core building are all of single storey construction, though not on a single level due to the ground sloping down from north to south. It is constructed from a variety of masonry and styles but is mortar bonded throughout. Roofs of the western and southern extensions were pitched and covered with slate, the main roof was of asbestos and the northern extension was of modern metal (Figure 4 and Plates 1- 4).

4.2 Room A

- 4.2.1 The room measured 8m by 5m internally and was the core of the mill structure. At the western extent of the south wall a series of very large square cut masonry blocks formed what is likely to be the earliest part of the mill. These blocks c.0.6m by 0.3m, and with a crude chisel-tooled finish, are the best candidate for surviving elements of the medieval mill. Their finish and scale are consistent with a medieval date, but sadly by no means certainly diagnostic of such a date. Three courses of this masonry survived in this area and other examples were present in the western extent of the north wall as well. A large timber set into the south wall above the masonry, very likely, represented surviving elements of the hurst cradle for the wheel axle and gears to the millstone (Plate 5). Traces of less substantial timbers were also seen inset into the west wall nearby, leaving little doubt, despite the obscuring plaster and whitewash, that these walls, forming the three sides of the western part of the room, represent the core of the early mill structure (Plate 6).
- 4.2.2 The doorway through the south wall was well-built and displayed a chamfer rebate for an inward opening door constructed from large square cut masonry blocks, smaller but similar in style to the early blocks beneath the hurst. The present outward opening split door represented a later replacement for the original, inward opening, door that had hung from iron pins present on the east side of the doorway. A weathered graffito, that could not be read, was present cut into a block on the west side of the opening (Plates 7 and 8).

4.3 Room B

4.3.1 The room measured 3.8m east to west by 4.8m north to south. It was entered through a well-made doorway from Room A. Its walls comprised large blocks with a distinctive pecked tooling of apparently post-medieval character. No large and potentially early masonry blocks were apparent from the internal surfaces nor was any such material apparent form the external walls. Some of the lower courses did have a square cut regularity that was indicative of more than one build phase to this end of the structure. This view was further reinforced by a distinctive colour differential between some of the lowest courses in the south wall, being of a yellow sandstone, and the upper part of the lower storey and upper storeys, being constructed of a pinkish sandstone. The only feature of note within the room was the presence of a substantial fireplace set in the south side of the east wall (Plates 9 and 10).

4.4 Room C

4.4.1 Room C measured 8m by 2.4m and clearly contained two phases of build. The main part of the east wall comprised large, regularly coursed, square cut masonry blocks, as did some elements of the south wall, and the remaining elements were of a later cruder build with smaller blocks and irregularly coursed. These were clearly the later element as a butt joint was present between the north and east walls, showing this wall of Room C to be an add on to Room A. There were indications within the early build of the south wall that a blocked feature was present (Plate 11) and this appeared to be mirrored on the exterior wall, though here it appeared to be a blocked

doorway and the masonry was of small irregular blocks similar to the later west and north walls.

4.4.2 The large, square cut regularly coursed blocks that formed the base of the east wall are almost certainly elements of the Room A structure. The basal blocks were of similar scale to those seen immediately inside at the base of Room A, and although the block sizes diminished further up the wall they exhibited the same chisel tooling throughout. This is likely the best indication of the form of the primary build of the mill. It is significant that they stopped at a consistent line, some 3m above ground level, indicating that the original mill structure was of a single storey, or that the upper element was of timber (Plate 12). No clear trace of where timbers leading to the hurst on the far side of this wall would have penetrated was present, but a coal storage bin may well cover the critical spot. It was also clear on examination that this regular masonry turned a right angle at the south end of the room suggestive that some small elements of the south wall of Room C may well have been a part of the primary build.

4.5 Room D

- 4.5.1 The room represented a south-east extension to the core building represented by Room A. L-shaped in plan and measuring 5.8m north-west to south-east and 6.4m south-west to north-east, internally. It is clear that there are at least two main phases of construction; a lower phase, clearly visible in the exterior north-west wall, comprised larger square cut regular blocks of masonry compared to the upper construction. This lower build could represent the continuation of the early phase seen in Room A, or more likely, an additional early phase. It was only really apparent in this one wall, so no clear indication survives as to whether the early phase structure was also L-shaped or even of a similar scale. A low arched opening some 1.7m high was present in this wall. The larger early masonry blocks gave the impression of respecting this opening making it potentially an original feature. The voussoirs of the arch were formed of mould cast bricks of likely 19th century date. suggesting that either the opening was a later addition, despite indications, or that the voussoirs had been replaced at a latter date. Two square opening were present, blocked by similar bricks, either side of the springing of the arch and a small rectangular opening was present above the arch and offset to the south. The arched opening had been blocked by masonry of a character similar to the upper build of the room as had a window to the north of the doorway in the north-east facing wall (Plate 13).
- 4.5.2 The impression was clearly that alterations, probably representing a change of function for this room had occurred at least once. The south-west wall appeared to be a single build of irregular roughly squared uncoursed masonry that very likely was not contemporary in phase to the upper part of the north-east wall, which was more regular in form and coursing and composed of smaller but squared masonry blocks. This together with numerous examples of in-filled areas with broadly 19th century bricks suggested that at least three phases of use/build were present and potentially more.

4.6 Room E

4.6.1 The room represents an additional structure to the north side of the main building

extending from the east end, two thirds the way along the structure on the north side. It measures 8m east to west and 4m north-south internally. It butt jointed to the main building and was clearly a later addition. The east and west walls comprise roughly squared irregularly coursed masonry of various sizes and it had a single sloping roof pitching down from south to north. The end of the east wall shows larger well dressed corner quoins and the north side if the building is divided by a three stone pillars in filled between by timber partitions. A breeze block partition divided the room into two uneven spaces. The room appears to have originality represented open fronted bays later closed. A doorway, blocked by timber, was present in the west wall, surrounded by larger square cut masonry blocks that gave the impression of being re-used from a more substantial structure. A short flight of steps lead up to the first floor entrance into Room F.

4.7 Room F

- 4.7.1 The room is reached from a short flight of stairs up to a door at the west end of the north wall. The room measured 12.5m east-west by 4.8m north-south and was constructed from a mixture of squared and irregular masonry blocks, mostly of small to medium size, that were irregularly coursed. The build of the upper two storeys appeared to be relatively homogeneous inside and out, suggesting a single phase, with some patching in brick in places internally. The level of the floor for the upper storey could be reconstructed from timber sockets set into the walls at about 2m in height above the surviving floor. They were present in the north and south walls but not in the east and west. In the main the supporting timbers were modest in size other than a matching pair of sockets close to the west end of the building which were for a much larger timber, clearly intended to be more load bearing (Plate 14).
- 4.7.2 A short door, blocked by timber, was present at the west end of the north wall, some 1.5m high. Above this and just above the missing upper floor level a small niche was set into the wall, measuring some 30cm high by 20cm wide. A boarded up window high in the wall was sited between this and the doorway to light the upper floor. A second, bricked up, top floor window was also present located centrally, high in the wall. A shallow curved recess, extending from floor level, 1m high and 40cm wide, was present between the blocked door and the access door. Its purpose was unclear. The east wall contained a timber door at first floor level and a window above it for the second storey. A consistent vertical patch of bricks, c. 0.4m wide, extended up the full height of the wall from floor level just to the south of the door, sloping slightly to the north as it ascended. The bricks were somewhat shallow in depth compared to modern standards and are likely 18th century in date, though potentially re-used. It seems likely that this represents the chimney for the Room B fireplace inserted into the wall, or a patch put in place when it was removed (Plate 15). Four windows were present in the south wall, two for each of the upper storeys. A further boarded up short door. 1.5m high, was present at the west end opposite the short door in the north wall. The west wall contained two bricked up niches, 1m above ground level and each c 30cm square, in the centre and south side of the wall. A window, blocked with stone, was traced high on the south side and would have lit the upper, second floor (Plates 16 and 17).

4.8 Structural sequence

- 4.8.1 Examination of the building fabric makes it apparent that a number of phases of construction activity are represented. It is possible to divide these tentatively into five phases:
 - 1. The west end of Room A forms the early core of the structure and its large masonry blocks could be of medieval date and would not be inconsistent with 13th century styles.
 - 2. Squared regular masonry blocks at the base of the east wall of Room D, clearly different from the main build of irregular blocks
 - 3. Lower yellow sandstone elements at the base of the south wall of Room B, different from (1) and also clearly earlier than (4).
 - 4. The main re-building event, likely to be later 18th century and characterised by small irregular stone blocks that are irregularly coursed. Conversion of earlier structures to a three storey mill building.
 - 5. Construction of Room E and later alterations.
- 4.8.2 Room A represents the heart of the mill building with traces of the location of the hurst being present. This together with the location of the mill damn relative to the River Pont, into which the water from the mill-wheel would have drained makes, Room C the site of the mill-wheel itself. An overshot wheel would have meant that the water entered the area of the mill wheel (Room C) relatively high and likely over the wall height at seen at present. The blocked feature in the south wall could be a patch filling where the water originally drained.
- 4.8.3 Reconstructing the sequence of building events beyond identifying the core of the mill structure requires more speculation. Rooms B and D are additions to the core, but which came first is not clear. The medieval records mention two mills at great Whittington and it is quite conceivable that the head of water was sufficient to drive two mill wheels and that both mills named in AD 1299 were present at this site. In this scenario the early element of Room D could represent an additional mill between the main mill and the outflow to the Font. In support of such an idea the large masonry blocks that form the earliest parts of Room A are not seen east of the east wall of Room D leaving the possibility that the early structure did not extent anything like as far to the east as the current building. There is little in the style of the squared blocks at the base of the east wall of Room D that could be seen as diagnostically medieval so this is mere speculation without further work.
- 4.8.4 Room B and most of the upper part of the structure composed of small and often irregular masonry blocks laid in an irregularly coursed fashion seem likely to represent an extensive main building event. It seems reasonable to contend that this is the rebuilding of the mill as a multi-storey structure in the later 18th century. The insertion of a fireplace and chimney into Room B was probably later than the room's construction. Room E also appears to have been a later addition to this main phase of reconstruction.

5.0 IMPORTANCE OF THE STANDING BUILDINGS

5.0.1 The present buildings fit into the general nature of late post medieval rural buildings in Northumberland. The overall form of the structure is likely to have been reached during a major reconstruction in the later 18th century. The 1st Edition Ordnance Survey almost certainly depicts the building broadly in its current form. A mill was present as early as the 13th century AD and the continued presence of a mill on the site up to post medieval period adds value to the otherwise unremarkable rural industrial structure. The possible presence of traces of a medieval original within the walls of the later rebuild certainly adds value to the structures historical significance, particularly so if the medieval original was also an overshot mill.

6.0 TRIAL TRENCH RESULTS

6.0.1 The original intent for the archaeological mitigation was for monitoring to be undertaken during during the groundworks associated with the construction of the connecting building. This was altered during the preparation phase of the WSI following consultation between Beke Projects, the Assistant County Archaeologist and the archaeological consultant in order to allow for a modest trial trench to demonstrate if there was any archaeological potential in the area of the connecting structure. Excavation of a simple trial trench measuring 4m by 0.8m on a north south alignment, to the immediate east of the mill building, revealed a sterile boulder clay beneath a thin cobble surface that was itself sealed by modern gravel. There were no finds or any indication of occupation such as charcoal in any of the layers. All indications were that the area had no archaeological potential (Plate 18).

7.0 CONCLUSIONS

7.0.1 It is clear from the number of variations seen in the fabric of the present structure, particularly low in the walls of the ground floor that the standing building contains a number of phases. The possible presence of medieval fabric is intriguing as is the elaborate arrangements to route water to the relatively tall mill dam from a modest burn. That the structure almost certainly represents an overshot mill, whose origins might be traced back to the 13th century is significant. Should future work become a possibility tracing the course of the water outflow from the wheel and identifying datable material from the earlier foundations would be of considerable interest as would examining the possibility of dendrochronological dating of the large hurst timber.

Text: Graeme Young BRP 18/01b

February 2018

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^{1&}lt;sup>st</sup> Edition Ordnance Survey, 25 inch to the mile 2nd Edition Ordnance Survey, 25 inch to the mile

APPENDIX I

LAND AT WHITTINGTON MILL WHITTINGTON NORTHUMBERLAND

HISTORIC BUILDING RECORDING AND ARCHAEOLOGICAL MONITORING WRITTEN SCHEDULE OF INVESTIGATION

1.0 INTRODUCTION

- 1.0.1 This document has been compiled by The Bamburgh Research Project Limited (BRP) for Beke Projects during January 2018 and comprises a Written Schedule of Investigation for historic building recording and archaeological monitoring associated with the conversion of existing barns and construction of a link between the barns and the existing house at Whittington Mill, Whittington, Northumberland.
- 1.0.2 The document has been prepared in order to fulfil a requirement for archaeological mitigation prior to and during construction work, following the determination of the planning application.

2.0 THE SITE

2.1 Location

2.1.1 The proposed development area at Whittington Mill lies 6.5 km north-north-east of Corbridge and two km south-west of Matfen in central south Northumberland, centred on grid reference NZ 0141 7037 (Figures 1 and 2). The development lies in a rural setting, 1 km from the nearest settlement of Great Whittington and comprises the former barns and house immediately north of the River Pont.

1.2 Archaeological Background

- 2.2.1 Great Whittington township lies within the parish of Corbridge, separated from Halton and Clarewood by the River Pont. Medieval villages and hamlets are known from the Whittington estate at Whittington, Little Groton, Bingfield, Clarewood and Halton. The remains of these former settlements can be seen as earthworks together with remains of their field systems that survive as ridge and furrow. In the 18th and 19th centuries as farming and industry developed a windmill was built and the watermill likely rebuilt on the site of a preceding medieval mill, at Great Whittington (Craster 1914, 420).
- 2.2.2 The current mill comprises a three storey mill building and mill house, believed to be of 18th century date. As stated it lies on the likely site of a medieval mill that can be traced in records back to the 13th century when two mills are recorded. It was powered by an overshot wheel with water fed from the north and the mill pond into the stream to the south. It was recorded in 1964 as having been gutted and converted to a farm store with only the hurst surviving for two pairs of millstones. Inspection by Northumberland County Council Conservation Team notes that the building appears to be in at least two phases, with the lower basement and ground floor being potentially earlier than the main building and that substantial rebuilding of the structure has occurred.
- 2.2.3 Whittington Windmill, a Grade II listed building lies some 100m to the north west of the water mill.
- 2.2.4 The mill and house are depicted on the 1st Edition Ordnance Survey map of c.1870.

2.3 Impact of the development

2.3.1 The available evidence demonstrates that the Mill at Whittington is of historical interest and may contain structural elements that predate the 18th century. The development of this structure will leave the main structural elements intact but a proportionately detailed record of the building prior to alteration is needed to preserve evidence of its early history. In addition the construction of a connection between the mill and mill house has the potential to impact on features associated with the structure in use and to impact on any remains of the medieval predecessors to the later structure.

3.0 OBJECTIVES

3.0.1 In the light of the potential for the construction works to impact upon the building and any preservedarchaeological remains it is proposed that building recording will be conducted in advance of the redevelopment of the structures and that a continuous watching brief be conducted during the intrusive ground work associated with the connection between the two structures, if deemed necessary following a test excavation during he building recording. Provision will be made for the archaeological consultant to suspend works to allow for the rapid investigation and recording of objects or features encountered. Should archaeological material be encountered the consultant will keep the client and Assistant County Archaeologist informed.

METHODOLOGY

4.0 ARCHAEOLOGICAL MONITORING

4.1 Monitoring methodology

- 4.1.1 After discussion with the Assistant County Archaeologist, and based on information supplied from the developer that indicates that the area subject to monitoring could be substantially disturbed ground of no archaeological potential, an initial assessment has been proposed in advance of the monitoring. In this instance a suitable area of ground within the proposed footprint of the connecting structure will be stripped under archaeological supervision based on the conditions in the methodology below, in order to identify is the area has any archaeological potential. If the ground proves to be disturbed then the issue will be discussed with the Assistant County Archaeologist and if agreed the monitoring will be suspended from the programme of works.
- 4.1.2 During all excavation activity a suitably experienced archaeologist, familiar with the archaeological background of the site, will be present to record any items of interest that are revealed. All work will be carried out in compliance with the codes of conduct of the Certified Institute for Archaeologists (CIfA 2014) and will follow their Standard and Guidance for Archaeological Watching Briefs (CIfA 2014) and Field Excavation (CIfA 2014).
- 4.1.3 Topsoil and unstratified modern material will be removed mechanically by a machine using a toothless ditching bucket, under direct supervision of an appropriate member of the archaeological staff. Machine excavation will be undertaken in successive shallow spits down to the first significant archaeological horizon or to the required depth. The following works are to be subject to archaeological monitoring:
 - · groundworks associated with the site clearance
 - · excavation of new services
 - · excavation of foundation trenches
- 4.1.4 A 'toolbox talk' briefing the building contractor and subcontractors on the archaeological objectives and mitigation strategy will be conducted by the archaeological contractor prior to any activity on site. The briefing will include the potential features, deposits and finds that might be expected to be encountered during the work and will be repeated for any new subcontractors joining the team. The intention of the briefing is to ensure that all site operatives understand the scope of the archaeological mitigation and the implication of its obligations.

4.2 General standards

- 4.2.1 An appropriate level of excavation that will be sufficient to enable the date, character, form and stratigraphic relationships of features to be identified and recorded is proposed. All excavation will be by hand and will include a maximum of:
 - 50% of all discrete features

- 25% of the area of a linear/curvilinear features with a non-uniform fill
- 10% of the area of linear/curvilinear features with a uniform fill
- 4.2.2 A 40 litre bulk palaeoenvironmental sample will be taken from all features recognised as suitable for the preservation of palaeoenvironmental remains.
- 4.2.3 Secure contexts will be sampled for dating where appropriate, whether on site or as sub samples of bulk samples. Any concentrations of charcoal or other carbonised material recovered on site will usually be retained.
- 4.2.4 Pottery and animal bone will be collected as bulk samples whilst significant artefacts will be three-dimensionally recorded prior to processing. All finds will be recorded and processed according to the BRP system and submitted for post-excavation assessment. Finds recovery and storage strategies will be in accordance with published guidelines (English Heritage 1995 and Standard and guidance for the collection, documentation, conservation and research of archaeological materials CifA 2014). Should artefacts of gold or silver covered by the 1996 Treasure Act be recovered, appropriate procedures will be followed.
- 4.2.5 In the event of Human burials being revealed they will be left *in situ* and treated in an appropriate manner. After consultation with the Conservation Team, if excavation is required, work will comply with the relevant home Office regulations.
- 4.2.6 Any archaeological features encountered will be hand-cleaned, excavated and recorded:
 - 1. A photographic record will be taken using a digital format and provision made for deposition with the ADS as part of the site archive.
 - 2. A written description of features will be recorded using the BRP *pro forma* context recording system.
 - 3. All features will be drawn at an appropriate scale using pre-printed permatrace. Plans will normally be drawn at a scale of 1:20 and sections at a scale of 1:10.
- 4.2.7 All archaeological features and horizons will be accurately tied into the Ordnance Survey grid. All levels will be tied in to Ordnance Datum.
- 4.2.8 Arrangements will be made with the appropriate museum for the deposition of the site archive within 6 month of the completion of the post-excavation report.

4.3 Contingency for excavation

- 4.3.1 A contingency has been allowed within the evaluation program to allow for additional excavation in the event of the discovery of archaeological remains which are of a greater number or extent than can be dealt with in the normal course of the monitoring. In this instance the contingency will be fore 30 person days and will be invoked after consultation by the archaeological contractor with the Assistant County Archaeologist and the developer.
- 4.3.2 In the event that hearths, kilns or ovens (of whatever period, date or function) are identified during the work, provision will be made to collect at least one archaeo-magnetic date from each individual hearth surface (or in the case of domestic dwellings sites a minimum of one per building identified). Where applicable, samples are to be collected from the site and processed by a suitably trained specialist for dating purposes. In the event that such deposits or structures are identified, Northumberland Conservation will be contacted to discuss the appropriate response. This specific aspect of the sampling strategy should also be discussed in advance with Historic England.

5.0 HISTORIC BUILDING RECORDING

5.1 Building recording methodology

- 5.1.1 The building recording will be undertaken in line with the generic brief issued by Northumberland County Council Conservation Team for the recording of standing buildings. The building recording will also conform, as far as possible, with Level 2 of the Historic England Guidelines (HE 2016).
- 5.1.2 All work will be carried out in compliance with the codes of practice of the certified Institute of Field Archaeologists (CifA 2014) and will comply with the CifA Standard and guidance for the archaeological investigation and recording of standing buildings or structures (CifA 2014) as well as the aforementioned Historic England standard.

5.2 Elements of building recording

- 5.2.1 The building recording will evaluate the archaeological potential and significance of the buildings in the development area with particular reference to:
 - Historic openings, both open and blocked up, particularly in the ground floor/basement which appears to be earlier than 18th century in date
 - Any surviving timber or openings associated with the building's function as a mill
- 5.2.2 The detailed recording with follow Level 2 of the Historic England guidelines with additional elements as listed below:
 - 1. A written accountant.
 - Precise details of the location of the building, by name or street number, civil parish or town.
 - The National Grid reference of the building and details of listing or scheduling
 - The date when the record was made and the name of the recorder
 - A summary of the building's plan, type and purpose, materials used in construction and so far as is possible, the date of construction
 - The names of architects, builders, patrons and owners (if known)

2 Drawn Record

• A scale plan of all floors as existing, showing the form and location of any structural features of historic significance (including blocked windows and doors, former fireplace openings, masonry joints, changes in internal levels, internal fixtures and fittings)

3. Photographic Record

A photographic record should be taken in colour transparency, black and white print and digital will be made and should include a clearly visible metric scale in each frame.

- General views of the exterior of the building, from all angles
- The overall appearance of the principal rooms and circulation areas
- · Detailed photography of internal and external fixtures and fittings

6.0 GENERAL STANDARDS

6.0.1 All staff will be suitably qualified and experienced and a brief CV will be included in this WSI and will be familiar with the archaeological background to the site. In addition they will be aware of the work to be undertaken.

- 2.2.2 A full and proper record (written, graphic and photographic as appropriate) should be made for all work, using pro forma record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings should be drawn at 1:50, 1:20 and 1:10 scales as appropriate.
- 2.2.3 The recorded features and buildings should be accurately tied into the National Grid and located on a 1:2500 or 1:1250 map of the area.

7.0 MONITORING

- 7.1 Access will be made available at all reasonable times to the archaeological representatives of the Northumberland County council Conservation Team to inspect the excavation site.
- 7.2 Access to the site will be on the basis of prior notification and subject to any relevant health and safety considerations.

8.0 POST-EXCAVATION WORK, ARCHIVE AND REPORT COMPILATION

- 8.1 On completion of the excavation an assessment of the site records and finds will be undertaken in accordance with English Heritage (1991) guidelines and with reference to Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (HE 2015). This will include:
 - · collation of all site records
 - · compilation of a report
 - production of context, photographic, finds and illustration databases
 - analysis of the finds assemblage by relevant specialists
 - environmental assessment of selected bulk samples
 - description of the results of the Standing Building Recording
 - An assessment of the importance of the standing buildings individually and as a group of buildings
 - Where possible an assessment of the impact on the visual setting of Scheduled Monuments, Listed buildings, Historic Parks and Gardens and Historic battlefields and unscheduled archaeological sites of national or regional importance
- 8.2 The report, with each page and paragraph numbered and with cross referenced illustrations, will include:
 - · summary of the project background
 - site location
 - methodology
 - · results of the watching brief
 - · results of the building recording
 - site location plans and illustrations of results of the monitoring and building recording at appropriate scales (1:10, 1:20. 1:50 or 1:100) and features referenced to aOD
 - a captioned photographic record appropriate to the building recording required
 - interpretation of the results in an appropriate context
 - post-excavation assessment of the site archive
 - catalogue and assessment of the artefactual archive
 - catalogue and assessment of the faunal remains
 - catalogue and assessment of the palaeoenvironmental samples recovered
 - appendix containing a list and summary of each recorded context
- 8.3 A copy of the report should be submitted by the archaeologist to the commissioning client, and the County Council Conservation Team within two months of completion of each phase of the work. A summary will be prepared for 'Archaeology in Northumberland' and an article will be submitted to a local or national journal if appropriate. In this instance the scale and nature of the journal submission will be agreed with Northumberland Conservation before discharging the condition on the planning permission

- 8.4 The site archive will be prepared to the standard specified in the Management of Archaeological Projects, appendix 3 (HBMC 1991) and in accordance with the Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990) and A strategy for the Care and Investigation of Finds (Ancient Monuments Laboratory1995). A summary account of the context record will be included and written by the supervising archaeologist. The archive will be deposited at the specified museum within 6 months of completion of the work on site.
- 8.5 An online OASIS form will be completed for the project as part of the post-excavation assessment process.

8.0 PERSONNEL

- 8.0.1 The designated project manager Graeme Young, is one of the four directors of the Bamburgh Research Project. A graduate of Newcastle University, with 29 years of experience in field archaeology including directing a number of excavations of urban medieval sites in Newcastle and Durham.
- 8.0.2 Additional field staff, with appropriate archaeological experience, will be engaged as required.

9.0 SUB-CONTRACTED SPECIALISTS

9.0.1 Although it is not possible to predict the range of artefacts that may be recovered provision has been made for the analysis of the most common artefacts.

Specialist
Jenny Vaughan
Jenny Vaughan
Blaise Vyner
Blaise Vyner

Animal bone Durham University Archaeological Services Palaeoenvironmental Durham University Archaeological Services

Conservation Karen Barker

10.0 HEALTH AND SAFETY

- 10.0.1 The Bamburgh Research Project maintains current appropriate insurance and complies with the 1974 Health and Safety Act and its subsequent amendments in all its operations. The SCAUM manual and the Bamburgh Research Project Health and Safety Policy Document is followed for all site works. A designated and appropriately trained first aider is present at all times during working hours. A First Aid kit, Accident Book and telephone are provided for each project. Safety footwear is mandatory on all excavation sites. Where required safety helmets and reflective jackets are provided. It is policy for a vehicle to be present at an excavation and staff must be appropriately equipped for bad weather.
- 10.0.2 All staff undergo a safety induction prior to commencing work on site. A written risk assessment is undertaken specific for each site. The safety assessment is reviewed on a daily basis and changes to the working conditions monitored continually during adverse weather conditions.

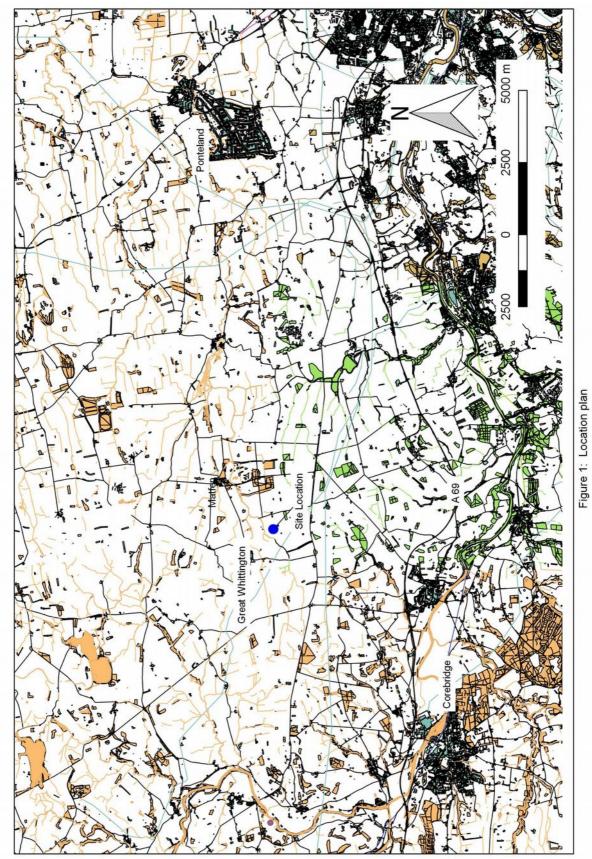
Text and illustrations: Graeme Young.

BRP 18/01a January 2018

APPENDIX II: PHOTOGRAPHIC CATALOGUE

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NW F Oblique view whole wall	3830	NW	F	

3832	N	F	Interior elevation of wall sequence West to East
3834	N	F	Interior elevation of wall sequence West to East
3836	N	F	Interior elevation of wall sequence West to East
3838	N	F	Interior elevation of wall sequence West to East
3840	N	F	Interior elevation of wall sequence West to East
3843	N	F	Interior elevation of wall sequence West to East
3846	E	F	Full elevation of interior wall
3847	Ε	F	Full elevation of interior wall
3849	Ε	F	Detail of doorway
3853	SW	F	Oblique view whole wall
3854	SW	F	Oblique view whole wall
3855	SE	F	Oblique view whole wall
3856	S	F	Interior elevation of wall sequence East to West
3857	S	F	Interior elevation of wall sequence East to West
3859	S	F	Interior elevation of wall sequence East to West
3860	S	F	Interior elevation of wall sequence East to West
3862	W	F	Full elevation of interior wall
3863	W	F	Full elevation of interior wall
3866	N	F	Detail of floor beam
3867	S	F	Detail of floor beam
3869	NE		Detail of alcove/niche
3870	N	F	Detail of alcove/niche
3872	N	С	Full elevation of interior wall
3874	SE	С	Full elevation of interior wall
3875	SE		Full elevation of interior wall
3877	S	С	Full elevation of interior wall
3878	SW	С	Full elevation of interior wall
3881	NE	С	Full elevation of interior wall- upper part
3884	W	С	Full elevation of interior wall
3888	SE		3/4 view of whole building
3896	SW		Oblique view exterior wall
3910	NW		Oblique view exterior wall



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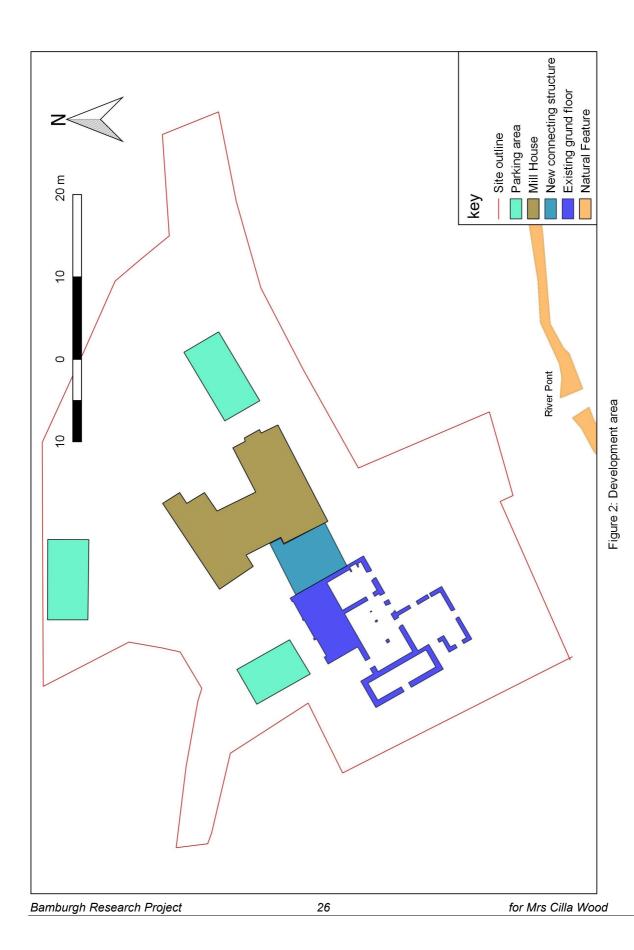




Figure 3 Details of building recording

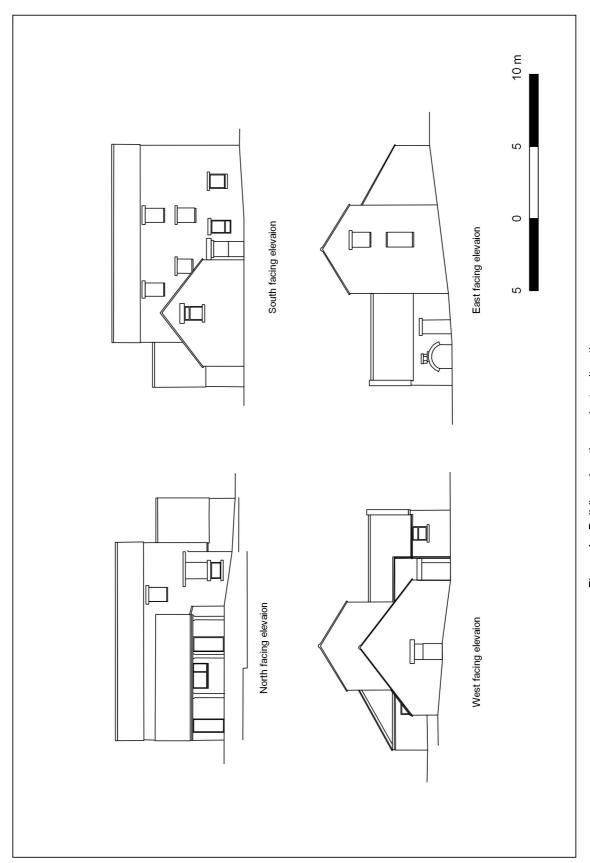


Figure 4: Building elevations prior to alteration



Figure 5: Medieval single storey, stone built, overshot watermill as depicted in the Luttrell Psalter, early 14th century (wikicommons)



Figure 6: First Edition Ordnance Survey, 6 inch, 1864, depicting mill damn and mill



Plate 1: North elevation of the mill building



Plate 2: South and east elevations of the mill building



Plate 3: South elevation of the mill building



Plate 4: West elevation of the mill building



Plate 5: Large chisel tooled masonry blocks and cut timber, south-west corner of Room A



Plate 6: West Wall of Room A with further timber elements



Plate 7: Doorway into Room A, facing south-east

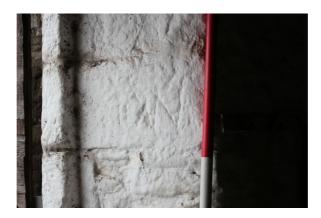


Plate 8: Graffito on opposite side of doorway to Room A, facing south-west



Plate 9: Doorway between Rooms A and B, facing east



Plate 10: Fireplace within Room B, facing east



Plate 11 South wall of Room C showing blocked feature



Plate 12 East wall of Room C, showing possible early roof line between large early blocks and later smaller irregularly coursed blocks



Plate 13 East wall of Room D, showing blocked arch and at least two phases of masonry



Plate 14 Wooden floor joist and niche, Room F, north wall, west end



Plate 15 East wall of Room F, showing chimney patch



Plate 16 North wall of Room F



Plate 17 West wall of Room F



Plate 18 Trial trench, facing north