# BISH MILL BISHOP'S NYMPTON DEVON

# HISTORIC BUILDING RECORDING

January 2017

# **Martin Watts**

1 Trinity Cottages Cullompton Devon EX15 1PE

Project BNM256

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#### HISTORIC BUILDING RECORDING

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Historic Building Recording Traditional Milling Specialist

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### HISTORIC BUILDING RECORDING

#### Summary

The former watermill at Bish Mill, to the east of South Molton in north Devon, was recorded prior to work being undertaken to convert it to holiday accommodation. A mill on the Nympton manor of the Bishop of Exeter is recorded in Domesday Book, one of the few in north Devon. The last mill on the site dates from the late 19th century, perhaps c.1870, and worked until the 1950s. The waterwheel and machinery were removed for scrap in the 1960s. After a period of neglect, the floors and roof structure were renewed. The site retains a live water supply, which has the potential for future reinstatement for power generation.

#### Introduction

This report has been compiled at the request of the building owner, to record the historic fabric which will be affected by the proposed development of a former water-powered corn mill at Bish Mill, Bishop's Nympton, South Molton, Devon, EX36 3QF. The proposed works comprise the conversion of the mill building to provide one unit of holiday accommodation and are the subject of a planning consent by North Devon Council, reference 61507, granted on 25 October 2016. It follows a Written Scheme of Investigation submitted to the Historic Environment Team (HET) of Devon County Council, for an archaeological/historic building survey and recording required in accordance with paragraph 141 of the *National Planning Policy Framework* (2012) and the Local Development Framework Policy on Archaeology.

The building which is the subject of this report is not listed nor understood to be within the curtilage of a listed building. The Devon Historic Environment Record Monument Reports MDV19605 refer to the former mill building and mill house and MDV37624 to the leat.

A preliminary site visit was made on 31 October 2016 and a non-intrusive site survey was carried out by Martin and Susan Watts on 10 January 2017. The building recording broadly conforms to Level 2-3 as set out in *Understanding Historic Buildings: a guide to good recording practice* (English Heritage 2006).

Digital copies of this report will be deposited with the Devon County Council Historic Environment Service and uploaded onto the OASIS (Online Access to the Index of archaeological investigationS) database under the identification number martinwa1-274194.

This report is intended to be read with the drawings and photographs attached. The drawings are based on plans and elevations of the building prepared by PWH Chartered Surveyors, Barnstaple, in June 2016.

#### Location

Bish mill is located in a small hamlet of the same name, towards the western side of the historic parish of Bishop's Nympton, NGR SS 7418 2530. The mill building stands at about 94m AOD, on the flood plain between the river Yeo and the B3227 road to South Molton. The river Yeo flows westwards past the mill site to join the river Mole about 1 mile (1.6km) to the south west.

#### Historical background

The earliest reference to a mill in Bishop's Nympton is from Domesday Book (1086), when the manor was held by the bishop of Exeter:

'The Bishop holds (Bishops) NYMPTON [*NIMETONE*] himself. Before 1066 it paid tax for 3 hides. Land for 52 ploughs. In lordship 4 ploughs; 1 hide. 56 villagers and 25 smallholders with 44 ploughs and 2 hides. 17 pigmen who pay 90 pigs; 14 slaves. **A mill which pays 40d**; meadow, 150 acres; pasture, 140 acres; woodland, 200 acres. 6 cattle; 31 sheep. Formerly £7; value now £16.' (Thorn & Thorn 2,21).

This entry indicates a substantial manor with a relatively large amount of arable land and one of the few mills to be recorded in north Devon by the Domesday survey. Whether the 11th century mill was located at Bish Mill is a matter for conjecture, but the persistence of the name, which refers to the hamlet as well as the mill itself, suggests it is an important site of long standing. No early references to the place-name Bish or Bishop's Mill are given in either of the Devon place-name studies (Gover, Mawer & Stenton 1973, 383-5; Blomé 1929, 116-8).

'Bish Mill' is marked on Benjamin Donn's county map of 1765 (Ravenhill 1965) and in 1797, when it was insured for £60 by Edward Rodd, it was described as built of stone, mud [cob] and thatch. A second fire insurance policy taken out shortly after by Mrs Thomasin Rodd refers to 'Two waterwheels, standing and going gear, millstones etc insured for £70, all mud and plaster built and thatched. Warranted no steam engine.' (Royal Exchange Fire Insurance Policies 156185 and 246962, from H.E.S. Simmons, transcribed Bodman 1993).

*Bish Mill* and *Bish mill* - the mill and the hamlet - are marked on the 2 inch to 1 mile Ordnance Survey drawing of 1804 (http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/), although the layout of the buildings is indistinct.

In 1807 the property was advertised for sale:

'To be SOLD for one life absolute, and two rights of widowhood, All those FLOUR and GRIST MILLS, called or known by the name of BISH MILLS in the parish of Bishop's Nympton, in the county of Devon; comprising a good dwelling-house in which there are three parlours, a large shop, kitchen, back-kitchen, cellar, wash-house, dairy and six lodging rooms, three cottages, a commodious malt and mill-house, with two kilns, lofts, and store rooms, two water wheels, four pair of stones, dressing-engine &c, a kitchen garden, one acre of orchard in the prime, and two plots of ground called the Islands.

These mills have a powerful head, and a constant supply of water in the driest season, are in a very eligible situation for a woollen, cotton, or any other manufactory, and part thereof is well adapted for a tan-yard; They adjoin the turnpike road leading from Barnstaple to Tiverton and are but one mile and a half from Southmolton. For which purpose a survey will be held at the King's Arms Inn, in Southmolton. Further particulars may be had of Mr Rodd, at the dwelling-house or of James Pearce and Son, attornies, in Southmolton aforesaid. N.B. The purchaser may be accommodated with the whole or any part of Ten Acres, of rich Meadow Land adjoining, at an annual rent. Dated January 28, 1807.' (*Sherborne Mercury*, 2 February 1807, transcribed in Bodman 2016, 367).

Some 14 years later, in 1821, a sale notice described the mill in similar terms (*Exeter Flying Post*, 30 Aug 1821, 4e). The sale was copyhold, based on lives, the mill and hamlet continuing to be held by the Bishop of Exeter. At the time of the Tithe Apportionment in 1841, Bish Mill Cottages were held by Thomas Maunder, lessee under the Bishop of Exeter,

and the mill was occupied by John Hulland and Philip Gibbs, together with the Fortescue Inn and a dwelling house.

In July 1849 'All those Mills, known by the name of Bish Mills, with a never-failing stream of water. Also a small Cottage adjoining, together with the Orchard and Grounds thereto belonging and now in the occupation of P. Gibbs and Miss Hulland' were for sale by auction (lot three of six) 'for Two Lives, to be named by the Purchaser; with a right of Widow-hood, according to the custom of the Manor of Bishopsnympton,' (*Exeter Flying Post*, 21 June 1849, transcribed by Lesley Withers, http://www.genuki.org.uk/big/eng/DEV/Bishops Nympton, accessed 29 October 2016).

From the mid 19th century the names of the millers and occupiers appear in various trade directories and gazetteers. While no miller is listed in White's Directory of 1850 Samuel Hulland appears as landlord of the Fortescue Arms. In 1857 John Redder [sic] is recorded as 'miller and victualler, Fortescue Inn' in Billing's Directory and Gazetteer and Thomas John Redler is given as miller in White's History, Gazetteer and Directory of Devon for 1878-9. Thomas William Redler is listed as 'miller (water)' in Kelly's Directory for 1883, the hamlet of Bish Mill being given a small section on its own at the end of the main Bishop's Nympton entries. By 1889 an auxiliary steam engine appears to have been introduced at Bish mill, as Thomas Redler's name appears as 'miller (water & steam)' (Kelly's Directory 1889) and his son, Thomas junior, has a similar entry in 1893 (Kelly's Directory 1893). William Cole, who appears to have worked as a wheelwright at Bish Mill from at least 1850, is recorded as being the miller at Garliford mill, also in Bishop's Nympton, in 1893, but in 1897 and in 1902 he is described as 'miller (water), farmer & wheelwright' at Bish Mill (Kelly's Directory 1897; 1902). His widow appears to have taken over by 1906, being listed as 'Cole Louisa Thurza (Mrs.), dairy & miller (water)' (Kelly's Directory 1906) and the entry for 1910 records 'Cole Amy (Miss), dairy, & miller (water)' (Kelly's Directory 1910). From 1919 to 1939 Ernest Cole, 'dairy & miller (water)' appears consistently in the directory entries (Kelly's Directory 1919; 1923; 1935; 1939). The mill is believed to have last worked in the 1950s and the waterwheel and machinery were removed for scrap in the 1960s (Thorpe 1989, 36; U3A 1995, 15-16).

In the entry for Bish Mill in the survey carried out by members of the North Devon Archaeological Society in the 1970s and 80s, the mill building is recorded as being dilapidated, with 'only four millstones' surviving. The entry also refers to a Sites and Monuments Record report which confuses the house and the mill, suggesting that the 'three storey stone building of late 19th century date' was 'probably a former warehouse.' (Thorpe 1989, 36). A later published survey of North Devon watermills carried out by the University of the Third Age contains the following description:

'The tall mill building, three storeys and a loft, stands parallel with the road. It is of stone construction, with a slate roof. It is in need of some repair. Mr Bushell would like to do restoration work. The machinery was sold to a South Molton scrap dealer in the 1960s. The wheel pit remains. The L-shaped Mill House nearby is said to date from the 17th century... It is believed to have last worked in the 1950s.' (U3A 1995, 15-16)

The layout of the buildings is first shown clearly on the tithe map of 1841 (Figure 1), where the mill appears as an L-shaped building with a long elevation along the mill race to the east. A map of the manor of Bishop's Nympton, date stamped 6 Jan 1870 upside down in the bottom right corner (Devon Archives & Local Studies Service, 2830Z/E36), gives two slightly conflicting plans of the mill. The plan of the hamlet shows an L-shaped building

similar to that on the tithe map, but an enlarged detail shows more the surviving plan of the mill, partly overdrawn roughly in pencil, which may suggest that the present mill building dates from about 1870 (see discussion below). The surviving layout is confirmed by the 25 inch Ordnance Survey maps of c.1889 and 1904 (Figures 2-4).

#### Description

The surviving mill building is orientated about west-east, with an external waterwheel pit along the east gable. The waterwheel was supplied with water by a leat taken off the south end of a weir across the river Yeo some 600m to the east-north-east (Figure 3). The weir, which is understood to be partly breached, and leat were not investigated, but water still runs along the leat towards the mill, being diverted back to the river down a spillway close to the site. The leat is now closed off by the spillway; the silted section between the spillway and the mill is about 2.1m wide between stone walls.

#### *Exterior* (see Figures 9 & 10)

The walls of the mill building are of local randomly-coursed rubble sandstone (Carboniferous period, Bude Formation - http://www.bgs.ac.uk/opengeoscience/, accessed 18 January 2017) under a slated gable roof with a glazed clay tile ridge. A notable feature is the slight entasis of the walls, visible externally at the corners of the building, indicating that it is well built, with some architectural pretensions. The gutters and downpipes on the north and south elevations are black plastic. The window and door openings have almost flat arched heads with brick voussoirs and the window openings have cut slate cills. The window frames are of softwood, with vertical glazing bars with lapped fixed glass panes between. Some of the windows have central mullions and opening casements. Some windows have been renewed, apparently following the earlier pattern of glazing.

The east gable is the pit wall, with the external wheelpit at its base. There is some standing water and silt in the bottom of the wheelpit. The wheelshaft opening, which is just above ground floor level, has a stone lintel. A small opening about 1m below it acted as a drain to clear any water from the cog pit. There are two recesses, both about 22cm square, to the north of the shaft opening which may have served to position timbers across the pit, either to prop the waterwheel or to support a platform for working on it. At the north-east corner is a vertical recess in the masonry which is considered further below (see photograph).

The lower part of the north wall is now partly covered by a single storey lean-to roofed timber extension. The ground floor doorway at its east end has been formed in a former window opening, from the evidence of the splayed reveals and rebuilt stonework with cement pointing. It has a modern sheet timber door in a softwood frame. To the west of this doorway is a rectangular opening which lines up with a brick plinth inside the building. On both the 1st and 2nd edition 25 inch OS maps extensions are shown against the north wall of the mill (see Figures 2 & 4). While the opening may have been made to allow an auxiliary drive to enter the mill, both it and the plinth appear relatively modern, certainly later than the late 1880s-early 1890s date when the mill appears to have had auxiliary steam power. There are remains of white lime-wash on the wall around the doorway and opening.

The west elevation has an enlarged doorway opening at ground floor level, with a squared timber lintel and three vertically-boarded door leaves. The north return of the doorway appears original, with quoins, while the south side has been rebuilt. From the symmetry of the elevation, it is suggested the original ground floor doorway was single leaf width. There are fragmentary remains of a cobbled surface immediately outside this doorway. A number

of millstone fragments have been built into the west gable wall on both sides of the ground and first floor doors. These are of French burr, granite and sandstone conglomerate (see photograph).

The south elevation is partly overgrown and inaccessible in places. The loading door at first floor level has two projecting oak timber cantilevers at floor level, presumably the remains of a platform which was used for unloading sacks of grain from the back of a cart or waggon.

#### Interior

The mill building now contains four full floors and four structural bays which are defined by the principal north-south cross beams (see Figures 6 & 7). While the cross beams are original, all of the joists, floorboards and roof structure have been renewed. This timberwork has been carried out to a good standard, but some historic detail will inevitably have been lost. Some evidence for the layout of the working parts of the mill survives at ground and first floor levels (see Figure 5 and discussion below). The internal walls are of random rubble stone set in lime mortar and were formerly lime-washed white. The window and door openings have timber lintels. Some of the internal window cills are timber, others are missing or have been renewed with cement. The two first floor doors, one to the south and one to the west elevation, are of vertical timber boards.

The ground floor is mass concrete, with an octagonal granite millstone and a stone slab set in under the hurst, the timber framework that supported the millstones and their drives. A concrete block pier has been inserted under the north end of the western cross beam. The principal cross beams are imported softwood, plainly converted, with some quality and import marks visible on some faces. The ends of the cross beams sit on timber pads built into the walls. The first floor joists (20 x 5.5cm) are partly notched over the tops of the cross beams. An additional cross beam spans north-south just inside the east gable (the pit wall), which forms the rear beam of the hurst. An oak beam that runs east-west between this timber and the next cross beam still carries a plummer block (plain bearing), which was the central bearing for the upright shaft.

The inner face of the east gable wall has several interesting features. In the north-east corner is what appears to be a blocked partially circular opening. This is in about the same position as the exterior recess. Above the wheelshaft opening is an arc-shaped recess in the stonework, which would have allowed clearance around the horizontal spurwheel from which the drive to the millstones was taken from the vertical shaft (Figure 12). In the south-east corner is an angled timber, roughly squared and white-washed, with several holes bored in it, and a heavy metal forging, which formed the control handle by which the penstock (the sluice gate behind the waterwheel) was operated. The holes in the timber allowed the penstock to be opened and held in different positions, depending on the amount of water required to run the mill.

The steps up to the first floor, in the westernmost bay, may not be in their original position, but the renewal of the floor timbers has removed any earlier evidence. The position of the sack traps, through which sacks of grain were lifted to the loft, has however been retained. Abrasion marks made by the chain and sacks are visible on the west face of the cross beam on the east side of the sack trap position. The steps up to the second floor appear to be original, while those to the loft floor have been improvised, with a short dog-leg and landing.

The first, second and loft floor boards have all been renewed using 20cm wide by 2.5cm thick softwood boards with inserted wooden tongues, nailed to the new joists. The second floor cross beams are original, squared softwood of similar dimensions (about 28cm deep x 30cm wide) to those supporting the first floor. The third or loft floor beams are of smaller section (28cm deep x 13cm wide) and their ends are built through the front and back walls, being visible externally just below eaves level. They have all been reinforced by having new softwood timbers bolted along both faces, except for that at the west end which has a timber plate along its west face only.

It appears that there were originally only three full floors in the mill - ground, first and second - the loft 'floor' being simply a gallery running west-east between the queen posts of the roof, with deep bins for storing grain on both sides. This would be a more typical layout for a mill building of this size and period (see Figure 8).

The roof structure has been completely renewed in good quality sawn softwood. It presumably replicates the original construction and has been neatly done, with a traditional appearance. The trusses are numbered I to III from west to east and there are other carpenter's assembly numbers on the west faces of all three trusses. The queen posts and struts are bolted to the principals. The principals are notched, lapped and bolted at their apexes and each has a vertical timber nailed to its east side to carry the vertical ridge board. The two rows of lapped purlins are located on cleats on the backs of the principals. The purlins support common rafters at about 40cm centres and the roof slopes are fully felted over the rafters. No details of any battening and slate fixing were visible. There is a single, modern opening roof-light in the north slope of bay 2.

#### Evidence of the working layout and working parts

The external wheelpit along the east gable of the building would have contained a mid-high breast waterwheel of about 4.88m (16 feet) diameter by 1.82m (6 feet) maximum width. From approximate measurements taken of the level of the cill at the top of the curved brick breastwork at the south end of the wheelpit, the minimum head of water would have been about 3m (10 feet). The waterwheel was relatively powerful, capable of driving two or three pairs of millstones and ancillary machinery, including a hoist. The number of millstones working at any one time would depend on the water supply and what was being milled. Across the upstream end of the wheelpit is a square iron shaft with two arms projecting from it, the remains of the penstock control.

Inside the pit wall is a stone-lined cog pit, in which the pit wheel (the primary gear mounted on the waterwheel shaft) rotated. The narrowness of the pit indicates that it was for a castiron gear (rather than a bulkier timber one). The pit is over 1m deep, with debris covering its base.

The remains of the hurst structure survive in the easternmost bay at ground floor level and the positions of the three pairs of millstones and the sack traps can be seen at first floor level, where plywood panels have been set in the floor. These and the positions of the vertical oak bridge posts are shown on the plans. The bridge posts are in pairs and, from the surviving evidence, would have supported cast-iron bridges, adjustable horizontal beams abut 1.2m long, on which the foot bearings of the millstone drive spindles were located. There are horizontal iron tie rods between the feet of each pair of bridge posts close above floor level. The working positions of the millstones are indicated on the plan (Figure 5). The layout appears to have been a relatively conventional spurwheel underdrive arrangement, with the

upright shaft extending to the first floor ceiling and carrying a crown wheel near its top, from which an ancillary drive layshaft was taken off the north side (see Figure 12). The position of the bearings for a horizontal shaft can still be seen, one on a beam close to the vertical shaft position and the other on the lintel over the window in the north-east corner (see first floor plan and photographs).

A short spindle or shaft from a grain cleaner or flour dresser survives, displaced at first floor level. It is 1.6m long, 3.8cm in diameter, with three circular collars (see photograph).

On the east side of the north principal of roof truss I a timber and iron hinged lever has been temporarily fixed, which may be a surviving element of the sack hoist control mechanism. At the east end of the loft is a displaced timber sack hoist drum with solid flanged timber drive pulley (see photographs). Because the roof has been renewed, the working position of the hoist is no longer evident and also all of the control rope and chain guide positions have been lost.

Two complete millstones survive, one (lower/bedstone) inside the mill house, now used as a table, and a second (upper/runner) outside. These are Millstone Grit 'Peak' or grey stones, 1.22m diameter, and probably worked as a pair. At least two large fragments of Old Red Sandstone conglomerate millstone also survive in the garden of the mill house. There are also fragments of French burr (the best stone for milling fine flour), conglomerate and granite millstones built into the west gable of the mill. The unusual octagonal granite millstone set in the ground floor under the hurst is of particular note. It is about 0.81m across and has two or possibly three generations of recesses for the rynd - the iron fitting that connected it to the drive spindle. Octagonal or polygonal millstone centres have been found elsewhere in Devon and Cornwall, although they are usually of smaller diameter than this. It is possible that it was cut into an octagonal shape for reuse after it stopped being used as a millstone. It is an interesting artefact, the curved four-armed rynd chases perhaps indicating a 17th century origin.

#### **Discussion and dating**

The references cited above indicate that there were two waterwheels driving four pairs of millstones at Bish mill in the late 18th and early 19th century. The mill building was then cob walled under thatch, probably with stone walls forming the wheelpit along the east side. The plan of the mill shown on the tithe map, with a rectangular building orientated about north-south with the mill race running along its east side, suggest a layout with two waterwheels sharing the same pit. If, as with the last working wheel, these were breast wheels, then they would have been staggered rather than in line, and possibly overlapped, a layout recorded elsewhere in Devon. It is possible that some of the stonework of the lower part of the present wheelpit wall may have survived from the earlier mill and that the feature in the north-east corner, described above, indicates the position of the second wheel. A difficulty with this interpretation is that it appears to be quite high in relation to the wheel-shaft opening for the last working wheel, which is likely to have been of larger diameter than the two late 18th/early 19th century wheels.

The stone-lined cog pit inside the pit wall at the east end of the ground floor is narrow and its north and south ends are not built into the pit wall. Its narrowness suggests it was built to accommodate a cast-iron gear, so it probably dates from the comprehensive rebuilding of the mill in the later 19th century. The earlier cog pit would have been wider and longer, to accommodate two timber-built pitwheels.

The present mill building appears, on stylistic grounds, to date from the second half of the 19th century. It is possible that it was built in about 1870, if the over-drawing of the plan on the 1870 manor map can be used as evidence. The existing building is certainly shown on the large scale Ordnance Survey maps, the original survey for which was carried out in 1886.

A date of c.1870 is also compatible with the scant evidence that survives of the millwork. The removal of the waterwheel and gearing for scrap indicates cast-iron work and the iron plates on the bridge posts appear to have supported iron bridges. The wholesale removal of the machinery, together with the complete renewal of the suspended timber floors, has resulted in the loss of further evidence.

Martin Watts January 2017

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#### Acknowledgements

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#### Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to, nor should it be relied upon by any third party. To the fullest extent I will not be liable by reason of breach of contract, negligence or otherwise for any loss or damage (whether direct, indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits, damage to reputation or goodwill, loss of business or anticipated business, damages cost expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.



Figure 1. Bish Mill. Bishop's Nympton tithe map, 1841

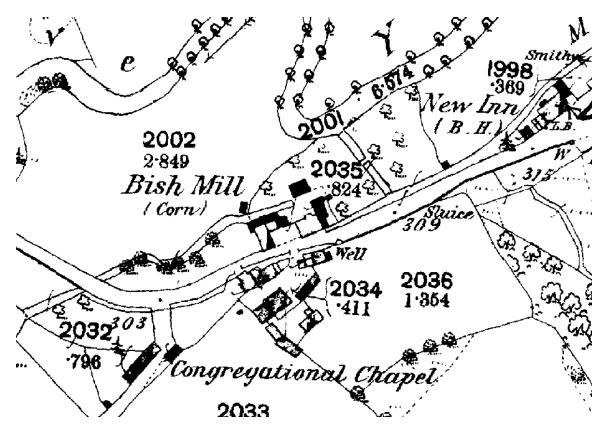


Figure 2. Bish Mill. Ordnance Survey 25 inch 1st edition, surveyed 1886, published *c*.1889 Not reproduced to scale

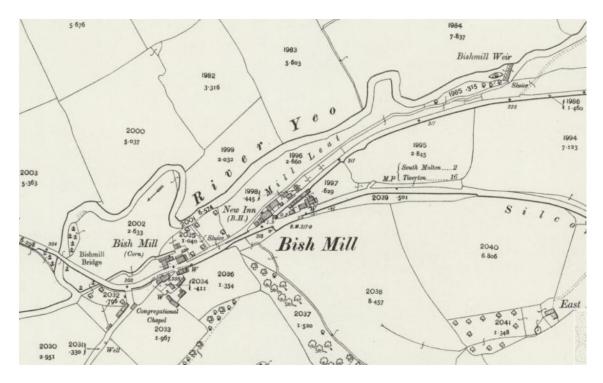


Figure 3. Bish Mill. Ordnance Survey 25 inch 2nd edition, 1904, showing weir and leat

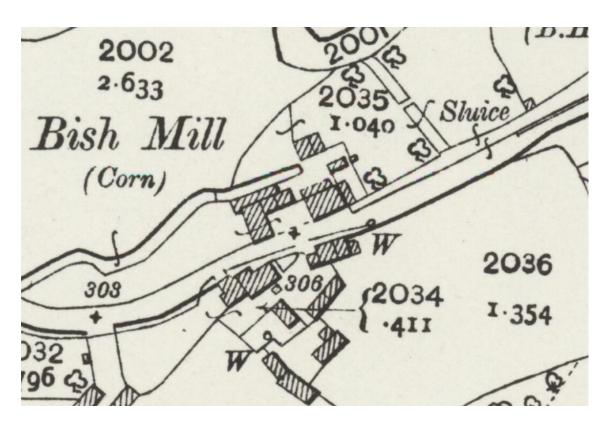


Figure 4. Bish Mill. Site layout from Ordnance Survey 25 inch 2nd edition, 1904

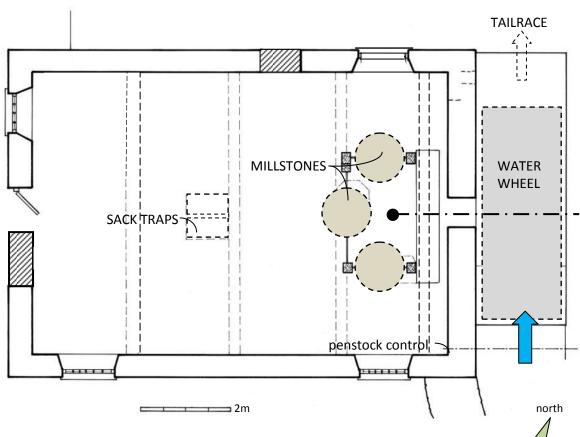


Figure 5. Ground floor plan: showing position of waterwheel and millstones

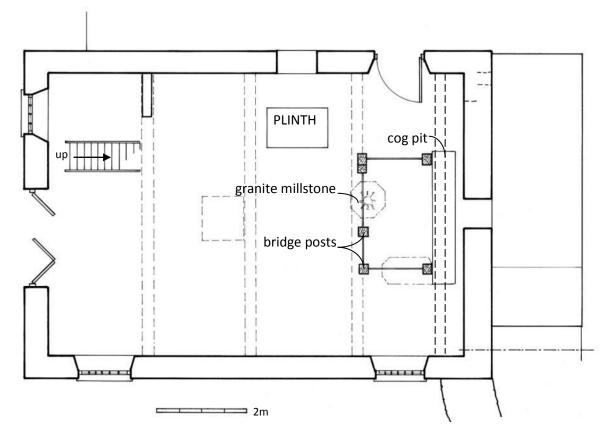


Figure 6. Ground floor plan: existing

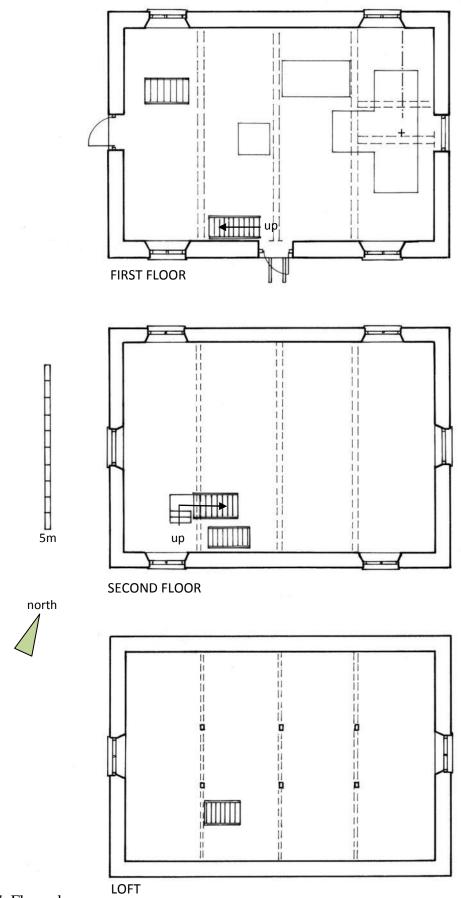


Figure 7. Floor plans

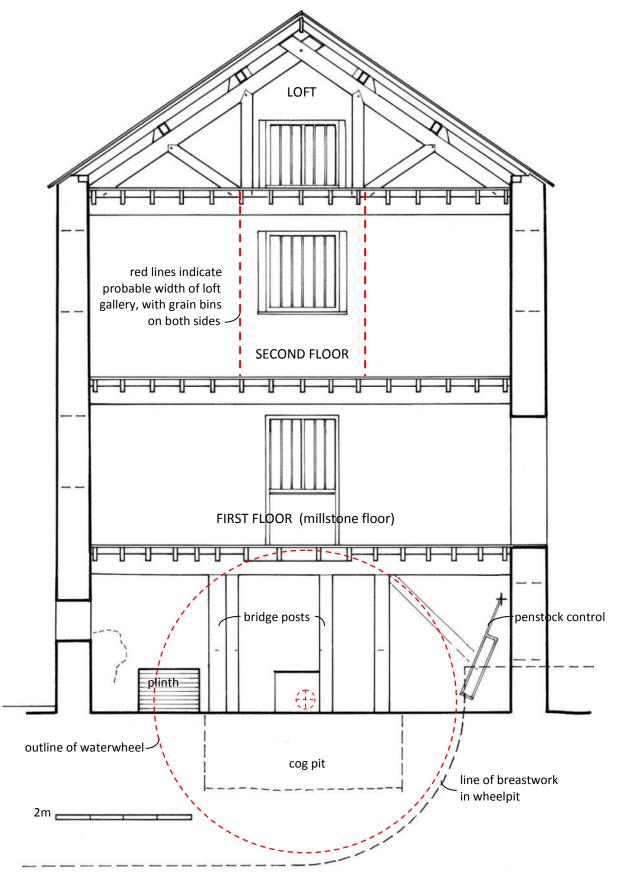
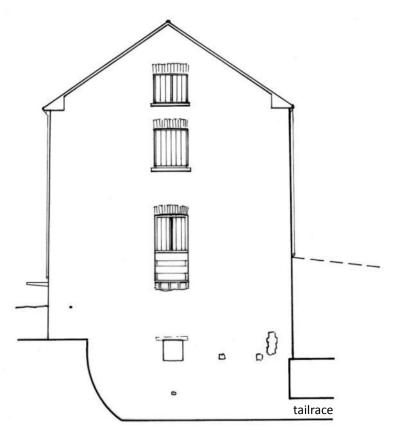


Figure 8. North-south section through mill building



EAST

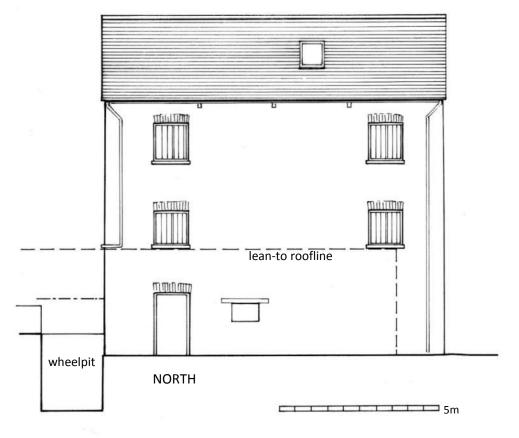


Figure 9. Elevations

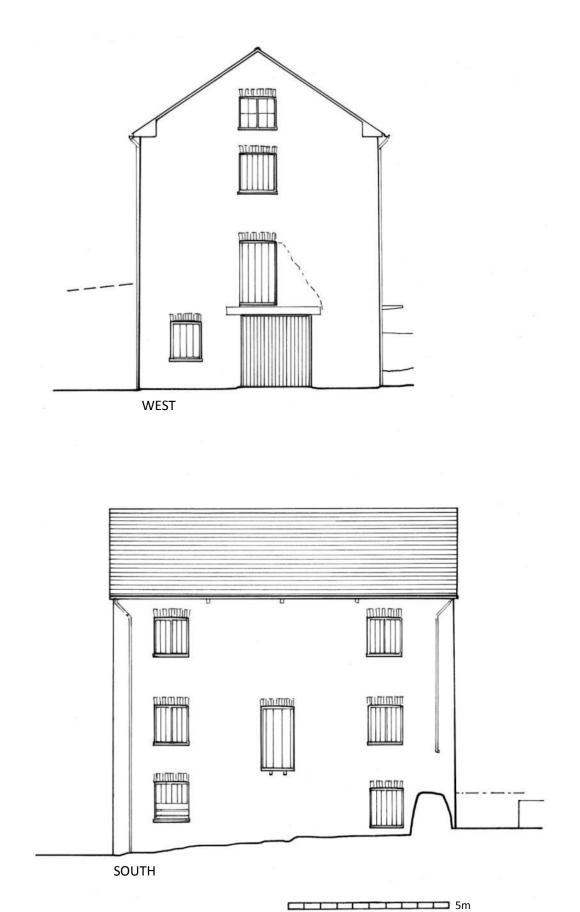


Figure 10. Elevations

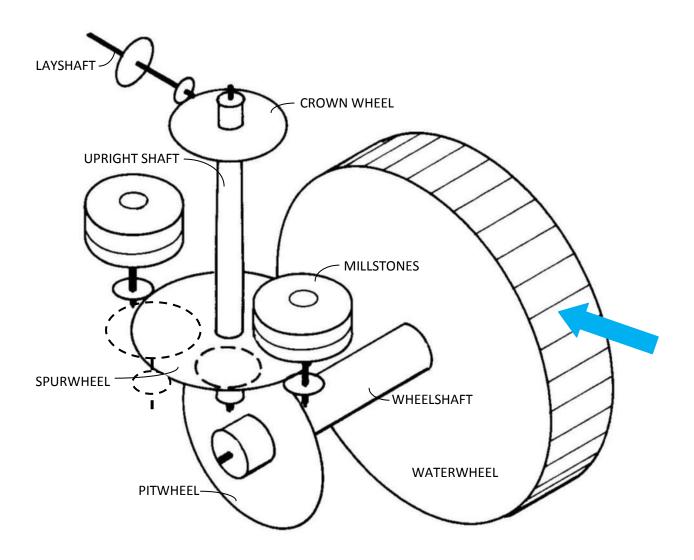


Figure 12. Diagram of spurwheel drive to three pairs of millstones and naming of parts



Bish Mill, from the west. Probably early 20th century (courtesy P. Williams)



Bish Mill from the south west. 31 October 2016



East gable end with silted leat to left foreground



East gable end and north elevation with modern extension



West gable end, from yard between mill and house



South elevation. The first floor loading door is partially obscured.



Detail of window opening and glazing, ground floor south



French burr millstone fragment built into west gable (half metre scale)



Leat diversion at spillway, with blocking to foreground



Silted section of leat to east of mill



Looking down into wheepit, with remains of penstock control



Wheelpit, showing curved brick breastwork at south end and wheelshaft opening



Recesses in pit (east gable) wall (half metre scale)



Doorway in north elevation into ground floor of mill, in former window opening



Blocked opening in north-east corner



Penstock control lever in south-east corner



Waterwheel shaft opening through east gable end wall, with recess in wall over for clear rotation of spurwheel



Ground floor. Bridge posts and hurst from the west (half metre scale)



Ground floor. Brick plinth, opening in north wall and modern door



Hurst. Millstone support beams from below, looking north



Rear of front hurst beam, with cleats marking former millstone spindle position



First floor, looking east. Plywood panels indicate former millstone positions, a former opening over the brick plinth (left) and the sack traps (centre foreground)



Layshaft bearing positions, hung from beam (centre) and on lintel over window



Plummer block (bearing) for head of upright shaft above first floor level



First floor, looking south west, with steps up to second floor



Steps in south-west corner from second floor up to loft



Reconstructed roof, looking east



Reconstructed roof, looking west



Detail at apex of roof truss, with timber nailed onto principal to carry ridge board



Hinged metal and timber lever fixed to principal of truss



Former sack hoist chain bollard on loft floor (half metre scale)



Sack hoist chain bollard drive pulley



Peak bedstone reused as a table in the mill house



Peak runner stone outside mill house (half metre scale)



Fragment of conglomerate millstone in mill house garden



Remains of fittings to locate and adjust bridges on south side of hurst



Drive spindle from grain cleaner or flour dresser (half metre scale)



Octagonal granite millstone set in ground floor below hurst